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

Other years’ catalogs »

The University of Kansas is accredited by the Higher Learning Commission (https://www.hlcommission.org/component/directory/?Itemid=&Action=ShowBasic&instid=1302) (hlcommission.org), a regional accreditation agency recognized by the U.S. Department of Education. In addition, certain Lawrence and Medical Center campus programs have specialized accreditation (https://provost.ku.edu/accreditation/).
Introduction

The University of Kansas

The University of Kansas School of Architecture and Design has been using interdisciplinary learning to produce pioneering leaders for more than 100 years. Our experienced, diverse faculty and innovative degree paths promote the development of creative talent that fits each student’s personal interests and abilities. Students learn through the processes of designing, drawing, and making, learning to solve problems through design-thinking, taking advantage of a wide array of global study opportunities, community engagement, and collaborative research.

Our courses are significantly influenced by the practical input of architects and designers from major firms the world over. These employers consistently say that those who receive degrees from KU are not only able to contribute as soon as they begin work, but also quickly ascend to leadership positions. Prepared as designers, critical thinkers, and problem solvers, graduates enjoy personal career fulfillment and serve, enrich, and sustain their professions and communities.

Architecture & Design

Facilities

The School of Architecture and Design's administrative offices are in Marvin Hall at the west end of Jayhawk Boulevard on the Lawrence campus. The School also has space in several adjacent buildings and additional off-campus facilities in Lawrence and Kansas City.

The Architectural Resource Center and Hatch Reading Room are also in Marvin Hall along with 19 design studios, several classrooms, offices for architecture faculty, woodworking and metal shops, three computer labs, an acoustics lab and critique spaces on each floor. In 2014 the School's Studio 804 students completed design and construction of The Forum addition to Marvin Hall, 120-seat auditorium. It provides a central commons for the School, a flex-space used for a variety of purposes, and is LEED Platinum-rated.

Snow Hall, directly across Jayhawk Boulevard from Marvin Hall, has 4 architecture studios. An open-access computer lab and a well-equipped model-building shop are located here along with a large critique and display area for student work.

Marvin Studios is just behind Marvin Hall. It includes studios as well as robotics, laser-cutter, 3-D printing and various other digital fabrication labs and faculty offices.

The school’s East Hills Design-Build Center is in the East Hills Industrial Park on Highway K-10 east of Lawrence. This 63,000 square-foot, open-span building acquired in 2009 is the site of many design-build studios including the internationally-acclaimed Studio 804. It includes design studios, conference areas, fully equipped maker-space facilities, and large areas for such things as the construction of building mock-ups and prefabrication.

The 130,000-square-foot Chalmers Hall, next to Marvin Hall, houses the main Design Department programs, including studios and classrooms. The building also houses the 2,100-square-foot Art and Design Gallery, Art Supply Store, and Chalmers Cafe which were fully renovated by students in 2017. The Gallery features new exhibits every two weeks and is an important component of our teaching mission which features new exhibits every two weeks and is an important component of the teaching mission.

Chalmers has multi-platform computer labs with the latest software for photography, animation, CAD, 3-D modeling, video production, desktop publishing, scanning, illustration, large-and medium-format plotters, and...
color and black-and-white laser printers. Unique satellite computer areas are dedicated to each type of work.

Also located here is a traditional film lab that includes a dark room for black-and-white photography, as well as a digital processing lab with dedicated spaces for video and digital image production. An equipment check-out facility allows students to borrow equipment they will need for photography assignments. The 6,400-square foot Common Shop includes a range of woodworking equipment, metal-working equipment, and classroom space. All computer and photo labs and the Common Shop have professionally-trained staff.

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

The recently renovated Helen Foresman Spencer Museum of Art houses the only comprehensive art collection in Kansas. Collections are particularly noteworthy in medieval art, 17th- and 18th-century German and Austrian painting, sculpture, American painting, prints, American photography, Japanese art of the Edo period, textiles, and decorative arts. Spencer Museum sponsors exhibitions, lectures, films, workshops, and activities that support curricular instruction in the arts.

Another important resource is the Murphy Art and Architecture Library, with 150,000 volumes and 600 current journals documenting design, and architecture from all cultures, from antiquity to the present.

Undergraduate Programs

Degree programs available to entering first-year students include a 5-year professional Master of Architecture (p. 44); a professional Bachelor of Fine Arts (p. 66) in design with concentrations in Illustration and Animation, Industrial Design, Photography, and Visual Communication Design and a Bachelor of Science in Interior Architecture.

Admission

Information on undergraduate admission standards and requirements, as well as application procedures and deadlines, is found on the Department of Architecture, Department of Design and Interdisciplinary Programs pages. Visit the Office of Admissions (http://admissions.ku.edu/) for information about admission to KU. Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions. Students who plan to transfer into programs and need advising assistance should contact Architecture and Design Admissions Office (http://www.arch.ku.edu/) at 785-864-3167 or specific Design information at http://design.ku.edu/ApplytKU at 785-864-2073.

Advising

In addition to advising and academic assistance from KU offices, the School has individual advisors for each student. Advisors are available throughout the course of study by appointment, and students are expected to see their advisors at enrollment times. For Architecture and Interior Architecture and advising information, students should contact Laura Leonard at lauraleonarad@ku.edu or 785-864-5130. For design advising information (http://design.ku.edu/advising/), contact Zac Shields at ZacShields@edu or 785-864-2959.

University Honors Program

The School encourages qualified students to participate in the University Honors Program (http://www.honors.ku.edu/). Students should be aware that the course load for professional architecture and design degrees may make it difficult to participate in the Honors Program.

Graduate Programs

Graduate programs include

- Master of Architecture (p. 49) (M.Arch.), a 2- year or 3-year professional degree for students already holding bachelor’s degrees in any field;
- Doctor of Philosophy in Architecture (p. 51) (Ph.D.);
- Master of Arts (M.A.) in Architecture; (p. 50)
- Master of Arts (p. 78) (M.A.) in Design with a concentration in Design Management & Strategy;
- Master of Arts (p. 79) (M.A.) in Design with a concentration in Interaction & User Experience Design

Undergraduate Scholarships and Financial Aid

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

Graduate Fellowships and Assistantships

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

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

Undergraduate University Regulations

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

Absences

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

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is a free or external elective not in your major or minor. Students must submit an online form during the two week period designated by the University in order to elect a course for Credit/ No Credit. For more information, visit the KU Policy Library (http://www.policy.ku.edu/).
Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Credit/No Credit is allowed for electives not in the major. It is not allowed for required courses or electives in the major.

ARCH 690 can only be graded as Satisfactory/Unsatisfactory.

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

Honor Roll (Dean’s List)
Students in the upper 10 percent of undergraduate student body who have completed at least 15 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

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

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

Probation

Master of Architecture, Bachelor of Arts in Architectural Studies, Interior Architecture, and Bachelor of Fine Arts in Design

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

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

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

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

3. The student has repeatedly failed to make progress toward graduation.

Reinstatement
Appeals for reinstatement may be submitted to the department’s probation committees at 200 Marvin Hall. A student reinstated has one semester to return to good standing.

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

Required Work in Residence

Architecture Students
All architecture students must complete 30 hours of KU work.

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

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

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

Design Students
Grades for studio related course work must be B or higher for transfer credit. Applicants with a lapse of four or more years since their last full-time enrollment may not expect studio credits to be accepted for transfer.

Architecture Courses

ARCH 100. Architectural Foundations I. 4 Credits.
An introductory design studio directed toward the development of spatial thinking and the skill necessary for the analysis and design of architectural space and form. This course is based on a series of exercises that include demonstrating observational and analytical skills through freehand drawing, full-scale studies in the making of objects that explore the relationship between 2D and 3D through mapping and extruding, and the design of a sequence of architectural spaces that explores path-space relationships and threshold. Students are introduced to different descriptive and analytical media and techniques of representation to aid in the development of critical thought, including orthographic projection, paraline drawing, exploded views, and measured perspective. Open only to students in Architectural Engineering. Prerequisite: Approval from the Dean of the School of Architecture and Design.

ARCH 101. Architectural Foundations II. 4 Credits.
A continuation of ARCH 100, with major emphasis on the design relationships between architectural space, human experience, and the environment. This course focuses on the basic design of a small architectural work on a real site, beginning with site analysis, the construction of a 3-dimensional site model, the learning of organizational principles, and the understanding of how the use of precedent can inform design. The design process itself is highly iterative, from 2- and 3-dimensional parti diagramming to generate ideas, to 3D investigations at different architectural scales. In design development, students learn the impact of internal programmatic forces and external site forces on design, including the seasonal and diurnal variations in natural lighting through sun path diagrams. By the end of the semester, students will have worked through the fundamental processes of building design towards the synthesis and presentation of a final scheme. Prerequisite: ARCH 100. Open only to students in Architectural Engineering.

ARCH 103. Introduction to Architecture. 3 Credits.
An introduction to the study and practice of architecture. This course aims at orienting the student to the various disciplinary facets which make up the total architectural curriculum as well as to the various professional roles which architects can be expected to perform. Architectural study is seen as both an art and a science, and architectural practice is seen as a complex, interdisciplinary professional activity. Students taking this course must bring a lap top computer to class.

ARCH 104. Principles of Modern Architecture. 3 Credits.
A lecture course covering the emergence of technological, theoretical and aesthetic principles of modern design beginning with the socio-cultural impact of industrialization and the crisis in architecture at the end of the 19th century. Attention is given to functionalist theory, mechanical analogies and the so-called machine aesthetic of 1910-1930 and to the precedents of important design principles of modern architecture, including modular coordination, the open plan, interlocking universal space, unadorned geometry, structural integrity, programmatic and tectonic expression, efficiency and transparency and briefly explores their development in post-war and late 20th century examples.

ARCH 108. Architectural Foundations I. 6 Credits.
An introductory design studio directed towards the development of spatial thinking and the skills necessary for the analysis and design of architectural space and form. This course is based on a series of exercises that include direct observation: drawing, analysis and representation of the surrounding world, and full-scale studies in the making of objects and the representation of object and space. Students are introduced to different descriptive and analytical media and techniques of representation to aid in the development of critical thought. These include but are not limited to freehand drawing, orthographic projection, para-line drawing, basic computer skills, and basic materials investigation. Students must bring a lap top computer to this class. Prerequisite: Approval from the Dean of the School of Architecture and Urban Planning.

ARCH 109. Architectural Foundations II. 6 Credits.
A continuation of the Architectural studio sequence with major emphasis on the design relationships among people, architectural space, and the environment. The course is based on a series of exercises leading to the understanding of architectural enclosure as mediating between people and the outside world. Issues of scale, light, proportion, rhythm, sequence, threshold, and enclosure are introduced in relation to the human body, as well as in relation to the human body as well as the architectural form. Students will engage in drawing, perspective projection, model building, and basic computer graphics. Students must bring a lap top computer to this class. Prerequisite: ARCH 108.

ARCH 110. Introduction to Computing. 3 Credits.
This course prepares students for design computation topics in the degree program. Topics covered in the class include computer basics, bitmap representation, vector-based graphics, 3-D modeling, scene modeling, building modeling, production of technical drawings, and other issues. These topics are covered in relation to architectural representation and involve skill development in both 2-D and 3-D modeling. The course includes projects that align with those covered in first-year design studios, presenting students with an alternative tool for the representation of two-dimensional diagrams and three-dimensional models. Requirements: Laptop computer with software that meets course specifications. Prerequisite: Must be admitted as a first-year student in the School of Architecture & Design.

ARCH 177. If These Walls Could Talk: Exploring KU Campus Architecture. 3 Credits.
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in architecture. May not contribute to major requirements in architecture. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

ARCH 208. Form and Function. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on introducing students to the basic form determinants of architecture—from limited scope exercises to complete building designs. Using diagrams and sketches, plans, sections, elevations and models, students explore the spatial ordering of human activity, site and landscape analysis, light and air modulation, simple environmental controls and energy conservation, basic framing systems, volumetric organization and the materials of building skins and envelopes. Students must bring a laptop computer to this class. Prerequisite: ARCH 109.

ARCH 209. Sustainability, Site, and Context. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on the synthesis of basic form determinants of medium-sized, multi-story public building in the urban environment. Students will demonstrate competence in basic architectural design, and preparedness for the third-year focus on materials and methods of building construction. Students are required to bring a laptop computer to this class. Prerequisite: ARCH 208.

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

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

ARCH 380. Design Workshop: Ideas and Methods in Planning and Design. 3 Credits.
This course focuses on design methods, ideas and approaches at the city, neighborhood and community levels. The course will introduce approaches to urban design and planning which are responsive to social, environmental and ecological issues. The goal is to develop core competencies in design thinking such as analyzing specific problems and developing possible design interventions by understanding relevant theories and analyzing case studies. Students will critically analyze past and current urban trends through case studies to inform design ideas for more equitable and sustainable communities. This material will be covered through class discussions, readings, and a number of design-oriented team projects and assignments.

ARCH 400. Interior Architecture Studio I. 6 Credits.
This course is an introduction to the basic principles and elements used in spatial organization, innovative design solutions and the practice of interior architecture, from predesign through final presentations. Prerequisite: Must be admitted to the Bachelor of Arts in Architecture Studies with an emphasis in Environmental Design.

ARCH 401. Interior Architecture Studio II. 6 Credits.
This course is an introduction to materials resources, specifications and sustainability; and helps students further their understanding of the design process by creating innovative design solutions and spatial organization for interior architecture. Prerequisite: Must be admitted to the Bachelor of Arts in Architecture Studies with an emphasis in Environmental Design.

ARCH 501. Architectural Foundations I. 6 Credits.
An introductory design studio directed towards the development of spatial thinking and the skills necessary for the analysis and design of architectural space and form. This course is based on a series of exercises that include direct observation; drawing, analysis and representation of the surrounding world and full-scale studies in the making of objects and the representation of object and space. Students are introduced to different descriptive and analytical media and techniques of representation to aid in the development of critical thought. These include but are not limited to freehand drawing, orthographic projection, para-line drawing, basic computer skills and basic materials investigation. Students must bring a lap top to class. Prerequisite: Admission to M.Arch. III program and/or permission of the Chair of Architecture.

ARCH 502. Architectural Foundations II. 6 Credits.
A continuation of the Architectural studio sequence with major emphasis on the design relationships among people, architectural space, and the environment. The course is based on a series of exercises leading to the understanding of architectural enclosure as mediating between people and the outside world. Issues of scale, light, proportion, rhythm, sequence, threshold, and enclosure are introduced in relation to the human body, as well as in relation to the human body as well as the architectural form. Students will engage in drawing, perspective projection, model building, and basic computer graphics. Students must bring a lap top computer to this class. Prerequisite: ARCH 501 studio and admission to M.Arch 3-yr program and permission of the Chair of Architecture.

ARCH 503. Form and Function. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on introducing students to the basic form determinants of architecture—fundamental skillset for architectural practice. This course will focus on technical drawing skills and professional drawing standards and conventions, including construction documentation, shop drawings, and analytical drawing techniques aimed at exploration and communication of the technical aspects of architectural design. Prerequisite: Corequisite: ARCH 510.

ARCH 504. Sustainability and Context. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on the synthesis of basic form determinants of medium-sized, multi-story public building in the urban environment. Students will demonstrate competence in basic architectural design, and preparedness for the third-year focus on materials and methods of building construction. Students are required to bring a laptop computer to this class. Prerequisite: ARCH 503 studio or permission of the Chair of Architecture.

ARCH 506. Material and Tectonics. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on studies in urban spaces and design development of building envelopes as related to urban public-life, structural and mechanical systems, and principles of sustainability. Students shall work individually on an advanced building design. Work will focus on medium scale, multi-story, urban-infill, buildings developed to an appropriate level of technical resolution as evidenced in clear schematic wall sections and structural proposals. Students shall demonstrate an understanding of formal ordering and building-concept development as related to the tectonic form determinants. Students are required to bring a laptop computer to this studio class. Prerequisite: ARCH 209.

ARCH 509. Designbuild. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on materiality and construction of built assemblies through hands-on activities. Development of craft, process, collaboration and technical documentation skills will be primary objective of the course. Students are required to bring a laptop computer to this studio class. Prerequisite: Must be current student in the 3.5 or 5 year M.Arch degree or Arch Studies degree. Corequisite: ARCH 510.

ARCH 510. Architectural Detailing. 3 Credits.
Architectural detailing during design and construction phases is a fundamental skillset for architectural practice. This course will focus on technical drawing skills and professional drawing standards and conventions, including construction documentation, shop drawings, and analytical drawing techniques aimed at exploration and communication of the technical aspects of architectural design. Prerequisite: Corequisite: ARCH 509, Designbuild.

ARCH 511. Building Information Modeling. 3 Credits.
This course will expose students to building information modeling: a digital representation of the building process that facilitates exchange and interoperability of information in digital format. The focus will be on the software's potential for reducing the information loss that occurs during each handoff of the project during the traditional delivery method. Possibilities for integrated practice including lifecycle costing and knowledge management are discussed.

ARCH 516. Portfolio Development. 3 Credits.
The aim of the course is to teach practical presentation skills using computer software, in addition to graphic design theories and strategies. This course will provide an opportunity for students to design and produce a design portfolio appropriate for internship and/or graduate school applications. Prerequisite: ARCH 209 or co-enrollment in ARCH 508 or ARCH 509.

ARCH 520. Architectural Acoustics. 3 Credits.
An introduction to the physics of sound. Objective and subjective evaluation and control of sound as applied to architectural spaces. Room shaping, mechanical and electrical system noise and vibration control, and electro-acoustic sound reinforcement. Prerequisite: PHSX 114 and ARCH 626 or equivalent, or consent of instructor.
new building materials and techniques, and development of architectural theory. Emphasis is on the historical context of how the diverse approaches of architects from different regions create variations of formal expressions, spatial program and theoretical underpinning, and thus create multiple meanings and images of modern architecture. Prerequisite: ARCH 340 or ARCH 540 or ARCH 640 or consent of instructor.

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

ARCH 560. Site Design. 3 Credits.
This course introduces concepts of architectural context and site through a combination of lectures and field studies. Natural, social and built systems are presented using a range of perspectives, including holistic ones. Students will develop visual and written skills of analysis through specific site analytic and design techniques. Application exercises and ongoing analysis assignments are required. Restricted to 3.5 and 5 year Master of Architecture students. Prerequisite: ARCH 208 for undergraduate students.

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

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

ARCH 602. Accelerated Design IV. 6 Credits.
Graduate studio emphasizing urban context and design theories and architectural tectonics. Students will undertake developing a detailed wall assembly, represented through drawings and/or models. Prerequisite: ARCH 508 and 509 (see studio grading policy) or permission of the Chair of Architecture.

ARCH 605. Visualizing Site and Natural Environmental Systems. 3 Credits.
This course advances empirical understanding and abilities to visualize natural forces as they both shape and affect siting and designing buildings that shape human experience. Students will develop abilities to demonstrate the principles of environmental systems’ design, how design criteria can vary by geographic region and the tools used for performance assessment. In-class and applied studies will help students learn about site characteristics, soils, topography, solar systems, ecology, climate, building orientation, active and passive heating and cooling, solar
geometry, day-lighting and natural ventilation. Prerequisite: ARCH 109 or equivalent.

ARCH 608. Urban Dwelling. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on program analysis and design of urban building(s) and urban spaces with culture, context and precedent as major form determinants. Students are required to bring a laptop computer to this studio class. Prerequisite: ARCH 508 and ARCH 509; or ARCH 602.

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

ARCH 610. Integrated Design Documentation. 3 Credits.
Integrated design documentation, including drawings and specifications, is fundamental to the development of a professional architectural project. This course is designed to complement and support ARCH 609 Integrated Design Studio in the technical documentation of the studio project and to shed light on professional expectations for design documentation. Prerequisite: ARCH 510. Corequisite: ARCH 609 Integrated Design Studio.

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

ARCH 615. Integrated Systems. 3 Credits.
This course provides a holistic understanding of building systems and active sustainable strategies. Students will examine the appropriate selection, development, and integration of environmental and structural systems covered in previous architecture courses. An emphasis is placed on the interconnectedness of these systems to building form, function, and performance. Use of simulation programs are expanded upon to quantify building performance. Prerequisite: Must be admitted to M.Arch I, II or III or Bachelor of Arts in Architectural Studies degrees.

ARCH 620. Theory of Urban Design. 3 Credits.
An examination of the relationship between architecture and urban design through contemporary interpretations of future urban form and the determinants of the location, spatial structure, growth and decline of cities. Foundations for an interdisciplinary synthesis are examined in an attempt to bridge the hiatus between large-scale architectural design and incremental adjustments to urban dynamics. Prerequisite: Must have completed Arch 208 and be enrolled in Arch 209 during the spring semester this course is offered.

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

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

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

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

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

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

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

ARCH 635. Visualizing Airflow In and Around Buildings. 3 Credits.

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

ARCH 637. Architecture and Cosmos. 3 Credits.

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

ARCH 639. Current/Historical Directions in Architecture. 3 Credits.

A study of contemporary or historical trends in architecture which relate to the development of individual or broad philosophies of architecture.

ARCH 646. American Architectural History. 3 Credits.

This course surveys the history of architecture in the USA from the beginning of European settlements to mid-20th century. It is organized based on place types that include, among others, towns, villages, housing, commercial developments, civic structures, agricultural and rural buildings and settlements, and religious buildings and communities. It also covers a range of topics such as architectural styles, typologies, building tectonics, patterns of diffusion, and socio-economic factors that influenced the development of these historic place types.

ARCH 647. Historic Preservation Theory. 3 Credits.

This course presents the historical development and contemporary status of the theories and philosophies of historic preservation. It particularly covers the concepts and approaches developed by UNESCO for the management of tangible and intangible cultural heritage resources worldwide and the related international charters, conventions, operational guidelines, and institutions. Using international case studies, it illustrates a range of theoretical, philosophical, ethical, and practical issues and debates in historic preservation in a global context.

ARCH 648. Historic Preservation. 3 Credits.

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

ARCH 649. Historic Preservation Technology. 3 Credits.

This course introduces students to architectural historiography and preservation technology. It covers a range of curatorial issues in preservation and adaptive reuse of historic buildings. The topics include technical documentation of historic buildings, archival research, assessment of causes of deterioration and preservation needs in historic buildings, selection of preservation strategies, and techniques of building material preservation. Also covered are the integration of sustainable technologies into historic construction and examination of the ecological advantages of adaptive reuse and preservation.

ARCH 658. Programming and Pre-Design Issues. 3 Credits.

This course will introduce the concepts, methods, techniques, and information used by the architect to establish the parameters of a project, prior to entering the formal design process. The course will introduce the student to the social, technical, legal, and economic dimensions of architectural programming. The content will introduce the core competencies in programming, site, and environmental analysis required by the profession. Programming theory, research techniques, information analysis, evaluation of significance, and creative synthesis of the multivalent factors acting upon the pre-design process of project definition will be covered. Exercises may include programming and analysis of projects and sites assigned in the Architectural Design Studio sequence. Prerequisite: ARCH 209 or ARCH 504.

ARCH 665. History of Urban Design. 3 Credits.

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

ARCH 690. Architecture Study Abroad. 6 Credits.

May be repeated up to a maximum of 18 credits. Students participate in a study abroad program approved by the Architecture Chair. Students will be evaluated upon a submitted journal, sketchbook, or equivalent assignments assigned by the instructor. Graded on a satisfactory/unsatisfactory basis.

ARCH 691. Architecture Practicum. 6 Credits.

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

ARCH 692. Documentation. 2-3 Credits.

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

ARCH 695. Internship Documentation. 3 Credits.

Students will document their experience in ARCH 691 or other approved internship or relevant work experience. The purpose of this course is to give students a structured opportunity to select, explore, research, and document a topic relevant to their internship experience and that goes beyond the work done for the internship credit.

ARCH 700. Directed Readings in Architecture. 1-3 Credits.

Individual study of special topics and problems. May be repeated for credit. Prerequisite: Graduate standing.
ARCH 720. Architectural Acoustics. 3 Credits.
An introduction to the physics of sound. Objective and subjective evaluation and control of sound as applied to architectural spaces. Room shaping, mechanical and electrical system noise and vibration control, and electro-acoustic sound reinforcement. Prerequisite: PHSX 114 and ARCH 626 or equivalent, or consent of instructor.

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

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

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

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

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

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

ARCH 800. Special Topics in Architecture: ___. 1-3 Credits.
Advanced or experimental courses on specialized topics representing unique or changing needs and resources in the graduate program in architecture.

ARCH 802. Urban and Community Issues II. 6 Credits.
Continuation of the critical and rigorous investigations into issues of urban and community design with an increasing focus on synthesis and evaluation. Prerequisite: ARCH 801.

ARCH 803. Design-Build and Materiality I. 6 Credits.
An advanced studio with an emphasis on issues of design-build and/or materiality with a focus on problem-setting, discovery, and analysis. Students are required to bring a laptop computer to this studio class. Prerequisite: ARCH 609 and/or consent of the Architecture Department Chair.

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

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

ARCH 806. Architectural Technology II. 6 Credits.
Continuation of the critical and rigorous investigations into issues of building technology with an increasing focus on synthesis and evaluation. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ARCH 805.

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

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

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

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

ARCH 811. Architectural Investigation I. 6 Credits.
A workshop-based course involving approved self and group directed investigations in a particular area of architectural investigation with a focus on problem-setting, discovery and analysis. Students are required to bring a laptop computer to this studio class. Prerequisite: ARCH 609.

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

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

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

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

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

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

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

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

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

Architecture Courses

IA 205. Professional Communications Skills. 3 Credits.
This course is an introduction to visual and oral communication skills. It will build practical skills to design and communicate ideas to a variety of audiences. This practice-based approach will introduce the students to two major fundamentals of communications. Oral competency, through presentations and writing; and visual communications through composition, color theory, typography and branding. The students will have an opportunity to present their work through one on one discussions, small and large group presentations. The course is intended to equip students with the practice-based tools to communicate and demonstrate their design ideas in relation to different fields and to a variety of audiences in practical situations. Prerequisite: ARCH 109 and ARCH 110.

IA 208. Interior Architecture Studio I. 3 Credits.
This second-year design studio is responsible for introducing students to the basic application of design determinants of interior architecture in which precedents research, programming, design, and presentation skills are developed. Design solution methodologies for small and medium scale interior spaces allow students to explore spatial configurations, programming, user centered design solutions, human psychology, behavior in space. There is an introduction to accessibility requirements. Students will learn to demonstrate their explorations with verbal presentations and visual communication skills including but not limited to sketching, diagramming, photography, digital representations and physical models. Prerequisite: ARCH 108 Architecture Foundations I and ARCH 109 Architecture Foundations II.

IA 209. Interior Architecture Studio II. 6 Credits.
A continuation of IA 208 Interior Architecture Studio, the emphasis of this design studio is to develop the application of design determinants in which architecture/design precedent study, programming, materials and furniture integration, and presentation skills are developed. Design solution methodologies for medium scale interior spaces allow students to explore complex spatial configurations and programming, user centered design solutions, furnishings, manufactured products, materials and finishes integrations. Students further develop design skills to address human psychology and behavior in space, and the ability to apply accessibility requirements in their design solutions. Students will demonstrate their explorations with written narratives, verbal presentations and visual communication skills not limited to, sketching, diagramming, photography, digital representations, and physical models. Prerequisite: IA 208 Interior Architecture Studio I.

IA 210. Human Factors in the Built Environment. 3 Credits.
This course provides an introduction to human factors theory, data, and analysis from an architectural perspective. Topics covered include how proxemics, anthropometrics, ergonomics, and material choices in the built environment impact our psychology, behaviors, and health. Furthermore, students will learn how human-centered design can be used to create optimal environments for diversity and inclusion. Open to students enrolled in the Interior Architecture degree. Restricted to students in the IA program. Prerequisite: Must be admitted to the IA program and ARCH 109.

IA 220. Sustainable Interior Materiality. 3 Credits.
This course is an introduction to the application of materials, processes, specification, and craft in the construction of the built environment. Along with presenting the information required for understanding the basic principles and appropriate application and performance of construction systems and assemblies, the course also provides a conceptual framework to bridge between the physical conditions of construction related to materials selections and the abstract processes of tectonics design. Students will demonstrate their explorations through different methods including model building and hands-on building experiences. Prerequisite: IA 210.
IA 230. Lighting Design and Technology. 3 Credits.
An exploration of topics on natural lighting and illuminance in interior spaces. Includes lighting sources, technology, specifications of luminaires and design applications through technical drawings. Prerequisite: IA 208, IA 510.

IA 300. Special Topics in Interior Architecture: _____. 3 Credits.
Study of special topics related to interior architecture in response to changing needs and/or resources of the interior architecture degree program. It may be offered concurrently by different instructors under different subtitles as announced in the semester timetable. May be repeated for credit. Prerequisite: Varies by topic.

IA 308. Interior Architecture Studio III. 6 Credits.
This third-year architecture studio builds on the skills developed in the second-year IA Studios. It covers design development of a nonresidential medium scale project. Students work individually to explore application of complex programming, spatial configuration, sustainability, lighting design, acoustics, psychology of a space, human experience, and ability to apply code and accessibility requirements to their projects. Students will explore manufactured products and furniture systems with an emphasis on material selections and specifications. Students will demonstrate their explorations with written narratives, verbal presentations, and visual communication skills including but not limited to, sketching, diagramming, photography, digital representations and physical models. Prerequisite: IA 209.

IA 309. Interior Design-Build Studio. 6 Credits.
A continuation of the Interior Architecture studio sequence with major emphasis on materiality and construction of built assemblies through hands-on activities. Development of craft, process, collaboration and technical documentation skills will be primary objective of the course. Prerequisite: Must have completed IA 209.

IA 322. Furniture Design. 3 Credits.
This course explores the methodology of furniture design and construction. Investigative studies of theory, materials and construction methods of classical, modern, and contemporary furniture design result in a basic knowledge of human factors, design processes, and tectonics. Students will develop skills in design and construction of a piece of furniture from using interior millwork to advanced digital technology. Prerequisite: IA 220.

IA 341. History of Interior Architecture. 3 Credits.
This lecture course offers a survey of interior spaces and built environments in relationship to historical, architectural, religious, political, cultural, and social context of different eras. This course provides a global overview of the historical evolution of interior spaces and furnishings from pre-historic times to the 20th century and covers geographical areas of Europe, America, Latin America, Asia, Middle-East and Africa. Students will be asked to demonstrate their learnings in the form of research, drawings, and written papers. Prerequisite: Must be admitted to the IA Program and ARCH 541.

IA 359. Special Problems. 1-3 Credits.
Special problems in Interior Architecture. This study of a particular problem in Interior Architecture involving individual research and presentation, conferences and reports. Prerequisite: Student must submit to his/her faculty advisor in advance, a statement they wish to pursue. The instructor must give permission to study with the student.

IA 390. Study Abroad. 5 Credits.
Students participate in a study abroad program approved by the IA program. Students will be evaluated upon a submitted journal, sketchbook, or equivalent assignments assigned by the instructor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be admitted to the IA Degree program.

IA 405. Professional Communications Skills. 3 Credits.
This course is an introduction to visual and oral communication skills. It will build practical skills to design and communicate ideas to a variety of audiences. This practice-based approach will introduce the students to two major fundamentals of communications. Oral competency, through presentations and writing; and visual communications through composition, color theory, typography and branding. The students will have an opportunity to present their work through one on one discussions, small and large group presentations. The course is intended to equip students with the practice-based tools to communicate and demonstrate their design ideas in relation to different fields and to a variety of audiences in practical situations. Prerequisite: Must be admitted to the BS Interior Architecture degree.

IA 408. Design Research. 3 Credits.
A seminar-based elective that exposes students to critical interior design research approaches, including but not limited to programming, post-occupancy evaluations (POE), global and cultural dimensions, and design thinking. Topics variable on accreditation needs, represented by subtitles as announced in the semester timetable. May be repeated for credit. Prerequisite: IA 308.

IA 409. Integrated Interior Architecture Studio. 6 Credits.
An advanced studio with an emphasis given to the student's demonstration of integration of all previously learned design skills. These include program analysis, space configuration, formal design composition, structure, materials and methods of construction, technical development of interior spaces, environmental systems, lighting design, acoustics, code and regulation compliance, and principles of sustainability. Students should also demonstrate an appropriate awareness of history, theory, and culture of the given context. The level of project development should be demonstrated by technically precise drawings and well-researched written documentation in additional to other means of representation. Students work in groups and with professional consultants. Prerequisite: IA 308.

IA 508. Interior Architecture Studio III. 3 Credits.
This third-year architecture studio builds on the skills developed in the second-year IA Studios. It covers design development of a nonresidential medium scale project. Students work individually to explore application of complex programming, spatial configuration, sustainability, lighting design, acoustics, psychology of a space, human experience, and ability to apply code and accessibility requirements to their projects. Students will explore manufactured products and furniture systems with an emphasis on material selections and specifications. Students will demonstrate their explorations with written narratives, verbal presentations, and visual communication skills including but not limited to, sketching, diagramming, photography, digital representations and physical models. Prerequisite: IA 209 Interior Architecture Studio II.

IA 509. Design-Build Studio. 6 Credits.
A continuation of the Interior Architecture studio sequence with major emphasis on materiality and construction of built assemblies through hands-on activities. Development of craft, process, collaboration and technical documentation skills will be primary objective of the course. Prerequisite: Must have completed IA 209 Studio.

IA 510. Human Factors in The Built Environment. 3 Credits.
This course provides an introduction to human factors theory, data, and analysis from an architectural perspective. Topics covered include how proxemics, anthropometrics, ergonomics, and material choices in the built environment impact our psychology, behaviors, and health. Furthermore, students will learn how human-centered design can be used to create optimal environments for diversity and inclusion. Open to students
enrolled in the Interior Architecture degree. Restricted to students in the IA program. Prerequisite: Must be admitted to the IA program.

**IA 511. Ergonomics. 3 Credits.**
This course focuses on analyzing human perception and behavioral patterns in the built environment and the study of natural, cultural, social and ethnic patterns and rituals. Students will survey and design a series of solutions for design problems addressing relationships between the organic and human-made environments as they relate to human experience. These explorations will be demonstrated by written narratives, universal design solutions, wayfinding techniques and ergonomics studies. Prerequisite: Must be admitted to the IA degree plan.

**IA 520. Products Materials and Specifications. 3 Credits.**
This course is an introduction to the application of materials, processes, specification, and craft in the construction of the built environment. Along with presenting the information required for understanding the basic principles and appropriate application and performance of construction systems and assemblies, the course also provides a conceptual framework to bridge between the physical conditions of construction related to materials selections and the abstract processes of tectonics design. Students will demonstrate their explorations through different methods including model building and hands-on building experiences. Prerequisite: Must be admitted to the IA degree plan.

**IA 522. Furniture Design. 3 Credits.**
This course explores the methodology of furniture design and construction. Investigative studies of theory, materials and construction methods of classical, modern, and contemporary furniture design result in a basic knowledge of human factors, design processes, and tectonics. Students will develop skills in design and construction of a piece of furniture from using interior millwork to advanced digital technology. Prerequisite: IA 520 Products, Materials and Specifications.

**IA 541. History of Interior Architecture. 3 Credits.**
This course offers a survey of interior spaces and built environments in relationship to historical, architectural, religious, political, cultural, and social context of different eras. This course provides a global overview of the historical evolution of interior spaces and furnishings from pre-historic times to the 20th century and covers geographical areas of Europe, America, Latin America, Asia, Middle-East and Africa. Students will be asked to demonstrate their learnings in the form of research, drawings, and written papers. Prerequisite: Student must be in the IA program and have taken ARCH 540.

**IA 608. Professional Internship. 6 Credits.**
Students will have an opportunity to work in a professional firm approved by the IA program. In addition to the work experience students will document their internship or relevant work experience. The purpose of this course is to give students a structured opportunity to select, explore, research, and document a topic relevant to their internship experience. Prerequisite: IA 508 Interior Architecture Studio III.

**IA 609. Integrated Interior Architecture Studio. 6 Credits.**
An advanced studio with an emphasis given to the student's demonstration of integration of all previously learned design skills. These include program analysis, space configuration, formal design composition, structure, materials and methods of construction, technical development of interior spaces, environmental systems, lighting design, acoustics, code and regulation compliance, and principles of sustainability. Students should also demonstrate an appropriate awareness of history, theory, and culture of the given context. The level of project development should be demonstrated by technically precise drawings and well-researched written documentation in additional to other means of representation. Students work in groups and with professional consultants. Prerequisite: IA 508 Interior Architecture Studio III.

**IA 690. Study Abroad. 5 Credits.**
Students participate in a study abroad program approved by the IA program. Students will be evaluated upon a submitted journal, sketchbook, or equivalent assignments assigned by the instructor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be admitted to the IA Degree program.

**Design Courses**

**ADS 300. Foundations in Interaction Design. 3 Credits.**
This course examines the fundamental principles and materials underlying the interactions between people, artifacts, and systems. Students will be introduced to a variety of new tools and techniques that will facilitate the prototyping of interactions/user experiences/mobile devices, desktop devices, cars, games, consoles, kiosks, and/or apps. Projects, lectures and tutorials will provide a working knowledge of fundamental principles, processes and current tools. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

**ADS 320. KU Design Lecture Series. 1 Credits.**
Visiting Design professionals discuss various aspects of their work and the industry of Design. Professionals from all the Design areas of the Department are represented: Illustration & Animation, Industrial Design, Photography, and Visual Communication Design. INDD 320 may be allowed to count in place of ADS 320 in limited cases for students in the Industrial Design concentration of the Design BFA. Students taking this course for credit must attend all seven lectures that compose the series each semester in order to earn a passing grade in the course. Open to all KU students. Graded on a satisfactory/unsatisfactory basis.

**ADS 325. Design Thinking & Research Methodologies. 3 Credits.**
Introduction to the principles of design thinking, design processes, design strategies and methods, including techniques and tools for the development of human-technology interfaces. Abstract through concrete representation methods and techniques will be applied to interaction design projects/problems. Information collection and analysis methods, scenario and prototyping methods, evaluation methods (empirical), creativity methods, and task-oriented methods (non-empirical) will also be considered. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

**ADS 340. History and Philosophy of Design. 3 Credits.**
Survey of design history from 1800 to present with emphasis on graphics, architecture, industrial and interior design movements, individuals and their influences. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

**ADS 401. Design Ethics. 3 Credits.**
Since the time of Socrates, philosophers have struggled with understanding everyday moral dilemmas. In this course, we will look at how cultures throughout history have framed everyday moral choices and how those choices apply to working as a designer/artist/architect in our contemporary world. Through presentations, guest lectures, small group discussions, and role-playing experiences, we will question and analyze ethical and moral problems faced by today's shapers of culture. This course is named after industrial designer Victor Papanek, who served as a Distinguished Professor of Architecture & Design at KU from 1981 until his death in 1998. His 1971 book “Design for the Real World” is credited as being one of the first publications which challenged designers to understand their social and ecological responsibilities. Open to all students admitted to majors and minors offered by the Department of Design. Other students may request instructor permission.
to enroll. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

**ADS 411. Design Trends and Forecasting. 3 Credits.**
This course introduces students to principles and theories from various disciplines concerning an understanding of cultural trends and micro-trends. Emphasis is placed on adaptation of these theories to an understanding of the practice of trends research and trend forecasting within the design practice, as well as how trends can be integrated into the designer's thinking and making process. Open to all students.

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

**ADS 531. Internship Credit. 1-6 Credits.**
Students develop professional skills and problems solving through applied work with an employer in a Design field. Supervision by a professional designer, and prior approval by the relevant Area Coordinator is mandatory. May be repeated twice for credit. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Junior level or higher standing in the Design Department.

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

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

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

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

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

**ADS 601. Design Ethics. 3 Credits.**
Since the time of Socrates, philosophers have struggled with understanding everyday moral dilemmas. In this course, we will look at how cultures throughout history have framed everyday moral choices and how those choices apply to working as a designer/artist/architect in our contemporary world. Through presentations, guest lectures, small group discussions, and role-playing experiences, we will question and analyze ethical and moral problems faced by today's shapers of culture. This course is named after industrial designer Victor Papanek, who served as a Distinguished Professor of Architecture & Design at KU from 1981 until his death in 1998. His 1971 book "Design for the Real World" is credited as being one of the first publications which challenged designers to understand their social and ecological responsibilities. Open to all graduate students. Prerequisite: Graduate student status.

**ADS 710. Advanced Human Factors in Interaction Design. 3 Credits.**
The study of human factors principles and guidelines are fundamental to interaction design. In this course, these principles will be illustrated and applied to real-world design projects/problems. Human physical and cognitive capabilities, computer-human interface and systems properties, interaction design methods, and the physical and socio-cultural environment will be considered. Fundamental issues in human-centered systems, basic research methods, including statistics and literature searches, will be included. Prerequisite: Admission to the MA in Design Management or MA in Interaction Design or instructor permission.

**ADS 712. Design Strategies and Methods. 3 Credits.**
This course will cover the principles of design thinking, design processes, design strategies and methods, including techniques and tools for the development of human-technology interfaces. Abstract through concrete representation methods and techniques will be applied to interaction design projects/problems. Information collection and analysis methods, scenario and prototyping methods, evaluation methods (empirical), creativity methods, and task-oriented method (non-empirical) will also be considered. Methods common to design-related disciplines in the social sciences, business, architecture, communication studies and engineering are integrated. Prerequisite: Admission to the MA in Design Management or MA in Interaction Design or instructor permission.

**ADS 714. Service and User Experience Design. 3 Credits.**
Business products, services and environments are often intermingled in ways that require more holistic ways of thinking and development. A challenge of service innovation is to design with an understanding of the many dimensions of human experience and satisfaction. This course elaborates how, where, when, and why design can enhance the value of business services. Theory, methods, and practice aspects of services design are presented. Prerequisite: Admission to the MA in Design Management or MA in Interaction Design or instructor permission.

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

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

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

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

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

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

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

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

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

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

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

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

**ADS 850. Studio Teaching Practice. 1 Credits.**
Graduate students only. Must hold an assistant instructor or teaching appointment. Credit earned does not satisfy any credit requirement for a degree. Graded on a satisfactory/unsatisfactory basis.

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

**ADS 861. Thesis Research Seminar. 1 Credits.**
Approaches to producing original design research. Methods, resources, topics and projects are discussed and evaluated. May be repeated for up to six credit hours in subsequent semesters. Prerequisite: Admission to the MA in Design Management or MA in Interaction Design or instructor permission.

**ADS 890. Thesis. 1-8 Credits.**
This course involves substantive individual research and thesis development, as well as regular discussions between student and instructor/advisor. Your ADS 890 instructor serves as your thesis advisor, and chairs your thesis committee. A thesis topic and research focus is expected very early in the term, followed by a formal thesis proposal containing clear objectives, schedule and deliverables. When green lighted, the proposed thesis is then executed by the student who prepares and presents the work to their thesis committee for evaluation. Prerequisite: Successful completion of ADS 861 and either ADS 750 or ADS 765.

**Design Courses**

**BDS 100. Design Thinking. 1 Credits.**
Design, like almost every industry, profession, school or major on campus, is forever being changed by technology, its reach, global access, and social innovation. From the basics of how to think like a designer or how to design a better presentation in powerpoint to how design can be situated in businesses and organizations to create innovative new products, services or social change. This course will give students an awareness of design in our everyday world: an understanding of some of the cultural, theoretical, conceptual, and practical issues related to design and designing. The ultimate goal is that by the end of this course students will know how design contributes to contemporary society and how they might use this understanding throughout their
life in little and big ways. Open to all majors. Graded on a satisfactory/unsatisfactory basis.

**BDS 101. Design Thinking and Making. 3 Credits.**
This course is an introduction to creative problem-solving and the fundamentals of two-, three-, and four-dimensional design. Drawing, Photography, and 2D and 3D models are used in this course as a means of design thinking to visually represent problems and solutions. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

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

**BDS 103. Drawing for Design. 3 Credits.**
This course will focus on drawing as a tool of communication through freehand exercises that explore observation and perception, form and proportion, dimensional illusion and expressive characteristics using a variety of materials and media. Some identified sections of this course will also use two-and three-dimensional modeling software. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

**Design Courses**

**ILLU 200. Foundations in Image Making. 3 Credits.**
Presentation of fundamental principles for communication through visual language. Exploration of theories in visual perception and visual communication, with focus on reading and developing visual images for intended meaning. Emphasis is placed on concept development, compositional exploration, color theory, the affect of value and color on images, and the significance of reference creation. Prerequisite: BDS 101 and BDS 103 with semester grades of "C+" or higher or instructor permission.

**ILLU 205. Drawing Media for Illustration I. 3 Credits.**
Exploration of problems in drawing for various reproduction processes. Emphasis on perspective, head drawing, the clothed and nude figure, nature illustration, perspective, and environments. Various drawing media and materials are explored. Prerequisite: ILLU 200 and VISC 200 with semester grades of "C+" or higher or instructor permission.

**ILLU 305. Image Making. 3 Credits.**
Concentrated study in developing methodologies for producing contemporary illustration. Emphasis is placed on concept development, composition exploration, value and color studies, and reference creation. Required for Illustration majors as a pre-review course. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 200.

**ILLU 315. Introduction to Illustration. 3 Credits.**
Concentrated study in developing skills and techniques with media and materials that are employed in producing contemporary illustration. Continued emphasis on methods of research and idea generation. Prerequisite: ILLU 200 and VISC 200 with semester grades of "C+" or higher or instructor permission.

**ILLU 405. Drawing Media for Illustration II. 3 Credits.**
Students will explore various drawing and painting media to continue developing their mastery of representational imagery for illustration. Reference collecting, model making, and the creating of photographic reference material will be addressed. Emphasis on mark making, value and color relationships, and placing the figure in an environment is also covered. Prerequisite: ILLU 205 and ILLU 315 with semester grades of "C+" or better or instructor permission.

**ILLU 410. Fundamentals of Animation. 4 Credits.**
Concentrated study in developing skills and techniques with digital media and materials employed in producing basic contemporary animation. Development of concept, script, storyboard, and use of audio, music and sound effects are part of this animation experience. Prerequisite: ILLU 205 and ILLU 315 with semester grades of "C+" or higher or instructor permission.

**ILLU 415. Illustration Concepts. 3 Credits.**
Focus of this course is to learn how to think visually. Concentrated study on developing different forms of concepts for illustration. Continued development of technical skills and visual literacy to gain insight on how to make images that communicate unique ideas clearly. Prerequisite: ILLU 405 and ILLU 410 with semester grades of "C+" or higher or instructor permission.

**ILLU 425. Concept Art. 3 Credits.**
Introductory exploration of the process, skills and concepts necessary for successful concept art character design and effective blending of matte painting and film. Drawing will be of primary concern for this course, yet exploring digital means of character development will also be introduced. Prerequisite: Successful completion of ILLU 405 and ILLU 410 with semester grades of "C+" or higher or instructor permission.

**ILLU 435. Sequential and Narrative Illustration. 3 Credits.**
Exploration of thematic illustration through the development of a series of images based on a topic or story. Aspects of continuity, consistency, storytelling, pacing, editing, packaging and a holistic method of developing illustration are addressed. Prerequisite: ILLU 415 and ILLU 425 with semester grades of "C" or higher or instructor permission.

**ILLU 445. Advanced Concept Art. 3 Credits.**
Continuation in exploration of the process, skills and concepts for successful concept art character design, along with continued development of digital characters and 3D modeling. Prerequisite: ILLU 415 and ILLU 425 with semester grades of "C" or higher or permission of instructor.

**ILLU 510. Advanced Animation. 4 Credits.**
Continued development of concepts, scripts, storyboards, and use of audio, music and sound effects in the production of a 1-3 minute animated film. Prerequisite: Prior completion of ILLU 410, ILLU 435, and ILLU 445 with semester grades of "C" or higher.

**ILLU 535. Promotion and Marketing for Illustration I. 3 Credits.**
Focus will be on preparation for entering the profession. Development and completion of a self-promotion and marketing package will supplement and support the senior portfolio. Contemporary business practices and legal issues will be addressed. Prerequisite: ILLU 435 and ILLU 445 with semester grades of "C" or higher.

**ILLU 545. Promotion and Marketing for Illustration II. 4 Credits.**
Continuation of phase development and completion of a self-promotion and marketing package from ILLU 535. Additional business practices and legal issues will be addressed. Prerequisite: ILLU 510 and ILLU 535 with semester grades of "C" or higher.

**ILLU 703. Illustration. 3-6 Credits.**
Design Courses

**INDD 200. Foundations in Industrial Design. 3 Credits.**
Course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in prototyping, drawing, computer modeling, digital fabrication, and presentation are demonstrated and developed. Prerequisite: BDS 101 and BDS 103 with semester grades of "C+" or higher or instructor permission.

**INDD 212. Drawing for Industrial Design I. 3 Credits.**
This course will focus on drawing as a tool of communication through a variety of exercises that explore observation and perception, form and proportion, dimensional illusion and expressive characteristics using a variety of materials and media. This course will also use two- and three-dimensional modeling software necessary for all industrial designers. Prerequisite: BDS 101 and BDS 103 with semester grades of "C+" or better or instructor permission.

**INDD 284. Basic Industrial Design Studio. 3 Credits.**
Course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in drawing, computer modeling, physical modeling, and presentation are demonstrated and developed. Strategies to improve creativity are explored, while addressing market and production considerations. Students majoring in Industrial Design must earn a semester grade of "C" or better in this course in order to continue in the program. Prerequisite: INDD 200 and INDD 212 with semester grades of "C" or higher. Corequisite: INDD 312 and ADS 325.

**INDD 302. Intermediate Industrial Design Studio. 4 Credits.**
This course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in drawing, computer modeling, physical modeling, and presentation are demonstrated and developed. Strategies to improve creativity are explored, while addressing market and production considerations. Prerequisite: INDD 284 and INDD 312 with semester grades of "C+" or higher or instructor permission.

**INDD 308. Materials and Processes. 3 Credits.**
A study of modern materials, manufacturing processes, and construction methods applicable to the fields of industrial design and interior design. Design analysis of existing products, furniture, building components, and storage systems. Design assignments in furniture, storage systems, and interior space arrangements with emphasis on materials and construction. Field trips to area manufacturing and design facilities. Prerequisite: INDD 284 and INDD 312 with semester grades of "C+" or higher or instructor permission.

**INDD 312. Drawing for Industrial Design II. 3 Credits.**
Sketching allows product designers to generate ideas quickly, without committing resources to any single idea. This course continues to focus on sketching/drawing as a tool of communication through a variety of exercises that continues to explore form and proportion, composition, dimensional illusion and expressive characteristics. Prerequisite: INDD 200 and INDD 212 with semester grades of "C+" or higher or instructor permission.

**INDD 320. Directed Readings in Industrial Design. 1 Credit.**
This course is an alternative to ADS 320 (Hallmark Symposium) for Industrial Design students with unavoidable scheduling conflicts. Students will watch relevant films and digital media, read important texts and articles, attend lectures, then compose and submit careful reflections on those media and experiences. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Admission to the Department of Design in the School of Architecture & Design and department permission.

**INDD 350. Computer-Aided Design. 3 Credits.**
Students will develop the skills needed to efficiently built parametric CAD models consistent with industrial design professional standards using Solidworks, an industry standard solid modeling software. Emphasis will be placed on how to translate 2D designs into 3 Dimensional models, focusing on design for manufacturing, understanding complex surfacing, and assemblies. Students will learn how to create photorealistic renderings using Keyshot. Prerequisite: INDD 302 with a semester grade of "C" or higher or instructor permission.

**INDD 378. Problems in Industrial Design: ______. 3 Credits.**
Individual and/or group research projects in one of several specific design areas which will be identified on a semester by semester basis. May be repeated for credit. Prerequisite: INDD 302 with a semester grade of "C" or higher or permission of instructor.

**INDD 446. Advanced Industrial Design Studio. 3 Credits.**
Continuation of INDD 284 and 302 but encompassing design problems of greater complexity including group research and problem solving assignments in advanced product and service design. Advanced techniques in problem solving, concept communication, visualization, and overall design expression will be demonstrated and explored. Prerequisite: INDD 302 with a semester grade of "C" or higher or instructor permission.

**INDD 448. Professional Industrial Design Studio Practices. 3 Credits.**
Continuation of Industrial Design studios, projects are longer requiring a high level of demonstrated design ability for successful completion. Issues regarding professional ethics, accountability, and responsibility to public and client are discussed and implemented. Professional design, presentation, and visualization skills will be demonstrated and explored. Finished designs will include full production technical specifications. Prerequisite: INDD 446 with a semester grade of "C" or higher or instructor permission.

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

**INDD 510. Human Factors and Ergonomics. 3 Credits.**
Introduction to the field of human factors appropriate to industrial, interior, interaction, and visual design. The course will cover a wide range of topics that fall underneath the umbrellas of cognitive ergonomics and physical ergonomics. This course aims to examine the cognitive and physical constraints of the human systems and how design can address those issues. Prerequisite: INDD 302 with a semester grade of "C" or higher or instructor permission.

**INDD 512. Methods in Design. 3 Credits.**
Introduction to the study of methods of designing common to industrial, interior, and visual design. Evaluation methods (semantic differential), creativity methods (scenario writing), and task-oriented method: (PERT/CPM) will be considered in relation to design problems. Open to non-design students. Prerequisite: Corequisite: INDD 302 for industrial design majors or ENVD 200 for environmental design majors respectively. Consent of instructor for all other students.
INDD 555. Portfolio. 3 Credits.
Work directed toward maximizing the quality and effectiveness of the individual student's professional portfolio. Prerequisite: INDD 446 with a semester grade of "C" or higher or instructor permission.

INDD 580. Senior Industrial Design Studio. 4 Credits.
Course requires the negotiation and accomplishment of a comprehensive body of work, comprising independent research, ideation, refinement, detail technical specifications, renderings, and a working and tested prototype of your final design. A final report of the project is required documenting your design process, the depth and complexity of which are commensurate with expectations for entry-level professionals. Faculty may consider national or international competitions as appropriate substitutions for student derived briefs, where applicable. The nature and scope of the work (1-2 projects maximum), as well as details of anticipated accomplishment must be outlined by the student and approved by the instructor prior to the beginning of the second week of classes. In exceptional circumstances, projects may extend into both semesters, via INDD 581—this requires permission/negotiation with faculty and is to be declared as an aspiration at start of INDD 580. Prerequisite: INDD 448 and INDD 555 with semester grades of "C" or higher.

INDD 581. Senior Industrial Design Studio II. 4 Credits.
Course requires the negotiation and accomplishment of a comprehensive body of work, comprising independent research, ideation, refinement, detail technical specifications, renderings, and a working and tested prototype of your final design. A final report of the project is required documenting your design process, the depth and complexity of which are commensurate with expectations for entry-level professionals. Faculty may consider national or international competitions as appropriate substitutions for student derived briefs, where applicable. The nature and scope of the work (1-2 projects maximum), as well as details of anticipated accomplishment must be outlined by the student and approved by the instructor prior to the beginning of the second week of classes. In exceptional circumstances, projects may be a continuation of those started in INDD 580—this requires permission/negotiation with faculty and is to be declared as an aspiration at start of INDD 580. Prerequisite: INDD 580 with a semester grade of "C" or higher or instructor permission.

INDD 715. Industrial Design. 2-6 Credits.
Research-oriented advanced study in industrial design. Prerequisite: Graduate major in industrial design or consent of instructor.

INDD 815. Industrial Design. 2-6 Credits.
Prerequisite: INDD 715.

Design Courses

PHTO 101. Fundamentals of Photography. 3 Credits.
Open to students of all disciplines and experience levels, this course provides an introduction to the medium and language of photography. Basic DSLR camera operation and workflow will be accompanied by lectures, readings, and discussions regarding the historical and theoretical concerns of the medium. A digital camera with full manual controls is required - RAW capable preferred.

PHTO 177. First Year Seminar: Picturing Place: Photographing Lawrence. 3 Credits.
Are you new to KU, Lawrence, or even the Midwest? Would you like to know your new home better? The act of photographing - observing, participating, being present - can accelerate a connection to Place. In this digital photography class, each student will identify a specific community or environment within the Lawrence area to photograph repeatedly and meaningfully over the course of the semester. Class time will be spent reviewing and refining the work, discussing its context, introducing research methods for deeper understanding of the chosen topic, and gaining inspiration from relevant historic and contemporary models of photographic inquiry. By the end of the semester, the student will have strengthened both their visual literacy skills and their ties to their new surroundings. All photographic experience levels welcome.

PHTO 200. Foundations in Photography: Digital. 3 Credits.
Foundations in Photography (Digital) explores the technical and creative possibilities of digital photography from image capture to print and the web. This advanced introductory-level studio course covers manual camera operation with dSLR or mirrorless digital cameras, basic digital processing workflow with Adobe software, and inkjet print or digital output methods, accompanied by lectures, readings, and discussions regarding the historical and theoretical concerns of the medium. A digital camera with full manual controls and RAW capable is preferred; a limited number of cameras are available for check-out.

PHTO 201. Photography I. 4 Credits.
The first of the two-part foundational Photography sequence, this majors-only course provides students with a rigorous immersion into the formal, technical, and conceptual concerns and challenges of photography by way of the view camera. Embracing both the wet and digital darkrooms, students shoot and develop sheet film that is then utilized to produce both traditional and digital prints. Intermediate digital editing methods are introduced and explored. View cameras are provided. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: BDS 101 and PHTO 200 with grades of C (2.0) or higher.

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

PHTO 205. Foundations in Photography: Darkroom. 3 Credits.
This introductory studio explores the technical and creative possibilities of black & white film photography. PHTO 205 covers manual camera operation using 35mm film cameras, darkroom film developing, and silver-gelatin printing methods, accompanied by lectures, readings, and discussions regarding the historical and theoretical concerns of the medium. Cameras are provided for check-out. No darkroom experience necessary.

PHTO 210. Understanding Photographs. 3 Credits.
Understanding Photographs is a lecture-based course that focuses on developing a critical understanding of how images, paired with culture and society, generate meaning in both the historical and contemporary contexts. Open to students of all disciplines and experience level.

PHTO 303. Photography I: View Camera. 4 Credits.
The first of the two-part second-year foundational Photography sequence for Photography majors, this course provides students with a rigorous immersion into the formal, technical, and conceptual concerns and challenges of photography by way of the view camera. Embracing both the wet and digital darkrooms, students shoot and develop sheet film that is then utilized to produce both traditional and digital prints. Intermediate digital editing methods are introduced and explored. View cameras are provided. Prerequisite: Admission to the Photography Major or Minor.
and PHTO 200 or PHTO 205 with a semester grade of "C+" or higher or instructor permission. Priority will be given to Photography majors.

PHTO 304. Photography II: Color Digital. 4 Credits.
The second of the two-part foundational Photography sequence, this advanced course builds upon PHTO 303 with additional emphasis on color, RAW workflow, and advanced methods for digital capture, manipulation, editing, and composting. Additionally, students work extensively with large-format inkjet printers to create custom ICC printing profiles. A digital SLR (RAW capable) camera with full manual controls is required. Prerequisite: Admission to the Photography major or minor and PHTO 303 with a semester grade of "C+" or higher, or instructor permission.

PHTO 305. Photography III: The Moving Image. 4 Credits.
This course serves as an introduction to the principles and challenges of photography as a time-based medium. Fundamental concepts of production are introduced and explored through hands-on exercises, class presentations and discussions, lectures, critiques, and individual and group projects. Prerequisite: Successful completion of PHTO 304 with a semester grade of "C" or higher.

PHTO 313. Lighting Studio. 3 Credits.
Lighting Studio is a fundamental course in awareness, modification, and control of light. Students work extensively with strobe and continuous light sources. Principles of natural and artificial light are introduced, explored, and applied through hands-on assignments both in and out of the studio environment. Prerequisite: Admission to the Photography major or minor and PHTO 304 with a semester grade of "C" or higher or instructor permission.

PHTO 314. The Moving Image. 3 Credits.
This course serves as an introduction to the principles and challenges of photography as a time-based medium. Fundamental concepts of production are introduced and explored through hands-on exercises, class presentations and discussions, lectures, critiques, and individual and group projects. Prerequisite: Admission to the Photography major or minor and PHTO 304 with a semester grade of "C" or higher or instructor permission.

PHTO 315. Experimental Processes. 3 Credits.
Experimental Processes is an introduction to the understanding and production of image-based works utilizing experimental approaches and alternative processes in an interdisciplinary environment. Prerequisite: Admission to the Photography major or minor and PHTO 304 with a semester grade of "C" or higher or permission of instructor.

PHTO 316. Professional Practices. 3 Credits.
This course provides an introduction to standards and conventions with regards to professional photographic practice. Topics include portfolio development, copyright, contracts, grant/statement writing, presentation methods, and self-promotion. Prerequisite: PHTO 400 or PHTO 402 each with a semester grade of "C" or higher or instructor permission.

PHTO 360. The Photobook. 3 Credits.
This class introduces students to the many potentials of photographic imagery in book form, from the traditional monograph to the narrative or lyrical and experimental. Considerations of sequencing, context, text, design, materiality, meaning, and production methods will be explored through book examples, readings, discussions, and in-class exercises. The class will culminate in the design and production of a hand-made or on-demand book. Prerequisite: PHTO 304 with a grade of C or higher or declaration of the Undergraduate Certificate in Book Arts or admission to the Photography Minor or instructor permission.

PHTO 400. Junior Seminar. 3 Credits.

This junior-level seminar is focused primarily on the development of independent and collaborative projects through an on-going group critique with an emphasis on research and analysis. Learning is focused on personal development and other issues relevant to contemporary photographic practice through assigned readings, presentations, and group discussion. Prerequisite: PHTO 304 with a semester grade of "C" or better or instructor permission.

PHTO 402. Photo Media Seminar. 3 Credits.
This upper-level seminar is focused primarily on the development of independent and collaborative projects through on-going group critique with an emphasis on research and analysis. Learning is focused on personal development and other issues relevant to contemporary photographic practice through assigned readings, presentations, and group discussion. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. May be repeated for credit. Prerequisite: PHTO 304 or instructor permission.

PHTO 450. Senior Seminar. 3 Credits.
This senior-level seminar is focused primarily on the further development of independent and collaborative projects through an on-going group critique with an emphasis on research and analysis. Learning is focused on personal development and other issues relevant to contemporary photographic practice through assigned readings, presentations, group discussions, and rotating special topics. Prerequisite: PHTO 400 with a semester grade of "C" or higher or instructor permission.

PHTO 500. Portfolio and Thesis. 4 Credits.
Taken the final semester of study, this capstone course guides students through the research, development, and refinement of a final body of photographic work and appropriate supplemental materials. Methods and strategies of presentation and dissemination are discussed and explored. Prerequisite: PHTO 450 with a semester grade of "C" or higher or instructor permission.

PHTO 513. Advanced Lighting Studio. 3 Credits.
A continuation of the skills and principles discussed in PHTO 313. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHTO 313 or instructor permission.

PHTO 514. Advanced Moving Image. 3 Credits.
A continuation of the skills and principles discussed in PHTO 314. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHTO 314 or instructor permission.

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

PHTO 560. Special Topics in Photography: __________. 3 Credits.
Special topics courses in Photography vary by instructor and provide additional opportunities for interdisciplinary research and advanced specialized study. A semester grade of "C" or higher is required in order for this course to count toward the "Major Studies Electives" component of the Photography major. May be repeated for credit. Prerequisite: PHTO 304 with a semester grade of "C" or higher or instructor permission.

Design Courses

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

VISC 200. Foundations in Typography. 3 Credits.
Introduces the discipline, function, and tradition of typography as it relates to visual/verbal communication. Emphasis is on interrelationships of letter, word, line and page. Projects examine two-dimensional typographic space, sequence and information hierarchy. Prerequisite: BDS 101 and BDS 103 with semester grades of “C+” or higher or instructor permission.

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

VISC 202. Elements of Typography. 3 Credits.
Introduces the discipline, function, and tradition of typography as it relates to visual/verbal communication. Emphasis is on interrelationships of letter, word, line and page. Projects examine two-dimensional typographic space, sequence and information hierarchy. Prerequisite: VISC 200 and ILLU 200 with semester grades of “C+” or higher or instructor permission.

VISC 204. Principles of Visual Communication. 3 Credits.
Visual communication problems involving the student in the translation of verbal concepts and design theory into visual images. This course focuses attention on the process of defining problems, gathering information, and formulating clear, powerful, and persuasive visual statements. Introduction to methods of research, idea generation, and image making will be an integral part of this course. Prerequisite: VISC 200 and ILLU 200 with semester grades of “C+” or higher or instructor permission.

VISC 302. Typographic Systems. 4 Credits.
Further exploration of typographic form and manipulation of variables which affect content; stresses the importance of typographic composition as an integral component of visual communication design. Projects examine advanced structures of typographic space, work-image structure, and typographic details and aesthetic. Prerequisite: VISC 202 and VISC 204 with semester grades of “C+” or higher or instructor permission.

VISC 304. Designing Understanding. 4 Credits.
Exploration of the relationships among people, places, and the visual objects and information they use. Attention on the different roles of the designer as observer, empathizer, communicator and experience builder. Introduction to information design processes and procedures of understanding by ordering data into useful and persuasive information tools and experiences. Various methodologies will be explored for visualizing information for clarity, resonance, and editorial voice with special attention to the relationships among audience and context in the creation of meaning. Prerequisite: VISC 202 and VISC 204 with semester grades of “C+” or higher or permission of instructor.

VISC 310. Letterpress. 3 Credits.
This course concentrates on the traditional methods of hand typesetting, using the Department of Design’s collection of lead and wood type. Learn how to use a pica rule, composing stick, leading, spacing material, the California Job Case, mix ink and operate a Vandercook proof press and C&P or Golding platen. Be inspired by visits to Special Collections. Emphasis will be placed on the acquisition of skills and the creative use of type and images. Prerequisite: BDS 101 with a semester grade of “C+” or higher or instructor permission.

VISC 360. The Photobook. 3 Credits.
This class introduces students to the possibilities of visual communication through photobook design, from the traditional monograph to the narrative or lyrical and experimental. Considerations of sequencing, context, text, materiality, meaning, and production methods will be explored through book examples, readings, discussions, and in-class exercises. Visual Communication students will partner with a photographer in the class to design and produce a hand-made or on-demand book. Prerequisite: VISC 304 with a semester grade of “C+” or higher or declaration of the Undergraduate Certificate in Book Arts or instructor permission.

VISC 402. Designer as Author. 3 Credits.
Building from the structures and approaches of VISC 302, the course is a research-based examination of traditional, non-traditional and expressive uses of the typographic medium. Projects emphasize the student as both content generator as well as designer and include development of text + image narrative, word as image and typographic “voice” while further refining technical proficiency. Prerequisite: VISC 302 and VISC 304 with semester grades of “C+” or higher.

VISC 404. Designing for Social Interactions. 3 Credits.
Introduces the discipline of designing for dynamic media (i.e., internet, on screen, multi-media.) Emphasis will be placed on concept development and on the fundamental principles of information hierarchy, user experience, navigation strategies, site development and site architecture. Projects, lectures and tutorials will provide a working knowledge of current tools and techniques, while exploring the issues of narrative structure, rhythm, space, animation, sound, and video. Prerequisite: VISC 302 and VISC 304 with semester grades of “C+” or higher.

VISC 405. Designing Brand Identity. 3 Credits.
A brand’s visual identity expresses an organization’s big idea of what it is, how it lives in the world, who is serves and why. Simply put, it identifies, explains and persuades. A visual brand identity needs to engage and communicate to specific audiences while differentiating the brand from its competition. This class will explore the creation of brand identity elements such as logos, icons and symbols, as well as how these can be organized into a “system of parts” that can communicate across multiple applications. Additionally, logo, symbol and iconography workflow and methods of brand identity ideation and conceptualization will also be explored. Prerequisite: Successful completion of VISC 302 and VISC 304 with semester grades of “C+” or higher and successful completion of the Second Year Full Review or instructor permission.

VISC 410. Digital Letterpress. 3 Credits.
In this course students will explore the possibilities that digital technologies offer to the letterpress printer, including laser cutting and polymer platemaking. Students will learn how to prepare digital files to make negatives, and to process and print polymer plates on the Vandercook press. Emphasis will be placed on creativity and craft. Starting with the simplest of techniques, projects will grow in increasing technical and aesthetic complexity. No previous letterpress experience is required. Knowledge of Adobe InDesign and Illustrator is essential. Prerequisite: Permission of instructor.

VISC 414. Publication and Editorial. 4 Credits.
Exploration of topics dealing intensively with editorial concept and format organization. Projects stress advanced problems in the integration of text and image through the development of complex and variable structures. Emphasis on thorough researching of content and audience as well as understanding of production/execution implications of solutions. Prerequisite: VISC 302 and VISC 304 with semester grades of C+ or higher or instructor permission.

**VISC 415. Motion Graphics. 3 Credits.**
Introduction to the elements, principles and history of motion design. Emphasis on the conceptualization, planning and storyboarding of time-based media with respect to some specific, clearly stated aesthetic and/or communicative purpose. Students will examine methods for synthesizing still & moving imagery, typography and audio, in motion, using Adobe After Effects in combination with other software such as Final Cut Pro, Illustrator and Photoshop. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher or instructor permission.

**VISC 420. Exhibition Design. 3 Credits.**
This course will explore how exhibitions are conceptualized, designed and made. It will look at the role of curators, exhibition designers, graphic designers as well as the audience of cultural institutions. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher or instructor permission.

**VISC 425. Environmental Graphics. 3 Credits.**
This course will examine core principles and practices of environmental graphic design. Many of these concepts will be concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of place. Some of the topics discussed will include: signage, exhibit design, identity graphics, pictogram design, mapping, civic design and themed environments. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher or instructor permission.

**VISC 435. Book Arts. 3 Credits.**
Producing books in editions is a complex undertaking. Students work in teams to create or compile content of their choosing, then edit, design, and bind their own books in a small edition. The class combines both traditional letterpress technology and digital interface for the creation of text and image. Each student receives two copies of the team’s final book, one copy is archived in Special Collections at the Spencer Research Library. Prerequisite: BDS 101 with a semester grade of "C+" or instructor permission.

**VISC 440. Bookmaking. 3 Credits.**
Students will learn to make a variety of book structures and enclosures, from historical to contemporary. Prototypes and models, as well as comprehensive notes and instructions will provide the student with a library of bindings for future reference. Students will document paper that is made in class and create a record for themselves, other students, and the Department of Design. Prerequisite: BDS 101 with a semester grade of "C+" or higher or instructor permission.

**VISC 455. Designing Information. 3 Credits.**
Making preliminary visualizations, models, and prototypes. Examines words, diagrams, type, and sequencing to restructure messages so that they tell a story more effectively. Editing images to make messages clear, unambiguous and understandable by their intended audience(s). Designing the appearance of an information product so that users can find what they want and understand it when they get there. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher or instructor permission.

**VISC 520. Designing for Change. 4 Credits.**
Exploration of branding, service and interaction design opportunities that respond to real-life complexity: audiences, systems and contexts. Introduces business and design thinking strategies associated with brand development and the idea that design plays a vital role in our local, national, and global society and well-being. Emphasis on the methods of thinking and research which precede the making of design as well as the importance of writing and verbal presentation to the visual communication design profession. Prerequisite: VISC 404 and VISC 405 with semester grades of "C" or higher or instructor permission.

**VISC 525. Senior Problems. 3 Credits.**
Goal-oriented graphic design problem-solving with emphasis on research, analysis, and synthesis of complex visual problems. Will allow for in-depth study of professional design issues and topics; provides a forum for multidisciplinary collaboration with related professional disciplines. May be repeated for credit. Prerequisite: VISC 530 with a semester grade of "C" or higher, or instructor permission.

**VISC 530. Portfolio. 4 Credits.**
Instruction in the organization and presentation of a professional quality visual portfolio. Readings, feedback and online collaborations will focus on the development of a focused portfolio consistent with the individual student's pursuits. Prerequisite: VISC 402 and VISC 520 with semester grades of "C" or higher or instructor permission.

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

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

**VISC 560. Special Topics in Visual Communication: _____ 3 Credits.**
A study of different topics in different semesters in a special area of visual communication. Entry by permission of instructor. May be repeated for credit.

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

**VISC 704. Designing Understanding. 3 Credits.**
Exploration of the relationships among people, places, and the visual objects and information they use. Attention on the different roles of the designer as observer, empathizer, communicator and experience builder. Introduction to information design processes and procedures of understanding by ordering data into useful and persuasive information tools and experiences. Various methodologies will be explored for visualizing information for clarity, resonance, and editorial voice with special attention to the relationships among audience and context in the creation of meaning. Prerequisite: Permission of the instructor.
VISC 706. Graphics. 3-6 Credits.

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

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

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

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

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

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

VISC 735. Book Arts. 3 Credits.
Combines wide range of traditional letterpress and digital processes for type and image for individually determined student book projects. Projects will culminate in a small printed and bound edition. Prerequisite: Graduate student status and instructor permission.

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

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

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

VISC 815. Graphics. 2-6 Credits.
Individual research.

Department of Architecture

Introduction

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

Mission

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

- The Master of Architecture (a NAAB-accredited professional degree),
- the Master of Architecture Track I (5+ year) (p. 44)
- the Master of Architecture Track II (2-year) (p. 49)
- the Master of Architecture Track III (3-year) (p. 49)
- The Bachelor of Science in Interior Architecture (p. 47), and
- 2 post-professional graduate degrees,
- the Master of Arts in Architecture (p. 50)
- the Ph.D. in Architecture (p. 51)

Undergraduate Programs

Master of Architecture Program (Track I: 5+ year)

“In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (http://
Prospective students who apply for admission to the accredited 5-year degree program and are accepted through the undergraduate admissions process are admitted directly into the Master of Architecture (M.Arch) Track I program. M.Arch (Track I) is a National Architectural Accrediting Board (NAAB) accredited professional degree that makes graduates eligible to sit for licensure examinations to become licensed architects. These students pay undergraduate tuition through the first 4 years and receive the Bachelor of Arts in Architectural Studies after completing 4 years of study, then move on to graduate student status for the final year. Students holding a baccalaureate degree apply through graduate admissions and enter a 3-plus-year program (those holding a preprofessional degree in architecture receive advanced standing and usually complete the degree in 2 years plus 1 summer).

Bachelor of Arts in Architectural Studies
The B.A. in Architectural Studies is designed to serve as a platform or foundational degree for students who plan to specialize in architecture and other disciplines that focus on the design, planning, and construction of the built environment. It is awarded to M.Arch Track I students when they complete the first 4 years of study.

Bachelor of Science in Interior Architecture
The Bachelor of Science in Interior Architecture trains students to become professional interior designers who focus on creating spaces with people in mind based on design research evidence. The Interior Architecture curriculum is compliant with CIDA (Council for Interior Design Accreditation) Professional Standards. The 4-year program has also been aligned with the School's NAAB-accredited Master of Architecture (M.Arch) degree; students have the option of getting accepted in a 2-year track of M.Arch with advanced standing upon completing the B.S. degree in Interior Architecture.

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

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

Of these 3 degree programs, the 3-year Master of Architecture (M.Arch) is a National Architectural Accrediting Board (NAAB) accredited professional degree that makes graduates eligible to sit for licensure examinations. The other degrees are post-professional degrees that do not place the student on the path for architectural registration. Students seeking a career change into a professional curriculum should apply for admission to the 3-year M.Arch. degree.

Courses
ARCH 100. Architectural Foundations I. 4 Credits.
An introductory design studio directed toward the development of spatial thinking and the skill necessary for the analysis and design of architectural space and form. This course is based on a series of exercises that include demonstrating observational and analytical skills through freehand drawing, full-scale studies in the making of objects that explore the relationship between 2D and 3D through mapping and extruding, and the design of a sequence of architectural spaces that explores path-space relationships and threshold. Students are introduced to different descriptive and analytical media and techniques of representation to aid in the development of critical thought, including orthographic projection, parallel drawing, exploded views, and measured perspective. Open only to students in Architectural Engineering. Prerequisite: Approval from the Dean of the School of Architecture and Design.

ARCH 101. Architectural Foundations II. 4 Credits.
A continuation of ARCH 100, with major emphasis on the design relationships between architectural space, human experience, and the environment. This course focuses on the basic design of a small architectural work on a real site, beginning with site analysis, the construction of a 3-dimensional site model, the learning of organizational principles, and the understanding of how the use of precedent can inform design. The design process itself is highly iterative, from 2- and 3-dimensional parti diagramming to generate ideas, to 3D investigations at different architectural scales. In design development, students learn the impact of internal programmatic forces and external site forces on design, including the seasonal and diurnal variations in natural lighting through sun path diagrams. By the end of the semester, students will have worked through the fundamental processes of building design towards the synthesis and presentation of a final scheme. Prerequisite: ARCH 100. Open only to students in Architectural Engineering.

ARCH 103. Introduction to Architecture. 3 Credits.
An introduction to the study and practice of architecture. This course aims at orienting the student to the various disciplinary facets which make up the total architectural curriculum as well as to the various professional roles which architects can be expected to perform. Architectural study is seen as both an art and a science, and architectural practice is seen as a complex, interdisciplinary professional activity. Students taking this course must bring a lap top computer to class.

ARCH 104. Principles of Modern Architecture. 3 Credits.
A lecture course covering the emergence of technological, theoretical and aesthetic principles of modern design beginning with the socio-cultural impact of industrialization and the crisis in architecture at the end of the 19th century. Attention is given to functionalist theory, mechanical analogies and the so-called machine aesthetic of 1910-1930 and to the precedents of important design principles of modern architecture, including modular coordination, the open plan, interlocking universal space, unadorned geometry, structural integrity, programmatic and tectonic expression, efficiency and transparency and briefly explores their development in post-war and late 20th century examples.

ARCH 108. Architectural Foundations I. 6 Credits.
An introductory design studio directed towards the development of spatial thinking and the skills necessary for the analysis and design of architectural space and form. This course is based on a series of exercises that include direct observation: drawing, analysis and representation of the surrounding world, and full-scale studies in the making of objects and the representation of object and space. Students are introduced to different descriptive and analytical media and techniques of representation to aid in the development of critical thought. These include but are not limited to freehand drawing, orthographic projection, para-line drawing, basic computer skills, and basic materials investigation. Students must bring a laptop computer to this class. Prerequisite: Approval from the Dean of the School of Architecture and Urban Planning.

**ARCH 109. Architectural Foundations II. 6 Credits.**
A continuation of the Architectural studio sequence with major emphasis on the design relationships among people, architectural space, and the environment. The course is based on a series of exercises leading to the understanding of architectural enclosure as mediating between people and the outside world. Issues of scale, light, proportion, rhythm, sequence, threshold, and enclosure are introduced in relation to the human body, as well as in relation to the human body as well as the architectural form. Students will engage in drawing, perspective projection, model building, and basic computer graphics. Students must bring a laptop computer to this class. Prerequisite: ARCH 108.

**ARCH 110. Introduction to Computing. 3 Credits.**
This course prepares students for design computation topics in the degree program. Topics covered in the class include computer basics, bitmap representation, vector-based graphics, 3-D modeling, scene modeling, building modeling, production of technical drawings, and other issues. These topics are covered in relation to architectural representation and involve skill development in both 2-D and 3-D modeling. The course includes projects that align with those covered in first-year design studios, presenting students with an alternative tool for the representation of two-dimensional diagrams and three-dimensional models. Requirements: Laptop computer with software that meets course specifications. Prerequisite: Must be admitted as a first-year student in the School of Architecture & Design.

**ARCH 177. If These Walls Could Talk: Exploring KU Campus Architecture. 3 Credits.**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in architecture. May not contribute to major requirements in architecture. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**ARCH 208. Form and Function. 6 Credits.**
A continuation of the Architectural Studio sequence with major emphasis on introducing students to the basic form determinants of architecture—From limited scope exercises to complete building designs. Using diagrams and sketches, plans, sections, elevations and models, students explore the spatial ordering of human activity, site and landscape analysis, light and air modulation, simple environmental controls and energy conservation, basic framing systems, volumetric organization and the materials of building skins and envelopes. Students must bring a laptop computer to this class. Prerequisite: ARCH 109.

**ARCH 209. Sustainability, Site, and Context. 6 Credits.**
A continuation of the Architectural Studio sequence with major emphasis on the synthesis of basic form determinants of medium-sized, multi-story public building in the urban environment. Students will demonstrate competence in basic architectural design, and preparedness for the third-year focus on materials and methods of building construction. Students are required to bring a laptop computer to this class. Prerequisite: ARCH 208.

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

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

**ARCH 380. Design Workshop: Ideas and Methods in Planning and Design. 3 Credits.**
This course focuses on design methods, ideas and approaches at the city, neighborhood and community levels. The course will introduce approaches to urban design and planning which are responsive to social, environmental and ecological issues. The goal is to develop core competencies in design thinking such as analyzing specific problems and developing possible design interventions by understanding relevant theories and analyzing case studies. Students will critically analyze past and current urban trends through case studies to inform design ideas for more equitable and sustainable communities. This material will be covered through class discussions, readings, and a number of design-oriented team projects and assignments.

**ARCH 400. Interior Architecture Studio I. 6 Credits.**
This course is an introduction to the basic principles and elements used in spatial organization, innovative design solutions and the practice of interior architecture, from predesign through final presentations. Prerequisite: Must be admitted to the Bachelor of Arts in Architecture Studies with an emphasis in Environmental Design.

**ARCH 401. Interior Architecture Studio II. 6 Credits.**
This course is an introduction to materials resources, specifications and sustainability; and helps students further their understanding of the design process by creating innovative design solutions and spatial organization for interior architecture. Prerequisite: Must be admitted to the Bachelor of Arts in Architecture Studies with an emphasis in Environmental Design.

**ARCH 501. Architectural Foundations I. 6 Credits.**
An introductory design studio directed towards the development of spatial thinking and the skills necessary for the analysis and design of architectural space and form. This course is based on a series of exercises that include direct observation: drawing, analysis and representation of the surrounding world and full-scale studies in the making of objects and the representation of object and space. Students are introduced to different descriptive and analytical media and techniques of representation to aid in the development of critical thought. These include but are not limited to freehand drawing, orthographic projection, para-line drawing, basic computer skills and basic materials investigation. Students must bring a laptop computer to class. Prerequisite:
Admission to M.Arch. III program and/or permission of the Chair of Architecture.

ARCH 502. Architectural Foundations II. 6 Credits.
A continuation of the Architectural studio sequence with major emphasis on the design relationships among people, architectural space, and the environment. The course is based on a series of exercises leading to the understanding of architectural enclosure as mediating between people and the outside world. Issues of scale, light, proportion, rhythm, sequence, threshold, and enclosure are introduced in relation to the human body, as well as in relation to the human body as well as the architectural form. Students will engage in drawing, perspective projection, model building, and basic computer graphics. Students must bring a laptop computer to this class. Prerequisite: Arch 501 studio and admission to M.Arch 3-yr program and permission of the Chair of Architecture.

ARCH 503. Form and Function. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on introducing students to the basic form determinants of architecture—on developing an understanding of basic form determinants of medium-sized, multi-story public building in the urban environment. Students will demonstrate competence in basic architectural design, and preparedness for the third-year focus on materials and methods of building construction. Students are required to bring a laptop computer to this class. Prerequisite: ARCH 502 and permission of the Chair of Architecture.

ARCH 504. Sustainability and Context. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on the synthesis of basic form determinants of medium-sized, multi-story public building in the urban environment. Students will demonstrate competence in basic architectural design, and preparedness for the third-year focus on materials and methods of building construction. Students are required to bring a laptop computer to this class. Prerequisite: ARCH 502 studio or permission of the Chair of Architecture.

ARCH 508. Material and Tectonics. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on studies in urban spaces and design development of building envelopes as related to urban public-life, structural and mechanical systems, and principles of sustainability. Students shall work individually on an advanced building design. Work will focus on medium scale, multi-story, urban-infill, buildings developed to an appropriate level of technical resolution as evidenced in clear schematic wall sections and structural proposals. Students shall demonstrate an understanding of formal ordering and building-concept development as related to the tectonic form determinants. Students are required to bring a laptop computer to this studio class. Prerequisite: ARCH 509.

ARCH 509. Designbuild. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on materiality and construction of built assemblies through hands-on activities. Development of craft, process, collaboration and technical documentation skills will be primary objective of the course. Students are required to bring a laptop computer to this studio class. Prerequisite: Must be current student in the 3.5 or 5 year M.Arch degree or Arch Studies degree. Corequisite: ARCH 510.

ARCH 510. Architectural Detailing. 3 Credits.
Architectural detailing during design and construction phases is a fundamental skillset for architectural practice. This course will focus on technical drawing skills and professional drawing standards and conventions, including construction documentation, shop drawings, and analytical drawing techniques aimed at exploration and communication of the technical aspects of architectural design. Prerequisite: Corequisite: Enrollment in ARCH 509, Designbuild.

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

ARCH 516. Portfolio Development. 3 Credits.
The aim of the course is to teach practical presentation skills using computer software, in addition to graphic design theories and strategies. This course will provide an opportunity for students to design and produce a design portfolio appropriate for internship and/or graduate school applications. Prerequisite: ARCH 209 or core-enrollment in ARCH 508 or ARCH 509.

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

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

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

ARCH 529. Problems in Architectural Acoustics. 1.5 Credits.
This course has the objective to introduce the students to practical problem-solving in architectural acoustics. Precedents will be introduced to frame discussions on how proper acoustical conditions can be realized within the functional parameters of a particular architectural space. Student will develop the understanding of how sound behaves in an enclosed architectural space. The course will include several visits to existing architectural spaces that have specific acoustical requirements and interesting acoustical characteristics.

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

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

ARCH 539. Global History of Construction and Materials. 3 Credits.
This course offers a survey of the global history of structural systems, construction techniques, and building materials from pre-history to contemporary times. The course will emphasize that historical evolution of construction system has not only been informed by technical and
mathematical innovations, but has also been determined by the cultural practices of a region. Examples will be taken from across the globe to show that structure and construction have been historically associated with diverse cultural values and had profound influence on the evolution of architecture and the spatial practices of society.

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

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

ARCH 605. Visualizing Site and Natural Environmental Systems. 3 Credits.
This course introduces concepts of architectural context and site through a combination of lectures and field studies. Natural, social and built systems are presented using a range of perspectives, including holistic ones. Students will develop visual and written skills of analysis through specific site analytic and design techniques. Application exercises and ongoing analysis assignments are required. Restricted to 3.5 and 5 year Master of Architecture students. Prerequisite: ARCH 208 for undergraduate students.

ARCH 606. Site Design. 3 Credits.
This course introduces concepts of architectural context and site through a combination of lectures and field studies. Natural, social and built systems are presented using a range of perspectives, including holistic ones. Students will develop visual and written skills of analysis through specific site analytic and design techniques. Application exercises and ongoing analysis assignments are required. Restricted to 3.5 and 5 year Master of Architecture students. Prerequisite: ARCH 208 for undergraduate students.

ARCH 607. Special Topics in Architecture: ____. 3 Credits.
This course is for the study of architectural topics on a one time or experimental basis in response to changing needs and/or resources in the Program. It may be offered concurrently by different instructors under different subtitles as announced in the Timetable. May be repeated for credit. Prerequisite: Varies by topic.

ARCH 608. Urban Dwelling. 6 Credits.
A continuation of the Architectural Studio sequence with major emphasis on program analysis and design of urban building(s) and urban spaces with culture, context and precedent as major form determinants. Students are required to bring a laptop computer to this studio class. Prerequisite: ARCH 508 and ARCH 509; or ARCH 602.

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

ARCH 610. Integrated Design Documentation. 3 Credits.
Integrated design documentation, including drawings and specifications, is fundamental to the development a professional architectural project. This course is designed to complement and support ARCH 609 Integrated Design Studio in the technical documentation of the studio project and to shed light on professional expectations for design documentation. Prerequisite: ARCH 510. Corequisite: ARCH 609 Integrated Design Studio.

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

ARCH 615. Integrated Systems. 3 Credits.
This course provides a holistic understanding of building systems and active sustainable strategies. Students will examine the appropriate selection, development, and integration of environmental and structural systems covered in previous architecture courses. An emphasis is placed on the interconnectedness of these systems to building form, function, and performance. Use of simulation programs are expanded upon to quantify building performance. Prerequisite: Must be admitted to M.Arch I, II or III or Bachelor of Arts in Architectural Studies degrees.

ARCH 620. Theory of Urban Design. 3 Credits.
An examination of the relationship between architecture and urban design through contemporary interpretations of future urban form and the determinants of the location, spatial structure, growth and decline of cities. Foundations for an interdisciplinary synthesis are examined in an attempt to bridge the hiatus between large-scale architectural design and incremental adjustments to urban dynamics. Prerequisite: Must have completed Arch 208 and be enrolled in Arch 209 during the spring semester this course is offered.

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

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

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

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

Prerequisite: ARCH 200 or ARCH 209 or Corequisite: ARCH 408 or ARCH 409 or ARCH 503.

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

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

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

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

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

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

ARCH 646. American Architectural History. 3 Credits.
This course surveys the history of architecture in the USA from the beginning of European settlements to mid-20th century. It is organized
ARCH 647. Historic Preservation Theory. 3 Credits.
This course presents the historical development and contemporary status of the theories and philosophies of historic preservation. It particularly covers the concepts and approaches developed by UNESCO for the management of tangible and intangible cultural heritage resources worldwide and the related international charters, conventions, operational guidelines, and institutions. Using international case studies, it illustrates a range of theoretical, philosophical, ethical, and practical issues and debates in historic preservation in a global context.

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

ARCH 649. Historic Preservation Technology. 3 Credits.
This course introduces students to architectural historiography and preservation technology. It covers a range of curatorial issues in preservation and adaptive reuse of historic buildings. The topics include technical documentation of historic buildings, archival research, assessment of causes of deterioration and preservation needs in historic buildings, selection of preservation strategies, and techniques of building material preservation. Also covered are the integration of sustainable technologies into historic construction and examination of the ecological advantages of adaptive reuse and preservation.

ARCH 658. Programming and Pre-Design Issues. 3 Credits.
This course will introduce the concepts, methods, techniques, and information used by the architect to establish the parameters of a project, prior to entering the formal design process. The course will introduce the student to the social, technical, leagan and economic dimensions of architectural programming. The content will introduce the core competencies in programming, site, and environmental analysis required by the profession. Programming theory, research techniques, information analysis, evaluation of significance, and creative synthesis of the multivalent factors acting upon the pre-design process of project definition will be covered. Exercises may include programming and analysis of projects and sites assigned in the Architectural Design Studio sequence. Prerequisite: ARCH 209 or ARCH 504.

ARCH 665. History of Urban Design. 3 Credits.
An exploration of the evolution of cities through the cultural and spatial development of human settlement patterns. The role of cities in the transformations of human culture from tribal communities to post industrial society is defined in terms of the historical origins of urban institutions and functions and their transformation into spatial structure and physical form.

ARCH 690. Architecture Study Abroad. 6 Credits.
May be repeated up to a maximum of 18 credits. Students participate in a study abroad program approved by the Architecture Chair. Students will be evaluated upon a submitted journal, sketchbook, or equivalent assignments assigned by the instructor. Graded on a satisfactory/unsatisfactory basis.

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

ARCH 692. Documentation. 2-3 Credits.
Students will document their experience in ARCH 690 or another approved study abroad program. This is intended as a critical reflection upon the student's experience and is additional documentation produced beyond the work done for the study abroad credit. The final product will include a written paper, using appropriate graphics to illustrate key points.

ARCH 695. Internship Documentation. 3 Credits.
Students will document their experience in ARCH 691 or other approved internship or relevant work experience. The purpose of this course is to give students a structured opportunity to select, explore, research, and document a topic relevant to their internship experience and that goes beyond the work done for the internship credit.

ARCH 700. Directed Readings in Architecture. 1-3 Credits.
Individual study of special topics and problems. May be repeated for credit. Prerequisite: Graduate standing.

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

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

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

ARCH 731. Architecture of Health. 3 Credits.
This is a seminar that will focus on the architectural dimensions of health and wellness. The course will investigate the ways the environment contributes to the well being (physical, emotional, spiritual) of people. The history of healthcare environments will be explored to show how healthcare environments have evolved to meet changing medical protocols and environmental technologies. A range of contemporary building types will studied, from critical-care hospitals to assisted-living residences and health spas. Students will research bibliographic sources, prepare case studies of existing health and wellness environments and prepare preliminary planning and design proposals for an environment that human well being.
ARCH 735. Graduate Seminar in Environmental Systems. 3 Credits.

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

ARCH 762. Urban Design Studies. 3 Credits.

Seminar concerned with the factors, processes, techniques, and current issues in urban design practice.

ARCH 799. Independent Study. 1-3 Credits.

May be repeated for credit up to a total of nine (9) credits. Prerequisite: Graduate standing and consent of instructor.

ARCH 800. Special Topics in Architecture: ______. 1-3 Credits.

Advanced or experimental courses on specialized topics representing unique or changing needs and resources in the graduate program in architecture.

ARCH 802. Urban and Community Issues II. 6 Credits.

Continuation of the critical and rigorous investigations into issues of urban and community design with an increasing focus on synthesis and evaluation. Prerequisite: ARCH 801.

ARCH 803. Design-Build and Materiality I. 6 Credits.

An advanced studio with an emphasis on issues of design-build and/or materiality with a focus on problem-setting, discovery, and analysis. Students are required to bring a lap top computer to this studio class. Prerequisite: ARCH 609 and/or consent of the Architecture Department Chair.

ARCH 804. Design-Build and Materiality II. 6 Credits.

Continuation of the critical and rigorous investigations into issues of design-build and/or materiality with an increasing focus on synthesis and evaluation. Prerequisite: ARCH 803.

ARCH 805. Architectural Cooperatives. 6 Credits.

An advanced studio with an emphasis on professional collaboration and scholarship. Faculty-directed investigations within the context of an internship experience will focus on the development of a research topic in areas such as health and wellness, global issues, public interest, and entrepreneurship. Students are required to bring a lap top computer to this studio class. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ARCH 609.

ARCH 806. Architectural Technology II. 6 Credits.

Continuation of the critical and rigorous investigations into issues of building technology with an increasing focus on synthesis and evaluation. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ARCH 805.

ARCH 807. Healthy and Sustainable Environments I. 6 Credits.

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

ARCH 808. Healthy and Sustainable Environments II. 6 Credits.

An advanced studio with an emphasis on investigations into healthy and sustainable environments with a focus on problem-setting, discovery, and analysis. Prerequisite: ARCH 807.

ARCH 809. Internship/Study Abroad. 6 Credits.

An advanced studio involving directed investigations with a focus on problem-setting, discovery, and analysis. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ARCH 609.

ARCH 810. Public Interest Design Studio. 6 Credits.

An advanced studio with an emphasis on engaging community stakeholders and the general public, with a focus on problem-setting, discovery, and analysis. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ARCH 809.

ARCH 811. Architectural Investigation I. 6 Credits.

A workshop-based course involving approved self and group directed investigations in a particular area of architectural investigation with a focus on problem-setting, discovery and analysis. Students are required to bring a lap top computer to this studio class. Prerequisite: ARCH 609.

ARCH 812. Architectural Investigation II. 6 Credits.

Continuation of the critical and rigorous investigations in a particular area of architectural investigation with an increasing focus on synthesis and evaluation. Prerequisite: ARCH 811.

ARCH 830. Designing Healthy Places and Communities. 3 Credits.

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

ARCH 899. Thesis or Project Research. 1-6 Credits.

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

ARCH 930. Doctoral Seminar I. 1 Credit.

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

ARCH 931. Theories of Architectural Inquiry. 3 Credits.

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

ARCH 951. Methods of Inquiry in Architectural Research. 3 Credits.

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

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

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

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

Courses

IA 205. Professional Communications Skills. 3 Credits.
This course is an introduction to visual and oral communication skills. It will build practical skills to design and communicate ideas to a variety of audiences. This practice-based approach will introduce the students to two major fundamentals of communications. Oral competency, through presentations and writing; and visual communications through composition, color theory, typography and branding. The students will have an opportunity to present their work through one on one discussions, small and large group presentations. The course is intended to equip students with the practice-based tools to communicate and demonstrate their design ideas in relation to different fields and to a variety of audiences in practical situations. Prerequisite: ARCH 109 and ARCH 110.

IA 208. Interior Architecture Studio I. 3 Credits.
This second-year design studio is responsible for introducing students to the basic application of design determinants of interior architecture in which precedents research, programming, design, and presentation skills are developed. Design solution methodologies for small and medium scale interior spaces allow students to explore spatial configurations, programming, user centered design solutions, human psychology, behavior in space. There is an introduction to accessibility requirements. Students will learn to demonstrate their explorations with verbal presentations and visual communication skills including but not limited to sketching, diagramming, photography, digital representations and physical models. Prerequisite: ARCH 108 Architecture Foundations I and ARCH 109 Architecture Foundations II.

IA 209. Interior Architecture Studio II. 6 Credits.
A continuation of IA 208 Interior Architecture Studio, the emphasis of this design studio is to develop the application of design determinants in which architecture/design precedent study, programming, materials and furniture integration, and presentation skills are developed. Design solution methodologies for medium scale interior spaces allow students to explore complex spatial configurations and programming, user centered design solutions, furnishings, manufactured products, materials and finishes integrations. Students further develop design skills to address human psychology and behavior in space, and the ability to apply accessibility requirements in their design solutions. Students will demonstrate their explorations with written narratives, verbal presentations and visual communication skills not limited to, sketching, diagramming, photography, digital representations, and physical models. Prerequisite: IA 208 Interior Architecture Studio I.

IA 210. Human Factors in the Built Environment. 3 Credits.
This course provides an introduction to human factors theory, data, and analysis from an architectural perspective. Topics covered include how proxemics, anthropometrics, ergonomics, and material choices in the built environment impact our psychology, behaviors, and health. Furthermore, students will learn how human-centered design can be used to create optimal environments for diversity and inclusion. Open to students enrolled in the Interior Architecture degree. Restricted to students in the IA program. Prerequisite: Must be admitted to the IA program and ARCH 109.

IA 220. Sustainable Interior Materiality. 3 Credits.
This course is an introduction to the application of materials, processes, specification, and craft in the construction of the built environment. Along with presenting the information required for understanding the basic principles and appropriate application and performance of construction systems and assemblies, the course also provides a conceptual framework to bridge between the physical conditions of construction related to materials selections and the abstract processes of tectonics design. Students will demonstrate their explorations through different methods including model building and hands-on building experiences. Prerequisite: IA 210.

IA 230. Lighting Design and Technology. 3 Credits.
An exploration of topics on natural lighting and illumination in interior spaces. Includes lighting sources, technology, specifications of luminaires and design applications through technical drawings. Prerequisite: IA 208, IA 510.

IA 300. Special Topics in Interior Architecture: ______. 3 Credits.
Study of special topics related to interior architecture in response to changing needs and/or resources of the interior architecture degree program. It may be offered concurrently by different instructors under different subtitles as announced in the semester timetable. May be repeated for credit. Prerequisite: Varies by topic.

IA 308. Interior Architecture Studio III. 6 Credits.
This third-year architecture studio builds on the skills developed in the second-year IA Studios. It covers design development of a nonresidential medium scale project. Students work individually to explore application of complex programming, spatial configuration, sustainability, lighting design, acoustics, psychology of a space, human experience, and ability to apply code and accessibility requirements to their projects. Students will explore manufactured products and furniture systems with an emphasis on material selections and specifications. Students will demonstrate their explorations with written narratives, verbal presentations, and visual communication skills including but not limited to, sketching, diagramming, photography, digital representations and physical models. Prerequisite: IA 209.

IA 309. Interior Design-Build Studio. 6 Credits.
A continuation of the Interior Architecture studio sequence with major emphasis on materiality and construction of built assemblies through hands-on activities. Development of craft, process, collaboration and technical documentation skills will be primary objective of the course. Prerequisite: Must have completed IA 209.

IA 322. Furniture Design. 3 Credits.
This course explores the methodology of furniture design and construction. Investigative studies of theory, materials and construction
methods of classical, modern, and contemporary furniture design result in a basic knowledge of human factors, design processes, and tectonics. Students will develop skills in design and construction of a piece of furniture from using interior millwork to advanced digital technology. Prerequisite: IA 220.

IA 341. History of Interior Architecture. 3 Credits.
This lecture course offers a survey of interior spaces and built environments in relationship to historical, architectural, religious, political, cultural, and social context of different eras. This course provides a global overview of the historical evolution of interior spaces and furnishings from pre-historic times to the 20th century and covers geographical areas of Europe, America, Latin America, Asia, Middle-East and Africa. Students will be asked to demonstrate their learnings in the form of research drawings, and written papers. Prerequisite: Must be admitted to the IA Program and ARCH 541.

IA 359. Special Problems. 1-3 Credits.
Special problems in Interior Architecture. This study of a particular problem in Interior Architecture involving individual research and presentation, conferences and reports. Prerequisite: Student must submit to his/her faculty advisor in advance, a statement they wish to pursue. The instructor must give permission to study with the student.

IA 390. Study Abroad. 5 Credits.
Students participate in a study abroad program approved by the IA program. Students will be evaluated upon a submitted journal, sketchbook, or equivalent assignments assigned by the instructor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be admitted to the IA Degree program.

IA 405. Professional Communications Skills. 3 Credits.
This course is an introduction to visual and oral communication skills. It will build practical skills to design and communicate ideas to a variety of audiences. This practice-based approach will introduce the students to two major fundamentals of communications. Oral competency, through presentations and writing; and visual communications through composition, color theory, typography and branding. The students will have an opportunity to present their work through on one or on discussions, small and large group presentations. The course is intended to equip students with the practice-based tools to communicate and demonstrate their design ideas in relation to different fields and to a variety of audiences in practical situations. Prerequisite: Must be admitted to the BS Interior Architecture degree.

IA 408. Design Research. 3 Credits.
A seminar-based elective that exposes students to critical interior design research approaches, including but not limited to programming, post-occupancy evaluations (POE), global and cultural dimensions, and design thinking. Topics variable on accreditation needs, represented by subtitles as announced in the semester timetable. May be repeated for credit. Prerequisite: IA 308.

IA 409. Integrated Interior Architecture Studio. 6 Credits.
An advanced studio with an emphasis given to the student's demonstration of integration of all previously learned design skills. These include program analysis, space configuration, formal design composition, structure, materials and methods of construction, technical development of interior spaces, environmental systems, lighting design, acoustics, code and regulation compliance, and principles of sustainability. Students should also demonstrate an appropriate awareness of history, theory, and culture of the given context. The level of project development should be demonstrated by technically precise drawings and well-researched written documentation in additional to other means of representation. Students work in groups and with professional consultants. Prerequisite: IA 308.

IA 506. Interior Architecture Studio III. 3 Credits.
This third-year architecture studio builds on the skills developed in the second-year IA Studios. It covers design development of a nonresidential medium scale project. Students work individually to explore application of complex programming, spatial configuration, sustainability, lighting design, acoustics, psychology of a space, human experience, and ability to apply code and accessibility requirements to their projects. Students will explore manufactured products and furniture systems with an emphasis on material selections and specifications. Students will demonstrate their explorations with written narratives, verbal presentations, and visual communication skills including but not limited to, sketching, diagramming, photography, digital representations and physical models. Prerequisite: IA 209 Interior Architecture Studio II.

IA 509. Design-Build Studio. 6 Credits.
A continuation of the Interior Architecture studio sequence with major emphasis on materiality and construction of built assemblies through hands-on activities. Development of craft, process, collaboration and technical documentation skills will be primary objective of the course. Prerequisite: Must have completed IA 209 Studio.

IA 510. Human Factors in The Built Environment. 3 Credits.
This course provides an introduction to human factors theory, data, and analysis from an architectural perspective. Topics covered include how proxemics, anthropometrics, ergonomics, and material choices in the built environment impact our psychology, behaviors, and health. Furthermore, students will learn how human-centered design can be used to create optimal environments for diversity and inclusion. Open to students enrolled in the Interior Architecture degree. Restricted to students in the IA program. Prerequisite: Must be admitted to the IA program.

IA 511. Ergonomics. 3 Credits.
This course focuses on analyzing human perception and behavioral patterns in the built environment and the study of natural, cultural, social and ethnical patterns and rituals. Students will survey and design a series of solutions for design problems addressing relationships between the organic and human-made environments as they relate to human experience. These explorations will be demonstrated by written narratives, universal design solutions, wayfinding techniques and ergonomics studies. Prerequisite: Must be admitted to the IA degree plan.

IA 520. Products Materials and Specifications. 3 Credits.
This course is an introduction to the application of materials, processes, specification, and craft in the construction of the built environment. Along with presenting the information required for understanding the basic principles and appropriate application and performance of construction systems and assemblies, the course also provides a conceptual framework to bridge between the physical conditions of construction related to materials selections and the abstract processes of tectonics design. Students will demonstrate their explorations through different methods including model building and hands-on building experiences. Prerequisite: Must be admitted to the IA degree plan.

IA 522. Furniture Design. 3 Credits.
This course explores the methodology of furniture design and construction. Investigative studies of theory, materials and construction methods of classical, modern, and contemporary furniture design result in a basic knowledge of human factors, design processes, and tectonics. Students will develop skills in design and construction of a piece of furniture from using interior millwork to advanced digital technology. Prerequisite: IA 520 Products, Materials and Specifications.

IA 541. History of Interior Architecture. 3 Credits.
This lecture course offers a survey of interior spaces and built environments in relationship to historical, architectural, religious, political, cultural, and social context of different eras. This course provides a global
overview of the historical evolution of interior spaces and furnishings from pre-historic times to the 20th century and covers geographical areas of Europe, America, Latin America, Asia, Middle-East and Africa. Students will be asked to demonstrate their learnings in the form of research, drawings, and written papers. Prerequisite: Student must be in the IA program and have taken ARCH 540.

**IA 608. Professional Internship. 6 Credits.**

Students will have an opportunity to work in a professional firm approved by the IA program. In addition to the work experience students will document their internship or relevant work experience. The purpose of this course is to give students a structured opportunity to select, explore, research, and document a topic relevant to their internship experience. Prerequisite: IA 508 Interior Architecture Studio III.

**IA 609. Integrated Interior Architecture Studio. 6 Credits.**

An advanced studio with an emphasis given to the student's demonstration of integration of all previously learned design skills. These include program analysis, space configuration, formal design composition, structure, materials and methods of construction, technical development of interior spaces, environmental systems, lighting design, acoustics, code and regulation compliance, and principles of sustainability. Students should also demonstrate an appropriate awareness of history, theory, and culture of the given context. The level of project development should be demonstrated by technically precise drawings and well-researched written documentation in additional to other means of representation. Students work in groups and with professional consultants. Prerequisite: IA 508 Interior Architecture Studio III.

**IA 690. Study Abroad. 5 Credits.**

Students participate in a study abroad program approved by the IA program. Students will be evaluated upon a submitted journal, sketchbook, or equivalent assignments assigned by the instructor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be admitted to the IA Degree program.

### Master of Architecture (5-year)

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

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

The 172 credit curriculum is divided into three segments: Foundations, Core and Professional Options.

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

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

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

Within the 172 credits required to graduate, students will also have a study abroad experience and complete coursework in a variety of other academic disciplines. Students will be exposed to the social sciences, the physical sciences, the humanities and the arts. Study abroad options currently includes spending a semester in Denmark, Germany, England, or Australia, traveling to Central America, Asia, or Europe during intersessions, or working in an international architecture office in Paris and Seoul.

Students in the Department of Architecture M.Arch Track I program will be awarded a Bachelor of Arts in Architectural Studies when they complete a minimum of 136 credits after the first 4 years of undergraduate studies.

### Professional Registration and Licensing

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

### Undergraduate Admission

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

Dr. Jae Chang, Associate Chair
Department of Architecture
School of Architecture and Design ([http://www.arcd.ku.edu/](http://www.arcd.ku.edu/)) University of Kansas
200 Marvin Hall
1465 Jayhawk Blvd.
Lawrence, KS 66045
arch@ku.edu (archku@ku.edu)

For undergraduate applications, write to:

KU Office of Admissions ([http://admissions.ku.edu/](http://admissions.ku.edu/))
KU Visitor Center
1502 Iowa St.
Lawrence, KS 66045
Applications

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

Transfer students should apply by October 1 for the spring semester and by the priority deadline of November 1 for the summer and fall terms. The final application deadline is February 1. Space limitations apply to transfer students. Transfer applications received after February 1 are likely to be denied for reasons not connected with the applicant’s academic qualifications. The School of Architecture and Design encourages applications from women and members of minority groups.

High School Students

High school students are encouraged to apply for admission if they have a cumulative GPA of at least 3.2 and have a minimum ACT of 23 or a minimum SAT of 1050 and if they will meet the following preparation thresholds by the time they graduate:

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

Students who are already at the University of Kansas may apply to the M.Arch. program by February 1 for admission in the following fall. Students must have a cumulative college GPA of 3.5 or higher and space must be available to be admitted to the M.Arch. program.

Transfer Students

Transfer students may be admitted, if space is available, and if they have an overall grade-point average of at least 3.5.

International Students

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

Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Master of Architecture Degree Requirements

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Design/Synthesis</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Architecture Support Courses</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Architecture and Professional Electives</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>General Education Courses</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>172</strong></td>
</tr>
</tbody>
</table>

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

Students are required to complete at least 30 credit hours at the undergraduate level (first four years), based on the NAAB Accreditation requirements.

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

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

In the final year of the program, students participate in a chosen year-long professional option which may include an internship. Options are defined by faculty strengths and the emerging needs of the profession. They offer students the opportunity to focus on a particular area of interest that is one of the professional choices or specializations available after graduation.

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

This is an ambitious program of study, averaging 18 credit hours a semester. It is highly recommended that students either

1. attempt to enter with advanced-placement credit for general education courses such as calculus, physics, environmental studies, or geography and/or
2. plan to take 6 hours of general education requirements during a summer (this may be completed at a local community college).
than satisfactory” is graded B. Work evaluated as “satisfactory” is graded C. Work evaluated as “more satisfactory” is graded A. Work evaluated as “less than satisfactory” is graded D. Work evaluated as “failing” is graded F. Information on the studio grade appeal procedure is available in the Dean’s Office.

If a student receives a grade of D in a design studio in any semester, he or she is placed on notice by the school, regardless of the overall grade-point average. To be removed from this status, the student must perform satisfactory work in the next semester of design. If in any subsequent semester the student receives another grade of D, he or she must repeat that studio before advancing in the sequence. If the student receives a grade of D in 2 consecutive studios, he or she must repeat the entire design year in which the first D was given.

Computer Requirement

All students in the Master of Architecture program must supply a computer for digitally based architectural studios. Students must follow a checklist of minimum hardware- and software- requirements when they purchase a computer. The specifications for architectural studio computing are on the school’s website (http://www.sadp.ku.edu/).

Substitution of Courses

A student who wishes to select certain courses not in the prescribed curriculum may petition through the Chair.

Credit for ROTC Courses

Students may enter the Reserve Officers Training Corps to train for commissions as regular or reserve officers. An allowance of 6 hours of military science, aerospace studies, or naval science may be substituted for free electives in the M.Arch. program. A student who enters one of the ROTC programs but discontinues military training and does not receive a commission may not apply credits for ROTC courses toward a degree in architecture. If a student does not receive a commission because of circumstances beyond his or her control (such as a medical discharge), he or she may use ROTC credits as part of the requirements for the degree as indicated above.

Activity Courses

The School of Architecture and Design does not accept physical education (HSES) activity courses for fulfilling graduation requirements.

Career Opportunities

The M.Arch. is a NAAB accredited professional degree. The following options are open to students after they complete it:

1. Graduates may seek to refine and augment their professional capabilities through experience in an office under a licensed architect. Such experience qualifies the graduate for admission to the appropriate examination for licensing and practice as an architect or may precede admission to graduate school. Increasingly, graduates are finding alternative career options, including work in urban design, design-build firms, interior design, historic preservation, and many others.

2. Qualified students may pursue graduate study in Ph.D. in architecture programs or in areas related to architecture and environmental design, such as urban planning, law, psychology, social welfare, public administration, or business.
Prescribed Curriculum

Master of Architecture (5-year)

A total of 172 credit hours is required. Substitutions in the prescribed curriculum may be made only by petition to the department.

Students are in Undergraduate Status for enrollment in the first 4 years and begin Graduate Status enrollment in the final year of this program.

Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>ARCH 103</td>
<td>3</td>
<td>ARCH 109</td>
</tr>
<tr>
<td>ARCH 108</td>
<td>6</td>
<td>ARCH 110</td>
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<tr>
<td>ENGL 101</td>
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<td>PHSX 114</td>
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<tr>
<td>(Fulfills KU Core Goal 2.1 - 1 of 2 required)</td>
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<td>(Fulfills KU Core Goal 3 Nat. Science)</td>
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<tr>
<td>MATH 115 or 105 (Fulfills KU Core Goal 1.2)</td>
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<td>ENGL 102 or 105 (Fulfills KU Core Goal 2.1 - 2 of 2 required)</td>
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<td>HUM 204 or 205 (Fulfills KU Core Goal 1.1)</td>
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Year 2

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<tr>
<td>ARCH 524</td>
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<td>ARCH 541</td>
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<td>(Fulfills KU Core Goal AE4.2)</td>
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<tr>
<td>ARCH 540</td>
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<td>ARCH 620</td>
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<tr>
<td>(Fulfills KU Core Goal 3 Arts &amp; Humanities)</td>
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<tr>
<td>ARCH 605</td>
<td>3</td>
<td>ARCH 624</td>
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<tr>
<td>KU CORE Goal 3 Social Science</td>
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<td>KU Core Goal 2.2 (Suggest ARCH 405 after it is approved by KU Core New course proposal of ARCH 405 to fulfill Core Goal 2.2 will be submitted in Fall 2022.)</td>
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Year 3

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<th>Fall Hours</th>
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<td>ARCH 509 or 508</td>
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<tr>
<td>6 hours, expected to take during winter or summer sessions between third and fourth or between fourth and fifth years</td>
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Year 4

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<tbody>
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<td>ARCH 530</td>
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Year 5

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<td>ARCH 800-level course: Professional Options part 1</td>
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<td>Architecture Elective</td>
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<td>Architecture Elective</td>
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<tr>
<td>Architecture Elective</td>
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</tr>
<tr>
<td>Architecture Elective</td>
<td>3</td>
<td>Architecture Elective</td>
</tr>
</tbody>
</table>

Total Hours 172

NOTE: Students admitted to the Master of Architecture degree prior to 2022 will follow the curriculum in place at the time of their admission (see the KU Archived Academic Catalogs).

* Pending approval by the Kansas Board of Regents, the Bachelor of Arts in Architectural Studies may be awarded to students who qualify and apply after completing the Spring semester of Year 4.

Bachelor of Science in Interior Architecture

Professional interior designers are responsible for creating thoughtful spatial experiences that directly influence people's comfort, wellbeing, efficiency, functionality, and overall positive outcomes. Interior designers have the expertise to generate aesthetically unique interior layouts, specify furniture, material finishes, lighting & acoustics, and produce holistic spaces that are inclusive, inspirational, and imaginative. The Bachelor of Science in Interior Architecture trains students to become professional interior designers who focus on creating environments...
with people in mind based on design research evidence. Students are exposed to real-life experiences through design projects as well as internships. Students also participate in study abroad experiences. The Interior Architecture curriculum is compliant with CIDA (Council for Interior Design Accreditation) Professional Standards.

The 4-year program has been aligned with the School's NAAB-accredited Master of Architecture (M.Arch) degree; students have the option of getting accepted in a 2-year track of M.Arch with advanced standing upon completing the B.S. degree in Interior Architecture. This allows well-qualified students to earn a B.S. in Interior Architecture degree and a professional Master of Architecture degree in six years and one summer, rather than the seven years it would normally take to earn each degree separately.

New and transfer students may be admitted to the Bachelor of Science in Interior Architecture and Design. Contact:

University of Kansas
Dr. Jae Chang, Associate Chair
200 Marvin Hall
1465 Jayhawk Blvd
Lawrence, KS 66045
arch@ku.edu

For applications contact:

KU Office of Admissions
KU Visitor Center
1502 Iowa St.
Lawrence, KS 66045
785-864-3911
adm@ku.edu

Applications

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

Complete the online KU application by going to www.admissions.ku.edu (https://www.ku.edu/admissions/) and selecting the School of Architecture and Design, and then selecting the appropriate degree. This online application will serve as both your application for admission to KU and to the School of Architecture and Design. Make sure that you complete and submit the Architecture Interest Profile which will become part of the online application once you’ve selected your degree.

Transfer students should apply by October 1 for the spring semester and by the priority deadline of November 1 for the summer and fall terms. The final application deadline is February 1. Space limitations apply to transfer students. Transfer applications received after February 1 are likely to be denied for reasons not connected to the applicant’s academic qualifications. The School of Architecture and Design encourages applications from women and members of minority groups.

High School Students

High school students are encouraged to apply for admission if they have a cumulative GPA of at least 3.2 and have a minimum ACT of 23 or a minimum SAT of 1050 and if they meet the following preparation thresholds by the time they graduate:

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

Transfer Students

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

International Students

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

Visit the Office of International Student Services for information about international admissions.

<table>
<thead>
<tr>
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<th>Hours</th>
<th>Spring</th>
<th>Summer</th>
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<td>Fall</td>
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<td>ARCH 103</td>
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<td>ARCH 109</td>
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<td>ARCH 108</td>
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<td>ENGL 101</td>
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<td>PHSX 114</td>
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<tr>
<td>MATH 105 (or MATH 115)</td>
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<td>ENGL 102 (or ENGL 105)</td>
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<tr>
<td>IA 208</td>
<td>6</td>
<td>IA 209</td>
<td>6 IA 390 (and/or IA 401 - 3hrs)</td>
<td>5</td>
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<td>IA 205</td>
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<td>IA 220</td>
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<td>IA 210</td>
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<tr>
<td>IA 308</td>
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<td>IA 309</td>
<td>6 IA 401 (and/or IA 390 - 5hrs)</td>
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<td>IA 322</td>
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<td>IA 341</td>
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<td>ARCH 626</td>
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<td>Core Goal</td>
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<td>4.1 Human Diversity (AE41)</td>
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</table>
Students who have completed or are completing a bachelor's degree in architectural studies (non-accredited, pre-professional degree) or non-architectural subject area who wish to pursue professional careers as licensed architects may apply for admission to this program. In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure.

This Master of Architecture degree is accredited by the National Architectural Accrediting Board (NAAB). Students who have completed previous course work in an approved NAAB architecture curriculum or a pre-professional architectural degree program may achieve advanced standing. All requests for advanced standing are evaluated using the minimum qualifications for graduate study at KU, the student performance criteria established by NAAB, and procedures approved by the architecture graduate studies committee. This degree requires a sequence of 6 semesters and 2 summers of architectural design studio/synthesis experiences, each of which is accompanied by associated professional graduate courses. The program also has a required study abroad component, planned to occur during a student's summer or winter semester. The degree plan is constituted of a total of 123 credit hours.

Total Hours 120

NOTE: IA 390-Study Abroad (5) and IA 401: Prof. Internship (3) can be taken during the summer semester of either Year Two or Year Three.

Master of Architecture (3-year and 2-year)

Master of Architecture (Track II and Track III)

Students who have completed or are completing a bachelor's degree in architectural studies (non-accredited, pre-professional degree) or non-architectural subject area who wish to pursue professional careers as licensed architects may apply for admission to this program. In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure.

The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformity with established educational standards.

Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

This Master of Architecture degree is accredited by the National Architectural Accrediting Board (NAAB). Students who have completed previous course work in an approved NAAB architecture curriculum or a pre-professional architectural degree program may achieve advanced standing. All requests for advanced standing are evaluated using the minimum qualifications for graduate study at KU, the student performance criteria established by NAAB, and procedures approved by the architecture graduate studies committee. This degree requires a sequence of 6 semesters and 2 summers of architectural design studio/synthesis experiences, each of which is accompanied by associated professional graduate courses. The program also has a required study abroad component, planned to occur during a student's summer or winter semester. The degree plan is constituted of a total of 123 credit hours.

There are 2 tracks and 4 typical entry points to this curriculum:

Track III (Degree designed for candidates who have an undergraduate degree in a discipline other than architecture, 3-Year)

1. Students without backgrounds in architecture who hold bachelor's degrees in non-design-oriented disciplines enter the first year of the curriculum which begins in the summer session. The first year of the curriculum is 2 academic semesters and 2 summer sessions. The total number of credit hours required is 117-123 depending on the student's background.

2. Students without backgrounds in architecture who hold bachelor's degrees in a design discipline usually begin course work with the fall semester of the first year. Other curricular requirements may potentially be waived after careful vetting of the student's educational background. The total number of credit hours required for graduation is likely to be approximately 108.

Track II (Degree designed for candidates who have a pre-professional degree in architecture, 2-Year)

3. Students with a pre-professional degree in architecture, such as a Bachelor of Arts in Architectural Studies, are likely to be placed in the second year of the curriculum if they have a background in architecture design studios. This is commonly referred to as the 4+2 option. Students interested in being placed in this way should make this clear in their statements. These students normally are asked to complete four studios (synthesis experiences), a study abroad experience, and architecture support courses whose number and content are determined on a case-by-case basis. The total number of credit hours required for graduation depends on the student's previous preparation and is highly variable, but is likely to be approximately 63-72 hours.

4. Students who already possess an accredited professional Bachelor of Architecture degree generally enter a three-semester program that requires a study abroad experience during a summer or winter session as well as the final year of the curriculum. The total number of credit hours required for graduation depends on the student's previous preparation and is highly variable, but a minimum of 36 hours is required.

Graduate Admission

Regardless of background or career goals, a person whose previous records indicate the ability to succeed with advanced work may be admitted to one of the graduate programs. Admission requires a bachelor's degree and a grade-point average of 3.0 from KU or another accredited institution or foreign university with substantially equivalent requirements for the bachelor's degree. A complete application for admission consists of the following materials:

1. Graduate application (http://www.graduate.ku.edu/).
2. One unofficial transcript where the undergraduate degree is confirmed and one copy of the transcript where any graduate degree/credit was earned (if applicable).
3. Three letters of recommendation from persons qualified to comment on the applicant's intellectual abilities and probable success in graduate study.
4. Application fee, nonrefundable check or money order payable to the University of Kansas (See Admission in the Graduate Studies (p. 2408) section of the online catalog for further information).
5. Students whose native language is not English must follow the policy for English Proficiency Requirements for Admission to Graduate Study. (http://policy.ku.edu/graduate-studies/english-proficiency-international-students?num=1.5)
6. A statement of interest indicating the applicant's career goals and the relationship of these goals to the specific option chosen (Those seeking advanced placement in the M.Arch. program should make this clear in this statement).
7. A portfolio of work demonstrating the candidate's strengths. Examples may include design or creative work and writing samples. The portfolio is limited to 10 megabytes (not zipped) in PDF format. Upload under other documents.
8. Graduate Record Examination (GRE) test results (not required but preferred).
9. For international students, a financial statement showing minimum financial support for the first year of study (see the admissions page on the school’s website (http://www.sadp.ku.edu/)).

Submit your graduate application and upload all application materials online (http://www.graduate.ku.edu/). Please contact the Admissions Coordinator if you have any questions:

The University of Kansas
Department of Architecture
Marvin Hall
1465 Jayhawk Blvd., Room 206
Lawrence, KS 66045

Be sure to check the school’s website (http://www.sadp.ku.edu/) for updates to the admission process or requirements.

Master of Architecture Degree Requirements

M.Arch. Curriculum (3-year or 2-year)

The curriculum is designed in 3 parts. The first 2 semesters plus 2 summer sessions offer an accelerated education in the foundations of architecture as a professional discipline. The second academic year emphasizes professional development, with the comprehensive studio as a capstone experience. The program also has a required study abroad component, usually planned to occur during a student’s summer or winter semester. The third and final year offers students a choice of options for an inquiry of enhanced depth typical in graduate education. This allows students to develop a specialization by the time they complete the professional degree.

Students who have completed previous course work in an approved NAAB architecture curriculum or a pre-professional architectural degree program may achieve advanced standing and are likely to be placed in the second year of the curriculum.

Students who have completed previous course work in an approved NAAB architecture curriculum or a pre-professional architectural degree program may achieve advanced standing and are likely to be placed in the second year of the curriculum.

Master of Arts in Architecture

The post-professional M.A. in Architecture is a research-based academic program for students interested in the study of architecture from an academic and scholarly perspective. It requires 36 credit hours of course work, independent study, and research. The program is designed for highly motivated students with well-defined interests who wish to pursue individualized plans of study that draw upon the diverse resources of the graduate faculty at the master level.

APPLICATION GUIDELINES

Admission to the MA/PhD program is based upon the capability of the applicant to complete advanced doctoral studies through a demonstrated ability to think critically; to understand and apply analytical concepts; and to conduct substantive, innovative, and original inquiry that contributes to the theoretical and/or methodological foundations of the discipline of architecture.

To ensure the highest level of faculty support and proper level of faculty guidance, the program seeks to accept those students whose research interests are best matched with faculty specializations and expertise. It is essential that the applicant, in their written Statement of Purpose, establish a clear connection between the applicant’s interests and those of the faculty.

Required Components of the Application Package
1. Completion of the appropriate Graduate Student Application Form (http://graduate.ku.edu/application-process/) and associated application fee.

2. One official transcript from all colleges and universities from which credit has been received.

3. Students whose native language is not English must follow the policy for English Proficiency Requirements for Admission to Graduate Study. (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/?num1.5)

4. Graduate Record Examination (GRE) test results (not required, but preferred). Applications will still be reviewed without GRE scores. Applicants may be asked to submit GRE scores later, if needed.

5. Vita or resume.

6. Statement of purpose outlining your reasons for pursuing the MA/PhD in Architecture (not to exceed 1500 words).

7. Three letters of recommendation from educational and/or professional references that can speak on the applicant’s behalf regarding his/her research and academic potential, and ability to succeed in a doctoral program.

8. Portfolio of work illustrating the applicant’s interests and abilities in architecture-related inquiry. The portfolio should be representative of the applicant’s most significant work and may include design projects, research papers, academic papers, scholarly and/or professional presentations, or other work relevant to the applicant’s area of interest (limited to 10 MB (not zipped) in PDF format). Upload under “other documents.” The portfolio should be no longer than 15 pages.

A limited number of teaching or research assistantships are available. Interested candidates should include a separate statement requesting an assistantship in their application package (Maximum 150 words).

**Application Deadline**

All materials must be postmarked no later than January 15 and uploaded here (http://graduate.ku.edu/ku-graduate-application/). The application will be reviewed as they become available for review. Admission decisions will generally be taken by the end of January to take advantage of different graduate funding opportunities available in the University.

**Application Contact Information**

Graduate Admissions
1450 Jayhawk Blvd., Room 313 Strong Hall
Lawrence, KS 66045
785.864.3140
graduateadm@ku.edu

Admissions Coordinator for Architecture
School of Architecture and Design
1465 Jayhawk Blvd., Room 205 Marvin Hall
Lawrence, KS 66045
785.864.3167
arch@ku.edu (archku@ku.edu)

**Vita or Resume**

The vita or resume is to be a maximum of 5 pages. The format is determined by the applicant and should include background information about the applicant’s education, professional/work experience, professional certification or licensure, professional affiliations, and evidence of significant accomplishments such as grants received, publications, presentations, awards, competitions and/or other activities deemed significant by the applicant.

**Statement of Purpose**

The Statement of Purpose is one of the most important components in the application package. As a personal expression of interest, this statement distinguishes applicants from each other and clarifies the relationship between each applicant’s interests and the scholarship occurring among KU faculty. The Statement of Purpose should elaborate on information provided in the transcripts and vita/resume and deliver a concise description of the applicant’s objectives, including research interests. This information is critical and, for that reason, the Statement of Purpose should reflect a clear rationale for pursuing the MA/PhD in Architecture.

The statement should:

- Describe the research that you anticipate pursuing if admitted to the program. The ideas should be clear, well stated, and specific.
- Describe your qualifications to undertake this research and reference your own or other related work if appropriate.
- Describe how your interests are compatible with our faculty interests.
- Describe the applicant’s career goals and how attainment of the MA/PhD will contribute to those goals.

The admissions committee needs a clear understanding of each applicant’s objectives and interests in order to ensure compatibility with the faculty interests.

The statement of purpose is a maximum of 1500 words (Times Roman, 10-point font, single spaced, double space between paragraphs).

For students admitted to the academic/research program at the master’s level in architecture in Lawrence, a total of 36 credit hours of course work is required. Each student must enroll in a 3-hour course dealing with research methods.

In addition to the core courses, each student must complete a minimum of 15 graduate credit hours in a concentration. With the consent of the student’s advisor and the approval of the graduate studies committee, the student may take a maximum of 12 hours of graduate credit in course work outside the School of Architecture and Design. 6 hours in the 36-hour course of study are composed of course work in which the student prepares a written project or thesis, or in additional course work in the student’s concentration to prepare for a final written examination.

**Doctor of Philosophy in Architecture**

**Introduction**

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

The Ph.D. in Architecture educates students to become more valuable to society through academic, business, and government organizations that require greater artistic, scientific, and investigative skills. It offers candidates opportunities to develop and deepen their education in 3 important ways:

- Enhancing research and analytical skills with rigorous methods of inquiry and synthesis;
- Acquiring advanced knowledge specific to their area(s) of inquiry through comprehensive scholarly investigations and distinguished documentation; and
- Developing the ability to communicate knowledge in a clear and eloquent manner.

To realize this goal, the faculty has made a commitment to create, along with doctoral students, a climate in which scholarship and creativity can flourish. Underlying the advanced study of architecture at KU is an ethic regarding architectural inquiry and architectural practice; one that sustains the question, “What ought we do as architects and researchers to enhance the quality of life on this planet?” Examples of inquiry at KU that exemplify this underlying question are

- Progressive models of practice embracing evidence-based design and design-build practices;
- Affordable housing with a sensitive aesthetic;
- Material investigations to create more affordable and sustainable building practices;
- Rigorous evaluations of built artifacts to inform better design practice;
- Translation of empirical findings of person-place interaction research into design guidelines; and
- Critical perspectives on human settlement patterns.

Our research is founded on an ethical position. We are not involved in research simply to generate knowledge for its own sake but rather to improve the human condition through more thoughtful built form. The overall focus is on developing understanding that may inform the critical delivery processes by which humane architecture is created.

Note: Contact the Architecture department or program for more information about the Research and Skills and Responsible Scholarship requirement for doctoral students.

APPLICATION GUIDELINES

Admission to the MA/PhD program is based upon the capability of the applicant to complete advanced doctoral studies through a demonstrated ability to think critically; to understand and apply analytical concepts; and to conduct substantive, innovative, and original inquiry that contributes to the theoretical and/or methodological foundations of the discipline of architecture.

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Required Components of the Application Package

1. Completion of the appropriate Graduate Student Application Form (http://graduate.ku.edu/application-process/) and associated application fee.
2. One official transcript from all colleges and universities from which credit has been received.
3. TOEFL or IELTS scores for international applicants (contact Architecture Admissions Coordinator for minimum scores).
4. Graduate Record Examination (GRE) test results (not required, but preferred). Applications will still be reviewed without GRE scores. Applicants may be asked to submit GRE scores later, if needed.
5. Vita or resume.
6. Statement of purpose outlining your reasons for pursing the MA/PhD in Architecture (not to exceed 1500 words).
7. Three letters of recommendation from educational and/or professional references that can speak on the applicant’s behalf regarding his/her research and academic potential, and ability to succeed in a doctoral program.
8. Portfolio of work illustrating the applicant’s interests and abilities in architecture-related inquiry. This portfolio should be representative of the applicant’s most significant work and may include design projects, research papers, academic papers, scholarly and/or professional presentations, or other work relevant to the applicant’s area of interest (limited to 10 MB (not zipped) in PDF format). Upload under “other documents.” The portfolio should be no longer than 15 pages.

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Admissions Coordinator for Architecture
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1465 Jayhawk Blvd., Room 205 Marvin Hall
Lawrence, KS 66045
785.864.3167
arch@ku.edu (archku@ku.edu)

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- Describe how your interests are compatible with our faculty interests.
- Describe the applicant’s career goals and how attainment of the MA/PhD will contribute to those goals.

The admissions committee needs a clear understanding of each applicant’s objectives and interests in order to ensure compatibility with the faculty interests.

The statement of purpose is a maximum of 1500 words (Times Roman, 10-point font, single spaced, double space between paragraphs).

**Ph.D. Degree Requirements**

**General Plan of Study**

The Ph.D. in Architecture degree program is carefully crafted to allow students to engage in rewarding and potentially revolutionary scholarly investigation steeped in an atmosphere of rigorous academic pursuit. The 49-credit-hour curriculum is divided into three parts: foundation, concentrations, and advanced study. In the foundation, students must take the following courses:

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<td>ARCH 931</td>
<td>Theories of Architectural Inquiry</td>
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<td>ARCH 951</td>
<td>Methods of Inquiry in Architectural Research</td>
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<tr>
<td>Research Skills</td>
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<td>Advanced Methods</td>
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<td>ARCH 958</td>
<td>Research Practicum Preparation</td>
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<td>ARCH 959</td>
<td>Research Practicum</td>
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<tr>
<td>Major Course</td>
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</tbody>
</table>

Concentrations are major (12 credit hours minimum) and minor (9 credit hours minimum) curricula developed by the student in concert with the major professor. The student becomes a candidate upon passing the comprehensive examination. As a candidate, the student enters the advanced studies portion of the curriculum and begins work on the dissertation. The student must be continuously enrolled (http://policy.ku.edu/graduate-studies/doctoral-candidacy/) until all requirements for the degree are completed. A minimum of 9 dissertation credit hours is required for the degree. What follows under “Degree Plan” is a sample plan of study.

**Year 1**

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<th>Fall</th>
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<td>Advanced methods</td>
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<td>ARCH 951</td>
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<td>Major course</td>
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<td>Research skills</td>
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**Year 2**

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<td>ARCH 959</td>
<td>4 Minor course</td>
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<td>Major course</td>
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<tr>
<td>Minor course</td>
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**Year 3**

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<th>Year 3</th>
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<td>ARCH 999 (Dissertation extends beyond the fall semester.)</td>
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**Total Hours 41-49**

**Undergraduate Certificate in Architecture Acoustics**

To receive the Certificate in Architectural Acoustics students must complete 12 hours from the courses listed below, including either ARCH 520/ARCH 720 or ARCH 521/ARCH 721 or ARCE 620.

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</thead>
<tbody>
<tr>
<td>ARCH 520</td>
<td>Architectural Acoustics</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 521</td>
<td>Electro-Acoustical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 629</td>
<td>Acoustic Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 600</td>
<td>Special Topics in Architecture: _____ (Acoustic &amp; Theatrical Design Considerations for Performance Facilities)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 530</td>
<td>Environmental Systems I</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 531</td>
<td>Environmental Systems II</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 608</td>
<td>Urban Dwelling (Acoustics Focus)</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 720</td>
<td>Architectural Acoustics</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 721</td>
<td>Electro-Acoustical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ARCE 620</td>
<td>Architectural Acoustics</td>
<td>3</td>
</tr>
</tbody>
</table>

For further information, please contact: Jason Pittman (pittman.jason.k@ku.edu).
Graduate Certificate in Architectural Acoustics

To receive the Graduate Level Certificate in Architectural Acoustics students must complete 12 hours from the courses listed below, including either ARCH 720 or ARCH 721 or ARCE 620.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARCH 720</td>
<td>Architectural Acoustics</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 721</td>
<td>Electro-Acoustical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 620</td>
<td>Acoustic Studio</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 608</td>
<td>Urban Dwelling</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 700</td>
<td>Directed Readings in Architecture: (Acoustic Focus)</td>
<td>1-3</td>
</tr>
<tr>
<td>ARCH 600</td>
<td>Special Topics in Architecture: _____ (Acoustic &amp; Theatrical Design Considerations for Performance Facilities)</td>
<td>3</td>
</tr>
<tr>
<td>ARCE 620</td>
<td>Architectural Acoustics</td>
<td>3</td>
</tr>
</tbody>
</table>

For further information, please contact: Jason Pittman (pittman.jason.k@ku.edu).

Graduate Certificate in Architecture of Health and Wellness

Completion of the requirements for the Graduate Certificate of Health & Wellness Design varies according to each student’s academic situation. All students are required to take ARCH 731. Students in the NAAB accredited Master of Architecture program would complete the certificate by taking ARCH 807 and ARCH 808 in the final year of the program. Students not enrolled in the professional Master of Architecture program would take a total of fifteen (15) graduate hours in courses approved by the Health & Wellness faculty.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARCH 600</td>
<td>Special Topics in Architecture: _____ (Evidence-Based Design Research Theories &amp; Methods)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 700</td>
<td>Directed Readings in Architecture: (Directed Readings on topics related to Health and Wellness Design)</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 731</td>
<td>Architecture of Health</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 807</td>
<td>Healthy and Sustainable Environments I</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 808</td>
<td>Healthy and Sustainable Environments II</td>
<td>6</td>
</tr>
</tbody>
</table>

For further information contact Dr. Kent Spreckelmeyer, Professor of Architecture, kents@ku.edu

Graduate Certificate in Building Information Modeling (BIM)

Admitted Graduate students would enroll in at least 12 credit hours:

The certificate program is currently revising the courses and will provide the updated information later. Please contact the department for inquiries.

Graduate Certificate in Designbuild

There are three primary paths to earn the Design-Build Certificate:
1) Studio 804: ARCH 803 Design-Build & Materiality I (6) + ARCH 804 Design-Build & Materiality II (6)
2) Design-Build+: ARCH 509 Design-Build Studio (6) + (2) additional qualifying 3-credit hour courses
3) Elective Courses: (4) qualifying 3-credit hour courses
If needed, any of the above courses could be replaced with ARCH 799: Independent Study or ARCH 800 Special Topics in Architecture, focusing on the specific subject area.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARCH 509</td>
<td>Designbuild</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 600</td>
<td>Special Topics in Architecture: _____ (Furniture Design and/or Digital Fabrication )</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 622</td>
<td>Material Investigations</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 803</td>
<td>Design-Build and Materiality I</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 804</td>
<td>Design-Build and Materiality II</td>
<td>6</td>
</tr>
</tbody>
</table>

Please direct questions regarding the Designbuild Graduate Certificate to: Chad Kraus, Associate Professor of Architecture, ckraus@ku.edu.

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University’s policy on Admission to Graduate Study.

Graduate Certificate in Historic Preservation

Students must complete 12 credit hours from the courses listed below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ARCH 646</td>
<td>American Architectural History</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 647</td>
<td>Historic Preservation Theory</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 648</td>
<td>Historic Preservation</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 649</td>
<td>Historic Preservation Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

If needed any of the above courses could be replaced with ARCH 700: Directed Readings focusing on the specific subject area. These courses may be available via distance delivery or online.

Please direct questions regarding the Graduate Certificate of Historic Preservation to: Dr. Kapila D. Silva, Professor of Architecture, kapilads@ku.edu and Amy Van de Riet, Historic Preservation Technology Course Coordinator, amy.vanderiet@ku.edu.

Graduate Certificate in Participatory Design

Students may elect 12 hours of graduate-level credit from the courses listed below to satisfy specific curricular requirements for this certificate program. Students in the professional M.Arch program may enroll in one of the Architecture Design Courses (509, 608, 804 and/or 810) and complete the certificate requirements by taking any two public-interest-
Questions regarding the Urban Design Certificate should be directed to Dr. Marie-Alice L’Heureux, Professor of Architecture, malheur@ku.edu.

Department of Design

Introduction

The Department of Design advances the professional work of thoughtful, creative, and meaningful design to delight, inspire, and serve the needs of people. Design is the planning that lays the basis for creation and development of every object or system people use. Design programs train students to be problem solvers who consider the aesthetic, functional, and user-focused aspects of an object or a process. This requires considerable integrative research, thought, modeling, interactive adjustments, and redesign.

KU is an accredited institutional member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

Undergraduate Programs

The department offers a professional B.F.A. degree program with concentrations in the following:

- Illustration & Animation
- Industrial Design
- Photography
- Visual Communication Design

Courses for KU Students Not Admitted to Design

Students in other KU schools may enroll in Design courses for credit subject to the availability of classroom space with the permission of the instructor of the course.

Department Policy on Professionalism & Attendance

Design is a collaborative profession. Clear verbal skills are important in communicating one’s ideas to clients and Design team members, and professional conduct can have a significant impact on the ability of a Designer to succeed. Because of the importance of professionalism in communication and conduct, students should maintain themselves according to the following guidelines:

- Attend each session of class in its entirety.
- Come prepared to present their concepts, discuss how the form of their design supports their concept, and describe how they arrived at their ideas.
- Participate in critiques and discussions with a spirit of mutual respect. Providing comments to one’s peers is a privilege. Students will benefit from both giving and receiving feedback - one does not have to “like” another’s work, but must provide insightful commentary in a courteous and productive manner.
- Maintain a positive and open-minded attitude.
- Demonstrate self-discipline and eagerness to participate.
- Consistently strive for the highest standards of quality in work and conduct.
Failure to abide by the guidelines and policy notes stated in this policy will lower a student’s grade by one full letter grade or more.

CELL PHONE USAGE:

Students are required to turn off their cell phones off or on silent and refrain from browsing the web, using social media, checking email, text messaging, etc. during class, lectures, and demonstrations. Students may use these devices only during designated break times.

SUBMISSION OF LATE WORK:

All projects and assignments are due at the beginning of class on the date set by the instructor. Late projects will be penalized by lowering the project grade by one full letter grade for each day that it is late. Late projects will not be accepted beyond three days after the original due date. Instructors may elect not to accept late work, but must note their policy regarding late work in the syllabus for each class.

PENALTIES FOR EXCESSIVE ABSENCES:

Each class is a significant financial investment (http://affordability.ku.edu/costs/) by each student, is based on sequential information and projects, and requires the full participation of each student. Each session of class missed or coasts through is a wasteful and impedes the student’s ability to succeed in that class. For those reasons, students are required to attend classes in which they are enrolled and/or intend to enroll, must be on time for each session of class, and must remain in attendance for each entire session of class. Attendance will be taken at the beginning of each session of class.

In the event of any absence, students are responsible for obtaining all missed information, materials, and assignments from the class period(s) during which they were absent. Students who are absent must complete all assignments by the due date originally assigned for the work.

For each class that meets twice per week, only three absences will be allowed for any reason during the course of a given semester. A semester total of four absences in a given class that meets twice per week will result in a penalty of one letter grade in that class. A semester total of five absences in a given class that meets twice per week will result in a semester grade of “F” in that class. In case of exceptional circumstances, instructors may make exceptions to this policy at their discretion.

For each class that meets only once per week, only two absences will be allowed for any reason during the course of a given semester. A semester total of three absences for a given class that meets once per week will result in a penalty of one letter grade in that class. A semester total of four absences in a given class that meets once per week will result in a semester grade of “F” in that class. In case of exceptional circumstances, instructors may make exceptions to this policy at their discretion.

A semester total of three “late” marks in any given class will be equivalent to one absence with respect to this policy.

In order to ensure that students are connected with support services at the university when appropriate, and to ensure that students are duly reminded of the possible consequences of continued truancy, instructors should submit an Absence Warning Form after two absences for a class that meets twice per week or after one absence for a class that meets once per week.

RELIGIOUS HOLIDAYS:

If any scheduled course meeting conflicts with mandated religious observance, the student must notify the instructor prior the day of the observance that the student will be absent.

MEDICALLY-RELATED ABSENCES:

Because of the fast-paced, project-based nature of studio curricula, absences as the result of a medical condition will count in the same way as non-medical absences. Excessive absence for any reason, as outlined in this policy, are irreparably detrimental to a student’s ability to succeed in our studio curriculum.

If a student is facing an extended illness, the student or their designee should contact the relevant instructor(s) as soon as possible to discuss ramifications of future absences and possible solutions.

ALTERNATIVE ATTENDANCE POLICIES:

Instructors may implement amended versions of this policy at their discretion, which supersede this policy for the class(es) for which the policy is implemented. Regardless, the attendance policy used for a class must be documented in the syllabus for that class in order to be considered valid.

School of Architecture & Design Policy on Plagiarism & Academic Misconduct

If a student tries to copy someone’s work or take someone’s idea and pass it off as their own they will suffer the penalties as outlined in the KU Student Code of Rights and Responsibilities.

All work that students hand in for a course must be made and created by them, over the course of this semester, exclusively for the course in question.

Academic misconduct by a student shall include, but not be limited to, disruption of classes; threatening an instructor or fellow student in an academic setting; giving or receiving of unauthorized aid on examinations or in the preparation of notebooks, themes, reports, or other assignments; knowingly misrepresenting the source of any academic work; unauthorized changing of grades; unauthorized use of University approvals or forging of signatures; falsification of research results; plagiarizing of another’s work; violation of regulations or ethical codes for the treatment of human and animal subjects; or otherwise acting dishonestly in research. See full policy (https://design.ku.edu/arcd-academic-misconduct-policy/). (http://design.ku.edu/academic-misconduct-policyprece/d/)

The Department of Design’s procedures regarding allegations of plagiarism and academic misconduct are outlined here (https://design.ku.edu/department-academic-misconduct-procedures/).

Expected Workload

The minimum standard workload for courses at the University of Kansas (https://policy.ku.edu/Registrar/credit-hour/) entails a ratio of at least 2 hours of outside-of-class work per week for each credit hour. For instance, a typical 3-credit-hour course at KU features at least 6 hours of outside-of-class work each week.

In order to provide impactful training and prepare students for the rigor of professional work in Design, courses offered by the Department of Design often exceed that minimum standard. Students can anticipate 3 or more hours of outside-of-class work per week for each credit hour. This means that a 3-credit-hour course offered by the Department of Design usually
features at least 9 hours of outside-of-class work each week, and a 4-credit-hour course offered by the Department of Design usually features at least 12 hours of outside-of-class work each week. Variability certainly exists due to student aptitude, instructors’ pedagogical strategies, and other factors, though these guidelines can be trusted as a general rule.

Because of the intense workload of Design courses, we recommend that students avoid extracurricular engagements that would have them working more than 10-15 hours per week. We realize that isn’t always possible, and our department’s academic advisor may be able to help you find a healthy balance! Please contact our department’s academic advisor (https://design.ku.edu/contact-our-advisor) if you have questions or concerns about your workload.

Accommodation for Students with Documented Disabilities (ADA)
The Student Access Center (http://access.ku.edu/) coordinates academic accommodations and services for all eligible KU students with documented disabilities. If you have a documented disability for which you wish to request accommodations and have not contacted the Student Access Center, please do so as soon as possible. They are located in 22 Strong Hall and can be reached at 785-864-4064 (V/TTY). Information about their services is also available at http://access.ku.edu/. Students should work with the Student Access Center to contact their instructor(s) at the start of each semester to make arrangements for any needed accommodations.

Minimum Grade Requirements, Minimum KU Cumulative GPA Required for Graduation
All students must earn or exceed certain minimum semester grades for courses in the “Foundation Studies” and “Major Studies” requirements of the Design BFA in order to continue in the program. Failure to earn the minimum required semester grade in a “Foundation Studies” course may require that the student in question repeat the course and earn the minimum required grade before they would be able to continue in the Design studio sequence. Failure to earn the minimum required semester grade in a “Major Studies” course may prohibit a student from continuing in the Design program entirely and may require that they select a new major area of study beyond Design. In most cases, “Foundation Studies” and “Major Studies” courses are only offered once per year. In addition to being listed on course syllabi and in relevant course descriptions, these specific grade requirements are outlined here (https://design.ku.edu/minimum-grades/).

Students in the Department of Design must maintain or exceed a 2.0 KU Cumulative Graduation GPA in order to graduate with our BFA in Design.

Graduate Programs
The department offers the following graduate degree programs:

- Master of Arts (M.A.) in Design with a concentration in Design Management & Strategy
- Master of Arts (M.A.) in Design with a concentration in Interaction & User Experience Design

Please visit the Graduate Studies (http://www.graduate.ku.edu) website for more information.

Courses

ADS 300. Foundations in Interaction Design. 3 Credits.

This course examines the fundamental principles and materials underlying the interactions between people, artifacts, and systems. Students will be introduced to a variety of new tools and techniques that will facilitate the prototyping of interactions/user interfaces/experiences of mobile devices, desktop devices, cars, games, consoles, kiosks, and/or apps. Projects, lectures and tutorials will provide a working knowledge of fundamental principles, processes and current tools. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

ADS 320. KU Design Lecture Series. 1 Credits.
Visiting Design professionals discuss various aspects of their work and the industry of Design. Professionals from all the Design areas of the Department are represented: Illustration & Animation, Industrial Design, Photography, and Visual Communication Design. INDD 320 may be allowed to count in place of ADS 320 in limited cases for students in the Industrial Design concentration of the Design BFA. Students taking this course for credit must attend all seven lectures that compose the series each semester in order to earn a passing grade in the course. Open to all KU students. Graded on a satisfactory/unsatisfactory basis.

ADS 325. Design Thinking & Research Methodologies. 3 Credits.
Introduction to the principles of design thinking, design processes, design strategies and methods, including techniques and tools for the development of human-technology interfaces. Abstract through concrete representation methods and techniques will be applied to interaction design projects/problems. Information collection and analysis methods, scenario and prototyping methods, evaluation methods (empirical), creativity methods, and task-oriented methods (non-empirical) will also be considered. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

ADS 340. History and Philosophy of Design. 3 Credits.
Survey of design history from 1800 to present with emphasis on graphics, architecture, industrial and interior design movements, individuals and their influences. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

ADS 401. Design Ethics. 3 Credits.
Since the time of Socrates, philosophers have struggled with understanding everyday moral dilemmas. In this course, we will look at how cultures throughout history have framed everyday moral choices and how those choices apply to working as a designer/artist/architect in our contemporary world. Through presentations, guest lectures, small group discussions, and role-playing experiences, we will question and analyze ethical and moral problems faced by today’s shapers of culture. This course is named after industrial designer Victor Papanek, who served as a Distinguished Professor of Architecture & Design at KU from 1981 until his death in 1998. His 1971 book “Design for the Real World” is credited as being one of the first publications which challenged designers to understand their social and ecological responsibilities. Open to all students admitted to majors and minors offered by the Department of Design. Other students may request instructor permission to enroll. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

ADS 411. Design Trends and Forecasting. 3 Credits.
This course introduces students to principles and theories from various disciplines concerning an understanding of cultural trends and micro-trends. Emphasis is placed on adaptation of these theories to an understanding of the practice of trends research and trend forecasting within the design practice, as well as how trends can be integrated into the designer’s thinking and making process. Open to all students.

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

**ADS 531. Internship Credit. 1-6 Credits.**

Students develop professional skills and problems solving through applied work with an employer in a Design field. Supervision by a professional designer, and prior approval by the relevant Area Coordinator is mandatory. May be repeated twice for credit. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Junior level or higher standing in the Design Department.

**ADS 532. Study Abroad: _____ 3 Credits.**

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

**ADS 533. Study Abroad Documentation. 3 Credits.**

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

**ADS 560. Topics in Design: _____ 3 Credits.**

A study of different topics in different semesters in a special area of interest to a staff member and suitable qualified students. May be repeated for credit. Prerequisite: Junior standing in department or permission of instructor.

**ADS 570. Design Seminar. 3 Credits.**

Comprehensive examination of a complex design problem from the point of view of the various specializations. Prerequisite: Junior standing in department.

**ADS 580. Special Problems in Design. 1-6 Credits.**

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

**ADS 601. Design Ethics. 3 Credits.**

Since the time of Socrates, philosophers have struggled with understanding everyday moral dilemmas. In this course, we will look at how cultures throughout history have framed everyday moral choices and how those choices apply to working as a designer/artist/architect in our contemporary world. Through presentations, guest lectures, small group discussions, and role-playing experiences, we will question and analyze ethical and moral problems faced by today’s shapers of culture. This course is named after industrial designer Victor Papanek, who served as a Distinguished Professor of Architecture & Design at KU from 1981 until his death in 1998. His 1971 book "Design for the Real World" is credited as being one of the first publications which challenged designers to understand their social and ecological responsibilities. Open to all graduate students. Prerequisite: Graduate student status.

**ADS 710. Advanced Human Factors in Interaction Design. 3 Credits.**

The study of human factors principles and guidelines are fundamental to interaction design. In this course, these principles will be illustrated and applied to real-world design projects/problems. Human physical and cognitive capabilities, computer-human interface and systems properties, interaction design methods, and the physical and socio-cultural environment will be considered. Fundamental issues in human-centered systems, basic research methods, including statistics and literature searches, will be included. Prerequisite: Admission to the MA in Design Management or MA in Interaction Design or instructor permission.

**ADS 712. Design Strategies and Methods. 3 Credits.**

This course will cover the principles of design thinking, design processes, design strategies and methods, including techniques and tools for the development of human-technology interfaces. Abstract through concrete representation methods and techniques will be applied to interaction design projects/problems. Information collection and analysis methods, scenario and prototyping methods, evaluation methods (empirical), creativity methods, and task-oriented method (non-empirical) will also be considered. Methods common to design-related disciplines in the social sciences, business, architecture, communication studies and engineering are integrated. Prerequisite: Admission to the MA in Design Management or MA in Interaction Design or instructor permission.

**ADS 714. Service and User Experience Design. 3 Credits.**

Business products, services and environments are often intermingled in ways that require more holistic ways of thinking and development. A challenge of service innovation is to design with an understanding of the many dimensions of human experience and satisfaction. This course elaborates how, where, when, and why design can enhance the value of business services. Theory, methods, and practice aspects of service design are presented. Prerequisite: Admission to the MA in Design Management or MA in Interaction Design or instructor permission.

**ADS 720. Graduate Seminar in Design. 1 Credits.**

Comparative studies of various areas of specialization in design. Repeat for credit to a maximum of six credit hours.

**ADS 730. Directed Reading in Design. 1-3 Credits.**

Research reading and presentation of reports on specific subjects related to the students major area of specialization. Required of all graduate students.

**ADS 732. Study Abroad: _____ 3 Credits.**

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

**ADS 733. Study Abroad Documentation. 3 Credits.**

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

**ADS 740. Special Problems in Design. 1-6 Credits.**

An in-depth study of current problems in design or crafts with an emphasis on research. Special problems proposals must be discussed with and approved by the instructor and graduate advisor prior to enrollment in the course.

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

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

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

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

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

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

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

**ADS 850. Studio Teaching Practice. 1 Credits.**
Graduate students only. Must hold an assistant instructor or teaching appointment. Credit earned does not satisfy any credit requirement for a degree. Graded on a satisfactory/unsatisfactory basis.

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

**ADS 861. Thesis Research Seminar. 1 Credits.**
Approaches to producing original design research. Methods, resources, topics and projects are discussed and evaluated. May be repeated for up to six credit hours in subsequent semesters. Prerequisite: Admission to the MA in Design Management or MA in Interaction Design or instructor permission.

**ADS 890. Thesis. 1-8 Credits.**
This course involves substantive individual research and thesis development, as well as regular discussions between student and instructor/advisor. Your ADS 890 instructor serves as your thesis advisor, and chairs your thesis committee. A thesis topic and research focus is expected very early in the term, followed by a formal thesis proposal containing clear objectives, schedule and deliverables. When green lighted, the proposed thesis is then executed by the student who prepares and presents the work to their thesis committee for evaluation. Prerequisite: Successful completion of ADS 861 and either ADS 750 or ADS 765.

**Courses**

**BDS 100. Design Thinking. 1 Credits.**
Design, like almost every industry, profession, school or major on campus, is forever being changed by technology, it’s reach, global access, and social innovation. From the basics of how to think like a designer or how to design a better presentation in powertpoint to how design can be situated in businesses and organizations to create innovative new products, services or social change. This course will give students an awareness of design in our everyday world; an understanding of some of the cultural, theoretical, conceptual, and practical issues related to design and designing. The ultimate goal is that by the end of this course students will know how design contributes to contemporary society and how they might use this understanding throughout their life in little and big ways. Open to all majors. Graded on a satisfactory/unsatisfactory basis.

**BDS 101. Design Thinking and Making. 3 Credits.**
This course is an introduction to creative problem-solving and the fundamentals of two-, three-, and four-dimensional design. Drawing, Photography, and 2D and 3D models are used in this course as a means of design thinking to visually represent problems and solutions. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

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

ILLU 103. Drawing for Design. 3 Credits.
This course will focus on drawing as a tool of communication through freehand exercises that explore observation and perception, form and proportion, dimensional illusion and expressive characteristics using a variety of materials and media. Some identified sections of this course will also use two-and three-dimensional modeling software. Prerequisite: Admission to a major and/or minor offered by the Department of Design or instructor permission.

Courses
ILLU 200. Foundations in Image Making. 3 Credits.
Presentation of fundamental principles for communication through visual language. Exploration of theories in visual perception and visual communication, with focus on reading and developing visual images for intended meaning. Emphasis is placed on concept development, compositional exploration, color theory, the affect of value and color on images, and the significance of reference creation. Prerequisite: BDS 101 and BDS 103 with semester grades of "C+" or higher or instructor permission.

ILLU 205. Drawing Media for Illustration I. 3 Credits.
Exploration of problems in drawing for various reproduction processes. Emphasis on perspective, head drawing, the clothed and nude figure, nature illustration, perspective, and environments. Various drawing media and materials are explored. Prerequisite: ILLU 200 and VISC 200 with semester grades of "C+" or higher or instructor permission.

ILLU 305. Image Making. 3 Credits.
Concentrated study in developing methodologies for producing contemporary illustration. Emphasis is placed on concept development, composition exploration, value and color studies, and reference creation. Required for Illustration majors as a pre-review course. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: ILLU 200.

ILLU 315. Introduction to Illustration. 3 Credits.
Concentrated study in developing skills and techniques with media and materials that are employed in producing contemporary illustration. Continued emphasis on methods of research and idea generation. Prerequisite: ILLU 200 and VISC 200 with semester grades of "C+" or higher or instructor permission.

ILLU 405. Drawing Media for Illustration II. 3 Credits.
Students will explore various drawing and painting media to continue developing their mastery of representational imagery for illustration. Reference collecting, model making, and the creating of photographic reference material will be addressed. Emphasis on mark making, value and color relationships, and placing the figure in an environment is also covered. Prerequisite: ILLU 205 and ILLU 315 with semester grades of "C+" or better or instructor permission.

ILLU 410. Fundamentals of Animation. 4 Credits.
Concentrated study in developing skills and techniques with digital media and materials employed in producing basic contemporary animation. Development of concept, script, storyboard, and use of audio, music and sound effects are part of this animation experience. Prerequisite: ILLU 205 and ILLU 315 with semester grades of "C+" or higher or instructor permission.

ILLU 415. Illustration Concepts. 3 Credits.
Focus of this course is to learn how to think visually. Concentrated study on developing different forms of concepts for illustration. Continued development of technical skills and visual literacy to gain insight on how to make images that communicate unique ideas clearly. Prerequisite: ILLU 405 and ILLU 410 with semester grades of "C+" or higher or instructor permission.

ILLU 425. Concept Art. 3 Credits.
Introductory exploration of the process, skills and concepts necessary for successful concept art character design and effective blending of matte painting and film. Drawing will be of primary concern for this course, yet exploring digital means of character development will also be introduced. Prerequisite: Successful completion of ILLU 405 and ILLU 410 with semester grades of "C+" or higher or instructor permission.

ILLU 435. Sequential and Narrative Illustration. 3 Credits.
Exploration of thematic illustration through the development of a series of images based on a topic or story. Aspects of continuity, consistency, storytelling, pacing, editing, packaging and a holistic method of developing illustration are addressed. Prerequisite: ILLU 415 and ILLU 425 with semester grades of "C" or higher or instructor permission.

ILLU 445. Advanced Concept Art. 3 Credits.
Continuation in exploration of the process, skills and concepts for successful concept art character design, along with continued development of digital characters and 3D modeling. Prerequisite: ILLU 415 and ILLU 425 with semester grades of "C" or higher or permission of instructor.

ILLU 510. Advanced Animation. 4 Credits.
Continued development of concepts, scripts, storyboards, and use of audio, music and sound effects in the production of a 1-3 minute animated film. Prerequisite: Prior completion of ILLU 410, ILLU 435, and ILLU 445 with semester grades of "C" or higher.

ILLU 535. Promotion and Marketing for Illustration I. 3 Credits.
Focus will be on preparation for entering the profession. Development and completion of a self-promotion and marketing package will supplement and support the senior portfolio. Contemporary business practices and legal issues will be addressed. Prerequisite: ILLU 435 and ILLU 445 with semester grades of "C" or higher.

ILLU 545. Promotion and Marketing for Illustration II. 4 Credits.
Continuation of phase development and completion of a self-promotion and marketing package from ILLU 535. Additional business practices and legal issues will be addressed. Prerequisite: ILLU 510 and ILLU 535 with semester grades of "C" or higher.

ILLU 703. Illustration. 3-6 Credits.
ILLU 825. Illustration. 2-6 Credits.
Individual research.

Courses
INDD 200. Foundations in Industrial Design. 3 Credits.
Course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in prototyping, drawing, computer modeling, digital fabrication, and presentation are demonstrated and
developed. Prerequisite: BDS 101 and BDS 103 with semester grades of "C+" or higher or instructor permission.

**INDD 212. Drawing for Industrial Design I. 3 Credits.**
This course will focus on drawing as a tool of communication through a variety of exercises that explore observation and perception, form and proportion, dimensional illusion and expressive characteristics using a variety of media. This course will also use two- and three-dimensional modeling software necessary for all industrial designers. Prerequisite: BDS 101 and BDS 103 with semester grades of "C+" or better or instructor permission.

**INDD 284. Basic Industrial Design Studio. 3 Credits.**
Course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in drawing, computer modeling, physical modeling, and presentation are demonstrated and developed. Strategies to improve creativity are explored, while addressing market and production considerations. Students majoring in Industrial Design must earn a semester grade of "C" or better in this course in order to continue in the program. Prerequisite: INDD 200 and INDD 212 with semester grades of "C" or higher. Corequisite: INDD 312 and ADS 325.

**INDD 302. Intermediate Industrial Design Studio. 4 Credits.**
This course introduces tools, techniques and processes used in the professional practice of Industrial Design. Learning is through a series of short, focused projects. Techniques in drawing, computer modeling, physical modeling, and presentation are demonstrated and developed. Strategies to improve creativity are explored, while addressing market and production considerations. Prerequisite: INDD 284 and INDD 312 with semester grades of "C+" or higher or instructor permission.

**INDD 306. Materials and Processes. 3 Credits.**
A study of modern materials, manufacturing processes, and construction methods applicable to the fields of industrial design and interior design. Design analysis of existing products, furniture, building components, and storage systems. Design assignments in furniture, storage systems, and interior space arrangements with emphasis on materials and construction. Field trips to area manufacturing and design facilities. Prerequisite: INDD 284 and INDD 312 with semester grades of "C+" or higher or instructor permission.

**INDD 312. Drawing for Industrial Design II. 3 Credits.**
Sketching allows product designers to generate ideas quickly, without committing resources to any single idea. This course continues to focus on sketching/drawing as a tool of communication through a variety of exercises that continues to explore form and proportion, composition, dimensional illusion and expressive characteristics. Prerequisite: INDD 200 and INDD 212 with semester grades of "C+" or better or instructor permission.

**INDD 320. Directed Readings in Industrial Design. 1 Credits.**
This course is an alternative to ADS 320 (Hallmark Symposium) for Industrial Design students with unavoidable scheduling conflicts. Students will watch relevant films and digital media, read important texts and articles, attend lectures, then compose and submit careful reflections on those media and experiences. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Admission to the Department of Design in the School of Architecture & Design and department permission.

**INDD 350. Computer-Aided Design. 3 Credits.**
Students will develop the skills needed to efficiently built parametric CAD models consistent with industrial design professional standards using Solidworks, an industry standard solid modeling software. Emphasis will be placed on how to translate 2D designs into 3 Dimensional models, focusing on design for manufacturing, understanding complex surfacing, and assemblies. Students will learn how to create photorealistic renderings using Keyshot. Prerequisite: INDD 302 with a semester grade of "C" or higher or instructor permission.

**INDD 378. Problems in Industrial Design: _______ 3 Credits.**
Individual and/or group research projects in one of several specific design areas which will be identified on a semester by semester basis. May be repeated for credit. Prerequisite: INDD 302 with a semester grade of "C" or higher or permission of instructor.

**INDD 446. Advanced Industrial Design Studio. 3 Credits.**
Continuation of INDD 284 and 302 but encompassing design problems of greater complexity including group research and problem solving assignments in advanced product and service design. Advanced techniques in problem solving, concept communication, visualization, and overall design expression will be demonstrated and explored. Prerequisite: INDD 302 with a semester grade of "C" or higher or instructor permission.

**INDD 448. Professional Industrial Design Studio Practices. 3 Credits.**
Continuation of Industrial Design studios, projects are longer requiring a high level of demonstrated design ability for successful completion. Issues regarding professional ethics, accountability, and responsibility to public and client are discussed and implemented. Professional design, presentation, and visualization skills will be demonstrated and explored. Finished designs will include full production technical specifications. Prerequisite: INDD 446 with a semester grade of "C" or higher or instructor permission.

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

**INDD 510. Human Factors and Ergonomics. 3 Credits.**
Introduction to the field of human factors appropriate to industrial, interior, interaction, and visual design. The course will cover a wide range of topics that fall underneath the umbrellas of cognitive ergonomics and physical ergonomics. This course aims to examine the cognitive and physical constraints of the human system and how design can address those issues. Prerequisite: INDD 302 with a semester grade of "C" or higher or instructor permission.

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

**INDD 555. Portfolio. 3 Credits.**
Work directed toward maximizing the quality and effectiveness of the individual student's professional portfolio. Prerequisite: INDD 446 with a semester grade of "C" or higher or instructor permission.

**INDD 580. Senior Industrial Design Studio. 4 Credits.**
Course requires the negotiation and accomplishment of a comprehensive body of work, comprising independent research, ideation, refinement, detail technical specifications, renderings, and a working and tested prototype of your final design. A final report of the project is required.
documenting your design process, the depth and complexity of which are commensurate with expectations for entry-level professionals. Faculty may consider national or international competitions as appropriate substitutions for student derived briefs, where applicable. The nature and scope of the work (1-2 projects maximum), as well as details of anticipated accomplishment must be outlined by the student and approved by the instructor prior to the beginning of the second week of classes. In exceptional circumstances, projects may extend into both semesters, via INDD 581—this requires permission/negotiation with faculty and is to be declared as an aspiration at start of INDD 580. Prerequisite: INDD 448 and INDD 555 with semester grades of "C" or higher.

INDD 581. Senior Industrial Design Studio II. 4 Credits.
Course requires the negotiation and accomplishment of a comprehensive body of work, comprising independent research, ideation, refinement, detail technical specifications, renderings, and a working and tested prototype of your final design. A final report of the project is required documenting your design process, the depth and complexity of which are commensurate with expectations for entry-level professionals. Faculty may consider national or international competitions as appropriate substitutions for student derived briefs, where applicable. The nature and scope of the work (1-2 projects maximum), as well as details of anticipated accomplishment must be outlined by the student and approved by the instructor prior to the beginning of the second week of classes. In exceptional circumstances, projects may be a continuation of those started in INDD 580—this requires permission/negotiation with faculty and is to be declared as an aspiration at start of INDD 580. Prerequisite: INDD 580 with a semester grade of "C" or higher or instructor permission.

INDD 715. Industrial Design. 2-6 Credits.
Research-oriented advanced study in industrial design. Prerequisite: Graduate major in industrial design or consent of instructor.

INDD 815. Industrial Design. 2-6 Credits.
Prerequisite: INDD 715.

Courses

PHTO 101. Fundamentals of Photography. 3 Credits.
Open to students of all disciplines and experience levels, this course provides an introduction to the medium and language of photography. Basic DSLR camera operation and workflow will be accompanied by lectures, readings, and discussions regarding the historical and theoretical concerns of the medium. A digital camera with full manual controls is required - RAW capable preferred.

PHTO 177. First Year Seminar: Picturing Place: Photographing Lawrence. 3 Credits.
Are you new to KU, Lawrence, or even the Midwest? Would you like to know your new home better? The act of photographing - observing, participating, being present - can accelerate a connection to Place. In this digital photography class, each student will identify a specific community or environment within the Lawrence area to photograph repeatedly and meaningfully over the course of the semester. Class time will be spent reviewing and refining the work, discussing its context, introducing research methods for deeper understanding of the chosen topic, and gaining inspiration from relevant historic and contemporary models of photographic inquiry. By the end of the semester, the student will have strengthened both their visual literacy skills and their ties to their new surroundings. All photographic experience levels welcome.

PHTO 200. Foundations in Photography: Digital. 3 Credits.
Foundations in Photography (Digital) explores the technical and creative possibilities of digital photography from image capture to print and the web. This advanced introductory-level studio course covers manual camera operation with dSLR or mirrorless digital cameras, basic digital processing workflow with Adobe software, and inkjet print or digital output methods, accompanied by lectures, readings, and discussions regarding the historical and theoretical concerns of the medium. A digital camera with full manual controls and RAW capable is preferred; a limited number of cameras are available for check-out.

PHTO 201. Photography I. 4 Credits.
The first of the two-part foundational Photography sequence, this majors-only course provides students with a rigorous immersion into the formal, technical, and conceptual concerns and challenges of photography by way of the view camera. Embracing both the wet and digital darkrooms, students shoot and develop sheet film that is then utilized to produce both traditional and digital prints. Intermediate digital editing methods are introduced and explored. View cameras are provided. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHTO 200 with grades of C (2.0) or higher.

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

PHTO 205. Foundations in Photography: Darkroom. 3 Credits.
This introductory studio explores the technical and creative possibilities of black & white film photography. PHTO 205 covers manual camera operation using 35mm film cameras, darkroom film developing, and silver-gelatin printing methods, accompanied by lectures, readings, and discussions regarding the historical and theoretical concerns of the medium. Cameras are provided for check-out. No darkroom experience necessary.

PHTO 210. Understanding Photographs. 3 Credits.
Understanding Photographs is a lecture-based course that focuses on developing a critical understanding of how images, paired with culture and society, generate meaning in both the historical and contemporary contexts. Open to students of all disciplines and experience level.

PHTO 303. Photography I: View Camera. 4 Credits.
The first of the two-part second-year foundational Photography sequence for Photography majors, this course provides students with a rigorous immersion into the formal, technical, and conceptual concerns and challenges of photography by way of the view camera. Embracing both the wet and digital darkrooms, students shoot and develop sheet film that is then utilized to produce both traditional and digital prints. Intermediate digital editing methods are introduced and explored. View cameras are provided. Prerequisite: Admission to the Photography Major or Minor and PHTO 200 or PHTO 205 with a semester grade of "C+" or higher or instructor permission. Priority will be given to Photography majors.

PHTO 304. Photography II: Color Digital. 4 Credits.
The second of the two-part foundational Photography sequence, this advanced course builds upon PHTO 303 with additional emphasis on color, RAW workflow, and advanced methods for digital capture, manipulation, editing, and compositing. Additionally, students work extensively with large-format inkjet printers to create custom ICC printing profiles. A digital SLR (RAW capable) camera with full manual controls
is required. Prerequisite: Admission to the Photography major or minor and PHTO 303 with a semester grade of "C+" or higher, or instructor permission.

**PHTO 305. Photography III: The Moving Image. 4 Credits.**
This course serves as an introduction to the principles and challenges of photography as a time-based medium. Fundamental concepts of production are introduced and explored through hands-on exercises, class presentations and discussions, lectures, critiques, and individual and group projects. Prerequisite: Successful completion of PHTO 304 with a semester grade of "C" or higher.

**PHTO 313. Lighting Studio. 3 Credits.**
Lighting Studio is a fundamental course in awareness, modification, and control of light. Students work extensively with strobe and continuous light sources. Principles of natural and artificial light are introduced, explored, and applied through hands-on assignments both in and out of the studio environment. Prerequisite: Admission to the Photography major or minor and PHTO 304 with a semester grade of "C" or higher or instructor permission.

**PHTO 314. The Moving Image. 3 Credits.**
This course serves as an introduction to the principles and challenges of photography as a time-based medium. Fundamental concepts of production are introduced and explored through hands-on exercises, class presentations and discussions, lectures, critiques, and individual and group projects. Prerequisite: Admission to the Photography major or minor and PHTO 304 with a semester grade of "C" or higher or instructor permission.

**PHTO 315. Experimental Processes. 3 Credits.**
Experimental Processes is an introduction to the understanding and production of image-based works utilizing experimental approaches and alternative processes in an interdisciplinary environment. Prerequisite: Admission to the Photography major or minor and PHTO 304 with a semester grade of "C" or higher or permission of instructor.

**PHTO 316. Professional Practices. 3 Credits.**
This course provides an introduction to standards and conventions with regards to professional photographic practice. Topics include portfolio development, copyright, contracts, grant/statement writing, presentation methods, and self-promotion. Prerequisite: PHTO 400 or PHTO 402 each with a semester grade of "C" or higher or instructor permission.

**PHTO 360. The Photobook. 3 Credits.**
This class introduces students to the many potentials of photographic imagery in book form, from the traditional monograph to the narrative or lyrical and experimental. Considerations of sequencing, context, text, design, materiality, meaning, and production methods will be explored through book examples, readings, discussions, and in-class exercises. The class will culminate in the design and production of a hand-made or on-demand book. Prerequisite: PHTO 304 with a grade of C or higher or declaration of the Undergraduate Certificate in Book Arts or admission to the Photography Minor or instructor permission.

**PHTO 400. Junior Seminar. 3 Credits.**
This junior-level seminar is focused primarily on the development of independent and collaborative projects through on-going group critique and group projects. Prerequisite: PHTO 304 with a semester grade of "C" or higher or instructor permission.

**PHTO 402. Photo Media Seminar. 3 Credits.**
This upper-level seminar is focused primarily on the development of independent and collaborative projects through on-going group critique with an emphasis on research and analysis. Learning is focused on personal development and other issues relevant to contemporary photographic practice through assigned readings, presentations, and group discussion. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. May be repeated for credit. Prerequisite: PHTO 304 or instructor permission.

**PHTO 450. Senior Seminar. 3 Credits.**
This senior-level seminar is focused primarily on the further development of independent and collaborative projects through an on-going group critique with an emphasis on research and analysis. Learning is focused on personal development and other issues relevant to contemporary photography practice through assigned readings, presentations, group discussions, and rotating special topics. Prerequisite: PHTO 400 with a semester grade of "C" or higher or instructor permission.

**PHTO 500. Portfolio and Thesis. 4 Credits.**
Taken the final semester of study, this capstone course guides students through the research, development, and refinement of a final body of photographic work and appropriate supplemental materials. Methods and strategies of presentation and dissemination are discussed and explored. Prerequisite: PHTO 450 with a semester grade of "C" or higher or instructor permission.

**PHTO 513. Advanced Lighting Studio. 3 Credits.**
A continuation of the skills and principles discussed in PHTO 313. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHTO 313 or instructor permission.

**PHTO 514. Advanced Moving Image. 3 Credits.**
A continuation of the skills and principles discussed in PHTO 314. If this course is required under the major studies section on the degree requirement sheet, students must receive a grade of C (2.0) or higher to continue on to the next course in the sequence. Prerequisite: PHTO 314 or instructor permission.

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

**PHTO 560. Special Topics in Photography: ______. 3 Credits.**
Special topics courses in Photography vary by instructor and provide additional opportunities for interdisciplinary research and advanced specialized study. A semester grade of "C" or higher is required in order for this course to count toward the "Major Studies Electives" component of the Photography major. May be repeated for credit. Prerequisite: PHTO 304 with a semester grade of "C" or higher or instructor permission.

**Courses**

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

**VISC 200. Foundations in Typograpy. 3 Credits.**
Introduces the discipline, function, and tradition of typography as it relates to visual/verbal communication. Emphasis is on interrelationships of letter, word, line and page. Projects examine two-dimensional typographic space, sequence and information hierarchy. Prerequisite: BDS 101 and BDS 103 with semester grades of "C+" or higher or instructor permission.

**VISC 201. Visual Communication Design. 3 Credits.**

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

**VISC 202. Elements of Typography. 3 Credits.**

Introduces the discipline, function, and tradition of typography as it relates to visual/verbal communication. Emphasis is on interrelationships of letter, word, line and page. Projects examine two-dimensional typographic space, sequence and information hierarchy. Prerequisite: VISC 200 and ILLU 200 with semester grades of "C+" or higher or instructor permission.

**VISC 204. Principles of Visual Communication. 3 Credits.**

Visual communication problems involving the student in the translation of verbal concepts and design theory into visual images. This course focuses attention on the process of defining problems, gathering information, and formulating clear, powerful, and persuasive visual statements. Introduction to methods of research, idea generation, and image making will be an integral part of this course. Prerequisite: VISC 200 and ILLU 200 with semester grades of "C+" or higher or instructor permission.

**VISC 302. Typographic Systems. 4 Credits.**

Further exploration of typographic form and manipulation of variables which affect content; stresses the importance of typographic composition as an integral component of visual communication design. Projects examine advanced structures of typographic space, work-image structure, and typographic details and aesthetic. Prerequisite: VISC 202 and VISC 204 with semester grades of "C+" or higher or instructor permission.

**VISC 304. Designing Understanding. 4 Credits.**

Exploration of the relationships among people, places, and the visual objects and information they use. Attention on the different roles of the designer as observer, empathizer, communicator and experience builder. Introduction to information design processes and procedures of understanding by ordering data into useful and persuasive information tools and experiences. Various methodologies will be explored for visualizing information for clarity, resonance, and editorial voice with special attention to the relationships among audience and context in the creation of meaning. Prerequisite: VISC 202 and VISC 204 with semester grades of "C+" or higher or permission of instructor.

**VISC 310. Letterpress. 3 Credits.**

This course concentrates on the traditional methods of hand typesetting, using the Department of Design's collection of lead and wood type. Learn how to use a pica rule, composing stick, leading, spacing material, the California Job Case, mix ink and operate a Vandercook proof press and C&P or Golding platen. Be inspired by visits to Special Collections. Emphasis will be placed on the acquisition of skills and the creative use of type and images. Prerequisite: BDS 101 with a semester grade of "C+" or higher or instructor permission.

**VISC 360. The Photobook. 3 Credits.**

This class introduces students to the possibilities of visual communication through photobook design, from the traditional monograph to the narrative or lyrical and experimental. Considerations of sequencing, context, text, materiality, meaning, and production methods will be explored through book examples, readings, discussions, and in-class exercises. Visual Communication students will partner with a photographer in the class to design and produce a hand-made or on-demand book. Prerequisite: VISC 304 with a semester grade of "C+" or higher or declaration of the Undergraduate Certificate in Book Arts or instructor permission.

**VISC 402. Designer as Author. 3 Credits.**

Building from the structures and approaches of VISC 302, the course is a research-based examination of traditional, non-traditional and expressive uses of the typographic medium. Projects emphasize the student as both content generator as well as designer and include development of text + image narrative, word as image and typographic "voice" while further refining technical proficiency. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher.

**VISC 404. Designing for Social Interactions. 3 Credits.**

Introduces the discipline of designing for dynamic media (i.e., internet, on screen, multi-media.) Emphasis will be placed on concept development and on the fundamental principles of information hierarchy, user experience, navigation strategies, site development and site architecture. Projects, lectures and tutorials will provide a working knowledge of current tools and techniques, while exploring the issues of narrative structure, rhythm, space, animation, sound, and video. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher.

**VISC 405. Designing Brand Identity. 3 Credits.**

A brand's visual identity expresses an organization's big idea of what it is, how it lives in the world, who is serves and why. Simply put, it identifies, explains and persuades. A visual brand identity needs to engage and communicate to specific audiences while differentiating the brand from its competition. This class will explore the creation of brand identity elements such as logos, icons and symbols, as well as how these can be organized into a "system of parts" that can communicate across multiple applications. Additionally, logo, symbol and iconography workflow and methods of brand identity ideation and conceptualization will also be explored. Prerequisite: Successful completion of VISC 302 and VISC 304 with semester grades of "C+" or higher and successful completion of the Second Year Full Review or instructor permission.

**VISC 410. Digital Letterpress. 3 Credits.**

In this course students will explore the possibilities that digital technologies offer to the letterpress printer, including laser cutting and polymer platemaking. Students will learn how to prepare digital files to make negatives, and to process and print polymer plates on the Vandercook press. Emphasis will be placed on creativity and craft. Starting with the simplest of techniques, projects will grow in increasing technical and aesthetic complexity. No previous letterpress experience is required. Knowledge of Adobe InDesign and Illustrator is essential. Prerequisite: Permission of instructor.

**VISC 414. Publication and Editorial. 4 Credits.**

Exploration of topics dealing intensively with editorial concept and format organization. Projects stress advanced problems in the integration of text and image through the development of complex and variable structures. Emphasis on thorough researching of content and audience as well as understanding of production/execution implications of solutions. Prerequisite: VISC 302 and VISC 304 with semester grades of C+ or higher or instructor permission.

**VISC 415. Motion Graphics. 3 Credits.**

Introduction to the elements, principles and history of motion design. Emphasis on the conceptualization, planning and storyboarding of time-
based media with respect to some specific, clearly stated aesthetic and/or communicative purpose. Students will examine methods for synthesizing still & moving imagery, typography and audio, in motion, using Adobe After Effects in combination with other software such as Final Cut Pro, Illustrator and Photoshop. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher or instructor permission.

VISC 420. Exhibition Design. 3 Credits.
This course will explore how exhibitions are conceptualized, designed and made. It will look at the role of curators, exhibition designers, graphic designers as well as the audience of cultural institutions. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher or instructor permission.

VISC 425. Environmental Graphics. 3 Credits.
This course will examine core principles and practices of environmental graphic design. Many of these concepts will be concerned with the visual aspects of wayfinding, communicating identity and information, and shaping the idea of place. Some of the topics discussed will include: signage, exhibit design, identity graphics, pictogram design, mapping, civic design and themed environments. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher or instructor permission.

VISC 435. Book Arts. 3 Credits.
Producing books in editions is a complex undertaking. Students work in teams to create or compile content of their choosing, then edit, design, and bind their own books in a small edition. The class combines both traditional letterpress technology and digital interface for the creation of text and image. Each student receives two copies of the team's final book, one copy is archived in Special Collections at the Spencer Research Library. Prerequisite: BDS 101 with a semester grade of "C+" or instructor permission.

VISC 440. Bookmaking. 3 Credits.
Students will learn to make a variety of book structures and enclosures, from historical to contemporary. Prototypes and models, as well as comprehensive notes and instructions will provide the student with a library of bindings for future reference. Students will document paper that is made in class and create a record for themselves, other students, and the Department of Design. Prerequisite: BDS 101 with a semester grade of "C+" or higher or instructor permission.

VISC 455. Designing Information. 3 Credits.
Making preliminary visualizations, models, and prototypes. Examines words, diagrams, type, and sequencing to restructure messages so that they tell a story more effectively. Editing images to make messages clear, unambiguous and understandable by their intended audience(s). Designing the appearance of an information product so that users can find what they want and understand it when they get there. Prerequisite: VISC 302 and VISC 304 with semester grades of "C+" or higher or instructor permission.

VISC 520. Designing for Change. 4 Credits.
Exploration of branding, service and interaction design opportunities that respond to real-life complexity: audiences, systems and contexts. Introduces business and design thinking strategies associated with brand development and the idea that design plays a vital role in our local, national, and global society and well-being. Emphasis on the methods of thinking and research which precede the making of design as well as the importance of writing and verbal presentation to the visual communication design profession. Prerequisite: VISC 404 and VISC 405 with semester grades of "C" or higher or instructor permission.

VISC 525. Senior Problems. 3 Credits.
Goal-oriented graphic design problem-solving with emphasis on research, analysis, and synthesis of complex visual problems. Will allow for in-depth study of professional design issues and topics; provides a forum for multidisciplinary collaboration with related professional disciplines. May be repeated for credit. Prerequisite: VISC 530 with a semester grade of "C" or higher, or instructor permission.

VISC 530. Portfolio. 4 Credits.
Instruction in the organization and presentation of a professional quality visual portfolio. Readings, feedback and online collaborations will focus on the development of a focused portfolio consistent with the individual student’s pursuits. Prerequisite: VISC 402 and VISC 520 with semester grades of "C" or higher or instructor permission.

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

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

VISC 560. Special Topics in Visual Communication: ______. 3 Credits.
A study of different topics in different semesters in a special area of visual communication. Entry by permission of instructor. May be repeated for credit.

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

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

VISC 706. Graphics. 3-6 Credits.
VISC 710. Letterpress. 3 Credits.
This introductory course in letterpress will instruct the student in methods for printing from moveable type and other type-high surfaces. The discipline will be explored from a historic as well as artistic perspective. Emphasis will be placed on the acquisition of skills and vocabulary, and the creative use of type and techniques. Prerequisite: Graduate student status and instructor permission.

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

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

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

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

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

VISC 735. Book Arts. 3 Credits.
Combines wide range of traditional letterpress and digital processes for type and image for individually determined student book projects. Projects will culminate in a small printed and bound edition. Prerequisite: Graduate student status and instructor permission.

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

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

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

VISC 815. Graphics. 2-6 Credits.
Individual research.

Bachelor of Fine Arts in Design

The mission of the Department of Design is to seek to engage its students in the practice of design thinking and visualization to create beautiful, innovative, and responsible solutions (products, spaces, systems, messages, and services) that respond to human needs and enhance the quality of everyday life.

The Department of Design encompasses a rich tradition and a long history of educating students to engage in current paradigms toward defining the future of design practice. Exceptional faculty and state-of-the-art facilities provide an environment that cultivates and optimizes educational experience in each area of undergraduate and graduate study through innovative and comprehensive curricula and experiences. Students gain insights from lectures and workshops with world-renowned designers, collaborations with industry partners, and opportunities to participate in short-term study abroad programs and semester-long internships in the US and abroad.

Check out a selection of great student work:

- Illustration & Animation (https://www.behance.net/KU-Illustration/)
- Industrial Design (https://www.behance.net/ku-industrialdesign/)
- Photography (https://www.behance.net/KU-Photography/)
- Visual Communication Design (https://www.behance.net/KU-VisCom/)
- Outside of class projects: (https://www.behance.net/ KU_Blitz2Workshops/) Study Abroad, Workshops and Blitzes

The University of Kansas Department of Design is an accredited institutional member of the National Association of Schools of Art and Design (https://nasad.accredit.org/) (NASAD).

Undergraduate Admissions Requirements

Incoming Freshmen

Admission to the Department of Design is selective and competitive. Students can complete the online University of Kansas application by going to admissions.ku.edu (https://admissions.ku.edu/). This application serves as the application for admission to KU, admission to the Department of Design, and eligibility for scholarships (https://admissions.ku.edu/tuition-scholarship/freshman/).

Applicants must submit a portfolio (http://design.ku.edu/ portfoliorequirements/) and must be admissible to KU (https://admissions.ku.edu/freshman-requirements-deadlines/) by assured admission or individual review according to the following criteria:
21+ ACT (1060+ SAT) and 3.25+ GPA

or

24+ ACT (1160+ SAT) and 3.0+ GPA

Portfolio:
- Required for all applicants.
- 10-15 images of creative work and a brief essay question.
- Learn more and submit a portfolio here (https://kudesign.slideroom.com/#/login/program/39465).

Application Deadlines:
- Priority Consideration - Nov. 1
- Final Deadline - Feb. 1

Portfolios are not reviewed until after the deadlines. Decision letters are sent approximately one month after the deadline.

Transfer Students
Admission to the Department of Design is selective and competitive. Complete the online application by going to admissions.ku.edu and selecting the School of Architecture and Design, then select your major. This application will serve as your application to KU, the Department of Design and University scholarships (https://admissions.ku.edu/tuition-scholarship/transfer/). In addition, students must submit a portfolio (https://design.ku.edu/PortfolioRequirements/).

Requirements
- Must have a 3.0+ cumulative GPA from previous institutions, including KU
- Complete online application (https://admissions.ku.edu/i-am/transfer/)
- Submit official transcripts to the KU Office of Admissions (https://admissions.ku.edu/transfer-requirements-deadlines/transfer-college-credits/)
- Submit portfolio (https://design.ku.edu/PortfolioRequirements/)

Application Deadlines
- Spring 2020: Oct. 1
- Fall 2020: Feb. 1

Transferring credits to KU
Utilize KU’s credit transfer tool (http://credittransfer.ku.edu/) to learn more about how your courses may transfer to KU. Please note transfer studio courses with a grade of C- or lower will not be accepted by the Department of Design for credit. Transfer general education courses with a grade of D+ or lower will not be accepted by the Department of Design for credit.

International Students
Admission to the Department of Design is selective and competitive. International students should apply through the Office of International Recruitment and Undergraduate Admissions (http://irua.ku.edu/). (http://irua.ku.edu/)

Requirements
- Total TOEFL iBT score of 70+ or Total IELTS score of 6.0+
- Must have at least a 3.0+ cumulative GPA on a 4.0-point scale
- Complete Online Application (https://irua.ku.edu/apply/)
- Submit Portfolio (https://design.ku.edu/PortfolioRequirements/)

Application Deadlines
- Spring 2020: Transfer, Current KU Students, or Readmits - Oct. 1
- Fall 2020:Incoming Freshmen - Deadline for Priority Consideration - Nov. 1
- Incoming Freshmen - Deadline for Final Consideration - Feb. 1
- Transfer, Current KU Students, or Readmits - Feb. 1

Current KU Students (change of school)
Admission to the Department of Design is selective and competitive. Students must fill out the Change of School form (http://registrar.ku.edu/change-school/) and select their major. This form will serve as your application to the Department of Design. In addition, students must submit a portfolio (https://design.ku.edu/PortfolioRequirements/).

Requirements
- Must have at least a 3.0+ cumulative GPA on a 4.0-point scale
- Complete Change of School Form (http://registrar.ku.edu/change-school/)
- Submit Portfolio (https://design.ku.edu/PortfolioRequirements/)

Application Deadlines
- Spring 2020: Oct. 1
- Fall 2020: Feb. 1

Students Seeking Readmission and Non-Degree Seeking Students
Admission to the Department of Design is selective and competitive. If you’ve taken classes at KU before or wish to take a class that won’t necessarily count toward a degree at KU, please follow these application instructions (https://admissions.ku.edu/apply/). If you have taken courses at another institution since attending KU, please follow the application process for transfer students (http://design.ku.edu/transfer/).

Requirements
- Complete the appropriate application to KU online (https://admissions.ku.edu/apply/).
- Applications are reviewed on a case-by-case basis. Some applicants may be asked to submit a portfolio (https://design.ku.edu/PortfolioRequirements/) for consideration.

Application Deadlines
- Spring 2020: Oct. 1
- Fall 2020: Feb. 1
Portfolio Requirement

All applicants must submit a portfolio to be considered for admission to the Department of Design.

Portfolios are submitted online through SlideRoom. Please select "Undergraduate Student - Portfolio Submission (https://kudesign.slideroom.com/)" from the directory. For technical support questions while submitting your online application, please contact support@slideroom.com.

The online portfolio submission includes the following requirements:

- **Media:** Please upload 10-15 images of your strongest creative works.
  - Please title each piece.
  - In the description, include the medium or software used, the size, date of completion, and a brief one to two sentence description.
  - In the case of documented professional or group projects, applicants should indicate personal responsibilities.
  - Your portfolio must include at least two mediums. Examples: sketches, drawings, paintings, ceramics, jewelry, 3-D pieces, logos, branding, publications/yearbook, posters or any art or design-related works.
  - Displaying a variety of work is essential; use your strongest pieces and good judgment.
- **Essay:** Why are you interested in studying design, what have you done to prepare, and how do you hope to use your degree?
  - To complete your application you must provide a response to the prompt.
  - Please limit your response to 200-250 words.

Questions?

If you have questions about your application to the Department of Design, please contact our Admissions Coordinator, Joan Weaver, at jweaver@ku.edu or 785-864-3167.

For technical support questions while submitting your online application through Slideroom, please contact support@slideroom.com.

Design BFA Degree, Programs Offered

The Department of Design offers Bachelor of Fine Arts degree (BFA) in Design with concentrations in the following areas:

- Illustration & Animation
- Industrial Design
- Photography
- Visual Communication Design

Each of these concentrations is built upon a carefully-sequenced pathway of unique studio courses that constitutes a four-year track to graduation from the fall semester of the year of a student’s admission. More information about the Design studio sequence is available at https://design.ku.edu/design-studio-sequencing/.

Summaries of each of the concentrations of the Design BFA are listed below:

Illustration and Animation

The Illustration & Animation program prepares students to develop and refine methodologies in image-making while acquiring an effective use of visual language and problem solving skills. Technical skills and techniques, as well as a refined understanding of composition, color, and value are developed through the introduction and exploration of traditional and contemporary media. Business and legal issues of the industry are addressed that prepare students for numerous professional options that include print media, book publishing, motion graphics, entertainment, gallery installation, fashion, toys and games, and surface design.

Industrial Design

Graduates of KU’s Industrial Design program are particularly attractive to potential employers because of our well-rounded and rigorous curriculum. Our students find career opportunities in a wide variety of disciplines including product design, furniture design, exhibit design, package design, human factors, design research and product planning. The variety of products and systems that fall within the potential scope of an industrial designer’s work is extremely broad. Examples range from household appliances to aircraft interiors, furniture to major electronics equipment, transportation and vehicles, and myriad other product areas.

Photography

The Photography program at the University of Kansas is dedicated to evaluating and redefining the medium of photography. Through in-depth instruction, students develop a diverse technical skill set, becoming proficient in both analog and digital practices. The program encourages a strong work ethic, and places emphasis on visual literacy. Graduates of the Photography program at the University of Kansas leave with exceptional visual communication skills, fully prepared to successfully engage in a wide range of possible careers in lens-based media.

Visual Communication Design

Visual Communication Designers shape the information that everybody sees, uses and experiences. The Visual Communication Design program at KU prepares students for current professional demands and provides students with the fundamental design thinking, making and process skills required to build a rewarding career and facilitate life-long learning. Career options for visual communication designers include a wide range of areas such as traditional print media, magazine and book design, corporate marketing communications, branding, packaging design, exhibition and environmental design, motion graphic design, website design, interface design and more.

General Degree Requirements

Total Credit Hours Required for the Design BFA

In order to earn the Bachelor of Fine Arts in Design degree, students must complete a total of at least 120 credit hours. At least 45 of those credit hours must be in “junior/senior-level courses,” which are numbered 300 and above. At least 30 credit hours must be in residence to receive a degree from the department and KU.

Maximum Number of Applicable Activity Credit Hours

Only three hours of activity and/or performance work (e.g. HSES 108 or BAND 210) will count toward the degree.
Maximum Accepted Age of Studio Transfer Credit
Transfer courses with course codes ADS, BDS, ILLU, INDD, PHTO, and VISC will not be accepted to fulfill requirements in the Studio & Professional Requirements component of the Design BFA if they are older than three calendar years from the semester to which the student is admitted to the Department of Design.

Remedial Courses
Remedial courses - those numbered below 100, such as MATH 2 - will not be counted toward the requirements of the Design BFA and may only serve only as prerequisites to other courses.

Minimum Required Grades for Foundation Studies and Major Studies Courses
Specific minimum grades are required for each course in the Foundation Studies and Major Studies requirements of the Design BFA. Failure to meet these minimum grade requirements can result in an extended track to graduation or prohibition from continuing in a student’s concentration in the Design BFA. These minimum grades are documented each course’s catalog description as well as at https://design.ku.edu/minimum-grades.

Minimum GPA Required to graduate from the Design BFA
Students must earn or exceed a 2.0 KU Cumulative Graduation GPA in order to be eligible to graduate from any concentration in the Design BFA.

Second Year Full Review
After completing second-year spring-semester Major Studies courses, students are required to participate in a portfolio review that is organized according to each student's concentration in the Design BFA, as outlined below:

Illustration & Animation:

- Students are required to participate in a portfolio review of all course content produced in both fall and spring semester Illustration & Animation courses. The Illustration & Animation faculty use this review to determine if a student's work is at a satisfactory level. Supplemental to the grade portion of the Portfolio Review, students are also evaluated on attendance, work habits, attitude, and the ability to listen and learn from constructive criticism.

Industrial Design:

- The Portfolio Review is of all projects produced in both the fall and spring semesters in Industrial Design courses: INDD 212, INDD 284 and INDD 302. The Industrial Design faculty use this review to determine if the student's work is at an above satisfactory level. Supplemental to the grade portion of the Portfolio Review, students are also evaluated on attendance, work habits, attitude, and the ability to listen and learn from constructive criticism.

Photography:

- The primary component of the review is the submission of a photographic portfolio (10-15 images) of work made over the course of the previous year. Each portfolio is evaluated by a faculty committee upon the following criteria: originality, treatment of form and composition, engagement with subject matter and medium, quality of ideas, technical ability, and craftsmanship. In addition to their portfolio, students are also evaluated on attendance, work habits, professionalism, participation, and GPA.

Visual Communication Design:

- The Portfolio Review is of all projects produced in both the fall and spring semesters in Visual Communication Design courses. The Visual Communication Design faculty use this review to determine if the students' work is at a satisfactory level. Supplemental to the grade portion of the Portfolio Review, students are also evaluated on attendance, work habits, attitude, and the ability to listen and learn from constructive criticism.

In addition to passing the Second-Year Full Review, students must earn or exceed the minimum required grades for their spring-semester Major Studies courses.

Students who fail to pass the Second-Year Full Review and/or fail to earn or exceed the minimum required grades for their spring-semester Major Studies courses do not have the option of repeating any Major Studies coursework and must change their major.

Breadth of Study Requirements

Written & Oral Communication
At least 12 credit hours of courses in written and oral communication are required of all Design students, consisting of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 105</td>
<td>Honors Introduction to English</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing:</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar:</td>
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<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
<td></td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
<td></td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
<td></td>
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<tr>
<td>KU Core Goal GE22 (Oral Communication)</td>
<td>3</td>
<td></td>
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</tbody>
</table>

Students whose ACT/SAT/AP scores have exempted them from ENGL 101 or ENGL 102 will need to complete one or more additional General Elective courses in order to meet the minimum credit hour requirements of their degree. Students who earn credit for ENGL 101, 102, and/or 105 through AP or IB credit may be exempted from taking additional General Elective courses in some cases.

Students who are exempted from KU Core Goal GE22 will likewise need to complete an additional General Elective course in order to meet the minimum credit hour requirements of their degree.

Historical Context
At least 12 credit hours of historical context courses will be required of all Design students, consisting of the following for students in the Illustration & Animation, Industrial Design, and Visual Communication Design concentrations of the Design BFA:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 340</td>
<td>History and Philosophy of Design</td>
<td>3</td>
</tr>
<tr>
<td>HA Elective Course</td>
<td>See note below.</td>
<td>3</td>
</tr>
</tbody>
</table>
and Option I or Option II

<table>
<thead>
<tr>
<th>Option I</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td></td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td></td>
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</tbody>
</table>

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<tr>
<th>Option II (Honors Students Only)</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>HA 160</td>
<td>History of Western Art: Ancient Through Medieval, Honors</td>
<td></td>
</tr>
<tr>
<td>HA 161</td>
<td>History of Western Art: Renaissance to Contemporary, Honors</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** A course to fulfill the HA Elective requirement can be any HA course except HA 100 and HA 300, which feature very similar material to HA 150/151 and HA 160/161.

Students in the **Photography** concentration of the Design BFA must complete the following instead:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 100</td>
<td>Introduction to Western Art History</td>
<td>3</td>
</tr>
<tr>
<td>ADS 340</td>
<td>History and Philosophy of Design</td>
<td>3</td>
</tr>
<tr>
<td>HA 380</td>
<td>History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>HA 567</td>
<td>Contemporary Art (or HA 566)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Social Responsibility & Ethics**

All Design students must complete ADS 401 to fulfill KU Core Goal AE51 (Social Responsibility & Ethics).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 401</td>
<td>Design Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Other KU Core**

All Design students must complete the KU Core. KU Core goals not otherwise fulfilled by courses required for the Written & Oral Communication requirement, Historical Context requirement, and Social Responsibility & Ethics requirement are listed below:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KU Core Goal GE12</td>
<td>(Quantitative Literacy)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal GE3N</td>
<td>(Natural Science)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal GE3S</td>
<td>(Social Science)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal AE41</td>
<td>(Human Diversity)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal AE61</td>
<td>(Integration &amp; Creativity): Fulfilled by ILLU 535, 560, INDD 580, PHTO 500, or VISC 520</td>
<td>3</td>
</tr>
</tbody>
</table>

Please consult classes.ku.edu (https://classes.ku.edu/) and an academic advisor to explore course options to fulfill these KU Core goals.

Students whose ACT/SAT/AP scores have exempted them any of these KU Core Goals will need to complete one or more additional General Elective courses in order to meet the minimum credit hour requirements of their degree. Students who earn credit for any of these KU Core goals through AP or IB credit may be exempted from taking additional General Elective courses in some cases.

**Academic Concentration**

All students in Design must complete at least 3 courses at the 300+ level in the same topic or subject area beyond the Departments of Design and Visual Art. Suggested courses and more information is available at http://design.ku.edu/academic-concentration-requirement (https://design.ku.edu/academic-concentration-requirement/).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Concentration Course</td>
<td>See note above.</td>
<td>3</td>
</tr>
<tr>
<td>Academic Concentration Course</td>
<td>See note above.</td>
<td>3</td>
</tr>
<tr>
<td>Academic Concentration Course</td>
<td>See note above.</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Electives**

Students completing the **Illustration & Animation** concentration of the Design BFA must complete 3 credit hours of General Elective coursework in order to meet the minimum total credit hours required for their degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Elective Course</td>
<td>See note above.</td>
<td>3</td>
</tr>
</tbody>
</table>

Students completing the **Industrial Design** concentration of the Design BFA must complete 6 credit hours of General Elective coursework in order to meet the minimum total credit hours required for their degree.

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Elective Course</td>
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</tr>
<tr>
<td>General Elective Course</td>
<td>See note above.</td>
<td>3</td>
</tr>
</tbody>
</table>

Students completing the **Photography** concentration of the Design BFA must instead complete 9 credit hours of General Electives:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Elective Course</td>
<td>See note above.</td>
<td>3</td>
</tr>
<tr>
<td>General Elective Course</td>
<td>See note above.</td>
<td>3</td>
</tr>
<tr>
<td>General Elective Course</td>
<td>See note above.</td>
<td>3</td>
</tr>
</tbody>
</table>

Students completing the **Visual Communication Design** concentration of the Design BFA are not required to complete General Elective courses in order to meet the minimum total credit hours of their degree.

**Studio & Professional Requirements**

The curriculum of the Design BFA centers on a carefully-sequence pathway of studio courses and professional studies. This sequence is unique for each of the four concentrations of the Design BFA, and is outlined below:

### Illustration & Animation

**Foundation Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101</td>
<td>Design Thinking and Making</td>
<td>3</td>
</tr>
<tr>
<td>BDS 103</td>
<td>Drawing for Design</td>
<td>3</td>
</tr>
<tr>
<td>ILLU 200</td>
<td>Foundations in Image Making</td>
<td>3</td>
</tr>
<tr>
<td>VISC 200</td>
<td>Foundations in Typography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ILLU 205</td>
<td>Drawing Media for Illustration I</td>
<td>3</td>
</tr>
<tr>
<td>ILLU 315</td>
<td>Introduction to Illustration</td>
<td>3</td>
</tr>
<tr>
<td>ILLU 405</td>
<td>Drawing Media for Illustration II</td>
<td>3</td>
</tr>
<tr>
<td>ILLU 410</td>
<td>Fundamentals of Animation</td>
<td>3</td>
</tr>
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</table>

ILLU 410 will be worth 4 credit hours instead of 3 effective spring 2023.
ILLU 415 Illustration Concepts This course will be worth 4 credits instead of 3 effective fall 2023.

ILLU 425 Concept Art

ILLU 435 Sequential and Narrative Illustration ILLU 435 will be worth 3 credit hours for spring 2022 and spring 2023, but will return to being worth 4 credit hours effective spring 2024.

ILLU 445 Advanced Concept Art

ILLU 510 Advanced Animation ILLU 510 will be worth 4 credit hours instead of 3 effective fall 2022.

ILLU 535 Promotion and Marketing for Illustration I ILLU 535 will be worth 3 credit hours instead of 4 effective fall 2022.

ILLU 545 Promotion and Marketing for Illustration II

**Supplementary Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>DRWG 213</td>
<td>Life Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>PNTG 263</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 200</td>
<td>Foundations in Photography: Digital (or PHTO 101 or PHTO 210)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Professional Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 320</td>
<td>KU Design Lecture Series (Must be successfully taken 4 times.)</td>
<td>4</td>
</tr>
</tbody>
</table>

6 credit hours from the options below:

- ADS 411 Design Trends and Forecasting
- ADS 531 Internship Credit
- ADS 532 Study Abroad: ______
- ADS 533 Study Abroad Documentation
- ADS 560 Topics in Design: ______
- ADS 580 Special Problems in Design
- VISC 310 Letterpress
- VISC 410 Digital Letterpress
- Studio Elective See note below.

Note for the Professional Studies requirement of the Illustration & Animation concentration of the Design BFA: A Studio Elective can be any studio course in the Departments of Design, Architecture, or Visual Art at the 300+ level.

**Industrial Design**

**Foundation Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101</td>
<td>Design Thinking and Making</td>
<td>3</td>
</tr>
<tr>
<td>BDS 103</td>
<td>Drawing for Design</td>
<td>3</td>
</tr>
<tr>
<td>INDD 200</td>
<td>Foundations in Industrial Design</td>
<td>3</td>
</tr>
<tr>
<td>INDD 212</td>
<td>Drawing for Industrial Design I</td>
<td>3</td>
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</tbody>
</table>

**Major Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDD 284</td>
<td>Basic Industrial Design Studio</td>
<td>3</td>
</tr>
<tr>
<td>INDD 312</td>
<td>Drawing for Industrial Design II</td>
<td>3</td>
</tr>
<tr>
<td>INDD 302</td>
<td>Intermediate Industrial Design Studio Will be worth 4 credit hours instead of 3 effective spring 2023.</td>
<td>3</td>
</tr>
<tr>
<td>INDD 508</td>
<td>Materials and Processes INDD 508 will be numbered</td>
<td>3</td>
</tr>
<tr>
<td>INDD 446</td>
<td>Advanced Industrial Design Studio Will be worth 4 credit hours instead of 3 effective fall 2023.</td>
<td>3</td>
</tr>
<tr>
<td>INDD 510</td>
<td>Human Factors and Ergonomics</td>
<td>3</td>
</tr>
<tr>
<td>INDD 448</td>
<td>Professional Industrial Design Studio Practices Will be worth 4 credit hours instead of 3 effective spring 2024.</td>
<td>3</td>
</tr>
<tr>
<td>INDD 555</td>
<td>Portfolio</td>
<td>3</td>
</tr>
<tr>
<td>INDD 580</td>
<td>Senior Industrial Design Studio INDD 580 will be worth 4 credit hours instead of 3 effective fall 2022.</td>
<td>3</td>
</tr>
<tr>
<td>INDD 581</td>
<td>Senior Industrial Design Studio II INDD 581 will be worth 4 credit hours instead of 3 effective spring 2023.</td>
<td>3</td>
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**Supplementary Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 325</td>
<td>Design Thinking &amp; Research Methodologies</td>
<td>3</td>
</tr>
<tr>
<td>INDD 350</td>
<td>Computer-Aided Design</td>
<td>3</td>
</tr>
</tbody>
</table>

9 credit hours from the options below:

- ADS 411 Design Trends and Forecasting
- ADS 531 Internship Credit
- ADS 532 Study Abroad: ______
- ADS 533 Study Abroad Documentation
- ADS 560 Topics in Design: ______
- ADS 580 Special Problems in Design
- INDD 378 Problems in Industrial Design: ______
- Studio Elective See note below.

**Photography**

**Foundation Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101</td>
<td>Design Thinking and Making</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 101</td>
<td>Fundamentals of Photography or course for KU Core Goal GE3H.</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 200</td>
<td>Foundations in Photography: Digital</td>
<td>3</td>
</tr>
<tr>
<td>or PHTO 205</td>
<td>Foundations in Photography: Darkroom</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 210</td>
<td>Understanding Photographs</td>
<td>3</td>
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</tbody>
</table>

**Major Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTO 303</td>
<td>Photography I: View Camera</td>
<td>4</td>
</tr>
<tr>
<td>PHTO 304</td>
<td>Photography II: Color Digital</td>
<td>4</td>
</tr>
<tr>
<td>PHTO 305</td>
<td>Photography III: The Moving Image</td>
<td>4</td>
</tr>
<tr>
<td>PHTO 400</td>
<td>Junior Seminar This course will be worth 4 credit hours effective spring 2024.</td>
<td>3</td>
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</table>

Note for the Professional Studies requirement of the Industrial Design concentration of the Design BFA: A Studio Elective can be any studio course in the Departments of Design, Architecture, or Visual Art at the 300+ level.
Bachelor of Fine Arts in Design

Major Studies Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTO 313</td>
<td>Lighting Studio</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 315</td>
<td>Experimental Processes</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 360</td>
<td>The Photobook</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 560</td>
<td>Special Topics in Photography: _____</td>
<td>3</td>
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</table>

Supplementary Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Studio Elective</td>
<td>See note below.</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>See note below.</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>See note below.</td>
<td>3</td>
</tr>
<tr>
<td>ADS 325</td>
<td>KU Design Lecture Series (Must be successfully taken 7 times.)</td>
<td>7</td>
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</tbody>
</table>

Note for the Supplementary Studies requirement of the Photography concentration of the Design BFA: Studio Elective options are outlined at http://design.ku.edu/studio-electives/photography/ (https://design.ku.edu/studio-electives/photography/).

Professional Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 320</td>
<td>KU Design Lecture Series (Must be taken 3 times.)</td>
<td>3</td>
</tr>
<tr>
<td>ADS 411</td>
<td>Design Trends and Forecasting</td>
<td>3</td>
</tr>
<tr>
<td>ADS 531</td>
<td>Internship Credit</td>
<td>3</td>
</tr>
<tr>
<td>ADS 532</td>
<td>Study Abroad: _____</td>
<td>3</td>
</tr>
<tr>
<td>ADS 533</td>
<td>Study Abroad Documentation</td>
<td>3</td>
</tr>
<tr>
<td>ADS 535</td>
<td>Topics in Design: _____</td>
<td>3</td>
</tr>
<tr>
<td>ADS 580</td>
<td>Special Problems in Design</td>
<td>3</td>
</tr>
<tr>
<td>VISC 310</td>
<td>Letterpress</td>
<td>3</td>
</tr>
<tr>
<td>VISC 360</td>
<td>The Photobook</td>
<td>3</td>
</tr>
<tr>
<td>VISC 410</td>
<td>Digital Letterpress</td>
<td>3</td>
</tr>
<tr>
<td>VISC 414</td>
<td>Publication and Editorial</td>
<td>3</td>
</tr>
<tr>
<td>VISC 435</td>
<td>Book Arts</td>
<td>3</td>
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<tr>
<td>VISC 440</td>
<td>Bookmaking</td>
<td>3</td>
</tr>
<tr>
<td>Studio Elective</td>
<td>See note below.</td>
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</tbody>
</table>

Note for the Professional Studies requirement of the Visual Communication Design concentration of the Design BFA: A Studio Elective can be any studio course in the Departments of Design, Architecture, or Visual Art at the 300+ level.

Visual Communication Design

Foundation Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101</td>
<td>Design Thinking and Making</td>
<td>3</td>
</tr>
<tr>
<td>BDS 103</td>
<td>Drawing for Design</td>
<td>3</td>
</tr>
<tr>
<td>VISC 200</td>
<td>Foundations in Typography</td>
<td>3</td>
</tr>
<tr>
<td>ILLU 200</td>
<td>Foundations in Image Making</td>
<td>3</td>
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Major Studies

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>VISC 202</td>
<td>Elements of Typography</td>
<td>3</td>
</tr>
<tr>
<td>VISC 204</td>
<td>Principles of Visual Communication</td>
<td>3</td>
</tr>
<tr>
<td>VISC 302</td>
<td>Typographic Systems</td>
<td>3</td>
</tr>
<tr>
<td>VISC 304</td>
<td>Designing Understanding</td>
<td>3</td>
</tr>
<tr>
<td>VISC 402</td>
<td>Designer as Author</td>
<td>3</td>
</tr>
<tr>
<td>VISC 404</td>
<td>Designing for Social Interactions</td>
<td>3</td>
</tr>
<tr>
<td>VISC 405</td>
<td>Designing Brand Identity</td>
<td>4</td>
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</tbody>
</table>

Illustration & Animation

Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101 (S)</td>
<td>3 ILLU 200 (S)</td>
<td>3</td>
</tr>
<tr>
<td>BDS 103 (S)</td>
<td>3 VISC 200 (S)</td>
<td>3</td>
</tr>
</tbody>
</table>

Each of the four concentrations of the Design BFA degree consist of a carefully-arranged sequence of courses that follow a four-year track from the fall semester of a student's year of admission to the program. On the sample graduation plans for each concentration as outlined below, sequenced courses are marked with an (S) and must be taken in the listed order. Such courses are only available in either fall or spring semesters and cannot be compressed into an accelerated time frame. Students should note the Second-Year Full Review and the minimum required grades for sequenced courses. These policies may affect a student's track to graduation, pending academic performance. Each of these policies is outlined under the “Degree Requirements” tab on this page.

The plans below are samples. Non-sequenced requirements of the degree can be fulfilled prior to admission to the Department of Design, and/or may be taken during summer semesters. Students should work with their academic advisor to ensure proper enrollment.
### Industrial Design

#### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDD 284 (S)</td>
<td>3</td>
<td>INDD 302 (S)</td>
<td>4</td>
</tr>
<tr>
<td>HA Elective Requirement*</td>
<td>3</td>
<td>HA 151 or 161</td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal GE3N (Natural Science) Any course that fulfills KU Core Goal GE3N. No lab required.</td>
<td>3</td>
<td>KU Core Goal GE22 (Oral Communication) Any course that fulfills KU Core Goal GE22.</td>
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<tr>
<td>ENGL 203, 205, 209, 210, or 211 Also fulfills KU Core Goal GE11.</td>
<td>3</td>
<td>ENGL 203, 205, 209, 210, or 211 Also fulfills KU Core Goal GE11.</td>
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</tr>
<tr>
<td>ADS 320: KU Design Lecture Series Four semesters of ADS 320 are required for the Illustration &amp; Animation concentration of the Design BFA.</td>
<td>1</td>
<td>ADS 320: KU Design Lecture Series Four semesters of ADS 320 are required for the Illustration &amp; Animation concentration of the Design BFA.</td>
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#### Year 2

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<thead>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDD 312 (S)</td>
<td>3</td>
<td>INDD 308</td>
<td>3</td>
</tr>
<tr>
<td>HA Elective Requirement*</td>
<td>3</td>
<td>HA 151 or 161</td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal GE3N (Natural Science) Any course that fulfills KU Core Goal GE3N. No lab required.</td>
<td>3</td>
<td>KU Core Goal GE22 (Oral Communication) Any course that fulfills KU Core Goal GE22.</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 203, 205, 209, 210, or 211 Also fulfills KU Core Goal GE11.</td>
<td>3</td>
<td>ENGL 203, 205, 209, 210, or 211 Also fulfills KU Core Goal GE11.</td>
<td>3</td>
</tr>
<tr>
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<td>ADS 320: KU Design Lecture Series Four semesters of ADS 320 are required for the Illustration &amp; Animation concentration of the Design BFA.</td>
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<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDD 446 (S) Worth 4 credit hours instead of 3 effective fall 2023.</td>
<td>4</td>
<td>INDD 448 (S) Worth 4 credit hours instead of 3 effective spring 2024.</td>
<td>4</td>
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<tr>
<td>INDD 350: Computer-Aided Design (S)</td>
<td>3</td>
<td>INDD 555 (S)</td>
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</table>
Bachelor of Fine Arts in Design

Photography

Year 1
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101 (S)</td>
<td>3</td>
<td>PHTO 200 or 205 (S)</td>
</tr>
<tr>
<td>PHTO 101 (S)</td>
<td>3</td>
<td>PHTO 210 (S)</td>
</tr>
<tr>
<td>HA 100</td>
<td>3</td>
<td>ADS 340 (S)</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>ENGL 102 or 105</td>
</tr>
<tr>
<td>KU Core Goal GE12 (Quantitative Literacy)</td>
<td>3</td>
<td>KU Core Goal GE22 (Oral Communication)</td>
</tr>
<tr>
<td>ADS 320: KU Design Lecture Series</td>
<td>Three semesters of ADS 320 are required for the Industrial Design concentration of the Design BFA.</td>
<td>1</td>
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Year 2
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTO 303 (S)</td>
<td>4</td>
<td>PHTO 304 (S)</td>
</tr>
<tr>
<td>HA 380 (S)</td>
<td>3</td>
<td>HA 567 (S)</td>
</tr>
<tr>
<td>Studio Elective Requirement**</td>
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<td>Studio Elective Requirement**</td>
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Total Hours 120

Year 3
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTO 305: Photography III (S)</td>
<td>4</td>
<td>PHTO 400 (S)</td>
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Year 4
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTO 450 (S)</td>
<td>4</td>
<td>PHTO 500 (S)</td>
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</table>

Total Hours 120

Visual Communication Design

Year 1
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101 (S)</td>
<td>3</td>
<td>VISC 200 (S)</td>
</tr>
<tr>
<td>BDS 103 (S)</td>
<td>3</td>
<td>ILLU 200 (S)</td>
</tr>
<tr>
<td>ADS 325 (S)</td>
<td>3</td>
<td>ADS 340 (S)</td>
</tr>
<tr>
<td>HA 150 or 160</td>
<td>3</td>
<td>HA 151 or 161</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>ENGL 102 or 105</td>
</tr>
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</table>
### Year 2
#### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISC 202 (S)</td>
<td>3 VISC 302 (S)</td>
<td>3 VISC 204 (S)</td>
<td>3 VISC 304 (S)</td>
</tr>
<tr>
<td>ADS 401 (S)</td>
<td>3 ADS 300 (S)</td>
<td>3 KU Core Goal GE22 (Oral Communication)</td>
<td>3 KU Core Goal GE12 (Quantitative Literacy)</td>
</tr>
<tr>
<td>ADS 300: KU Design Lecture Series</td>
<td>1</td>
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</tbody>
</table>

### Year 3
#### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>VISC 404 (S)</td>
<td>4 VISC 202 or 520 (S)</td>
<td>4 Professional Studies Requirement</td>
<td>3 Professional Studies Requirement</td>
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<tr>
<td>VISC 405 (S)</td>
<td>4</td>
<td></td>
<td>3 KU Core Goal GE3S (Social Science)</td>
</tr>
<tr>
<td>Professional Studies Requirement*</td>
<td>3</td>
<td></td>
<td>3 ENGL 203, 205, 210, or 211</td>
</tr>
<tr>
<td>KU Core Goal GE3N (Natural Science)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADS 320: KU Design Lecture Series</td>
<td>3</td>
<td></td>
<td>3 Academic Concentration Requirement</td>
</tr>
<tr>
<td>ADS 320: KU Design Lecture Series</td>
<td></td>
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### Year 4
#### Fall
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISC 525</td>
<td>4 VISC 402 or VISC 520</td>
<td>3 Professional Studies Requirement*</td>
<td>3 KU Core Goal GE3S</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 ENGL 203, 205, 210, or 211</td>
</tr>
<tr>
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</tr>
</tbody>
</table>

### Notes:
*The Academic Concentration requirement entails at least three courses at the 300+ level in the same topic or subject area beyond the Departments of Design and Visual Art. More information and recommendations are available here: [https://design.ku.edu/academic-concentration-requirement](https://design.ku.edu/academic-concentration-requirement/)*

**For the Illustration & Animation, Industrial Design, and Visual Communication Design concentrations of the Design BFA, the Studio Elective requirement can be fulfilled with any studio course in the Departments of Design and Visual Art. A number of other courses beyond the Departments of Design and Visual Art have been pre-approved to count toward the Studio Elective requirement, which are listed here: [https://design.ku.edu/studio-electives/photography](https://design.ku.edu/studio-electives/photography/)**

***For the Photography concentration of the Design BFA, the Photography Elective requirement can be fulfilled with any studio course in the Departments of Design and Visual Art. A number of other courses beyond the Departments of Design and Visual Art have been pre-approved to count toward the Studio Elective requirement, which are listed here: [https://design.ku.edu/studio-electives/photography](https://design.ku.edu/studio-electives/photography/)**
Minor in Design

Our Minor in Design complements students' major area(s) of study through the development of core skills in visual literacy, design thinking, and creative problem-solving.

Admission Requirements:
In order to qualify for admission to the Minor in Design, the interested student must hold a KU Cumulative Graduation GPA (just KU grades) of at least a 2.0. A portfolio is not prerequisite for admission to the Minor in Design.

Application Link & Deadline:
In order to be considered for admission to the Minor in Design, students will need to submit this application webform (https://deptsec.ku.edu/~sadt/form/40/). Successful applications received by August 1 will grant admission for the immediately-following fall semester. Successful applications received by January 1 will grant admission for the immediately-following spring semester. Applications received from students who don’t meet the GPA requirement listed above will be denied.

Total Required Credit Hours, 300+ Level (Jr/Sr) Credit Hours:
The minor consists of at least 18 credit hours, 12 credit hours must be completed at the 300+ level (Jr/Sr level).

Residency Requirements:
At least 9 credit hours of courses required for the minor must be completed at KU.

GPA Requirements:
A minimum GPA of 2.0 is required across all courses taken for the minor.

Specific Course Requirements:
Admission is prerequisite to enrolling in all courses for the minor except ADS 320, PHTO 101, PHTO 200, and PHTO 210 are also available as studio elective options prior to admission.

Design Studies: (15 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 320</td>
<td>KU Design Lecture Series</td>
<td>3</td>
</tr>
<tr>
<td>ADS 300</td>
<td>Foundations in Interaction Design</td>
<td>3</td>
</tr>
<tr>
<td>ADS 325</td>
<td>Design Thinking &amp; Research Methodologies</td>
<td>3</td>
</tr>
<tr>
<td>ADS 340</td>
<td>History and Philosophy of Design</td>
<td>3</td>
</tr>
<tr>
<td>ADS 401</td>
<td>Design Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
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</tbody>
</table>

Required Elective: (3 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS 101</td>
<td>Design Thinking and Making (Instructor permission required to enroll)</td>
<td>3</td>
</tr>
<tr>
<td>BDS 103</td>
<td>Drawing for Design (Instructor permission required to enroll)</td>
<td>3</td>
</tr>
<tr>
<td>ILLU 200</td>
<td>Foundations in Image Making (Instructor permission required to enroll)</td>
<td>3</td>
</tr>
<tr>
<td>INDD 200</td>
<td>Foundations in Industrial Design (Instructor permission required to enroll)</td>
<td>3</td>
</tr>
</tbody>
</table>

PHTO 101 Fundamentals of Photography (Instructor permission not required) 3
PHTO 200 Foundations in Photography: Digital (Instructor permission not required) 3
VISC 200 Foundations in Typography (Instructor permission required to enroll) 3
Any ILLU course pending instructor permission to enroll 3
Any INDD course pending instructor permission to enroll 3
Any PHTO course pending instructor permission to enroll 3
Any VISC course pending instructor permission to enroll 3

Notes:
- The Department of Design may approve substitutions to these course requirements in rare cases. For instance, a student who leaves studies in one of our majors may be allowed to substitute other Department of Design coursework in place of certain requirements of the Design Minor at the discretion of the department.
- Students may enroll in ADS 320 (KU Design Lecture Series), PHTO 101 (Fundamentals of Photography), and/or PHTO 200 (Foundations in Photography) without prior admission to the Minor in Design. Admission to the minor is prerequisite to enrollment in all other courses required for the Minor in Design.
- Admission to the Minor in Design does not guarantee enrollment in courses required for the minor. Space in required courses is available on a first-come, first-served basis. The Department of Design works carefully to build in capacity for our major and minor students to take their required courses, though we’re unable to guarantee accommodation for all possible students in every semester.
- For courses which require instructor permission to enroll, students should email the instructor listed for the section in which they’d like to enroll to request permission. Information about available sections and listed instructors is available on classes.ku.edu (https://classes.ku.edu/). Enrollment into such courses is not guaranteed.
- Students whose primary interest is Photography should consider our Minor in Photography!

Questions?
For assistance with enrollment planning, please schedule an appointment with your academic advisor.

For assistance with questions regarding the Minor in Design curriculum, course availability, or other questions about the program, please contact the Department of Design's academic advisor (https://design.ku.edu/contact-our-advisor/).

Minor in Design Entrepreneurship

The Minor in Design Entrepreneurship aligns existing Design and Entrepreneurship coursework in order to provide holistic training to students who wish to apply design thinking and methodologies into commercial applications. Students participating in the minor would take four courses in successful venture creation through the Center for Entrepreneurship, one course in Design thinking and methodologies, then a capstone Design course in which they’ll apply all that they’ve learned in their other minor coursework.

Admission Requirements:
In order for a student to qualify for admission to the Minor in Design Entrepreneurship, that interested student must hold a KU Cumulative GPA of 2.0. A portfolio is not prerequisite for admission to the Minor in Design.
Grading GPA (just KU grades) or at least 2.0. A portfolio is not prerequisite to admission to the Minor in Design Entrepreneurship.

Application Link & Deadline:
In order to be considered for admission to the Minor in Design Entrepreneurship, students will need to submit this application webform (https://deptsec.ku.edu/~sadp/form/51/). Qualifying applications received by August 1 will grant admission for the immediately-following fall semester. Qualifying applications received by January 1 will grant admission for the immediately-following spring semester. Applications received from students who don’t meet the GPA requirement listed above will be denied.

Total Required Credit Hours, 300+ Level (jr/sr) Credit Hours:
The Minor in Design Entrepreneurship requires 18 credit hours of coursework (6 courses), all of which are taken at the 300+ (jr/sr) level.

Residency Requirement:
At least 9 credit hours of coursework completed for the minor must be completed at KU.

GPA Requirement:
A minimum GPA of at least 2.0 is required across all courses completed for the minor.

Specific Course Requirements:
Admission to the minor is not prerequisite for enrollment in ENTR courses. Admission is prerequisite for enrollment in ADS courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTR 301</td>
<td>Starting Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 302</td>
<td>Financing Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 303</td>
<td>Marketing Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 490</td>
<td>Social Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>or ENTR 450</td>
<td>Advanced Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>ADS 325</td>
<td>Design Thinking &amp; Research Methodologies</td>
<td>3</td>
</tr>
<tr>
<td>ADS 560</td>
<td>Topics in Design: Prior completion of ENTR 301, 302, 303, 490/450, and ADS 325 are prerequisite to enrollment in this course.</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 18

Minor in Photography

The Minor in Photography emphasizes visual literacy, critical thinking, and creative and professional practice. Successful candidates will cultivate an advanced visual language in support of their major studies and exit the major with a working technical and conceptual grasp of photography as an expressive and communicative medium.

Admission to the Minor in Photography is selective and competitive, with applications for admission to the minor reviewed in the spring semester of each year.

Admission to the Minor in Photography is selective and competitive. Students must either have completed or be enrolled in PHTO 200 when applying for admission to the minor. Students may also enroll in PHTO 210, HA 380, and/or ADS 320 regardless of the status of their admission to the minor, though they should keep in mind that admission to the minor is competitive.

Application Requirements:
Applications to the Photography Minor are reviewed in the spring semester each year and are due by midnight on the night of April 15. Applications must include the following:

- A short essay (200-400 words) responding to the following questions:
  - Why do you want to pursue the Photography Minor?
  - How do you see the Photography Minor complementing your area of study?
  - A portfolio of your 10 strongest images
  - A PDF of your advising report (available at my.ku.edu (https://my.ku.edu) > Academics > My Progress in the lower right corner)

Applications are accepted here each spring semester. (https://kodesign.slideroom.com/#/permalink/program/54317/Wfqy3OktvM)

Total Required Credit Hours, Required 300+ (Jr/Sr) Credit Hours:
The Minor in Photography requires 18 credit hours of coursework, 12 credit hours of which must be completed at the 300+ (Jr/Sr) level.

Residency Requirements:
At least 9 credit hours of coursework required for the minor must be completed at KU.

Required Graduation GPA, Minimum Grade Requirements:
A minimum GPA of 2.0 must be met or exceeded across all required courses for the Minor in Photography in order to earn the minor. Most courses for the minor require minimum semester grades in order to count toward the minor. When applicable, the minimum required semester grade for a course is listed in its description.

Course Requirements:
Foundation (6 credit hours, available without instructor permission prior to admission):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTO 200</td>
<td>Foundations in Photography: Digital</td>
<td>3</td>
</tr>
<tr>
<td>or PHTO 205</td>
<td>Foundations in Photography: Darkroom</td>
<td></td>
</tr>
<tr>
<td>PHTO 210</td>
<td>Understanding Photographs</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 101 may be allowed to substitute for the PHTO 210 requirement at discretion of PHTO faculty. If taken, PHTO 101 should be completed prior to enrolling in PHTO 200.</td>
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</table>

Total Hours 6

Required Electives (12 credit hours from the options below, admission is prerequisite except when noted):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHTO 303</td>
<td>Photography I: View Camera</td>
<td>4</td>
</tr>
<tr>
<td>PHTO 304</td>
<td>Photography II: Color Digital</td>
<td>4</td>
</tr>
<tr>
<td>PHTO 313</td>
<td>Lighting Studio</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 314</td>
<td>The Moving Image</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 315</td>
<td>Experimental Processes</td>
<td>3</td>
</tr>
<tr>
<td>PHTO/VISC 360</td>
<td>The Photobook</td>
<td>3</td>
</tr>
<tr>
<td>PHTO 560</td>
<td>Special Topics in Photography: (only Architectural Photography accepted)</td>
<td>3</td>
</tr>
<tr>
<td>ADS 560</td>
<td>Topics in Design:</td>
<td>3</td>
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</table>
The following options)

Studio, Cultural & Historical Electives: (6-7 credit hours from Cornerstone Courses (6 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISC 310</td>
<td>Letterpress</td>
<td>3</td>
</tr>
<tr>
<td>VISC 440</td>
<td>Bookmaking</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
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<td>6</td>
</tr>
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</table>

Important Notes:

VISC 310 and VISC 440 are specifically required for the Book Arts Certificate, but are not prerequisite to courses which are options for the Studio, Cultural & Historical Electives requirement.

In order to officially earn the Certificate in Book Arts, students must email ltalleur@ku.edu and ZacShields@ku.edu to officially declare the certificate. This may be done at any point up until the time of a student's graduation.

Helpful Contacts:

Linda Talleur, Program Coordinator, Instructor: ltalleur@ku.edu

Zac Shields, Coordinator of Design Student Services & Advising: ZacShields@ku.edu

Master of Arts in Design with Concentration in Design Management & Strategy

The Department of Design advances the professional work of thoughtful, creative, and meaningful design to delight, inspire, and serve the needs of people. Design is the planning that lays the basis for creation and development of every object or system people use. Design programs train students to be problem solvers who consider the aesthetic, functional, and user-focused aspects of an object or a process. This requires considerable integrative research, thought, modeling, interactive adjustments, and redesign.

The M.A in Design with a concentration in Design Management and Strategy explores in depth the design function in business as an important integrative, and often interdisciplinary, area. The curriculum couples a rigorous, practical understanding of business with design’s natural capacity for handling diverse input, creative problem-solving, and human-centered understanding.

The Design Management and Strategy program is for prospective students who already hold design-related baccalaureate degrees and are seeking specialized study in management. Applicants should have at least 2 years of full-time professional work experience in design or a design-related field.

The master’s student in design management and strategy should demonstrate an advanced ability to solve design problems, manage teams and processes, communicate clearly, and produce excellent goal-directed outcomes. The graduate will have completed significant course work and a thesis that documents independent discovery and research and will have passed an oral examination on that work. For more information about the program M.A. in Design Management and Strategy.

The design department offers 2 Master of Arts degrees, which share a core curriculum.

The M.A. in Design Management and Strategy educates students in the theory, methods, and practices relevant to managing design in an organizational and business context. The program gives students the requisite knowledge to augment their professional skills and abilities, perform as effective design managers, and advance their careers.
The M.A. in Interaction and User Experience educates students in the theory, methods, and practices of interaction design. It gives students the requisite professional knowledge, skills, and abilities to perform as interaction designers.

KU is an accredited institutional member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

M.A. in Design Management Admission

By permission of the Kansas Board of Regents, application for admission to graduate programs in the Department of Design may be refused if available instructional space does not allow addition of more students. The application deadline for Fall is April 1 and October 1 for Spring.

A departmental graduate faculty committee reviews transcripts and evaluates applications to determine admission qualifications. Applicants to the M.A. programs must have undergraduate and/or professional backgrounds judged by the Graduate Faculty to be appropriate for the specialization selected.

A complete application for admission consists of the following materials:

1. Graduate application (http://www.graduate.ku.edu/) and application fee (See Admission in the Graduate Studies (p. 2408) section of the online catalog for further information);
2. 1 unofficial copy of the transcript from all colleges or universities attended, showing receipt of a bachelor’s degree, and 1 unofficial copy of the transcript showing any graduate degree or credit earned;
3. 3 letters of recommendation from people in a position to comment on your abilities and performance;
4. Statement of design philosophy and approach;
5. A portfolio of your design work, or if your previous degree was not in a design related discipline, samples of written work or other creative artifacts you have produced. Portfolio should represent the scope of your experience, knowledge, skills, and abilities to date. Please include documentation of each project: the challenge it was intended to address, the process involved, your role and the role of others in its execution. Please upload your portfolio digitally under "other documents" during the online application process. The portfolio is limited to 10 megabytes (not zipped) in PDF format;
6. For international students, a financial statement showing minimum financial support for the first year of study (see the Admissions page on the school’s website (http://www.sadp.ku.edu/));
7. Evidence of language proficiency if the native tongue is not English.
8. Graduate Record Examination (GRE) test results (preferred).

Submit your graduate application and application materials online (http://www.graduate.ku.edu/). Please contact the Admissions Coordinator if you have any questions:

The University of Kansas Department of Design
Admissions Coordinator
1465 Jayhawk Blvd., Room 205
Lawrence, KS 66045
785-864-3167
jweaver@ku.edu

The Design Management & Strategy concentration of our Design MA requires 31 credit hours of coursework. Specific course requirements are as follows:

Major Required Courses: (15 credit hours, may be completed in any order)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 714</td>
<td>Service and User Experience Design</td>
<td>3</td>
</tr>
<tr>
<td>ADS 712</td>
<td>Design Strategies and Methods</td>
<td>3</td>
</tr>
<tr>
<td>ADS 750</td>
<td>Design Management</td>
<td>3</td>
</tr>
<tr>
<td>ADS 751</td>
<td>Design Scenarios and Simulations</td>
<td>3</td>
</tr>
<tr>
<td>ADS 760</td>
<td>Design and Strategic Innovation</td>
<td>3</td>
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Total Hours: 15

Design Required Electives: (6 credit hours from the following options)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 601</td>
<td>Design Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ADS 710</td>
<td>Advanced Human Factors in Interaction Design</td>
<td>3</td>
</tr>
<tr>
<td>ADS 740</td>
<td>Special Problems in Design</td>
<td>1-6</td>
</tr>
<tr>
<td>ADS 765</td>
<td>Interaction Design</td>
<td>3</td>
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General Required Electives: (6 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ADS 861</td>
<td>Any course(s) at the 500+ level beyond ADS, VISC, and INDD</td>
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Total Hours: 6

Research & Thesis: (4+ credit hours)

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 861</td>
<td>Thesis Research Seminar</td>
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</tr>
<tr>
<td>ADS 890</td>
<td>Thesis</td>
<td>1-8</td>
</tr>
</tbody>
</table>

Total Hours: 2-9

Helpful Contacts:

Michael Eckersley, Ph.D: Program Director, mde@ku.edu
Zac Shields: Coordinator of Design Student Services & Advising, Zac Shields@ku.edu

Master of Arts in Design with Concentration in Interaction & User Experience Design

The Department of Design advances the professional work of thoughtful, creative, and meaningful design to delight, inspire, and serve the needs of people. Design is the planning that lays the basis for creation and development of every object or system people use. Design programs train students to be problem solvers who consider the aesthetic, functional, and user-focused aspects of an object or a process. This requires considerable integrative research, thought, modeling, interactive adjustments, and redesign.

Interaction Design and User Experience involves researching and fashioning products, services, and systems that are useful, usable, and desirable. Interaction design and user experience offers a human-centered approach to innovation, creatively mediating how businesses
engage with customers and how brands and organizations can become more relevant in the marketplace. Broadly speaking, interaction design and user experience defines the contextual behavior of artifacts, environments, and systems.

The Interaction Design program is for prospective students who already hold design-related baccalaureate degrees and are seeking advanced study in a versatile, rapidly growing professional design discipline. Applicants should have at least 2 years of full-time professional work experience in design or a design-related field.

The master’s student in interaction design and user experience should demonstrate the ability to conduct original design research, translate research insights into design input, and produce an interactive artifact of relevance and quality. The graduate will have completed significant course work and a thesis that documents independent discovery and research and will have passed an oral examination on that work. For more information about the program M.A in Interaction Design and User Experience. (http://design.ku.edu/ma-interaction-design/)

The design department offers 2 Master of Arts degrees, which share a core curriculum.

The M.A. in Design Management and Strategy educates students in the theory, methods, and practices relevant to managing design in an organizational and business context. The program gives students the requisite knowledge to augment their professional skills and abilities, perform as effective design managers, and advance their careers.

The M.A. in Interaction Design and User Experience educates students in the theory, methods, and practices of interaction design. It gives students the requisite professional knowledge, skills, and abilities to perform as interaction designers.

KU is an accredited institutional member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

M.A. in Interaction Design Admission

By permission of the Kansas Board of Regents, application for admission to graduate programs in the Department of Design may be refused if available instructional space does not allow addition of more students. The application deadline for Fall is April 1 and October 1 for Spring.

A departmental graduate faculty committee reviews transcripts and evaluates applications to determine admission qualifications. Applicants to the M.A. programs must have undergraduate and/or professional backgrounds judged by the Graduate Faculty to be appropriate preparation for the specialization selected.

A complete application for admission consists of the following materials:

1. Graduate application (http://www.granduate.ku.edu/) and application fee (See Admission in the Graduate Studies (p. 2408) section of the online catalog for further information);
2. 1 unofficial copy of the transcript from all colleges or universities attended, showing receipt of a bachelor’s degree, and 1 unofficial copy of the transcript showing any graduate degree or credit earned;
3. 3 letters of recommendation from people in a position to comment on your abilities and performance;
4. Statement of design philosophy and approach;
5. A portfolio of your design work, or if your previous degree was not in a design related discipline, samples of written work or other creative artifacts you have produced. Portfolio should represent the scope of your experience, knowledge, skills, and abilities to date. Please include documentation of each project: the challenge it was intended to address, the process involved, your role and the role of others in its execution. Please upload your portfolio digitally under “other documents” during the online application process. The portfolio is limited to 10 megabytes (not zipped) in PDF format;
6. For international students, a financial statement showing minimum financial support for the first year of study (see the Admissions page on the school's website (http://www.sadp.ku.edu/)).
7. Evidence of language proficiency if the native tongue is not English.
8. Graduate Record Examination (GRE) test results (preferred).

Submit your graduate application and application materials online (http://www.graduate.ku.edu/). Please contact the Admissions Coordinator if you have any questions:

The University of Kansas
Department of Design
Admissions Coordinator
1465 Jayhawk Blvd., Room 205
Lawrence, KS 66045
785-864-3167
jweaver@ku.edu

The Interaction & User Experience Design concentration of our Design MA requires 31 credit hours of coursework. Specific course requirements for the program are as follows:

Major Required Courses: (15 credit hours, may be taken in any order)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 710</td>
<td>Advanced Human Factors in Interaction Design</td>
<td>3</td>
</tr>
<tr>
<td>ADS 712</td>
<td>Design Strategies and Methods</td>
<td>3</td>
</tr>
<tr>
<td>ADS 714</td>
<td>Service and User Experience Design</td>
<td>3</td>
</tr>
<tr>
<td>ADS 751</td>
<td>Design Scenarios and Simulations</td>
<td>3</td>
</tr>
<tr>
<td>ADS 765</td>
<td>Interaction Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

Design Required Electives: (6 credit hours from the options below)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 601</td>
<td>Design Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ADS 740</td>
<td>Special Problems in Design</td>
<td>1-6</td>
</tr>
<tr>
<td>ADS 750</td>
<td>Design Management</td>
<td>3</td>
</tr>
<tr>
<td>ADS 760</td>
<td>Design and Strategic Innovation</td>
<td>3</td>
</tr>
</tbody>
</table>

General Required Electives: (6 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any course(s) at the 500+ level beyond ADS, INDD and VISC</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>6</td>
</tr>
</tbody>
</table>
Research & Thesis: (4+ credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 861</td>
<td>Thesis Research Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ADS 890</td>
<td>Thesis</td>
<td>1-8</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>2-9</strong></td>
</tr>
</tbody>
</table>

**Helpful Contacts:**
Michael Eckersley, Ph.D: Program Director, mde@ku.edu
Zac Shields: Coordinator of Design Student Services & Advising, ZacShields@ku.edu

Graduate Certificate in Book Arts

The Graduate Certificate in Book Arts requires at least 12 credit hours of coursework. The specific course requirements are as follows:

Cornerstone Courses: (6 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISC 710</td>
<td>Letterpress</td>
<td>3</td>
</tr>
<tr>
<td>VISC 740</td>
<td>Bookmaking</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>6</strong></td>
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</tbody>
</table>

Studio, Cultural & Historical Electives: (6-7 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISC 735</td>
<td>Book Arts</td>
<td>3</td>
</tr>
<tr>
<td>VISC 712</td>
<td>Letterpress II: Form and Content</td>
<td>3</td>
</tr>
<tr>
<td>PRNT 500</td>
<td>Advanced Special Topics in Printmaking: _____ (Papermaking or Japanese Woodblock)</td>
<td>3</td>
</tr>
<tr>
<td>PRNT 526</td>
<td>Printmaking IV A (Intaglio)</td>
<td>3</td>
</tr>
<tr>
<td>PRNT 527</td>
<td>Printmaking IV B (Lithography)</td>
<td>3</td>
</tr>
<tr>
<td>PRNT 528</td>
<td>Printmaking IV C (Serigraphy)</td>
<td>3</td>
</tr>
<tr>
<td>EXM 500</td>
<td>Advanced Special Topics in Expanded Media: _____ (The Artist's Book)</td>
<td>3</td>
</tr>
<tr>
<td>ADS 560</td>
<td>Topics in Design: _____ (Hamilton Wood Type Workshop)</td>
<td>3</td>
</tr>
<tr>
<td>ART 595</td>
<td>Advanced Study Abroad Topics in: _____</td>
<td>1-6</td>
</tr>
<tr>
<td>ADS 532</td>
<td>Study Abroad: _____ (Typography &amp; Printmaking in Italy)</td>
<td>3</td>
</tr>
<tr>
<td>ADS 533</td>
<td>Study Abroad Documentation (Typography &amp; Printmaking in Italy)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 751</td>
<td>Fiction Writing III</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 752</td>
<td>Poetry Writing III</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 753</td>
<td>Writers Workshop</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 756</td>
<td>Forms: ______</td>
<td>3</td>
</tr>
<tr>
<td>HA 510</td>
<td>Medieval Manuscripts and Early Printed Books</td>
<td>3</td>
</tr>
</tbody>
</table>

**Important Notes:**
While VISC 710 and VISC 740 are specifically required for the certificate, they are not prerequisite for enrollment in course options for the Studio, Cultural & Historical Electives component of the certificate.

In order to officially earn the Certificate in Book Arts, students must email Linda Talleur (program coordinator, ltalleur@ku.edu) and Zac Shields (Coordinator of Design Student Services & Advising, ZacShields@ku.edu) to declare the certificate. Students should do so when they know that they intend to pursue the certificate.

**Helpful Contacts:**
Linda Talleur, Program Coordinator and Instructor: ltalleur@ku.edu
Zac Shields, Coordinator of Design Student Services & Advising: ZacShields@ku.edu

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University's policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).
Business

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

Bachelor of Science in Business (p. 129)
Bachelor of Business Administration (p. 136)
Minor in Business (p. 138)
Undergraduate Certificate in Entrepreneurship (p. 139)
Jack Lockton Undergraduate Certificate in Insurance Risk Management (p. 139)
Undergraduate Certificate in Professional Selling (p. 139)
Master of Business Administration (p. 140)
Master of Accounting (p. 144)
Master of Science in Business Analytics (p. 145)
Master of Science in Organizational Leadership (p. 146)
Master of Science in Supply Chain Management (p. 147)
Doctor of Philosophy in Business (p. 147)
Graduate Certificate in Entrepreneurship (p. 152)

Introduction

In the School of Business, students acquire a rigorous education that prepares them for positions in a dynamic and competitive global environment.

The University of Kansas School of Business is accredited by the Association to Advance Collegiate Schools of Business International (http://www.aacsb.edu/).

Undergraduate Programs

The school offers the Bachelor of Science (p. 129) degree in business on the Lawrence campus and the Bachelor of Business Administration (p. 136) on the KU Edwards Campus.

The undergraduate curriculum develops a foundation for lifelong education and growth. The strength of the program is based not only on the quality of the professional course offerings but also on the offerings of other KU divisions, particularly in the social sciences, natural sciences, and humanities. Students acquire a foundation education in business and management with emphasis on analytical skills and obtain a liberal arts and sciences education from their work outside the school.

The school offers advanced electives in various areas of business. Eight undergraduate majors are available:

- Accounting
- Business administration
- Business analytics
- Finance
- Information systems
- Management and leadership
- Marketing
- Supply chain management

Business concentrations may be earned in business analytics, entrepreneurship, information systems, international business, human resources and supply chain management. The baccalaureate programs in the School of Business, and independently the accounting program, are accredited by the Association to Advance Collegiate Schools of Business (http://www.aacsb.edu/).

Resources and Opportunities

Study Abroad

The school encourages students to incorporate study abroad into their programs. Student and Academic Services can help students plan their studies to meet KU requirements while they are abroad. The school works with students and the KU Office of Study Abroad to select programs and courses appropriate to their interests and majors. Contact the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, 785-864-3742.

Job Shadowing

One on One, Jayhawks on the Job, allows business students to shadow a business professional during the course of a workday. The program offers students a daylong experience that enhances their understanding of a particular field and the business world, allows an opportunity for students to learn more about themselves and refine their career goals, and provides an opportunity for students to network with business professionals.

Internship Program

Internships offer students the opportunity to build on, apply, and assess the concepts that are developed through the curriculum and to further professional growth through meaningful real-world job experiences. The internship experience provides many benefits, from enhancing your knowledge of an industry or business field to increasing confidence in yourself and your abilities. Internships offer an opportunity to improve your professional skills, familiarize yourself with the business environment, network with business professionals, and refine your personal and career goals and aspirations. The school representative must approve the internship work experience. Not all positions qualify for internship credit.

Library Resources

The Anschutz Library offers a closed reserve service and reference services including a small print collection. The large collection in Watson Library offers additional reference and research materials. The business/economics bibliographer in the reference department can help business students use the library system. Spencer Research Library has an excellent collection on the history of economic thought and a special collection of business papers and records.

Computer Resources

Open Computing Resources

Open computer resources are located in 1057 Capitol Federal Hall and the McCarthy Finance Lab in 2035 Capitol Federal Hall. The computers are available to business undergraduate and graduate students for classroom assignments and individual research projects.

The Horejsi Family Teaching Lab

Equipped with 30 PCs, the Horejsi Family Teaching Lab located in 3047 Capitol Federal Hall is intended for teaching classes that make heavy use of computers.
Faculty
The school’s faculty consists of 59 professors drawn from first-rank universities throughout the nation. The faculty enjoys a national reputation for research productivity and teaching success.

Graduate Programs
Four graduate degree programs are offered:

- Master of Business Administration (p. 140).
- Master of Science (p. 147).
- Master of Accounting (p. 144).
- Doctor of Philosophy (p. 147).

Four degree programs are offered jointly with other departments:

- Combined MBA/J.D. with the School of Law.
- MBA/Pharm.D. in Pharmacy.
- MBA with a graduate certificate in petroleum management with the School of Engineering.

General admission requirements and the content of each of these programs are discussed on their pages of the online catalog.

Resources and Opportunities
Study Abroad
The school encourages students to incorporate study abroad into their programs. Student and Academic Services can help students plan study to meet KU requirements while they are abroad. The school works with students and the KU Office of Study Abroad to select programs and courses appropriate to their interests and majors. Contact the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, 785-864-3742.

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Graduate Fellowships and Assistantships

For information about graduate assistantships, contact the School of Business (https://business.ku.edu/).

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

Undergraduate University Regulations

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

Business Honor Code

Students taking any business course must sign a pledge of academic honesty at the end of all examinations. Upon application to the school, each student must electronically sign an honor code form, available from the School of Business (https://business.ku.edu/services/student-academic-services/honor-code/).

Change of School

Admission is competitive. Applications are due February 15 for fall admission and September 15 for spring admission.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (http://policy.ku.edu/).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Credit/No Credit is allowed for electives only. Required professional (business courses including macro and micro economics) courses may not be taken for Credit/No Credit.

Graduation with Distinction and Highest Distinction

Undergraduates whose KU professional grade-point averages rank in the upper 10 percent of their graduating class graduate with distinction. The upper 3 percent of those awarded distinction graduate with highest distinction.

Honor Roll

Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in the fall and spring semesters. An honor roll notation appears on the transcript.

Maximum and Minimum Semester Enrollment

No student may enroll for more than 20 hours a semester, or more than 9 hours in a summer session without permission from an undergraduate advisor.

Nonresidence Study Before the Last 30 Hours

Before the last 30 hours required for the degree, students may, under certain conditions, take courses at other institutions and transfer the credit to KU. Before enrolling in a nonresidence course, check on how your courses will transfer to KU (http://credittransfer.ku.edu/) or complete KU's standard form, Request for Tentative Evaluation of Transfer Credit, in your dean’s office or in College Student Academic Services for students in the College. After completing the course work, you must request that an official transcript be sent to the Office of Admissions (http://admissions.ku.edu/), KU Visitor Center, 1502 Iowa St., Lawrence, KS 66044-7576, 785-864-3911. For transcripts to be official, they must be mailed from the college or university directly to KU. Faxed transcripts are not accepted for posting of transfer credit.

Nonresidence credit includes all credits from another college or university taken after initial enrollment at KU, military service courses, and other undergraduate course work not formally offered in the Schedule of Classes (http://classes.ku.edu/).

Majors must submit the Request for Tentative Evaluation of Transfer Credit form before they enroll.

Prerequisites and Corequisites

The student is responsible for checking course prerequisites before enrollment. Course rosters are checked before the start of each semester and again after the last day to add classes online. Students who are enrolled in a course without its prerequisites are administratively dropped without notice during the first four weeks of the semester.

Probation

Placed on Probation

An undergraduate student whose cumulative grade-point average, either overall or at KU (in all courses or professional courses), is lower than 2.2 is placed on probation for the following semester.

Continued on Probation

A student on probation is continued on probation for one more semester if the KU semester grade-point average is at least 2.2, but the cumulative grade-point average, either overall or at KU (in all courses or professional courses), is lower than 2.2.

Returned to Good Standing

A student on probation is returned to good standing if the cumulative grade-point average, both overall and at KU (in all courses and professional courses), is at least 2.2.

Dismissed

A student on probation is dismissed for failure to earn a KU grade-point average of at least 2.2 (in all courses and professional courses) in the next semester of enrollment, or if after two consecutive semesters on probation, the cumulative grade-point average, either overall or at KU (in all courses and professional courses), is not at least 2.2. Students are readmitted through the competitive admission process. Those students
Required Work in Residence

No baccalaureate degree is granted to a student who has not completed at least 30 semester credit hours of residence courses at KU. No exceptions are granted.

Transfer of Credit

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

Courses completed at other institutions are accepted to fulfill graduation requirements (e.g., in place of specifically prescribed courses), only if they are substantially equivalent as indicated by course description, hours of credit, and prerequisites. For professional courses not listed on CredTran (http://credittransfer.ku.edu/), the student must submit a petition along with a course syllabus to the School of Business. Petition forms are available on the School of Business website at this location (https://business.ku.edu/student-and-academic-services/requests-petitions-transfer-credit-substitutions/).

Only transfer grades of C- or higher apply toward graduation from the School of Business at KU.

Graduate University Regulations

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

Business Career Services

Business Career Services (https://business.ku.edu/business-career-services/) provides a variety of resources including recruiting (on-campus interviews) for full-time and internship positions facilitated through KU Career Connections/Symplicity, an online job and internship database; individual career advising; and a variety of workshops and events—to name a few.

Other BCS services include

- Individual career advising with trained counselors
- Business career fair
- Résumé review
- Mock interviews and interview preparation assistance
- Workshops on various career-related topics
- Online resource libraries
- Salary information
- Mobile app, KU Business Career Plus

The faculty and career services staff are committed to providing a strong student-oriented program to help students develop career objectives and target job opportunities. The BCS cannot guarantee jobs, but it will make every effort to bring together the job-seeking candidate and potential employers in accordance with their needs, abilities, and interests. Business graduates have been successful in finding employment in their areas of interest. Positions have been available nationwide, regardless of academic area or business degree.

Students are encouraged to register with the BCS as early as possible. An early start can mean wider access to potential employment opportunities. Registrants’ may include one or more résumés in a web-based database, allowing access by the BCS and employers. This allows the BCS to perform résumé referrals quickly and companies to conduct their own résumé searches. Students can update their résumés at any time from any Internet-linked computer or affiliated app.

Post-graduation plans for graduates are collected and analyzed annually. Information on the number of degrees granted, percentage of graduates employed, and average starting salaries can be found on the School of Business website (https://business.ku.edu/).

Contact Business Career Services for more information at 785-864-5591, kubuscareer@ku.edu.

Business Courses

ACCT 200. Fundamentals of Financial Accounting. 4 Credits.
Accounting 200 is an introduction to the concepts of business and the measurement systems used to control and evaluate business activities. This course is designed to be of interest to all students regardless of discipline.

ACCT 201. Managerial Accounting I. 3 Credits.
A continuation of Financial Accounting I. A study of concepts of materials, labor, and overhead control; budget administration; cost accounting systems including standard costing; full costing and direct costing; income determination; differential costing; break-even analysis; accounting statement analysis; and use of return on investment as a basis for management decisions. Prerequisite: ACCT 200.

ACCT 205. Survey of Accounting. 3 Credits.
This course is an introduction to accounting. The overarching objective of the course is to prepare students for careers in any business by providing them with a solid foundation in financial accounting and reporting without overloading them with the mechanics and procedures more appropriate for future accountants. The focus of the course is 3-statement model -- that is, using the income statement, balance sheet and cash flow statement simultaneously both to provide clearer insights into a business and to make more informed decisions. With a strong emphasis on the interpretation of real-world financial statements, the course teaches students how to read, analyze, and interpret financial accounting data. (Not open to students with credit in ACCT 200.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1.

ACCT 230. Introduction to the Accounting Profession. 1 Credits.
In this course, we focus on Accounting as a profession and cover a variety of topics. Topics include, but are not limited to, career options in Accounting, the CPA exam, ethics in the profession, current issues in Accounting, professional standards, the Accounting major, and the five-year Accounting program. We emphasize both current practice and projected industry trends and involve guest speakers. Check with your Major to see which 230 course it requires (ACCT 230, BSAN 230, BUS 230, FIN 230, IST 230, MKTG 230 or SCM 230) and when it encourages you to take it. Not open to students with credit in ACCT 303. Prerequisite: ACCT 200.

ACCT 303. Introduction to the Accounting Profession. 1 Credits.
This course will focus on Accounting as a profession. Prospective and current accounting students will be exposed to a variety of topics. These include, but are not limited to, career options in Accounting, the CPA exam, ethics in the profession, current issues in Accounting, professional standards, the Accounting major, and the five-year Accounting program. Prerequisite: Acct 200 or coenrollment in Acct 200.
ACCT 311. Information Systems for Accountants. 3 Credits.
This course provides an overview of how to understand, analyze, and control computerized information systems, and is designed to provide the computer tools and knowledge so that today's business or accounting student will be tomorrow's successful and complete manager, consultant, accountant, and/or auditor. The topics covered in this course will include computer technology, internal control in a computer environment, computer auditing, systems analysis and design, database systems, networking, electronic commerce, and specific systems applications. Hands on experience will be obtained through projects and various software packages. This course will count as an advanced business elective. Not open to students with credit in BBA 407. Prerequisite: ACCT 201 and IST 202 or IST 301. Enrollment restricted.

ACCT 320. Intermediate Accounting I. 3 Credits.
A study of generally accepted accounting principles (GAAP) underlying the preparation and interpretation of general-purpose financial statements with emphasis on the principles of revenue recognition, matching revenues and related costs, and the determination of proper balance sheet valuations of assets and liabilities. The asset side of the balance sheet is the primary emphasis though the entire financial statements are used in examples throughout the course. Prerequisite: ACCT 201. Prerequisite or Corequisite: ACCT 303 or ACCT 230.

ACCT 321. Intermediate Accounting for Finance. 3 Credits.
An intermediate accounting course with emphasis on interpretation of general-purpose financial statements and the related disclosure notes. Includes understanding interrelationships among the various financial statements and analyzing the effects of transactions on the financial statements. Common and significant accounts/transactions will be analyzed, especially those relating to the financing and equity sections of the financial statements. Not open to students with credit in ACCT 320 or ACCT 323 or ACCT 410 or ACCT 411. Prerequisite: FIN 310 or FIN 311. Enrollment restricted.

ACCT 323. Intermediate Accounting I, Honors. 3 Credits.
Interpretation and application of financial accounting standards, with an emphasis on U.S. Generally Accepted Accounting Principles (GAAP) and ancillary treatment of International Financial Reporting Standards (IFRS). General coverage of all financial statements, with specific attention placed upon the balance sheet. A primary focus of the course is on the comprehension of foundational principles, concepts, and theories underlying financial reporting. Only open to students admitted to the University Honors Program, the School of Business Honors Program, or by consent of the instructor. Prerequisite: ACCT 201. Prerequisite or Corequisite: ACCT 230 or ACCT 303.

ACCT 325. Managerial Accounting II. 3 Credits.
An analysis of cost systems and their application in the determination, analysis and control of manufacturing and distribution costs. Emphasis is on managerial planning and control. Prerequisite: ACCT 201. Enrollment restricted.

ACCT 326. Managerial Accounting II, Honors. 3 Credits.
Honors treatment of this course involves an analysis of cost systems and their application in the determination analysis and control of manufacturing and distribution costs. Emphasis is on managerial planning and control. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: ACCT 201. Enrollment restricted.

ACCT 330. Introduction to Taxation. 3 Credits.
An introduction to the role of taxes in society with a primary emphasis on the tax implications of business transactions. By the end of this course students should be able to: recognize common tax issues from presented facts; apply basic tax rules and regulations to compute taxable income and tax liability for individuals and entities; incorporate tax costs and tax savings into calculations of the net present value of cash flows; recognize tax planning opportunities or problems inherent in common business and investment transactions; identify tax policy issues suggested by or underlying particular provisions of the tax law. Prerequisite: Corequisite: ACCT 320 or equivalent.

ACCT 331. Introduction to Taxation, Honors. 3 Credits.
An introduction to the role of taxes in society with a primary emphasis on the tax implications of business transactions. By the end of this course students should be able to: recognize common tax issues from presented facts; apply basic tax rules and regulations to compute taxable income and tax liability for individuals and entities; incorporate tax costs and tax savings into calculations of the net present value of cash flows; recognize tax planning opportunities or problems inherent in common business and investment transactions; identify tax policy issues suggested by or underlying particular provisions of the tax law. Prerequisite: ACCT 320 or equivalent. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

ACCT 400. Special Topics in Accounting: ____. 1-5 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of accounting topics not covered by established courses. Prerequisite: Determined for each topic by the instructor. Enrollment restricted.

ACCT 410. Intermediate Accounting II. 3 Credits.
A continuation of the study of generally accepted accounting principles (GAAP) underlying the preparation and interpretation of general-purpose financial statements. The focus of this course is on the liability and equity sections of the balance sheet, including such topics as loans, bonds, leases, pensions, accounting for income taxes, equity transactions, employee stock options, earnings per share, and cash flows. Application of many of the authoritative accounting pronouncements is illustrated. Prerequisite: ACCT 320 or equivalent and FIN 310 or equivalent. Enrollment restricted.

ACCT 411. Intermediate Accounting II, Honors. 3 Credits.
Honors treatment of this course is a continuation of the study of generally accepted accounting principles (GAAP) underlying the preparation and interpretation of general-purpose financial statements. The focus of this course is on the liability and equity sections of the balance sheet, including such topics as loans, bonds, leases, pensions, accounting for income taxes, equity transactions, employee stock options, earnings per share, and cash flows. Application of many of the authoritative accounting pronouncements is illustrated. Prerequisite: ACCT 320 or equivalent and FIN 310 or equivalent. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

ACCT 425. Accounting Information Systems & Analytics. 3 Credits.
This course provides an overview of how accounting and business professionals use information systems to support business processes and produce information, such as financial statements, that can be analyzed and used to make decisions. Topics covered in this course include, but are not limited to, computer technology; business transaction processing; threats and controls in a computerized accounting system; database design and controls; tools used by accountants for automation and analytics; and an accountant's role in designing, developing, implementing, and maintaining an information system. Hands on experience will be obtained through projects that require the use of various software packages. Not open to students with credit in ACCT 311 or BBA 407. Prerequisite: Corequisite: ACCT 320 or equivalent, IST 202 or BSAN 310, and IST 310. Enrollment restricted.
ACCT 500. Individual Research in Accounting: _____  1-5 Credits.

Individual study of selected topics in business not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SCM 310 or SCM 311; approval of the Area Director. Enrollment restricted.

ACCT 515. Accounting Professional Communications.  3 Credits.

This course is designed to improve the professional communications skills of students interested in pursuing careers in accounting. Topics covered include communication styles, communication approaches for different styles, listening skills, client interactions, appropriate communication channels, receiving feedback, and presentation skills.

ACCT 522. Individual Taxation.  3 Credits.

This course focuses on determination of tax, filing status, dependency exemptions, gross income inclusions, exclusions, deductions for AGI, itemized deductions, property transactions, capital gain/loss netting, business and investment expenses, hobby losses, rental activities, cost recovery, amortization, depletion, passive activities, individual tax credits, business and investment losses, casualty losses, bad debts, employee expenses, individual AMT, employment taxes, tax policy, tax rate structures, individual income tax compliance, fringe benefits, retirement plans, taxation of financial instruments, overview of estate and gift taxation. Prerequisite: ACCT 330 or equivalent.

ACCT 543. Introduction to Auditing.  3 Credits.

The fundamental concepts of audit risk, evidence accumulation and materiality are applied to financial statement audits using established accounting principles as the criterion for evaluating fair presentation. Audit objectives and procedures are studied in relation to the opinion which the auditor expresses on clients' financial statements. Financial statement audits are compared with other types of engagements performed by public accountants, and with other types of audits, such as compliance and operational audits. Prerequisite: ACCT 311 or ACCT 425 and ACCT 410 or ACCT 411. Enrollment restricted.

ACCT 544. Introduction to Auditing, Honors.  3 Credits.

Honors treatment of this course involves the fundamental concepts of audit risk, evidence accumulation and materiality are applied to financial statement audits using established accounting principles as the criterion for evaluating fair presentation. Audit objectives and procedures are studied in relation to the opinion which the auditor expresses on clients' financial statements. Financial statement audits are compared with other types of engagements performed by public accountants, and with other types of audits, such as compliance and operational audits. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: ACCT 311 or ACCT 425 and ACCT 410 or ACCT 411.

ACCT 545. Advanced Taxation.  3 Credits.

This is an advanced taxation course that focuses on corporate operations, formations, capital structure, liquidating and non-liquidating distributions, reorganizations, partial and complete liquidations, accumulated earnings tax, and personal holding company tax. The course includes an overview of the taxation of partnerships, accounting for income taxes, and selected tax topics. This class is not intended for students planning to follow the tax track in the Master of Accounting Program. Prerequisite: ACCT 330 or ACCT 331. Enrollment restricted.

ACCT 599. Internship in Accounting.  1-3 Credits.

Internships provide opportunities for students to combine their academic education with a meaningful experience in the business world. Accounting internships allow students to explore career pathways in accounting, further their professional growth, expand professional networks, and increase the relevancy of their academic course work. The internship course combines job-related activities of the accounting internship position with a set of academic requirements. These requirements include academic assignments as well as pre- and post-internship seminar held in the semester before and after the semester in which the internship occurs. Internships for credit must be approved by the Director of the Internship Program prior to the internship experience. Students may not receive more than three hours of internship credit from ACCT 599. ACCT 599 may count as an Accounting elective for students majoring in Accounting. Prerequisite: Approval of the internship; two of the following: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311, SCM 310 or SCM 311. Enrollment restricted.

ACCT 701. Financial Accounting.  3 Credits.

Financial accounting provides information to decision-makers external to the business, such as investors and lenders. The course describes the process through which economic information is captured, validated, and distributed externally in the form of financial statements. It also covers the contents of the major financial statements, focusing on how the various accounts are defined and measured and how the information can be used by external decision-makers. Enrollment restricted.

ACCT 705. Financial Statement Presentation and Analysis II.  2 Credits.

This course covers topics in intermediate-level financial accounting and financial statement analysis. Accounting topics are taught from an external decision-maker's perspective. The course is intended to help students read and understand complex financial statements, and to extract key financial information from a mass of detail. Topics will vary over time but can include financial reporting of various liabilities, derivatives and hedging, investments and acquisitions. Topics also can include forecasting financial statements, and valuation of common stock using accounting data. Not open to MAcc students or students with credit in ACCT 320 or ACCT 323, ACCT 410 or ACCT 411, ACCT 721, or ACCT 722. Prerequisite: ACCT 701. Enrollment restricted.

ACCT 706. Accounting.  3 Credits.

This course introduces students to the creation and application of financial accounting information and financial statements for decision making by corporate stakeholders, and to the use of internal accounting information for decision making by firm management. Enrollment restricted.

ACCT 708. Accounting and Finance for Professionals.  3 Credits.

This course is an introduction to financial and managerial accounting. It also serves as a bridge to basic financial decision-making. It will introduce the concepts of business and the measurement systems used to control and evaluate business activities. It will also explore costing systems and the use of accounting data as a basis for management planning and decision making, using basic tools such as return on investment. Not open to School of Business students.

ACCT 710. Business Writing for Accountants.  3 Credits.

This course is designed to improve students' professional writing skills. The course will emphasize effectively determining and meeting writing goals; writing with the readers' perspective in mind; employing a writing strategy to increase efficiency and effectiveness when writing; thinking critically about writing; writing clearly, concisely, and effectively within the context of business and accounting; avoiding common grammar errors; writing in a professional tone; reviewing and editing in an effective manner; and drafting email, client letters, and memos in an effective and professional manner using proper format. Not open to students with credit in BUS 105. Prerequisite: Admission to the MAcc program. Enrollment restricted.

ACCT 721. Advanced Accounting.  3 Credits.
A series of topics related mainly to financial accounting for corporations. Includes accounting for acquisitions and consolidations, asset impairments and derivative instruments. Also includes accounting for partnership equity. Prerequisite: ACCT 410 or equivalent. Enrollment restricted. Admission to the MAcc program.

ACCT 722. Researching Financial Accounting Issues. 3 Credits.
This course focuses on developing research and analytical skills. While the specific topics covered vary by year, students will research evolving recognition, measurement, and disclosure issues using the FASB’s Accounting Standards Codification (ASC) and apply what they learn to actual financial statements. Students will also develop data analytics skills focusing on the methodologies and tools used to (1) transform raw data into workable data sets and (2) analyze these data sets for decision-making purposes, mainly in the context of assurance services. Prerequisite: Admission to the MAcc program. Enrollment restricted.

ACCT 724. Accounting Theory. 3 Credits.
The goal of this course is to foster an understanding of the importance of accounting in capital markets and an intuitive approach to accounting problem-solving while simultaneously preparing students for professional certification. This course has two main components. First, students develop a conceptual and practical understanding of theories related to asymmetric information, information signaling, and the decision usefulness of accounting information. Second, students establish and extend their competence across a variety of complex financial accounting topics. Prerequisite: ACCT 410 or ACCT 411 and Admission to the MAcc program. Enrollment restricted.

ACCT 726. Advanced Managerial Accounting - Information for Business Decisions. 3 Credits.
Through judicious use of quantitative methods including statistical decision theory, this course provides a conceptual analysis of several prominent managerial accounting topics. This course is intended to assist both public accountants and management accountants to understand management decision-making processes and information requirements thereof. Prerequisite: Admission to the MAcc program. Enrollment restricted.

ACCT 727. Accounting and Professional Ethics. 3 Credits.
It may be easy to determine the most ethical choice in a professional setting. However, standing up for our values and "taking action" is often the hardest part. Knowing what to say and how to say it can give us courage to stand up for those values. As with any skill, practice builds muscle-memory. Therefore, this course will focus on identifying values and the factors that encourage ethical decision-making within the accounting profession, determining how to communicate those values, and most importantly, practicing the communication of those values. This course will explore the ethical principles and rules contained within the AICPA’s Code of Professional Conduct and other ethical rules specific to the accounting profession. Prerequisite: Admission to the MAcc program. Enrollment restricted.

ACCT 728. Financial Analysis. 3 Credits.
The objective of this course is to provide a framework for students to use accounting and other financial information to evaluate businesses and make informed decisions. The framework will include strategic analysis, accounting analysis, financial analysis, forecasting and valuation. Prerequisite: Admission to the MAcc program. Enrollment restricted.

ACCT 729. Corporate Finance for Accountants. 3 Credits.
This course is a unique study of how corporate finance and corporate financial policies drive financial statements. In addition to the traditional introductory finance topics, this course will cover more specialized corporate finance topics, such as mergers and acquisitions, bankruptcies, risk management, multinational finance and business sustainability and reporting. Finally, this course provides students with critical thinking skills to recognize the impact of corporate finance and corporate financial policies on financial statements. This course is not open to students with an undergraduate degree in Finance. Prerequisite: Admission to the MAcc program. FIN 310 or equivalent. Enrollment restricted.

ACCT 731. Tax Research. 3 Credits.
A course designed to develop one’s ability to use the research tools available and provide comprehensive coverage of the many aspects of tax research. Emphasis is placed on locating authorities, solving tax problems, and communicating the results. Prerequisite: ACCT 330 or equivalent. Enrollment restricted. Corequisite: ACCT 732 and ACCT 735. Admission to the MAcc program.

ACCT 732. Advanced Taxation of Corporations. 3 Credits.
This is an advanced corporate tax course that focuses on the taxation of corporate operations, formations, capital structure, liquidating and non-liquidating distributions, redemptions, partial and complete liquidations, accumulated earnings tax, and personal holding company tax. It also may cover incentive-based compensation, installment sales, tax policy, corporate acquisitions and reorganizations, consolidated returns, and constructive dividends. The course culminates with a focus on subchapter C compliance and documentation of research and findings of unique tax issues related to the compliance process. Prerequisite: ACCT 330 or equivalent and admission to MAcc program. Enrollment restricted. Corequisite: ACCT 731 and ACCT 735.

ACCT 733. Tax Planning. 3 Credits.
A study of the fundamentals of Federal estate and gift taxation, the income taxation of estates and trusts, and various aspects of family tax planning. Prerequisite: ACCT 330 or equivalent. Enrollment restricted.

ACCT 734. Multijurisdictional Tax. 3 Credits.
This course provides an exploration of the taxation of business entities by multiple taxing jurisdictions (interstate and international). The course will cover key state taxation issues including nexus, allocation, and apportionment issues. In addition, students will be provided with an overview of cross-border and international tax issues emphasizing "outbound" investments and activities of U.S. taxpayers. Prerequisite: ACCT 732. Enrollment restricted. Admission to the MAcc program.

ACCT 735. Accounting for Income Taxes. 3 Credits.
This course focuses on objectives, principles and scope of ASC 740, basic tax provision calculation including current and deferred tax expense/ benefit, permanent and temporary book vs. tax differences, mechanics of deferred tax accounting, provision to return reconciliations, income tax footnote disclosures, effective income tax rate reconciliation, intraperiod allocation and interim period report, valuation allowances, income tax payable reconciliations, indefinitely reinvested foreign earnings, foreign operations, equity compensation, equity investments, joint ventures, business combinations, ASC 450 as it relates to indirect taxes and uncertainty in income tax positions (FIN 48). Prerequisite: Admission to the MAcc program. Corequisite: ACCT 731 and ACCT 732. Enrollment restricted.

ACCT 736. Taxation of Pass-through Entities. 3 Credits.
This course focuses on partnership formation and operation, partnership and relationship agreements, elections, tax reporting, basis, loss limitations, distributions, termination of an interest, basis adjustments, special forms including PTP, LLC, LLP, LLLP and Electing Large Partnerships, S-corporation rules including special requirements for the election, operations, shareholder taxation, basis adjustments, distributions, pass-through entity compliance, disregarded entities, and hybrid structures. Prerequisite: ACCT 732 or equivalent and admission to the MAcc program.
ACCT 740. Fraud Examination and Forensic Accounting - Application. 3 Credits.
This course applies generally accepted fraud examination and forensic accounting methods and processes to investigate financial statement frauds. Students will learn to assess evidence, create hypotheses and develop an argument based on the best persuasive evidence. The course will incorporate actual financial statement frauds, such as WorldCom, and other fraud schemes. The course will also cover topics such as document analysis, witness behavior and interviews, managing chain of custody evidence and obtaining targeted information from IT professionals. Additionally, since fraud examinations and forensic accounting investigations often end up in a court of law, students will learn about litigation projects, specifically, the basics of damages and expert witness testimony. Prerequisite: Admission to the MAcc program.

ACCT 741. Fraud Examination and Forensic Accounting - Theory. 3 Credits.
Explores various academic approaches to fraud to include factors learned from other disciplines such as sociology and psychology. Students will review the vast body of knowledge gained by practitioners throughout the world and will attempt to apply these factors to the prevention of financial statement and occupational (employee) fraud. Some of the topics covered include: skimming transactions, identity fraud, computer schemes, money laundering, bribery and kickbacks, and corporate espionage. Prerequisite: Enrollment restricted. Admission to the MAcc program.

ACCT 742. Advanced Auditing. 3 Credits.
Current auditing philosophy, standards, techniques, and professional judgment are extensively investigated and related to auditing activities. Special emphasis is given to the design of audit programs in relation to the client's system of internal control and the effect of such factors as relative risk and materiality. Other topics include auditors' legal liability, professional ethics, the impact of electronic data processing and statistical techniques, and the preparation of auditors' reports and qualifications therein. Prerequisite: ACCT 543 or equivalent. Enrollment restricted. Admission to the MAcc program.

ACCT 743. Accounting Information System Risks and Controls. 3 Credits.
Students learn how to perform the risk assessments that auditors use to plan a top-down, risk-based assurance engagement. Using auditing standards and internal control frameworks as a guide, students learn how auditors (a) evaluate market conditions, industry practices, and client business activities to assess the risk of financial misstatement, (b) search potential misstatements by analyzing patterns of fluctuations in related financial statement accounts, and (c) assess the effectiveness of internal controls that protect technology-driven financial reporting processes from errors and irregularities. Prerequisite: ACCT 543 or equivalent. Enrollment restricted. Admission to the MAcc program.

ACCT 745. Specialized Accounting Practices. 3 Credits.
This course is an extension of the study of financial accounting practices to include specialized industries that have particular or varied forms of GAAP applications and reporting not typically covered in other financial accounting courses. Topics include a range of specialized industries, with a focus on the accounting and reporting models of not-for-profit organizations and state and local governments. Prerequisite: ACCT 410 or equivalent. Enrollment restricted. Admission to the MAcc program.

ACCT 746. Accounting Analytics. 3 Credits.
This course will prepare students to think critically about how to leverage accounting data to make decisions mainly in the financial accounting and auditing contexts. Students will develop an analytics mindset through hands-on assignments and projects using common accounting analytics software applications adopted in practice. These assignments involve manipulating and transforming raw data into workable data sets, using data visualization and other tools to analyze these data sets for decision-making purposes, and communicating the results of the analyses. The course also exposes students to practitioner and academic perspectives on analytics through a combination of readings, class discussions, and practitioner presentations. Prerequisite: Admission to the MAcc program. ACCT 543. Enrollment restricted.

ACCT 747. International Financial Reporting Standards II. 1 Credits.
This course will follow an independent study model with students identifying IFRS topics they wish to study further. Having successfully mastered the basic IFRS materials offered in IFRS I, this course will allow students an opportunity to explore a specific IFRS topic of interest with an in-depth research paper. Topics must be approved in advance. Students will interact with the professor to determine appropriate research material and obtain guidance to their research, the paper and their conclusions. Students are encouraged to work at their own pace in order to obtain the best possible outcome from their research activity. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Admission to the MAcc program. Enrollment restricted.

ACCT 749. Internal Auditing. 3 Credits.
This course is designed to improve and enhance your knowledge of internal auditing, information systems auditing, and written and oral communications skills. The course will discuss the role of the Internal Auditor and their relationship with Board of Directors & Audit Committee members; CEO's; Members of Senior Management; Division and/ or Operations Managers; External Auditors; Stakeholders and the General Public. Students will develop intellectual curiosity, the ability to spot the unusual, and the tenacity to discover the cause. To have the willingness to scrutinize details, without losing sight of the big picture; understand financial deception in order to detect it and to develop deterrence measures; understand evidence-gathering and investigative procedures; accept that everything you do will be challenged; develop the confidence to handle the challenge and respond; begin the development of your “Professional Skepticism;” apply your computer skills; produce exceptional quality written reports; enhance your verbal presentation skills and refine your time management technique. Prerequisite: ACCT 543 or ACCT 544 or equivalent and Admission to the MAcc program. Enrollment restricted.

ACCT 750. Corporate Taxation. 3 Credits.
This class will cover two key areas of corporation taxation. The first portion of the class will be focused on understanding basic corporation taxation principles including business income, deductions, and accounting methods. The second focus area of the class will be on the principles of ASC 740 -- Accounting for Income Taxes. This material will include the basic rules applicable to the accounting and auditing of income taxes. Students will understand the basic principles of corporate taxation and the various complexities associated with accounting for income taxes; be able to prepare a fairly complex tax provision using Microsoft Excel; and analyze and interpret the data that will be used to compile a tax provision. Students will understand the tax attributes of various entities; the tax principles of business income, deductions and accounting methods including being able to differentiate between permanent and temporary differences; understand the basic principles of accounting for income taxes including financial statement classification and footnote disclosures; be able to prepare a tax provision and interpret the data utilized in the preparation process; understand the basic principles of FIN 48 -- Uncertainty in Income Taxes; understand other taxation areas of required review or complexity within a corporation including state and local taxes and taxes related to foreign operations. Prerequisite:
ACCT 330 or equivalent and Admission to the MAcc program. Enrollment restricted.

ACCT 799. Internship in Accounting. 1-3 Credits.
Internships provide opportunities for students to combine their academic education with a meaningful experience in the business world. Accounting internships allow students to explore career pathways in accounting, further their professional growth, expand professional networks, and increase the relevancy of their academic coursework. The internship course combines job-related activities of the accounting internship position with a set of academic requirements. These requirements include academic assignments as well as a pre- and post-internship seminar held in the semester before and after the semester in which the internship occurs. Internships for credit must be approved by the Director of the Internship Program prior to the internship experience. Students may not receive more than three hours of internship credit. Enrollment restricted and by permission only. Prerequisite: Admission to the MAcc program.

ACCT 810. Accounting. 3 Credits.
Financial accounting provides information to decision-makers external to the business, such as investors and lenders. The course describes the process through which economic information is captured, validated, and distributed externally in the form of financial statements. It also covers the contents of the major financial statements, focusing on how the various accounts are defined and measured and how the information can be used by external decision-makers. This course is open only to students in the full-time MBA program.

ACCT 895. Graduate Seminar in Accounting: _____. 0.5-5 Credits.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted.

ACCT 898. Independent Study for Master’s Students. 1-6 Credits.
Individual study of selected current problems in the field of accounting to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

ACCT 928. Introduction to Accounting Research. 3 Credits.
Students will gain a broad overview of the empirical/archival financial accounting and auditing literature. The readings for the course focus on the identification of research issues, background and context, hypotheses, data sources, and variables. Students will identify a research topic that interests them and will assess its viability as a project for possible future research.

ACCT 929. Seminar in Archival-Based Accounting Research. 3 Credits.
Students will gain an understanding of the history and future of significant streams of archival-based accounting research. Students will replicate seminal studies, learn to calculate important variables used in prior literature, and gain an understanding of the various methodologies used in archival-based research.

ACCT 930. Seminar in Auditing Research I. 3 Credits.
Students will gain in-depth knowledge of specific streams of the empirical/archival auditing literature. Topics may vary over time depending upon the interests of the students and instructor. Possible topics include (but are not limited to): the role of the auditor and audit committee in corporate governance, the auditing environment including regulation, audit quality, the pricing of audit and assurance services, litigation against auditors, and international auditing research. Students are expected to critically analyze and suggest ways to improve and extend the extant literature. The seminar will also include hands on analysis of data used in archival auditing research.

ACCT 932. Seminar in Financial Accounting Research I. 3 Credits.
Students will gain in-depth knowledge of specific streams of financial accounting research. Topics may vary over time depending upon the interests of the students and instructor. Possible topics include (but are not limited to): the role of financial reporting in corporate governance and debt contracting determinants and effects of financial reporting standards; the financial reporting environment including regulation; measuring financial reporting quality; the role of financial reporting and analysis in securities pricing; and the inter-relations among financial reporting of taxes and tax reporting to government authorities.

ACCT 934. Seminar in Empirical Tax Research I. 3 Credits.
Students will gain in-depth knowledge and understanding how taxes affect decision-making, asset prices, equilibrium returns, and the financial and operational structure of firms.

ACCT 936. Accounting Research Design and Corporate Governance Seminar. 3 Credits.
This course aids in developing a strong intuition for the research design methodologies that are commonly used in archival accounting research. Additionally, this course will introduce corporate governance related topics, specifically related to the role of top executives in the financial reporting process.

ACCT 995. Doctoral Seminar in Accounting: _____. 2-5 Credits.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor.

ACCT 998. Independent Study for Doctoral Students. 1-5 Credits.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team.

ACCT 999. Doctoral Dissertation. 1-12 Credits.
(V) Individual research work. Graded on a satisfactory progress/limited progress/no progress basis.

Business Courses

BBA 200. Special Topics in Business Administration: _____. 1-5 Credits.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of business topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor.

BBA 301. Managerial Economics. 3 Credits.
This course uses economic theory and methodology to understand and improve managerial decision making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures and business policies. Course content includes demand, production, cost analysis, supply and demand analysis, price and non-price modes of competition, market structure, and economic efficiency. Prerequisite: Completion of ECON 142 or ECON 143 and ECON 144 or ECON 145.
BBA 302. Legal Aspects of Business. 3 Credits.
A course designed to acquaint the student with the basic principles of law that are applicable to business transactions in the modern business world and the legal systems.

BBA 303. Organizational Behavior. 3 Credits.
This course serves as an introduction to the study of individual and group behavior within the context of an organization. An objective may be the development of the student's potential for becoming an effective organization member and manager of people. Experiential learning methods are utilized to involve the student actively. A wide variety of topics and theories may be covered, generally including motivation, leadership, job design, group dynamics, and formal organizational structure and process. Prerequisite: Completion of ECON 142 or ECON 143, ACCT 200, PSYC 104 or PSYC 105 and college algebra or higher math course and completion or co-enrollment in ACCT 201 and MATH 365 or equivalent statistics course.

BBA 304. Marketing. 3 Credits.
A study of marketing from the point of view of the business firm. Topics include the structure of the marketing system, the nature of marketing management, consumer behavior, marketing research, product policy, channels of distribution policy, and analytical techniques useful to marketing management. Prerequisite: Completion of ECON 142 or ECON 143, ACCT 200, PSYC 104 or PSYC 105 and college algebra or higher math course and completion or co-enrollment in MATH 365 or equivalent statistics course.

BBA 305. Management Science and Operations Management. 3 Credits.
Introduces some of the most widely used models from management science in business decision making. Topics include decision making under uncertainty, resource allocation models, and production and operations management. Prerequisite: Completion of college algebra or higher math course and completion or co-enrollment in IST 202, IST 205 or IST 310, and MATH 365 or equivalent statistics course.

BBA 306. Finance. 3 Credits.
This course consists of the analysis of problems relating to estimating the financial needs of an enterprise and to evaluating the alternative means of providing and utilizing both temporary and permanent capital. The relationship of current financial decisions with financial policy is analyzed from the viewpoint of management and the stockholder. Prerequisite: Completion of ACCT 200 and college algebra or higher math course and completion or co-enrollment in MATH 365 or equivalent statistics course.

BBA 307. Introduction to International Business. 3 Credits.
This course provides an overview of the key concepts, analytical frameworks and institutions that underlie international business. Particular attention is paid to the cultural and social diversity present in the world as well as the economic theories that explain the benefits of trade and underpin the agreements governing such international transactions. Not open to students with credit in IBUS 410 or IBUS 480. Prerequisite: Completion of ECON 144 or ECON 145.

BBA 308. Business Policy and Strategy. 3 Credits.
This course exposes students to the role of general management in complex organizations. The cases, conceptual materials, and projects are selected to provide students with opportunities to analyze and formulate strategic decisions that allow businesses to create and sustain competitive advantages. Knowledge and skills gained in previous business courses, including marketing, finance, and quantitative methods, will be applied to problems associated with the totality of organizational strategic activity. Prerequisite: BBA 303, BBA 304, BBA 305, and

BBA 309. Capital Budgeting. 3 Credits.
This course introduces the student to supply chain management. Students are presented the key concepts of supply chain management, the application of these concepts and are provided with the managerial
knowledge of supply chain management through class discussions and case studies. Students discover the impact of information technologies, strategic alliances and logistics on supply chain management and the performance implication of supply chain management.

**BBA 406. Advanced Finance - Principle and Applications. 3 Credits.**
This course covers the theory and professional practice in three areas of finance. (1) The processes investors follow in selecting where to place their savings are detailed. (2) The investment and financing issues faced by firms are investigated. (3) The financial intermediaries that facilitate the flow of funds between investors and firms are studied. Prerequisite: BBA 306. Enrollment restricted to students admitted to the Bachelor of Business Administration Major.

**BBA 407. Information Systems Technology Elective:** ____. 3 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of information systems technology topics not covered by established courses. Not open to students with credit in ACCT 311 or ACCT 425. Prerequisite: Determined for each topic by instructor. Enrollment restricted to students admitted to the Bachelor of Business Administration Major.

**BBA 408. Accounting Elective:** ____. 3 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of accounting topics not covered by established courses. Prerequisite: Determined for each topic by the instructor. Enrollment restricted to students admitted to the Bachelor of Business Administration Major.

**BBA 409. Management of Small Business. 3 Credits.**
This course looks at the unique aspects of owning and managing a small business, family business or franchise, with the owners having close control over operations and management decisions. Students will examine the startup options of buying, starting, or franchising; operations and human resources management; the unique factors of the family business; marketing, including setting prices, choosing a location, developing competitive advantage, positioning, and promotion with limited resources; financial statements, accounting systems, financing, cash flow and the working-capital cycle; exit through selling, bequeathing, or dissolving the business.

**BBA 410. Project Management. 3 Credits.**
This course develops a systems view of business so students can more effectively integrate project management into their business strategy. A common language and knowledge of project management concepts, principles and practices is developed. Students will develop an understanding of what project management involves, how it relates to other functional management areas, and its role in an organization's structure and leadership. Topics are covered in the order they appear in the project lifecycle starting with project selection and bidding and ending with project acceptance and close out. Topics covered in this course include: the importance of and role of project management, the contextual nature of projects, and managing scope, cost, time, and risk in project management. Prerequisite: BBA 303. Enrollment restricted to student admitted to the BBA program.

**BBA 500. Individual Research in Business. 1-5 Credits.**
Individual study of selected topics in business not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: Approval of proposed plan of study by the instructor. Enrollment restricted to students admitted to the Bachelor of Business Administration Major. Enrollment restricted.

**BBA 610. Intermediate Financial Accounting I. 3 Credits.**
This course focuses on generally accepted accounting principles (GAAP) underlying the preparation and interpretation of general-purpose financial statements. The asset side of the balance sheet with be stressed although the complete financial statements will be used throughout the course. Topics include the principles of revenue recognition, matching revenues and related costs, and the determination of proper balance sheet valuations of assets and liabilities. Prerequisite: ACCT 201 or equivalent. Enrollment restricted to students admitted to the Bachelor of Business Administration Major.

**BBA 620. Intermediate Financial Accounting II. 3 Credits.**
This course is a continuation of the study of generally accepted accounting principles (GAAP) underlying the preparation and interpretation of general-purpose financial statements. The liability and equity sections of the balance sheet will be emphasized, including loans, bonds, leases, pensions, accounting for income taxes, equity transactions, employee stock options, earnings per share, and cash flows. The course will also cover the application of many of the authoritative accounting pronouncements. Prerequisite: BBA 610, ACCT 320, or ACCT 323. Enrollment restricted to students admitted to the Bachelor of Business Administration Major.

**BBA 630. Foundations of Taxation. 3 Credits.**
This course will cover major concepts related to taxation with emphasis on both the federal income tax for individuals, as well as the federal income tax for partnerships, corporations, S corporations, and limited liability companies. Corequisite: BBA 610. Enrollment restricted to students admitted to the Bachelor of Business Administration Major.

**BBA 640. Principles of Auditing. 3 Credits.**
This course will focus on auditing theory and procedures. The concepts of audit risk, evidence accumulation and materiality will be applied to financial statement audits and auditing objectives and procedures will be studied in relation to the auditor's opinion. The course will compare financial statement audits with other types of engagements performed by public accountants, as well as other types of audits, such as compliance and operational audits. Prerequisite: BBA 610, Corequisite: BBA 620. Enrollment restricted to students admitted to the Bachelor of Business Administration Major.

**Business Courses**

**BE 301. Managerial Economics. 3 Credits.**
This course uses economic theory and methodology to understand and improve managerial decision making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures and business policies. Course content includes demand, production, cost analysis, supply and demand analysis, price and non-price modes of competition, market structure, and economic efficiency. Not open for credit to students in BBA 301 or ECON 524. Prerequisite: ECON 142 or ECON 143, and ECON 144 or ECON 145.

**BE 302. Managerial Economics, Honors. 3 Credits.**
Honors treatment of this course includes uses of economic theory and methodology to understand and improve managerial decision making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures and business policies. Course content includes demand, production, cost analysis, supply and demand analysis, price and non-
price modes of competition, market structure, and economic efficiency. Not open for credit to students in ECON 524. Prerequisite: ECON 142 or ECON 143 and ECON 144 or ECON 145. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

BE 701. Business Economics. 3 Credits.
This course uses economic theory and methodology to understand and improve managerial decision making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures and business policies. Course content includes demand, production, cost analysis, supply and demand analysis, price and non-price modes of competition, market structure, and economic efficiency. Enrollment restricted.

BE 718. Managerial Economics. 3 Credits.
This course covers principles of microeconomic analysis and methodology used in managerial decision-making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures for business strategy. Course content includes demand, cost and production analysis, supply and demand analysis, price and non-price competition, market structure, the basic elements of game theory, and the economics of information.

BE 810. Managerial Economics. 3 Credits.
This course covers principles of microeconomic analysis and methodology used in managerial decision-making. The focus is on the role of markets in determining business and individual opportunities to create value, the behavior of individual markets reacting to supply and demand forces, and the consequences of alternative market structures for business strategy. Course content includes demand, cost and production analysis, supply and demand analysis, price and non-price competition, market structure, the basic elements of game theory, and the economics of information. Cases and problems will be used throughout the course to help students develop the skill of applying economic analysis to the types of problems managers confront in the basic business disciplines of finance, marketing, management of people and organizations, supply chain management and strategy. This course is open only to students in the full-time MBA program.

BE 898. Independent Study for Master's Students. 1-6 Credits.
Individual study of selected current problems in the field of economics to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

BE 917. Advanced Managerial Economics. 3 Credits.
(F) This course is designed primarily for doctoral candidates in business administration. It will provide a rigorous analytical approach to developing and understanding an integrated economic model of the business firm and its environment. The student will be expected to learn the theory and understand how it can be applied to solve problems in business. Upon completion of the course the student should also possess an understanding of how economic analysis relates to and can be used in his/her own field of research. Masters students may enroll with consent of instructor.

Business Courses

BLAW 300. Special Topics in Business Law: _____ 1-5 Credits.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of business law topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor.

BLAW 301. Legal Aspects of Business. 3 Credits.
A course designed to acquaint the student with the basic principles of law that are applicable to business transactions in the modern business world and the legal systems. Not open to students with credit in BBA 302.

BLAW 302. Legal Aspects of Business, Honors. 3 Credits.
Honors treatment of this course involves acquainting students with the basic principles of law that are applicable to business transactions in the modern business world and the legal systems. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

BLAW 500. Individual Research in Business Law. 1-5 Credits.
Individual study of selected topics in business law not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: BLAW 301 or BLAW 302; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted.

BLAW 505. Legal Aspects of the Management Process. 3 Credits.
A course designed to acquaint students with the basic principles of agency relationships, such as partnerships, limited liability companies, and corporations, with special emphasis on the problems encountered by managers and directors in operating a corporation. The course should acquaint a student with how to create and operate a corporation in light of current federal and state enactments. Prerequisite: BLAW 301 or BLAW 302. Enrollment restricted.

BLAW 515. Commercial Law. 3 Credits.
An advanced course in legal aspects of business with emphasis on the Uniform Commercial Code. Prerequisite: BLAW 301 or BLAW 302. Enrollment restricted.

BLAW 525. Negotiations and Dispute Settlement. 3 Credits.
This course involves the study of the theory and practice of dispute resolution and negotiation in business mediation (facilitated negotiation). Conflict resolution in the workplace, including grievance procedures, will be considered. Students are required to apply concepts studied through role playing simulations. Not open to students with credit in BLAW 525 or MGMT 525. Prerequisite: MGMT 310 or MGMT 311 and BE 301 or BE 302 by permission of instructor. Enrollment restricted.

BLAW 701. Introduction to the Legal Environment of Business. 2 Credits.
A course focused on understanding legal rights and duties and ethical responsibilities in the business environment and identifying and addressing legal risks in business decision making. This is an introductory course which includes an overview of several foundational areas of law that are highly relevant to business.

BLAW 702. Legal Aspects of Business Transactions: Contracts and Torts. 2 Credits.
A course focused primarily on principles of contract and tort law. Contract law and tort law serve as the foundation for many other areas of law that are relevant in the business environment. Prerequisite: BLAW 301 or BLAW 302 or BLAW 701.

BLAW 703. Legal Aspects of Business Organizations. 3 Credits.
This course focuses on a selection of legal topics and their importance to those serving as public and private accountants, corporate officers, directors, and other business decision-makers. Topics include agency law; formation/termination, management/financial structure, and other legal implications of different legal forms of business (such as partnerships, corporations, LLCs); rights and liabilities of individuals operating within these organizations; professional liability, securities regulation, and debtor-creditor rights, security interests and UCC sales. This course is not a CPA review course and does not cover all of the topics tested on the CPA exam. Rather, decision-making from a legal perspective within a professional environment is the primary focus of the course. Enrollment restricted.

**BLAW 704. Commercial Law. 3 Credits.**

An examination of the Uniform Commercial Code and related legal topics, such as bankruptcy and property law. Not open to students with credit in BLAW 515. Prerequisite: BLAW 301 or BLAW 302 or BLAW 701.

**BLAW 898. Independent Study for Master’s Students. 1-6 Credits.**

Individual study of selected current problems in the field of business law to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment. Enrollment restricted.

**Business Courses**

**BSAN 202. Statistics. 3 Credits.**

An introduction to statistical inference techniques with emphasis on the application of these techniques to decision making in a firm. Topics include probability theory, random variables, probability distribution functions, estimation, test of hypothesis, regression, correlation, and introduction to statistical process control. Prerequisite: MATH 115, MATH 121, MATH 125, MATH 141 or MATH 145.

**BSAN 230. Introduction to Business Analytics, Information Systems, and Supply Chain Management Professions. 1 Credits.**

In this course, we focus on the Business Analytics, Information Systems, and Supply Chain Management professions and cover a variety of topics. Topics include, but are not limited to, career opportunities; the importance of professional mentorship; professional membership with groups/associations; appropriate industry certifications; graduate education content, timing, and opportunities; the role of career broadening experiences; and ethical dilemmas within the professions. We emphasize both current practice and projected industry trends and involve guest speakers. This course is cross-listed with IST 230 and SCM 230. Check with your Major to see which 230 course it requires or recommends. (ACCT 230, BSAN 230, BUS 230, FIN 230, IST 230, MKTG 230 or SCM 230) and when it encourages you to take it. (Same as IST 230 and SCM 230.) Prerequisite: BUS 210 or concurrent enrollment.

**BSAN 302. Quantitative Methods and Data Analysis. 3 Credits.**

This course will cover quantitative methods and techniques of data analysis that are useful in solving common problems that arise in all the functional areas of business. Upon completion of this course, given a business problem, students will be expected to know how to formulate a mathematical model which is appropriate to the problem, to fit the model to available data, and to interpret the model results to derive actionable insights. Examples of quantitative methods and data analysis that may be taught include: multiple regression, analysis of variance, statistical process control, linear programming, non-linear optimization and decision making under uncertainty. Prerequisite: MATH 115 or MATH 121 or MATH 125 or MATH 141 or MATH 145 and DSCI 202 or BSAN 202.

**BSAN 310. Introduction to Business Analytics. 3 Credits.**

This course will provide an overview of analytics in the business context. The concepts and practices of analytical modeling and analysis will be covered. An analytics topology to make sense of the variety of analytics types, techniques, and processes, will be introduced. The course will also cover the data side of analytics including data sourcing, basic data modeling, data discovery, data cleansing, and data preparation. Analytics techniques for the exploration, discovery, experimentation, creation of KPIs and metrics will be used in hands-on exercises. The human side of analytics-communication, conversation, and collaboration will be discussed and utilized in class and homework exercises. Prerequisite: Corequisite: BSAN 202 or DSCI 202 and IST 310.

**BSAN 320. Fundamentals in Application Development. 3 Credits.**

This course provides an introduction to software development concepts and techniques. Students will develop an understanding of the software development process through hands-on programming assignments and projects. The course emphasizes problem solving, initiative, and teamwork within an information systems framework. Not open to students with credit in IST 320. Prerequisite: Corequisite: IST 202 or BSAN 310 and IST 310. Enrollment restricted.

**BSAN 325. Systems Analysis and Design. 3 Credits.**

This will take students through the entire systems development life cycle from the first contact with a customer through analysis and design to the implementation of the customer’s system. It will introduce the student to the field of systems analysis and design, basic systems analysis tools, and the procedures for conducting systems analysis. Topics covered will include the role of the systems analyst in the organization, concepts, philosophies and trends in system analysis and design, and tools and techniques for such analysis. Not open to students with credit in IST 325. Prerequisite: IST 202 or BSAN 310. Enrollment restricted.

**BSAN 400. Special Topics in Business Analytics: _____ 1-5 Credits.**

This is a variable-topic seminar. Its purpose is to allow the occasional offering of supply chain management topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

**BSAN 410. Project Management. 3 Credits.**

This course provides initial exposure to concepts related to the project management discipline generally, while focusing on management of information technology projects in particular. The course is organized to emphasize core project management knowledge areas developed by the Project Management Institute, and it stresses the benefits of a disciplined, formal project management methodology. Students completing the course will gain an appreciation for the complex nature of projects and be better prepared to be an effective member of project teams encountered in many types of organizations. Not open to students with credit in IST 410 or MGMT 472. Prerequisite: IST 202 or IST 310. Enrollment restricted.

**BSAN 412. HR Management Analytics. 3 Credits.**

The course introduces students to the field of human capital analytics and measurement. It provides an overview of the evolution of human capital
measurement, and guides students through various types of methods organizations use to understand the impact of people programs and initiatives on their organization. The importance of human capital analytics in business decisions is examined, including leader and manager use of data, basic analysis, reporting and presentation of data, benchmarking, and other use cases and trends. The course will provide a foundation of knowledge with the intent of developing the student's capabilities to be more prepared and equipped to advance the use of human capital measurement to drive business decisions. (Same as MGMT 412.) Prerequisite: Completion of MGMT 310 or MGMT 311. Enrollment restricted.

BSAN 415. Data Analysis and Forecasting. 3 Credits.
This course is concerned with the analysis and interpretation of data encountered in business and economics. The course gives students experience in data analysis that can be usefully applied in a wide variety of real life situations and hands on experience in using statistics programs, such as R, to analyze various types of data. Topics covered may include multiple regression, logistic regression, ARIMA time series models, classification methods, forecasting, building statistical models, and model validation. Not open to students with credit in SCM 415. Prerequisite: BSAN 202 or DCSI 202 and SCM 310 or SCM 311. Enrollment restricted.

BSAN 418. Modeling and Risk Analysis. 3 Credits.
An introduction to the concepts, methodologies, and applications of risk analysis and modeling. This course is designed primarily to develop practical modeling skills with spreadsheet software. To accomplish this, material from across the finance discipline will be covered as well as material from the supply chain management discipline. Examples from corporate finance, investments, financial derivatives, real estate, personal finance, and supply chain management methods will be used to demonstrate modeling. Not open to students with credit in FIN 418 or FIN 460 or SCM 418. Prerequisite: FIN 310 or FIN 311. Enrollment restricted.

BSAN 420. Data Visualization in Business. 3 Credits.
The ability to accurately and effectively analyze and communicate business data in paramount in today's world of business analytics and big data. Increasingly, professionals are being asked to use business data as a crucial component of everyday business decisions -- competitive advantage is gained in companies that can analyze and visualize data successfully to help them make business decisions. This course will focus on data visualization through applied, hands-on projects that will help students produce, analyze, and communicate data in a variety of business sectors. A principle focus of the course will be the use of data analysis programs and associated visualization techniques. Not open to students with credit in SCM 400. Prerequisite: IST 310, BSAN 310, and BSAN 326. Enrollment restricted.

BSAN 430. Marketing Analytics. 3 Credits.
This course introduces advanced analytical methods in the examination of data from a variety of sources to provide marketing professionals with the tools necessary to engage in today's data rich decision-making environment. Predictive models and other multivariate statistical techniques will be covered with an emphasis on practical application. Not open to students with credit in MKTG 400. Prerequisite: BSAN 415 or MKTG 415 or SCM 415. Enrollment restricted.

BSAN 440. Foundations in Business Analytics. 3 Credits.
Introduces students to the key business, computational and data competencies needed by business analysts for effective data-driven decision making. The course focuses on how structural as well as unstructured “big data” can be used to help decision makers improve organizational competitiveness. Students will learn fundamental skills for business analytics: data manipulation, data visualization and statistical methods to gain experience with different software tools used for data analysis and reporting. Not open to students with credit in IST 495. Prerequisite: Successful completion of BSAN 326 or IST 326. Enrollment restricted.

BSAN 450. Data Mining and Predictive Analytics. 3 Credits.
Overview of techniques for gathering, exploring, transforming, modeling, and summarizing data sets including very large data sets, both structured and unstructured. Basic data mining techniques including neural networks, decision trees, clustering algorithms, linear programs, text and web mining in business setting. Modeling approaches include techniques from supervised and unsupervised machine learning. Discussion of data cleaning and data preparation issues, including noise, missing and unbalanced data, discrete versus continuous features, and feature selection. Some techniques are implemented from scratch, while in other cases real-world tools such as R, Python packages and commercial data modeling tools are applied to large-scale data sets. Prerequisite: BSAN 415 or SCM 415. Enrollment restricted.

BSAN 465. Customer Relationship Management. 3 Credits.
This course offers a comprehensive introduction to the strategy and tactics of customer relationship management (CRM). Particular emphasis is given toward identifying the key strategic principles inherent in the customer-centric focus that underlies a successful CRM program. Topics include: Fundamentals of CRM strategy, marketing metrics, customer profitability analysis, choice modeling, techniques for evaluating model performance and applications of CRM to marketing campaign management. Students will be instructed on how to implement the CRM techniques using various software tools and real-world data. (Same as MKTG 465 and SCM 425.) Not open to students with credit in BSAN 465 or MKTG 465 or SCM 425 or MKTG 400. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

BSAN 480. Business Analytics Capstone. 3 Credits.
A case-based, project-oriented approach to data driven decision making based on company's mission and strategic objectives. This is the senior course tying together all the knowledge learned into a senior project. Prerequisite: BSAN 440 or IST 495. Prerequisite or Corequisite: BSAN 450. Enrollment restricted.

BSAN 500. Individual Research in Business Analytics. 1-5 Credits.
Individual study of selected topics in business analytics not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: Approval of proposed plan of study by the instructor. Enrollment restricted.

BSAN 599. Internship in Business Analytics. 1-3 Credits.
Internships provide opportunities for students to combine their academic education with a meaningful experience in the business world. Business Analytics internships allow students to explore career pathways in accounting, further their professional growth, expand professional networks, and increase the relevancy of their academic course work. The internship course combines job-related activities of the business analytics internship position with a set of academic requirements. Internships for credit must be approved prior to the internship experience. Students may not receive more than three hours of internship credit from BSAN 599. Prerequisite: Approval of the internship; two of the following: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311, SCM 310 or SCM 311. Enrollment restricted.

BSAN 701. Statistical Decision Making. 3 Credits.
This course provides an introduction to data gathering and analysis with an emphasis on problem solving for decision making and process improvement in a business setting. The role of numerical data in the understanding of business problems and in the evaluation of planned improvements is studied, along with the study of variation commonly occurring in business processes and methods of reducing this variation. Statistical software is used to supplement data analysis and aid in the problem solving. Topics covered may include statistical methods such as exploratory data analysis, graphical analysis, Pareto analysis, stratification analysis, confidence intervals, correlation, linear regression, and control charts. Enrollment restricted.

**BSAN 706. Statistics. 3 Credits.**
This course covers basic statistical tools for understanding data in organizations. The principal objectives of the course are to learn data analysis techniques and to learn how to apply statistical tools to help understand common problems in organizations. Course content includes data gathering and problem analysis tools, probability distributions and features of distributions (means, standard deviations, Normal distribution, and Binomial distribution), stratification analysis, Pareto analysis, correlation, confidence intervals, simple hypothesis testing, linear regression, and analysis of variance.

**BSAN 710. Statistical Modelling. 3 Credits.**
This course applies covers the development of statistical models that represent actual data and the use of these models to understand the important characteristics of that data. Statistical models including multiple regression, logistic regression, and time series models. The course will cover a process to build statistical models to represent actual data. This process teaches students how to select a statistical model for a given data set, how to estimate the parameters in that model, how to check to see if that model adequately fits the data, and when necessary how to modify that model. Students will gain model building experience by using R software on actual data. Prerequisite: A statistics class that covers basic statistical methods through multiple regression.

**BSAN 713. Advanced Statistics II. 2 Credits.**
This is a continuation of Advanced Statistics I. The topics covered in this class include time series models, sampling, classification, and clustering models. There will be an emphasis on development of statistical models that can be used to help solve business problems. Prerequisite: DSCI 712. Enrollment restricted.

**BSAN 714. Data Visualization. 3 Credits.**
The ability to accurately and effectively analyze and communicate business data is paramount in today’s world of business analytics and big data. Increasingly, professionals are being ask use business data as a crucial component of everyday business decisions—competitive advantage is gained in companies that can analyze and visualize data successfully to help them make business decisions. This course will focus on data visualization through applied, hands-on projects that will help students produce, analyze, and communicate data in a variety of business sectors. A principle focus of the course will be the use of data analysis programs and associated visualization techniques.

**BSAN 715. Analytics Application Development. 3 Credits.**
In this course students will learn aspects of contemporary programming that are important for data gathering and analysis, including real-time programming, GUI design, interactive database programming, service-oriented architecture, data collection with and without databases, machine learning, data mining techniques, and GIS programming. Students will be required to create a working system for a large volume of data using publicly available data sets. This course uses R, Python & Pandas.

**BSAN 720. Data and Visual Analytics. 3 Credits.**
Presenting quantitative information in visual form is an essential communication skill for data professionals. This course instructs students in various visualization techniques and software. Students will learn how to: (1) ask interesting questions about the business and policies, (2) identify data that can be used to answer those questions, (3) collect, clean and document the data, (4) explore and analyze the data with statistical and graphical techniques, (5) create compelling, informative and accurate visualizations and (6) present these visualizations to educated audiences.

**BSAN 726. Data Management, Databases, and Data Warehousing. 3 Credits.**
The effective use of data across firms to deliver fast and intelligent services presents one of the most critical challenges to today’s business leaders. This course is designed to introduce students to concepts and techniques in the theory, design, implementation, and administration of databases both on premises and cloud. Topics to be covered include the database design process, the entity-relationship (ER) model, relational and non-relational databases, queries in Structured Query Language (SQL), database administration, and big data analysis. The students will be exposed to using traditional relational databases along with using various non-relational based architectures such as Hadoop, Spark, and NoSQL. This is a project-based course that will provide hands-on experience using "real life" applications. This course focuses on the skills and concepts needed to design and query databases and therefore contribute to companies’ competitive positions.

**BSAN 730. Large Scale Data Analysis. 3 Credits.**
In today’s world, large volume of data is being generated every second by individuals and organizations across the globe. Organizations are working towards efficiently storing, managing, and analyzing complex and large datasets for generating business value from big data. In this course, students will learn about the challenges in handling as well as analyzing big data. Classroom exercises and group assignments will cover topics in big data technologies including Hadoop, Spark, Microsoft R, etc. Students will be exposed to foundational data science methods, techniques, and tools used in big data analytics.

**BSAN 735. Data Security. 3 Credits.**
The massive increase in the rate of novel cyber-attacks has made data-mining-based techniques a critical component in detecting security threats. The course covers various applications of data mining in computer and network security. Topics include: Overview of the state of information security; malware detection; network and host intrusion detection; web, email, and social network security; authentication and authorization anomaly detection; alert correlation; and potential issues such as privacy issues and adversarial machine learning.

**BSAN 740. Optimization and Prescriptive Analytics. 3 Credits.**
Data-driven decision making is key to establishing and maintaining a competitive edge in the modern business world. Optimization methods and techniques operationalize data to provide answers to business decision-making problems. In this course students will be exposed to a variety of such optimization methodologies including linear, non-linear, and integer programming, heuristics, simulation modeling, and certainty/uncertainty quantification. Students will apply these methods to problems in finance, marketing, and operations using Excel-based solvers and other state-of-the-art software.

**BSAN 744. Statistical Process Control and Improvement. 2-3 Credits.**
This course deals with process improvement through the reduction and control of variation in business organizations. The result of reduced variation is an improvement of integral organizational functions, a reduction of costs, and a minimization of defects in the market place. Data driven improvement is emphasized. Topics covered include advanced
discussion of using control charts for process improvement, and the use of designed experiments in process improvement. Particular emphasis will be given to methods used to analyze a given process, to the use of statistical tools to stabilize an entire process, to understand the natural variability in process output and to reducing process variation. Prerequisite: DSCI 701. Enrollment restricted.

BSAN 745. Advanced Machine Learning. 3 Credits.
This course expands the toolbox of machine learning methods and techniques presented in BSAN:750 Introduction to Machine Learning. The course also explores the statistical and mathematical underpinnings of machine learning methods in greater depth, while still providing a hands-on experience through the use of programming languages such as R and Python. Topics include: dimensionality reduction and feature selection, kernel methods, and deep learning, among other more advanced supervised learning methods, as well as special topics in machine learning of the instructors choosing.

BSAN 746. Accounting Analytics. 3 Credits.
This course covers the analysis of data as it pertains to accounting professionals. The focuses include analytic techniques for decision making and the examination of "big data" involving accounting information. Hands-on experiences will develop skills with select software tools used in data analytics for accounting professionals.

BSAN 750. Data Mining and Machine Learning. 3 Credits.
This course introduces students to foundational machine learning methods and techniques that can be applied to rich data sources common to many complex, real-world business problems. The material presented emphasizes a hands-on analytics experience using programming languages such as R and Python. Topics include: exploratory data analysis, data preparation, and both supervised (e.g., logistic regression, etc.) and unsupervised (e.g., clustering, etc.) learning methods, among other topics of the instructor's choosing.

BSAN 760. Data Driven Business Strategy. 3 Credits.
Ultimately, business analytics is about using data, analytics, and algorithms to make prescriptive predictions about future events and decisions. This course will take a holistic approach to helping participants understand the key factors involved, from data collection to analysis to prediction and insight. Projects will give students hands-on experience developing and running a data science pipeline to ensure that the correct business predictions are being made. Emphasis will be on merging technical skills with critical thinking and communication skills to ensure that robust analytics are being created for business benefit.

BSAN 770. Healthcare Analytics. 3 Credits.
Healthcare is one of the most critical industry sectors today due to its immediate impact on the lifestyle and wellbeing of individuals across different strata of the society. In this course, we will learn about the healthcare eco-system, healthcare information systems, and data analysis tools useful in analyzing healthcare data for improving health-related outcomes. We will explore data generated using personal health-gadgets such as activity monitors, electronic health records, health statistics reports, and other sources and understand how business analytics can be used to assist medical decision-making and improve organizational practices.

BSAN 775. Financial Risk Analytics. 3 Credits.
The financial services industry is undergoing significant changes, making the use of data and information technology increasingly important in driving business decisions and managing risk. This course provides a practical introduction to financial risk analytics with a focus on data-driven modeling, computation, and statistical estimation of credit and market risks. Real data case studies will be used throughout the course.

BSAN 777. Marketing Analytics. 3 Credits.
Introduction to the data and tools used to analyze the business environment and enable marketing decision making. Uses real world data and problems to evaluate strategic market opportunities and assess the impact of marketing decisions in the marketplace. Discusses analytical and empirical tools that address strategic issues of market sizing, market selection, and competitive analysis, as well as product management, customer management, and marketing function management decisions.

BSAN 780. Analytics Capstone. 3 Credits.
The Business Analytics capstone course comprises a project or practicum that exposes students to a real business problem, which they will solve using visualization, data mining, and optimization techniques. The problems are solicited from businesses, although students are welcome to propose projects as well. The student will work on an analytics project and prepare a comprehensive project report documenting the findings and recommendations. This course guides students through the process of developing and executing an original data analysis project aimed at addressing a public policy, political or governance challenge. The project can come from an extension of a project completed in a previous class or be part of a corporate internship.

BSAN 795. Special Topics Decision Science: ____. 2-5 Credits.
A variable-topic course open to graduate and selected undergraduate students meeting the requirements established by faculty members offering the course. Prerequisite: Determined by the instructor. Enrollment restricted.

BSAN 810. Statistics and Decision Tools. 3 Credits.
This course covers basic statistical tools for solving problems in organizations. The principal objectives of the course are to learn a strategy to solve organizational problems, to learn some data gathering and data analysis techniques, to learn how to interpret data and understand variation in data, and to learn how to reduce variation in organizational processes and output. Course content includes data gathering and problem analysis tools, probability distributions and features of distributions (means, standard deviations, Normal distribution, and Binomial distribution), stratification analysis, Pareto analysis, correlation, confidence intervals, simple hypothesis testing, linear regression, and analysis of variance. This course is open only to students in the full-time MBA program.

BSAN 820. Business Analytics. 3 Credits.
Business analytics is an essential business capability enabling the effective use of data to provide insight and support business decision making. This course will provide an overview of the field of business analytics, the concepts and processes with which data is sourced, cleansed, structured, and prepared as a strategic business asset will be introduced. Analytics techniques involving data modeling, and the exploration, discovery, and experimentation of data for discovering trends and patterns will be discussed and applied. The people side of analytics and data systems such as communication, visualization, and collaboration will be covered. This course is open only to students in the full-time MBA program.

BSAN 895. Graduate Seminar in Decision Sciences: ____. 0.5-5 Credits.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted.

BSAN 898. Independent Study for Master's Students. 1-6 Credits.
Individual study of selected current problems in the field of decision science to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good
academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

**BSAN 920. Probability for Business Research. 4 Credits.**
(F) This course covers the basic theory of probability and its use for research in the business disciplines. The course is designed primarily for Ph.D. students in the business school. Prerequisite: Doctoral standing and two semesters of calculus, or consent of instructor.

**BSAN 921. Statistics for Business Research. 4 Credits.**
(S) This course covers the basic theory of statistics and its use for research in the business disciplines. The course is designed primarily for Ph.D. students in the School of Business. Prerequisite: DSCI 920 or BSAN 920.

**BSAN 922. Advanced Regression. 3 Credits.**
This course presents various statistical tools for undertaking quantitative research in business. The regression model under the full ideal conditions is discussed, along with methodological issues that arise when these ideal conditions are violated, as often occurs in business research. A high degree of theoretical rigor is maintained, along with an emphasis on practical applications through the use of assignments that require data analysis. Prerequisite: DSCI 920 or BSAN 921 or consent of instructor.

**BSAN 934. Seminar in Probability and Statistics. 3 Credits.**
(V) This course will cover advanced topics in probability and statistics with application to various business disciplines. Topics covered may vary and will depend on the instructor. Examples of topics that may be covered are time series models, stochastic processes, uncertainty in artificial intelligence, multivariate statistics, etc. Prerequisite: DSCI 920 and DSCI 921 or BSAN 920 and BSAN 921, or consent of instructor.

**BSAN 935. Seminar in Optimization. 3 Credits.**
(V) This course will cover basic and advanced topics in optimization theory and applications. Examples of topics that may be covered are linear programming, nonlinear programming, dynamic programming, multiple-criteria decision making, habitual domain theory for forming winning strategies and effective decision making and game theory. Prerequisite: Linear algebra and real analysis or consent of instructor.

**BSAN 936. Management Science Research Seminar. 1 Credits.**
The seminar will discuss current research in management science topics such as artificial intelligence, statistics, optimization, decision making, decision support systems, and production/operations management. Topics covered will reflect the research interests of the instructor and participants. Participants are required to lead the discussion for at least one paper of their choice. Graded on a satisfactory/unsatisfactory basis.

**BSAN 995. Doctoral Seminar in Analytics and Operations. 2-5 Credits.**
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor.

**BSAN 998. Independent Study for Doctoral Students. 1-5 Credits.**
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team.

**BSAN 999. Doctoral Dissertation. 1-12 Credits.**
(V) Individual research work. Graded on a satisfactory progress/limited progress/no progress basis.

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**Business Courses**

**BUS 101. Business Majors, Careers and Professional Skills. 3 Credits.**
This course acquaints students with the nature of business majors and careers. With this knowledge, students can explore, engage and implement their academic and career interests within business. Students are introduced to the curricula requirements, expectations of business students, possible career paths, and the necessary professional skills in the business environment. Prerequisite: Open only to students with fewer than 60 hours.

**BUS 110. Introduction to Professionalism. 1 Credits.**
In this course, we position School of Business students for a productive university experience and lay the groundwork for their personal and professional development. We teach it through the lens of self discovery, self-awareness, self-management, academic planning, personal and professional development, and well-being. This course is only open to students pursuing a BSB degree. Students are encouraged to enroll in their first semester at the School. Enrollment restricted.

**BUS 120. Emerging Topics in Business. 1 Credits.**
In this course, we expose School of Business students to several cutting edge topics, trends and technologies (collectively, "topics") affecting businesses and business people and encourage students to think about how they will thrive in the face of change. We cover 3-6 topics during the semester. This course open only to BSB degree-seeking students, who are encouraged to enroll during their second semester in the School. Enrollment restricted.

**BUS 150. Foundations of Business. 3 Credits.**
This course introduces students to the intellectual foundations, historical context, and current environment for modern business, focusing on underlying economic and ethical concepts that guide allocation of resources. Examples of the topics covered include scarcity and property rights, fairness and equity, liberty and externalities, gains and losses from trade, competition and monopoly, intellectual property, and globalization. Enrollment restricted.

**BUS 177. First Year Seminar in Business. 3 Credits.**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in business. Does not contribute to major requirements in business. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**BUS 200. Business Leadership Seminar. 1 Credits.**
This course provides students with structured opportunities to engage in active career and major exploration, support leadership development, build professional skills, and promote self-discovery. The class is held for one hour a week and additional out-of-class activities are required. May be taken more than once; total credit not to exceed four hours. Prerequisite: Admission to the Business Leadership Program. Enrollment is restricted.

**BUS 210. Career Management and Planning. 1 Credits.**
In this course, we connect School of Business students with a career advisor and focus them on building up their career-related knowledge and skills. Students will choose focused learning activities that meet their specific career goals and needs, and they will improve their professional resume and interviewing skills. This course open only to BSB-degree-seeking students with 30 or more credit hours. Students are encouraged to enroll their sophomore year or, if later, their first semester upon admission. Prerequisite: BUS 110 or concurrent enrollment.

**BUS 230. Introduction to Professions in Business. 1 Credits.**
In this course, we explore the breadth of careers available to students earning a business degree and cover a variety of career-related topics in multiple business disciplines. We emphasize both current practice and projected industry trends and involve guest speakers. Students are encouraged to take this course (or ACCT 220, BSAN 220, FIN 220, IST 220, MKTG 220 or SCM 220) in their sophomore year or their first year at the School, whichever is later. Check with your advisor to see which 220 course the major requires and when it encourages you to take it. Prerequisite: BUS 210 or concurrent enrollment.

BUS 300. Special Topics in Business: _______. 1-3 Credits.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of business topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor.

BUS 305. Business Writing. 3 Credits.
This course explores the theory and practice of written communication in business. Students learn strategies for writing clearly, effectively, and in a professional tone and format within different business contexts that require both expository and persuasive writing styles. This course focuses entirely on the writing process, including developing ideas, organizing, drafting, revising, and editing. Classes provide students multiple opportunities to write drafts, receive feedback, and revise their work. This is done in the context of analyzing, discussing, and critiquing different forms of business writing. Not open to students who have taken BUS 105. Prerequisite: Goal 2, Outcome 1.

BUS 310. Internships with Impact. 1 Credits.
Students will apply skills developed through the School of Business curriculum in an approved internship experience. Students must secure and perform a professional-level internship and complete other BUS 310 requirements. Students should review the BUS 310 Internship Course Guide for requirements for the internship and enrollment. Enrollment in BUS 310 must be approved by the Employer Relations & Internships program team prior to the internship experience. Students may not receive more than one hour of credit from BUS 310. Prerequisite: BUS 210 or equivalent. Approval by Employer Relations & Internships program team.

BUS 330. Directed Study in Business Topics. 1-3 Credits.
Individual study of selected topics in business administration not otherwise available to non-business majors. Topics selected will be determined by special interest and objectives of the student in consultation with the faculty member who will supervise the directed study or research. Prerequisite: 3.0 grade-point average, major in a field other than business administration and/or accounting, and permission of instructor offering the directed study and of the director of the undergraduate program.

BUS 399. Internship in Business. 1 Credits.
Internships provide opportunities for students to integrate their academic education with a meaningful experience in the business world. Internships allow students to further their professional growth, explore career pathways, expand professional networks, and increase the relevancy of their academic course work. The internship course combines job-related activities of the internship position with a set of academic requirements. These requirements include academic assignments as well as a pre- and post-internship seminar held in the semester before and after the semester in which the internship occurs. Internships for credit must be approved by the coordinator of the internships prior to the internship experience. BUS 399 is limited to one (1) credit hour per offering, but students may count a maximum of two (2) cumulative credit hours of BUS 399 toward degree requirements. Internships must satisfy specific criteria in order to qualify for academic credit. Contact Business Career Services in 1130 Capitol Federal Hall for information regarding the process of having an internship evaluated for academic credit. Prerequisite: Approval of the internship; two of the following: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311, SCM 310 or SCM 311. Enrollment restricted.

BUS 400. Special Topics in Business: _______. 1-5 Credits.
A special variable-topic seminar open to seniors and graduate students meeting the requirements established by the faculty members offering the particular seminar. Its purpose is to allow the occasional offering of business-related topics not adequately covered in any regular course available to students of the School of Business. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

BUS 410. Professionalism Capstone. 1 Credits.
In this senior-level course, we recognize student accomplishment under the Business School's points program; help students integrate and synthesize their development while at college; and lay the groundwork for a successful transition to life after college. Prerequisite: BUS 110, BUS 120, BUS 210, BUS 220 or equivalent and the BUS 410 Points Prerequisite, as stated in the applicable BUS 410 Professionalism Capstone Course Guide. Not available to students with fewer than 90 credit hours.

BUS 450. Literary and Historical Narratives for Professional Enrichment. 3 Credits.
This course develops larger possibilities and purposes for students' professional lives through a sampling of timeless narratives that transcend the circumstances of their own time and place. Through a seminar format, students will enjoy the opportunity and pleasures of discovering or remembering the wisdom of leadership unbounded by time or place. A business endeavor demands careful reasoning and creative action if it is to serve those to whom it obligates itself. Timeless literary and historical narratives are a deep well of learning that develop, support, and elevate professional enrichment. Enrollment by application only.

BUS 500. Individual Research in Business. 1-5 Credits.
Individual study of selected topics in business not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311, SCM 310 or SCM 311; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted.

BUS 725. Capstone. 6 Credits.
The capstone course emphasizes leadership, analysis, and decision-making in a practical business environment, where students will demonstrate synthesis and mastery of the concepts explored in previous courses. The course is designed around four discrete blocks in which students will focus their learning through a combination of in-depth study and reflection, with each block ending with a data-driven case study intended to measure individual understanding and application of the ideas addressed in that particular block. Ultimately, the goal of this course is to posture the student to provide practical leadership and sound decisions in a dynamic and complex business environment, achieving what the ancient Greeks termed "phronesis"—practical wisdom that weaves together judgment, intellect, and experience to drive better decision-making in business leaders.

BUS 801. Professional Skills Development. 0.5 Credits.
A series of workshops for graduate business students to provide foundational and supplemental skill development in such areas as leadership training, career development, communications, negotiations,
ethical behavior, technology, business writing, and market-based thinking. This course is open only to students in the full-time MBA program.

BUS 810. Kansas Small Business Projects. 1-4 Credits.
The course provides an active learning opportunity to complement classroom learning. Many different enrichment activities can be used to provide an opportunity to apply classroom knowledge to specific situations. Some examples of possible enrichment activities include, but are not limited to case competitions, community consulting activities, communication skills workshops, leadership and team building exercises, intensive simulation. The principal objectives of the course are to enhance "doing" skills and help students turn classroom knowledge into action, to emphasize collaboration and team initiatives, to develop collaborative and cooperative behaviors, and to develop an understanding of how "failure" can ultimately be the best learning tool. Topics will vary depending on the enrichment activity. This course may be repeated for credit. This course is open only to students in the full-time MBA program.

BUS 811. Application and Integration Course. 4 Credits.
The course provides an active learning opportunity to complement classroom learning. Many different enrichment activities can be used to provide an opportunity to apply classroom knowledge to specific situations. Some examples of possible enrichment activities include, but are not limited to case competitions, community consulting activities, communication skills workshops, leadership and team building exercises, intensive simulation. The principal objectives of the course are to enhance "doing" skills and help students turn classroom knowledge into action, to emphasize collaboration and team initiatives, to develop collaborative and cooperative behaviors, and to develop an understanding of how "failure" can ultimately be the best learning tool. Topics will vary depending on the enrichment activity. This course may be repeated for credit. This course is open only to students in the full-time MBA program.

BUS 825. Internship Program. 1 Credits.
The Internship Program provides a continuing learning opportunity between the first and second year of MBA studies which compliments the comprehensive, research based in class learning with a full immersion clinical experience. The principal objectives of the course are to acquire a meaningful work related education, witnessing how the classroom instruction translates to practical applications and to develop interpersonal and executive skills. This course provides clinical applications of business problem solving and consulting. The course links the models and theories studied in the classroom with field applications to solve real business problems requiring real time analysis, consideration of practical alternative strategies, determination of sales and profit implications of the recommended course of action. A principal objective is for the student to acquire first-hand industry knowledge and witness varying client management styles. Topics include consulting processes and successful consultant characteristics, hypothesis generation, problem identification and differentiation of root cause vs. symptom, application of market research methods, solution modeling, and presentation of solution. This course is open only to students in the full-time MBA program.

BUS 895. Regionalism - From Concepts to Working Models. 2 Credits.
This seminar course introduces students to the concept of regionalism and progresses through the development of working models for regional approaches to business/economic development and governance. Topics include understanding the complexities related to doing business and governing in the Kansas City region, models of effective leadership necessary to manage and govern in the region, the economic impact of border wars, economic incentive policies that promote small business growth and entrepreneurs, and moving regionalism from concepts to working models.

BUS 901. Research Issues in Business Administration. 2 Credits.
(F) A core course for Ph.D. students (with the exception of Finance and Management) majoring in business administration. Provides a workshop format for discussion of the currently prevalent research methodologies and problems being addressed in the areas of accounting, finance, human resources management, information systems, marketing, decision sciences, organizational behavior, and strategic management. All Ph.D. students and faculty are encouraged to attend workshops of interest. Prerequisite: Admission to the Ph.D. program.

BUS 902. Teaching Seminar. 1 Credits.
(F) The objective of this course is to improve the teaching effectiveness of the participants. Highly effective teachers demonstrate their teaching techniques and discuss the reasons underlying their actions. School of Business Ph.D. students are required to take this seminar during the first semester in which they are the instructor of record for a course.

BUS 903. Responsible Conduct of Research. 2 Credits.
The major objectives of this doctoral level course on the responsible conduct of research are to build students' abilities to analyze ethical issues, and to expose students in advance to various issues that may arise while engaging in the research endeavor. Issues will be covered that arise in such areas as research design, data collection and management, the use of human subjects, data analysis, authorship, publication, peer review, and other aspects of professional practice.

Business Courses

DSCI 400. Special Topics in Decision Sciences: _____ 1-5 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of decision science topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

DSCI 500. Individual Research in Decision Sciences. 1-5 Credits.
Individual study of selected topics in decision sciences not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SCM 310 or SCM 311; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted.

DSCI 710. Business Forecasting Methods and Applications. 3-4 Credits.
A survey of forecasting methods and application. Essential concepts underlying these methods are discussed, including cost and performance characteristics. Criteria for selection of appropriate methods are developed. Issues concerning effective utilization for forecasting in several corporate planning situations are considered. Prerequisite: IST 701. Enrollment restricted.

DSCI 712. Advanced Statistics I. 2 Credits.
This class covers the process of building statistical models from observed data: including identifying an appropriate model, checking the fit of the model to observed data, and using the model to make inferences. An emphasis is upon development of models that can help answer questions of interest. The class covers multiple regression, variable selection in multiple regression, analysis of variance and logistic regression. Prerequisite: DSCI 701 or an introductory statistics class. Enrollment restricted.

DSCI 715. Managing for Quality Improvement. 3 Credits.
This course will take a closer look at various aspects of the total quality theory and its practices. Particular attention will be paid to the
foundations of total quality theory including Deming’s 14 principles of management and key tenants of Juran and Crosby. Additional topics include an examination of the continual improvement process in theory and action, strategies for getting started, and issues to address during a transformation into a total quality model of operation. Prerequisite: DSCI 702. Enrollment restricted.

DSCI 716. Business Analytics Models. 2 Credits.
This course will cover construction and solution of analytic models for problems in the business domain using spreadsheet software. Examples of analytic models are linear, nonlinear, and integer programming models. Examples of business problems are advertising, workforce scheduling, aggregate planning, blending, production process, financial, transportation, assignment, network flows, and shortest path determination.

DSCI 717. Business Analytics Projects. 2 Credits.
Business analytic projects are assigned to teams in this class and the teams are charged with identifying the project problem, obtaining data relevant to the problem, developing a model that represents the problem, and using the model and the data to make inferences relevant to the project. The data analysis tools that have been covered in previous classes will be used to help perform these projects. Prerequisite: DSCI 712, DSCI 713, DSCI 716, IST 713, and DSCI 714.

DSCI 720. Operations Management. 2 Credits.
This course is a survey of the strategic concepts and techniques used in managing the operations function in both the manufacturing and the service sectors. The course has the following principal objectives: to identify different kinds of operations problems and understand their impact on business and to apply basic operations analysis techniques to provide business solutions and to find improvement strategies. Topics covered include process and cycle time analysis, capacity planning, service operation and waiting line management, sales and operations planning, inventory management, and constraint management. Prerequisite: DSCI 701 or DSCI 810. Enrollment restricted.

DSCI 730. Managing Customer Focused Enterprises. 2 Credits.
An introduction to management principles supporting the concept that a primary goal of a business is to meet the needs of its customers. To accomplish this goal, organizations must design, build, and deliver products and services that meet customer needs in a resource effective manner. Topics covered include the role of the customer, the nature of process improvement in meeting customer needs in a cost effective manner, the view of the organization as a system, the reduction of variation in all organizational processes, the nature of continual organizational learning, and the responsibilities of management in this approach.

DSCI 740. Seminar in Decision Sciences: ____. 3 Credits.
This course will cover theories of decision making under uncertainty and competition. Examples of topics that may be covered are Bayesian decision theory, game theory, habitual domain theory for forming winning strategies and effective decision making. Automated aids for decision making such as expert systems may also be covered. Prerequisite: DSCI 701 and DSCI 702, or consent of instructor. Enrollment restricted.

DSCI 746. Contemporary Issues in Operations Management. 3 Credits.
This course will examine the major manufacturing and the operating strategies used by firms today. A partial list of these strategies include quality improvement, theory of constraints, just-in-time, and manufacturing planning and control systems. Pros and cons of each strategy will be discussed. Implementation issues will also be discussed. Prerequisite: DSCI 702. Enrollment restricted.

Business Courses

ENTR 177. The Entrepreneurial Mindset. 3 Credits.
Entrepreneurs are passionate, creative, idea people. They ask the tough why not questions, they seek and seize opportunities, they rarely accept the status quo, and throughout history entrepreneurs have developed innovative answers to the most challenging issues in technology, business and society. This course will allow students to become rigorous, agile thinkers by flexing their own critical thinking muscles through an examination of the entrepreneurial mindset. What made entrepreneurs like Steve Jobs, Bill Gates, Mary Kay, Mark Zuckerberg, and Oprah so wildly successful? Are there common characteristics that you may want to adopt to increase the likelihood of your own success? We'll look at them, and look at ourselves to see if and how to apply their innovative techniques to our own pursuits. Maybe starting the next Apple Computer company is in your future. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

ENTR 300. Special Topics in Entrepreneurship: ____. 1-5 Credits.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of business topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by the instructor.

ENTR 301. Starting Your Own Business. 3 Credits.
In this course the student examines the disciplines which comprise the critical success factors in entrepreneurship and develops a fundamental understanding of the basic skill set required to manage his/her own business. The course will emphasize the Entrepreneurial Process in which each of the following disciplines will be introduced so that the student understands meaning, interrelationship and the application of the subject matter. First the student will be introduced to entrepreneurship and the personal attributes which historically have produced successful entrepreneurs. Further, the student will learn how to evaluate business opportunities via Feasibility Analysis which encompasses industry and competitor analysis, developing an effective business model, building a new venture team, developing an effective marketing plan, assessing the new ventures financial strengths and preparing the proper ethical and legal foundation for the new business. Finally, on completion of the course the student will possess a beginning comprehension for getting financing for the new venture and preparing for the challenges of business growth.

ENTR 302. Financing Your Own Business. 3 Credits.
This course introduces the non-business student to the language of business, accounting, and its applications in the financial management of new and small business environments. Students will learn how to account for the various activities of the start-up and early stage new venture as well as the importance, utility and construction of financial statements. Further, students will acquire the ability to construct financial projections for a start-up firm and monitor the financial performance of the growing business with a focus on cash flow management. Finally, students will be introduced to various remedies in the event that performance does not meet expectations. Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1, or instructor approval.

ENTR 303. Marketing Your Own Business. 3 Credits.
This course focuses on the marketing development of new business ideas for small businesses including creating an environment conducive to innovation, recognizing business opportunities, assessing the industry and its potential customer segments, barriers to entry and competitive set. In addition, students will acquire an understanding of the primary marketing tools available to the entrepreneur to drive customer awareness, initial
and repeat purchase and the ability to fully integrate each of those tools into a cohesive, integrated marketing plan, all on an extremely limited budget as typifies start up businesses. Upon successful completion of the course, students will understand how to plan an entrepreneurial marketing program, implement it and evaluate its performance. This includes market analysis, segmentation, the marketing mix of product, price, promotion and distribution and marketing strategy, both long term and annually. Prerequisite: ENTR 301 or ENTR 410, or instructor approval.

ENTR 304. Launching Your Own Business. 3 Credits.
This course provides the student with an opportunity to prepare a complete go-to-market business plan for a new venture which leverages the students' major area of study so that following graduation the student has the option of pursuing self employment in the launch of their own business. The students' expertise from their area of major study will be combined with the entrepreneurial skills acquired from the prior three courses in this Certificate sequence. Ideally, this course will originate from the students' school of origin, either selected from a roster of existing qualifying courses or independent study with a faculty member in the students' field of major study. In the event that the students' school of major study cannot provide the teaching resources for independent study, it will be provided by the School of Business, Center for Entrepreneurship. If the faculty at the students' school of origin wants to develop a specific course which completes the Certificate requirements, course preparation funding has been arranged via a grant from the Kauffman Foundation. Prerequisite: ENTR 303.

ENTR 400. Special Topics in Entrepreneurship: _____ 1-5 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of entrepreneurship topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

ENTR 410. Introduction to Entrepreneurship. 3 Credits.
In this course the student examines the disciplines which comprise the critical success factors in entrepreneurship and develops a fundamental understanding of the basic skill set required to manage his/her own business. Learning will be achieved by both study and discussion of key entrepreneurial business issues as well as the critical appraisal of new venture business plans as presented in the text. Readings in entrepreneurship and case studies, contained in the text as well as in video presentations, will be used to illustrate the essential entrepreneurial management issues. Enrollment restricted.

ENTR 430. Corporate Entrepreneurship. 3 Credits.
This course explores challenges to entrepreneurship and innovation in large established organizations and how entrepreneurial principles can be applied to drive competitive advantage. Applications include exploration and development of new products, business processes, markets, customers, and organizational structures. The course emphasizes experiential learning through the study of large companies that have successfully implemented entrepreneurial practices. Enrollment restricted.

ENTR 450. Advanced Entrepreneurship. 3 Credits.
This course builds upon the foundation created by the Introduction to Entrepreneurship course. It will provide the student with two learning opportunities: first, it details the critical success factors of starting a new venture, growing it and finally harvesting it profitably; secondly, this course will provide hands-on instruction regarding the development of a complete and compelling business plan. Students will work as teams on the development of a business plan for the purposes of commercializing an innovative business concept or KU lab-sourced technology. These student teams will also present and defend their business plans at various venues including intercollegiate competitions for the purposes of improving their team interaction skills, their presentation capabilities. Prerequisite: ENTR 301, ENTR 410, or instructor approval.

ENTR 460. Fundamentals of Entrepreneurial Finance. 3 Credits.
This foundational entrepreneurial finance course will focus on financing young high-growth potential private companies (start-ups). Students will learn how to make investment and financing decisions in a startup environment which is characterized by very high degrees of uncertainty and information asymmetry, from both founder/entrepreneur and investor perspectives. Topics include forecasting methods, debt and equity financing considerations, bootstrapping and emerging funding alternatives (grants, strategic partnerships and crowd funding). Prerequisite: ENTR 301 or ENTR 410, and FIN 305 or FIN 310 or FIN 311 or FIN 302, or instructor approval.

ENTR 470. Entrepreneurial Marketing. 3 Credits.
The course focuses on the development of new business ideas for new or established organizations, creating an environment conducive to innovation, recognizing business opportunities, assessing the industry, potential customers, market segment, barriers to entry and competitor set. The development of each of these subjects will lead to a feasibility analysis which each student will prepare for his/her chosen new venture. This course will also examine the development of the optimal sales and distribution. Additionally, the course will provide an understanding of how to translate the product/service idea to the business concept and marketing positioning. Lastly, students will acquire an understanding of the primary marketing tools available to the entrepreneur to drive customer awareness, initial and repeat purchase and the ability to fully integrate each of those tools into a cohesive, integrated marketing communications program. Prerequisite: ENTR 301 or ENTR 410 and MKTG 310 or MKTG 311, or instructor approval.

ENTR 480. Management of Small Business. 3 Credits.
This course looks at the unique aspects of owning and managing a small business, family business or franchise, with the owners having close control over operations and management decisions. Students will examine the startup options of buying, starting, or franchising; operations and human resources management; the unique factors of the family business; marketing, including setting prices, choosing a location, developing competitive advantage, positioning, and promotion with limited resources; financial statements, accounting systems, financing, cash flow and the working-capital cycle; and exit through selling, bequeathing, or dissolving the business.

ENTR 490. Social Entrepreneurship. 3 Credits.
This course emphasizes the idea that every new venture should seek not only a return to its stakeholders, but also a return to society. Students will be exposed to a variety of entrepreneurial ventures that demonstrate the establishment of both economic sustainability and social benefit as a part of new venture success, whether it be in a for profit or nonprofit venture. A variety of stimuli will be employed to generate discussion and allow for experiential learning including: an online new venture simulation game, analysis of social entrepreneurship oriented business cases, and development of a new venture social impact project. Prerequisite: ENTR 301 or ENTR 410, or instructor approval.

ENTR 500. Individual Research in Entrepreneurship: _____. 1-5 Credits.
Individual study of selected topics in entrepreneurship not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Enrollment restricted.

ENTR 701. Entrepreneurship. 3 Credits.
Entrepreneurs are uniquely critical thinkers, they have distinguished themselves by not accepting the status quo, asking the why not questions, developing innovative answers to many challenging issues in science, technology, social issues and commerce. This course will allow students to become rigorous, versatile and agile thinkers by flexing their own critical thinking muscles through an examination of the entrepreneurial mindset and learn how to apply that capability to starting a new business, either their own business or a new business opportunity for a larger organization. This will be accomplished by learning the entrepreneurial process including a lean startup approach, validating the opportunity and the business model via direct customer feedback, projecting the market value of the opportunity with sales, profits forecasting and preparing a commercialization plan that provides a comprehensive opportunity development roadmap. Prior business knowledge is not required; however an open mind that embraces innovative problem solving is essential. Not open to KU School of Business students.

ENTR 702. Financing Your Own Business. 3 Credits.
This course introduces the non-business student to the language of business, accounting, and its applications in the financial management of new and small business environments. Students will learn how to account for the various activities of the start-up and early stage new venture as well as the importance, utility and construction of financial statements. Further, students will acquire the ability to construct financial projections for a start-up firm and monitor the financial performance of the growing business with a focus on cash flow management. Finally, students will be introduced to various remedies in the event that performance does not meet expectations. Not open to students in the School of Business.

ENTR 703. Marketing Your Own Business. 3 Credits.
This course focuses on the marketing development of new business ideas for small businesses including creating an environment conducive to innovation, recognizing business opportunities, assessing the industry and its potential customer segments, barriers to entry and competitive set. In addition, students will acquire an understanding of the primary marketing tools available to the entrepreneur to drive customer awareness, initial and repeat purchase and the ability to fully integrate each of those tools into a cohesive, integrated marketing plan, all on an extremely limited budget as typifies start up businesses. Upon successful completion of the course, students will understand how to plan an entrepreneurial marketing program, implement it and evaluate its performance. This includes market analysis, segmentation, the marketing mix of product, price, promotion and distribution and marketing strategy, both long term and annually. Not open to students in the School of Business.

ENTR 704. Launching Your Own Business. 3 Credits.
This course provides the student with an opportunity to prepare a complete go-to-market business plan for a new venture which leverages the students’ major area of study so that following graduation the student has the option of pursuing self employment in the launch of their own business. The students’ expertise from their area of major study will be combined with the entrepreneurial skills acquired from the prior three courses in this Certificate sequence. Ideally, this course will originate from the students’ school of origin, either selected from a roster of existing qualifying courses or independent study with a faculty member in the students’ field of major study. In the event that the students’ school of major study cannot provide the teaching resources for independent study, it will be provided by the School of Business, Center for Entrepreneurship. If the faculty at the students’ school of origin wants to develop a specific course which completes the Certificate requirements, course preparation funding has been arranged via a grant from the Kauffman Foundation. Not open to students in the School of Business. Prerequisite: ENTR 703.

ENTR 830. Advanced Entrepreneurship. 3 Credits.
This course in entrepreneurship shows the student how to start, grow and harvest a business. Students learn how diverse business disciplines integrate to form an optimal go-to-market plan for a given new business opportunity which maximizes likelihood of success and investor return. They learn how to commercialize a technological or social business opportunity and apply the models and theories acquired from other classes to clinical practice. Topics include identifying new venture opportunities, writing the business plan, validating the market opportunity, developing the business model and go-to-market strategy, preparing financial projections and new venture valuations, raising equity capital, understanding deal structures and terms, negotiating the term sheet, raising debt capital, and presenting the business plan to investors. This course is open to those with admission to a graduate business program.

ENTR 850. Advanced Entrepreneurship. 3 Credits.
This course will focus on identifying and evaluating the business opportunity, the strategies to be developed and implemented as well as entrepreneurial capabilities required for marketplace success. Development of a robust and compelling business concept will be emphasized. Analyses of the industry, competition, the new business points of strategic leverage, creation of an effective business model and funding strategies will be studied. Financing the new venture, sourcing and structuring the required deal capital will be explored and attention to managing rapid growth and exit strategies will be provided.

FIN 101. Personal Finance. 3 Credits.
This course will provide the tools to help you better understand and improve the financial decisions you'll make throughout your life. You will learn how to analyze the financial effects of spending and investing decisions and how to use credit well, including credit cards. You will develop an understanding of the basics of mortgages, purchase (buy) versus lease (rent) decisions, savings, investments, and insurance. You will acquire an appreciation of the time value of money that provides a foundation for reasonable financial planning. Given the basic tools and terminology you'll learn, the course will help you develop solutions to various practical financial problems that you will face. Not open to students who have taken FIN 301. This course is open to all university students.

FIN 208. Principles of Insurance and Risk Management. 3 Credits.
This course provides an introduction to risk and insurance. Topics include an introduction to moral hazard and adverse selection. The identification and evaluation of risk are emphasized. Business and personal risk are considered, as well as the use of insurance as a risk management tool. Not open to students who have taken FIN 408 or Business School students.
FIN 230. Introduction to the Finance Profession. 1 Credits.
In this course, we introduce current Finance students to possible career opportunities in the profession. Students will have an opportunity to interact with current Finance professionals in multiple fields. We emphasize both current practice and projected industry trends and involve guest speakers. Note: Check with your Major to see which 230 course it requires (ACCT 230, BSAN 230, BUS 230, FIN 230, IST 230, MKTG 230 or SCM 230) and when it encourages you to take it. Prerequisite: BUS 210 or concurrent enrollment.

FIN 301. Personal Finance. 3 Credits.
This course will provide the tools to help you better understand and improve the financial decisions you'll make throughout your life. You will learn how to analyze the financial effects of spending and investing decisions and how to use credit well, including credit cards. You will develop an understanding of the basics of mortgages, purchase (buy) versus lease (rent) decisions, savings, investments, and insurance. You will acquire an appreciation of the time value of money that provides a foundation for reasonable financial planning. Given the basic tools and terminology you'll learn, the course will help you develop solutions to various practical financial problems that you will face. Not open to students who have taken FIN 101. This course is open to all university students.

FIN 302. Finance Scholars I: Introduction to Financial Institutions. 1 Credits.
This course acquaints students with the financial institutions. Topics include a review of major international, national, regional money center institutions, investment management and other related institutions. The management and key revenue generators for these institutions will also be discussed. Enrollment restricted.

FIN 303. Finance Scholars II: Financial Careers and Institutions. 1 Credits.
This course acquaints students with the careers in financial institutions. Topics include: careers in major international, national, and regional money center institutions; ethical issues related to financial careers; a comparison of recruiting practices in investment management, corporate finance positions. Placement and recruiting practices in those institutions would be reviewed. Enrollment restricted.

FIN 304. Careers in Finance. 1 Credits.
This course will introduce current Finance students to the possible career opportunities in the profession. Students will have the opportunity to interact with current Finance professionals in multiple fields. Emphasis is on current practice and projected industry trends. Prerequisite: FIN 310 or coenrollment in FIN 310.

FIN 305. Survey of Finance. 3 Credits.
The purpose of this course is to help the student develop a basic understanding of Finance. Topics covered include (1) financial instruments and the markets in which they are traded, (2) financial planning and analysis, (3) the cost and time-value of money, and (4) the fundamentals of investor decision-making. (Not open to students with credit in BBA 306, FIN 310, or FIN 311.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1 and ACCT 200 or ACCT 205.

FIN 310. Finance. 3 Credits.
This course consists of the analysis of problems relating to estimating the financial needs of an enterprise and to evaluating the alternative means of providing and utilizing both temporary and permanent capital. The relationship of current financial decisions with financial policy is analyzed from the viewpoint of management and the stockholder. Prerequisite: Prior completion of ACCT 200; ECON 142 or ECON 143 and prior completion or co-enrollment in BSAN 202, DSCI 202 or DSCI 301.

FIN 311. Finance, Honors. 3 Credits.
Honors treatment of this course consists of the analysis of problems relating to estimating the financial needs of an enterprise and to evaluating the alternative means of providing and utilizing both temporary and permanent capital. The relationship of current financial decisions with financial policy is analyzed from the viewpoint of management and the stockholder. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: Prior completion of ACCT 200; ECON 142 or ECON 143 and prior completion or co-enrollment in BSAN 202, DSCI 202 or DSCI 301.

FIN 400. Special Topics in Finance. 1-5 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of finance topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

FIN 408. Principles of Insurance and Risk Management. 3 Credits.
This course provides an introduction to risk and insurance. Topics include an introduction to moral hazard and adverse selection. The identification and evaluation of risk are emphasized. Business and personal risk are considered, as well as the use of insurance as a risk management tool. Not open to students who have taken FIN 208. Enrollment restricted.

FIN 410. Investment Theory and Applications. 3 Credits.
This course emphasizes the theoretical and practical aspects of investments. Financial instruments such as common stocks, bonds, options, futures, and mutual funds are analyzed in a theoretical context using efficient market theory, capital market theory, option pricing, and stock valuation models. Experience in practical applications is generally obtained through the use of case studies. Prerequisite: FIN 310 or FIN 311. Enrollment restricted.

FIN 411. Investment Theory and Applications, Honors. 3 Credits.
Honors treatment of this course emphasizes the theoretical and practical aspects of investments. Financial instruments such as common stocks, bonds, options, futures, and mutual funds are analyzed in a theoretical context using efficient market theory, capital market theory, option pricing, and stock valuation models. Experience in practical applications is generally obtained through the use of case studies. Prerequisite: FIN 310 or FIN 311. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

FIN 413. Financial Markets and Intermediaries. 3 Credits.
Explores the financial institutions that create credit and liquidity for businesses and other borrowers, the financial instruments that facilitate credit and liquidity creation, and the markets in which those instruments are sold or traded. Special emphasis is paid to commercial banks, but non-depository intermediaries such as finance companies, mortgage banks, insurance companies and investment banks are also discussed. Presents and analyzes the workings of money markets, bond markets, commercial loan markets, mortgage markets and foreign exchange markets. Throughout the course, the determination of interest rates, as well as the sources and implications of credit risk, liquidity risk and interest rate risk, are central to the discussion. The course closes with an introduction to risk management at financial intermediaries using on-balance sheet (e.g., loan underwriting, asset-liability management) and off-balance sheet (e.g., asset securitization, interest rate, foreign exchange and credit derivatives) tools. Prerequisite: FIN 310 or FIN 311. Enrollment restricted.

FIN 414. Financial Markets and Intermediaries, Honors. 3 Credits.
Honors treatment of this course explores the financial institutions that create credit and liquidity for businesses and other borrowers, the financial instruments that facilitate credit and liquidity creation, and
the markets in which those instruments are sold or traded. Special emphasis is paid to commercial banks, but non-depository intermediaries such as finance companies, mortgage banks, insurance companies and investment banks are also discussed. Presents and analyzes the workings of money markets, bond markets, commercial loan markets, mortgage markets and foreign exchange markets. Throughout the course, the determination of interest rates, as well as the sources and implications of credit risk, liquidity risk and interest rate risk, are central to the discussion. The course closes with an introduction to risk management at financial intermediaries using on-balance sheet (e.g., loan underwriting, asset-liability management) and off-balance sheet (e.g., asset securitization, interest rate, foreign exchange and credit derivatives) tools. Prerequisite: FIN 310 or FIN 311. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

FIN 415. Corporate Finance. 3 Credits.
Building on the concepts of present value, the focus of this course is on the theory of and methods for corporate asset selection. The course includes coverage of important technical issues such as risk analysis, evaluation of mutually exclusive projects, capital rationing, and leasing. Some attention usually will be devoted to the topic of project financing. Prerequisite: FIN 310 or FIN 311. Enrollment restricted.

FIN 416. Corporate Finance, Honors. 3 Credits.
Honors treatment of this course builds on the concepts of present value. The focus of this course is on the theory of and methods for corporate asset selection. The course includes coverage of important technical issues such as risk analysis, evaluation of mutually exclusive projects, capital rationing, and leasing. Some attention usually will be devoted to the topic of project financing. Prerequisite: FIN 310 or FIN 311. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

FIN 418. Modeling and Risk Analysis. 3 Credits.
An introduction to the concepts, methodologies, and applications of risk analysis and modeling. This course is designed primarily to develop practical modeling skills with spreadsheet software. To accomplish this, material from across the finance discipline will be covered as well as material from the supply chain management discipline. Examples from corporate finance, investments, financial derivatives, real estate, personal finance, and supply chain management methods will be used to demonstrate modeling. Not open to students with credit in FIN 418 or FIN 460 or SCM 418. (Same as SCM 418.) Prerequisite: FIN 310 or FIN 311. Enrollment restricted.

FIN 420. International Finance. 3 Credits.
The economic determinants of exchange rates are discussed. This is followed by an examination of the financing problems faced by the multinational corporation and the international portfolio manager, arising from the international nature of their environment. Topics include spot, forward, futures, and options markets in foreign currency, international risk management, purchasing power parity, interest rate parity, covered interest arbitrage, and contemporary issues in international financial management. Prerequisite: FIN 413 or FIN 414. Enrollment restricted.

FIN 422. Financial Modeling. 3 Credits.
This course is designed to develop practical financial modeling skills. Students will build financial models in Excel using actual case studies, current methodologies, best practices, and sensitivity analyses. The course will give an in-depth understanding of financial statement modeling, DCF, trading comps, and transaction comps modeling. Prerequisite: FIN 310 or FIN 311. Enrollment restricted.

FIN 424. Operational Risk Management. 3 Credits.
This course explores real and financial risks faced by businesses and the management of those risks. Topics include risk identification, risk evaluation, and the management of risk through the use of insurance. Prerequisite: FIN 310.

FIN 425. Futures and Options. 3 Credits.
This course examines the use of forwards, futures, swaps, options, and related financial derivatives for hedging, arbitrage, and speculative purposes in the global environment. The course focuses on understanding how firms can manage interest rate risk, exchange rate risk, and commodity price risk using these derivatives. The emphasis is on understanding the motivation and the techniques behind financial engineering with these derivatives, as practiced by firms and individuals to maximize value in global markets. Prerequisite: FIN 410 or FIN 411. Enrollment restricted.

FIN 428. Real Estate Investment. 3 Credits.
Students study real estate as an investment asset class. Students first study home pricing, mortgage financing, the buy-versus-rent decision, and other aspects of residential real estate. Then students study investment fundamentals of income-producing commercial property segments (multifamily, office, industrial, and retail). Students apply economic concepts and analytical models for valuing income-producing properties. Finally, students investigate investment vehicles for portfolio investment in real estate such as REITs, real estate-sensitive industrial sectors, mutual funds, and ETFs. (Not open to students with credit in FIN 400: Real Estate Investment.) Prerequisite: FIN 413 or FIN 414. Enrollment restricted.

FIN 435. Commercial Banking. 3 Credits.
An in-depth study of commercial banking. The primary focus is the value maximization of the bank, given the legal, technological, economic, and competitive constraints facing bank managers. A second focus is the central role played by commercial banks in financing small, middle-market, and large businesses. The course emphasizes bank investment decisions (e.g., underwriting loans), financing decisions (generating deposits, capital adequacy), risk-management decisions (loan portfolio diversification, managing credit risk and liquidity, hedging interest rate risk), bank business strategies, and the government regulations under which banks must operate. Prerequisite: FIN 413 or FIN 414. Enrollment restricted.

FIN 445. Fixed Income. 3 Credits.
This course is an introduction to bond markets and bond derivatives. Bonds and associated financial derivatives include securities that promise a fixed income stream and by extension all securities whose valuation and hedging are related to interest rates. The objective of this course is to provide students with a guide to financial markets, institutions and instruments associated with debt funds and help them to understand the determinants of the general level and structure of interest rates. The focus of this course is on the concepts and tools that are useful to understand and interpret real world issues related to debt markets. Prerequisite: FIN 410 or FIN 411 and FIN 413 or FIN 414. Enrollment restricted.

FIN 448. Business Valuation. 3 Credits.
Apply finance principles to measure and manage the value of companies using a professional's step-by-step approach. In this course, students estimate free cash flows, economic value added, and cost of capital. They also forecast accounting statements, compare absolute and relative valuation techniques, and evaluate restructuring opportunities and potential flexibility options. Prerequisite: FIN 415 or FIN 416. Corequisite: ACCT 321 or ACCT 410 or ACCT 411. Enrollment restricted.

FIN 450. Applied Portfolio Management, Honors. 4 Credits.
Honors treatment of this course provides the student with practical portfolio experience. Students actually and collectively manage funds in
an endowment account of the benefit of the University and the School of Business. Experienced instructors, speakers, and financial analysts from Wall Street give the class a hands-on real life experience in analyzing and managing securities. The student will be familiarized with many different applied valuation procedures such as cash flows and growth models in an event driven context, as well as market capitalization techniques. Individual securities and stock options are analyzed on a continuing basis. Prerequisite: FIN 410 or FIN 411. Enrollment by application only.

FIN 454. Portfolio Strategy. 3 Credits.
Investors construct portfolios by choosing allocations across asset classes and by selecting funds or managers within each asset class. This course will (1) examine methods to forecast return and risk across asset classes, including fixed income, equities, real assets, venture capital, buyouts, and hedge fund strategies, (2) describe ways to evaluate the performance of fund managers relative to appropriate benchmarks, and (3) consider optimal allocations among fund managers in various asset classes. Prerequisite: FIN 410 or FIN 411. Enrollment restricted.

FIN 462. Mergers and Acquisitions. 3 Credits.
This is a course about corporate “deals” - corporate transactions that change who owns a business or who controls it. Naturally, the course covers classical mergers and acquisitions, including the financial, strategic and regulatory issues. However, it also covers corporate governance and control, IPO’s (initial public offerings), financial distress, and venture capital and private equity. Finally, deals require deal-makers - the investment bankers. We’ll touch on aspects of investment banking, an industry that majors in finance and MBA’s often work in or have contact with. Prerequisite: FIN 415 or FIN 416. Enrollment restricted.

FIN 466. Entrepreneurial Finance. 3 Credits.
The entrepreneurial finance course will focus on valuing and financing young high-growth potential private companies (start-ups). The objective is for the students to learn how to make investment and financing decisions (and how to distinguish good from bad investments) in an environment characterized by very high degrees of uncertainty and information asymmetry. We will address this topic from two distinct perspectives: the perspective of users (entrepreneurs) and suppliers (venture capitalists and other private equity investors) of capital. In the beginning of the semester we will first take the perspective of the individual entrepreneur (or manager). We will focus on identifying good ideas (evaluating projects using different valuation techniques), separating them from bad ideas, and placing a quantitative value on these opportunities. This part will review different valuation methods used to value start-up companies. We will also deal with issues such as forecasting cash flows of a start-up firm and ways to grow the firm using internal resources. Then we will turn our attention to the next step in the entrepreneurial process - raising capital to take advantage of good opportunities. Specifically we will consider venture capital (independent venture capitalists, angels, and corporate venture capitalists) as a source of financing for start-ups. This part will provide overview of the venture capital industry (players, organizational forms, contracting) and introduce students to the challenges of structuring venture capital deals. In addition, we will cover other ways of raising capital to aid the growth of the entrepreneurial firm. The focus will be on the private debt market as well as other alternative sources of financing for start-up firms (SBA loans, SBICs, mezzanine financing, L/Cs, etc.). Finally, we will study the ways to harvest the ventures (IPOs, acquisitions, LBOs). Prerequisite: FIN 415 or FIN 416. Enrollment restricted.

FIN 468. Corporate Financial Policy. 3 Credits.
The course will have three primary objectives. First, students will review basic valuation methods, including instruction on the location of relevant resources. Some advanced valuation techniques will be examined, e.g., APV, multiples and capital cash flow. Finally, students will work to apply these techniques to particular corporate financial decisions. Prerequisite: FIN 415 or FIN 416. Enrollment restricted.

FIN 492. Honors Topics and Problems in Finance: _____ 1-5 Credits.
This honors topics seminar is open only to students meeting the requirements established by faculty members offering the course. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

FIN 500. Individual Research in Finance. 1-5 Credits.
Individual study of selected topics in finance not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: Approval of proposed plan of study by the instructor. Enrollment restricted.

FIN 600. Advanced Portfolio Management. 3 Credits.
This course is designed to give students increased practical portfolio experience. Students actually and collectively manage funds in an endowment account of the benefit of the University and the School of Business. Students will analyze portfolio decisions and determine the risk/reward profile of the portfolio. The student will apply many different valuation models to current and potential equity holdings in the portfolio. Individual securities and stock options are analyzed on a continuing basis. Enrollment restricted.

FIN 701. Finance. 3 Credits.
This course provides an overview of the challenges associated with the financial management of firms. The focus is on the practices followed by managers in raising and investing capital so as to maximize value. Topics include cash planning, working capital management, operating and financial risks, valuation of real and financial assets, and the cost of capital. Prerequisite: ACCT 701 or ACCT 706.

FIN 702. Business Finance for Supply Chain Management. 3 Credits.
Adopting the perspective of the CFO, this course focuses on the problems and opportunities, analytic methods, and solutions in the businesses’ (1) working capital management, (2) long-term capital investments, and (3) financing. The unifying theme involves balancing expected return and risk in order to maximize the financial value of the enterprise.

FIN 706. Finance. 3 Credits.
This course provides an overview of the challenges associated with the financial management of firms. The focus is on the practices followed by managers in raising and investing capital so as to maximize value. Topics include cash planning, working capital management, operating and financial risks, valuation of real and financial assets, and the cost of capital. Prerequisite: ACCT 706.

FIN 710. Investments I. 3 Credits.
This course covers financial instruments and markets used by investment professionals and the key concepts used in the construction and management of equity portfolios. Emphasis is placed on understanding and managing investment risk, on the concept of market efficiency, and the role of financial markets and institutions in shaping the investment environment. Topics include financial instruments; financial markets and institutions; risk and return; portfolio optimization; asset pricing models; and behavioral finance. Prerequisite: FIN 701. Enrollment restricted.

FIN 711. Investments II. 2 Credits.
This course covers bonds, bond markets, options, futures, and derivative securities. Emphasis is placed on the features, risks and valuation of fixed income and derivative securities. Topics include types of bonds and bond terminology; valuation of bonds; derivatives including options, futures
and swaps; and risk, return and diversification. Prerequisite: FIN 710. Enrollment restricted.

FIN 712. Business Investment. 2 Credits.
This course examines the tools for assessing the value of projects and capital investments, and the use of these tools in financial decision-making in public and private corporations. Topics to be covered include estimating the cost of capital, computing and discounting projected cash flows, capital budgeting, real options, and the intersection between business investment and strategy. Prerequisite: FIN 701. Enrollment restricted.

FIN 713. Business Financing. 2 Credits.
This course examines how firms finance their projects and investments, and how those corporate financing decisions impact firm value. Topics covered include capital structure, payout policy, security issuance, mergers and acquisitions, and corporate governance. Prerequisite: FIN 712. Enrollment restricted.

FIN 720. Advanced Investments. 2 Credits.
This course covers asset pricing models used by investment professionals to evaluate the performance of actively managed portfolios, such as mutual funds and hedge funds. Emphasis is placed on understanding managerial risk-taking and risk-adjusted performance. Topics include the Capital Asset Pricing Model (CAPM); multi-factor models; statistical analysis of portfolio returns; benchmark portfolios; the risk and assessment of portfolio performance; and the theory of active portfolio management. Prerequisite: FIN 711. Enrollment restricted.

FIN 722. Prediction Markets. 2 Credits.
Prediction markets are a type of derivative market which can be used to make forecasts about upcoming events. Research has shown that they leverage the incentives of financial markets and the wisdom of crowds to effectively pool large amounts of information and make accurate, real-time forecasts. The class will explore the theoretical underpinnings of prediction markets and how they have been applied to topics ranging from politics to athletics. The main focus will be on applications within firms. We will explore the strengths and weaknesses of prediction markets, using as the basis of our discussion cases from real-world applications. Prerequisite: FIN 711. Enrollment restricted.

FIN 724. Operational Risk Management. 3 Credits.
This course explores real and financial risks faced by businesses and the management of those risks. Topics include risk identification, risk evaluation, and the management of risk through the use of insurance. Prerequisite: FIN 701.

FIN 725. Business Valuation. 2 Credits.
This course applies finance principles to measure and manage the company value. In this course students estimate free cash flows, economic value added, and cost of capital. They forecast accounting statements and compare absolute and relative valuation techniques. Prerequisite: FIN 701 or ACCT 810 and ACCT 720. Enrollment restricted.

FIN 726. Financial Statement Analysis. 2 Credits.
This course covers topics in financial accounting and financial statement analysis. Accounting topics are taught from an external decision-maker's perspective. The course is intended to help students read and understand complex financial statements, and to extract key financial information from a mass of detail. Topics will vary over time but can include analyses of cash flows, quality and persistence of earnings, income recognition, restructuring, other special charges and off-balance sheet financing. Prerequisite: ACCT 701 or ACCT 810. Not open to MAcc students or students with credit in ACCT 320, ACCT 410, ACCT 721, or ACCT 722. Enrollment Restricted.

FIN 728. Fair Valuation. 3 Credits.
Apply finance principles to value entire businesses as well as their assets and liabilities, primarily based on financial reporting and tax accounting standards. The course begins with conducting valuation research, reorganizing financial statements, and interpreting financial ratios. Then values are estimated using the income (discounted cash flow) method, the market (multiples) method, and the asset (adjusted cost) method. In addition, the valuations of typical intangible assets including goodwill are addressed, and option valuation techniques for contingent items are introduced. The course also examines discounts for lack of control and lack of marketability. Prerequisite: FIN 310 or FIN 701 or equivalent.

FIN 735. International Finance. 2 Credits.
Markets for foreign exchange and foreign exchange derivatives are examined. This is followed by an exploration of financial decisions faced by multinational corporations and international portfolio managers, and how such decisions are affected by global economics conditions and various international risk factors. Topics can include managing foreign exchange exposure, financing the global firm, foreign direct investment and political risk, multinational capital budgeting, and international portfolio theory and diversification. Prerequisite: FIN 701 or ACCT 810. Enrollment restricted.

FIN 749. Advanced Topics in Finance: ______. 3 Credits.
A variable-topic course open only to graduate students in the Working Professional MBA program. Finance Topics can include derivatives and risk management, alternative investment strategy, entrepreneurial finance, fixed income, real estate finance, or other similar topics in finance, investments or valuation.

FIN 751. Corporate Finance. 3 Credits.
This course explores how businesses evaluate investment opportunities, deploy capital to enhance firm value, and raise capital to support business investment and growth. Principal objectives include: understanding the application of discounted cash flow techniques to evaluate investment opportunities and potential acquisitions; understanding alternative valuation techniques and their use in the analysis of real options; understanding how both young and mature firms raise capital from financiers and financial markets, as well as the factors that affect how firms choose to raise capital; and understanding the interaction between a firm's financing structure and its investment and payout policies. Topics include discounted cash flow techniques, real options analysis, capital structure, dividend payout policy, security issuance, mergers and acquisitions, and corporate governance. Prerequisite: FIN 706 or equivalent.

FIN 752. Financial Institutions and Markets. 3 Credits.
This course explores the financial institutions that create credit and liquidity for businesses and other borrowers, the financial instruments that facilitate credit and liquidity creation, and the markets in which those instruments are sold or traded. Current issues in conjunction with historical and evolutionary developments are a hallmark of this course. Throughout the course, the determination of interest rates, as well as the sources and implications of credit risk, liquidity risk and interest rate risk, are central to the discussion. The course closes with an introduction to risk management at financial intermediaries using on-balance sheet (e.g., loan underwriting, asset-liability management) and off-balance sheet (e.g., asset securitization, interest rate and credit derivatives) tools. Prerequisite: FIN 706 or equivalent.

FIN 753. Investments. 3 Credits.
This course introduces theoretical concepts and analytical tools essential to investment management by individual investors and portfolio managers. The goal of this class is to provide a structure to address investment problems in a systematic manner. Topics include security risk and return; portfolio theory; valuation of financial instruments such as
bonds, common stocks, and options; asset allocation; and performance evaluation of portfolios and portfolio managers. Prerequisite: FIN 706 or equivalent.

FIN 754. Advanced Topics in Finance. 3 Credits.
A variable-topic course open only to graduate students who have completed the Foundations and Pillar certificate courses. Topics can include international finance, derivatives and risk management, alternative investment strategy, entrepreneurial finance, fixed income, real estate finance, or other similar topics in finance, investments or valuation. Prerequisite: FIN 706 or equivalent.

FIN 810. Financial Management. 3 Credits.
This course provides an overview of the problems associated with the financial management of business firms. The focus is on the practices followed by managers in raising and investing capital so as to maximize value. Prerequisite: ACCT 810.

FIN 820. Macroeconomics and Financial Markets. 3 Credits.
This course explores the national and global macroeconomics and the influence of financial markets on decision-making by firms and individuals. Understanding, analyzing, and forecasting economic indicators are key aspects of this course. The objectives of this course are to understand economic indicators and observe their impacts on national and global economies, to appreciate how financial markets aggregate economic information into interest rates and securities prices and thus influence decision-making by firms and individuals, to use data to construct forward-looking economic models, to understand and use economic indicators in short-run business decision-making and long-run business planning, and to appreciate how government policies can enhance or impair the functioning of markets and the behavior of firms and individuals. Topics in the course include economic growth, employment and labor markets, inflation, exchange rates, monetary policy, fiscal policy, capital markets, credit markets, economic indicators, trend analysis and forecasts, the language of the economics, and the financial press. This course is open only to students in the full-time MBA program. Prerequisite: FIN 810. This course is only open to Full Time MBA Students.

FIN 821. Corporate Finance. 3 Credits.
This course explores how businesses evaluate investment opportunities and deploy capital to enhance firm value. Principal objectives include identification of incremental cash flows and growth opportunities generated by business investment, application of discounted cash flow techniques to evaluate investment opportunities and firms, understanding of alternative valuation techniques and their use in the analysis of real options, understanding interactions between a firm’s financing strategy and its investment policies, and identification of managerial incentives and how a firm’s governance structure affects investment policy and firm valuation. Topics include incremental cash flow identification, discounted cash flow techniques, real options analysis, leverage, cost of capital, corporate governance. Prerequisite: ACCT 810 and FIN 810. This course is open only to students in the full-time MBA program.

FIN 830. Investments. 3 Credits.
This course introduces theoretical concepts and analytical tools essential to investment management by individual investors and portfolio managers. The goal of this class is to provide MBA students with a structure to address investment problems in a systematic manner. Topics include factors that affect security risk and return, portfolio theory, valuation and selection of financial instruments such as bonds, common stocks, and options, asset allocation in a portfolio framework, and performance evaluation of portfolios and portfolio managers. Principal objectives are to apply financial theory and develop analytical models that explain security risk and return in a portfolio framework, to explain risks and returns associated with alternative asset allocation strategies, to evaluate the performance of portfolios and portfolio managers, and to value securities such as bonds, stocks, and options. Prerequisite: FIN 821. This course is open only to students in the full-time MBA program.

FIN 831. Financing Business Growth. 3 Credits.
This course evaluates alternative means of financing business operations and capital investment. The principal objectives are to evaluate the effects of alternative financial structures on a firm’s risk, cost of capital, and valuation; to understand how young entrepreneurial firms raise capital from financiers and financial markets, including sources such as angel investors, bank loans, venture capital, private equity, and initial public offerings; to understand how mature firms raise capital via seasoned equity issuance, corporate bonds, and leases, and how financial terms affect mergers and acquisitions, and to appreciate how firms engage in financial restructuring, including bankruptcy, subsequent to financial distress. Topics include leverage and financial risk, venture capital, private equity, public equity, bond financing, leasing, financial distress. Prerequisite: FIN 821. This course is open only to students in the full-time MBA program.

FIN 832. Derivatives and Risk Management. 3 Credits.
This course focuses on understanding how firms manage interest rate risk, exchange rate risk, and commodity price risk using derivative instruments such as forwards, futures, swaps, and options. The emphasis is on the motivation, issues, and techniques behind financial engineering with these derivatives, as practiced by firms and individuals to maximize value in global markets. The principal objectives are to identify sources of risk to businesses and financial institutions, including commodity price risk, interest rate risk, and exchange rate risk; to understand institutional features and pricing of derivative instruments such as forwards, futures, swaps, and options; to use derivative instruments and other risk management tools to hedge financial and operational risks for both financial and non-financial firms and to appreciate the limitations of risk management and hazards such as “model risk” and counterparty risk. Topics include financial and operating risk assessment; valuation of forwards, futures, swaps, and options; use of derivative instruments and other risk management tools to hedge financial and operational risk; limitations and hazards of risk management. Prerequisite: FIN 821. This course is open only to students in the full-time MBA program.

FIN 840. Applied Portfolio Management. 4 Credits.
This course provides the student with practical portfolio experience. Students actually and collectively manage funds in an endowment account for the benefit of the University and the School of Business. Experienced instructors, speakers, and financial analysts from Wall Street give the class a hands-on real life experience in analyzing and managing securities. The student will be familiarized with many different applied valuation procedures such as cash flows and growth models in an event driven context, as well as market capitalization techniques. Individual securities and stock options are analyzed on a continuing basis for inclusion or exclusion in the portfolio. Prerequisite: FIN 410 or FIN 411 or FIN 810 or ACCT 810. Enrollment by application only.

FIN 898. Independent Study for Master’s Students. 1-6 Credits.
Individual study of selected current problems in the field of finance to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

FIN 901. Current Research in Finance. 2 Credits.
This course provides a seminar format for a discussion of the currently prevalent research topics, methods, and problems being addressed in the area of finance. All first year PhD students in finance will enroll in this course their first semester in the doctoral program.

FIN 937. Seminar in Business Finance. 3 Credits.
This course is designed to develop the students' analytical abilities. Course material is of a theoretical and empirical nature. Advanced topics in financial management of business firms are covered. Special emphasis is given to long-term financing topics. Prerequisite: Admitted to the Business Ph.D. program.

FIN 938. Seminar in Investments. 3 Credits.
A study of advanced topics in investments, capital markets, and portfolio theory. Special emphasis is given to the theory of efficient markets. The course is designed to cover recent analytical and empirical literature in the investment area. Prerequisite: Must be admitted to the Business Ph.D. program.

FIN 939. Seminar in Financial Institutions. 3 Credits.
A survey of the academic literature in financial institutions. The reading list will vary depending on the instructor. May include both seminal theoretical papers and/or recent empirical studies on the role and importance of financial institutions in market economies. Prerequisite: Consent of Instructor.

FIN 995. Doctoral Seminar in Finance: _____._ 2-5 Credits.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor.

FIN 998. Independent Study for Doctoral Students. 1-5 Credits.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team.

FIN 999. Doctoral Dissertation. 1-12 Credits.
(V) Individual research work. Graded on a satisfactory progress/limited progress/no progress basis.

Business Courses

IBUS 300. Special Topics in International Business: ____. 1-5 Credits.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of international business topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor.

IBUS 400. Special Topics in International Business: ____. 1-5 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of international business topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

IBUS 410. Introduction to International Business. 3 Credits.
This course provides an overview of the international business environment and explores its implications for firms and managers. Students will analyze the political, economic, legal and socio-cultural forces that shape the conduct of business in and across divergent cultural and institutional settings and examines theories and trends in international trade and investment from the perspective of a manager doing business across borders. Not open to students with credit in BBA 307. Prerequisite: ECON 144 or ECON 145. Enrollment restricted or permission of the instructor.

IBUS 415. Business in Latin America. 3 Credits.
This course analyzes the unique aspects of the Latin American business environment and the major managerial issues that are likely to confront firms and individuals doing business in the region. The first part of the course develops analytic skills for assessing country environments. The second part of the course focuses on making corporate and managerial decisions in the Latin American context. Prerequisite: Corequisite: IBUS 410 or permission of the instructor. Enrollment restricted.

IBUS 425. Business in China. 3 Credits.
This course analyzes the unique aspects of the Chinese business environment and the major managerial issues that are likely to confront firms and individuals doing business in the country. The first part of the course develops knowledge about the country and skills for assessing it as a place for business. The second part of the course focuses on the performance of key management functions in the Chinese context such as marketing, finance, supply chain and human resource management. Prerequisite: Corequisite: IBUS 410 or permission of the instructor. Enrollment restricted.

IBUS 462. Comparative and Cross-Cultural Management. 3 Credits.
This course examines in depth how culture, in all its aspects, is the major determinant of successful organizational performance and management practices in the global workplace. This is accomplished by comparing and contrasting various cultural norms and values, and demonstrating how these differences impact business in the areas of communication (verbal and nonverbal), relationship building, the role of the manager, the functioning of teams and group dynamics, negotiation, conflict resolution, and decision making. Students will also examine the influences of culture on legal and governmental considerations in business, organization structures and corporate culture. The basis for cultural norms and comparisons used in this course are drawn from all areas of the world. The emphasis is on developing the awareness and skills necessary for managing multicultural diversity in both domestic and international settings. Prerequisite: Corequisite: MGMT 310 or MGMT 311 or permission of the instructor. Enrollment restricted.

IBUS 480. International Management. 3 Credits.
This course provides an overview of the essential managerial issues that firms and individuals will confront and must master to successfully operate in the international business setting. This is accomplished by introducing the student to an array of practical concepts, analytical frameworks and vital managerial techniques that will be useful to the international manager. Specific topics covered include the role of culture in global business, ethics and social responsibility in a multicultural setting, strategy development and organizational structure models for multinational operations, methods for analyzing and evaluating potential foreign markets and modes for foreign market entry. Also covered is the impact of a global scope of operations on basic management functions including marketing, finance, and human resource management. Not open to students with credit in BBA 307. Prerequisite: Corequisite: MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and FIN 310 or FIN 311 or permission of the instructor. Enrollment restricted.

IBUS 500. Individual Research in International Business. 1-5 Credits.
Individual study of selected topics in international business not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311
IBUS 701. International Business. 3 Credits.
This course provides an understanding of the basic concepts, institutions, and practices of international business, and their implications for business decision making. Topics include the causes and consequences of globalization, the political, economic, legal and socio-cultural differences across countries, and the institutional arrangements governing cross-border flows of trade, investment and intellectual property. Enrollment restricted.

IBUS 718. International Business. 3 Credits.
This course examines the basic concepts, institutions, and practices of international business, and their implications for business decision-making. The main objectives of this course include developing an understanding of cross-national differences in political, economic, legal, and socio-cultural systems. The course will place special emphasis on understanding the unique institutions of emerging economies and their implications for doing business in these countries, and the effects of differences in culture on the practice of management in different parts of the world. Topics include the principal theories of government policies on, and international institutional arrangements for international trade and foreign direct investment. The course will examine the key factors affecting a firm's foreign market entry decisions.

IBUS 730. International Business Strategy. 2 Credits.
This course examines the important managerial issues arising from a firm's expansion into the international arena and introduces analytical frameworks and management techniques that are essential for an international manager. Specific topics covered include foreign market entry decisions, strategies and organizational structures for managing a multinational corporation, and management of various functional areas (such as production, marketing, finance and human resources) in an international setting. Prerequisite: MGMT 704 and IBUS 701 or IBUS 820. Enrollment restricted.

IBUS 731. Comparative and Cross-Cultural Management. 2 Credits.
This course explores how culture, in all of its aspects, is a major determinant of organizational practices and performance. We analyze how and why organizational communication and practices vary from one culture to another, as well as why certain values and cultural contexts might make particular management styles more successful than others. Finally, we will investigate the possibilities for transferring certain practices between cultures. Prerequisite: IBUS 701 or IBUS 820. Enrollment restricted.

IBUS 740. Business Practices in China. 3 Credits.
This course provides students an opportunity to learn about business in China by observing it in practice. Students will travel to China to visit a variety of companies and meet with their managers to learn about the unique opportunities and challenges faced by companies operating in China. Company visits will be selected to include both manufacturing and services firms and to reflect a variety of ownership structures (foreign subsidiaries, locally-owned companies, joint-ventures, etc.). Lectures from faculty at a Chinese host institution will provide specific information on the local business environment and cultural, historical and institutional context. Prerequisite: IBUS 701 or IBUS 820 and IBUS 721. (Please note: This course involves travel abroad and required PRIOR completion of both IBUS 701 and IBUS 721.) Enrollment restricted.

IBUS 820. International Business. 3 Credits.
This course aims to provide an understanding of the basic concepts, institutions, and practices of international business, and their implications for business decision making. The main objectives of this course include developing an understanding of cross-national differences in political, economic, legal and socio-cultural systems. The course will place special emphasis on understanding the unique institutions of emerging economies and their implications for doing business in these countries, and the effects of differences in culture on the practice of management in different parts of the world. Topics include the principal theories of government policies on, and international institutional arrangements for international trade and foreign direct investment. The course will examine the key factors affecting a firm's foreign market entry decisions. Students will apply these theories to the analysis of a country's business environment and the formulation of international business decisions. This course is open only to students in the full-time MBA program.

IBUS 895. Graduate Seminar in International Business: _____ 0.5-5 Credits.
A variable-topic seminar opens only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted.

IBUS 898. Independent Study for Master's Students. 1-6 Credits.
Individual study of selected current problems in the field of business management to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

IBUS 950. Research in International Management and Strategy. 3 Credits.
This seminar surveys the literature, classic and contemporary, that forms the theoretical basis of the international business field. Topics covered include but are not limited to: (1) institutional issues such as the international framework of trade and investment, crosscountry governance differences, and the role of NGOs; (2) firm-level strategic issues such as choice of market entry modes, international entrepreneurship, and management of multinational enterprises; and (3) group- and individual-level organizational issues such as international staffing and cross-cultural management. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

Business Courses

IST 204. Excel Essentials for Business. 1 Credits.
This course focuses on the fundamental Excel functions and tools that are used by business professionals. Students will be exposed to a wide variety of Excel features such as data tables, formulas and functions, and charts. After learning about these essential Excel topics, students will apply their knowledge of Excel by solving many different business problems. This course covers material that must be mastered in order to pass the Microsoft Excel Specialist® exam. Not open to students who are
IST 205. Survey of Information Systems. 3 Credits. This course focuses on the use of information systems in business. Topics will include components of information systems, types of information systems, development of information systems, and uses and benefits of information systems. Relevant technology issues such as security, privacy and ethics will also be introduced. In addition to content on information systems, the course will cover the basic principles of Microsoft Office. (Not open to students with credit in IST 202 or 301.)

IST 230. Introduction to Business Analytics, Information Systems, and Supply Chain Management Professions. 1 Credits. In this course, we focus on the Business Analytics, Information Systems, and Supply Chain Management professions and cover a variety of topics. Topics include, but are not limited to, career opportunities; the importance of professional mentorship; professional membership with groups/associations; appropriate industry certifications; graduate education content, timing, and opportunities; the role of career broadening experiences; and ethical dilemmas within the professions. We emphasize both current practice and projected industry trends and involve guest speakers. This course is cross-listed with IST 230 and SCM 230. Check with your Major to see which 230 course it requires or recommends (ACCT 230, BSAN 230, BUS 230, FIN 230, IST 230, MKTG 230 or SCM 230) and when it encourages you to take it. (Same as BSAN 230 and SCM 230.) Prerequisite: BUS 210 or concurrent enrollment.

IST 310. Introduction to Information & Management Productivity Systems. 3 Credits. This course introduces essential components of information systems and examines how information systems provide the foundation for modern businesses. Additionally, the course introduces the analysis of business data and solving business problems with spreadsheet software. The course also focuses on the role of information systems in facilitating digital transformation by leveraging information technology and data. Students are expected to master intermediate and advanced spreadsheet skills such as logical functions, PivotTables, and macros. Students must bring a portable computing device that runs the most current full version of Microsoft Excel that is available for free from KU to every class session. Prerequisite: ACCT 200.

IST 312. Information Systems for Managers. 3 Credits. This course provides an overview of how to understand, analyze, and design computerized information systems, and is designed to provide the computer tools and knowledge so that today's business student will be tomorrow's successful and complete manager and/or consultant. The topics covered in this course include computer technology, internal control in a computer environment, strategic information systems planning, systems analysis and design, database systems, networking, and various software packages. This course will count as an advanced business elective. Not open to students with credit in ACCT 311. Prerequisite: ACCT 201 and IST 202 or IST 301. Enrollment restricted.

IST 320. Fundamentals of Software Development. 3 Credits. This course provides an introduction to software development concepts and techniques. Students will develop an understanding of the software development process through hands-on programming assignments and projects. The course emphasizes problem solving, initiative, and teamwork within an information systems framework. Not open to students with credit in BSAN 320. Prerequisite: Corequisite: IST 202 or BSAN 310 and IST 310. Enrollment restricted.

IST 325. Systems Analysis and Design. 3 Credits. This will take students through the entire systems development life cycle from the first contact with a customer through analysis and design to the implementation of the customer's system. It will introduce the student to the field of systems analysis and design, basic systems analysis tools, and the procedures for conducting systems analysis. Topics covered will include the role of the systems analyst in the organization, concepts, philosophies and trends in systems analysis and design, and tools and techniques for such analysis. Not open to students with credit in BSAN 325. Prerequisite: IST 202 or BSAN 310. Enrollment restricted.

IST 326. Database Management Systems. 3 Credits. This course introduces the fundamental concepts and implementation of the database development process and relational database systems. The student will be exposed to database development issues, SQL methodology, and entity-relationship models. Not open to students with credit in BSAN 326 or IST 326. (Same as BSAN 326.) Prerequisite: Corequisite: IST 202 or BSAN 310 and IST 310. Enrollment restricted.

IST 330. Fundamentals of Business Computer Networking. 3 Credits. This course introduces business students to the terms and concepts of networking in the business environment. This course balances practical application and network theory. It examines common architecture models, transmission media, network topologies, and protocols in both local area network (LAN) and wide area network (WAN) environments. The course also delves into the operating characteristics of the Internet and various applicable protocol suites. Conceptual learning is supported by team exercises and projects. Prerequisite: IST 202 or BSAN 310. Corequisite: IST 320. Enrollment restricted

IST 400. Special Topics in Information Systems Technology: 1-5 Credits. This is a variable-topic seminar. Its purpose is to allow the occasional offering of information systems technology topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

IST 401. Management of Integrated Information Systems/ERP. 3 Credits. This course provides an introduction to Enterprise resource planning (ERP) systems. We explore process integration of business-wide functions (controlling, production planning, demand management, sales and distribution) as required and supported by ERP implementations. The objectives of the course include: (1) understanding processes and data needs of different business functions; (2) understanding alternative information systems solutions and the challenges of independent information systems and; (3) understanding ERP systems as solutions to business process integration. Not open to students with credit in SCM 404. Prerequisite: IST 202 or BSAN 310. Enrollment restricted.

IST 405. Contemporary Information Technology Topics. 3 Credits. This course examines a wide range of innovative information technologies (IT) which have both technical and strategic implications for businesses. These IT innovations affect all functions of businesses. Topics include Web 2.0, Web 3.0, next generation Web, social networking technology, virtual world, pervasive computing, ubiquitous computing, unified communications (unification), IT utility, on-demand computing, grid computing, Web services, service-orientation architecture, business intelligence, data mining, search technology and applications (Google), next generation Web search, virtualization (server, hardware), storage fabrics, open source, IT outsourcing, personal technology, healthcare IT, green IT, security and privacy, Internet policy, regulation global control, and the gap between IT and business (goals and strategies). This course is available to all undergraduate and graduate students in the business school. Prerequisite: IST 202 or BSAN 310. Enrollment restricted.

IST 410. IT Project Management. 3 Credits.
This course provides initial exposure to concepts related to the project management discipline generally, while focusing on management of information technology projects in particular. The course is organized to emphasize core project management knowledge areas developed by the Project Management Institute, and it stresses the benefits of a disciplined, formal project management methodology. Students completing the course will gain an appreciation for the complex nature of projects and be better prepared to be an effective member of project teams encountered in many types of organizations. Not open to students with credit in BSAN 410 or MGMT 472. Prerequisite: IST 202 or IST 310. Enrollment restricted.

IST 435. Information Security. 3 Credits.
This course provides an introduction to a wide range of topics associated with managing the security of information systems and related data in a business environment. Topics addressed include cryptography and security of operating systems, databases, networks... both wired and wireless, and telecommunications systems. Security issues are examined related to application development and to the use of the Internet as a business medium. Other elements of security are reviewed: physical security, disaster recovery and business resumption planning, change control, and so forth. On successful completion of the course, each student will be better able to: a. Understand and appreciate risks associated with business information systems infrastructures and the dynamic nature of these threats. b. Evaluate various risks associated with information systems. c. Envision controls that might mitigate these risks. d. Possess the ability to effectively articulate the threats and need for appropriate controls to others, be they higher management, peers, or subordinates. Prerequisite: IST 202 or BSAN 310. Enrollment restricted.

IST 492. Honors Topics and Problems in Information Systems and Technology: _____. 1-5 Credits.
This honors topic seminar is open only to students meeting the requirements established by faculty members offering the course. Open only to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor.

IST 495. Foundations in Business Analytics. 3 Credits.
Introduces students to the key business, computational and data competencies needed by business analysts for effective data-driven decision making. The course focuses on how structural as well as unstructured "big data" can be used to help decision makers improve organizational competitiveness. Students will learn fundamental skills for business analytics: data manipulation, data visualization and statistical methods to gain experience with different software tools used for data analysis and reporting. Not open to students with credit in BSAN 440. Prerequisite: Completion of BSAN 326 or IST 326. Enrollment restricted.

IST 500. Individual Research in Information Systems Technology. 1-5 Credits.
Individual study of selected topics in information systems technology not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SC/M 310 or SCM 311; approval of the Area Director. Enrollment restricted.

IST 701. Managerial Information Systems. 2 Credits.
This course provides a broad, managerial level introduction to fundamental information technology concepts and terminology and the application of those concepts in business organizations. It addresses a variety of topics including: the Internet, intranets, and extranets; relational database theory; hardware, software, and networking concepts; the system development life cycle, project management; eBusiness/eCommerce; knowledge management; enterprise resource planning; ethical considerations related to information technology advances; and organizational considerations related to information systems. The course focuses on the knowledge and expertise required for managers to successfully leverage information systems assets in a business setting.

IST 702. Systems Development. 3 Credits.
This course focuses on the practical issues of system development. A main objective of the course is to teach students system development through programming projects. In addition, the course examines the software engineering issues involved in system development, including usability and design issues, and alternative systems development processes. To enhance the quality of the system developed, the course also looks into software testing and evaluation issues. This course is not open to students with credit in IST 320. Prerequisite: IST 202 or IST 310 or IST 701 or concurrent enrollment in IST 701. Enrollment restricted.

IST 704. Database Management. 3 Credits.
This course provides insight to the managerial and organizational issues that surround the development and implementation of database systems in organizations. Students will undertake a project that allows them to experience the database development process while learning and practicing modern data modeling techniques. Students will also study the value that databases have to the organization and the impact that databases have on decision-making processes. Students also will study strategic issues that impact database development and will research the latest advances in database management systems and other emerging technology to gain insight on how these advances will impact the future of database development. This course is not open to students with credit in IST 326. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted.

IST 706. Systems Analysis and Design. 3 Credits.
This course develops skills with regard to the Analysis and Design activities typically encountered in an organizational software development environment. It emphasizes structured project planning, analysis and design techniques, including Project Estimation Methods, Data Flow Diagrams, Entity-Relationship Diagrams, and the application of CASE (Computer-Aided Software Engineering) Tools. The teaching methods will combine classroom experience with an analysis and design case study using role-play techniques to simulate an actual analysis and design scenario. This course is not open to students with credit in IST 325. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted.

IST 708. Strategic Information Systems Planning. 3 Credits.
This course has two objectives. The first objective is to give graduate students an understanding of the need for high level IT strategy in organizations. This is accomplished through case analysis, the experiential learning of strategic concepts and through interaction with IT executives. IT strategy is explored at the executive levels of an organization. The second objective of the course is to give students experience working on projects/research and presenting materials as is done in developing IT strategy for real organizations. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted.

IST 709. Business Computer Networking. 3 Credits.
This course has two objectives. The first objective is to give graduate students an understanding of the need for high level IT strategy in organizations. This is accomplished through case analysis, the experiential learning of strategic concepts and through interaction with IT executives. IT strategy is explored at the executive levels of an organization. The second objective of the course is to give students experience working on projects/research and presenting materials as is done in developing IT strategy for real organizations. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted.

IST 712. Information Security. 3 Credits.
This course will introduce, at a managerial rather than highly technical level, a range of topics associated with security of information systems and related data in a business environment. Topics addressed include cryptography and the system and the security of operating systems, databases, networks—both wired and wireless, and telecommunications systems. The course also considers security issues related to application development, including management of the change control process, and to the use of the Internet as a business medium. Students will also address physical security, disaster recovery, business resumption planning, and managerial planning and techniques involved in creating a security conscious organization. This course is not open to students with credit in IST 335. Prerequisite: IST 701. Enrollment restricted.

IST 713. Data Management. 3 Credits.
Businesses today collect and manage large volume of data in a variety of types, forms, and sources for myriad uses. To provide necessary skills to data scientists and analysts, this course introduces traditional data management concepts and techniques as well as contemporary information retrieval and processing innovations. Topics include database fundamentals, database query techniques, data marts and data warehouse, information retrieval and Web search, NoSQL movement and practices, data management for analytics, distributed data management and cloud computing, and other emerging trend and techniques. Enrollment restricted.

IST 715. E-Commerce: An Integrative Perspective. 3 Credits.
This course examines how organizations and individuals exploit the Internet and other emerging information technology to conduct business in an information era. This course combines practice and theory to examine successes, failures, and common practices when using information technology for e-commerce activities. Prerequisite: IST 202 or IST 301 or IST 701. Enrollment restricted.

IST 720. Developments in Software Technology. 3 Credits.
This course is an introduction to object-oriented (OO) technology and the object paradigm. We explore the object paradigm, its benefits and limitations. Specifically, we study a state-of-art technique for OO modeling. We also apply this technique to the analysis and design of a system, and implement the concepts with OO programming. Students will gain practical experience in OO analysis, design, and implementation through projects with an OO programming language. Prerequisite: IST 702. Enrollment restricted.

IST 725. Contemporary Information Technology Topics. 3 Credits.
This course examines a wide range of innovative information technologies (IT) which have both technical and strategic implications for business. These IT innovations affect all functions of businesses. Topics include Web 2.0, Web 3.0, next generation Web, social networking technology, virtual world, pervasive computing, ubiquitous computing, unified communications (unification), IT utility, on-demand computing, grid computing, Web services, service-oriented architecture, business intelligence, data mining, search technology and applications (Google), next generation Web search, virtualization (server, hardware), storage fabrics, open source, personal technology, healthcare IT, green IT, security and privacy, Internet policy, regulation, global control, and the gap between IT and business (goals and strategies). This course is not open to students with credit in IST 405. Prerequisite: IST 202 or IST 301 or IST 701.

IST 730. IT Project Management. 3 Credits.
This course provides initial exposure to concepts related to the project management discipline generally, while focusing on management of information technology projects in particular. The course is organized to emphasize core project management knowledge areas developed by the Project Management Institute, and it stresses the benefits of a disciplined, formal project management methodology. Students completing the course will gain an appreciation for the complex nature of projects and be better prepared to be an effective member of project teams encountered in many types of organizations. This course is not open to students with credit in IST 410. Prerequisite: IST 202 or IST 301 or IST 701.

IST 799. Internship in Information Systems. 1-3 Credits.
Internships provide opportunities for students to combine their academic education with a meaningful experience in the business world. Accounting internships allow students to explore career pathways in accounting, further their professional growth, expand professional networks, and increase the relevancy of their academic coursework. The internship course combines job-related activities of the accounting internship position with a set of academic requirements. These requirements include academic assignments as well as a pre- and post-internship seminar held in the semester before and after the semester in which the internship occurs. Internships for credit must be approved by the Director of the Internship Program prior to the internship experience. Students may not receive more than three hours of internship credit. Enrollment restricted and by permission only.

IST 895. Graduate Seminar Information Systems: _____. 0.5-5 Credits.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted.

IST 898. Independent Study for Master's Students. 1-6 Credits.
(V) Individual study of selected current problems in the field of information systems to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

IST 995. Doctoral Seminar in Information Systems: _____. 2-5 Credits.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor.

IST 998. Independent Study for Doctoral Students. 1-5 Credits.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team.

IST 999. Doctoral Dissertation. 1-12 Credits.
(V) Individual research work.

Business Courses

MGMT 230. Introduction to the Management Profession. 1 Credits.
In this course, we introduce current Management students to possible career opportunities in the profession. Students will have an opportunity to interact with current Management professionals in multiple fields. We emphasize both current practice and projected industry trends and involve guest speakers. Note: Check with your Major to see which 230 course it requires (ACCT 230, BSAN 230, BUS 230, FIN 230, IST 230, MKTG 230 or SCM 230) and when it encourages you to take it. Prerequisite: BUS 210 or concurrent enrollment.

MGMT 300. Special Topics in Management: _____. 1-5 Credits.
This is a variable-topic course open to undergraduates meeting the prerequisites for the specific topic being offered. Its purpose is to allow the occasional offering of management topics not covered by established courses. Enrollment is not limited to School of Business students. Prerequisite: Determined for each topic by instructor. 

MGMT 305. Survey of Management and Leadership. 3 Credits.
This course is designed to acquaint students with traditional business management ideas, recent management thinking, and the contemporary application of both to the management functions of planning, organizing, leading and controlling. A survey of a wide variety of topics is offered, generally including goal setting, strategy formulation and implementation, managerial decision making, structure and design of organizations, corporate culture, organizational change and development, human resources management, managing diversity, leading, motivation, communication, teamwork, quality control, management control systems, and operations and service management, entrepreneurship and small business management, managerial ethics, corporate social responsibility, and management in the global environment. (Not open to students with credit in BBA 303, MGMT 310 or MGMT 311.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1.

MGMT 310. Principles of Management. 3 Credits.
This course serves as an introduction to the study of the management functions of planning, organizing, leading and controlling. Students will apply these fundamental management functions through the study of various topics such as the history of management, organizational ethics and social responsibility, diversity and inclusion within organizations, problem solving and decision making, strategic and operational planning, techniques for motivating employee performance, leadership theories and organizational behavior concepts, human resources management, and management control systems including the budgeting process in organizations. Prerequisite: Completion of ECON 142 or ECON 143, ACCT 200, PSYC 104 or PSYC 105, and prior completion or co-enrollment in ACCT 201 and BSAN 202 or DSCI 202 or DSCI 301.

MGMT 311. Principles of Management, Honors. 3 Credits.
The honors treatment of this course serves as an introduction to the study of the management functions of planning, organizing, leading and controlling. Students will apply these fundamental management functions through the study of various topics such as the history of management, organizational ethics and social responsibility, diversity and inclusion within organizations, creative problem solving and decision making, strategic and operational planning, techniques for motivating employee performance, leadership theories and organizational behavior concepts, human resources management, and management control systems including the budgeting process in organizations. Only open to students admitted to the University Honors Program, the School of Business Honors Program, or by consent of the instructor. Prerequisite: Completion of ECON 142 or ECON 143, ACCT 200, PSYC 104 or PSYC 105, and prior completion or co-enrollment in ACCT 201 and BSAN 202 or DSCI 202 or DSCI 301.

MGMT 400. Special Topics in Management: _____ 1-5 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of management topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

MGMT 405. Ethical Decision Making in Business. 3 Credits.
This course is designed to provide students with: (a) a grounding in the psychological and philosophical foundations of business ethics; (b) the ability to recognize ethical problems; (c) an exposure to many of the ethically sensitive issues facing corporations and managers in business today (e.g., layoffs, outsourcing, employee whistle-blowing, employee privacy, employee health and safety, marketing and advertising, environmental issues, discrimination, and the global responsibilities of business); and (d) the tools for analyzing and reaching closure on ethical problems. Students will study the role of ethics in the relation of business to employees, consumers, and society. Students in this course will have the opportunity to engage in stimulating class discussions, justify ethical positions in case study analyses, investigate ethical issues in their own future professional lives, and develop and present their solutions for typical ethical problems faced by managers in organizations. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 410. Human Resources Management. 3 Credits.
This course addresses the ways that firms manage employment relationships, including staffing, training and development, compensation, performance appraisal, labor-management relations, employment law, career management, and job design. Upon completion of the course, students will be able to identify and address these topics from a general management perspective. Prerequisite: MGMT 310 or MGMT 311. Sports Management majors may petition for entry to the course with completion of the following prerequisite: MGMT 305, ECON 142, or ECON 143, and an introductory statistics course (DSCI 202 or DSCI 301), HSES 310, MATH 365, PSYC 300). Enrollment restricted.

MGMT 412. HR Management Analytics. 3 Credits.
The course introduces students to the field of human capital analytics and measurement. It provides an overview of the evolution of human capital measurement, and guides students through various types of methods organizations use to understand the impact of people programs and initiatives on their organization. The importance of human capital analytics in business decisions is examined, including leader and manager use of data, basic analysis, reporting and presentation of data, benchmarking, and other use cases and trends. The course will provide a foundation of knowledge with the intent of developing the student's capabilities to be more prepared and equipped to advance the use of human capital measurement to drive business decisions. (Same as BSAN 412.) Prerequisite: Completion of MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 413. Recruiting and Selecting Effective Employees. 3 Credits.
What makes for a great employee? The answer will depend on the fit between the person and the organization. One size does not fit all. This course covers policies and procedures for recruitment, selection and staffing to enhance organizational effectiveness. Students learn about individual differences, how to measure these differences, and how to ensure the organization's recruitment and selection processes are reliable, valid, legal and “fair.” Topics will include (i) conducting a job analysis for creating job descriptions, (ii) recruiting candidates, and (iii) setting up selection procedures through initial screening and resume review, the employment interview, general and specific ability tests, personality tests, assessment centers, performance tests, integrity testing, and drug testing. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 416. Training, Development, and Management Careers for Individuals and Organizations. 3 Credits.
The course introduces students to effective approaches for developing training and career management processes that support continuous learning and organizational adaptation. Topics include analyzing training needs, developing training with clear objectives, evaluating outcomes rigorously, and individual and organizational strategies for careers and work/life balance. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.
MGMT 419. Managing Performance and Compensation. 3 Credits.

This course focuses on principles and practices in designing and administering performance management and reward systems. Employee performance measurement at both the individual and group levels is reviewed. Using performance measurement information for administrative decision-making and employee development is discussed. The impact of reward systems on employee recruitment, satisfaction, and individual and firm-level performance is examined, including establishing pay structures, individual and group-based pay-for-performance plans, executive pay issues, government influences, and employee benefits. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 431. Legal Environment for Managing Employees. 3 Credits.

The focus of this course is how the legal environment affects the management of employees. The topics covered include laws on employment discrimination, employment-at-will, and negligent hiring, the Occupational Safety and Health Act, the National Labor Relations Act, the Fair Labor Standards Act, and the Family and Medical Leave Act. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 434. International Human Resource Management. 3 Credits.

Whether a company has a domestic or an international footprint, there is little doubt that it is impacted by global competition for markets and for talent. This course increases students' understanding of core HRM activities as they are conducted in a global context. These activities include staffing, performance management, training and development, compensation, and labor relations. These topics are examined in the light of cultural and institutional differences. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 437. Developing Management Skills. 3 Credits.

This course enhances leadership and other people-related skills of students in order to strengthen their capacity to manage others effectively. The course begins by focusing on self-awareness and self-management. Students also learn systems for classification of people on the basis of personality, behavior, and attitudes. Other topics covered include communication skills, time management, techniques for controlling stress, problem solving, reading people's emotions and intentions more effectively, effective team leadership, coaching and counseling, delegation and empowerment, conflict resolution, motivation, and effective discipline techniques. The focus of the course is on skill acquisition and development. Other pedagogy involves readings, personality and behavior inventories, role-playing, and case analyses. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 440. Advanced Organizational Behavior. 3 Credits.

This course addresses the impact of individual, group, and organizational influences on human behavior within organizations. Building on the foundation of organizational behavior topics introduced in the principles course, this course will guide students to further achieve in-depth knowledge and interpersonal skills through the study and application of theories and concepts related to understanding and predicting human behavior in organizations. Prerequisite: Completion of MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 455. General Management Processes/Change. 3 Credits.

The course focuses on the principles and methods that general managers use to implement strategies, both at the business unit and corporate levels. While stressing the complex nature of the general manager's job, the organization's mission, environment, technology, and strategy are discussed as the primary drivers of designing effective organization structures, processes, and management systems. Change processes for realigning the organization's strategy, structure, processes, and culture are further emphasized, highlighting the role of the general manager as the architect of change. Topics covered include: organization design, transaction costs, behavior and output control; strategic leadership; design of information and reward systems; organizational change and cultural change processes. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 470. Leadership in Business Organizations. 3 Credits.

This course provides an introduction to business leadership. Students will learn the major frameworks and perspectives for understanding and developing organizational leaders. Students will also develop an understanding of the skills and behaviors demonstrated by effective business leaders; these include establishing direction, aligning others behind that direction, motivating and inspiring, and generally promoting organizational change and transformation. Class pedagogy will emphasize methods that will allow students to recognize and develop their own leadership capabilities. A key goal will be establishing a leadership development mindset that will drive students' future personal and professional development efforts. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 472. Project Management. 3 Credits.

The purpose of this course is to examine business from a project management perspective, to develop a systems view of business rather than a functional view and to lay the foundation for future leaders to more effectively integrate project management into their business strategy. This course is intended to help students gain an understanding of what project management involves, how it relates to other functional management areas, and its role in an organization's structure and leadership. Topics will be covered in the order they appear in the project lifecycle starting with project selection and bidding and ending with project acceptance and close out. Topics covered in this course include: the importance and role of project management, the contextual nature of projects, and managing scope, cost, time, and risk in project management. This course also provides optional course material for the CAPM certification. Not open to students enrolled in or with credit in BSAN 410 or IST 410. Prerequisite: MGMT 310 or MGMT 311, or permission of the instructor. Enrollment restricted.

MGMT 485. Business Consulting. 3 Credits.

Business Consulting teaches the skills necessary to become consummate consultants and presents students with live projects incorporating real business challenges requiring real time analysis, consideration of practical alternative strategies, exploration of sales and profit implications of the selected strategy and delivery of a full rationalized recommendation to real clients. Prerequisite: MGMT 310 or MGMT 311. Enrollment restricted.

MGMT 488. Business Policy and Strategy. 3 Credits.

The course exposes the student to the role of general management in complex organizations. The cases, conceptual materials, and projects are selected to provide the student with decision-making opportunity in major areas of managerial concern: environmental opportunities and constraints, formulation of business policy, and policy implementation mechanisms. Knowledge and skills gained in previous business courses, including marketing, finance, and quantitative methods, will be applied to problems associated with the totality of organizational activity. Not open to students with credit in BBA 308. Prerequisite: FIN 310 or FIN 311; IST 310; MGMT 310 or MGMT 311; MKTG 310 or MKTG 311 and SCM 310 or SCM 311 and Senior standing (90 hours completed). Enrollment restricted.

MGMT 499. Business Policy and Strategy, Honors. 3 Credits.

Honors treatment of this course exposes the student to the role of general management in complex organizations. The cases, conceptual
materials, and projects are selected to provide the student with decision-making opportunity in major areas of managerial concern: environmental opportunities and constraints, formulation of business policy, and policy implementation mechanisms. Knowledge and skills gained in previous business courses, including marketing, finance, and quantitative methods, will be applied to problems associated with the totality of organizational activity. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: FIN 310 or FIN 311; IST 310; MGMT 310 or MGMT 311; MKTG 310 or MKTG 311 and SCM 310 or SCM 311 and Senior standing (90 hours completed).

**MGMT 500. Individual Research in Management. 1-5 Credits.**
Individual study of selected topics in management not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 and MKTG 311 and SCM 310 or SCM 311; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted.

**MGMT 525. Negotiations and Dispute Settlement. 3 Credits.**
This course involves the study of the theory and practice of dispute resolution and negotiation in business mediation (facilitated negotiation). Conflict resolution in the workplace, including grievance procedures, will be considered. Students are required to apply concepts studied through role playing simulations. Not open to students with credit in BLAW 525 or MGMT 525. (Same as BLAW 525.) Prerequisite: MGMT 310 or MGMT 311 and BE 301 or BE 302 or by permission of instructor. Enrollment restricted.

**MGMT 701. Organizational Behavior. 3 Credits.**
This course focuses on human behavior in organizations. It helps the student learn to think systematically and critically about organizations, to appreciate knowledge building in the organization sciences, and to apply that knowledge in the work setting. Topics covered may include: individual differences and motivation, work and group design, leading and decision making, organization design and culture, and organization change and development.

**MGMT 704. Strategic Management. 3 Credits.**
Strategic Management has as its primary objective the development of an understanding of the role of general management from both a conceptual and operating standpoint. The course is based on the strategic management framework emphasizing the evaluation of an organization's strategic situation and the formulation of viable alternative strategies required to deal with the challenges facing the organization. Attention is focused on the development of organizational objectives and the formulation of strategies at the business and operating levels. Prerequisite: MGMT 701, FIN 701, and MKTG 701. Enrollment restricted.

**MGMT 705. Ethical Decision Making in Business. 3 Credits.**
This course is designed to provide students with: (a) a grounding in the psychological and philosophical foundations of business ethics; (b) the ability to recognize ethical problems; (c) an exposure to many of the ethically sensitive issues facing corporations and managers today in each of the functional areas of business (management, accounting, finance, information systems, and marketing); and (d) the tools for analyzing and reaching closure on ethical problems. Students will study the role of ethics in the relation to the individual, manager, organization, and global business environment. Students in this course will have the opportunity to engage in stimulating class discussions, justify ethical positions in case study analyses, investigate ethical issues in their own future professional lives, and develop and present their solutions for typical ethical problems faced by managers in organizations after fully exploring the ethical dimensions of both sides of a given issue. Prerequisite: MGMT 701. Enrollment restricted.

**MGMT 706. Managing People. 3 Credits.**
This course addresses topics, challenges and processes associated with business-related people issues. The principal objectives are to increase understanding of human and group behavior in organizations; to learn how to effectively motivate and lead individuals and groups; to increase effectiveness in managing oneself and others in team settings; and to increase understanding of human resource policies and practices that help create and sustain competitive advantage through people. Course topics include individual differences, motivation, groups, leadership, strategic HR, employment law, staffing, compensation, performance management, and training and development.

**MGMT 710. Leadership Philosophy and Practice. 3 Credits.**
This course emphasizes an exploration of ideas about leadership that are practice-oriented. The material covered is based primarily on ethnographic and clinical inquiry rather than social scientific research. A central theme of this material, some of which is philosophical in nature, is the focus on learning and the role of reflection in both the leadership process itself and in the process of developing leaders. Varieties of topics are covered, including foresight, intuition, practical reason, critical thinking, reflective practice, and ethical judgment. A key goal is to move the student into a position where he or she can begin to take control of their own leadership development process. The course is structured so as to give students the opportunity to reflect on their experiences, analyze those experiences using the conceptual material, and then enter into systematic dialogue on these issues with other students and the instructor. The ultimate product of this learning process is the creation of a detailed personal leadership development plan. Prerequisite: MGMT 701. Enrollment restricted.

**MGMT 711. Human Resources Management. 2 Credits.**
The purpose of this course is to acquaint students with the rationale and tools for creating a sustainable competitive advantage through human resources. The management of human resources - people and their human capital - is approached from the perspective of the practicing manager as opposed to that of the human resources specialist. The major topics covered include staffing, training and development, performance management, compensation and benefits, job design, facets of employment law, and employee (labor-management) relations. Prerequisite: BE 701, DSCI 701 and MGMT 701. Enrollment restricted.

**MGMT 712. Economic, Environment, and Social Sustainability in Business. 3 Credits.**
This course introduces students to conducting business and pursuing organizational goals sustainably. It includes principles (scientific, economic, and cultural) to guide decision-making for sustainability, metrics to assess sustainability (e.g. the integrated or triple bottom line), and the application of sustainability concepts to business functions. Aspects of global environmental sustainability [energy, water, agriculture, resource use and waste] are considered. The use of cases, discussion of best practices, and attention to relevant skills help students gain familiarity with sustainable business practices and develop their capabilities to contribute to firm efforts to operate more sustainably. Enrollment restricted.

**MGMT 713. Managing People: Applications and Skills. 2 Credits.**
The goal of this course is to increase the capacity of the student to manage others effectively. It begins by focusing on self-awareness and self-management. Students also learn systems for classification of people on the basis of behavior and attitudes. Topics covered may include time management, problem solving, reading people, coaching and counseling, delegation and empowerment, conflict resolution,
motivation and discipline. The focus is on skill acquisition and the learning approaches including readings, inventories, role playing and case analysis. Prerequisite: MGMT 701. Enrollment restricted.

**MGMT 718. Business Law and Ethics. 3 Credits.**
This course has two purposes: 1) to provide a foundation for understanding the relation between law and business and 2) to address ethical decision-making and the management of ethics in the workplace. Topics include classifications of law; legal processes; emerging legal issues; alternative dispute resolution; recognition of ethical issues; ethical analysis frameworks; and the management of ethical responsibilities in a global business environment.

**MGMT 719. Strategic Management. 3 Credits.**
The principal objectives of this course are to learn how to perform strategic analyses of competitive contexts external to the firm, how to leverage firm specific resources and capabilities for competitive advantage, how to exploit specific strategic perspectives such as game theory and real options, and to learn how to make more effective strategic decisions within the firm. Topics include: industry analysis, firm level strategy, resources and capabilities, intangible resources, firm structure, industry evolution, game theory, real options, managerial discretion, and multinational strategy. Prerequisite: BE 718.

**MGMT 722. Corporate Strategy. 3 Credits.**
The objective of this course is to help students build an understanding of how competitive strategy may lead to the creation and persistence of competitive advantage in diversified firms. In contrast to the core Strategic Management (MGMT 704) course, which is designed to address how firms develop competitive advantage in a single market, this course analyzes how advantage can be created through the configuration and coordination of activities across multiple markets. Examples of corporate strategies include vertical integration, cooperative alliances, corporate diversification, mergers and acquisitions, and so forth. Prerequisite: MGMT 704 or MGMT 830. Enrollment restricted.

**MGMT 725. Strategic Management of Technological Innovation. 3 Credits.**
This course focuses on the dynamics of industries driven by technological innovation. It strives to help students think strategically about appraising and managing technological innovation and new product deployment. Specific topics covered include how innovations emerge, their type and pattern of diffusion, and their meaning to businesses and society. In depth coverage is given to dominant designs and industry standards, decisions on entry timing of new technologies, resource allocation among multiple attractive innovation projects, and capturing the value created by innovations. Prerequisite: MGMT 704 or MGMT 830. Enrollment restricted.

**MGMT 727. Strategy Implementation. 2 Credits.**
The course focuses on the principles and methods of implementing strategies, both at the business unit and corporate levels. Strategy is discussed as the primary driver of organization structure, processes, systems, culture and skills in successful organizations. The role of the general manager as the architect of implementation is highlighted. Topics covered include: different forms of structure, behavior and output controls; organization design, information systems design, reward systems and organizational culture. Prerequisite: MGMT 704 or MGMT 830. Enrollment restricted.

**MGMT 728. Managing Strategic Direction and Change. 2 Credits.**
This course focuses on executive actions needed to create and sustain high performance of firms. The vision, credibility, and human skills that executives need to set strategic direction are explored extensively. A major part of the course covers strategic and organizational change practices that can be used to motivate employees to alter their patterns of behavior to meet the shifting needs of the firm's strategy. Emphasis is placed on theories of effective change implementation, mutual engagement and shared diagnosis, organizational redesign, reinforcing new behaviors, organizational culture and change, and the political dynamics of strategic change. Prerequisite: MGMT 704 or MGMT 830. Enrollment restricted.

**MGMT 732. Recruiting and Selecting Effective Employees. 3 Credits.**
Building on selected fundamental principles from psychology, economics, and sociology, this course emphasizes the importance of sound measurement practices for the acquisition of effective human talent by organizations. Topics covered include job analysis for selection procedure development, legal and fairness issues, recruitment, initial screening, employment testing, and the employment interview. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted.

**MGMT 734. Compensation and Rewards. 2 Credits.**
This course focuses on principles, policies and practices in designing and administering compensation and reward systems. It covers frameworks and applications useful for achieving organizational effectiveness through pay systems that help promote a competent and committed workforce. Topics include: developing pay structures, formulating and implementing pay level strategies, assessing and managing employee performance, pay-for-performance issues, legal issues, executive compensation and employee benefits. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted.

**MGMT 738. Developing People and Careers. 2 Credits.**
This course is designed with an emphasis on effective talent management for practicing managers and includes individual and organizational perspectives. Topics include assessing training needs; designing, developing, delivering and evaluating training and development investments; and career management planning, strategies and progression, including succession planning. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted.

**MGMT 740. Appraising and Managing Employee Performance. 2 Credits.**
This course covers the measurement/appraisal of employee performance at the individual and small work group/team levels, and the use of appraisal information in administrative decision-making, employee coaching, employee counseling, and individual/team performance improvement. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted.

**MGMT 741. International Human Resources Management. 2 Credits.**
This course introduces students to the major issues associated with managing people in the context of the global marketplace. The focus is on understanding human resource issues that are unique to international business and strategies for effectively addressing them. These issues include staffing, performance management, compensation and labor relations. These topics are considered in the context of factors such as culture, socio-politics, legal regulations, and education. Prerequisite: MGMT 701 or MGMT 810. Enrollment restricted.

**MGMT 751. Strategic Organizational Design and Change Management. 3 Credits.**
This course focuses on the principles and methods of implementing strategies. Strategy is focused upon as the primary driver of organization structure, processes, systems, culture, and skills in successful organizations. A major part of the course covers strategic and organizational change practices that can be used to motivate employees to meet the shifting needs of the firm's strategy. Emphasis is placed on theories of effective change implementation, mutual engagement and
shared diagnosis, organizational redesign, reinforcing new behaviors, organizational culture and change, and the political dynamics of strategic change. Prerequisite: MGMT 706 and MGMT 719.

MGMT 752. Developing Effective Management and Team Skills. 3 Credits.
This course enhances skills to improve students' capacity and ability to manage others effectively. The focus of the course is on skill acquisition and development. Topics covered include negotiation and conflict resolution in organizations, communication skills, and collaborative team skills, along with other skills managers use in their day-to-day work. The course promotes self-awareness and reflection upon individual traits and abilities through self-assessments. Other pedagogy involves readings, personality and behavior inventories, and case analyses. Prerequisite: MGMT 706.

MGMT 753. Leadership. 3 Credits.
This course will emphasize an exploration of ideas about leadership that are practice-oriented. The central themes of this material, some of which is philosophical in nature, are the focus on learning and the role of reflection in the leadership process and the process of developing leaders. A variety of topics are covered, including foresight, intuition, practical wisdom, critical thinking, reflective practice, ethical judgment, and articulating relationally responsive understandings of alternative futures. Students are provided the opportunity to reflect on and narrate their leadership-related crucible experiences, analyze those experiences using the conceptual material, and then enter into systematic dialogue on these issues with other students and the instructor. The ultimate product of this learning process will be the creation of a personal leadership development plan. Prerequisite: MGMT 706.

MGMT 754. Managing Internationally. 3 Credits.
This course explores the important managerial issues arising from a firm's expansion into the international arena and examines the analytical frameworks and management techniques that are essential for an international manager. Topics covered include strategies and organizational structures for managing a multinational corporation and management of various functional areas (such as production, marketing, finance, and human resources) in an international setting. Considerable attention is paid to how and why organizational communication and practices vary from one culture to another, as well as why certain values and cultural contexts might make particular management styles more successful than others. Prerequisite: IBUS 718 and MGMT 719.

MGMT 761. Strategy and Organization Design. 2 Credits.
The course is based on the strategic management framework emphasizing the evaluation of an organization's strategic situation and the formulation of viable alternative strategies required to deal with the challenges facing the organization as it tries to develop strategies and resources for competitive advantage. Special emphasis is placed on the principles and methods of implementing strategies. Strategy is discussed as the primary driver of organization structure, processes, systems, culture, and skills in successful organizations. The role of the general manager as the architect of implementation is highlighted. Prerequisite: Corequisite: MGMT 706 and enrollment in the MS-OL Program.

MGMT 762. Management Skills and Teams. 2 Credits.
Managerial effectiveness is critically dependent upon the ability to influence, persuade, motivate and get things done with and through other people in the organization. Integrating concepts from MGMT 706 with cutting-edge concepts drawn from the latest behavioral science research, this course focuses on questions such as: "How does one influence the behavior of others in the organization and direct their behavior toward the achievement of organizationally relevant goals?" and "How does one maximize the performance of the teams we become a part of?" Topics include: person-environment fit, power and influence, organizational culture, cross-cultural management and high performance teams. Case based and reading intensive, the course also includes self-assessment exercises aimed at personal introspection and development. Prerequisite: MGMT 706 and enrollment in the MS-OL Program.

MGMT 763. Leadership Capstone. 2 Credits.
This course focuses on the student's ability to synthesize the learning experience through case analyses and a comprehensive capstone leadership project that demonstrates the knowledge, character, and reasoning capacity expected to lead successfully in a contemporary business environment. Leveraging the leadership foundation and personal leader development plan from MGMT 710, this course uses a combination of professional readings and scenario-based leader case studies to enhance individual and team leadership skills while posturing the student to lead effectively in an increasingly complex world. Pedagogy involves professional reading and discourse, personality and behavior inventories, and practical case analyses. Prerequisite: MGMT 710 and enrollment in the MS-OL Program.

MGMT 781. Managing Strategic Direction and Change. 3 Credits.
The course focuses on the principles and methods of implementing strategies. Strategy is focused upon as the primary driver of organization structure, processes, systems, culture and skills in successful organizations. A major part of the course covers strategic and organizational change practices that can be used to motivate employees to meet the shifting needs of the firm's strategy, theories of effective change implementation, mutual engagement and shared diagnosis, organizational redesign, reinforcing new behaviors, organizational culture and change, and the political dynamics of strategic change.

MGMT 782. Developing Effective Management and Team Skills. 3 Credits.
This course enhances skills to improve students' capacity and ability to manage others effectively. The focus of the course is on skill acquisition and development. Topics covered include negotiation and conflict resolution in organizations, communication skills, and collaborative team skills, among other skills managers use in their day-to-day work. The course promotes self-awareness and reflection upon individual traits and abilities through self-assessments. Other pedagogy involves readings, personality and behavior inventories, and case analyses.

MGMT 783. Ethical Decision Making in Business. 3 Credits.
This course is designed to provide students with: (a) a grounding in the psychological and philosophical foundations of business ethics; (b) the ability to recognize ethical problems; (c) an exposure to many of the ethically sensitive issues facing corporations and managers today in each of the functional areas of business (management, accounting, finance, information systems, and marketing); and (d) the tools for analyzing and reaching closure on ethical problems. Students will study the role of ethics in the relation to the individual, manager, organization, and global business environment. Students in this course will have the opportunity to engage in stimulating class discussions, justify ethical positions in case study analyses, investigate ethical issues in their own future professional lives, and develop and present their solutions for typical ethical problems faced by managers in organizations after fully exploring the ethical dimensions of both sides of a given issue.

MGMT 784. Leadership Capstone. 3 Credits.
This course focuses on the students' ability to synthesize the learning experience through the application and exploration of case studies and a capstone leadership project. Combines individual leadership assessment with enhances skills to improve students' capacity and ability to manage others effectively. Varieties of topics are covered, including foresight, intuition, practical reason, critical thinking, reflective practice, and ethical
MGMT 810. Managing People. 3 Credits.
This course addresses topics, challenges and processes associated with business-related people issues. The principal objectives are to increase understanding of human and group behavior in organizations; to learn how to effectively motivate and lead individuals and groups; to increase effectiveness in managing oneself and others in team settings; and to increase understanding of human resource (HR) policies and practices that help create and sustain competitive advantage through people. Course topics include individual differences, motivation, groups, leadership, strategic HR, employment law, staffing, compensation, performance management, and training and development. This course is open only to students in the full-time MBA program.

MGMT 820. Business Law and Ethics. 3 Credits.
This course has two purposes: to explore the relationship between law and business and provides a foundation for further understanding of business relevant laws and to address ethical decision-making and the management of ethics in the work place. Topics include classifications of law, federalism, court systems, civil judicial process, alternative dispute resolution, ethical analysis tools, recognition of ethical issues, organizational dimensions that impact ethical behavior, and the management of ethical responsibilities in a global business environment. This course is open only to students in the full-time MBA program.

MGMT 830. Global Strategic Management. 3 Credits.
Global Strategic Management is a capstone Strategic Management course infused with applications to global business. The principal objectives of the course are to learn the basics of strategic decision making and how strategy integrates functional area policies in organizations; to understand how industries affect firm strategies; to understand how firms develop resources and capabilities for competitive advantage; to examine key strategic decisions or areas such as vertical integration, diversification, technology and market entry; and to understand how globalization affects core aspects of strategic business decisions. Topics include firm strategy, industry analysis, resources and capabilities, cost and differentiation advantage, organizing for competitive advantage, strategic change, technology-based competition, multinational strategy, vertical integration, and diversification. This course is open only to students in the full-time MBA program.

MGMT 831. Business Consulting. 3 Credits.
This course provides clinical applications of business problem solving and consulting. The course objectives are to link models and theories with field applications to solve real business problems; to acquire first-hand industry knowledge and witness varying client management styles; to learn time management skills and acquire a practical "tool kit" for diverse business problem solving; to apply problem solving techniques in both corporate and client consulting environments; and to enhance team interaction and leadership capabilities. Topics include consulting processes and successful consultant characteristics, hypothesis generation, problem identification and differentiation of root cause vs. symptom, market research methods, solution modeling, prep and presentation of solution, keys to consulting effectiveness. This course is open only to those with admission to a graduate business program.

MGMT 885. Business Consulting. 3 Credits.

Through experiential learning using live consulting assignments, students will achieve understanding clarity of the linkage between models and theories studied in the classroom and application in the field; direct interaction with clients at sophisticated corporate organizations; and first hand experience in addressing significant business challenges with impactful and strategically correct solutions. Students will enhance their team and leadership skill capabilities through interaction with other team members. This course is not open to students with credit in MGMT 485.

MGMT 895. Graduate Seminar in Management: ___. 0.5-5 Credits.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted.

MGMT 898. Independent Study for Master's Students. 1-6 Credits.
Individual study of selected current problems in the field of business management to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

MGMT 901. Current Research in Management. 1 Credits.
This course provides a workshop format for a discussion of the currently prevalent research topics, methods, and problems being addressed in the areas of human resources management, organizational behavior, and strategic management. All first year PhD students in HRM, OB, and SM will typically enroll in this course their first and second semesters in the doctoral program. Students will enroll in this course with their respective faculty advisors, who will work out a schedule of research seminars that each student must attend and participate in during the semester. Prerequisite: Admission to the School of Business PhD Program in HRM, OB, or SM, or permission of the Management Area Director.

MGMT 905. Macro Management Research Methods. 3 Credits.
This course is designed to develop in students an ability to analyze research reports critically and to provide skills in designing, performing, and reporting original Management research. Data preparation methodologies include sample bias corrections and missing data treatments. The course also covers practical application of what are typically considered to be "macro" research methods such as endogeneity treatments, panel data analysis, advanced linear models like logit, probit and binomial regression, and basic econometrics, and so forth to Management research topics. Students prepare and defend an original research proposal as part of this course. Recommended to be taken early in the program for Human Resource Management, Organizational Behavior, and Strategic Management doctoral students. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MGMT 906. Micro Management Research Methods. 3 Credits.
This course is designed to develop in students an ability to analyze research reports critically and to provide skills in designing, performing, and reporting original Management research. Methodologies ranging from naturalistic field studies to laboratory experiments are reviewed along with various data collection strategies and construct measurement and validation. The course also covers practical application of what are typically considered to be "micro" research methods such as Hierarchical Linear Modeling, Structural Equation Modeling, Factor Analysis, and so forth to Management research topics. Students prepare and defend an original research proposal as part of this course. Recommended to be taken early in the program for Human Resource Management,
Organizational Behavior, and Strategic Management doctoral students. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MGMT 916. Major Management Theories. 3 Credits.
This course provides an advanced survey of the essential theories about organizations and people that comprise contemporary Management theory. As such, it covers topics from diverse Management fields such as Organizational Theory, Strategy, Human Resource Management, Organizational Behavior, and Ethics. In doing so, this course also covers the historical evolution of evidence and theory in Management research as well as describing current debates and emphases in these various specific streams of research as well as opportunities for cross-fertilization. The intent is to prepare students to create a base level of knowledge that will enable doctoral students to effectively participate in the research conversations in Management as both consumers and producers of research. Students are expected to write a major research paper as part of this course. This course is primarily for School of Business Ph.D. students, but other advanced graduate students may enroll with the permission of the instructor. Prerequisite: Doctoral standing or masters students with at least one undergraduate or M.B.A. level behavioral science course or consent of instructor.

MGMT 950. Acquiring and Preparing Human Resources. 3 Credits.
This seminar focuses on staffing organizations and the training and development of human capital to produce effective performance of work. It covers individual differences in work performance, job/work analysis, recruitment, selection, new hire socialization, training, development, and career management. Topics include, but are not limited to: job performance theory, recruitment, principles of assessment (e.g., validity, performance prediction, generalizability), selection tools (e.g., general mental ability tests, personality inventories, aptitude tests, interviews), applicant reactions, legal issues (e.g., adverse impact, discrimination), learning theory, training design, transfer, training evaluation, instructional methods, development methods, and career models. Typically, reading assignments are articles from research journals (e.g., Journal of Applied Psychology, Personnel Psychology). Typically, students are required to write a substantial paper on a major aspect of human resources approved by the Professor. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MGMT 951. Retaining and Utilizing Human Resources. 3 Credits.
This seminar focuses on human resources programs that retain and strategically utilize human capital to produce effective work performance, positive employee attitudes (e.g., commitment, satisfaction, engagement), and enhanced firm productivity. Topics covered include, but are not limited to: the nature of human capital, compensation systems and benefits, performance appraisal, work/family policies, strategic human resource management frameworks, employment contracts, turnover, mobility, and reemployment job search. Typically, reading assignments are articles from research journals (e.g., Journal of Applied Psychology, Personnel Psychology). Typically, students are required to write a substantial paper on a major aspect of human resources approved by the Professor. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MGMT 953. Seminar in Organizational Behavior. 3 Credits.
This seminar provides a broad survey of theory and research in organizational behavior—i.e., research related to individual and group behavior in an organizational context. Organizational behavior concerns the set of approaches to understanding and predicting how people in organizations think, feel, and act, both as individuals and in relation to others in groups and organizations, and the outcomes (individual attitudes, task performance, citizenship behavior, deviance, etc.). The major objective of this course is to provide seminar members with a solid overview of the organizational behavior literature. Upon completion of the course, the student should be able to discuss theory and research in the major topic areas of organization behavior, critique theory and research in these areas, and integrate material within and across topics. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MGMT 954. Individual and Interactionist Perspectives of Organizations. 3 Credits.
This seminar focuses on conceptual and empirical research in organizational behavior that seeks to understand how the interaction between individuals and organizational facets influences their sense-making and identity. The implications of these processes for employees’ well-being, performance, and careers will be discussed. Readings will address such topics as: Social Cognitive Theory, Self-efficacy, Creativity, Employee Attachment and Job Attitudes, Individual Differences, Person-Environment Fit, Careers, Employee Well-being, Emotions, Attribution Theory, Sense-making processes, Identity, Organizational Culture, Multi-level Theorizing and Research, and Cross-cultural Dimensions/Globalization. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MGMT 956. Economic Theories of Strategic Management. 3 Credits.
This seminar surveys the scholarly literature in Strategic Management that is based on economic modeling of human and firm behavior. Topics include but are not limited to Industrial Organization Economics, Transaction Costs Economics, Property Rights Theory, Agency Theory, Resource-Based View and Dynamic Capabilities, and Real Options Theory. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MGMT 957. Behavioral Theories of Strategic Management. 3 Credits.
This seminar surveys the scholarly literature in Strategic Management that is based on behavioral, psychological and sociological theories. Topics include but are not limited to the Behavioral Theory of the Firm, Behavioral Models of Strategic Decision Making, Strategy Formation, Strategic Leadership including CEO’s, Boards and Top Management Teams, Organizational Demography, Cognition in Strategic Decision Making, Power & Politics in Strategy Development. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MGMT 995. Doctoral Seminar in Management: ______. 2-5 Credits.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor.

MGMT 998. Independent Study for Doctoral Students. 1-5 Credits.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team.

MGMT 999. Doctoral Dissertation. 1-12 Credits.
(V) Individual research work. Graded on a satisfactory progress/limited progress/no progress basis.

Business Courses

MKTG 101. Enlightened Consumption. 3 Credits.
An introduction to consumer behavior and its application to issues related to individual and societal well-being. Some of the topics include consumption and sustainability, how to detect and resist persuasion tactics, how to be a smart consumer and save money, and consumer rights. Students will learn to think critically about consumer decision-making and view consumer behavior not only from a personal vantage point but also from a broader societal perspective. This course is designed to be of interest to all undergraduate students regardless of discipline.

MKTG 230. Introduction to the Marketing Profession. 1 Credit.

In this course, we focus on Marketing as a profession and cover a variety of topics. Topics include, but are not limited to, current trends in Marketing, professional expectations, job search strategies and preparation, and the four most common career tracks for a Marketing major: Professional Sales, Analytics, Brand Management, and Advertising/Communications. We emphasize both current practice and projected industry trends and involve guest speakers. Note: Check with your Major to see which 230 course it requires or recommends (ACCT 230, BSAN 230, BUS 230, FIN 230, IST 230, MKTG 230 or SCM 230) and when it encourages you to take it. Graded on a satisfactory/unsatisfactory basis. Prerequisite: BUS 210 or concurrent enrollment.

MKTG 305. Survey of Marketing. 3 Credits.

This course introduces the student to marketing from the perspective of the business firm. Topics included are the marketing system, consumer and industrial behavior, market segmentation and positioning, product policy, channels of distribution, pricing strategy, sales management, and marketing communications. (Not open to students with credit in BBA 304, MKTG 310 or MKTG 311.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1.

MKTG 310. Marketing. 3 Credits.

A study of marketing from the point of view of the firm. Topics include the nature of marketing, consumer behavior, marketing research, design of marketing mix (product, price, promotion, and place), and analytical techniques useful to marketing management. Prerequisite: ECON 142 or ECON 143, ACCT 200, and PSYC 104 or PSYC 105. Prior completion or co-enrollment in DSCI 202 or BSAN 202.

MKTG 311. Marketing, Honors. 3 Credits.

Honors treatment of this course involves a study of marketing from the point of view of the firm. Topics include the nature of marketing, consumer behavior, marketing research, design of marketing mix (product, price, promotion, and place), and analytical techniques useful to marketing management. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: ECON 142 or ECON 143, ACCT 200, and PSYC 104 or PSYC 105. Prior completion or co-enrollment in DSCI 202 or BSAN 202.

MKTG 315. Sales Force Management. 3 Credits.

Managing a sales force is a key marketing activity and a natural progression of a successful career in professional selling. Several factors contribute to the success of the sales force in meeting a firm's objectives. These include sales force structure, sales force sizing, territory alignment, market segmentation and selection, compensation, and pricing policies. Accordingly, the primary objective of this course is to familiarize you with the concepts, methodologies, and tools for making sound decisions in these areas. Not open to business students. Prerequisite: MKTG 305.

MKTG 316. Professional Selling Skills. 3 Credits.

This course surveys the practice of professional selling steps in a logical and orderly sequence. The course covers an assortment of selling skills such as listening, communications, handling objections, and closing. Students are taught that successful salespeople learn to be a helper, a problem solver and an advisor to the customer. The successful salesperson will unselfishly persuade a prospective customer to buy a good, a service or an idea that benefits the customer. Finally, the course will provide the student with an understanding of how the function of professional selling fits into the overall marketing mix. The content of the course will include lectures, case discussion, and role-plays. Not open to business students. Prerequisite: MKTG 305.

MKTG 400. Special Topics in Marketing: _____, 1-5 Credits.

This is a variable-topic seminar. Its purpose is to allow the occasional offering of marketing topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

MKTG 411. Introduction to Consumer Behavior. 3 Credits.

A study of the buyer's information acquisition, evaluation, purchasing, and post-purchasing evaluation process. Emphasis is placed upon social psychological theories and their implications on the understanding and prediction of consumers' behavior. The student, from the standpoint of the marketing manager, will apply behavioral science concepts to the problems of planning, pricing, and promotion decisions. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 412. Introduction to Consumer Behavior, Honors. 3 Credits.

Honors treatment of this course involves study of the buyer's information acquisition, evaluation, purchasing, and post-purchasing evaluation process. Emphasis is placed upon social psychological theories and their implications on the understanding and prediction of consumers' behavior. The student, from the standpoint of the marketing manager, will apply behavioral science concepts to the problems of planning, pricing, and promotion decisions. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: MKTG 310 or MKTG 311.

MKTG 415. Marketing Research for Managers. 3 Credits.

This course introduces the student to the fundamentals of marketing research and analytical approaches to marketing problems. The material is presented from an applied point of view and is designed to familiarize the student with those aspects of marketing research with which the marketing manager is likely to interact. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 420. Integrated Marketing Communications. 3 Credits.

This course will deal with the use of advertising, sales promotion, and public relations as elements in a promotional program. The emphasis of this course will be on the efficient use of an organization's resources to accomplish communication goals through effective promotional strategy. A good part of the course will be spent examining the communication process; the nature of the receiver and how information is processed; determination of promotional objectives; promotional budget; media decisions, and measuring the effectiveness of the promotional campaigns. The goal of the course is to enable the students to better evaluate and devise a marketing communications program for any given product, service, or idea. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 425. Sales Force Management. 3 Credits.

Managing a sales force is a key marketing activity and a natural progression of a successful career in professional selling. Several factors contribute to the success of the sales force in meeting a firm’s objectives. These include sales force structure, sales force sizing, territory alignment, market segmentation and selection, compensation, and pricing policies. Accordingly, the primary objective of this course is to familiarize you with the concepts, methodologies, and tools for making sound decisions in professional selling, such as listening, communications, handling objections, and closing. Students are taught that successful salespeople learn to be a helper, a problem solver, and an advisor to the customer. The successful salesperson will unselfishly persuade a prospective customer to buy a good, a service, or an idea that benefits the customer. Finally, the course will provide the student with an understanding of how the function of professional selling fits into the overall marketing mix. The content of the course will include lectures, case discussion, and role-plays. Not open to business students. Prerequisite: MKTG 305.
these areas. Enrollment Restricted. Not open to non-business students. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 426. Professional Selling Skills. 3 Credits.
This course surveys the practice of professional selling steps in a logical and orderly sequence. The course covers an assortment of selling skills such as listening, communications, handling objections, and closing. Students are taught that successful salespeople learn to be a helper, a problem solver and an advisor to the customer. The successful salesperson will unselfishly persuade a prospective customer to buy a good, a service or an idea that benefits the customer. Finally, the course will provide the student with an understanding of how the function of professional selling fits into the overall marketing mix. The content of the course will include lectures, case discussion, and role-plays. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted to Business students.

MKTG 427. Advanced Selling Skills. 3 Credits.
This course will build on the foundation created in professional selling skills. As such, it will focus on mastering advanced sales techniques via role plays, case studies, presentations, demonstrations, and simulations. Various strategies for both business-to-business and business-to-consumer sales will be discussed. Throughout, emphasis will be placed on value-added, consultative selling. Prerequisite: MKTG 426. Enrollment restricted.

MKTG 430. New Product Management. 3 Credits.
This course deals with the strategies, techniques, and methods used to develop and market a new product. An important aspect of the course deals with anticipating and managing change that can affect a firm's marketing opportunities and response. Also emphasized is the need for a disciplined process of development. Subjects examined include innovative thinking, identification, and development of marketing opportunities, marketing mix strategies, and implementation. Prerequisite: MKTG 310, MKTG 311 or consent of instructor. Enrollment restricted.

MKTG 435. Marketing Strategy. 3 Credits.
The emphasis of this course is strategic marketing analysis and planning. Concepts and methods for the strategic analysis of product-market definition, segmentation, product positioning, and new product planning are examples of individual subjects that are covered. However, the primary objective is to integrate various topics into a strategic planning framework. An important component of the course is the application of concepts to realistic marketing problems through the use of comprehensive marketing simulations or in-depth cases that capture the dynamics of the marketing environment. Students will learn how to identify markets, assess company strengths and weaknesses, target market segments, analyze competition, and develop specific functional strategies in such areas as product development, pricing, distribution, and promotion. Prerequisite: MKTG 415. Enrollment restricted.

MKTG 440. Global Marketing. 3 Credits.
Today businesses compete in a global environment. As such, marketing managers must recognize the global nature of their markets and must develop the knowledge background, sensitivity, and skills required to successfully operate in this dynamic setting. This course examines the array of activities required to select, gain entry, and compete in a location other than the "home" country. Also examined is the influence that culture, environment, government regulation, and economic systems can have upon marketing mix decisions (product, price, promotion, distribution) related to localization, standardization, and local adaptation. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 443. Digital Marketing and Social Media. 3 Credits.
This course aims to provide the theoretical knowledge and practical insights for integrating social media and digital marketing into the traditional marketing mix, understanding and engaging social media consumers, and monitoring and measuring the results of these efforts. Students will learn how to manage digital and social media, be able to understand the psychology of online consumers, the impact of digital and social media on traditional marketing strategy, review the digital and social media marketing process, critically evaluate the various social media platforms and online content, and successfully measure the impact of digital marketing efforts. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 445. Services Marketing. 3 Credits.
This course aims to prepare students for careers that entail managing service businesses or service aspect of any business. It will help students understand the unique needs and challenges faced by service companies and those manufacturing companies that rely on services for their differential advantage (e.g., automobiles, appliances) in a complex global environment. As such, it should be relevant to all students, but especially to those who wish to work in service functions/industries (e.g., accounting, advertising, banking, finance, healthcare, hospitality, insurance, retailing, sales, supply chain management.) Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 448. Managing Brands. 3 Credits.
This course provides students with the knowledge and skills required to design a strategic brand management plan. Emphasis is placed on building, measuring, and managing brand equity. Some topics covered in the course include developing a brand strategy, designing and implementing brand marketing programs, measuring and interpreting brand performance, and growing and sustaining brand equity. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 453. Retailing, Distribution Channel and Supply Chains. 3 Credits.
This course exposes students to the many facets of retailing and provides a basic understanding of retailing concepts. At the completion of the course, students will understand the challenges of starting, managing, expanding, and succeeding in retailing. The course covers major functions that comprise the retailing task, including the decision tools used, planning, strategy formulation, implementation and control in retail management. The content of the course should be useful for students interested in working in the retail sector, desiring to work for companies that interface with retailers and/or for those with a general management and entrepreneurial interest. Not open to students with credit in SCM 453. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 455. Pricing. 3 Credits.
The primary objective of this course is to examine the concepts and tools required to effectively manage the pricing function. Both strategic and tactical aspects of pricing will be covered with a view to identify profit-boosting practices across a range of professional contexts - as product managers, business unit managers, management consultants, and entrepreneurs. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 458. Marketing, Supply Chains, and Geographic Information Systems. 3 Credits.
This course is designed to engage students in critical discussions, analysis and use of Geographic Information Systems (GIS) in a variety of business sectors. Additionally, the course will introduce students to GIS systems used to make business decisions through hands-on and applied assignments. Upon completion, student will understand how GIS and related systems are applied to and utilized by businesses, as well as how to employ basic GIS programs to help solve a variety of business problems. Not open to students with credit in MKTG 458 or GEOG 458. Prerequisite: MKTG 310. Enrollment restricted.
MKTG 460. Practicum in Advertising and Promotional Plan Development. 3 Credits.
The course is an experiential approach to promotional campaign development with an emphasis on promotional strategy as a single component of the total marketing strategy. Students teams work with actual businesses to address the business’s individual marketing needs. Students conduct environmental and industry analysis and primary and secondary market research to identify target markets, develop a marketing strategy, promotional objectives, product positioning, brand development and ROI measures for a promotional strategy. Students then complete media planning, creative execution, and budgeting and present the project to the business. Prerequisite: MKTG 310 or MKTG 311 and at least two of the following three courses: MKTG 411 or MKTG 412, MKTG 415, or MKTG 435. Enrollment restricted.

MKTG 465. Customer Relationship Management. 3 Credits.
This course offers a comprehensive introduction to the strategy and tactics of customer relationship management (CRM). Particular emphasis is given toward identifying the key strategic principles inherent in the customer-centric focus that underlies a successful CRM program. Topics include: Fundamentals of CRM strategy, marketing metrics, customer profitability analysis, choice modeling, techniques for evaluating model performance and applications of CRM to marketing campaign management. Students will be instructed on how to implement the CRM techniques using various software tools and real-world data. (Same as BSAN 465 and SCM 425.) Not open to students with credit in BSAN 465 or MKTG 465 or SCM 425 or MKTG 400 - Customer Relationship Management. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 470. Marketing Analytics. 3 Credits.
This course introduces advanced analytical methods in the examination of data from a variety of sources to provide marketing professionals with the tools necessary to engage in today's data rich decision-making environment. Predictive models and other multivariate statistical techniques will be covered with an emphasis on practical application. Not open to students with credit in BSAN 430 or MKTG 400 - Marketing Analytics. Prerequisite: BSAN 415 or MKTG 415 or SCM 415. Enrollment restricted.

MKTG 471. Sports and Entertainment Marketing. 3 Credits.
This course examines the marketing mix of product, price, place, and promotion in the multi-billion dollar sports and entertainment industries. The scope of the course will include both the marketing of sports and entertainment products and properties, as well as marketing through sports and entertainment (as a promotional vehicle to market other products). A variety of sports at the high school, intercollegiate, amateur, and professional levels will be considered. Through textbook and journal article readings, case analyses, and virtual simulations, students will explore the conceptualization of the marketing planning process, market and consumer research, target market (“fan” persona) characteristics and segmentation, audience usage and consumption patterns, endorsements, sponsorships, and branding. Additionally, through in-class discussion topics the student will focus on reinforcing topics presented in the class as well as current event or seasonal topics including, but not limited to the Super Bowl, college football, March Madness, and the Olympics. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

MKTG 500. Individual Research in Marketing. 1-5 Credits.
Individual study of selected topics in marketing not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the readings and research. Prerequisite: FIN 310 or FIN 311, MGMT 310 or MGMT 311, MKTG 310 or MKTG 311 and SCM 310 or 311; 3.0 professional grade point average and approval of proposed plan of study by the instructor. Enrollment restricted.

MKTG 701. Marketing Management. 3 Credits.
This course examines the marketing function of the firm, primarily from a managerial perspective. The topics examined include: marketing concepts, segmentation, and decisions related to positioning, products, pricing, distribution, and promotion.

MKTG 706. Marketing. 3 Credits.
This course is designed to equip students with basic concepts associated with the marketing function. Principal objectives are to discuss the role of marketing in an organization, to describe the processes of buyer behavior and the impact of these processes on marketing decisions, to develop an understanding of approaches used to segment markets and factors influencing the selection of target markets, to develop an understanding of elements of the marketing mix (product, price, communications, channels) and factors affecting decisions in these areas, and to integrate these concepts into an effective marketing strategy.

MKTG 714. Discovering & Evaluating New Product Opportunities. 3 Credits.
Rapid shifts in technology and consumer preferences make new products critical to a firm's portfolio. This course highlights the value of a disciplined approach in bringing new products and services to market. Specific topics covered include models for opportunity identification, understanding customer preferences and perceptions, and gauging market demand. Multidimensional scaling, factor analysis, clustering, preference regression and conjoint analysis are some techniques used in this course. Prerequisite: MKTG 701 or MKTG 810. Enrollment restricted.

MKTG 715. Consumer Behavior. 3 Credits.
This course is designed to review behavioral science concepts applicable to understanding behavior of consumers in the marketplace. It investigates the specific processes of consumer decision-making and purchasing, and the implications these have for marketing strategy. Topics covered include: effect of internal and external factors on consumer decision making, information processing, learning and memory, attitude formation and change, post-purchase behavior, ethical/social issues, effects on marketing strategy. Prerequisite: MKTG 701. Enrollment restricted.

MKTG 716. Global Marketing. 3 Credits.
This course is designed to provide a set of conceptual and managerial tools to students for undertaking marketing of products and services on a global scale. The topics covered in the course include economic and financial dimensions in global marketing, social and cultural aspects of the global market environment, regional market characteristics, political and legal issues in global marketing. A significant portion of the course is devoted to the study of competitive analysis and competitive strategy for the global markets, marketing information systems, various strategies for entering global markets, organization, planning and control of global marketing, and marketing mix decisions (product, price, promotion, and distribution) in a global setting. Prerequisite: MKTG 701. Enrollment restricted.

MKTG 717. Integrated Marketing Communications. 3 Credits.
The goal of this course is to enable the student to evaluate and devise a product/service marketing communications program. Emphasis will be placed on the efficient use of resources to accomplish communication goals through effective promotional strategy involving advertising, personal selling, sales promotion and publicity. Topics covered include the communication process, determination of promotional objectives, promotional budgeting, media planning, measuring effectiveness and ethical issues. Prerequisite: MKTG 701. Enrollment restricted.
MKTG 721. Advanced Topics in Managing Products and Brands. 2 Credits.
This course is designed to explore various marketing issues in managing a portfolio of products in a global marketplace, based on specific product lines. While the course will review marketing strategies concerning pricing, promotions, product liability, and protection of intellectual property rights, it will especially focus on such concepts as brand identity/personality brand extension/leverage, co-branding, brand loyalty, brand equity, product and brand strategies over the lifecycle of products and brands, and organizational requirements for building successful brands. Prerequisite: MKTG 701 or MKTG 810. Enrollment restricted.

MKTG 722. Marketing Strategy. 2 Credits.
The emphasis of this course is strategic marketing analysis and planning. Topics examined include: (a) Situation and SWOT analyses and how these lead to an understanding of the firm’s sustainable competitive advantage, (b) methods for the identification of segmentation within consumer and business markets, (c) the selection of target segments based upon competitive advantage and value, (d) positioning and differentiation within target segments, and (e) the development of brand strategy and action plans based upon segment positioning and differentiation. An important component of the course is the application of concepts to realistic marketing problems that captures the dynamics of marketing environments. Prerequisite: MKTG 701 or MKTG 810. Enrollment restricted.

MKTG 723. Marketing Research. 2 Credits.
This course engages students in a broad examination of marketing research as practiced in marketing organizations today. Topics include defining business problems and establishing research objectives, choosing among research approaches (survey, qualitative, and secondary designs), gathering data (questionnaires, focus groups/interviews, and online), analyzing research data, and generating actionable results for business decision-making. The emphasis is on practical applications for the marketing professional. Prerequisite: DSCI 701 or DSCI 810. Enrollment restricted.

MKTG 724. Pricing of Products and Services. 2 Credits.
The objective of this course is to prepare students for addressing strategic and tactical pricing issues and identifying profit-boosting changes in pricing practices. Pricing issues will be examined from various perspectives (e.g., product managers, business unit managers, management consultants, and entrepreneurs). The course will focus on teaching key economic, analytical and behavioral concepts associated with costs, customer behavior and competition. The course will employ economic, analytical, and behavioral concepts to illustrate how pricing decisions can be deployed to capture additional value. It will cover basic topics such as measurement of price sensitivity, segmented pricing, role of costs, and life cycle pricing as well as advanced topics such as dynamic pricing, pricing structures, and pricing under competition. Prerequisite: MKTG 701 or MKTG 810. Enrollment restricted.

MKTG 748. Managing Brands. 3 Credits.
This course provides students with the knowledge and skills required to design a strategic brand management plan. Emphasis is placed on building, measuring, and managing brand equity. Some topics covered in the course include developing a brand strategy, designing and implementing brand marketing programs, measuring and interpreting brand performance, and growing and sustaining brand equity. Prerequisite: MKTG 706.

MKTG 751. Consumer Behavior. 3 Credits.
This course is designed to review behavioral science concepts applicable to understanding behavior of consumers in the marketplace. It investigates the specific processes of consumer decision-making and purchasing, and the implications these have for marketing strategy. Topics covered include: effect of internal and external factors on consumer decision making, information processing, learning and memory, attitude formation and change, postpurchase behavior, ethical/social issues, effects on marketing strategy. Prerequisite: MKTG 706 or equivalent.

MKTG 752. Integrated Marketing Communications. 3 Credits.
The goal of this course is to enable the student to evaluate and devise a product/service marketing communications program. Emphasis will be placed on the efficient use of resources to accomplish communication goals through effective promotional strategy involving advertising, personal selling, sales promotion and publicity. Topics covered include the communication process, determination of promotional objectives, promotional budgeting, media planning, measuring effectiveness and ethical issues. Prerequisite: MKTG 706 or equivalent.

MKTG 753. Global Marketing. 3 Credits.
This course is designed to provide a set of conceptual and managerial tools to students for undertaking marketing of products and services on a global scale. The topics covered in the course include economic and financial dimensions in global marketing, social and cultural aspects of the global market environment, regional market characteristics, political and legal issues in global marketing. A significant portion of the course is devoted to the study of competitive analysis and competitive strategy for the global markets, marketing information systems, various strategies for entering and managing in global markets, organization, planning and control of global marketing, and marketing mix decisions (product, price, promotion, and distribution) in a global setting. Prerequisite: IBUS 718 and MKTG 706 or equivalent.

MKTG 754. Digital and Social Media Marketing. 3 Credits.
This course aims to provide the theoretical knowledge and practical insights for integrating social media and digital marketing into traditional marketing mix, understanding and engaging social media consumers, and monitoring and measuring the results of these efforts. Students will learn how to manage digital and social media, be able to understand the psychology of online consumers, the impact of digital and social media on traditional marketing strategy, review the digital and social media marketing process, critically evaluate the various social media platforms and online content, and successfully measure the impact of digital marketing efforts. Specific topics to be discussed include: Search Engine Marketing, Google AdWords, Google Analytics and Facebook Insights. Prerequisite: MKTG 706 or equivalent.

MKTG 756. Customer Relationship Management. 3 Credits.
This course offers a comprehensive introduction to the strategy and tactics of customer relationship management (CRM). Particular emphasis is given toward identifying the key strategic principles inherent in the customer-centric focus that underlies a successful CRM program. Topics include: Fundamentals of CRM strategy, marketing metrics, customer profitability analysis, choice modeling, techniques for evaluating model performance and applications of CRM to marketing campaign management. Students will be instructed on how to implement the CRM techniques using various software tools and real-world data. Prerequisite: MKTG 706.

MKTG 810. Marketing Management. 3 Credits.
This course is designed to equip students with basic concepts associated with the marketing function. Principal objectives are to discuss the role of marketing in an organization, to describe the processes of buyer behavior and the impact of these processes on marketing decisions, to develop an understanding of approaches used to segment markets and factors influencing the selection of target markets, and to develop an understanding of elements of the marketing mix (product, price,
communications, channels) and factors affecting decisions in these areas. This course is open only to students in the full-time MBA program.

MKTG 820. Marketing Intelligence. 3 Credits. This course is an introduction to marketing research. The emphasis will be on providing an understanding of the value of marketing research and the tools to engage in the process. The objectives are to understand research planning, types of research and design, to determine appropriate sampling, data collections methods and research methodologies, to understand, apply and interpret fundamental concepts of data analysis and analysis software. Topics covered will include the research process, understanding data sources, qualitative research, measurement and scaling issues, questionnaire design, analysis of data, and the research report. Prerequisite: DSCI 810 and MKTG 810. This course is open only to students in the full-time MBA program.

MKTG 830. Understanding Customers. 3 Credits. This course is designed to review behavioral science concepts applicable to understanding behavior of consumers in the marketplace. It investigates the specific processes of consumer decision making and purchasing, and the implications these have for marketing strategy. The course will cover the internal and external factors that affect consumer decision-making processes; the steps consumers go through before, during and following the purchase decision; theories of attitude formation, methods of attitude-measurement and attitude change. Topics include the effect of external factors (cultures, social class, reference groups, family), effect of internal factors (needs, motives, personality), the extended decision-making process, information processing, learning and memory, attitude formation and change, low-involvement decision making, post-purchase behavior, ethical/social issues, effects on marketing strategy. Prerequisite: MKTG 820. This course is open only to students in the full-time MBA program.

MKTG 832. Marketing Services and Managing Customer Relationships. 3 Credits. This course is designed to fill the knowledge gap between managing products and managing services. It will help students understand the unique needs and challenges faced by service companies (and those manufacturing companies that rely on services for their differential advantage) in a complex global environment. The primary objective is to provide a set of conceptual and managerial tools for effective management and marketing of services. Broad topics include services characteristics, managing customer expectations, understanding service consumption behavior, service strategy, segmentation & positioning, creating service offerings, service quality, managing demand for services, service pricing. Topics pertaining to customer relationships include acquiring and retaining customers, customer profitability & lifetime value, customer satisfaction measurement, relationship marketing, and service recovery. Topics pertaining to managing service employees include empowering service employees, employees as living brands; globalization of services; and ethical issues in services marketing. Prerequisite: MKTG 820. This course is open only to students in the full-time MBA program.

MKTG 895. Graduate Seminar in Marketing: _____ 0.5-5 Credits. A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Enrollment restricted.

MKTG 898. Independent Study for Master's Students. 1-6 Credits. (V) Individual study of selected current problems in the field of business management to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

MKTG 901. Introduction to Research Methods in Marketing. 3 Credits. This course introduces key concepts that are critical in marketing academic and scientific research, as well as identifying the pros and cons of research methods and how multiple methods can complement each other. Students will gain an understanding of how the nature of research questions dictate the research methodology(ies) to most effectively address questions.

MKTG 951. Consumer Behavior. 3 Credits. This seminar provides an overview of the current theories and methodological approaches associated with consumer behavior research. Main topics of the course include attention and information search, consumer memory structure, consumer knowledge, inference making, motivation/goal, consumer attitude and persuasion, judgment and decision making, self-perception and regulation, culture's influence on consumer behavior, and affect/emotion/mood. The content will be based on literature from multiple disciplines including marketing, psychology, sociology, and economics. Students will be required to critically analyze and synthesize the literature, with a view to formulate research proposals on issues that interest them. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MKTG 952. Introduction to Marketing Models. 3 Credits. There is a rich tradition of using models to represent and analyze various marketing phenomena. An illustrative list of topics include: examining first-mover advantages, understanding response to price, analyzing new pricing formats, compensation design, interaction between marketing investments and stock market response, consumer surplus analysis, allocation of marketing resources, and decision support systems. Against this backdrop, the objectives of this course are two-fold: (i) to provide a non-technical overview of various modeling approaches employed in marketing, and (ii) apply one or more of these approaches to generate new research. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MKTG 953. Marketing Communications. 3 Credits. This course focuses on fundamentals of marketing communications with a heavy emphasis on message-memory. Some of the topics covered in this course include memory (e.g., elderly adults). Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MKTG 954. Pricing and Strategy. 3 Credits. This seminar exposes students to the various analytical approaches to understand and model pricing phenomena by examining the classic as well as contemporary works on pricing. The students will learn how to model strategic interactions in the marketplace using game theory and other analytical tools as well as theories such as auction theory, prospect theory, and mental accounting. Some of the topics covered in this course include price discrimination mechanisms, price as a competitive tool (e.g., entry deterrence), price as a promotional strategy, role of price in channel structure and strategy, and effect of price on consumer choice. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MKTG 957. Managerial Issues in Marketing. 3 Credits. The course is designed to examine issues that influence managerial decision-making such as product management, behavioral pricing, marketing communications, and marketing models. Instructor's research interest would dictate the emphasis on a particular topic. Prerequisite:
Admission to the Doctoral Program or graduate standing and permission of the instructor.

MKTG 958. Consumer Judgment and Decision Making. 3 Credits.
The purpose of this course is to develop a solid foundation for critical thinking and research on judgment and decision making aspects of consumer behavior, marketing, and business in general. This graduate seminar may cover a wide range of behavioral research topics relevant to the study of judgment and decision making, such as utility theory, prospect theory, costly signaling theory and conspicuous consumption, sex differences in behavior and consumption, and hormonal influence on consumption. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MKTG 959. Affect, Cognition and Hedonic Consumption. 3 Credits.
This seminar takes a comprehensive look at the current and prior research on affect and cognitive processes, and specifically examines various aspects of consumption, both pleasant and unpleasant. Topics covered in this course include but are not limited to positive emotions, mindfulness, and various social, emotional, and cognitive determinants of consumer satisfaction, happiness, and well-being. Prerequisite: Admission to the Doctoral Program or graduate standing and permission of the instructor.

MKTG 995. Doctoral Seminar in Marketing: 1-12 Credits.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor.

MKTG 998. Independent Study for Doctoral Students. 1-5 Credits.
Individual study of selected current problems in the field of business administration to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval from supervising faculty member and PhD Team.

MKTG 999. Doctoral Dissertation. 1-12 Credits.
(V) Individual research work. Graded on a satisfactory progress/limited progress/no progress basis.

Business Courses

SCM 230. Introduction to Business Analytics, Information Systems, and Supply Chain Management Professions. 3 Credits.
In this course, we focus on the Business Analytics, Information Systems, and Supply Chain Management professions and cover a variety of topics. Topics include, but are not limited to, career opportunities; the importance of professional mentorship; professional membership with groups/associations; appropriate industry certifications; graduate education content, timing, and opportunities; the role of career broadening experiences; and ethical dilemmas within the professions. We emphasize both current practice and projected industry trends and involve guest speakers. This course is cross-listed with IST 230 and SCM 230. Check with your Major to see which 230 course it requires or recommends (ACCT 230, BSAN 230, BUS 230, FIN 230, IST 230, MKTG 230 or SCM 230) and when it encourages you to take it. (Same as BSAN 230 and IST 230.) Prerequisite: BUS 210 or concurrent enrollment.

SCM 305. Survey of Decision Making in Business. 3 Credits.
An introduction to decision making under the uncertainty encountered in business and in everyday life. Covers selected topics in probability, statistics, economics, and operations research, and their application to complex problems in financial management, marketing, operations management, supply chain management, and quality management; as well as risks affecting everyday life, such as personal decisions in regard to career, marriage, and wealth management. (Not open to students with credit in BBA 305, SCM 310 or SCM 311.) Prerequisite: Goal 1, Outcome 2 and Goal 2, Outcome 1.

SCM 310. Management Science and Operations Management. 3 Credits.
Introduces some of the most widely used models from management science in business decision making. Topics include decision making under uncertainty, resource allocation models, and production and operations management. Prerequisite: Prior completion or co-enrollment in DSCI 202 or BSAN 202.

SCM 311. Management Science and Operations Management, Honors. 3 Credits.
Honors treatment of this course introduces some of the most widely used models from management science in business decision making. Topics include decision making under uncertainty, resource allocation models, and production and operations management. Only open to students admitted to the University Honors Program, the Business Honors Program, or permission of the instructor. Prerequisite: Prior completion or co-enrollment in DSCI 202 or BSAN 202.

SCM 400. Special Topics in Supply Chain Management: 1-5 Credits.
This is a variable-topic seminar. Its purpose is to allow the occasional offering of supply chain management topics not covered by established courses. Prerequisite: Determined for each topic by instructor. Enrollment restricted.

SCM 401. Introduction to Supply Chain Management. 3 Credits.
This course introduces the student to supply chain management. Students are presented the key concepts of supply chain management, the application of these concepts and are provided with the managerial knowledge of supply chain management through class discussions and case studies. Students discover the impact of information technologies, strategic alliances and logistics on supply chain management and the performance implication of supply chain management. Prerequisite: SCM 310 or SCM 311, FIN 310 or FIN 311, and MKTG 310 or MKTG 311. Enrollment restricted.

SCM 402. Procurement and Supplier Management. 3 Credits.
This course involves the study of supply management. Topics covered include the purchasing process, the role of the procurement function within the company, and the evaluation, selection and development of suppliers. The course is also designed to emphasize the importance of negotiations and managing contracts. Prerequisite: SCM 401. Enrollment restricted.

SCM 403. Logistics, Transportation and Warehouse Management. 3 Credits.
This course discusses the area of physical distribution management of supply chains. Attention is given to managerial responsibilities such as inventory management, network and transportation design, warehousing, closed-loop supply chains, and facility planning. Prerequisite: SCM 401. Enrollment restricted.

SCM 404. Management of Integrated Information System/ERP. 3 Credits.
This course provides an introduction to Enterprise Resource Planning (ERP) systems. We will evaluate the functions, processes and data requirements of business functions in an integrated framework. The objectives of the course include (1) understanding data needs of different business functions; (2) understanding alternative information systems solutions and the problems in independent information systems and;
(3) understanding ERP systems as solutions to integration. Not open to students with credit in IST 401. Prerequisite: IST 202 or BSAN 310. Enrollment restricted.

SCM 410. Capstone in Supply Chain Management. 3 Credits. Integrating and applying the theories, concepts, and methods taken in previous supply chain management courses through the use of readings, case studies, projects, and industry speakers. Prerequisite: SCM 401 and IST 202 or BSAN 310. Enrollment restricted.

SCM 415. Data Analysis and Forecasting. 3 Credits. This course is concerned with the analysis and interpretation of data encountered in business and economics. One goal of the course is to develop skills in the analysis of data that can be used to solve problems students are likely to encounter on the job. The course attempts to develop an attitude toward data analysis that can be usefully applied in a wide variety of real life situations. A variety of statistical tools are covered. In particular, the multiple regress model is covered with an emphasis on how the model can be used in situations involving economic data. Data analysis techniques are illustrated with examples and case studies using computers. This course is in the management sciences and operations management area. Not open to students with credit in BSAN 415. Prerequisite: SCM 310 or SCM 311. Enrollment restricted.

SCM 416. Supply Chain Modeling and Optimization. 3 Credits. Design, develop, and use computer decision models for analysis of supply chain operations; computer intensive coursework emphasizing spreadsheet applications. Prerequisite: SCM 401. Enrollment restricted.

SCM 418. Modeling and Risk Analysis. 3 Credits. An introduction to the concepts, methodologies, and applications of risk analysis and modeling. This course is designed primarily to develop practical modeling skills with spreadsheet software. To accomplish this, material from across the finance discipline will be covered as well as material from the supply chain management discipline. Examples from corporate finance, investments, financial derivatives, real estate, personal finance, and supply chain management methods will be used to demonstrate modeling. (Same as FIN 418.) Not open to students with credit in FIN 418 or FIN 460 or SCM 418. Prerequisite: FIN 310 or FIN 311. Enrollment restricted.

SCM 420. Customer Focused Operations Service Management. 3 Credits. The purpose of this course is to build the conceptual framework which drives an organization striving to operate in a customer-focused mode. This requires an integration of basic principles of marketing and operations in order to define the value-added in each of an organization's products and/or services, to use this information to define the value-added in work, and to use this definition to improve the actual work. To do this effectively, requires leadership, empowerment, focused data, and a system view. The basic principles of each requirement will be discussed as well as their integration into a unified whole. Not open to students with credit in BSAN 420. Prerequisite: SCM 310 or SCM 311 and MKTG 310 or MKTG 311. Enrollment restricted.

SCM 425. Customer Relationship Management. 3 Credits. This course offers a comprehensive introduction to the strategy and tactics of customer relationship management (CRM). Particular emphasis is given toward identifying the key strategic principles inherent in the customer-centric focus that underlies a successful CRM program. Topics include: Fundamentals of CRM strategy, marketing metrics, customer profitability analysis, choice modeling, techniques for evaluating model performance and applications of CRM to marketing campaign management. Students will be instructed on how to implement the CRM techniques using various software tools and real-world data. (Same as BSAN 465 and MKTG 465.) Not open to students with credit in BSAN 465 or MKTG 465 or SCM 425 or MKTG 400 - Customer Relationship Management. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

SCM 453. Retailing, Distribution Channel and Supply Chains. 3 Credits. This course exposes students to the many facets of retailing and provides a basic understanding of retailing concepts. At the completion of the course, students will understand the challenges of starting, managing, expanding, and succeeding in retailing. The course covers major functions that comprise the retailing task, including the decision tools used, planning, strategy formulation, implementation and control in retail management. The content of the course should be useful for students interested in working in the retail sector, desiring to work for companies that interface with retailers and/or for those with a general management and entrepreneurial interest. Not open to students with credit in MKTG 453. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

SCM 458. Marketing, Supply Chains, and Geographic Information Systems. 3 Credits. This course is designed to engage students in critical discussions, analysis and use of Geographic Information Systems (GIS) in a variety of business sectors. Additionally, the course will introduce students to GIS systems used to make business decisions through hands-on and applied assignments. Upon completion, student will understand how GIS and related systems are applied to and utilized by businesses, as well as how to employ basic GIS programs to help solve a variety of business problems. Not open to students with credit in MKTG 458 or GEOG 458. Prerequisite: MKTG 310 or MKTG 311. Enrollment restricted.

SCM 500. Individual Research in Supply Chain Management. 1-5 Credits. Individual study of selected topics in supply chain management not otherwise available to the student. Topics selected to be determined by the special interests and objectives of the student in consultation with a faculty member who will supervise the reading and research. Prerequisite: Approval of proposed plan of study by the instructor. Enrollment restricted.

SCM 701. Introduction to Supply Chain Management. 3 Credits. This overview course covers a wide set of topics to develop a strategic view of supply chain management and to illustrate its interdisciplinary nature. The course has the following principal objectives: to introduce the strategic and operating issues and decisions involved in managing the operational and supply chain processes within and across firms; to understand the global and interdisciplinary nature of supply chain management; to understand the concept of supply chain coordination by managing information and inventory. Topics covered in the class include supply chain functions, forecasting and demand management, inventory management, managing information flows in supply chains, globalization and outsourcing, and supply chain technologies. Prerequisite: Corequisite: DSCI 701. Enrollment restricted.

SCM 702. Procurement and Supplier Management. 3 Credits. This course involves the study of supply management. Topics covered include the purchasing process, the role of the procurement function within the company, and the evaluation, selection and development of suppliers. The course is also designed to emphasize the importance of negotiation and managing contracts. Prerequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers.

SCM 703. Transportation, Logistics Systems. 3 Credits. This course discusses the area of physical distribution management of supply chains. Attention is given to managerial responsibilities such as network design, transportation methods, inventory management,
warehousing, packaging and materials handling. Prerequisite: Corequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers.

SCM 704. Information Systems for Supply Chain Management. 2 Credits.
This course provides an introduction to Enterprise Resource Planning (ERP) systems. We will evaluate the functions processes and data requirements of business functions in an integrated framework. The objectives of the course include (1) understanding data needs of different business functions; (2) understanding alternative information systems solutions and the problems in independent information systems and; (3) understanding (ERP) systems as solution to integration. Prerequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers.

SCM 705. Project Management. 2 Credits.
An introduction to formal project management methods and practices presented in a fashion that builds upon experiences of the students in the class. At the end of the class, each student should: understand the formal project management discipline and methodology, appreciate at a high level different approaches to project management and when each might most effectively be applied, understand the importance and benefits of standard methodologies, be able to adapt such methods to unique situations, and learn the key features of some project management software.

SCM 706. Change Management. 2 Credits.
This course provides students an understanding of the processes driving change in the business world as well as the strategic implementation required of leaders that enables them to effectively manage their organizations in a changing environment. It is concerned with the development of specific actions, decisions and communications in times of change. The course is specifically designed to focus on changes in the environment for business, but in a way that business professionals and/or non-business people can be equally effective in the learning environment. Prerequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers.

SCM 710. Capstone in Supply Chain Management. 3 Credits.
Integrating and applying the theories, concepts, and methods taken in previous supply chain management courses through the use of readings, case studies, project and industry speakers. Prerequisite: SCM 701. Enrollment restricted to Fort Leavenworth officers.

SCM 718. Operations and Supply Chain Management. 3 Credits.
This course covers a wide set of topics to develop both strategic and analytical skills in supply chain management. The course will provide a conceptual framework and a set of analytical tools to analyze, coordinate, and improve organizational processes. Objectives of the course include and introduction to the strategic and operating issues and decisions involved in managing the operational and supply chain processes within and across firms; an understanding of the concept of supply chain coordination by managing information and inventory; and to develop a basic understanding of purchasing, supplier relationship management, and outsourcing. Topics include process and cycle time analysis, lean/JIT production system, six sigma, inventory management, managing information flows in supply chains, and purchasing and supply management. Prerequisite: DSCI 706 or BSAN 706.

SCM 720. Procurement and Supplier Management. 2 Credits.
This course provides the students with an understanding of procurement, strategic sourcing and supplier management. The course has the following principal objectives: to introduce the basic concepts, terminology, tools of purchasing; to provide a conceptual framework of the trends and developments in global sourcing; to understand the techniques of negotiations; and to develop understanding of supplier relationship management. Topics covered in the course include purchasing process, policy, and procedures, purchasing law and ethics, supply management, supplier selection and evaluation, supplier relations management, global sourcing, and negotiations. Prerequisite: SCM 701 or SCM 820. Enrollment restricted.

SCM 721. Logistics and Distribution Management. 2 Credits.
This course addresses the theory and practice of designing distribution channels and logistics systems. The course has the following principal objectives: to understand how logistics management generates value to customers; to establish a sound foundation in transportation, fulfillment, and facility location to support global supply chains; and to develop the ability to design logistics systems and formulate integrated supply chain strategy, so that all components are not only internally synchronized but also tuned to fit corporate strategy, competitive realities and market needs. Topics covered include transportation & fulfillment, inventory management, facility location, warehousing, and global logistics. Prerequisite: SCM 701 or SCM 820. Enrollment restricted.

SCM 722. Information Systems for Supply Chain Management. 2 Credits.
This course examines information technology (IT) applications in the field of supply chain management, focusing on such issues as the breadth of IT tools and products available to support the planning, implementation and operation of supply chains, the process by which specific applications are selected by companies, and the implementation process. Among the other topics addressed in the course are the integration of IT systems between internal and external supply chain partners and the IT problems typically facing a company post acquisition. Prerequisite: SCM 701 or SCM 820. Enrollment restricted.

SCM 723. Lean Six Sigma. 2 Credits.
This course addresses the theory and practice of continuous process improvement through lean thinking and six sigma quality improvement. The course has the following principle objectives: to understand the process associated with continuous improvement in manufacturing and service organizations; to understand common tools that are useful in continuous improvement in manufacturing and service organizations; and to gain experience in the practice of continuous improvement. Topics covered include using the scientific method in continuous improvement; tools to understand and reduce variability like control charts, capability analysis, stratification analysis, Pareto analysis, etc; and tools to implement lean thinking like Kanban (pull systems), Takt time (process pacing to customer demand), one piece flow, Jodoka (error proofing), Heijunka (product leveling). Prerequisite: DSCI 701 or DSCI 810. Enrollment restricted.

SCM 820. Operations and Supply Chain Management. 3 Credits.
This introductory course covers a wide set of topics to develop both strategic and analytical skills in supply chain management. The course will provide a conceptual framework and a set of analytical tools to analyze, coordinate, and improve organizational processes. Objectives of the course include an introduction to the strategic and operating issues and decisions involved in managing the operational and supply chain processes within and across firms; an understanding of the concept of supply chain coordination by managing information and inventory; and to develop a basic understanding of purchasing, supplier relationship management, and outsourcing. Topics include process and cycle time analysis, lean/JIT production system, six sigma, inventory management, managing information flows in supply chains, and purchasing and supply management. This course is open only to students in the full-time MBA program.

SCM 831. Distribution Channels and Global Operations. 3 Credits.
This course addresses the theory and practice of designing distribution channels and global supply chains. The objectives of the course are to
provide an understanding of different channels of distribution and the complexities of global operations along with their associated risks and rewards. The course will address topics in transportation, fulfillment, and facility location to support global supply chains. It will develop the ability to design logistics systems and formulate integrated supply chain strategy. The topics also include channels of distribution, warehousing, and global operations management. Prerequisite: SCM 820. This course is open only to students in the full-time MBA program.

SCM 895. Graduate Seminar in Supply Chain Management: _____ 0.5-5.5 Credits.
A variable-topic seminar open only to graduate students meeting the requirements established by faculty members offering the course.

SCM 898. Independent Study for Master’s Students. 1-6 Credits.
Individual study of selected current problems in the field of supply chain management to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Students must have at least a 3.0 grade point average and be in good academic standing in a graduate business program and must submit a written statement of the proposed project approved by a supervisory faculty member prior to enrollment.

SCM 995. Doctoral Seminar in Supply Chain Management. 2-5 Credits.
A variable topic seminar open only to graduate students meeting the requirements established by faculty members offering the course. Prerequisite: Consent of instructor.

SCM 998. Independent Study for Doctoral Students. 1-5 Credits.
Individual study of selected current problems in the field of business to be adapted to the special interests and objectives of the students and conducted through extensive reading and research. Student must submit written statement of proposed project. Prerequisite: Approval required from supervising faculty member and PhD Team.

SCM 999. Doctoral Dissertation. 1-12 Credits.
Individual research work. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Science in Business

Since its founding in 1924, the School of Business at the University of Kansas has been committed to shaping tomorrow’s business leaders. The business school holds the gold standard of accreditation in business education, the Association to Advance Collegiate Schools of Business (http://www.aacsb.edu/), for both the school and its accounting programs. With its focus on teaching and research, the KU School of Business bridges theory and practice to know where business is going. Learn more at business.ku.edu (https://business.ku.edu/).

Undergraduate Admission to the School of Business

There are two paths for admission to the School of Business:

1. Direct freshman admission
2. Competitive admission

Freshman Admission

Applicants accepted at KU with an interest in business are eligible for direct admission into the School of Business based on an index score calculated using high school GPA and ACT composite or SAT math and evidence-based reading and writing scores. The index score is calculated as ACT/10 + HS GPA = index score. The required index score is at least 5.55. Students should refer to the official ACT/SAT concordance table when comparing SAT scores to ACT scores. Directly admitted freshman must start the sequence of B.S.B. professionalism courses in their first semester.

Note: Freshman admission is not an option for students who change their major to business or pre-business after the start of their first semester of college at KU or elsewhere. Such students should apply for competitive admission.

Competitive Admission

Students who do not meet direct admission standards, transfer students, and students who start out at KU pursuing other majors can be admitted to the B.S.B. degree program through competitive admission. Current KU students applying for competitive admission process should apply for a change of school during the semester in which they will complete the minimum requirements for admission. Applicants who are not currently KU students must first apply to KU and submit official transcripts for all previous colleges and universities attended to the Office of Admissions (http://admissions.ku.edu/) along with the application. To facilitate advising, current KU students applying for competitive admission are encouraged to submit change of school requests by September 15 for spring admission and by February 15 for fall admission. Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Competitive admission to the B.S.B. program is subject to the following requirements:

- Sophomore standing (>30 credit hours completed)
- Completion of three pre-admission foundation courses or their equivalents, which must be taken for a grade:
  - ECON 142 - Principles of Microeconomics
  - ACCT 200 - Financial Accounting 1
  - BSAN 202 - Statistics or DSCI 202 - Statistics
- Greater than or equal to 2.5 GPA in overall, overall KU, professional, and KU professional coursework
- When the School of Business must accept grades of credit/no credit (contrary to standing School policy), an assigned grade of “credit” will be treated as a “C” or 2.0 for admission purposes. Exceptions and petitions may be considered on a case-by-case basis.
- Upon admission to the B.S.B. program students must enroll in BUS 150 - Foundations of Business and begin or continue the required B.S.B. professionalism course sequence.

Academic Probation Policy

Students admitted to the B.S.B. degree program by direct, competitive, or transfer admission whose overall GPA, overall KU GPA, professional GPA, KU professional GPA, or within-major GPA falls below 2.5 will be placed on academic probation. Following imposition of probation students must meet with their academic advisors to develop and implement an academic performance improvement plan. Probation will be rescinded after the subsequent academic term if relevant GPAs improve to above these thresholds; absent academic performance improvement students may be dismissed and may not register for School of Business courses with restricted enrollment except by special permission. Petitions for readmission will be evaluated on evidence of improvement in academic performance.
Transfer Students
Transfer students may find it to their advantage to enter KU before the junior year, because some required courses may be available only at KU. Students attending Kansas community colleges should consult their advisors and a KU School of Business academic advisor about course equivalents and articulation agreements to ensure progress toward the degree. The Office of Admissions provides a guide (http://credittransfer.ku.edu/) to how classes at your current or former school transfer to KU. You must submit official transcripts of course work completed to the Office of Admissions (http://admissions.ku.edu) before a final determination can be made.

At least 30 hours of junior/senior professional course work must be completed at KU (courses in residence) for the student to be eligible for graduation. Only transfer grades of C- or higher apply toward graduation from the KU School of Business.

64-Hour Rule
A maximum of 64 hours of community college course work can be applied toward a KU business degree. All subsequent credit hours earned at a community college or other 2-year institution add an equivalent number of hours to the 120-hour minimum required to graduate.

10-Year Rule
Transfer business credits are limited to a 10-year span in which they can be considered equivalent to a KU School of Business course and satisfy any corresponding requirement. This 10-year limit begins on the date of completion of the credit. After 10 years, transfer business credits are treated as elective business credit, and a course repeat or update may be necessary.

Tentative Evaluation of Credit
Students are advised to work with an academic advisor if they are considering enrolling in a class outside of KU. Before enrolling in any non-KU courses, students should confirm the course transfers over properly in Credtran (https://admissions.ku.edu/apply/credit-transfer/) or submit course syllabi for approval by using the transfer credit evaluation form for business classes located here (https://business.ku.edu/student-and-academic-services/requests-petitions-transfer-credit-substitutions/).

Readmission
Students must submit an application for readmission to KU if their lapse in attendance is one semester or more. See the Office of Admissions for more information. Students may be readmitted to the School of Business if they left the school in good standing and it has been less than 5 years since they last attended.

5-Year Rule
If a student does not complete the business degree within 5 years of last attendance, the student must reapply through the competitive admission process. Students also must complete degree requirements in effect at the time of readmission to the business school regardless of the initial program.

Dismissal
Students who have been dismissed from the school must reapply through the competitive admission process.

Bachelor of Science in Business Degree Requirements
The School of Business offers a Bachelor of Science in Business (B.S.B.) with majors in accounting, business administration, business analytics, finance, information systems, management and leadership, marketing, and supply chain management. Also offered are a co-major in international business and various discipline-specific minors and certificate programs. Each major consists of the following components: general education courses, business foundation classes, international dimension requirement, major courses, and advanced business electives to satisfy requirements of specific majors, minors, and certificates. Degree program requirements are subject to change. It is the student’s responsibility to stay informed of requirements. To receive the B.S.B. degree students must complete the degree requirements in effect at the time they are admitted to the school.

General Education Requirements
All business majors are required to take the following course, which may satisfy KU Core requirements:

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>COMS 322</td>
<td>Audience Centered Public Speaking in the</td>
<td>3</td>
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<td>Workplace</td>
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<td>MATH 115</td>
<td>Calculus I</td>
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<td>or MATH 125</td>
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<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
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<td>Natural Science with lab</td>
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</tbody>
</table>

Requirements for All Majors

Professionalism course sequence
Starting with first-year students as of fall 2020, all business majors must complete the required sequence of the following one-credit-hour professionalism courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 110</td>
<td>Introduction to Professionalism</td>
<td>1</td>
</tr>
<tr>
<td>BUS 120</td>
<td>Emerging Topics in Business</td>
<td>1</td>
</tr>
<tr>
<td>BUS 210</td>
<td>Career Management and Planning</td>
<td>1</td>
</tr>
<tr>
<td>BUS 310</td>
<td>Internships with Impact</td>
<td>1</td>
</tr>
<tr>
<td>BUS 410</td>
<td>Professionalism Capstone</td>
<td>1</td>
</tr>
</tbody>
</table>

In addition to these courses, students must complete a 230-level introductions to professions course appropriate to their respective majors, listed below Accounting majors must complete ACCT 230.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 230</td>
<td>Introduction to the Accounting Profession</td>
<td>1</td>
</tr>
<tr>
<td>BUS 230</td>
<td>Introduction to Professions in Business</td>
<td>1</td>
</tr>
<tr>
<td>BSAN 230</td>
<td>Introduction to Business Analytics, Information Systems, and Supply Chain Management Professions</td>
<td>1</td>
</tr>
<tr>
<td>FIN 230</td>
<td>Introduction to the Finance Profession</td>
<td>1</td>
</tr>
<tr>
<td>IST 230</td>
<td>Introduction to Business Analytics, Information Systems, and Supply Chain Management Professions</td>
<td>1</td>
</tr>
</tbody>
</table>
OPTION 1. FOREIGN LANGUAGE

Complete through the fourth level (intermediate II) of courses in a modern foreign language or earn equivalent proficiency as determined by the appropriate language department. International students who have completed the English proficiency requirement through the Applied English Center (http://www.aec.ku.edu/) or receive passing TOEFL score according to business school TOEFL Policy may use this to fulfill Option 1.

OPTION 2. INTERNATIONAL STUDIES

6 credit hours of courses completed in one or a combination of the following categories:

1. (a) Study abroad credit hours from any study abroad program approved by KU.
2. (b) Contemporary regional/international studies/international business courses must be selected from a list available online (https://business.ku.edu/) and may be double-counted to meet General Education requirements. Courses in this category may be double-counted toward the corresponding business major and/or concentration.

Majors

Within the Bachelor of Science in Business degree, students may earn major(s) in accounting, business administration, business analytics, finance, information systems, management and leadership, marketing, or supply chain management. Each major has core and elective major courses which must be completed.

Program guides are available on the school's website (https://business.ku.edu/undergraduate-programs/degree-programs/).

Accounting Major

Accounting majors must complete three (3) hours of advanced business elective. ABE courses are numbered 320 and higher and have prerequisites. Accounting majors must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 230</td>
<td>Introduction to the Accounting Profession</td>
<td>1</td>
</tr>
<tr>
<td>ACCT 320</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 323</td>
<td>Intermediate Accounting I, Honors</td>
<td></td>
</tr>
<tr>
<td>ACCT 325</td>
<td>Managerial Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 330</td>
<td>Introduction to Taxation</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 410</td>
<td>Intermediate Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 411</td>
<td>Intermediate Accounting II, Honors</td>
<td></td>
</tr>
<tr>
<td>ACCT 425</td>
<td>Accounting Information Systems &amp; Analytics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 543</td>
<td>Introduction to Auditing</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced business electives (ABE)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 498</td>
<td>Business Policy and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 499</td>
<td>Business Policy and Strategy, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Business Administration Major

This major offers a broad interdisciplinary approach. Discovering solutions to complex problems in a globalized marketplace requires a multidisciplinary and integrated approach. The major prepares students for a variety of job markets and career paths. The program is flexible, allowing students to develop in-depth skills in such areas as accounting, business law, finance, information systems, management and leadership, marketing, and supply chain management.

The major requires 21 hours of advanced business credit from courses numbered 320 or above. The 21 hours must be distributed across at least

### Foundation Courses

The following courses are considered foundation courses and must be completed by all majors:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 150</td>
<td>Foundations of Business</td>
<td>3</td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 143</td>
<td>Principles of Microeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BSAN 202</td>
<td>Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Core Courses and Capstone Course

In addition to the business foundation courses, all majors must complete the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 201</td>
<td>Managerial Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BE 301</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>or BE 302</td>
<td>Managerial Economics, Honors</td>
<td></td>
</tr>
<tr>
<td>BLAW 301</td>
<td>Legal Aspects of Business</td>
<td>3</td>
</tr>
<tr>
<td>or BLAW 302</td>
<td>Legal Aspects of Business, Honors</td>
<td></td>
</tr>
<tr>
<td>BUS 305</td>
<td>Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>FIN 310</td>
<td>Finance</td>
<td>3</td>
</tr>
<tr>
<td>or FIN 311</td>
<td>Finance, Honors</td>
<td></td>
</tr>
<tr>
<td>IST 310</td>
<td>Introduction to Information &amp; Management Productivity Systems</td>
<td>3</td>
</tr>
<tr>
<td>BSAN 310</td>
<td>Introduction to Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 310</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 311</td>
<td>Principles of Management, Honors</td>
<td></td>
</tr>
<tr>
<td>MKTG 310</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>or MKTG 311</td>
<td>Marketing, Honors</td>
<td></td>
</tr>
<tr>
<td>SCM 310</td>
<td>Management Science and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>or SCM 311</td>
<td>Management Science and Operations Management, Honors</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 498</td>
<td>Business Policy and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>or MKTG 499</td>
<td>Business Policy and Strategy, Honors</td>
<td></td>
</tr>
</tbody>
</table>

### International Dimension Requirement

The International Dimension Requirement (IDR) is required of all students graduating from the KU School of Business. To complete the IDR, students must choose one of the following options:

#### OPTION 1. FOREIGN LANGUAGE

Complete through the fourth level (intermediate II) of courses in a modern foreign language or earn equivalent proficiency as determined by the appropriate language department.
three of the following prefixes, with a minimum of 3 hours in each of the three prefixes selected: ACCT, BE, BLAW, BSAN, DSCI, ENTR, FIN, IBUS, IST, MGMT, MKTG, and SCM.

The student must satisfy all business graduation requirements for the B.S.B. and have a grade-point average of at least 2.2 in the 21 advanced business credit hours selected for the major.

**Business Analytics Major**

The goal of the Business Analytics program is to prepare students with the requisite knowledge to implement data gathering, cleansing, integration, and modeling tasks as well as data asset analysis for business applications. The program will build on the basic business core courses by adding the necessary courses in the Statistics, Data Domain, and Business Analytics Domain. These courses will cover statistical methods, data warehousing, dimensional modeling, big-data analytical methods, and visualization tools and techniques and will introduce topics such as data mining and predictive analytics. Students will have the skills and experience to create and manage big data initiatives as well as associated business processes facilitating large-scale business data analytics in organizations. Graduates will be able to serve as architects, change agents and analytics tool suite operators for business and government.

In addition to providing students with fundamental big data resource and infrastructure management skills, the program is also designed to provide graduates with exposure to applied areas (specifically Information Systems, Marketing or Supply Chain Management) through specific electives. Graduates will work as applied business analysts, data architects, data visualization experts, big data analysts, and data change agents. The areas of healthcare, public administration, mobile services, retail, manufacturing, and consulting service industries are all areas where analytics talent will provide significant business value.

The Business Analytics major must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAN 326</td>
<td>Database Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>BSAN 415</td>
<td>Data Analysis and Forecasting</td>
<td>3</td>
</tr>
<tr>
<td>BSAN 440</td>
<td>Foundations in Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BSAN 450</td>
<td>Data Mining and Predictive Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BSAN 480</td>
<td>Business Analytics Capstone</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Two additional Business Analytics approved electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**Finance**

Finance majors must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 321</td>
<td>Intermediate Accounting for Finance</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 410</td>
<td>Intermediate Accounting II</td>
<td></td>
</tr>
<tr>
<td>FIN 410</td>
<td>Investment Theory and Applications</td>
<td>3</td>
</tr>
<tr>
<td>or FIN 411</td>
<td>Investment Theory and Applications, Honors</td>
<td></td>
</tr>
<tr>
<td>FIN 413</td>
<td>Financial Markets and Intermediaries</td>
<td>3</td>
</tr>
<tr>
<td>or FIN 414</td>
<td>Financial Markets and Intermediaries, Honors</td>
<td></td>
</tr>
</tbody>
</table>

**Information Systems Major**

The information systems major exposes students to a range of studies focused on the effective use of information technologies in settings typical of business, governmental, and not-for-profit organizations. Students gain a comprehensive understanding of specific technologies as well as an appreciation of challenges involved with the application of such technologies in dynamic environments. The major equips graduates with both technical and managerial skill sets needed to begin careers in major business and governmental entities or with major information systems consulting firms.

The information systems major must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 415</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>or FIN 416</td>
<td>Corporate Finance, Honors</td>
<td></td>
</tr>
<tr>
<td>FIN 400 or higher electives</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**Management and Leadership Major**

The management and leadership major gives students the knowledge and skills to be successful leaders and managers of people and organizations. Students learn to design and modify organizational structure, strategy, and processes to enhance organization performance in a socially and ethically responsible manner. They learn how to influence and direct change through a better understanding of organization politics, vision, and values. Students learn to influence and lead others effectively through skill development in communication, motivation, and conflict resolution. They develop self-awareness and an appreciation for individual differences, leading to more successful work relations. They learn to lead and follow in team settings and to use team-based problem-solving skills. Students learn to create competent and committed teams and organizations through the use of effective systems for employee hiring, development, compensation, and performance management. They also learn about the challenges of competing globally, including how to adapt organizational structures, processes, and functions such as production, marketing, finance, and human resources so that they function more effectively cross-culturally. Student learning is enhanced through supporting activities such as clubs, consulting projects, case competitions, and study abroad opportunities.

The Management and Leadership degree will require the completion of 21 hours of coursework with 12 hours of foundational courses described below. These courses must be completed with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 405</td>
<td>Ethical Decision Making in Business</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 410</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
</tbody>
</table>
Elective Tracks: To satisfy the remaining 9 credit hours for the major, students will have an opportunity to complete one of the following focused curriculum (“tracks”) through the selection of 3 unique upper division elective courses within the track.

NOTE: These tracks and courses are subject to change in the future according to changes in resources and needs.

Track: ORGANIZATIONAL LEADERSHIP

Electives (3 required):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 437</td>
<td>Developing Management Skills</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 455</td>
<td>General Management Processes/Change</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 472</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 485</td>
<td>Business Consulting</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 525</td>
<td>Negotiations and Dispute Settlement</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 480</td>
<td>International Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Track: ENTREPRENEURSHIP

Electives (3 required):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTR 410</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 430</td>
<td>Corporate Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 450</td>
<td>Advanced Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 460</td>
<td>Fundamentals of Entrepreneurial Finance</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 480</td>
<td>Management of Small Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 490</td>
<td>Social Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

Track: HUMAN RESOURCES

Electives (3 required):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 412</td>
<td>HR Management Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 413</td>
<td>Recruiting and Selecting Effective Employees</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 416</td>
<td>Training, Development, and Management Careers</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 419</td>
<td>Managing Performance and Compensation</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 431</td>
<td>Legal Environment for Managing Employees</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 434</td>
<td>International Human Resource Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Marketing Major

The marketing major gives students the concepts and tools needed to succeed as marketing managers skilled in the creation, evaluation, and refinement of marketing programs that lead to valuable exchanges between channel partners, firms, and customers. Core concepts and tools are primarily provided through four required foundation courses: marketing, marketing research, marketing strategy, and digital marketing. The major offers numerous electives to reflect the breadth of the marketing function and to allow students to tailor their programs to individual preferences and career goals. Such opportunities as the marketing club, consulting projects, case competitions, and study abroad further enhance the learning experience.

The marketing major must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 310</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 311</td>
<td>Marketing, Honors</td>
<td></td>
</tr>
<tr>
<td>MKTG 415</td>
<td>Marketing Research for Managers</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 435</td>
<td>Marketing Strategy</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 443</td>
<td>Digital Marketing and Social Media</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 400+</td>
<td>Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

Supply Chain Management Major

Supply chain management professionals integrate the flow of materials, finances, and information from suppliers, manufacturers, wholesalers, distributors, and retailers to the final consumer and back again. The major gives students the basic skills to do this work. The demand for professionals in the field is rapidly growing as firms realize improved efficiency from good SCM practices. The field continues to evolve to become a proactive, strategic enterprise, often with global partners. Students typically have opportunities for internships and other experiential activities with businesses while they are in the program. The major offers a set of required core courses and electives.

The supply chain management major must complete the following core courses with a grade-point average of at least 2.5:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCM 401</td>
<td>Introduction to Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>SCM 402</td>
<td>Procurement and Supplier Management</td>
<td>3</td>
</tr>
<tr>
<td>SCM 403</td>
<td>Logistics, Transportation and Warehouse Management</td>
<td>3</td>
</tr>
<tr>
<td>SCM 404</td>
<td>Management of Integrated Information System/ERP</td>
<td>3</td>
</tr>
<tr>
<td>SCM-related electives</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Co-Major in International Business

International Business, Co-Major

To earn a co-major in international business, a student must co-major with another B.S.B. major and successfully complete a total of at least 21 credit hours distributed as follows:

• Required Knowledge:

  • 9 credits from three required courses:
    - IBUS 410
    - IBUS 480
    - IBUS 462

• Regional/Functional Knowledge:

  • 6 credits from two of the following course options:
    - IBUS 415
    - IBUS 425
    - FIN 420
    - MKTG 440
    - MGMT 434
\textbf{Elective:}
- 3 or more credits from the following:
  - One or more additional courses from the Regional/Functional list above.
  - IBUS 300 or IBUS 400 or IBUS 500.
  - Course from School of Business IDR list (300 level or above).
  - Other related course as approved by the designated IB faculty member.
  - Approved Business School study abroad program.

\textbf{Language Requirement:}
- 4 semesters of a foreign language or proficiency equivalency (0 – 12 credits).

\textbf{Study Abroad Requirement:}
- Summer or semester study abroad program (minimum 6 weeks).

\section*{Minors for B.S.B. Students}

Students in the B.S.B. program and majoring in one of the business majors may also earn one or more of the following minors. KU students not in the B.S.B. program are not eligible for these minors.

\textbf{Minor in Business Analytics}

\textit{Complete 2 Required Courses (3 credits each):}
- BSAN 326: Database Management Systems (Not open to students with credit in IST 326)
- BSAN 440: Foundation in Business Analytics (Not open to students with credit in IST 495)

\textit{Complete 3 Elective Courses (3 credits each):}
- BSAN 320: Fundamentals of Application Development
- BSAN 325: Systems and Analysis Design
- BSAN 415: Data Analysis and Forecasting
- BSAN 420: Data Visualizations in Business
- BSAN 430: Marketing Analytics
- BSAN 450: Data Mining and Predictive Analytics
- BSAN 480: Business Analytics Capstone
- BSAN 599: Internship in Business Analytics

\textbf{Minor in Entrepreneurship}

To complete the Minor in Entrepreneurship the student must complete 15 credit hours (five courses of 3 credits each) as follows:

- Students will be required to take ENTR 410 Introduction to Entrepreneurship, ENTR 490 Social Entrepreneurship, and ENTR 450 Advanced Entrepreneurship.
- Students will choose two additional courses to complete the 15 credit requirement. Such courses include: ENTR 430 Corporate Entrepreneurship, FIN 460 Entrepreneurial Finance, ENTR 470 Entrepreneurial Marketing, and ENTR 480 Small Business Management.

\textbf{Minor in Human Resources Management}

\textbf{Minor in Human Resources Management – 15 total credits}

\textbf{Complete 4 Required Courses (12 credits)}

\textbf{Required Strategic HRM Knowledge (3 credits)}
- MGMT 410: Intro to HR Management (must be taken prior or concurrently with a Core Functional Course)

\textbf{Required HRM Functional Core Knowledge (9 credits from the four courses below)}
- MGMT 413: Recruiting & Selecting Effective Employees
- MGMT 416: Training, Development, & Managing Careers
- MGMT 419: Managing Performance & Compensation
- MGMT 431: Legal Environment for Managing Employees

\textbf{Choose 1 Elective (3 credits)}
- MGMT 400: HRM Data Analytics
- MGMT 434: International Human Resources
- BLAW/MGMT 525: Negotiations and Dispute Settlement or MGMT 413, 416, 419, 431 (taken beyond the required 9 Functional Core Knowledge)

\section*{Minor in Information Systems}

\textit{Choose 5 Courses (3 credits each):}
- IST 320: Fundamentals of Software Development
- IST 321/310: Spreadsheet & Database Applications
- IST 325: Systems Analysis and Design
- IST 326: Database Management Systems (Not open to students with credit in BSAN 326)
- IST 330: Fundamentals of Business Computer Networking
- IST 335: Information Security
- IST 401: Mgmt of Integrated IS/ERP (Not open to students with credit in SCM 404)
- IST 405: Contemporary Information Technology Topics (Fall only)
- IST 410: IT Project MGMT
- IST 495: Foundations Business Analytics (Not open to students with credit in BSAN 440)

\textbf{Minor in International Business}

The coursework required for the IB Minor would be as follows:

\textbf{Required Knowledge:}
- 9 credits from three required courses:
  - IBUS 410 – International Business
  - IBUS 480 – International Management
  - IBUS 462 – Comparative and Cross-Cultural Management

\textbf{Regional/Functional Knowledge:}
- 3 credits from one of following course/experiential options:
  - IBUS 415 – Business in Latin America
  - IBUS 425 – Business in China
  - FIN 420 – International Finance
  - MKTG 440 – Global Marketing
  - MGMT 434 – International Human Resource Management
  - Approved Business School study abroad program.

\textbf{Elective:}
- 3 Credits from one of the following:
  - An additional course from Regional/Functional group above.
  - IBUS 300 or IBUS 400 or IBUS 500.
  - Course from School of Business IDR list (300 level or above).
• Other related course as approved by a designated IB faculty member.

• Cultural Broadening Requirement:
  • 3 credits:
  • Students required to successfully complete one language course at KU or participate in a KU Summer or Semester study abroad (minimum 4 weeks).

• Total Minor: 18 credits.

Minor in Management and Leadership

Leadership Foundation (All 4 courses required below):

MGMT 405: Ethical Decision Making in Business
MGMT 440: Advanced Organizational Behavior
MGMT 410: Talent Management
MGMT 470: Leadership in Business Organizations

Plus one elective from below:

IBUS 410: Introduction to International Business
BUS 450: Literary & Historical Narratives for Professionals
MGMT 412: HR Data Analytics
MGMT 413: Recruiting & Selecting Effective Employees
MGMT 416: Training, Development, & Managing Careers
MGMT 419: Managing Performance & Compensation
MGMT 431: Legal Environment for Managing Employees
MGMT 434: International Human Resource Management
MGMT 437: Personal Skills for Managing People
MGMT 455: General MGMT Processes/Change
MGMT 472: Project Management

Minor in Marketing

Complete 2 required courses:

MKTG 415 Marketing Research
MKTG 443 Digital Marketing & Social Media

Choose 3 elective courses from below:

MKTG 315 Sales Force Management (3)
MKTG 316 Professional Selling Skills (3)
MKTG 400 Sports and Entertainment Marketing (3)
MKTG 411 Introduction to Consumer Behavior (3)
MKTG 420 Integrated Marketing Communications (3)
MKTG 425 Sales Force Management (3)
MKTG 426 Profession Selling Skills (3)
MKTG 430 New Product Management (3)
MKTG 435 Marketing Strategy (3)
MKTG 440 Global Marketing (3)
MKTG 445 Services Marketing (3)
MKTG 448 Managing Brands (3)
MKTG 453 Retailing, Distribution Channel & Supply Chains (3)
MKTG 455 Pricing (3)
MKTG 465 Customer Relationship Management (3)
MKTG 470 Marketing Analytics (3)

Minor in Supply Chain Management

Complete 1 Required Course (3 credits):

• SCM 401: Introduction to Supply Chain Management

Complete 4 Elective Courses (3 credits each):

• SCM 400: Special Topics in Supply Chain Management
• SCM 402: Procurement and Supplier Management
• SCM 403: Logistics, Transportation and Warehouse Mgmt
• SCM 404: Mgmt of Integrated IS/ERP
• SCM 410: Capstone in Supply Chain Management
• SCM 415: Data Analysis and Forecasting (Not open to students with credit in BSAN 415)
• SCM 416: Supply Chain Modeling and Optimization
• SCM 418: Modeling and Risk Analysis
• SCM 420: Customer Focused Operations Service Mgmt
• SCM 425: Customer Relationship Management
• SCM 400 Special Topics in Supply Chain Management (Study Abroad)
• SCM 453 Retail Distribution Channels and Supply Chain Management
• SCM 500 Individual Research In Supply Chain Management

Suggested Course Sequencing

Students in the School of Business should consult with their academic advisor to plan and execute their paths toward desired degrees. Each student's circumstances (e.g., direct versus competitive admission, transfer credits, initial math placement, plans for study abroad, desired major, desire to achieve double-major or minor degrees, etc.) are unique. Consequently the scheduling suggestions identified below must be tailored to each student's circumstances with the assistance of an academic advisor.

Freshman Year

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 110</td>
<td>Introduction to Professionalism (required first semester after admission)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 120</td>
<td>Emerging Topics in Business (recommended second semester)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 150</td>
<td>Foundations of Business (strongly recommended for first semester after admission)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology (KU Core 3S)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BSAN 202</td>
<td>Statistics (if math prerequisites met)</td>
<td>3</td>
</tr>
</tbody>
</table>

Mathematics: through calculus I -- KU Core 1.2 Quantitative Literacy
KU Core Goal 2.1 Written Communication (e.g., ENGL 101)
KU Core 3N Natural Science with lab
KU Core 3H Arts and Humanities

Foreign language or other classes satisfying international dimension requirement
Sophomore Year

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 210</td>
<td>Career Management &amp; Planning</td>
<td>1</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Managerial Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BSAN 202</td>
<td>Statistics (if math prerequisites completed in freshman year)</td>
<td>3</td>
</tr>
<tr>
<td>BE 301</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BLAW 301</td>
<td>Legal Aspects of Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 230</td>
<td>Introduction to the Accounting Profession (or recommended major-specific 230 professions course)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 305</td>
<td>Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>COMS 322</td>
<td>Audience Centered Public Speaking in the Workplace</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional courses that satisfy KU Core requirements
- Business Core classes at 310-level; sequencing tailored to student’s desired major (e.g., FIN 310 for finance majors)
- Major-specific courses if appropriate (e.g., ACCT 320 for accounting majors)
- Foreign language or other classes satisfying international dimension requirement

Junior/Senior Year

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 310</td>
<td>Internship (recommended before senior year)</td>
<td>1</td>
</tr>
<tr>
<td>BUS 410</td>
<td>Professionalism Capstone (senior year)</td>
<td>1</td>
</tr>
<tr>
<td>MGMT 498</td>
<td>Business Policy and Strategy (senior year)</td>
<td>3</td>
</tr>
</tbody>
</table>
| Remaining KU Core requirements
| Remaining Business Core classes

Major-specific required and elective classes
- Additional courses to meet requirements for double-majors, B.S.B. minors (e.g., Minor in Entrepreneurship), or certificates

Study Abroad

B.S.B. students frequently study abroad in year-long, semester-long, summer, and short-term study abroad programs -- while making progress to a four-year degree. Study abroad advisors in the School of Business are skilled at identifying suitable programs, helping students apply to study abroad programs, ensuring that credits earned abroad can be eligible for transfer to KU or School of Business degree requirements, and helping students apply for scholarships. Students are encouraged to visit https://business.ku.edu/study-abroad for additional information about study abroad opportunities and resources.

Graduation Requirements

Hours Required for Graduation

A minimum of 120 credit hours is required for graduation. Of the 120 hours, a student must earn at least 45 junior/senior hours and 30 residency hours (business courses numbered 300 or higher) completed within the KU School of Business.

- The 120-hour minimum to graduate is increased by the following:
  - More than 4 hours in physical education courses (HSES 112 and below).
  - More than 4 hours of music organization courses.
  - Any repeated courses for which a student has already received credit.
  - All subsequent credits earned at a community college or other 2-year institution after a student has completed a total of 64 community college credit hours.

Grade-Point Average Required for Graduation

To be eligible to graduate from the School of Business with any major, a student must earn a grade-point average of 2.5 in

1. Total hours attempted from all schools (including Independent Study through KU Continuing Education),
2. All professional (business courses including macro and micro economics) courses attempted from all schools,
3. Total hours attempted at KU, and
4. All professional (business courses including macro and micro economics) hours attempted at KU.

Students majoring in accounting, business analytics, finance, information systems, management and leadership, marketing, and supply chain management majors and co-majors in international business also must earn minimum grade-point averages of 2.5 in their respective major courses.

Independent Study Through KU Continuing Education

After admission to the school, students may complete up to 30 hours of Independent Study through KU Continuing Education. Prior approval from the school is recommended.

University Honors Program

Prebusiness majors who meet admission requirements for the University Honors Program (http://www.honors.ku.edu/) are strongly encouraged to participate in it. Its small, challenging classes provide an excellent opportunity for business majors to develop a strong base in liberal arts and sciences. Because its requirements fit well with the school’s distribution requirements, the program fits easily into the normal 4-year program.

Undergraduate Business Honors Program

The Business Honors Program allows an elite cadre of undergraduate business school students to participate in a special set of enrichments. Graduating with business honors requires that the students admitted to the programs complete at least 12 hours of business honors classes. They will also be expected to be deeply involved in the life of the school, routinely assuming leadership positions and taking advantage of experiential learning opportunities.

Bachelor of Business Administration

Business Administration B.B.A.

The Bachelor of Business Administration (B.B.A) exposes students to a broad range of topics such as business law, economics, finance, management, marketing and international business. The accredited BBA
program curriculum provides a strong professional education within a broad liberal arts context.

Program outcomes include strong verbal and written communication skills, an aptitude for technology, data analysis proficiency, a global perspective on business and the ability to maintain good professional relationships. Flexible course schedules make it easy for full-time employees to earn their degrees as part-time students.

**Accredited**
The KU School of Business is proud to be accredited by the Association to Advance Collegiate Schools of Business ([http://www.aacsb.edu/](http://www.aacsb.edu/)). AACSB accreditation is the gold standard of quality in the world of business education.

**Requirements**
Ideal candidates are individuals wanting to gain business theory, practical knowledge and professional skills in preparation for careers as business leaders. Those interested should have earned an associate's degree or equivalent credit hours and seek to complete requirements for a bachelor's degree.

*This program is funded by the Johnson County Education and Research Triangle ([http://edwardscampus.ku.edu/johnson-county-education-research-triangle/](http://edwardscampus.ku.edu/johnson-county-education-research-triangle/)) initiative.*

**B.B.A. Admission**
Admission is competitive. Students should apply during the semester in which they will complete the minimum requirements for admission and after gaining admission to KU. The application is available on the Edwards Campus website ([http://www.edwardscampus.ku.edu/bba/](http://www.edwardscampus.ku.edu/bba/)). Deadlines are December 1 for spring, May 1 for summer, and July 1 for fall entry. Students who meet the minimum admission standards are not guaranteed admission.

**Prebusiness Preparation**
Students planning to enter the School of Business should work toward completing pre-admission requirements first. Every student contemplating a business major in the School should enroll in a mathematics course during the first semester. Students must take the following courses before admission to the school:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 201</td>
<td>Managerial Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Various (MATH 365, PSYC 210, COMS 356, BIOL 570, SOC 510, etc., for example)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See the Office of Admissions ([http://admissions.ku.edu/](http://admissions.ku.edu/)) for more information.

**Minimum Requirements**
To satisfy minimum standards for admission to the School of Business, a student must:

1. Complete 60 college credit hours including ACCT 200, ACCT 201, statistics (with prerequisite MATH 101), ECON 142, ECON 144, and PSYC 104 (or their equivalents).

Because admission is competitive, students who meet the minimum admission standards may not be admitted.

Guaranteed admission to the School of Business is possible when achievement of a grade-point average of 3.0 in all professional course work (business and economics) has been met at the time of application (in addition to the minimum requirements listed above).

**Transfer Students**
Transfer students may find it to their advantage to enter KU before the completion of their associate’s degree, because some required courses may be available only at KU. Students attending Kansas community colleges should consult their advisors and a KU School of Business advisor about course equivalents and articulation agreements to ensure progress toward the degree. The Office of Admissions provides a guide ([http://credittransfer.ku.edu/](http://credittransfer.ku.edu/)) to how classes at your current or former school transfer to KU. You must submit official transcripts of course work completed to the Office of Admissions ([http://admissions.ku.edu/](http://admissions.ku.edu/)) before a final determination can be made.

At least 30 hours of junior/senior School of Business course work must be completed at KU (courses in residence) for the student to be eligible for graduation. As of fall 2008, only transfer grades of C- or higher apply toward graduation from the KU School of Business.

**KBOR Transfer Pilot**
Beginning with students admitted during the 2019-2020 academic year, the Kansas Board of Regents has initiated a transfer pilot program with Johnson County Community College under which a maximum of 75 hours of community college coursework may be applied toward a KU business degree at the University of Kansas Edwards Campus. A minimum of 45 credit hours must be earned at the University of Kansas in courses designated at the 300 level and above, and all degree requirement must be satisfied.

**10-Year Rule**
Transfer business credits are limited to a 10-year span in which they can be considered equivalent to a KU School of Business course and satisfy any corresponding requirement. This 10-year limit begins on the date of completion of the credit. After 10 years, transfer business credits are treated as elective business credit, and a course repeat or update may be necessary.

**Tentative Evaluation of Credit**
Before enrolling in a non-KU course, students may submit KU’s standard Request for Tentative Evaluation of Credit form to Student and Academic Services ([https://business.ku.edu/services/student-and-academic-services/](https://business.ku.edu/services/student-and-academic-services/)) for approval.

**Readmission**
Students must submit an application for readmission to KU if their lapse in attendance is one semester or more. See the Office of Admissions ([https://admissions.ku.edu/](https://admissions.ku.edu/)) for more information. Students may be readmitted to the School of Business if they left the School in good standing and it has been less than 5 years since they last attended.
5-Year Rule
If a student does not complete the business degree within five years of last attendance, the student must reapply through the competitive admission process. Students also must complete degree requirements in effect at the time of readmission to the business school regardless of the initial program.

Dismissal
Students who have been dismissed from the School must reapply through the competitive admission process.

Bachelor of Business Administration
Degree Requirements
KU Edwards Campus
This program for students who want to attain practical knowledge, business theory, and professional skills in preparation for careers as business leaders. It covers a broad range of topics including business law, economics, finance, management and leadership, marketing, and international business. Calculus is not required.

Offered exclusively at the KU Edwards Campus (http://edwardscampus.ku.edu/), 12600 Quivira Rd., Overland Park, KS 66213, this program responds to the needs and goals of nontraditional part-time students. In addition to the 39 credit hours listed below, School of Business graduation requirements apply. Contact the BBA Learning Coach at 913-897-8539 for information and advising.

B.B.A. Curriculum

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBA 301</td>
<td>Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>BBA 302</td>
<td>Legal Aspects of Business</td>
<td>3</td>
</tr>
<tr>
<td>BBA 303</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BBA 304</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BBA 305</td>
<td>Management Science and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BBA 306</td>
<td>Finance</td>
<td>3</td>
</tr>
<tr>
<td>BBA 307</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>BBA 308</td>
<td>Business Policy and Strategy</td>
<td>3</td>
</tr>
<tr>
<td>BBA advanced business electives:</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>BBA 400</td>
<td>Special Topics in Business Administration: _____</td>
<td></td>
</tr>
<tr>
<td>BBA 401</td>
<td>Marketing Management and Strategy</td>
<td></td>
</tr>
<tr>
<td>BBA 402</td>
<td>Human Resources Management</td>
<td></td>
</tr>
<tr>
<td>BBA 403</td>
<td>Ethical Decision Making in Business</td>
<td></td>
</tr>
<tr>
<td>BBA 404</td>
<td>Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>BBA 405</td>
<td>Introduction to Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>BBA 406</td>
<td>Advanced Finance - Principle and Applications</td>
<td></td>
</tr>
<tr>
<td>BBA 407</td>
<td>Information Systems Technology Elective: _____</td>
<td></td>
</tr>
<tr>
<td>BBA 408</td>
<td>Accounting Elective: _____</td>
<td></td>
</tr>
<tr>
<td>BBA 409</td>
<td>Management of Small Business</td>
<td>3</td>
</tr>
<tr>
<td>BBA 410</td>
<td>Project Management</td>
<td></td>
</tr>
<tr>
<td>BBA 500</td>
<td>Individual Research in Business</td>
<td></td>
</tr>
<tr>
<td>BBA 610</td>
<td>Intermediate Financial Accounting I</td>
<td></td>
</tr>
<tr>
<td>BBA 620</td>
<td>Intermediate Financial Accounting II</td>
<td></td>
</tr>
<tr>
<td>BBA 630</td>
<td>Foundations of Taxation</td>
<td></td>
</tr>
</tbody>
</table>

B.B.A. candidates may earn an Accounting Certificate. Please visit the certificate (http://www.EdwardsCampus.KU.edu/ACCTcertificate/) website for more details.

Please visit the B.B.A. website (http://edwardscampus.ku.edu/overview-bachelors-business-administration-bba/) for further information.

Graduation Requirements
Grade-Point Average Required for Graduation
To be eligible to graduate from the School of Business, a student must earn a grade-point average of 2.2 in

1. Total hours attempted from all schools (including Independent Study through KU Continuing Education),
2. All professional (business and economics) courses attempted from all schools,
3. Total hours attempted at KU, and
4. All professional hours attempted at KU.

B.B.A. candidates must achieve a 2.5 grade-point average in the 21 credit hours that include BBA 307, BBA 308, and the 5+ advanced business electives.

Tentative Evaluation of Credit
Before enrolling in a non-KU course, students must submit KU’s standard Request for Tentative Evaluation of Credit form to Student and Academic Services (https://business.ku.edu/services/student-and-academic-services/) for approval.

Independent Study Through KU Continuing Education
After admission to the school, students may complete up to 30 hours of Independent Study (http://www.independentstudy.ku.edu/) through KU Continuing Education. Prior approval from the school is recommended.

Minor in Business
Introduction
In the School of Business, students acquire a rigorous education that prepares them for positions in a dynamic and competitive global environment.

The University of Kansas School of Business is accredited by the Association to Advance Collegiate Schools of Business International (http://www.aacsb.edu/).

Requirements for the Minor in Business
The business minor program complements nonbusiness majors by providing a general overview of accounting, information systems, finance, management and leadership, marketing, and supply chain.

The minor requires completion of 18 hours (6 courses) with a cumulative grade-point average of 2.0 or higher in these courses. All business minor courses must be taken for a grade; credit/no credit is not permitted.
Students must declare the business minor by completing the declaration of minor form (http://business.ku.edu/degrees/business/minor/declare/) and are strongly encouraged to do so as early as possible.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 205 or ACCT 200</td>
<td>Survey of Accounting or Fundamentals of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FIN 305 or FIN 310 or FIN 311</td>
<td>Survey of Finance or Finance, Honors</td>
<td>3</td>
</tr>
<tr>
<td>IST 205</td>
<td>Survey of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 305 or MGMT 310 or MGMT 311</td>
<td>Survey of Management and Leadership or Principles of Management or Principles of Management, Honors</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 305 or MKTG 310 or MKTG 311</td>
<td>Survey of Marketing or Marketing, Honors</td>
<td>3</td>
</tr>
<tr>
<td>SCM 305 or SCM 310 or SCM 311</td>
<td>Survey of Decision Making in Business or Management Science and Operations Management or Management Science and Operations Management, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

The 12-hour residency requirement requires students to take a minimum of 12 hours of business minor credits from the University of Kansas. Approved KU study abroad opportunities may count towards the residency requirement.

**Undergraduate Certificate in Entrepreneurship**

**Entrepreneurship Certificate**

The Certificate in Entrepreneurship is a series of courses designed to help undergraduates and graduate students start, finance, plan, and launch their own business in their major or favorite subject. You will learn how to be your own boss, realize your dream job and acquire wealth by becoming an entrepreneur with the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTR 301</td>
<td>Starting Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 302</td>
<td>Financing Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 303</td>
<td>Marketing Your Own Business</td>
<td>3</td>
</tr>
</tbody>
</table>

**Jack Lockton Undergraduate Certificate in Insurance & Risk Management**

An initial required course, FIN 208 Principles of Insurance & Risk Management, is the gateway into the certificate program. To ensure required numeracy and critical thinking skills, ECON 142 Microeconomics (which satisfies KU Core goal 3S and is required for all BSB degree students) is a prerequisite to FIN 208. An additional course, FIN 424 Operational Risk Management, is also required. FIN 424 has FIN 310 Finance -- required of all BSB degree students -- as a prerequisite.

An additional two courses from a specified list of eight courses in finance, marketing, management, and mathematics complete the course requirements. To be awarded the certificate students must complete the two required and two elective classes with a minimum GPA of 2.5.

**Required courses:**

- FIN 208 Principles of Insurance & Risk Management or FIN 408 Principles of Insurance & Risk Management
- FIN 424 Operational Risk Management

**Elective courses (choose two):**

- MKTG 316 Professional Selling Skills
- FIN 418 Modeling & Risk Analysis
- MGMT 419 Managing Performance & Compensation
- FIN 422 Financial Modeling
- FIN 425 Futures & Options
- FIN 445 Fixed Income
- FIN 454 Portfolio Strategy
- MATH 630 Actuarial Mathematics

(NB. The Department of Mathematics has approved MATH 630 as an elective for the certificate)

**Undergraduate Certificate in Professional Selling**

1. **Course Sequence**

   University’s Core requirement + the following three courses:

   MKTG 305/MKTG 310/MKTG 311: To provide an overview of the marketing process, and articulate the role of the sales force in the marketing mix. Offered every semester.

   Two courses specific to professional selling skills and sales management, as described below.

   MKTG 315/MKTG 425: SALES FORCE MANAGEMENT (Prerequisites: for MKTG 315 - MKTG 305 or MKTG 310, for MKTG 425 - MKTG 310 or 311). Enrollment in MKTG 315 restricted to non-business students. Enrollment in MKTG 425 restricted to business students.

   MKTG 316/MKTG 426/JOUR 611: PROFESSIONAL SELLING SKILLS (Prerequisites: for MKTG 316 - MKTG 305 or MKTG 310, for MKTG 426 - MKTG 310 or 311). Enrollment in MKTG 316 restricted to non-business students. Enrollment in MKTG 426 restricted to business students.

2. **Additional Requirements**

   As part of the certificate, students will also be expected to participate in development activities such as attendance at workshops, summits, simulations, and contests. While some of these will be a part of the second course on professional selling, others will be in addition to the coursework.
Master of Business Administration

When you earn your MBA from The University of Kansas, you'll receive a well-rounded education that not only supports your career goals, but also incorporates both the theoretical background and practical experience needed to succeed in today's ever-changing global economy. Two types of MBA programs are offered at KU: 1) the Full-Time MBA based in Lawrence for those seeking a career change. 2) The Online MBA, for those seeking career enhancement.

The Full-Time Program includes 48 hours of coursework and can be completed in 16 months (3 semesters, plus a summer internship). The program is cohort-based and special emphasis is placed on experiential learning. Elective options are available in Finance, Marketing, Supply Chain Management, and Business Analytics. New students are admitted each fall semester. New students are admitted in the fall semester.

The Online MBA program includes 42 hours of coursework that can be completed in about two and a half years. The program is lock-step, with students taking two courses per semester. New students are admitted fall, spring, and summer.

The KU MBA programs are designed for business leaders, from the recent college graduate to the seasoned executive. If you are looking to advance, re-brand, change industries, or start your own business, a KU MBA will open the doors to new possibilities.

Baccalaureate Preparation

The Master of Business Administration program is open to graduates from areas other than business administration. It also provides an opportunity for continued study in management for graduates from a school or department of business. The only prerequisite coursework is college algebra or its equivalent.

Admission to MBA Programs

MBA programs are open to those who have earned a baccalaureate degree from an accredited college or university and whose undergraduate academic records, scores on the required standardized examination, and prior work experience indicate that they have the capability to complete the program. A Bachelor's degree in Business Administration, specifically, is not required - other areas of study are also eligible. Admission to all programs in business is reviewed by the MBA Admissions Committee. Those who have not completed a baccalaureate degree are not eligible for enrollment in MBA courses.

Applicants for MBA graduate programs must take the Graduate Management Admission Test (http://www.mba.com/us/the-gmat-exam/register.aspx) administered by Pearson VUE. The GMAT is administered in most foreign countries and by appointment at designated testing centers throughout the United States. The test typically is taken during the academic year before the term for which admission is sought.

Regular Admission to MBA Programs

The admission committee looks at each applicant holistically for evidence of preparedness for graduate and MBA study. The minimum requirements for consideration include:

1. Bachelor’s Degree (or international equivalent) from an accredited university with a 3.0 cumulative GPA,
2. GMAT score of 500 or above (or an equivalent GRE score), and
3. A completed application.
4. Quality and length of post-graduate work experience,
5. Evidence of leadership.
6. Evidence of analytical ability.

A complete MBA application includes:

1. Completed application form
2. Official transcript with GPA and conferral of a Bachelor’s Degree (or international equivalent) from an accredited school
3. Resume or CV
4. Official GMAT or GRE or a waiver request
5. Personal Statement
6. Application fee
7. For international applicants only, IELTS or TOEFL score.

Additional Admission Notes:

PROVISIONAL ADMISSION TO THE MBA PROGRAM

Provisional admission may be offered to applicants who meet all requirements for admission but have a bachelor's degree (or international equivalent) with a 2.0-3.0 cumulative GPA from an accredited university.

Provisional admission affords one semester of enrollment in the MBA program, at the conclusion of which a 3.0 GPA must be earned or the student is subject to dismissal.

GRE vs GMAT Scores

The GMAT exam is preferred. However, we will accept a GRE score and review it based on a GMAT concordance.

International Applications:

Students whose native language is not English or who have not completed a degree from a college or university in the United States, Great Britain, Canada, or Australia are required to provide English proficiency scores to earn regular admission into the MBA and obtain a waiver from the AEC. International students in F-1 and J-1 status must also comply with Federal immigration requirements by pursuing a full course of study each semester to maintain their legal status. Students who require an F-1 or J-1 visa are not eligible for admission into the Working Professional MBA and/or Online MBA Part-Time Programs.

GMAT/GRE Waiver Policy for Professional MBA Programs

A GMAT or GRE score report is generally required as part of the application process for the Full Time MBA Program. It is used by the Admissions Committee to help assess an applicant's quantitative and analytical readiness for graduate study and the academic rigor of the KU MBA program. However, under special circumstances, candidates may request a GRE/GMAT waiver.

GMAT Waivers are automatically granted for students with a terminal degree. The GMAT is waived for individuals that have completed a J.D., M.D., D.O. or Ph. D. degree.

Check with the department for more information and instructions on how to submit a GMAT waiver.
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The GMAT exam is preferred. However, we will accept a GRE score and review it based on a GMAT concordance.

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Joint Degree Programs

Dual MBA and JD

This program combines in 4 years of study the 3-year Juris Doctor (https://business.ku.edu/graduate-programs/full-time-mba/joint-degree-programs/mba-jd) program offered by the School of Law (http://law.ku.edu/) and the Full-Time MBA program offered by the School of Business. It entails 40 hours of MBA coursework and 76 hours of law coursework. It is for students who plan to engage in corporate law practice or enter business using law training as background. It offers training in the convergent fields of business management and law.

Students must meet the admission requirements of each school and should be admitted by both the School of Law and the School of Business. The Law School Admission Test and the Graduate Management Admission Test are required. A student who decides to enter the program after beginning the first year in the School of Law or in the MBA program should discuss the plan with the associate dean
or program director of each school as early as possible. Diplomas are awarded concurrently by each school at the conclusion of the joint degree program requirements.

The School of Business follows general Graduate Studies policy requiring a 3.0 cumulative grade-point average for all coursework counted toward any master’s degree. The School of Law requires a minimum cumulative grade-point average of 2.0 (C) in all law school work. Grades received in any law courses credited toward fulfillment of the MBA degree requirements are incorporated into the MBA grade-point average, which ultimately must be 3.0 for the awarding of the MBA degree.

**Dual MBA and M.Arch. Degree Program**

The Master of Business Administration/Master of Architecture dual degree program is designed for students intending to pursue a career in architecture, development, construction, and/or business. Students completing the dual degree program earn an MBA from the KU School of Business (https://business.ku.edu/) and an M.Arch. from the KU School of Architecture and Design (http://arcd.ku.edu/). Diplomas are awarded concurrently by each school at the conclusion of the joint degree program requirements.

Students complete 106 credit hours in the Master of Architecture (https://business.ku.edu/graduate-programs/full-time-mba/joint-degree-programs/m-arch/) program and 34 credit hours in the School of Business. Prospective dual degree students must already be students in the Master of Architecture program and must apply and be accepted by the School of Business. New students must complete the architecture curriculum before starting the MBA curriculum and must declare their intention before completing the first year of the architecture curriculum. Typically, the MBA is completed during the final year of study. Diplomas are awarded concurrently by each school at the conclusion of the joint degree program requirements.

**Dual MBA and MD**

This dual degree offered in partnership with the KU Medical Center allows MD students an opportunity to earn an MBA in one year. The MBA/MD program (https://business.ku.edu/graduate-programs/full-time-mba/joint-degree-programs/mba-md/) is offered full-time at the Lawrence campus. Students will take 34 hours to complete the MBA portion of this dual degree. Students gain competence and expertise in the complementary fields of business management and medicine.

Prospective students must submit an application and be accepted to the School of Medicine first. Students must meet the prerequisites of and be accepted by both schools. Diplomas are awarded concurrently by each school at the conclusion of the joint degree program requirements.

**Dual MBA and Pharm.D.**

This dual degree program allows students to earn an MBA from the School of Business (http://business.ku.edu/) and a Doctor of Pharmacy (https://business.ku.edu/graduate-programs/full-time-mba/joint-degree-programs/mba-pharmd/) from the School of Pharmacy (http://pharmacy.ku.edu/) by extending their professional graduate study. The MBA/Pharm.D. program is combined with the Full-Time MBA Program on the Lawrence Campus. Students will take 34 hours to complete the MBA portion of this dual degree. Students gain competence and expertise in the complementary fields of business management and pharmacy.

Prospective students must submit an application and be accepted to the School of Pharmacy first. Students must meet the prerequisites of and be accepted by both schools. Diplomas are awarded concurrently by each school at the conclusion of the joint degree program requirements.

**Dual MBA and Physical Therapy (DPT)/Occupational Therapy (OT)**

The purpose of this joint degree program is to meet the demand for business courses in the Physical Therapy (DPT) (https://business.ku.edu/graduate-programs/full-time-mba/joint-degree-programs/mba-dpt/) and Occupational Therapy (OT) (https://business.ku.edu/graduate-programs/full-time-mba/joint-degree-programs/mba-dot/) programs and prepare physical therapists to run their future practices with business efficacy. The program will be offered on the Lawrence Campus and will consist of 34 credit hours of MBA coursework. Students will complete the MBA portion in one academic year. The DPT and OT curriculums will remain unchanged.

Prospective students must submit an application and be accepted to the School of Health Professions first. Students must meet the prerequisites of and be accepted by both schools. Diplomas are awarded concurrently by each school at the conclusion of the joint degree program requirements.

**Dual MBA and Bachelors of Engineering**

The KU MBA and Bachelors of Engineering bridge program (https://business.ku.edu/graduate-programs/full-time-mba/joint-degree-programs/undergraduate-engineering-bridge-program/) allows engineering students to begin taking MBA courses in their senior year of the engineering undergraduate program. Bridge program students will earn a Bachelor of Science from the School of Engineering and an MBA from the School of Business in about nine to ten semesters. A good fit for the program is a student on-pace to graduate in the spring of their senior year, prepared for an academically rigorous senior year, and meets the admission requirements of the Full-Time MBA program. The program will be offered on the Lawrence Campus and consist of 44 credit of MBA coursework. Students will complete the MBA coursework in a year and a half.

**Dual MBA and MS Business Analytics**

The purpose of this dual degree program is to meet the demand for analytical skill sets in management. With an MS in Business Analytics (https://business.ku.edu/graduate-programs/ms-business-analytics/) offered on campus, we have the unique opportunity to join this high demand area of specialization with the MBA. By using the MS as a specialization, we can pair the programs in a 4-semester sequence. The program will be offered on the Lawrence Campus and will consist of 34 credit hours of MBA and 30 hours of MS coursework. The dual program will take two years to complete and includes a summer internship.

**MBA with a Graduate Certificate in Petroleum Management**

The MBA program with a graduate certificate in Petroleum Management (https://business.ku.edu/graduate-programs/full-time-mba/joint-degree-programs/mbadot/mbapm/) from the School of Engineering (http://www. engr. ku. edu/) is offered full time on the Lawrence campus. It meets the requirements of active-duty U.S. Naval Supply Corps officers who usually are assigned to billets requiring this training upon completion of study at KU. Other students interested in the intersection of the management of fuels and business are also encouraged to apply to this program. Students typically take a minimum of 43 hours of MBA
coursework and 15 hours of Engineering coursework during this two-year program.

**Master of Business Administration Degree Requirements**

**Full-Time MBA Degree Program**

The full-time MBA program features an emphasis on cohort learning. The community-building begins each August with orientation and is integrated throughout the program. The Full-Time MBA program in Lawrence requires 50 credit hours over 16 months. Students are admitted to the program only once a year in the fall semester. Requirements are designed for a person holding a baccalaureate degree in any field, with no specific course requirements in business and related areas. Transfer credit is not accepted to this program. Due to the accelerated nature of this program, students who receive a failing grade in a course or have less than 3.0 after the first semester may be dismissed upon recommendation of the MBA team.

The 48 hours in the MBA program consist of 31 credit hours in ten core classes, 7 credit hours of application classes, and 12 credit hours of specialized track classes. Prior to the beginning of the second semester, students select a track of either Finance or Marketing/Supply Chain Management.

**Full Time MBA Degree Requirements**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tr>
<td>Core:</td>
<td>16 Core:</td>
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<td>12 Internship</td>
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<tr>
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<td>Application:</td>
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<td>BUS 810</td>
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<tr>
<td>BE 810</td>
<td>BUS 801</td>
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<td>Application:</td>
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<td>MKTG 810</td>
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<tr>
<td>BUS 801</td>
<td>MKTG 820</td>
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<tr>
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<tr>
<td><strong>Total Hours:</strong></td>
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<td><strong>19.5</strong></td>
<td><strong>1</strong></td>
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<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
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<tbody>
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<td>Core:</td>
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<tr>
<td>MKTG 830</td>
<td>3</td>
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<tr>
<td>Application:</td>
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<td>ENTR 830</td>
<td>FIN 840</td>
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<td>MGMT 898</td>
<td>ENTR 895</td>
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<tr>
<td>MKTG 830</td>
<td>3</td>
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</tr>
</tbody>
</table>

**Professional MBA Degree Program**

The Professional MBA degree requires a total of 42 credit hours. To complete the Professional MBA, students are required to complete 30 credits of core business courses, 6 credits of electives, and 6 hours of Capstone. Core courses cannot be waived or substituted. Up to 6 graduate credit hours from a KU Department or an AACSB-accredited institution can be transferred in as elective credits. All transfer coursework must be pre-approved by the MBA Team.

**Professional MBA Degree Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td></td>
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</tr>
<tr>
<td>ACCT 706 or ACCT 701</td>
<td>Accounting</td>
<td>3</td>
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<tr>
<td>FIN 706 or FIN 701</td>
<td>Finance</td>
<td>3</td>
</tr>
<tr>
<td>DSCI 706 or DSCI 701</td>
<td>Statistics</td>
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<td>MGMT 706 or MGMT 701</td>
<td>Organizational Behavior</td>
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<td>MKTG 706 or MKTG 701</td>
<td>Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BE 718 or BE 701</td>
<td>Managerial Economics</td>
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</tr>
<tr>
<td>MGMT 718 or MGMT 705</td>
<td>Business Law and Ethics</td>
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</tr>
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<td>DSCI 718 or SCM 701</td>
<td>Operations and Supply Chain Management</td>
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<tr>
<td>IBUS 718 or IBUS 701</td>
<td>International Business</td>
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<td>MGMT 719</td>
<td>Strategic Management</td>
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<td>Elective Courses</td>
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<td>FIN 752</td>
<td>Financial Institutions and Markets</td>
<td>3</td>
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<td>FIN 753</td>
<td>Investments</td>
<td>3</td>
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<td>FIN 754</td>
<td>Advanced Topics in Finance</td>
<td>3</td>
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<tr>
<td>MGMT 751</td>
<td>Strategic Organizational Design and Change Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 752</td>
<td>Developing Effective Management and Team Skills</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 753</td>
<td>Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 754</td>
<td>Managing Internationally</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 751</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 752</td>
<td>Integrated Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 753</td>
<td>Global Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 754</td>
<td>Digital and Social Media Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Capstone</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
Master of Accounting

Overview

Earning a Master of Accounting (MAcc) degree not only expands a student's education and job options, it amplifies earning potential and career advancement. On average, over 90 percent of graduates secure a job by graduation. From coast to coast, in every major metropolitan area of the country, even the world, KU MAcc graduates find success.

For students who have never considered accounting, a MAcc can be an excellent gateway into a career they’re passionate about through a route they never thought to explore. The MAcc program welcomes students from many different backgrounds who are looking to enhance their professional options.

The KU MAcc program offers a challenging curriculum, acclaimed faculty and opportunities for experiential learning that provide a comprehensive graduate program. The University of Kansas School of Business is accredited by the Association for the Advancement of Collegiate Schools of Business International (http://www.aacsb.edu/) (AACSB). Not only is the School of Business as a whole AACSB-accredited, but the accounting program also holds the distinction.

Less than 5 percent of the 15,000 business programs worldwide earn an AACSB accreditation, and even fewer programs are dually accredited. Attending an AACSB-accredited program ensures students receive relevant coursework taught by highly qualified faculty who are working on the most current issues in the profession.

Two Master of Accounting programs are offered at KU: 1) the Full-Time program in Lawrence and 2) the Working Professional program based at the Edwards Campus in Overland Park.

Baccalaureate Preparation

The Full-Time Master of Accounting program offers a 30 credit hour degree for students with baccalaureate degrees in accounting equivalent to that required for accreditation by the AACSB. Deficiencies in the undergraduate program result in additional hours being required for the degree.

The Working Professional Master of Accounting program length varies based upon the pace at which students complete classes. Most students with baccalaureate degrees in accounting equivalent to that required for accreditation by the AACSB can complete the program in 5 semesters. Deficiencies in the undergraduate program result in additional hours being required for the degree.

Admission to the Master of Accounting Programs

Full-Time Program

The Full-Time MAcc program is open to graduates who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records, scores on required standardized examinations, and/or prior work experience indicate that they have the capability to complete the program. Admission to the program is limited on the basis of space, facilities, faculty, and other resources.

Applicants from schools other than the University of Kansas can contact the MAcc office to verify whether they are required to submit Graduate Management Admission Test (GMAT) scores.

Working Professional Program

The Working Professional MAcc program is open to working professional graduates who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records, and prior work experience indicate that they have the capability to complete the program. Admission to the program is limited on the basis of space, facilities, faculty, and other resources.

Applicants for the Working Professional program are not required to take the GMAT. Applicants are required to complete an interview with the MAcc Admission Committee to assess work experience and capability to complete the program. Applicants will be contacted to schedule the interview subsequent to review of application by committee.

Both Programs

All applications for admission to the Full-Time MAcc program must include:

1. Transcripts: Non-KU graduates must submit OFFICIAL paper or electronic transcripts as part of the application process. KU students may upload a copy of their “KU Advising Report” in lieu of an official transcript.

2. The score from the applicant’s GMAT, if applicable.

3. Proof of English proficiency, if required: Students whose native language is not English or who have not completed a degree from a college or university in the United States, Great Britain, Canada, or Australia must obtain and submit satisfactory scores on the Test of English as a Foreign Language or International English Language Testing System (IELTS).

4. Two letters of recommendation.

5. Pledge to support the Honor System of the School of Business.


7. Three essays.

8. $65 application fee ($85 for international students).

Completed applications are reviewed by committee, and action is taken on them periodically throughout the year. Each applicant is notified by letter of the action taken on his or her application.

Graduate applications (http://graduate.ku.edu/) are submitted online. For detailed application steps and answers to frequently asked questions, please visit the Getting Admitted section of our Full-Time (https://business.ku.edu/graduate-programs/master-of-accounting/getting-admitted/) program website (https://business.ku.edu/degrees/accounting/maacc/apply/) or our Working Professional (https://edwardscampus.ku.edu/maacc-program-application-steps/) program website.

All admissions to any graduate program in business are subject to and in accordance with all rules and regulations. See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Curriculum

Full-Time Program

The Full-Time MAcc program offers four different tracks of coursework, allowing students to specialize in assurance, tax, advisory/consulting services or corporate accounting. Each track requires 30 credit hours,
but the number and type of required courses and electives in each track varies. Students with a non-accounting undergraduate degree will take an additional set of classes prior to their track coursework.

**Assurance (Audit)**

The Assurance (Audit) track curriculum prepares students for a career in external audit at public accounting firms. External auditors examine financial records and assess internal controls to ensure a company’s financial statements are presented fairly and in accordance with generally accepted accounting principles.

**Tax**

The Tax track curriculum prepares students to meet the demands of a career in taxation, including positions in public accounting or corporate tax. There are many opportunities to specialize as a tax professional, including state and local tax, international tax, transfer pricing and estate and trust planning.

**Advisory/Consulting Services**

The Advisory/Consulting Services track curriculum helps students develop the skills necessary to become successful advisors in a complex and diverse business world. Advisory and consulting services careers vary greatly and include risk management, IT audit, performance improvement, fraud and forensics, business valuation and mergers and acquisitions.

**Corporate**

The Corporate track curriculum prepares students for a career outside of public accounting, including private industry, not-for-profit and government. Typical entry-level positions are in the areas of corporate accounting and internal audit.

See the Curriculum (https://business.ku.edu/graduate-programs/master-of-accounting.curriculum/) page of our website for more detailed track information.

**Working Professional Program**

The Working Professional MAcc program offers students at least two classes per semester. Although a specific track is not required for Working Professional students, courses offered are similar to those in the Full-Time Corporate track. Students are required to complete a total of 30 credit hours.

Students with a non-accounting undergraduate degree will take an additional set of classes prior to their track coursework.

**Contact Information**

For more information about the KU Master of Accounting programs, please see our Full-Time website (http://www.macc.ku.edu) and/or our Working Professional website (http://edwardscampus.ku.edu/macc/) or email kuaccounting@ku.edu.

**Master of Science in Business Analytics**

Business analytics aims to turn big data into actionable intelligence. To that end, business analysts use a variety of statistical and quantitative methods, computational tools, and predictive models – as well as their knowledge of finance, the corporate world, and the economy – to make data-driven decisions. With the emergence of today’s data-driven revolution, the Business Analytics Master’s program trains participants in how to uncover highly relevant data insights using advanced analytics and technologies. A joint report by PwC and the Business-Higher Education Forum indicates that data science and analytics job postings will rise to 2.72 million by 2020, and revealed that by 2021, 69 percent of employers will seek candidates with data science and analytics skills.

The goal of the Business Analytics program is to prepare students with the requisite knowledge to implement data gathering, cleansing, integration, and modeling tasks as well as data asset analysis for business applications. The program will build on the basic business core courses by adding the necessary advanced courses in the Statistics, Data, and Business Analytics Domains. These courses will cover statistical methods, data warehousing, dimensional modeling, big-data analytical methods, and visualization tools and techniques and will introduce topics such as machine learning and predictive analytics.

Students will have the skills and experience to create and manage big data initiatives as well as associated business processes facilitating large-scale business data analytics in organizations. Program graduates will not only drive decision-making across companies and government agencies, but will also act as catalysts for growth.

**Admission to MS in Business Analytics**

MS programs are open to those who have earned a baccalaureate degree from an accredited college or university and whose undergraduate academic records, scores on the required standardized examination, and prior work experience indicate that they have the capability to complete the program. Admission to all programs in business is reviewed by the Admissions Committee.

Applicants for Business graduate programs must take the Graduate Management Admission Test (http://www.mba.com/us/the-gmat-exam/register.aspx) administered by Pearson VUE. The GMAT is administered in most foreign countries and by appointment at designated testing centers throughout the United States. The test typically is taken during the academic year before the term for which admission is sought.

**Regular Admission**

The admission committee looks at each applicant holistically for evidence of preparedness for graduate study. The minimum requirements for consideration include:

1. Bachelor’s Degree (or international equivalent) from an accredited university with a 3.0 cumulative GPA,
2. GMAT score (or GRE score)
3. A completed application.
4. Quality and length of post-graduate work experience,
5. Evidence of leadership.
6. Evidence of analytical ability.

A complete application includes:

1. Completed application form
2. Official transcript with GPA and conferral of a Bachelor’s Degree (or international equivalent) from an accredited school
3. Resume or CV
4. Official GMAT or GRE or a waiver request
5. Application fee
6. For international applicants only, IELTS or TOEFL score.
Additional Admission Notes:

KU Business Undergraduate GMAT Waiver for the MS in Business Analytics Program

A GMAT waiver may be granted to students that have earned or will earn a KU business undergraduate degree before starting the Masters in Business Analytics program. KU undergraduate business students must have an overall GPA of 3.5 or higher and have earned a B or better in all DSCI, BSAN, IST, and Math courses taken. A GMAT waiver does not guarantee admission into the MS in BSAN program. If you believe you may qualify for a GMAT waiver, reach out to Jinae Krieshok (jinae@ku.edu) for GMAT waiver submission instructions.

Provisional Admission

Provisional admission may be offered to applicants who meet all requirements for admission but have a bachelor’s degree (or international equivalent) with a 2.0-3.0 cumulative GPA from an accredited university. Provisional admission affords one semester of enrollment in the program, at the conclusion of which a 3.0 GPA must be earned or the student is subject to dismissal.

GRE vs GMAT Scores

The GMAT exam is preferred. However, we will accept a GRE score and review it based on a GMAT concordance.

International Applications

Students whose native language is not English or who have not completed a degree from a college or university in the United States, Great Britain, Canada, or Australia are required to provide English proficiency scores to earn regular admission and obtain a waiver from the AEC. International students in F-1 and J-1 status must also comply with Federal immigration requirements by pursuing a full course of study each semester to maintain their legal status.

Curriculum of the proposed program

The Business Analytics program is designed on the fundamental principles of Business Analytics.

Themes should include: Hands on learning, projects and real world case studies. Working with leading companies to solve Business Problems and challenges with Business Analytics.

Also, graduates will not only learn to work with multiple tools, data sets, and solutions, but will learn to tell the value of Business Analytics to better business decision-making and overall business success.

The main student cohort for the Business Analytics program will be students that will be full-time for two consecutive semesters with an optional summer session. The core courses in the curriculum include:

24 total credits – **Core** common for all students

- BSAN 713: Data Management in Analytics (3 cr.)
- BSAN 710: Statistical Modelling (3 cr.)
- BSAN 720: Data and Visual Analytics (3 cr.)
- BSAN 740: Analytical Optimization (3 cr.)
- BSAN 730: Large Scale Data Analytics (3 cr.)
- BSAN 750: Data Mining and Machine Learning (3 cr.)
- BSAN 705: Business Analytics Strategy (3 cr.)
- BSAN 780: Analytics Capstone (*capstone project*) (3 cr.) (Can be done as Internship as well)

6 total credits – **elective courses (choose 2)**

- BSAN 735: Data Security and Analytics (3 cr.)
- BSAN 715: Analytics Application Development (3 cr.)
- BSAN 745: Advanced Machine Learning and AI (3 cr.)
- BSAN 760: Accounting Analytics (3 cr.)
- BSAN 770: Healthcare Analytics (3 cr.)
- BSAN 775: Financial Risk Analytics (3 cr.)
- BSAN 777: Marketing Analytics (3 cr.)

Total Credit Hours: 30

Students pursuing a master’s degree in Business Analytics will develop the following knowledge and skills:

- creative thinking and critical reasoning
- advanced data analysis skills
- statistical analysis and visualization skills
- strategic communication
- strategy development
- ethics
- written and oral communication

While the program does not require an internship, students may articulate credit for relevant internship experiences. No more than three hours of credit will be articulated for internship credit toward the requirements for the graduate degree.

Through our strong AI Board, representing top the top firms regionally, we are actively working to create a pipeline for projects, jobs and internships that will benefit students in both the Undergraduate and Graduate Business Analytics Programs.

Through this strategic partnerships with industries and corporate sponsors that will allow for a variety of experiential learning opportunities in the core and elective courses. Real world examples, cases and data will be used throughout the program to provide unique meaningful learning and relevant experiences in and out of the classroom.

Master of Science in Organizational Leadership

Candidates must complete a minimum of 30 semester hours of graduate credit. Students must fulfill the following requirements:

1. Earn credit in required courses toward a Master’s Degree in Organizational Leadership.
2. Complete a capstone course.
3. Complete a comprehensive project in Organizational Leadership, prepared and evaluated by at least three Graduate Faculty members in the area.

It is expected that students at the Command and General Staff College (CGSC) will transfer 6 credit hours to KU to satisfy the elective requirements below. Non-military students or those not enrolled at the CGSC will take these 6 elective hours through the KU Online MBA program.
Undergraduate prerequisites that were not completed during the undergraduate program must be taken during initial enrollment and do not count toward fulfillment of the degree requirement of 30 hours.

30 Credit Hour Program (online and classroom classes):

3 total credits – required **online course**
- MGMT 706: Managing People (3 cr.)

9 total credits – **online courses** (students must complete three)
- ACCT 706: Accounting (3 cr.)
- DSCI 706: Statistics (3 cr.)
- BE 718: Economics (3 cr.) or FIN 706: Finance (3 cr.)
- MKTG 706: Marketing (3 cr.)

12 total credits – **classroom courses** common for all students
- MGMT 7xa: Strategy and Organization Design (2 cr.)
- MGMT 705: Ethical Decision Making in Business (2 cr.)
- MGMT 7xb: Management Skills and Teams (2 cr.)
- MGMT 710: Leadership Philosophy and Practice (2 cr.)
- MGMT 728: Managing Strategic Direction and Change (2 cr.)
- MGMT 7xc: Leadership Capstone (capstone project) (2 cr.)

6 total credits – **elective courses**
- Recognized in coordination with Army University for elective coursework completed by resident Command and General Staff Officer Course students.
- Other students must complete elective coursework as part of the MS-OL program. These courses may be completed at the Edwards Campus or through the Online MBA.

30 Total Credits

Applicants must meet all admissions requirements for certificate-seeking graduate admissions as defined by the University's policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

**Master of Science in Supply Chain Management**

**Master of Science in Supply Chain Management**

The Master of Science degree program is for students who have completed a baccalaureate degree in business or a related degree as prescribed by the Association to Advance Collegiate Schools of Business and want to do concentrated study in a specific business area. Deficiencies in a student’s undergraduate program result in additional hours being required for the degree. These are determined before or at the time of initial enrollment.

Supply chain management is only available to U.S. Army majors, or major-eligible captains stationed at Fort Leavenworth in Leavenworth, Kansas. The program is lock-step, 24 credit hours from KU and must be completed in 2 semesters. Six hours of credit are afforded students from concurrent course work at Command and General Staff College.

**Admission to Master’s Programs**

All graduate programs are open to those who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records, scores on the required standardized examination, and prior work experience indicate that they have the capability to complete the program. Admission to all programs in business is limited on the basis of space, facilities, faculty, and other resources.

All applications for admission to the M.S. programs must include

1. Graduate application (http://graduate.ku.edu/ku-graduate-application/); (http://graduate.ku.edu/ku-graduate-application/)
2. 1 official transcript of each college and university record;
3. Scores on the TOEFL if required;
4. A current résumé; and

Completed applications are reviewed by committee, and action is taken on them periodically throughout the year. Each applicant is notified by Graduate Studies of the action taken on his or her application.

All admissions to any graduate program in business are subject to and in accordance with all rules and regulations. See Admission (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/?num1_1=) in the Graduate Studies section of the online catalog for more information.

Submit your graduate application online (http://graduate.ku.edu/ku-graduate-application/). Send original transcripts of all completed college and university course work and all other requested application materials to the school:

**The University of Kansas**
**School of Business**
**Admissions Coordinator**
**Capitol Federal Hall**
**1654 Naismith Drive**
**Lawrence, KS 66045**

785-864-3841
bschoolphd@ku.edu
Charly Edmonds, Director, Ph.D. Program
785-864-3841

**M.S. Degree Requirements**

Candidates must complete a minimum of 30 semester hours of graduate credit. Students must fulfill the following requirements:

1. Earn credit in required courses toward a MS in Supply Chain Management.
2. Complete a capstone course.
3. Pass a comprehensive examination in the concentration, prepared and evaluated by at least three Graduate Faculty members in the area.

**Doctor of Philosophy in Business**

**School of Business**

Capitol Federal Hall
1654 Naismith Drive
Lawrence, KS 66045
785-864-3841
bschoolphd@ku.edu
Charly Edmonds, Director, Ph.D. Program
785-864-3841
Financial Aid

Students admitted to the Ph.D. program receive financial assistance. Contingent on satisfactory progress and availability of funds, the school provides financial assistance to most students for the first 4 years of their programs. Financial assistance is available in varying degrees through assistantships, fellowships, grants, loans, and employment.

Assistantships

During the first year, most doctoral students are appointed as research or teaching assistants. During 2021-22, a graduate teaching assistantship paid about $2,000 a month, and a 50-percent-time graduate research assistantship paid about $2,000 a month plus tuition and fees. Appointment as a graduate teaching assistant at 40-percent time or more entitles the student to a 100-percent tuition waiver.

For non-native speakers of English, appointment as a graduate teaching assistant is only made after the student passes the SPEAK test or the Test of Spoken English administered by KU’s Applied English Center (https://aec.ku.edu/).

Fellowships and Grants

The School of Business has been successful in nominating doctoral students for fellowships and grants from sources outside the school. Business students have received awards from the Richard D. Irwin Foundation, Kauffman Foundation, the American Institute of Certified Public Accountants, Beta Gamma Sigma, the American Accounting Association, Accounting Doctoral Scholars, and KU. These awards allow the student to receive support for a semester while working on his or her dissertation.

The School of Business maintains active files on these and other sources of fellowships and grants, recommends qualified students for the awards, and works closely with students in submitting application materials.

Visit the Graduate Studies website for information about other funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

Assistant in the form of loans or employment is available through:

Financial Aid and Scholarships (http://financialaid.ku.edu/)

KU Visitor Center
1502 Iowa Street
Lawrence, KS 66045
785-864-4700

Ph.D. Admission

The applicant must hold at least a bachelor’s degree from an accredited college or university. No specific undergraduate preparation in business is required.

The applicant must demonstrate competence as a scholar through a high level of previous academic performance and high percentile scores on the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE). Scores may not be older than five years at the time of application. In addition, international applicants must present high scores on the Test of English as a Foreign Language (TOEFL), or IELTS.

Finally, the applicant must demonstrate the ability for doctoral study in business, either by a record of achievement in previous professional or academic experience, including research and scholarship, or through letters of recommendation and a personal interview.

These requirements are intended only as suggestions for minimum admission standards. They should not be construed as a guarantee of admission to the Ph.D. program.

A $65 nonrefundable application fee for domestic students and $85 for international students, payable to the University of Kansas, must accompany all applications.

Submit your graduate application online (http://www.graduate.ku.edu/).

Doctor of Philosophy in Business

The program is designed for students who wish to become tenure-track scholars and scholar-teachers. Our program is selective and rigorous, yet it provides a collegial, supportive, and intellectually stimulating atmosphere for original research and effective teaching by providing mastery of the knowledge in a particular field, a thorough understanding of research methodology, the ability to communicate effectively, and the motivation for continuing self-education. Students must specialize in a concentration and develop a broad knowledge of other areas of business and their interrelationships in the management function.

The program is limited in size so each student can work closely with faculty members to receive substantial individual attention.

Ph.D. Degree Requirements

By the end of the third semester of the aspirant’s program (excluding summer sessions), an aspirant must complete the following qualifier requirements. All aspirants must demonstrate some proficiency in doing original research of publishable quality and some proficiency in teaching.

Accounting

Ph.D. students must take the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BSAN 920</td>
<td>Probability for Business Research</td>
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<tr>
<td>BSAN 921</td>
<td>Statistics for Business Research</td>
<td>4</td>
</tr>
<tr>
<td>BE 917</td>
<td>Advanced Managerial Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 715</td>
<td>Elementary Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 928</td>
<td>Introduction to Accounting Research</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 929</td>
<td>Seminar in Archival-Based Accounting Research</td>
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</tr>
<tr>
<td>ACCT 930</td>
<td>Seminar in Auditing Research I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 932</td>
<td>Seminar in Financial Accounting Research I</td>
<td>3</td>
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<tr>
<td>ACCT 936</td>
<td>Accounting Research Design and Corporate Governance Seminar</td>
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Supporting Areas: Choose 6

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>BSAN 922</td>
<td>Advanced Regression</td>
</tr>
<tr>
<td>FIN 937</td>
<td>Seminar in Business Finance</td>
</tr>
<tr>
<td>FIN 938</td>
<td>Seminar in Investments</td>
</tr>
<tr>
<td>FIN 939</td>
<td>Seminar in Financial Institutions</td>
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<tr>
<td>ECON 730</td>
<td>Topics in Industrial Organization</td>
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<td>ECON 769</td>
<td>Financial Economics</td>
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<td>ECON 817</td>
<td>Econometrics I</td>
</tr>
<tr>
<td>ECON 818</td>
<td>Econometrics II</td>
</tr>
<tr>
<td>ECON 830</td>
<td>Game Theory and Industrial Organization</td>
</tr>
<tr>
<td>ECON 851</td>
<td>The Theory of International Trade</td>
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</table>
ECON 869  Advanced Financial Economics
ECON 880  Advanced Topics in Economic Theory: _____
ECON 915  Advanced Econometrics I
ECON 916  Advanced Econometrics II
ECON 917  Advanced Econometrics III
ECON 918  Financial Econometrics
PSYC 790  Statistical Methods in Psychology I
PSYC 791  Statistical Methods in Psychology II
PSYC 893  Multivariate Analysis
PSYC 894  Multilevel Modeling
PSYC 895  Categorical Data Analysis
PSYC 896  Structural Equation Modeling I
MATH 727  Probability Theory
MATH 728  Statistical Theory

Analytics & Operations
Ph.D. students must take the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BSAN 920</td>
<td>Probability for Business Research</td>
<td>4</td>
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<tr>
<td>BSAN 921</td>
<td>Statistics for Business Research</td>
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</tr>
<tr>
<td>ECON 701</td>
<td>Survey of Macroeconomics</td>
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<tr>
<td>or ECON 790</td>
<td>Game Theory and Applications</td>
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<tr>
<td>MATH 790</td>
<td>Linear Algebra II</td>
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<tr>
<td>ECON 715</td>
<td>Elementary Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>or BSAN 922</td>
<td>Advanced Regression</td>
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</tr>
<tr>
<td>MATH 765</td>
<td>Mathematical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 790</td>
<td>Linear Algebra II</td>
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<tr>
<td>BSAN 740</td>
<td>Optimization and Prescriptive Analytics</td>
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<tr>
<td>or BSAN 750</td>
<td>Data Mining and Machine Learning</td>
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<tr>
<td>BSAN 935</td>
<td>Seminar in Optimization: _____</td>
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<tr>
<td>SCM 995</td>
<td>Doctoral Seminar in Supply Chain Management</td>
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<tr>
<td>or IST 995</td>
<td>Doctoral Seminar in Information Systems:</td>
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<tr>
<td>SCM 998</td>
<td>Independent Study for Doctoral Students</td>
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Select four of the following courses:

<table>
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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>BSAN 726</td>
<td>Data Management, Databases, and Data</td>
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<tr>
<td>Warehousing</td>
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<tr>
<td>BSAN 730</td>
<td>Large Scale Data Analysis</td>
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<tr>
<td>BSAN 745</td>
<td>Advanced Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>ECON 790</td>
<td>Game Theory and Applications</td>
<td>3</td>
</tr>
<tr>
<td>ECON 800</td>
<td>Optimization Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 817</td>
<td>Econometrics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 818</td>
<td>Econometrics II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 830</td>
<td>Game Theory and Industrial Organization</td>
<td>3</td>
</tr>
<tr>
<td>ECON 916</td>
<td>Advanced Econometrics II</td>
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<tr>
<td>EPSY 906</td>
<td>Latent Trait Measurement and Structural Equation Models</td>
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<tr>
<td>EPSY 908</td>
<td>Structural Equation Modeling II</td>
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<tr>
<td>FIN 710</td>
<td>Investments I</td>
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<td>FIN 711</td>
<td>Investments II</td>
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<td>FIN 712</td>
<td>Business Investment</td>
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<td>FIN 713</td>
<td>Business Financing</td>
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<td>MKTG 952</td>
<td>Introduction to Marketing Models</td>
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<tr>
<td>MKTG 954</td>
<td>Pricing and Strategy</td>
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<tr>
<td>MKTG 955</td>
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Finance
Ph.D. students must take the following:

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BSAN 920</td>
<td>Probability for Business Research</td>
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</tr>
<tr>
<td>or MATH 727</td>
<td>Probability Theory</td>
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<tr>
<td>BSAN 921</td>
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<tr>
<td>or MATH 728</td>
<td>Statistical Theory</td>
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<td>BSAN 922</td>
<td>Advanced Regression</td>
<td>3</td>
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<tr>
<td>ECON 800</td>
<td>Optimization Techniques I</td>
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<td>ECON 801</td>
<td>Microeconomics I</td>
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<td>ECON 802</td>
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<td>BE 917</td>
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<td>FIN 901</td>
<td>Current Research in Finance</td>
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<td>FIN 937</td>
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<td>FIN 938</td>
<td>Seminar in Investments</td>
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</tr>
<tr>
<td>FIN 939</td>
<td>Seminar in Financial Institutions</td>
<td>3</td>
</tr>
<tr>
<td>Advanced elective in finance or economics or research methods</td>
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<tr>
<td>ECON 817</td>
<td>Econometrics I</td>
<td>3</td>
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<tr>
<td>ECON 818</td>
<td>Econometrics II</td>
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<tr>
<td>Select one of the following sequences:</td>
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<tr>
<td>Sequence 1:</td>
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<tr>
<td>ECON 715</td>
<td>Elementary Econometrics</td>
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<tr>
<td>Advanced elective in research methods</td>
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<tr>
<td>Sequence 2:</td>
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<tr>
<td>ACCT 928</td>
<td>Introduction to Accounting Research</td>
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<td>ACCT 932</td>
<td>Seminar in Financial Accounting Research</td>
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<tr>
<td>Sequence 3:</td>
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<td>ECON 770</td>
<td>Economics of the Labor Market</td>
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<tr>
<td>ECON 870</td>
<td>Applied Microeconomics</td>
<td>3</td>
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</table>

Human Resources Management
Ph.D. students must take the following:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>BE 701</td>
<td>Business Economics</td>
<td>3</td>
</tr>
<tr>
<td>or BE 917</td>
<td>Advanced Managerial Economics</td>
<td></td>
</tr>
<tr>
<td>or ECON 700</td>
<td>Survey of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>MGMT 905</td>
<td>Macro Management Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 906</td>
<td>Micro Management Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 916</td>
<td>Major Management Theories</td>
<td>3</td>
</tr>
<tr>
<td>HRM Content Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OB Content Course</td>
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<tr>
<td>Strategy Content Course</td>
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<tr>
<td>HRM Content Course</td>
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<tr>
<td>Elective or Statistics/Methods</td>
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<tr>
<td>Elective or Statistics/Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 791</td>
<td>Statistical Methods in Psychology II</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 893</td>
<td>Multivariate Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>
PSYC 894  Multilevel Modeling  4  
PSYC 896  Structural Equation Modeling I  4

Marketing
Ph.D. students must take the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 901</td>
<td>Introduction to Research Methods in Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 951</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 952</td>
<td>Introduction to Marketing Models</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 957</td>
<td>Managerial Issues in Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Consumer Behavior Track:

BE 917  Advanced Managerial Economics  3  
or ECON 700  Survey of Microeconomics  
BSAN 920  Probability for Business Research  4  
or MATH 727  Probability Theory  
BSAN 921  Statistics for Business Research  4  
PSYC 791  Statistical Methods in Business Research  4  
PSYC 818  Experimental Research Methods in Social Psychology  3  
PSYC 893  Multivariate Analysis  4  
PSYC 894  Multilevel Modeling  4

Choose at least four of the following courses:

- PSYC 578  Social Attitudes
- PSYC 723  Advanced Cognitive Psychology
- PSYC 725  Cognitive Neuroscience
- PSYC 735  Psycholinguistics I
- PSYC 774  Advanced Social Psychology I
- PSYC 775  Advanced Social Psychology II
- PSYC 787  Multidisciplinary Perspectives on Gerontology and Aging
- PSYC 831  Advanced Human Learning and Memory
- PSYC 885  Altruism and Helping Behavior
- PSYC 895  Categorical Data Analysis  4
- PSYC 896  Structural Equation Modeling I
- PSYC 933  Seminar: The Measurement of Attitudes
- PSYC 983  Methods & Professional Issues in the Cognitive & Brain Sciences
- PSYC 991  Longitudinal Data Analysis
- PSYC 993  Seminar: ______
- PSYC 996  Structural Equation Modeling II

Quantitative Track:

BE 917  Advanced Managerial Economics  3  
or ECON 730  Topics in Industrial Organization  
BSAN 920  Probability for Business Research  4  
or MATH 727  Probability Theory  
BSAN 921  Statistics for Business Research  4  
or MATH 728  Statistical Theory

Strategic Management
Ph.D. students must take the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE 701</td>
<td>Business Economics</td>
<td>3</td>
</tr>
</tbody>
</table>
or BE 917  Advanced Managerial Economics  
or ECON 700  Survey of Microeconomics  
MGMT 905  Macro Management Research Methods  3  
MGMT 906  Micro Management Research Methods  4  
MGMT 916  Major Management Theories  3  
HRM Content Course  
OB Content Course  
Strategy Content Course  
Elective or Statistics/Methods  
Elective or Statistics/Methods  
PSYC 790  Statistical Methods in Psychology I  4  
PSYC 791  Statistical Methods in Psychology II  4  
PSYC 893  Multivariate Analysis  4  
PSYC 894  Multilevel Modeling  4  
PSYC 896  Structural Equation Modeling I  4

EECS 649  Introduction to Artificial Intelligence  3  
EECS 738  Machine Learning  3  
EECS 837  Data Mining  3  
EECS 839  Mining Special Data  3  
EPSY 941  Bayesian Statistics  3

Organizational Behavior
Ph.D. students must take the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE 701</td>
<td>Business Economics</td>
<td>3</td>
</tr>
</tbody>
</table>
or BE 917  Advanced Managerial Economics  
or ECON 700  Survey of Microeconomics  
MGMT 905  Macro Management Research Methods  3  
MGMT 906  Micro Management Research Methods  4  
MGMT 916  Major Management Theories  3  
HRM Content Course  
OB Content Course  
Strategy Content Course  
Elective or Statistics/Methods  
Elective or Statistics/Methods  
PSYC 790  Statistical Methods in Psychology I  4  
PSYC 791  Statistical Methods in Psychology II  4  
PSYC 893  Multivariate Analysis  4  
PSYC 894  Multilevel Modeling  4

One of the two sequences below:

Sequence one:

- PSYC 790  Statistical Methods in Psychology I  
- PSYC 791  Statistical Methods in Psychology II  
- PSYC 893  Multivariate Analysis

Advanced elective statistics course
Advanced elective statistics course
**Sequence two:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAN 920</td>
<td>Probability for Business Research</td>
</tr>
<tr>
<td>BSAN 921</td>
<td>Statistics for Business Research</td>
</tr>
</tbody>
</table>

**Advanced statistics course**

**Advanced statistics course**

**Advanced statistics course**

These courses should be completed in the first 2 years of a student's program. At or before the end of the aspirant's third semester in the program, a qualifier assessment team, composed of five faculty members, holistically determines whether or not a student continues in the program.

The aspirant for the Ph.D. in business administration must have an area of concentration, supporting areas, and preparation in research methodology.

**Concentration**

Each aspirant, with the assistance of her or his faculty advisor and the area faculty, selects an area of concentration from the traditional business disciplines of accounting, analytics & operations, finance, human resources management, marketing, organizational behavior, and strategic management. An aspirant also may propose an interdisciplinary concentration that is a combination of these disciplines or may include emphases such as international business, law, and economics. The aspirant must take at least five advanced courses in the concentration. These courses may include those offered outside the School of Business.

**Supporting Areas**

Course work in the area of concentration is supplemented and strengthened by study in one or two supporting areas. A supporting area is one that supplements and complements the concentration. The aspirant satisfies the supporting area requirement by taking at least 4 advanced courses in the supporting areas (at least 2 courses in each of 2 supporting areas or at least 4 courses in 1 supporting area). Courses recommended for preparation for the qualifier assessment may not be included in satisfying the supporting area requirement.

**Probation and Dismissal Guidelines**

To be in good standing, a student must maintain a 3.0 cumulative grade-point average; if the grade-point average falls below 3.0, the student is placed on probation. This is followed by a letter to the student confirming the probation and explaining the student's options.

A student is placed on probation for 1 academic semester. If the cumulative grade-point average has not risen to 3.0 in the next semester of enrollment (excluding summers), the student can either be dismissed or allowed to continue on probation. Continued probation requires the area director for the student’s concentration to write a letter to the Ph.D. team explaining why the student should be allowed to continue.

A graduate student can be dismissed on the recommendation of the area director for the student’s concentration. Usually, a graduate student is dismissed because of a low grade-point average; however, failure of examinations or failure to make satisfactory progress toward the degree is also cause for dismissal. Academic dismissal should occur before a semester begins; but if a student is dismissed during the semester, the dismissal is effective only at the end of the semester in which the Ph.D. team gives notification of dismissal.

**Policy for KU School of Business Ph.D. Program on Academic Misconduct:**

We believe that doctoral students should be held to a higher standard with regard to academic integrity than other students in the School given their future role in doing research and teaching in the university setting as well as enforcing such standards in their own classes. To this end, the faculty of the KU School of Business provides a course, Bus 903 - Responsible Conduct in Research, that is required of each student in the Ph.D. program.

Consistent with USRR 2.5.1 and existing Graduate Studies Policies on "Good Academic Standing" and "Dismissed Enrollment," this document discusses the guidelines for probation and dismissal of doctoral students who commit academic misconduct. The Ph.D. program administrators will regularly check with the Provost's office for any records of misconduct by business doctoral students in any class at KU (inside or outside of the School of Business). For example, these checks will occur (but are not limited to): (a) at the end of the first year for use in the qualifying review process; (b) prior to start of any teaching responsibilities; (c) prior to comprehensive exams; (d) prior to the dissertation proposal defense.

Instances of misconduct will be shared with the members of the Ph.D. team, advisor, and deans of the School.

The first case of any academic misconduct in a class anywhere in the university may result in probation or dismissal of the student depending on the severity of the misconduct and the student's response. It is expected that the advisor, Ph.D. team chair and team members, and Ph.D. program director will all be granted access to the details of a misconduct case by the professor involved. If probation, the conditions for the probation are set by the Ph.D. team chair and Ph.D. program director in consultation with the advisor and Ph.D. team members. The conditions may include (but are not limited to) such assignments as reviewing the literature on the area of the responsible conduct in research violated by the misconduct and/or reviewing the material covered in the target class. These conditions and the choice of probation vs. dismissal will be based on the details of each individual case. Importantly, if the student is not dismissed as a result of the first offense and if the conditions for the probation are not met in a timely manner, or if a second act of misconduct occurs, the student will likely be dismissed from the Ph.D. program.

Dissertations will also be reviewed by the advisor and program director for academic misconduct before being submitted to the Research and Graduate Studies Office. Academic misconduct on a dissertation is grounds for dismissal from the program. Academic misconduct on the dissertation that is not discovered until after graduation may be grounds for revoking the Ph.D. degree. In summary, the Ph.D. program in the KU School of Business seeks to maintain the highest standards of academic integrity with this policy.

**Research Methodology**

When preparing for the qualifier assessment, area groups should ensure that the student’s program includes adequate preparation in research methodology.

**Responsible Scholarship**

Students in the first year must enroll in BUS 903 Responsible Conduct of Research. This course builds students’ abilities to analyze ethical issues and introduces students to various issues that may arise while engaging in the research endeavor.
Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Teaching

Students enroll in BUS 902 Teaching Seminar during the first semester in which they teach independently. Before the completion of the Ph.D. program, all students also must have teaching experience equivalent to teaching at least 2 undergraduate courses independently in 2 different semesters.

Examinations

To advance to candidacy, the student must pass a written-oral comprehensive examination in the concentration. Finally, the student must pass an oral defense of the dissertation research proposal and the dissertation.

Graduate Certificate in Entrepreneurship

Entrepreneurship Certificate

The Certificate in Entrepreneurship is a series of courses designed to help undergraduates and graduate students start, finance, plan, and launch their own business in their major or favorite subject. You will learn how to be your own boss, realize your dream job and acquire wealth by becoming an entrepreneur with the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTR 701</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 702</td>
<td>Financing Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 703</td>
<td>Marketing Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 704</td>
<td>Launching Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University’s policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).
Education and Human Sciences

Graduation requirements and regulations for each of the School's academic programs are provided in this catalog. For information on graduate program regulations, refer to the School of Education and Human Sciences Graduate Regulations tab. In most cases, you will use the catalog of the year you entered KU (see your School of Education and Human Sciences advisor (http://soe.ku.edu/students/advising/) for details). Other years' catalogs:

Curriculum and Teaching (p. 212)
- Bachelor of Science in Education (p. 222)
- Undergraduate Certificate in Teaching English as a Foreign Language (TEFL) (p. 235)
- Master of Arts in Curriculum and Instruction (p. 236)
- Master of Science in Education in Curriculum and Instruction (p. 237)
- Doctor of Education in Curriculum and Instruction (p. 240)
- Doctor of Philosophy in Curriculum and Instruction (p. 241)
- Graduate Certificate in Reading (p. 242)
- Reading Specialist Endorsement (p. 243)
- Graduate Certificate in Teaching English to Speakers of Other Languages (p. 244)
- Teaching English to Speakers of Other Languages Endorsement (p. 245)

Educational Leadership and Policy Studies (p. 246)
- Master of Science in Education in Educational Administration (p. 251)
- Master of Science in Education in Educational Technology (p. 254)
- Master of Science in Education in Higher Education Administration (p. 255)
- Master of Science in Education/ Education and Social Policy (p. 257)
- Doctor of Education in Educational Leadership and Policy Studies (p. 259)
- Doctor of Philosophy in Educational Leadership and Policy Studies (p. 261)
- Graduate Certificate in K-12 Building Leadership (p. 264)

Educational Psychology (p. 264)
- Master of Science in Counseling Psychology (p. 272)
- Doctor of Philosophy in Counseling Psychology (p. 274)
- Master of Science in Education in Educational Psychology and Research (p. 277)
- Doctor of Philosophy in Educational Psychology and Research (p. 279)
- Specialist in Education in School Psychology (p. 281)
- Doctor of Philosophy in School Psychology (p. 282)
- Graduate Certificate in Mind, Brain, and Education (p. 284)
- Graduate Certificate in Social Emotional Wellness (p. 285)

Health, Sport, and Exercise Sciences (p. 285)
- Bachelor of Science in Education (p. 297)
- Bachelor of Science in Exercise Science and Sport Management (p. 301)
- Bachelor of Applied Science in Exercise Science (p. 317)
- Minor in Sport Management (p. 318)
- Undergraduate Certificate in Strength and Conditioning (p. 319)
- Master of Science in Education in Health, Sport, and Exercise Science (p. 319)
- Doctor of Philosophy in Health, Sport, and Exercise Science (p. 322)
Special Education (p. 323)
Undergraduate Certificate in KU Transition to Postsecondary Education (p. 336)
Master of Science in Education in Special Education (p. 336)
Doctor of Education in Special Education (p. 339)
Doctor of Philosophy in Special Education (p. 340)
Graduate Certificate in Autism (KS) (p. 342)
Graduate Certificate in High Incidence Disabilities Endorsement (KS) (p. 342)
Graduate Certificate in Interdisciplinary Early Intervention (p. 343)
Graduate Certificate in Leadership in Special and Inclusive Education (p. 343)
Graduate Certificate in Licensure Endorsement in Early Childhood Unified (birth-k) (KS) (p. 344)
Graduate Certificate in Low Incidence Disabilities Endorsement (KS) (p. 345)
Graduate Certificate in Transition (p. 345)

Introduction
Founded in 1909, the University of Kansas School of Education & Human Sciences educates future teachers, administrators, counselors, psychologists, and health and sport professionals. The School offers a variety of programs at Joseph R. Pearson Hall and Robinson Center on the Lawrence campus. The KU School of Education & Human Sciences also offers several graduate degree programs, as well as an undergraduate degree in Exercise Science, at the KU Edwards Campus in Overland Park, Kansas.

Mission Statement
View the mission statement (https://soehs.ku.edu/mission-vision/) of the School of Education & Human Sciences.

Nationally Accredited Programs (https://soehs.ku.edu/mission-vision/accreditation/)
Council for Accreditation of Educator PREPARATION (CAEP)
The University of Kansas School of Education and Human Sciences educator preparation programs (https://soehs.ku.edu/academics/) are accredited under the Council for the Accreditation of Educator Preparation (CAEP) Standards, for a period of 7 years, from January 1, 2022, to December 31, 2029.

American Psychological Association (APA)
The Counseling Psychology and School Psychology doctoral programs offered by the School of Education & Human Sciences at the University of Kansas are accredited by the American Psychological Association (APA) (http://www.apa.org/ed/accreditation/): 750 First Street, NE, Washington, DC 20002-4242; Phone: (202) 336-5979 - TDD/TTY: (202) 336-6123. Both the School of Psychology Ed.S. and Ph.D. programs are approved by the National Association of School Psychologists (NASP), NCATE, and Kansas State Department of Education (KSDE).

Undergraduate Programs
School of Education and Human Sciences programs prepare teachers and sport and health professionals through the following majors:

- Community Health
- Elementary Education
- Education Elementary Unified
- English Education – Secondary Grades
- Exercise Science
- Foreign Language Education
- Physical Education Plus
- History and Government Education – Secondary Grades
- Sport Management
- Unified Early Childhood Education

Undergraduate programs feature extensive coursework in subject areas taught by expert faculty and real world experiences or concentrations in areas of interest or future study.

School of Education & Human Sciences also offers the following minors:

- Education Studies
- Sport Management

University Honors Program
The school encourages qualified students to participate in the University Honors Program (http://www.honors.ku.edu/).

Teacher Preparation Program Reports
The Title II Report (https://soehs.ku.edu/mission-vision/accreditation/) provides information about the performance of KU School of Education & Human Sciences teacher education program students on required state examinations. This data is part of the Title II report required by the federal government.

Graduate Programs
To facilitate preparation for specific types of professional service and teaching, graduate study in education has been organized into the program areas encompassed by these departments:

- Curriculum and Teaching (p. 212) includes programs in curriculum and instruction, including the fields relating to elementary and secondary education.
- Educational Leadership and Policy Studies (p. 246) comprises programs in educational administration, social and cultural studies in education, and higher education.
- Health, Sport, and Exercise Sciences (p. 285) offers areas of study in exercise science, health science, pedagogy, and sports management.
- Educational Psychology (p. 264) offers programs in counseling psychology, school psychology, and educational psychology and research.

President's Office
President's Office, Room 1110, 469 Kansas Union
University of Kansas
Lawrence, Kansas 66045-7296
Phone: 785-864-4000; Fax: 785-864-6767

Office of the University Registrar
Office of the University Registrar, 300 Craft Hall
University of Kansas
Lawrence, Kansas 66045-7240
Phone: 785-864-5431; Fax: 785-864-8670

Office of the Vice President for University Relations
Office of the Vice President for University Relations, 1020 Wescoe Hall Drive
University of Kansas
Lawrence, Kansas 66045-7424
Phone: 785-864-2300; Fax: 785-864-2323
• Special Education (p. 323) offers programs in autism spectrum disorder, early childhood unified, high-incidence disabilities, low-incidence, and secondary transition education and services.

Further information on graduate study may be found on the departmental sections of the online catalog.

Undergraduate Advising

Prospective undergraduates should contact the School of Education and Human Sciences Advising Center, 208 J.R. Pearson Hall, soehsadvising@ku.edu, 785-864-9616, when considering an Education major. Working closely with School of Education and Human Sciences advisors is critical for admission to the programs and timely graduation.

Graduate Advising

Graduate advising is done at the department and program level. For more information, please contact the director of graduate studies in your department or program.

All education students have a graduate or faculty advisor and should know and be in contact with the advisor to whom they have been assigned. Students who are unsure of their advisor should contact their academic department for information.

Undergraduate & Graduate Scholarships and Financial Aid

Since 1958, the KU School of Education and Human Sciences has offered financial support through academic scholarships to thousands of students. These scholarships are awarded to students in addition to the scholarships made available through the university as a whole. Scholarships are awarded on a competitive basis and are available for KU School of Education and Human Sciences students in on-ground and hybrid programs (freshman and fully online students are not eligible). To be considered for an award, KU School of Education and Human Sciences students should complete the SOEHS application (https://soehs.ku.edu/admission/scholarships/) that is typically due in early February each year for the following academic year.

Additional funds may be available from the University of Kansas Financial Aid & Scholarships (http://affordability.ku.edu/).

Graduate Fellowships and Assistantships

For information about graduate assistantships, contact the School of Education and Human Sciences (http://www.soe.ku.edu/).

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

Undergraduate University Regulations

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

C Minimum

A student must earn at least a grade of C or higher in COMS 130, ENGL 101, English and mathematics admission requirements. A grade lower than a C is not acceptable in any teacher education course. Some programs may have additional minimum grade point requirements for specific classes. Consult School of Education & Human Sciences advisors for details.

Credit/No Credit

Only 6 hours of Credit/No Credit is allowed before a student is admitted into the School of Education and Human Sciences. Once admitted, a student cannot take a class Credit/No Credit for any program requirement.

Graduation with Distinction and Highest Distinction

Undergraduates whose grade-point averages rank in the upper 10% of their graduating class graduate with distinction. The upper 3% of those awarded distinction graduate with highest distinction.

Honor Roll

Students with a semester grade-point average of 3.75 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Maximum and Minimum Semester Enrollment

No student may enroll for more that 19 hours a semester, or more than 9 hours in a summer session without permission from an undergraduate advisor and the Associate Dean.

Maximum Community College Credit Allowed

A maximum of 64 community college hours may be counted toward a student's degree.

Probation and Warning

Academic Warning

An academic warning is issued to students with a semester grade-point average below a 2.75.

Informal Probation

An undergraduate student whose cumulative grade-point average is lower than 2.75 is placed on unofficial probation for the following semester.

Formal Probation

An undergraduate student whose cumulative grade-point average is lower than 2.75 for a second semester is placed on official probation for the following semester.

Returned to Good Standing

An undergraduate student on probation is returned to good standing if the cumulative grade-point average is at least 2.75.
Dismissed
A student on official probation is dismissed for failure to earn a cumulative grade-point average of at least 2.75 at the end of the official probation semester. Those students are dropped from all School of Education & Human Sciences courses for the next semester. Students are readmitted through the competitive admission process.

Required Work in Residence
To be eligible for the B.S.E. degree, a student must complete at least 30 hours at KU and at least 30 hours after being admitted to the School of Education & Human Sciences. Up to 6 hours of work done at another institution may be accepted as part of the last 30 hours.

Transfer of Credit
Before the last 30 hours required for the degree, students may, under certain conditions, take courses at other institutions and transfer the credit to KU. Before enrolling in a course that will be transferred to meet program requirements, students should obtain approval from their assigned School of Education and Human Sciences advisor. In some cases, students may need to petition that the course be allowed to meet a requirement. Please note, some transfer courses will not meet KU Core requirements.

Some courses have already been evaluated and approved by KU; they are listed on Cred/Tran http://credittransfer.ku.edu/.

After completing the course work, you must request that an official transcript be sent to the Office of Admissions (http://admissions.ku.edu), KU Visitor Center, 1502 Iowa St., Lawrence, KS 66044-7576, 785-864-3911. For transcripts to be official, they must be mailed from the college or university directly to KU. Faxed transcripts are not accepted for posting of transfer credit.

Nonresidence credit includes all credits from another college or university taken after initial enrollment at KU, military service courses, and other undergraduate course work not formally offered in the Schedule of Classes (http://www.classes.ku.edu (https://classes.ku.edu/)).

The School of Education and Human Sciences follows the regulations and policies of the University (http://policy.ku.edu). In some cases, the School of Education and Human Sciences and departmental policies are more restrictive than those of the broader University. Students are encouraged to work closely with their department and advisor for specifics.

The School of Education and Human Sciences follows the regulations and policies (http://policy.ku.edu) of the University and of Graduate Studies (for example: Academic probation (http://policy.ku.edu/graduate-studies/academic-probation/), enrollment status (http://policy.ku.edu/graduate-studies/fulltime-enrollment/), grading policies (http://policy.ku.edu/graduate-studies/grading/), grievances (http://policy.ku.edu/graduate-studies/grad-student-grievance-policy/), etc.). In some cases, School of Education and Human Sciences and departmental policies are more restrictive than those of the broader University. Students are encouraged to work closely with their department and advisor for specifics.

While all of these policies are important, the School of Education and Human Sciences follows the policy outlined below regarding the academic performance of our graduate students.

Good Academic Standing
Evaluation of graduate student academic standing includes, but is not limited to, consideration of performance in and progress through a graduate program according to program expectations.

Performance
Graduate students must maintain an expected level of performance throughout their program. Criteria for evaluating satisfactory performance include, but are not limited to:

1. For degree- and certificate-seeking students, a minimum cumulative grade point average (GPA) of 3.0 or higher and, for non-degree-seeking students, a cumulative graduate GPA of 2.0 or higher. Students must have a 3.0 minimum GPA to graduate with a KU graduate degree.

2. For students enrolled in dissertation, master's thesis or project hours the expectation is that students will make satisfactory academic progress. Earning a grade of NP in one semester or earning a grade of LP in consecutive semesters may indicate a lack of satisfactory academic progress and may result in probation or dismissal.

3. Academic and scholarly integrity;
4. Compliance with academic policies at the university, school, and departmental level; and
5. For degree- and certificate-seeking students, satisfactory progress toward completion of the degree or certificate, as determined by the program. Progress may be determined by factors including:
   a. Satisfactory completion of coursework, milestones, exams, or other program components on a specified timeframe; and
   b. Official time to degree and total time in program.

Failure to maintain an expected level of performance will result in a student not being in good academic standing. Lack of good academic standing will result in the graduate program placing the student on probation or dismissal from the program (for more information, please see the policies on academic probation (http://policy.ku.edu/graduate-studies/academic-probation/) and dismissed enrollment (http://policy.ku.edu/graduate-studies/dismissed-enrollment/?num2.2)).

Academic Probation
Upon falling below a cumulative graduate grade-point average of 3.0, computed with the inclusion of grades earned at KU for all courses acceptable for graduate credit, or earning a grade of NP (no progress) in thesis, project or dissertation, the student is placed on probation by the graduate division of the school/college. The grades of SP, LP, NP and I, for which no numerical equivalents are defined, are excluded from the GPA computation.

If the student’s overall graduate average has been raised to 3.0 by the end of the next semester of enrollment after being placed on probation, the student may be returned to good academic standing. If not, the student is not permitted to re-enroll and will be dismissed unless the graduate division of the school/college acts favorably on a departmental recommendation for the student to continue study.

If a student earns a grade of NP in dissertation hours, master's project or thesis any semester, the student will be placed on academic probation for the following semester until they receive a LP or SP. Earning consecutive semesters with a grade of LP may also place a student on academic probation. Students are encouraged to meet with their advisor to discuss
their progress. Students who do not make satisfactory progress may be discontinued from their program at any time.

If a student earns a grade of NP (equivalent to grade of F or No Credit) in dissertation hours, master’s project or thesis any semester, prior to earning 18 dissertation hours or in the required hours for master’s project or thesis, those hours will not count towards their graduation requirement. A student must enroll in those credit hours again the following semester and earn at least a LP for them to apply to their degree requirements. Students must have a SP in the final semester of their enrollment of this milestone.

View the current policy on academic probation (http://policy.ku.edu/graduate-studies/academic-probation/).

**Degrees Offered through the School of Education and Human Sciences**

**Certificate Programs**

An application is required in order to be admitted to and pursue a Graduate Certificate. Degree-seeking graduate students who wish to apply to a certificate program must be in good standing in their departments or programs. An individual who is not currently a degree-seeking graduate student at KU must be admitted directly to a graduate certificate program.

With the consent of the certificate-granting department, degree-seeking or non-degree seeking students may count up to two (2) courses — for a maximum of 8 credit hours — taken at KU prior to admission to the certificate program toward the graduate certificate. Any course credits that are counted are subject to the specific certificate coursework requirements in the certificate program. Graduate certificates are not granted retroactively and no exceptions to this two-course limit will be granted. Students who withdraw from a degree program and subsequently seek admission to a certificate program are subject to these same limits (i.e., 8 hours).

If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking students, applicable courses taken for the graduate certificate program may be counted toward the degree with the approval of the degree-granting program as long as the student is enrolled in the degree program prior to completing the last certificate requirement.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program.

Graduate credit from another institution may not be transferred to a KU graduate certificate program. Graduate courses taken at KU may count toward both a graduate degree and graduate certificate(s) as long as the student is admitted and enrolled in the intended program prior to completion of the last required course. If the courses were taken as a KU non-degree seeking student, a Count Toward Degree form must be submitted prior to approval for graduation or approval of the certificate.

The courses taken in the graduate certificate program will be listed on the student’s transcript and recognition of the earned certificate will also be posted on the transcript. The awarding of graduate certificates will coincide with the August, December and May graduations at the University of Kansas.

Graduate certificates will not be recognized by any Graduate Studies official graduation ceremony.

Completion of a graduate certificate is not a guarantee of licensure or endorsement of any kind. It is each student’s responsibility to determine the licensure and endorsement requirements in his or her state and to apply for the licenses or endorsements necessary for his or her career goals.

View the current graduate certificate policies and processes (http://policy.ku.edu/graduate-studies/certificate-programs/).

View the current policy on eligibility and admission to a graduate certificate program (http://policy.ku.edu/graduate-studies/grad-certification-program-admission/). A current list of all certificate programs is available on the KU Academics page (http://www.ku.edu/academics/).

**Master’s Degree Programs**

Master’s degrees are granted on satisfactory completion of not less than 1 academic year, or its equivalent, of graduate study. Broadly, the School provides 3 options for the master’s degree with specific requirements set by each program and department.

- The thesis option (minimum 36 graduate credit hours of study),
- The project or portfolio option (minimum 30 graduate credit hours of study), and
- The examination option (minimum 36 graduate credit hours of study).

At least 20 of the credit hours required for the thesis and project option master’s programs must be in regular course work, as contrasted with independent study and similar enrollments. Students pursuing the 36-hour examination program option must have 26 hours in regular course work.

**Master of Arts**

A candidate for the Master of Arts degree completes work both in education and in a teaching area (other than physical education). For students who choose the thesis or project option, a minimum of 30 hours of graduate credit is required for this degree, of which no fewer than 10 and no more than 15 hours must be earned in the teaching area. Some work must be elected in at least 2 of the approved graduate program areas in the School of Education and Human Sciences. Currently, the School of Education and Human Sciences only offers one Master of Arts degree in Curriculum & Instruction (https://catalog.ku.edu/education/curriculum-teaching/ma/) with an emphasis in Teaching English as a Second Language.

The MA candidate may complete a thesis in the concentration by enrolling in Master’s Thesis (6 hours maximum credit applicable to degree requirements) or complete the project option by enrolling in Master’s Project (4 hours maximum applicable to degree requirements). Students may also pursue the written examination option (36 hours of coursework applicable to degree requirements). Students who pursue the written examination option must take 36 hours of coursework applicable to degree requirements. Check with the department for specific requirements for each option. Check with the Curriculum and Teaching department for specific requirements for each option.
Master of Science (Counseling Psychology)

A candidate for the degree of Master of Science in Counseling Psychology (http://epsy.soee.ku.edu/academics/cpsy/masters/) earns a concentration in mental health counseling. A minimum of 60 credit hours is required for this degree, about 50 of which are prescribed, with the rest made up of electives approved by the student's advisor. The candidate must complete a Master's Thesis (3 hours maximum credit applicable to degree requirements), or complete a Master's Project (3 hours applicable to degree requirements), or complete a written comprehensive examination. Check with the Educational Psychology department for specific requirements for each option.

Master of Science in Education

The Master of Science in Education is offered in several departments, some with specific concentrations. A minimum of 30 credit hours is required.

The MSE candidate may complete a thesis in the concentration by enrolling in Master’s Thesis (6 hours maximum credit applicable to degree requirements) or complete the project option by enrolling in Master’s Project (4 hours maximum applicable to degree requirements). Students may also pursue the written examination option (36 hours of coursework applicable to degree requirements). Students who pursue the written examination option must take 36 hours of coursework applicable to degree requirements. Check with the department for specific requirements.

REQUIREMENTS

Students must acquaint themselves thoroughly with departmental requirements for the degree, which may be in addition to general requirements and those of the School of Education and Human Sciences. Consistent with Graduate Studies' general regulations, it is the student's responsibility to know and observe all university, school, department, and academic program regulations and procedures relating to the graduate program.

In no case will a regulation be waived or an exception be granted because a student pleads ignorance of, or contends that he or she was not informed of requirements, regulations, procedures, or deadlines. Petitions for other reasons may be accepted. Consult with your department and/or advisor for information on this process.

Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

All master’s programs require a graduate class in research and evaluation methods (i.e. EPSY 715), successfully completed during the first 12 hours.

Students are required to make satisfactory progress towards their degree as determined by the faculty in their department and may be discontinued for failure to do so.

All graduate students enrolled in master’s programs must be enrolled the semester they complete master’s degree requirements. Master’s students who complete degree requirements during the first week of summer session or within the first two weeks of the fall or spring semester are not required to be enrolled for that term unless they were not enrolled during the previous semester. These dates can be verified on the Graduate School calendar.

View the current Lawrence and Edwards Campus policy on master's enrollment requirements (http://policy.ku.edu/graduate-studies/ma-enrollment-requirements/).

Master's Program Time Constraints

Normal expectations are that most master’s degrees are typically completed in two years of full-time study. However, master’s degree students are allowed seven years for completion of all degree requirements assuming satisfactory progress.

In cases in which compelling reasons or circumstances recommend a one-year extension, the Graduate Division, on recommendation of the department/committee, has authority to grant the extension. In cases where more than eight years are requested, the School of Education and Human Sciences Associate Dean for Graduate Studies considers petitions for further extensions and, where evidence of continuous progress, currency of knowledge, and other reasons are compelling, may grant them.

Some departments may have more stringent rulings about time restrictions. Students should ask about the policy in effect in the department in which they plan to study. View the current Lawrence and Edwards Campus policy on master's program time constraints (http://policy.ku.edu/graduate-studies/ma-program-time-constraints/).

Continuous Enrollment

Students are expected to maintain continuous enrollment (fall & spring) while in their academic program.

A student may petition the Graduate Division through the department for a leave of absence if they experience extraordinary circumstances (e.g. cases of illness, emergency, financial hardship, military leave), to pursue family responsibilities, or to pursue full-time activities related to long-range professional goals. Appropriate documentation related to these extraordinary circumstances may be requested from the student directly. Evidence of progress towards degree will also be a determining factor in the decision to grant a leave of absence. Students must be in good standing in order to request a leave of absence. If approved, a leave of absence is typically granted for one year, with the possibility of extension upon request. The time taken for a leave of absence does not count against the student’s time to degree. However, after an absence of five years, a master’s candidate loses status as such and must apply for readmission to the program and the Graduate Division.

If a student has been actively enrolled in a graduate program and has not applied for a leave of absence, but has not been enrolled for one academic year, they will be discontinued from their program. If they wish to return, they will need permission from the department and will need to submit the Permit to Re-Enroll form and must reapply for graduate admission.

Transfer Credit

The transfer credit option allows master’s students to count graduate coursework completed at a regionally-accredited institution toward their KU degree. Students can transfer up to 9 credit hours toward their master’s degrees. The department, advisor, School of Education and Human Sciences, and Dean of Graduate Studies must approve the transfer request. The course(s) and grade(s) will then appear on the student’s KU transcript as the KU course equivalent.

Some restrictions apply to what non-KU courses can be counted toward a KU master’s degree:
• Only courses taken for graduate credit and graded B or higher (3.0 on a 4.0 scale or higher) can be transferred.
• The courses in question cannot have counted toward any previously completed undergraduate or graduate degrees.
• Courses must be current (taken within the last 7 years).
• KU does not accept transfer credit for educational institutes, workshops, or work/life experience.
• Courses must be approved by the student’s department as fulfilling a specific, regular degree requirement (including elective coursework) and should be equal in rigor to KU’s graduate coursework, as reflected in the course description and syllabus.

To begin the transfer process, students should contact their departments to submit the required transfer materials, including an official transcript reflecting the courses from the other institution to be transferred in, as well as descriptions and/or syllabi for the courses in question. The department, advisor, and department chair will then determine whether the course may count for KU credit and, if so, what KU course is equivalent.

Count Toward Degree

The count toward degree process is distinct from transfer credit, which only applies to courses taken at another institution. In the count toward degree process, a student may be allowed to complete coursework taken as a graduate non-degree seeking student at KU toward a graduate degree. No more than 9 credit hours may be counted in this way, assuming the degree-granting department endorses the request and the courses in question meet the University’s criteria for graduate credit. The student must contact the department to complete a Count Toward Degree form, which must then be submitted to the School of Education and Human Sciences Graduate Associate Dean for review and approval. If the form is approved, the School of Education and Human Sciences and the department will include the counted courses when verifying that degree requirements have been met.

Students should be advised that graduate coursework taken as a non-degree-seeking student already counts into the calculation of the student’s graduate GPA, but the count towards degree form is still required for the coursework to count toward completion of degree requirements. The change is not otherwise reflected on the student’s transcript.

With the exception of coursework completed via a pre-approved co-enrollment arrangement, graduate coursework completed as an undergraduate degree-seeking or undergraduate non-degree seeking student may not be counted toward a graduate degree at KU.

Graduate courses taken at KU may count toward both a graduate degree and graduate certificate(s) as long as the student is admitted and enrolled in the intended program prior to completion of the last required course. If the courses were taken as a non-degree seeking student, a Count Toward Degree form must be submitted prior to approval for graduation or approval of the certificate.

Reduced Hour Degree

Kansas Board of Regents policy defines 30 hours as the minimum for master’s degrees at KU. Departments may petition for a reduced-hour master’s degree for individual students. A reduction in hours is distinct from a transfer of credit and is reserved for those students especially well-prepared to complete a graduate-level degree and who are able to maintain a superior grade point average. If approved, a student will be allowed to complete his or her degree by enrolling in up to 6 fewer hours of graduate credit than is typically required for that degree. No coursework is transferred and no modifications to the transcript are made. This policy is enacted in rare circumstances.

To find out more about reduced-hour degrees, please contact your department directly. The department must support the request and the School of Education and Human Sciences Graduate Associate Dean must approve it before the reduced degree requirements will be granted.

Minimum KU Hours

In all cases, a minimum of 15 credits toward a master’s degree must be earned in graduate coursework at the University of Kansas.

GRADING FOR THESIS AND PROJECT

Master’s students who choose the thesis or project option will be graded using the grading scale established in USRR 2.2.5 (http://policy.ku.edu/governance/USRR/#art2sect2). It evaluates a student’s thesis/project as demonstrating satisfactory progress (SP), limited progress (LP), or no progress (NP). A grade of SP must be assigned for a student’s final semester of enrollment in thesis/project. The SP indicates that the final product was of satisfactory quality to earn the degree.

If a student earns a grade of NP in thesis/project hours any semester, the student will be placed on academic probation for the following semester until they receive a LP or SP for thesis/project hours. Students are encouraged to meet with their advisor to discuss their progress. Earning consecutive semesters or LP may also place a student on academic probation. Students who do not make satisfactory progress may be discontinued from their program at any time.

If a student earns a grade of NP (equivalent to grade of F or No Credit) in master’s project or thesis any semester, those hours will not count toward their graduation requirement. A student must enroll in those credit hours again the following semester and earn at least a LP for them to apply to their degree requirements. Students must have a SP in the final semester of their enrollment of this milestone.

Master’s Final exam, Thesis or Project

A final general examination, defense of the thesis or completion of the master’s project (or portfolio) in the major subject is required of all candidates for the Master of Arts, Master of Science or Master of Science in Education. The degree program and the Graduate Division should ascertain that the graduate student is in good academic standing (3.0 or higher grade-point average) and not have a grade of I (incomplete) in any course, before scheduling the final general examination, thesis defense or project.

At the option of the department, the examination may be oral or written, or partly oral and partly written. In some departments, passing a written examination is a necessary preliminary to taking the oral examination by which success or failure is judged.

Master’s examinations are administered by a committee of at least three members of the Graduate Faculty.

The examination is held during the semester of the student’s final enrollment in course work. The thesis/project defense should be held when they have been substantially completed and are in the final semester of their enrollment.

The department’s request to schedule the general examination must be made or before the date set by the Graduate Division, normally a minimum of two weeks before the examination date.
Students earning a master’s thesis degree must have completed at least one hour of thesis enrollment before the master’s degree may be awarded. See the Graduate Studies website (http://www.graduate.ku.edu/electronic-thesis-and-dissertation/) for information and requirements related to submitting the thesis electronically.

View the current Lawrence and Edwards Campus policy on master’s final examinations (http://policy.ku.edu/graduate-studies/masters-final-exams/).

**Master’s Student Oral Exam Committee Composition**

If there is an oral component of the exam, attendance is governed by the Graduate Student Oral Exam Attendance (http://policy.ku.edu/graduate-studies/oral-exam-attendance/) policy.

When the master’s student final examination is partly or entirely oral (i.e., thesis defense), the oral portion of the examination must be conducted by a committee which meets the following conditions.

1. Master’s committees are composed of at least three voting members.
2. The majority of committee members serving on a master’s student oral examination committee must be tenured/tenure-track faculty holding regular or dissertation graduate faculty status in the candidate’s department/program of study. Tenured/tenure-track faculty who are appointed as courtesy faculty within the program/department are considered (for the purposes of committee composition) to be faculty of that program/department.
3. Beyond the majority requirement, additional members may hold any graduate faculty status, including regular, dissertation, or special status. This third member can be, but need not be, a member of the candidate’s department/program.

As long as the conditions above are met, the committee may include more than three members.

The master’s committee chair must be tenured/tenure-track faculty holding regular or dissertation graduate faculty status in the candidate’s department/program of study. While master’s committees are not required to have a co-chair, the student or the committee members may decide to select a co-chair. The co-chair can hold any graduate faculty status.

Substitutions of the committee chair (and/or co-chair) are prohibited after the committee has been approved by the Graduate Division of the school or college. If a committee chair (and/or co-chair) needs to be replaced, the revised committee must be approved by the Graduate Division of the school or college in advance of the exam.

Substitutions of the committee members are permitted as long as the new members hold regular or dissertation graduate faculty status. Special members can be added after the committee has been approved by the Graduate Division of the school or college, but these additions must be approved by the Graduate Division of the School of Education and Human Sciences in advance of the exam.

**Master’s Thesis Submission**

When the master’s candidate has passed the final oral examination and the members of the committee have signed the thesis, a title page and acceptance page with original signatures must be delivered to the Graduate Division of the school in which the student’s program resides so that completion of degree requirements may be officially certified. As a requirement of graduation, the candidate must publish the thesis electronically and pay all applicable fees. Learn more about the electronic submission and publication process here (http://www.graduate.ku.edu/electronic-thesis-and-dissertation/).

Theses will be made available through UMI/Proquest and KU ScholarWorks, unless there is an embargo in place or special circumstances pertain as outlined in the KU Embargo policy (http://policy.ku.edu/graduate-studies/embargo-policy/).

**Specialist in Education -School Psychology**

The Specialist in Education program consists of 2 years of full-time graduate study (about 70 semester credit hours) followed by a third year of internship. Check with the Educational Psychology department for specific requirements.

**Doctoral Degree Programs**

**Doctor of Philosophy with a Major in Education (Ph.D.)**

The Doctor of Philosophy degree is awarded for mastering a field of scholarship, learning the methods of investigation appropriate to that field, and completing a substantial piece of original research. The degree is intended to produce highly competent scholars who are prepared to be university faculty members and other professionals, to conduct and evaluate original research, to teach at the college/university level, and to provide discipline-related leadership to the field and to the public. The Ph.D. is offered in all education graduate departments.

Although the courses and the research leading to the Ph.D. are necessarily specialized, the attainment of this degree should not be an isolated event in the enterprise of learning. The aspirant for the Ph.D. is expected to be a well-educated person and should have acquired a broad base of general knowledge, both as preparation for more advanced work and as a means of knowing how the concentration is related to other fields of human thought.

**Advisory Committee**

A student admitted to study for the Ph.D. is known as an aspirant for the degree until the comprehensive examination has been passed. After passing this examination, the student is known as a candidate for the degree.

Each student must have an advisory committee consisting of at least three members of the Graduate Faculty. One member of the committee serves as the chair.

The student meets with this committee before completing 12 hours of coursework to plan and formally approve an appropriate program leading to the Ph.D. The approved program, signed by members of the committee and the student, is placed in the student’s file in the School of Education and Human Sciences Graduate Division office.

**Requirements**

Students must acquaint themselves thoroughly with departmental requirements for the degree, which may be in addition to general requirements and those of the School of Education and Human Sciences. Consistent with Graduate Studies’ general regulations, it is the student’s responsibility to know and observe all university, school, department, and academic program regulations and procedures related to the graduate program.
In no case will a regulation be waived or an exception be granted because a student pleads ignorance of, or contends that he or she was not informed of requirements, regulations, procedures, or deadlines.

Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

Students are required to make satisfactory progress towards their degree as determined by the faculty in their department and may be discontinued for failure to do so.

**Time Limit-Maximum Tenure**

After being admitted to a doctoral program at KU, students who are making satisfactory progress must complete all degree requirements in eight years. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in two years of full-time study, and both master’s and doctorate in six years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.

In cases in which compelling circumstances exist, students can petition for a **one-year extension** of their time limit with the support of their advisory committee. Doctoral students requesting a time extension must have an approved dissertation proposal on file prior to being granted the extension. In rare cases, students can request a second extension with support from their dissertation chair and committee and a clear plan for how they will complete the final degree requirements. All extensions must be approved by the Graduate Division in the School of Education and Human Sciences.

Under normal circumstances, the doctoral candidacy period between passage of the oral comprehensive examination and the final dissertation defense must last no longer than 5 years. If a student took the oral comprehensive examination more than 5 years prior to the dissertation defense, a re-evaluation of the student’s candidacy status is necessary to verify recency of knowledge. Re-evaluation of the student’s candidacy status can include retaking the comprehensive written or oral examination or through some other means approved by the chair and the dissertation committee.

**Transfer Credit**

Because general requirements do not specify a minimum number of hours for the degree, no transfer of credits is allowed. Departments do, however, consider relevant prior graduate work in setting up programs of study leading to the doctorate.

**Continuous Enrollment**

Students are expected to maintain continuous enrollment (fall & spring) while in their academic program.

A student may petition the Graduate Division through the department for a **leave of absence** during either the pre- or post-comprehensive examination period if they experience extraordinary circumstances (e.g. cases of illness, emergency, financial hardship, military leave), to pursue family responsibilities, or to pursue full-time activities related to long-range professional goals. Appropriate documentation related to these extraordinary circumstances may be requested from the student directly.

Evidence of progress towards degree will also be a determining factor in the decision to grant a leave of absence. Students must be in good standing in order to request a leave of absence. If approved, a leave of absence is typically granted for one year, with the possibility of extension upon request. The time taken for a leave of absence does not count against the student’s time to degree. However, after an absence of five years, a doctoral aspirant or candidate loses status as such and must apply for readmission to the program and the Graduate Division.

If a student has been actively enrolled in a graduate program and has not applied for a leave of absence, but has not been enrolled for one academic year, they will be discontinued from their program. If they wish to return, they will need permission from the department and will need to submit the Permit to Re-Enroll form and must reapply for graduate admission.

**Residence Requirement**

The general purpose of the residency requirement is to allow for a concentrated period of immersion in formal study and the close association of the aspirant with faculty, graduate student colleagues, and other university resources. Because the Ph.D. is a scholarly, research-oriented degree, residency is met through academic involvement in the graduate program.

Residency must be completed and filed prior to comprehensive examinations and cannot include dissertation hours.

The residency requirement is not measured merely in hours of enrollment or of credit in courses counted towards a degree, but should also include academic and professional activities appropriate to the field of study (i.e., engaging with a professor in research, publishing, presenting at a conference, writing grants, etc.). These activities should be arranged with your advisor. Though they are not part of the formal residency approval process, they are an expectation of the Ph.D. degree.

**The formal residency can be met in 2 ways:**

1. **Students who hold a 50% Graduate Assistant, Graduate Teaching Assistant or a Graduate Research Assistant (GA/GTA/GRA) position during residency, need to enroll in two consecutive semesters following one of the three patterns outlined below:**

   - Spring enrollment of 6 credit hours and fall enrollment of 6 credit hours;
   - Spring enrollment of 6 credit hours and summer enrollment of 3 credit hours;
   - Summer enrollment of 3 credit hours and fall enrollment of 6 credit hours.

2. **Students without a 50% GA, GTA or GRA position during residency, need to enroll in two consecutive semesters following one of the three patterns outlined below:**

   - Spring enrollment of 9 credit hours and fall enrollment of 9 credit hours;
   - Spring enrollment of 9 credit hours and summer enrollment of 6 credit hours;
   - Summer enrollment of 6 credit hours and fall enrollment of 9 credit hours.

In unusual and rare circumstances, if a student cannot meet the above residency enrollment requirements, they should meet with their advisor and develop a plan to meet the spirit of the residency requirement. Such
a plan must be approved in advance through departmental and School petition processes. These exceptions will not be automatically approved.

The student, with the help of the advisory committee, must file in the Graduate Division office, a residence plan congruent with School of Education and Human Sciences requirements before the beginning of the formal residence period. This plan may be filed as a part of the overall program plan.

Hourly enrollment requirements must be met through regularly scheduled courses at KU.

Program Area

In applying for doctoral study, the student specifies a program area in which formal classes and research work are to be done and in which she or he expects to become a scholar. A minimum of 36 credit hours is required in the major area, excluding credits used to fulfill research skills and the dissertation requirements. The doctoral core requirement (EDUC 800) may be included as part of the major if it is consistent with the student's area of study and if doing so is supported by the student's department and doctoral committee.

Fifty-percent of the student's major must be 800-level or above (18 credit hours). The program must include at least 6 credit hours outside of the student's home department, not including courses required to fulfill the student's research skills component or the doctoral core (EDUC 800).

Course work completed at KU or at another institution as part of a previous graduate degree, cannot be used to meet the credit hour requirements for this degree.

Upon admission to doctoral study, students who have not completed a research and evaluation methods course for the education master's degree must take the course, e.g. EPSY 715, during the first doctoral enrollment. The course taken to fulfill this requirement, whether taken at KU or at another institution, does not count toward any doctoral requirements.

Core Requirement

All students are required to complete a Responsible Conduct of Research course as specified by their program.

The course, EDUC 800: Education as a Field of Scholarship, is required for all Ph.D. students except for those in HSES and Counseling Psychology.

Teaching Experience

Some programs require students to satisfactorily complete at least 1 semester of supervised college teaching experience under the direction of a KU faculty member. This may be completed during the semester in which the student takes the comprehensive examination. This experience does not count towards the 36 credit hour requirement. Documentation of the student's supervised college teaching experience or enrollment in the departmental college teaching course must be submitted to the Graduate Division office. Contact your program for specifics.

Research Skills

Before being admitted to the comprehensive examination, the student must have completed the research skills requirements established for the degree. Specific research skills requirements vary with department and program, but all reflect the expectation of a significant research skills component distinct from the dissertation but strongly supportive of it. The Ph.D. research skills requirement includes completion of at least 12 graduate hours relevant to the aspirant's research: statistics, measurement and assessment, qualitative methods, and historical and philosophical methods. Up to 6 hours, excluding credit hours for the required master's course in research methods and evaluation, whether taken at KU or elsewhere, may be waived using prior B-level or higher graduate course work. A statement concerning specific research skills should be secured from the student's major department. At least 9 of the 12 credit hours must be 800 level or above. The 12 credit hours cannot include EPSY 715 or its program equivalent.

Comprehensive Examination

When a Ph.D. aspirant has completed the required course work at a satisfactory level and has completed the research skills requirement and all other departmental requirements prerequisite to the comprehensive examination, the department asks the School of Education and Human Sciences Graduate Division office to schedule the comprehensive examination. The graduate student must be in good academic standing (3.0 or higher grade-point average) and not have a grade of I (incomplete) in any course, before scheduling their comprehensive examination.

The examination request must be made to the School's Graduate Division Office at least 2 weeks before the date of the written portion of the examination. Doctoral students in Counseling Psychology and School Psychology should refer to their department for timing of the comprehensive examination.

Students must be enrolled when they take the exam. During the semester in which the student takes their comprehensive examination, the student can be enrolled in no more than 6 credits of required regularly scheduled coursework. All required research skills courses must be completed prior to the semester in which the student takes their comprehensive examination. These course requirements can be petitioned under exceptional circumstances.

The examining committee must consist of at least 5 members (usually including the advisory committee). All must be graduate faculty, and 3 of the 5 must be regular faculty from the student’s home department. In some circumstances, faculty that hold courtesy appointments in the department may represent the department majority but cannot be the chair. For more information visit the KU Policy library: Doctoral Student Oral Exam Committee Composition (http://policy.ku.edu/graduate-studies/oral-exam-committee-composition/) and Graduate Studies Representative on Doctoral Exam Committees (http://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees/).

The comprehensive examination consists of both written and oral parts and covers the major area pursued by the student, as well as the minor area, if one is required by the student's program. The student passes the comprehensive examination if a majority of the official examining committee (including the chair) approves the student's performance. The grade on this examination is Honors, Satisfactory, or Unsatisfactory. An aspirant who receives a grade of Unsatisfactory may be allowed, upon the recommendation of the department, to repeat it, but it may not be taken more than 3 times. The aspirant may not repeat the oral examination until at least 90 days have elapsed since the last unsuccessful attempt or by petition.

Students in Ph.D. education programs must pass both written and oral components of the comprehensive examination. Satisfactory performance on the written component must be attained before the oral component may be attempted. To fail either component is to fail the examination. All 5 members of the student’s comprehensive examination committee are involved in the evaluation process. The written component of the comprehensive examination, like the oral, focuses on advanced knowledge in the major and any appropriate related areas. To pass,
the student must be evaluated as having responded satisfactorily to questions in the major areas. If a student fails any portion of the written comprehensive component, a failure of the examination is recorded. The examining committee determines if the entire written component of the examination, or only the failed portion(s), must be retaken. The entire written component lasts a minimum of 16 hours. If a student passes the written component but fails the oral, the examining committee determines if both components or only the oral must be repeated.

Dissertation Proposal Committee and Proposal

Upon passing the comprehensive examination, the aspirant becomes a candidate for the Ph.D.

The dissertation committee must consist of at least five members and may include members from other departments and divisions or, on occasion, members from outside the university. All members of the committee must be chosen from the Graduate Faculty, and the chair must, in addition, be authorized to chair doctoral dissertations. A prospective member of the committee from outside the university must have gained KU graduate faculty status before being appointed on the committee.

Doctoral aspirants may begin work on the dissertation after they complete the equivalent of one full-time semester of doctoral study in regular student status. However, students may first enroll in dissertation credit hours only during the semester in which they take their comprehensive examinations. Dissertation hours taken during that semester count toward the minimum of 18 hours of dissertation credit only if the examinations are passed during that same semester. Dissertation hours taken prior to the semester in which the student passes the comprehensive examination will not count towards degree requirements or the dissertation hour requirements.

The dissertation proposal must be read by a minimum of 3 dissertation committee members. One copy of the approved dissertation proposal title sheet, signed by these members of the dissertation committee, along with an electronic copy of the proposal must be submitted to the School of Education Graduate Division office.

Post-comprehensive Examination Continuous Enrollment

After passing the comprehensive examination, the candidate must be continuously enrolled (http://policy.ku.edu/graduate-studies/doctoral-candidacy/) until the degree is completed. A student must be continuously enrolled in accordance with the following schedule: Until the degree is completed or until 18 post-comprehensive hours have been completed (whichever comes first), the student must enroll for at least 6 hours a semester (fall and spring). Students who have not completed the degree after completing 18 hours of post-comprehensive enrollment must continue to enroll for the amount of credit that best reflects their demands on faculty time and university resources each semester until they pass the final oral examination. Typically PhD students who have completed their 18 hours of dissertation, enroll in 1 hour per term (fall and spring) until they are done.

Summer enrollment in dissertation hours is required only when students intend to complete major milestones (i.e. comprehensive examination, proposal meeting, dissertation defense) or require significant faculty time in the summer.

Post-comprehensive enrollment may include enrollment during the semester in which the comprehensive examination has been passed. Dissertation hours taken during the semester in which the student passes the comprehensive examination count towards the 18 hour requirement, although other required coursework taken this semester does not count towards the 18 hours. Students who do not pass the examination cannot apply dissertation hours to degree requirements. Non-required coursework that is related to the dissertation, and/or internship/field experience credits taken after the comprehensive examination semester may be counted towards the 18 hours post-comprehensive examination requirement. Nonetheless, students are required to enroll in dissertation hours commensurate with the demands on faculty time. Check with your department regarding specific post-comprehensive enrollment requirements.

Candidates may petition the School of Education and Human Sciences Graduate Division for a leave of absence during the period between the comprehensive examination and the final dissertation oral under extraordinary circumstances outlined above.

Dissertation

The candidate must present a dissertation showing the results of original research. The dissertation for the Ph.D. considers applied or basic concerns and results in conclusions that have broad theoretical implications. The format and style of a student’s dissertation is left to the discretion of the student, the advisor, and the dissertation committee, but format and style options may be constrained or dictated by Graduate Studies policies. The dissertation is prepared under the direction of the dissertation committee. The minimum number of post-comprehensive dissertation hours in the Ph.D. program is 18 or until done. Instructions regarding the proper form of the final document (http://graduate.ku.edu/etd-formatting-and-working-multimedia-files/) may be obtained from the School of Education and Human Sciences Graduate Division office.

Grading for Dissertation Hours

Dissertation hours are graded using the grading scale established in USRR 2.2.5 (http://policy.ku.edu/governance/USRR/#art2sect2). It evaluates a student’s dissertation as demonstrating satisfactory progress (SP), limited progress (LP), or no progress (NP). A grade of SP must be assigned for a student’s final semester of enrollment in their dissertation. The SP indicates that the final product was of satisfactory quality to earn the degree.

If a student earns a grade of NP in dissertation hours any semester, the student will be placed on academic probation for the following semester until they receive a LP or SP. Students are encouraged to meet with their advisor to discuss their progress. Earning consecutive semesters with the grade of LP may also place a student on academic probation. Students who do not make satisfactory progress may be discontinued from their program at any time.

If a student earns a grade of NP in dissertation hours any semester, the student will be placed on academic probation for the following semester until they receive a LP or SP. Students are encouraged to meet with their advisor to discuss their progress. Earning consecutive semesters with the grade of LP may also place a student on academic probation. Students who do not make satisfactory progress may be discontinued from their program at any time.

If a student earns a grade of NP in dissertation hours any semester, the student will be placed on academic probation for the following semester until they receive a LP or SP. Students are encouraged to meet with their advisor to discuss their progress. Earning consecutive semesters with the grade of LP may also place a student on academic probation. Students who do not make satisfactory progress may be discontinued from their program at any time.

Final Oral Examination

When the dissertation has been tentatively accepted by the dissertation committee, and approved as ready for defense, the chair of the dissertation committee must notify the department of the date and time of the proposed defense, committee members, and dissertation title. This notification must be made at least two weeks before the desired defense date.
The committee for the final oral examination (http://policy.ku.edu/graduate-studies/final-oral-exams/) must consist of at least five members (the members of the dissertation committee plus other members of the Graduate Faculty recommended by the committee chair and the department and appointed by the Graduate Division). At least one member must be from a department other than the major department. This member represents Graduate Studies and must be a member of the Graduate Faculty with Regular or Dissertation status. A majority of the committee members must be from the student's department.

The examination covers the dissertation and the candidate's concentration area. The candidate passes the final examination if a majority of the official examining committee members (including the chair) approves the candidate's performance. When the final oral examination has been passed, the dissertation committee reports a grade of Honors, Satisfactory, or Unsatisfactory. Candidates who fail the final oral examination may be allowed to repeat it upon the recommendation of the dissertation committee.

Dissertation Copies

When the final oral examination has been passed and the dissertation has been signed by the members of the dissertation committee, a title page and acceptance page with original signatures and ETD Release form and other paperwork are to be delivered to the Graduate Division so that completion of degree requirements may be officially certified.

Doctor of Education (Ed.D.)

The Doctor of Education is a professional degree intended primarily for practitioners in education rather than for researchers, for whom the Ph.D. is the appropriate degree plan. The Ed.D. is offered in the department of Curriculum & Teaching (curriculum and instruction), and the department of Educational Leadership & Policy Studies (educational administration, higher education).

Advisory Committee

A student admitted to study for the Ed.D. is considered an aspirant for the degree until the comprehensive examination has been passed. After passing this examination, the student is considered a candidate for the degree. Each student must have an advisory committee of at least three members of the Graduate Faculty from within the department. This internal department majority may include one non-tenure track faculty member from within the department. One member of the committee serves as the chair. The student must confer with this committee before completing 12 hours of course work to formally approve an appropriate program leading to the Ed.D. The approved program, signed by members of the committee and the student, is placed in the student's file in the School of Education and Human Sciences Graduate Division office.

Requirements

Students must acquaint themselves thoroughly with departmental requirements for the degree, which may be in addition to general requirements and those of the School of Education and Human Sciences. Consistent with Graduate Studies' general regulations, it is the student's responsibility to know and observe all university, school, department, and academic program regulations and procedures relating to the graduate program.

In no case will a regulation be waived or an exception be granted because a student pleads ignorance of, or contends that he or she was not informed of requirements, regulations, procedures, or deadlines.

Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

Students are required to make satisfactory progress towards their degree as determined by the faculty in their department and may be discontinued for failure to do so.

Time Limit-Maximum Tenure

After being admitted to a doctoral program at KU, students who are making satisfactory progress must complete all degree requirements in eight years. Students who complete the master's degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master's degrees (excluding some professional terminal degrees) should be completed in two years of full-time study, and both master's and doctorate in six years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.

In cases in which compelling circumstances exist, students can petition for a one-year extension of their time limit with the support of their advisory committee. Doctoral students requesting a time extension must have an approved dissertation proposal on file prior to being granted the extension. In rare cases, students can request a second extension with support from their dissertation chair and committee and a clear plan for how they will complete the final degree requirements. All extensions must be approved by the Graduate Division in the School of Education and Human Sciences.

Under normal circumstances, the doctoral candidacy period between passage of the oral comprehensive examination and the final dissertation defense must last no longer than 5 years. If a student took the oral comprehensive examination more than 5 years prior to the dissertation defense, a re-evaluation of the student's candidacy status is necessary to verify recency of knowledge. Re-evaluation of the student's candidacy status can include retaking the comprehensive written or oral examination or through some other means approved by the chair and the dissertation committee.

Transfer Credit

Because general requirements do not specify a minimum number of hours for the degree, no transfer of credits is allowed. Departments do, however, consider relevant prior graduate work in setting up programs of study leading to the doctorate.

Continuous Enrollment

Students are expected to maintain continuous enrollment (fall & spring) while in their academic program.

A student may petition the Graduate Division through the department for a leave of absence during either the pre- or post-comprehensive examination period if they experience extraordinary circumstances (e.g. cases of illness, emergency, financial hardship, military leave), to pursue family responsibilities, or to pursue full-time activities related to long-range professional goals. Appropriate documentation related to these extraordinary circumstances may be requested from the student directly.

Evidence of progress towards degree will also be a determining factor in the decision to grant a leave of absence. Students must be in good standing in order to request a leave of absence. If approved, a leave of absence is typically granted for one year, with the possibility of extension upon request. The time taken for a leave of absence does not count...
against the student’s time to degree. However, after an absence of five years, a doctoral aspirant or candidate loses status as such and must apply for readmission to the program and the Graduate Division.

If a student has been actively enrolled in a graduate program and has not applied for a leave of absence, but has not been enrolled for one academic year, they will be discontinued from their program. If they wish to return, they will need permission from the department and will need to submit the Permit to Re-Enroll form and must reapply for graduate admission.

Period of Continuous Study

The Ed.D. period of continuous study requirement is fulfilled according to its purpose and with maximal benefit to the doctoral aspirant. It is recognized that the typical Ed.D. student works full-time while enrolling in their doctoral program.

In all options it has been recognized that continuous involvement in formal study and the close association with faculty and graduate student colleagues, which are the general goals of this requirement may be enhanced, particularly for the professional/practitioner degree aspirant, by related professional activities—if such experiences are directly related, contributory to and coordinated with on-campus courses and research.

Residency must be completed and filed prior to comprehensive examinations and cannot include dissertation hours.

The following is required:

Enrollment in two consecutive semesters following one of the three patterns outlined below

• Spring enrollment of 6 credit hours and fall enrollment of 6 credit hours;
• Spring enrollment of 6 credit hours and summer enrollment of 3 credit hours;
• Summer enrollment of 3 credit hours and fall enrollment of 6 credit hours.

The student, with the help of the advisory committee, must file in the Graduate Division office a period of continuous study plan congruent with School of Education and Human Sciences requirements before the beginning of the formal period of continuous study. This plan may be filed as a part of the overall program plan.

Hourly enrollment requirements must be met through regularly scheduled courses at KU.

Program Area

All candidates for the Ed.D. must complete a minimum of 27 credit hours in their major area, excluding credits used to fulfill Research Skills, Dissertation, and the doctoral practicum requirements. Coursework completed at KU or at another institution as part of a previous graduate degree, cannot be used to meet the credit hour requirements for this degree.

Research Skills

Upon admission to doctoral study, students who have not completed a research and evaluation methods course for the education master’s degree must take the course, e.g., EPSY 715 , during the first doctoral enrollment. The course used to fulfill this requirement, whether taken at KU or at another institution, does not count toward any doctoral requirements.

Before being admitted to the comprehensive examination, students must have successfully completed the research skills requirements that demonstrate satisfactory evidence that they possess the professional research skills of advanced practitioners in their concentrations, as established for the degree. Specific research skills requirements vary with department and program, but all reflect the expectation of a significant research skills component distinct from the dissertation but strongly supportive of it.

The Ed.D research skills requirement includes completion of at least 9 graduate hours relevant to understanding, promoting and evaluating professional practice, including, statistics, assessment and evaluation, qualitative methods, and/or historical and philosophical methods. In some cases, up to 3 hours, excluding credit hours for the required master’s course in research methods and evaluation, whether taken at KU or elsewhere, may be waived using prior B level or higher graduate coursework upon approval of advisory committee. A statement concerning specific research skills should be secured from the student’s major department. At least 6 of the 9 credit hours must be 800 level or above. The 9 credit hours cannot include EPSY 715 or its program equivalent.

Responsible Conduct of Research

All students must satisfy departmental and university requirements regarding the responsible conduct of research. Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for Ed.D. students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (http://policy.ku.edu/graduate-studies/doctoral-research-skills-requirement/) are listed in the KU Policy Library.

Doctoral Practicum/Field Experience Enrollment

Ed.D. aspirants must complete a 3-credit-hour practicum/field experience. Specific requirements for this practicum/field experience are available from students’ departments.

Comprehensive Examination

When an Ed.D. aspirant has completed the required course work at a satisfactory level and has completed the research skills requirement and all other departmental requirements prerequisite to the comprehensive examination, the department asks the School of Education and Human Sciences Graduate Division office to schedule the comprehensive examination. The graduate student must be in good academic standing (3.0 or higher grade-point average) and not have a grade of I (incomplete) in any course, before scheduling their comprehensive examination. The examination request must be made to the School’s Graduate Division Office at least 2 weeks before the date of the written portion of the examination.

Students must be enrolled when they take the exam. During the semester in which the student takes their comprehensive examination, the student can be enrolled in no more than 6 credits of required regularly scheduled coursework. All required research skills courses must be completed prior to the semester in which the student takes their comprehensive examination. These course requirements can be petitioned under exceptional circumstances.

The examining committee must consist of at least 5 members (usually including the advisory committee). All must be graduate faculty, and 3
of the 5 must be regular faculty from the student’s home department. In some circumstances, faculty that hold courtesy appointments in the department may represent the department majority but cannot be the chair. For more information visit the KU Policy library: Doctoral Student Oral Exam Committee Composition (http://policy.ku.edu/graduate-studies/oral-exam-committee-composition/) and Graduate Studies Representative on Doctoral Exam Committees (http://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees/).

The comprehensive examination consists of both written and oral parts and covers the major area pursued by the student. The student passes the comprehensive examination if a majority of the official examining committee (including the chair) approves the student’s performance. The grade on this examination is Honors, Satisfactory, or Unsatisfactory. An aspirant who receives a grade of Unsatisfactory may be allowed, upon the recommendation of the department, to repeat it, but it may not be taken more than 3 times. The aspirant may not repeat the oral examination until at least 90 days have elapsed since the last unsuccessful attempt or by petition.

Students in Ed.D education programs must pass both written and oral components of the comprehensive examination. Satisfactory performance on the written component must be attained before the oral component may be attempted. To fail either component is to fail the examination. All 5 members of the student’s comprehensive examination committee are involved in the evaluation process. The written component of the comprehensive examination, like the oral focuses on the ability to relate program knowledge to tasks and problems faced by practitioners. To pass, the student must be evaluated as having responded satisfactorily to questions in the major areas. If a student fails any portion of the written comprehensive component, a failure of the examination is recorded. The examining committee determines if the entire written component of the examination, or only the failed portion(s), must be retaken. The entire written component lasts a minimum of 16 hours. If a student passes the written component but fails the oral, the examining committee determines if both components or only the oral must be repeated.

**Dissertation Proposal Committee and Proposal**

Upon passing the comprehensive examination, the aspirant becomes a candidate for the Ed.D.

The dissertation committee must consist of at least five members and may include members from other departments and divisions or, on occasion, members from outside the university. All members of the committee must be chosen from the Graduate Faculty, and the chair must, in addition, be authorized to chair doctoral dissertations. A prospective member of the committee from outside the university must have gained KU Graduate Faculty status before appointment to the committee.

Doctoral aspirants may work on the dissertation after they complete the equivalent of one full-time semester of doctoral study in regular student status and may use their practicum experience in preparation for the dissertation. However, students may first enroll in dissertation credit hours only during the semester in which they take their comprehensive examinations. Dissertation hours taken during that semester count toward the post-comprehensive enrollment requirements. Dissertation hours taken prior to the semester in which the student passes the comprehensive examination, will not count towards degree requirements or the post-comprehensive hour requirements.

The dissertation proposal must be read by a minimum of 3 dissertation committee members. One copy of the approved dissertation proposal title sheet, signed by these members of the dissertation committee, along with an electronic copy of the proposal must be submitted to the School of Education and Human Sciences Graduate Division office.

**Post-comprehensive Examination Continuous Enrollment**

After passing the comprehensive examination, the candidate must be continuously enrolled (http://policy.ku.edu/graduate-studies/doctoral-candidacy/) until the degree is completed. A student must be continuously enrolled in accordance with the following schedule: Until the degree is completed or until 18 post-comprehensive hours have been completed (whichever comes first), the student must enroll for at least 6 hours a semester (fall and spring). Students who have not completed the degree after completing 18 hours of post-comprehensive enrollment must continue to enroll for the amount of credit that best reflects their demands on faculty time and university resources each semester until they pass the final oral examination. Typically Ed.D. students who have completed their 18 hours of dissertation, enroll in 1 hour per term (fall and spring) until they are done.

Summer enrollment in dissertation hours is required only when students intend to complete major milestones or require significant faculty time in the summer.

Post-comprehensive enrollment may include enrollment during the semester in which the comprehensive examination has been passed. Dissertation hours taken during the semester in which the student passes the comprehensive examination count towards the post-comprehensive enrollment requirement. Students who do not pass the examination cannot apply dissertation hours to degree requirements.

Non-required coursework that is related to the dissertation, and/or internship/field experience credits taken after the comprehensive examination semester may be counted towards the post-comprehensive examination requirement. Nonetheless, students are required to enroll in dissertation hours commensurate with the demands on faculty time.

Check with your department regarding specific post-comprehensive enrollment requirements.

Candidates may petition the School of Education and Human Sciences Graduate Division for a leave of absence during the period between the comprehensive examination and the final dissertation oral under extraordinary circumstances outlined above.

**Dissertation**

The candidate must present a dissertation that exhibits the application of existing knowledge in the major field of professional study. Ed.D. candidates may conduct an original study or satisfy the dissertation requirement by completing a comprehensive, critical assessment of the relevant literature on a major educational issue or problem. The dissertation should demonstrate the application of existing knowledge to the author’s area of professional practice. The format and style of a student’s dissertation is left to the discretion of the student, advisor, and committee, but format and style options may be constrained or dictated by the policy of the department from which the student is to receive the degree and by the Office of Graduate Studies. The dissertation is prepared under the direction of the dissertation committee.

Instructions regarding the proper form of the final document (http://graduate.ku.edu/etd-formatting-and-working-multimedia-files/) may be obtained from the School of Education Graduate Division office.

**Grading for Dissertation Hours**
Dissertation hours will be graded using the grading scale established in USRR 2.2.5 (http://policy.ku.edu/governance/USRR/#art2sect2). It evaluates a student’s dissertation as demonstrating satisfactory progress (SP), limited progress (LP), or no progress (NP). A grade of SP must be assigned for a student’s final semester of enrollment in their dissertation. The SP indicates that the final product was of satisfactory quality to earn the degree.

If a student earns a grade of NP in dissertation hours any semester, the student will be placed on academic probation for the following semester until they receive a LP or SP. Students are encouraged to meet with their advisor to discuss their progress. Earning consecutive semesters with the grade of LP may also place a student on academic probation. Students who do not make satisfactory progress may be discontinued from their program at any time.

If a student earns a grade of NP (equivalent to grade of F or No Credit) in dissertation, those hours will not count towards their 18 hour post-comprehensive enrollment requirement. A student must enroll in those dissertation credit hours again the following semester and earn at least a LP for them to apply to their degree requirements. Students must have a SP in the final semester of their enrollment of this milestone.

Final Oral Examination

When the dissertation has been tentatively accepted by the dissertation committee, and approved as ready for defense, the chair of the dissertation committee must notify the department of the date and time of the proposed defense, committee members, and dissertation title. This notification must be made at least two weeks before the desired defense date.

The committee for the final oral examination (http://policy.ku.edu/graduate-studies/final-oral-exams/) must consist of at least five members (the members of the dissertation committee plus other members of the Graduate Faculty recommended by the committee chair and the department and appointed by the Graduate Division). At least one member must be from a department other than the major department. This member represents Graduate Studies and must be a member of the Graduate Faculty with Regular or Dissertation status. A majority of the committee must be members of the student's home department. One of the 3 internal members may be a non-tenure track faculty member from within the department. The fourth member of the committee may be a non-tenure track faculty member with graduate faculty status from any department. For more information visit the KU Policy library: Doctoral Student Oral Exam Committee Composition (http://policy.ku.edu/graduate-studies/oral-exam-committee-composition/) and Graduate Studies Representative on Doctoral Exam Committees (http://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees/).

The candidate passes the defense if a majority of the official examining committee members (including the chair) approves the candidate’s performance. When the final oral examination has been passed, the dissertation committee reports a grade of Honors, Satisfactory, or Unsatisfactory. Candidates who fail the final oral examination may be allowed to repeat it upon the recommendation of the dissertation committee.

Dissertation Copies

When the final oral examination has been passed and the dissertation has been signed by the members of the dissertation committee, a title page and acceptance page with original signatures and ETD Release form and other paperwork are to be delivered to the Graduate Division so that completion of degree requirements may be officially certified.

University Career Center

The University Career Center (https://career.ku.edu/), Summerfield Hall, Room 206, (ph:785-864-3624), provides career counseling and services for all KU students, including students in the School of Education & Human Sciences. The University Career Center hosts an Education Career Fair for students each fall and spring semester.

Curriculum and Teaching Courses

C&T 100. Introduction to the Education Profession. 3 Credits.
This course is designed to acquaint students with the profession of education by helping to increase an awareness of the role and characteristics of an effective teacher. Large and small group activities and assignments are dispersed throughout the semester to facilitate these outcomes. Students will be involved in observation of and participation with teachers and pupils in public school classrooms, which complement course activities and assignments. Students will work with a mentor pre-service teacher from the KU School of Education to provide discussions about each of the course objectives. C&T 100 is a pre-professional course. Successful completion of the course does not guarantee eventual admission to the School of Education's Teacher Education Program.

C&T 175. Introduction to Career Development. 1-5 Credits.
This is the first course in a series of 2 courses focused on student career development. The purpose of this course is to provide structured career exploration and other experiences for students to: identify career interests, strengths, and skills through career assessments, job shadows, informational interviews, and short-term work experiences; develop an individualized career plan; begin developing a career portfolio by developing a resume, references list and cover letters. Students participate in structured, recurring work-based learning opportunities, and coursework as well as individual meetings with the instructor. Instruction and practice job-seeking and job maintenance skills are provided both in the classroom and in work-based learning experiences.

C&T 177. First Year Seminar: _____. 3 Credits.
A limited-enrollment seminar course for first-time freshmen, addressing current issues related to curriculum and instruction in the field of education. Course is designed to meet the critical thinking outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First -time freshman status.

C&T 220. Career Development. 1-5 Credits.
This is the second course in a series of 2 courses providing structured career development and is by appointment with the instructor. It provides structured experiences for students to: refine their career plan based on individual interests, strengths, and skills; learn and practice job-seeking and maintenance skills; participate in work-based learning; apply skills and experiences learned to enhance career plan and develop a career portfolio. Students participate in structured, recurring work-based learning opportunities and complete individualized projects related to career plans to contribute to students’ career portfolios. Students consult with the instructor on their individualized projects and career portfolios. Prerequisite: Successful completion of C&T 175.

C&T 235. Cultural Diversity, Equity, and Inclusion in K-12 Schools. 3 Credits.
This course explores cultural diversity in K-12 settings through a critical analysis of several key themes: power, privilege, and difference. Students will examine the social construction of race, ethnicity, gender, social class, sexuality, language, and abilities within the classroom. This course
examines topics including: gender bias, racism, white privilege, income inequality, as well as the educational and social experiences of students from historically marginalized backgrounds. Fieldwork experience is a required component of this course.

C&T 290. Introduction to Secondary Science and Mathematics Teaching. 1 Credits.
This course allows KU students to explore teaching in science or mathematics as a career as well as gain and practice collaborative and communication skills. Students teach combined science/math lessons in local elementary classrooms in order to obtain firsthand experience with planning and implementing inquiry-based curriculum. This course is part of a STEM Teach sequence. C&T 290 is part of a sequence of courses that allow STEM Teach students to earn a KU service learning certificate.

C&T 291. Introduction to Science and Mathematics Teaching 2 (STEM Teach 2). 1 Credits.
This course is for students who want to continue to explore math or science teaching. This goal will be accomplished by observing a mentor teacher and by teaching several lessons to a middle school math or science class. Students will build upon and practice lesson design skills that were developed in STEM Teach 1 and become familiar with excellent science and mathematics resources for middle school. As a result of the STEM Teach 2 experiences, students generally will able to make a decision as to whether they want to pursue a pathway to teacher licensure through the STEM Teach program. C&T 291 is part of a sequence of courses that allow STEM Teach students to earn a KU service learning certificate. Prerequisite: Successful completion of STEM Teach 1 (C&T 290).

C&T 301. Educational Technology in Elementary-Middle Education. 3 Credits.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to elementary and middle school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program.

C&T 302. Educational Technology in Middle/Secondary Education. 3 Credits.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to middle school and high school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program.

C&T 322. Curriculum and the Learner in the Elementary School. 3 Credits.
Building on the experiences in C&T 100, this course will focus on the learner in the elementary setting. Learning occurs as a result of interaction among learners, teacher and subject matter in the classroom within a school in a community. The impact of the interactions of these students of learning of young children is studied in this course. Emphasis is given to the factors that influence curriculum decision-making, and methods that are considered in elementary grades curriculum and how it is delivered. Prerequisite: Admission to the Teacher Education Program.

C&T 324. Curriculum Learner in the Middle School and High School. 3 Credits.
Building on experiences in C&T 100, this course will focus on the learner within the high school setting. Learning occurs in a classroom within a school in a community, and the nature and structure of these settings as well as their impact on learning is studied in this course. Emphasis is given to the curriculum, the factors that influence the curriculum, and the ways that goals for high school students are reflected in the high school curriculum. Prerequisite: Admission to the Teacher Education Program.

C&T 330. Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom. 3 Credits.
Teaching English as a Second or Additional Language/Bilingual Education is designed to provide preservice elementary teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teaching skills needed to work with English language learners of elementary age, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are or should be available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program.

C&T 331. Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom. 3 Credits.
This course is designed to provide preservice middle/secondary discipline specific teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teachings skills needed to work with English language learners of all ages, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are or should be available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program.

C&T 335. Curriculum and Instruction in Middle and Secondary History and Government Classrooms. 3 Credits.
The purpose of this course is to help prepare students to teach social studies in the middle and secondary grades. Prerequisite: Admission to the teacher education program.

C&T 344. Children’s Literature in the Elementary School. 3 Credits.
A study of literature (poetry, folk literature, fiction, and nonfiction) appropriate for elementary school children with a focus on contemporary children’s books. Emphasis will be on selection of literature based on child development, literary quality, curriculum, and pluralism and the engagement of children in literature experiences from the interactive, reader response, and critical perspectives. Prerequisite: Admission to the Teacher Education Program.

C&T 347. Social Studies in the Elementary Classroom. 3 Credits.
A study of curricula, instructional strategies, and classroom organization for social studies education K-6. Emphasis is placed on the effective implementation of social studies programs in classroom settings. Prerequisite: Admission to the School of Education in elementary, middle, or secondary, or the Unified Early Childhood programs.
C&T 349. Science in the Elementary Classroom. 3 Credits.
In this course, you will develop an understanding of how children learn science and why science education is important. You will examine effective approaches to teaching, instructional materials, and student assessment and will learn how to plan and implement a science unit. The course will emphasize a guided-inquiry approach to science instruction appropriate for the abilities and interests of children in grades K-6. Prerequisite: Admission to the School of Education.

C&T 351. Mathematics for the Elementary Classroom. 3 Credits.
This course is a study of the curriculum, instructional strategies, and classroom organization for mathematics in grades K-6. Emphasis is placed on the effective implementation of mathematics programs in classroom settings. Prerequisite: Admission to the School of Education.

C&T 352. Literacy Instruction in the Primary Grades (K-3). 3 Credits.
This course is intended to develop the attitudes, knowledge, and skills necessary to effectively instruct primary grades (K-3) children through the development of literacy skills: reading, writing, listening, speaking, spelling, and handwriting. The major goals of this course are for the prospective teacher to develop an understanding of literacy development of the primary-grades child, current literacy theories, and the ability to work with a number of approaches to promote literacy learning and a positive attitude toward literacy in all primary-grades students who may have different needs due to language, culture, learning challenges, and/or differing stages of development. This course is to be taken concurrently with C&T 353, Literacy Practicum in the Primary Grades. Prerequisite: Admission to the Teacher Education Program.

C&T 353. Literacy Practicum in the Primary Grades. 1 Credits.
This supervised practicum is intended to allow the pre-service teacher to apply the knowledge gained in C&T 352, Literacy Instruction in the primary grades (K-3), by teaching children in the primary grades. To be taken concurrently with C&T 352 Prerequisite: Admission to the Teacher Education Program.

C&T 354. Literacy Instruction in the Intermediate Grades. 3 Credits.
C&T 354 is designed to introduce pre-service teachers to the principles and methods of facilitating language and literacy development of students in third through sixth grade. Pre-service teachers will also have an opportunity to teach an elementary grade student(s). Prerequisite: Admission to the Teacher Education Program. This course is to be taken concurrently with C&T 355, Literacy Practicum in the Intermediate Grades.

C&T 355. Literacy Practicum in the Intermediate Grades (4-6). 1 Credits.
This supervised practicum is intended to allow the preservice teacher to apply the knowledge gained in C&T 354, Literacy Instruction in the intermediate grades (4-6), by teaching children in the intermediate grades. To be taken concurrently with C&T 354. Prerequisite: Admission to the Teacher Education Program.

C&T 359. Literacy in the Content Areas. 1 Credits.
An introduction to reading in relation to specific areas of art, music and health and physical education. Focus on specialized vocabulary and literature related to each area. Introduction of specific strategies to teach vocabulary and comprehension and to integrated units of study. Prerequisite: Admission to certification program in music education, art education, health education, or physical education.

C&T 360. Knowing and Learning in Mathematics and Science. 3 Credits.
This course focuses on issues of what it means to learn and know science and mathematics. What are the standards for knowing we will use? How is knowing and learning structured and how does what we know change and develop? For the science and mathematics educator, what are the tensions between general, cross-disciplinary characterizations of knowing (e.g. intelligence) and the specifics of coming to understand powerful ideas in mathematics and science? What are the links between knowing and developing in learning theory, and the content and evolution of scientific ideas. Also, current issues and tensions in education will be discussed, especially as it relates to mathematics and science instruction.

C&T 366. Classroom Interactions in Mathematics and Science. 3 Credits.
To make prospective teachers aware of multiple models of teaching (including direct instruction, inquiry teaching and use of small groups); the advantages, disadvantages and uses of each; and what each model requires of teachers. To allow prospective teachers to explore ways of probing student understanding through authentic assessment, evaluating student understanding through student artifacts, and enhancing student understanding through lesson plans built around models of how people learn. To make prospective teachers aware of equity and diversity issues in classroom teaching and ways of ensuring that all students have an opportunity to learn. To make students aware of the proficiencies for licensure recognized by UKanTeach and Kansas State Board of Education and facilitate students' demonstration and documentation of these through their development of a professional portfolio. To develop students' capacity to identify and evaluate best teaching practices as presented in research literature. Prerequisite: C&T 360.

C&T 380. English as a Global Language. 3 Credits.
In this course, we will explore the political, cultural, historical, and economic factors that drive English's status as a global language and the demand to learn it. We will attend to such questions as, Why a global language, and why English? Is the spread of English necessarily natural, neutral, and beneficial? Then, we will consider implications of answers to the above questions on teaching English internationally, since TESOL positions overseas provide ideal opportunities for college-age Americans to live and work abroad. The projects assigned are intended to teach students to think critically about issues related to prominence of English teaching/learning around the world.

C&T 401. Professional Learning Seminar I. 1 Credits.
This is the first in a series of three consecutive professional learning seminars. The primary purpose of the professional learning seminars is to collaboratively engage KU teacher education students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that pre-service teacher education students face in the schools. Faculty and students will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the philosophical, and psychological. The professional learning seminars are designed around key features of effective professional learning communities and sustained professional development for teachers. Features include supportive, collaborative learning, shared personal and professional practice, and collective inquiry of teaching and learning. Prerequisite: Admission to the Teacher Education Program.

C&T 402. Professional Learning Seminar II. 1 Credits.
This is the second in a series of three consecutive professional learning seminars. The primary purpose of the professional learning seminars is to collaboratively engage KU teacher education students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that pre-service teacher education students face in the schools. Faculty and students will critically examine instructional practices,
learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the philosophical, and psychological. The professional learning seminars are designed around key features of effective professional learning communities and sustained professional development for teachers. Features include supportive, collaborative learning, shared personal and professional practice, and collective inquiry of teaching and learning. Prerequisite: Admission to the Teacher Education Program and successful completion of C&T 401.

C&T 403. Professional Learning Seminar III. 1 Credits.
This is the third in a series of three consecutive professional learning seminars. The primary purpose of the professional learning seminars is to collaboratively engage KU teacher education students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that pre-service teacher education students face in the schools. Faculty and students will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the philosophical, and psychological. The professional learning seminars are designed around key features of effective professional learning communities and sustained professional development for teachers. Features include supportive, collaborative learning, shared personal and professional practice, and collective inquiry of teaching and learning. Prerequisite: Admission to the Teacher Education Program and successful completion of both C&T 401 and C&T 402.

C&T 420. Teaching Kansas Government and Contemporary Public Policy Issues: _____ . 3 Credits.
A study of the constitution, organization, functions, and processes of Kansas government, of contemporary public policy issues with local, state and national implications, and of strategies for teaching these in middle and secondary classrooms. Prerequisite: Admission to the School of Education and POLS 110.

C&T 423. Assessing English Language Learners. 3 Credits.
This course provides an introduction and overview of basic principles in assessing English language learners (ELLs) in the context of U.S. preK-12 classrooms and schools. With a focus on addressing equity issues, the course: 1) provides the context and rationale for variety of approaches to assessment; 2) discusses assessment related academic language in the content classroom; 3) discusses the multiple purposes of assessments; and 4) reviews how assessment results can inform educators, students, families, and community members. Prerequisite: C&T 330 or C&T 331.

C&T 424. Second Language Acquisition for preK-12 TESOL Educators. 3 Credits.
This course provides an introduction to the process of second language acquisition as it relates to English language learners (ELLs) in a U.S. preK-12 context. Particular attention is given to the influence of cognitive, affective, and sociocultural factors in second language acquisition. Current developments in second language acquisition are reviewed and evaluated in keeping with the needs of professionals in the context of second language education. Prerequisite: C&T 330 or C&T 331.

C&T 430. Teaching Literature for Young Adults. 3 Credits.
Teaching literature (novel, short story, poetry, drama, nonfiction) suitable for students in the middle school, the junior high school, and the senior high school. Ethnic literature, censorship, bibliographies, and other relevant sources of information about books for young adults will be studied. Prerequisite: Admission to the School of Education.

C&T 448. Reading and Writing Across the Curriculum. 3 Credits.
Content area teachers do far more than impart information to students. They play an important role in guiding middle/secondary students as they use reading and writing as tools for learning. This course includes an overview of the state and national reading and writing scores of adolescents. Students will then be introduced to the basic processes or ways in which individuals may learn to read and write. The course continues with a focus on the instructional strategies and materials that promote the development of reading and writing in the context of teaching new information. Additionally, the course emphasizes the informal methods educators can use, on an on-going basis, to diagnose their students ability to comprehend content material. Finally, appropriate fix-up strategies will be modeled. Prerequisite: Admission to the Teacher Education Program.

C&T 449. Understanding Dyslexia and Supporting Students in Middle and Secondary Schools. 1 Credits.
In this 1-credit online course, middle and secondary preservice teachers will begin acquiring an understanding of dyslexia and the characteristics that students with dyslexia might display in the classroom and on academic/social tasks. Preservice teachers will learn how dyslexia is identified, how to teach students identified with dyslexia, and how to help students address co-morbidities that are often associated with dyslexia such as organization, memory and concentration. Prerequisite: Admission to the Teacher Education Program.

C&T 460. Project Based Instruction in Mathematics and Science. 3 Credits.
This course will have three essential components. The first will be a theory driven perspective accounting for what we know of how people learn and how project-based instruction improves student learning in math and science. The second component will provide the students with support as they develop their own project-based unit. The third component will be field experiences consisting of two parts: 1) observation of well-implemented project-based instruction in local schools and 2) teaching project-based activities in an informal education setting. Prerequisite: C&T 360.

C&T 489. Advanced Teaching Practicum. 1 Credits.
This supervised practicum is intended to allow the pre-service teacher to apply knowledge gained in SPED 507; C&T 448, ELPS 537; and C&T 540, C&T 541, C&T 542, C&T 543 and C&T 544: Advanced (Content Area) Methods by teaching children in the middle/secondary grades. To be taken concurrently with SPED 507; C&T 448, ELPS 537; and C&T 540, C&T 541, C&T 542, C&T 543 and C&T 544: Advanced (Content Area) Methods. Prerequisite: Admission to the Teacher Education Program.

C&T 490. Student Teaching. 6-7 Credits.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of fall practicum experiences and demonstration of appropriate professional dispositions.

C&T 491. TESOL Practicum for Kansas State Endorsement. 3 Credits.
The TESOL Practicum allows individuals to gain supervised experience in Teaching English to Speakers of Other Languages (TESOL) for a professional KSDE ESOL endorsement and advancement. Prerequisite: Completion of all TESOL endorsement courses.

C&T 494. Internship. 6-7 Credits.
A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of all practicum experiences and demonstration of appropriate professional dispositions.

C&T 495. Seminar: Developing the Teaching Portfolio. 3 Credits.
This course serves to instruct students in the research, teaching, and writing components of developing a teaching portfolio. The seminar will
provide a forum for discussion and deeper exploration into topics and issues related to working in the school setting, teaching, and developing a professional teaching philosophy. Graded on a satisfactory/fail basis. Prerequisite: Enrollment in Student Teaching or Internship during the Spring semester.

C&T 497. Independent Study in: _____. 1-2 Credits.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor.

C&T 499. Bachelor’s Project. 4-6 Credits.
A formal report of some aspect of the field experience that relates formal learning and in situ experience to program planning, implementation, and evaluation. Topic will be selected in consultation with the project advisor. Prerequisite: C&T490 and C&T 491 (C&T 491 may be taken concurrently).

C&T 500. Student Teaching in: _____. 1-6 Credits.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Admission to the Student Teaching program.

C&T 501. Student Teaching Practicum in: _____. 1-6 Credits.
A supervised classroom teaching experience under the direction of an experienced teacher and in close relationship with a university supervisor. Prerequisite: Admission to the Graduate Certification Program and approval of advisor.

C&T 503. International Perspectives in Primary and Secondary Education. 3 Credits.
This course is will expose students to a variety of debates and developments related to primary and secondary education in our globalized era. Students will survey educational systems from the US and selected world regions, comparing and contrasting them in terms of access, funding, curriculum, and pedagogy. They will investigate educational systems from the perspective of international development while addressing issues of local vs. national or international control, tradition vs. global advancement, and other challenges and trade-offs. Prerequisite: Junior standing or higher, or permission of instructor: The course is suitable for advanced undergraduate and master's degree seeking students.

C&T 530. Curriculum and Instruction in Foreign Language Classrooms. 3 Credits.
A study of philosophy, objectives, curriculum, instructional strategies, and evaluation in teaching foreign language at the K-12 levels. Prerequisite: Admission to the Teacher Education Program.

C&T 533. Curriculum and Instruction in Middle & Secondary English/Language Arts Classrooms. 3 Credits.
This is an English/Language Arts methods course that focuses on curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12. Prerequisite: Admission to the Teacher Education Program.

C&T 537. Curriculum and Instruction in Middle and Secondary Science Classrooms. 3 Credits.
The purpose of this course is to help you prepare to teach science in the middle and secondary grades. The instructor designed the class sessions and learning tasks to enable you to make progress toward achieving the Kansas Science Teaching Standards and Kansas Professional Education Standards. Prerequisite: Admission to the Teacher Education Program.

C&T 539. Curriculum and Instruction in Middle and Secondary Mathematics Classrooms. 3 Credits.
This course is designed to provide focused study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12. Prerequisite: Admission to the Teacher Education Program.

C&T 540. Advanced Practices in Teaching English in the Middle and Secondary Schools. 3 Credits.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12 and as a final readiness for the undergraduate student teaching experience. Prerequisite: Admission to the Teacher Education Program.

C&T 541. Advanced Practices in Teaching Social Studies in Middle/Secondary Schools. 3 Credits.
Advanced study of curriculum development and instructional strategies appropriate for teaching social studies in grades 6-12 and application of learning in a middle/secondary classroom. Prerequisite: C&T 335; SPED 326 and, C&T 324

C&T 542. Advanced Practices in Teaching Science in the Middle and Secondary Schools. 3 Credits.
This course is designed as a final readiness for the semester-long student teaching experience and the Kansas Performance Teaching Portfolio to be completed during that student teaching experience. The course deals with the analysis, adaptation, and application of varied instructional designs to implement curricula in specific science areas in grades 5-12. Prerequisite: Admission to the middle-level licensure program in science education at the undergraduate level or one of the graduate licensure programs in middle/secondary science. Successful completion of C&T 537.

C&T 543. Advanced Practices in Teaching Mathematics in the Middle and Secondary Schools. 3 Credits.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12 and as a final readiness for the undergraduate of GLP student teaching experience. Prerequisite: Admission to the middle-level licensure program in mathematics education at the undergraduate level or the GLP in middle or secondary mathematics. Successful completion of C&T 539.

C&T 544. Advanced Practices: Situating Foreign Language Content, Dispositions, Skills & Tools Language Classroom. 3 Credits.
This is an advanced Foreign Language methods course that focuses on the critical importance of the socio-linguistic environment of foreign language classrooms. Prerequisite: Admission to the Teacher Education Program.

C&T 598. Special Course: _____. 1-5 Credits.
A special course of study to meet current needs of education students, primarily for undergraduates.

C&T 649. An International Teaching Experience. 3 Credits.
This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director.

C&T 707. Project Based Instruction. 3 Credits.
This course will emphasize exploring, designing, and evaluating materials and pedagogy to work toward the design of project-based curriculum and
instruction. Topics focus on the principles of project-based instruction as well as multiple models for its use in the classroom.

C&T 709. Foundations of Curriculum and Instruction. 3 Credits. Basic concepts and processes of curriculum and instruction, including theories, planning models, resources for decision-making, current trends, research, and proposals for improvement of curriculum and instruction.

C&T 730. Understanding Talent. 3 Credits. This course addresses the social, cognitive, affective, and other developmental aspects of talent as manifested in children and youth with high potential. The course provides an opportunity to examine characteristics, strengths, and needs of these children and their families. The course focuses on the foundational aspects of gifted/talented education: educational and political history of the field, etiology of extraordinary potential, and identification and assessment techniques, instruments, and systems. Included in the course are relevant research, policies and regulations, services, and information resources. Prerequisite: SPED 425, SPED 431, SPED 725, or equivalent introductory course on exceptional children and youth.

C&T 739. Internship in Teaching: _____ 1-6 Credits. A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Admission to a Curriculum and Instruction licensure program. Instructor permission required to enroll.

C&T 740. Foundations of Reading: Process, Theory, and Instruction. 3 Credits. It is the purpose of this course to introduce students to the foundations of the reading process, developmental levels, theory, models, and procedures at the emergent, elementary, and secondary levels. Elements of cultural, linguistic, and ethnic diversity that affect the reading process are included. Students work with research related to the reading process, remediation, and assessment.

C&T 741. Comprehension and Study Strategies for Use with Multiple Texts. 3 Credits. It is the purpose of this course to examine research, theory, and practice in reading comprehension. Emphasis is placed on the application of strategies for various text types (expository, narrative, persuasive, and technical) for teaching reading comprehension and study skills across content areas in the K-12 classrooms. Prerequisite: C&T 740 or permission of the instructor.

C&T 743. Writing and Spelling Development and Instruction. 3 Credits. A study of the research base on writing, spelling, speaking, and listening for teaching the language arts; an overview of development in writing and spelling, the writing and spelling processes and instruction, and strategies for integrating the language arts. Prerequisite: Admission to a masters program within the School of Education, C&T 740 or permission of the instructor.

C&T 745. Reading and the English Language Learner. 3 Credits. The course focuses on the literacy development, research, and effective teaching practices that support emerging bilinguals (EBs) becoming literate. The course examines how reading, writing, speaking, and viewing in a new language are similar and/or dissimilar from these modalities in a first language. Cognitive, sociocultural, linguistic and educational perspectives are investigated as part of this examination.

C&T 748. Reading and Writing Across the Curriculum. 3 Credits. In C&T 748, preservice content teachers, who have had no previous literacy courses, are introduced to the basic processes of reading and to instructional strategies and materials that promote the development of reading, writing, and studying in the context of teaching new information. Additionally, we discuss the ways in which teachers diagnose, in an informal, on-going basis, their students’ abilities to comprehend the material they are teaching.

C&T 749. An International Teaching Experience. 3 Credits. This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director.

C&T 770. Pedagogical Considerations in the 21st Century Classrooms. 3 Credits. Exploration of pedagogy in the 21st century classroom and examination of current learning environments and strategies available to enhance student learning and engagement. Prerequisite: Admission to graduate program in the School of Education. Admission to a non-degree program in the School of Education.

C&T 797. Special Project in: _____ 2 Credits. Implementation of the curriculum project planned in C&T 734 or C&T 735; implementation and assessment of the special project will occur during the internship. Prerequisite: C&T 734, C&T 735, and C&T 736.

C&T 798. Special Course: _____ 1-5 Credits. A special course of study to meet current needs of education professionals—primarily for graduate students.

C&T 800. Foundations of Curriculum Development. 3 Credits. This course is designed for students to gain a functional understanding of the historical, philosophical, political, psychological, and cultural factors which affect the designing and implementation of curriculum at several levels: the individual classroom, the team, the school, the larger administrative unit, the state, and the nation. Prerequisite: C&T 709 or permission of instructor.

C&T 801. Planning for School Improvement. 3 Credits. This course will emphasize the latest research and practice related to school reform and student success, particularly professional development and data analysis as they relate to standards, curriculum, assessment, and instruction embedded in a school improvement plan. Discussions will provide a pathway for teachers to contribute to the development and implementation of an identified district’s school improvement plan. You will function as a teacher member of a school improvement team to assimilate and synthesize research and practice into the development, revision, and/or assessment of a school improvement plan for a specific school site. Prerequisite: Enrollment is restricted to students admitted to the online Curriculum and Instruction Master’s program.

C&T 802. Curriculum Planning for Educational Settings. 3 Credits. A focus on organizing and managing curriculum development in educational settings. Such curricular decisions as writing philosophies, setting goals and objectives, selecting and organizing content, and designing and monitoring evaluation procedures will be emphasized. Providing leadership for the collaborative process of curriculum planning in organizational settings will receive attention.

C&T 803. Differentiating Curriculum and Instruction. 3 Credits. This course is designed for educators interested in expanding curriculum and instruction to accommodate diverse learners in the classroom, K-12. Topics include: models, methods, and resources for differentiating
curriculum and instruction, designing and modifying differentiated curriculum, evaluating student learning, and introducing students, parents and colleagues to differentiation. An evidence-based, practical course for teachers, administrators, and support personnel. Prerequisite: Admission to Graduate School.

C&T 806. Instructional Strategies and Models. 3 Credits.
Analysis of models of teaching which represent distinct orientations toward students and how they learn. The application of these models is complemented by the study of research evidence on effective teaching strategies. Prerequisite: C&T 709.

C&T 807. Multicultural Education. 3 Credits.
In order to provide the student with an understanding of multicultural education, the course will examine the effects of such issues as ethnicity in America, the melting pot theory, separatism, cultural pluralism, legal issues, and bilingual education upon the curriculum and instruction in today's classrooms. It will include an evaluation of materials for bias and stereotypes.

C&T 808. Qualitative Research: Curriculum Inquiry. 3 Credits.
Curriculum Inquiry provides an opportunity to reflect, explore, understand, and broaden perspectives of curriculum through examining the theories, methodologies, strategies, and design of qualitative research. This course is designed to develop a common understanding of the major elements of qualitative research, while offering each student an opportunity to examine research topics and methods of personal interest, with particular attention to curricular issues. The course also includes practical experience with various modes of data collection and analysis.

C&T 809. Creative Thinking and Learning. 3 Credits.
This course provides an opportunity to investigate the nature of the creative process in educational settings. The knowledge base for the course builds from foundations of creativity, principles and theories of identifying and enhancing creative production, and affective learner variables. The course blends classic and contemporary works in creativity, and features the application of theories and models of the origins and development of creativity to promoting creative thinking and learning among children, youth and adults. Participants learn about, apply, and adapt techniques for defining and identifying creative potential and for encouraging creative thinking in educational settings. Prerequisite: Admission to graduate school.

C&T 816. Culturally Responsive Pedagogy. 3 Credits.
U.S. schools are increasingly multilingual spaces, where new waves of migration and refugee resettlement are reshaping the linguistic landscape of previously English-dominant spaces. It is from this perspective that this course explores the history and evolution of culturally responsive pedagogy--beginning with its origin in U.S. multicultural education, to its expansion into the education of culturally and linguistically diverse learners, to its adoption in English language education more broadly, and TESOL teacher education more specifically (in the U.S. and abroad). The course will highlight the curricular and instructional approaches that undergird CRP and the future global direction of this pedagogical approach.

C&T 817. Contact, Change & American English. 3 Credits.
This course introduces the sociolinguistic topics of language change and variation through a study of the historical evolution of what has come to be known as modern American (U.S.) English. The course will explore the historical instances of contact between English and other languages that have resulted in significant and minor changes, as well as regional variations to spoken and written American English. It will also discuss the pedagogical and research implications of these changes for teaching English in the U.S. and abroad.

C&T 818. Language, Discourse and Ideology. 3 Credits.
Language, Discourse and Ideology adopts an interdisciplinary approach to exploring the language ideologies that shape English language development in EFL, ESL, and Bilingual / Dual Immersion contexts. The study of language ideology is a subfield of Sociolinguistics and is linked to issues of language, ideologies about language, and language as a vehicle for ideology. Though language is a focus of this course, the course is "not about language alone. Rather, ...[it addresses] ties of language to identity, to aesthetics, to morality, and to epistemology" (Woolard 1998: 3) and the ways in which these uses of language reflect and reproduce language ideologies. The course is open to graduate students across the School of Education with an interest in language, English as a Second/Foreign language, and policy planning and curriculum studies. It is also open to students in anthropology, linguistics, sociology and related fields with an interest in language use in educational contexts.

C&T 819. Foreign Language/EFL Teaching Methods. 3 Credits.
This course addresses foreign language/EFL teaching methods and techniques that are related to second language acquisition theories and appropriate for the teaching of foreign languages/EFL to children, adolescents, and adults learners. Prerequisite: Admission to a graduate program (Master or Doctorate.)

C&T 820. Methods of Teaching English to Speakers of Other Languages (TESOL). 3 Credits.
The purpose of this course is to study the objectives and methods of ESL/ Bilingual education. Students will examine methods and techniques of teaching: listening, speaking, reading, and writing in the ESL/Bilingual Education settings. The course will also emphasize the importance of culture in second language teaching, and self-evaluation of teaching and instructional materials. Prerequisite: Corequisite: C&T 709.

C&T 821. Assessment in Teaching English to Speakers of Other Languages (TESOL). 3 Credits.
This course provides an overview of diagnostic techniques and instruments used to identify and remediate specific learning difficulties associated with normal second language development in the area of listening, speaking, reading, and writing. The course includes a review of research concerning assessment as it relates to error analysis in the second language context. Prerequisite: Corequisite: C&T 820.

C&T 822. Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Credits.
This course provides an intensive review of the theory and research base of second language acquisition. Particular attention is given to the influence of research trends in linguistics and psychology on second language education theory and practice. Current trends in second language education are examined in light of the historical theory base. Prerequisite: C&T 820.

C&T 823. Intercultural Competence for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Credits.
This course includes the study of the interrelationship of language and culture and the use of multicultural training techniques to develop cultural awareness and positive attitudes in the second language classroom. Emphasis is on the integration of culture in the second language curriculum. Prerequisite: C&T 820 or C&T 803.

C&T 824. Problems in Second Language Instruction. 3 Credits.
This course presents a study of curricula and instruction in the second language setting at all levels with emphasis on educational research concerning these issues. Particular attention is given to developing competency in locating and utilizing sources of information and to preparing the research document. The course facilitates practical problem solving in the second language learning context. Prerequisite: C&T 820.
C&T 825. Advanced Practicum in Teaching English to Speakers of Other Languages (TESOL). 3 Credits.

This course provides a supervised teaching experience in a setting appropriate to the goals of the prospective ESL/Bilingual teacher: elementary, secondary, or adult. Particular attention is given to lesson planning, classroom management, and the development of self-evaluation techniques. This course will also emphasize structured classroom observation prior to teaching and techniques for developing and maintaining positive working relationships with other professionals in the school setting. Prerequisite: C&T 820, C&T 821, and C&T 822 or C&T 824.

C&T 826. Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Credits.

This course offers pre- and in-service teachers the basic foundations of language analysis necessary for the teaching of second/foreign languages. The course covers basic linguistic topics common to all human languages (grammatical, phonological, and semantic aspects) with the intent to help teachers understand and address common language problems that students face when learning English as a second/foreign language.

C&T 827. Teaching Pronunciation for Foreign Language/Teaching English to Speakers of Other Languages (TESOL). 3 Credits.

The objective of this course is to give prospective language teachers the requisite theoretical and practical background for making decisions concerning pronunciation teaching. This course provides second and foreign language teachers with the necessary knowledge and skills to address the teaching of pronunciation in the foreign language classroom. After a review of theoretical and practical research dealing with universal human speech perception and production, implications for the design of appropriate strategies and lessons to teaching pronunciation, both at the segmental and suprasegmental levels, are addressed. Prerequisite: C&T 444, C&T 820 or C&T 822.

C&T 828. Language and Identity. 3 Credits.

This interdisciplinary seminar explores the interrelationship between language and identity, and the role of language in developing identities of second language learners.

C&T 829. Teaching English to Speakers of Other Languages in Global Context (TESOL). 3 Credits.

The purpose of this course is to investigate contemporary issues in and key concepts pertaining to Teaching English to Speakers of Other Languages (TESOL) throughout the world. We will examine primary research and employ a sociocultural lens to better understand how the phenomenon of globalization has shaped how, why, and the conditions under which English is taught and learned on different continents, as well as critiquing research methods and approaches to studying English language teaching and learning.

C&T 840. Emergent Literacy and Beginning Reading. 3 Credits.

A study of emergent literacy through the beginning stages of literacy development. Course content focuses on the history, theory, and research that supports instructional reading practices for children Pre-kindergarten through grade 2. Prerequisite: C&T 740, C&T 741, or permission of instructor.

C&T 841. Early Intervention in Reading Practicum. 3 Credits.

A case study approach to the instruction of children in need of early intervention in reading. Requires assessment, instruction, and case reports of tutored children. Prerequisite: C&T 740 or permission of instructor. Concurrent enrollment or previous enrollment in C&T 840 is required.

C&T 842. Supporting Striving Readers: Adolescent through Adult. 3 Credits.

A study of the characteristics and multiple causes of reading and writing difficulties, principles and procedures for diagnosing and remediating reading difficulties, how to provide individual and group intervention strategies, communicate diagnostic information, and gain awareness of the impact of research on instructional decision-making for students with reading difficulties. Prerequisite: Admission to a masters program within the School of Education, C&T 740, C&T 741, C&T 840, and C&T 841, or permission of instructor.

C&T 843. Supporting Striving Readers Practicum. 3 Credits.

Case study approach to the treatment of pre-adolescent through adults with reading disabilities. Requires diagnostic testing of the learner, compilation of case study reports, and participating in staffing for the purpose of designing remedial reading programs. Students also participate in implementation of remedial programs with pre-adolescent through adults through tutoring in either a clinical setting or a public school setting. Prerequisite: C&T 740, C&T 840, C&T 841, or permission of instructor. Concurrent enrollment or previous enrollment in C&T 842 is required.

C&T 844. The Reading Program: Coordination and Supervision. 3 Credits.

An overview of the role of the reading coordinator/supervisor and that individual’s responsibility for the components of a balanced reading program. Emphasis will be given to assessment of the reading program, strategies for change, improving the reading program, in-service programs, working with other school personnel, providing services, and public relations. Prerequisite: C&T 740, C&T 741, C&T 840, C&T 841, C&T 842, and C&T 843.

C&T 850. Seminar in Science and Mathematics Educational Research. 3 Credits.

The primary purpose of this course is to examine literature in science and mathematics education in order to better understand research in these fields from both a historical and contemporary perspective. The process of examining literature in these fields will be used to help understand how to plan, conduct, and evaluate research in science and math education. This course emphasizes both qualitative and quantitative research in science and math education.

C&T 851. Modern Approaches to Middle/Secondary School Mathematics. 3 Credits.

A study of aspects of curriculum and instruction in middle/secondary school mathematics programs, including research on teaching and learning mathematics. Prerequisite: Teaching experience in middle-level or high school mathematics or permission of instructor.

C&T 852. Instruction in Mathematics and Science. 3 Credits.

In this course, students will explore a variety of research-based instructional theories, models, and strategies for teaching and learning of mathematics and science. They will apply and evaluate the usage of one instructional strategy in an action research project in their classrooms. Prerequisite: C&T 709.

C&T 854. Assessment and Evaluation in Science and Mathematics. 3 Credits.

The primary purpose of this course is to examine assessment and evaluation in science and mathematics, including assessment of students, teachers, schools, and educational programs. The course will examine technical characteristics of various assessment methods including both traditional and alternative methods. In additional and alternative methods. In addition, the course will analyze and discuss various controversial issues in assessment such as authentic assessment, and large scale
assessment, and large scale assessments, assessment for accountability, and equity issues.

C&T 855. Curriculum in Science and Mathematics. 3 Credits.
A survey of the concepts and processes that provide the focus of modern science and mathematics curricula will be central to the course. Students develop a standards-based framework for a school science or mathematics program. The course includes an analysis of national and state recommendations for the reform of science and mathematics education in the context of our state and local educational systems, which is applied by evaluating exemplary instructional materials and activities appropriate for classroom use. Prerequisite: C&T 709.

C&T 857. Practicum in Mathematics Education. 1-3 Credits.
Intensive supervised experience working with improvement of mathematics curriculum and/or instruction in an educational setting. Credit in any one semester may range from one to three hours; and total credit may not exceed three hours. Prerequisite: Two graduate courses in mathematics education and prior consent of practicum supervisor.

C&T 858. Connecting Research to Classroom Practice in Mathematics. 3 Credits.
This course will explore current research on issues important to mathematics teachers so they can use research to support and improve their classroom practice. Prerequisite: Teaching experience or permission of instructor.

C&T 859. Issues in Mathematics or Science Education: _____. 1-3 Credits.
A study of issues in a particular area of mathematics or science education. The course may be repeated for different topics. Prerequisite: Admission to graduate study.

C&T 862. Trends and Issues in Social Studies Instruction. 3 Credits.
A study of trends and issues relating to, and needed changes in the content, organization, emphasis, resources and equipment, methods, devices and evaluation in the social studies. Consideration of related problems such as achieving meaning and understanding, providing for individual differences, providing motivation, the cooperative assignment and socialized recitation. Students will be permitted to concentrate on those problems of particular interest to them. Prerequisite: Nine hours of Education including educational psychology.

C&T 896. Seminar in: ___. 1-4 Credits.
C&T 897. Independent Study. 1-4 Credits.
Prerequisite: Consent of advisor and instructor.

C&T 898. Master's Project. 1-4 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

C&T 899. Master's Thesis. 1-6 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

C&T 900. Current Trends & Issues in Curriculum & Instruction. 3 Credits.
The course, taught as a capstone seminar, will provide a review of current trends and issues in theories, practices, and events within curricular and instructional efforts in American education. Topics studied may include constructivism, connectivism in the digital age, contemporary theories and theorists such as Vygotsky, online instruction and the Internet's potential and growth, the new Cult of Efficiency, stigmatization and standardized testing, and charter schools. Student composition of each class will influence the final syllabus, which may include other topics reflective of student interests and goals. The class is designed for those in the final course phase of their doctoral studies. Students in their first or second semester of their programs will not be encouraged to enroll in the class.

C&T 901. Contemporary Research of Teaching Effectiveness. 3 Credits.
A review of recent research on the conceptualization, measurement, and improvement of teaching effectiveness. Particular attention is given to the history of efforts to improve teaching, to the reasons why such efforts have often been unsuccessful, and to the recent contributions of the "micro-criteria" approach to the problem.

C&T 902. Directed Readings. 3 Credits.
Directed Readings course is intended for students wishing to study an area not covered by or regularly offered in an existing course, or the subject of a course that is not regularly offered in the Curriculum & Teaching Department. This course is individually designed by C&T faculty with reading loads, writing requirements and academic expectations comparable to other doctoral level courses in the department. Prerequisite: Admission to the Ph.D. or Ed.D. program. Successful completion of C&T 920 or C&T 922 or by instructor permission.

C&T 903. Curriculum Supervision. 3 Credits.
An intensive study of the theoretical and research bases for curriculum supervision and improvement. Topics include models and practices in supervision and staff development, skills and instruments used in curriculum assessment, coordination of both human and material resources, and the dynamics of change strategies.

C&T 904. Philosophical Questions in Curriculum and Teaching. 3 Credits.
This course addresses philosophical questions pertaining to curriculum and teaching across a range of educational contexts. These questions center on epistemology, ethics, and the assumptions underlying alternative approaches to research in education. Students completing this course should be able to engage in philosophical inquiry and apply relevant philosophical literature and principles to the examination of curriculum and teaching.

C&T 905. Teacher Education in the U.S.. 2 Credits.
A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students.

C&T 906. Qualitative and Curriculum Inquiry: Analysis and Interpretation. 3 Credits.
Supports novice researchers in extending their understanding of the theoretical frameworks underlying qualitative research, qualitative methodologies, the research process and its relationship with curriculum inquiry. During the course we will discuss various forms of qualitative research methods, approaches to research, and perspectives in methodology relate to curriculum inquiry. We will explore the intertwining of data generation, analysis, and writing. In addition, we will focus on refining data generation techniques, strategies for data analysis, data interpretation, and various forms of reporting/writing. Prior coursework: Introduction to a graduate level qualitative research course or permission from the instructor. Prerequisite: Introduction to a graduate level qualitative research course or permission from the instructor.

C&T 907. Critical Pedagogies. 3 Credits.
This course examines the theories and practices of several educational orientations that comprise "critical pedagogy." Students examine the historical roots and evolution of this broad orientation toward education. Recurring themes in the class are relations between knowledge and curriculum, the school and society, and teachers and students. Students completing the course should be able to analyze educational phenomena through a critical theoretical lens. Open to all doctoral students and advanced masters students with instructor permission.

C&T 920. Introduction to the Curriculum & Instruction Doctor of Education Program. 1 Credits.
This course is designed to provide first-year doctoral students an introduction of graduate study in the Doctor of Education (Ed.D.) program. The course will help students acclimate to University and Graduate School level expectations and conditions, and to begin the development of skills and abilities to translate theory and research into practice. Students will be guided through the critical skills of how planning and conducting research can translate to academic writing and scholarship in a field of study. Prerequisite: Admission to the Ed.D. program in curriculum and instruction.

C&T 922. Introduction to the Curriculum & Instruction Doctor of Philosophy Program. 1 Credits.
This seminar course introduces students to doctoral education, the faculty with whom they will work, the regulations and policies that guide their work and the structure and assessment for the Ph.D. program. This course will also assist students in becoming familiar with scholarship and planning, conducting, and sharing (writing and presenting) results of research. Prerequisite: Admission to the C&I Ph.D. program.

C&T 924. Advanced Research in 2nd Language Teaching and Learning. 3 Credits.
This course provides doctoral level students an in-depth overview of current issues in second language teaching and learning. Each week, we will explore research methodologies most appropriate for investigations of second language learning and teaching processes and the theoretical foundations that such research brings to light. Class reading assignments will draw from both "how to" handbooks and actual primary research, and students will engage in weekly reactions to and discussions of the readings. Students will also be guided in the development of research questions that target critical gaps in our current understanding of language teaching and learning. The culminating assignment is the preparation of a research proposal, an initial step toward the doctoral dissertation. Prerequisite: C&T 820, C&T 821, C&T 822, Admission to Doctoral Program; or permission of Instructor.

C&T 940. Evaluation of Research in Reading. 3 Credits.
This course is designed to support doctoral level students' ability to evaluate research around the teaching of reading. Issues of theory, research design, and methodology will be taken into consideration. Additional purposes include fostering discussion about prominent literacy researchers, influential journals, and writing, as well as factors that influence reading research.

C&T 951. Research and Evaluation in Mathematics and Science. 3 Credits.
This course introduces students to the processes of planning, conducting, and evaluating mathematics and science research and evaluation methodologies. This course emphasizes the methods and techniques used in both quantitative mathematics and science research and evaluation methodologies. Prerequisite: A PRE course in statistics.

C&T 970. Fostering Teacher Growth and Inquiry. 3 Credits.
Students will explore theory and research related to professional learning with a focus on the professional learner, professional contexts, and professional learning activities. Students will learn about and design a pilot study that is set in a relevant professional context. Prerequisite: Admission to the Ed.D. program in the Department of Curriculum & Teaching or consent of instructor.

C&T 971. Planning and Conducting Educator Inquiry in Professional Settings. 3 Credits.
Students will explore theory and research related to student learning and its relationship to the professional learner, professional contexts, and professional learning activities. Students will learn how to conduct a needs assessment in educational settings, and design and implement professional learning based on the needs assessment data. Students will also implement the pilot study that they designed in C&T 970. Prerequisite: C&T 970.

C&T 972. Connecting Professional Growth and Student Learning. 3 Credits.
Students will synthesize theory and research related to (a) curriculum and instruction, and (b) the relationship between student learning and professional learner, with respect to their career goals. Students will write a report and present findings from their pilot study and the professional learning they implemented in C&T 971. Prerequisite: C&T 970 and C&T 971.

C&T 975. Writing Literature Reviews. 1 Credits.
This course is designed to give doctoral students an introduction to writing literature reviews. The course will address the process of writing a literature review as well as the types of literature reviews that appear in dissertation study proposals and dissertations. The course is a 1-credit seminar that is designed to complement other coursework taken in the doctoral program. Prerequisite: Admission to a doctoral program in the University of Kansas, or permission from the instructor.

C&T 990. Capstone Seminar. 3 Credits.
This course will provide students in the Doctor of Education program with capstone experiences in the areas of curriculum and instruction in preparation for comprehensive examinations. Prerequisite: Admission to the Curriculum & Instruction Ed.D. program.

C&T 994. Advanced Topics: ______. 1-3 Credits.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students.

C&T 995. Field Experience in: ______. 1-5 Credits.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

C&T 996. Teaching and Learning in the College Classroom. 3 Credits.
This course identifies strategies of instruction, both face-to-face and online, for post-secondary learners. Students will analyze characteristics and needs of post-secondary learners and develop curriculum; for example, a syllabus, units, lessons, assessments, and course objectives, aligning objectives with assessments to learner outcomes for post-secondary learners. Prerequisite: Admission to a graduate program in the University of Kansas.

C&T 997. Individual Study. 1-4 Credits.
Prerequisite: Prior graduate course work in the area of study and consent of instructor.

C&T 998. Seminar in: _____ 1-4 Credits.

C&T 999. Doctoral Dissertation. 1-15 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

Educ Leadership & Policy Stds Courses

ELPS 200. Making Connections Between Schools and Community. 3 Credits.
This course is designed to increase the students’ awareness of learning in the classroom and to familiarize them with the role of the school and the community. Institutions and resources that support children and families will be addressed through large and small group sessions and
field experiences. Emphasis is given to the diverse nature of schools, communities, and their populations. In addition, the course will acclimate students with the School of Education programs, admissions procedures, and curriculum offerings. Successful completion of this course does not guarantee eventual admission of the School of Education’s Teacher Education Program. Prerequisite: Successful completion of C&T 100.

ELPS 250. Education and Society. 3 Credits.
This course provides students with an introduction to key ideas and socio-historical forces that have shaped the contemporary educational system in the United States, drawing upon the disciplines of the historical, philosophical, and social foundations of education. The development of school and community relations will be a point of emphasis.

ELPS 450. Foundations of Education. 3 Credits.
A historical approach to the major social and philosophical foundations of American education, with an emphasis on the relation of educational theory to classroom practice.

ELPS 497. Independent Study Inc.. 1-2 Credits.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor’s degree. Prerequisite: Recommendation of advisor and consent of instructor.

ELPS 537. The Governance and Organization of Schools. 3 Credits.
The course provides the prospective teacher with an overview of the legal foundations of the American educational system including the ways schools and school districts are organized and run; the role of various levels of government and various governmental and educational officials in controlling education; the rights of students and teachers; the terms, conditions, and responsibilities of teacher employment. Prerequisite: Admission to the Teacher Education Program.

ELPS 540. Ethics in Education. 3 Credits.
This course examines practices and policies occurring in k-12 and postsecondary educational institutions through the lenses provided by ethics. During the semester, we will read, discuss, and write about ethics in education from both theoretical and practical perspectives. Prerequisite: Junior standing or higher. The course is suitable for advanced undergraduate and master’s degree seeking students.

ELPS 598. Special Course:.. 1-5 Credits.
A special course of study to meet current needs of education students, primarily for undergraduates.

ELPS 627. Growing Up in Urbanizing America. 3 Credits.
A study of the changing role and character of childhood and youth as stages of life in the context of American urban and social history, with particular attention to education and human development. Prerequisite: Junior standing or higher.

ELPS 712. Instructional Media Development. 3 Credits.
The purpose of this course is to help students acquire fundamental technical skills required for developing various instructional media products. This course takes a hands-on, practical approach to creating various computer-based instructional materials, such as digital image, audio, video, and computer animation for Web and mobile devices. This course is prerequisite for several courses in the program. No previous design or development experience is required.

ELPS 714. Foundations of Learning Technology. 3 Credits.
This course provides a comprehensive overview of the historical and theoretical foundations of learning technologies. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field. Special emphasis is on current and emerging learning science research and how it can be applied to the creation of technology supported learning environments.

ELPS 718. Human Performance Technology. 3 Credits.
This course will provide an introduction to the field of human performance technology (HPT) and how it is applied to productivity and efficiency problems in the workplace. Performance improvement methods include data gathering, analysis, change management, implementation, measurement and the integration of technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field of performance improvement. Special emphasis is on current and emerging technology and how it can be applied to human performance improvement in education and the workplace.

ELPS 720. Social Media Technology. 3 Credits.
This course provides students with an introduction to the use of social media and cloud computing. Social media and cloud computing enable individuals to create, collaborate, and share information. Students will develop implementation strategies and acceptable use policies for the use of social media and cloud computing in the context of K-16 education, government, and corporate settings.

ELPS 750. Principalship. 3 Credits.
An introduction to the role, responsibilities, expectations and major duties of elementary, middle, and high school building administrators. Students are presented typical problems faced by school administrators through simulations and role playing and are expected, through reflection and discussion, to develop viable solutions.

ELPS 752. Education Law. 3 Credits.
A study of legal principles and issues affecting educational policy making and practice with emphasis on student and teacher rights, equity, and the administration of schools. Prerequisite: Admission to graduate study.

ELPS 755. Human Resource Management. 3 Credits.
An overview of the theory and practice of the management, recruitment, selection, compensation, placement, and development of personnel in the school setting.

ELPS 756. Data-Driven Leadership. 3 Credits.
The course focuses on the role and effective use of school related data and its analysis in making decisions regarding school improvement, meeting the needs of students with exceptionalities, evaluating educational programs, developing student management strategies, and using instructional technology.

ELPS 757. Education in American Society. 3 Credits.
A study of the roles and goals of education in the United States, the interrelationships among schools and students, teachers, administrators, and parents, and the culture of schools.

ELPS 760. Integration of Learning Technology. 3 Credits.
This course focuses on strategies for integrating learning technologies in K-12 schools, universities, corporate and government settings. Topics cover the National Educational Technology Standards that apply information technology to: a) inspire learning and creativity, b) develop digital-age learning experiences and assessments, c) model digital-age work, d) advance digital citizenship, and e) engage in professional growth and leadership. Students produce a comprehensive electronic portfolio that describes the theoretical perspectives that guide their technology integrations strategies and presents evidence that demonstrates their competencies.

ELPS 773. School and Society in Comparative Education. 3 Credits.
Analysis of the role of social science in comparative education as perceived by different philosophies or schools of thought, such as Marxism, phenomenology, empiricism, pragmatism, and linguistic analysis.

**ELPS 774. Modern Educational Theorists.** *3 Credits.*
The course is designed for beginning master's degree students and for doctoral students who have had no previous administrative experience in college or university settings. Students will be introduced to the function and responsibilities of major administrative divisions of a college or university and to the major tasks of administration: planning, programming, budgeting, staffing, managing. An emphasis will be placed on current issues facing higher education and students will be introduced to the major journals of the field. As part of the course requirements, students will spend some time familiarizing themselves with one or more administrative offices on a college campus. Prerequisite: Admission to study in higher education at the graduate level.

**ELPS 780. Introduction to Higher Education Administration.** *3 Credits.*
The course is designed to include the study of the history and development of student personnel services in higher education, the role and function of the student affairs administrator, contemporary issues and problems, and an understanding of the organization and role of student affairs administration within higher education settings. Prerequisite: Admission to the higher education program or permission of instructor.

**ELPS 782. Diversity, Equity and Inclusion in Higher Education.** *3 Credits.*
The course provides an introduction to diversity, equity, and inclusion in higher education settings. The content introduces and applies key theories and concepts to the practice of student affairs.

**ELPS 786. Introduction to College Leadership.** *3 Credits.*
This is an introductory course about college leadership that will provide an overview of concepts and theories for the practice of leadership in colleges and universities. Particularly, the course focuses on the application of theoretical perspectives for leadership practice. The aim of the course is to have students analyze and situate themselves as future higher education leaders and administrators. Subject matter includes, but is not limited to, topics such as: administrative leadership in higher education, fundamental leadership theories, managing people and conflict, fostering collaboration and leadership for diverse institutions.

**ELPS 798. Special Course: 1-3 Credits.**
A special course of study to meet current needs of educational professionals--primarily for graduate students.

**ELPS 811. Constructivist Learning Technology.** *3 Credits.*
To be effective, educational technologies must be designed based on what we know about how people learn. This course explores (1) important constructivist learning theories, (2) how such learning theories can be used in designing and developing computer-based learning environments, and (3) how student learning can be assessed in those environments. This course is suitable for students who wish to learn how constructivist learning technologies can change the way we teach and learn new knowledge to improve student learning.

**ELPS 812. Design of Learning Technology.** *3 Credits.*
This course introduces instructional design theories and production techniques for developing and evaluating learning technology resources and systems. Students apply their understandings of instructional systems design and learning theories as they work in teams to develop learning technology solutions for specific clients in real-world settings.

**ELPS 814. Online Learning Design and Development.** *3 Credits.*
The course provides an overview of the knowledge and skills for that are essential for designing and developing online instruction. The goal of the course is for students to acquire the analysis, design, development, and evaluation skills needed to facilitate learning in both asynchronous and synchronous online learning environments. Special emphasis is on learning design, and the evaluation of online learning solutions for education, medicine, military, business, and industry.

**ELPS 818. Games and Simulations for Learning.** *3 Credits.*
This course provides an introduction to the design and development of games, gamification, and simulations for learning and instruction. Emphasis is on the selection and design of interactive learning environments for K-16 education and workforce training. Topics include a review of the essential elements of game design, rapid prototyping, the psychology of gaming, game technology, and research related to the use of games, gamification, and simulations in K-16 education and workforce training.

**ELPS 820. Practicum in Educational Technology.** *1-3 Credits.*
Supervised practice in a media center in selection, classifying, designing, producing, and/or managing instructional materials. Prerequisite: C&T 770 and C&T 871.

**ELPS 830. Foundations of Multicultural Education.** *3 Credits.*
This class provides students with an understanding of multicultural education as an instructional concept, educational reform movement, and systemic process meant to ensure educational equity for all people, especially those who have been inadequately served and/or historically discriminated against because of their racial/ethnic or linguistic backgrounds, gender or sexual orientation, socio-economic status, and special needs. Students will examine different theoretical approaches that inform the practice of multicultural education and explore the contribution of various social sciences to the field.

**ELPS 831. Sociology of Education.** *3 Credits.*
This course will provide an introduction to the sociology of education. Specific topics will include: conflict over the purposes of education; how those purposes are-or are not-translated into actual classroom life; how educational systems have developed historically, how status, and more specifically race, class and gender relations, affect student experiences; and contemporary policy and reform movements. Prerequisite: Graduate Standing.

**ELPS 832. History of Educational Thought.** *3 Credits.*
An examination of the major ideas that have shaped practice in the schools. Emphasis is placed on assisting the student with the development of a coherent and consistent personal philosophy of education upon which administrative practice can be based.

**ELPS 833. Social Context of Urban Education.** *3 Credits.*
This course examines education in urban communities through the foundational disciplines of history, philosophy, and the social sciences. Particular attention is given to ways in which the changing social and political contexts of American cities affect the educational process.

**ELPS 834. History and Philosophy of Education.** *3 Credits.*
A comprehensive study of influential persons and movements in the development of educational thought, Eastern and Western, from ancient times to the present. Emphasis on those ideas and historical roots.
which are relevant to contemporary issues in teaching and school administration.

**ELPS 835. Philosophy of Education. 3 Credits.**
An analytic inquiry into basic philosophical positions and issues relevant to education. The difference between ELPS 770 and ELPS 771 is that the latter is topically arranged and does not necessarily follow a historical sequence; it normally proceeds by problems and schools of thought.

**ELPS 837. History of Education and Culture in America. 3 Credits.**
A study of the relation between education and culture in America from colonial times to the present. American schools are considered in the wider context of cultural and social change.

**ELPS 839. Historical Inquiry in Education. 3 Credits.**
This course will provide an introduction to the methodology of historical research in education. This course is designed to fulfill the doctoral core requirement for research methods in education for students interested in doing this type of research. Specific topics will include: the historiography of education; working with primary and secondary documents; oral history as method and documentation, quantitative approaches to history; constructing historical narratives; the question of interpretation.

**ELPS 852. School Resource Management. 3 Credits.**
An examination of the sources and uses of fiscal resources in education including underlying concepts from economic theory, the impact of values on fiscal policy, state funding formulas, and school budgeting and accounting practices.

**ELPS 853. Staff Evaluation and Development. 3 Credits.**
An examination of current trends in personnel evaluation with a focus on clinical supervision and adult development. Students will participate in simulation exercises to develop skills in classroom observation, conferencing techniques, evaluation of teaching artifacts, and the construction of staff development plans.

**ELPS 854. The Student in Society. 3 Credits.**
A study of children and youth with particular emphasis on demographic characteristics of the population served by schools and implications of those characteristics for schools and schooling.

**ELPS 856. Law and Special Education. 3 Credits.**
This course focuses on laws that apply to special education. The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law and the judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting disabled children and examines the sex principles of P.L. 94-142 and similar principles in state legislation. This course is not the equivalent of or a substitute for ELPS 752. (Same as SPED 851.) Prerequisite: SPED 750 or permission of instructor.

**ELPS 871. Introduction to Qualitative Research. 3 Credits.**
An introduction to the foundations of and techniques associated with qualitative research methods. Students will practice interview and participant observation skills and will analyze and interpret data. Additional topics include crafting qualitative research questions, ethics of fieldwork, and establishing trustworthiness of data. Common traditions of qualitative methods employed in education and other related fields will be introduced.

**ELPS 881. Leadership Theory and Practice in Education. 3 Credits.**
The purpose of this course is to explore leadership in educational settings from a variety of perspectives. Readings come from a variety of disciplinary perspectives, such as sociology, organizational behavior, and psychology. The course considers various aspects of leadership and analyzes the leader's role from a symbolic perspective, as a manager of meaning, and critical change agent. The course challenges students to deconstruct leadership realities with the help of several critical perspectives with the goal of examine who the leaders are, who they will be in the future to address diverse educational organizations of tomorrow.

**ELPS 882. Higher Education in the United States. 3 Credits.**
The purpose of the course is to acquaint students in higher education, and students from other areas who intend to work in the post-secondary setting, with the history, philosophy and development of higher education in the United States. The course focuses on three periods: 1) the founding of Harvard to 1965; 2) dissent, disruption, and change, 1965-1979; and 3) the future and crucial issues, the 1980's. European higher education and its early influence on higher education in the United States is also examined.

**ELPS 883. The College Student. 3 Credits.**
The characteristics of college students; impact of college on student behavior, changing attitudes, values, beliefs, and the implications of recent research on traditional and new students for instructional and administrative practices.

**ELPS 884. College Student Access, Persistence, and Success. 3 Credits.**
The purpose of this course is to provide an introduction to the scholarly research about American college students, with a specific focus on college access, persistence and student success for various student populations. The course also provides an overview of the policy implications and practical applications of this research for college and university administrators.

**ELPS 885. Assessment and Program Evaluation in Higher Education. 3 Credits.**
Nature, objectives, and basic procedures of assessment and program evaluation as applied to the various aspects of higher education settings. In addition to basic procedures for evaluating programs, topics covered include accreditation, program review, benchmarking, student outcomes assessment, and evaluation of teaching in colleges and universities. Prerequisite: ELPS 715 or equivalent.

**ELPS 886. Theory into Practice in Higher Education. 3 Credits.**
This course is required as a final course for all master's students in higher education. It is designed to prepare students for professional life after graduation. Using a case study approach, students will examine the reality of practice in a variety of higher educational settings including relevant political and ethical factors. Prerequisite: Higher education students in last semester of master's coursework.

**ELPS 887. Race and Social Class in Higher Education. 3 Credits.**
The purpose of this course is to examine the ways in which race and class shape access to, and experiences in, American postsecondary education. To deepen our understanding of these matters, we will engage five books that explore the topic from a different perspective (e.g., for profit colleges, admissions at selective institutions, race conscious admissions, Students of Color at highly selective institutions, etc.)

**ELPS 889. Internship. 1-5 Credits.**
The on site development of the skills necessary to effectively function as a school building leader. Activities will be tailored to the needs of individual students in consultation with a university advisor and a field advisor.

**ELPS 896. Seminar in:. 1-4 Credits.**

**ELPS 897. Independent Study. 1-4 Credits.**
Prerequisite: Consent of advisor and instructor.

**ELPS 898. Master's Project. 1-4 Credits.**
Graded on a satisfactory progress/limited progress/no progress basis.

**ELPS 899. Master's Thesis. 1-6 Credits.**
Graded on a satisfactory progress/limited progress/no progress basis.

**ELPS 945. District Strategic Planning. 3 Credits.**
A study of the principles and techniques necessary for planning, developing, implementing, and monitoring a district strategic plan for improving the educational programs of elementary and secondary schools.

**ELPS 948. Research in Education Policy and Leadership. 3 Credits.**
This course is an introduction to methods of inquiry in education policy and leadership studies. It is designed to help doctoral students explore possible research interests, formulate research questions, and to review a rich variety of approaches to inquiry in the field of education. Specific topics include: interview- and observation-driven studies, ethnography, feminist and narrative methods, legal and historical methods, questionnaire-driven studies, quantitative evaluation studies, and studies using administrative and large national data sources.

**ELPS 949. Educational Policy and Politics. 3 Credits.**
This course is an introduction to the field of education policy and the politics of education. The objective of the course is to provide students with an understanding of the forces that shape educational policy, with an emphasis on governance structures, stakeholders, public engagement, and current policy issues and political contexts.

**ELPS 951. Supervision of Instruction. 3 Credits.**
A study of the principles and techniques necessary for coordinating, monitoring, and improving the educational programs of elementary and secondary schools.

**ELPS 952. School Finance: Policy and Practice. 3 Credits.**
The objective of this course is to understand the financial systems and mechanisms used by states in the funding of elementary and secondary education in the United States. In simple language, we will be concerned with five basic issues: (1) Where the money comes from; (2) How it is redistributed; (3) How it is spent; (4) The relative effectiveness of spending decisions including selected international comparisons; and (5) How the previous four financial activities participate in a common financial ecology. The course provides an overview of theory and concepts central to the understanding of school finance with an emphasis on policy issues. It also examines the mechanics of school finance funding in light of state policies.

**ELPS 953. District Human Resource Management. 3 Credits.**
An in-depth study of theory and research in personnel administration. The focus will be on current literature dealing with empirical assessments of personnel theory and techniques. Specific concepts to be considered include the following: educator characteristics, job analysis and design, personnel recruitment, selection and evaluation techniques, staffing and development, and labor relations. Prerequisite: ELPS 755 or its equivalent.

**ELPS 954. Sociology of Educational Organizations. 3 Credits.**
This class is an overview of basic and advanced sociological and political theories of organization, with specific application to issues and problems in K-12 education. It is designed for graduate students and practicing educational leaders and administrators who intend to utilize research on organizations in their studies of the governance of schools, the sociology and politics of education, and education policy. The topics covered include the origins and nature of modern bureaucracy, formal structure and function, organizational control, transaction cost economics, population ecology, resource dependence, the new institutionalism, organizational effectiveness and legitimacy, organizational culture, power and politics, and change.

**ELPS 955. District Business Management. 3 Credits.**
This course emphasizes skills for effective and efficient business and financial management of school districts in a Kansas or Missouri context. Basic topics include: Short range and long range financial planning, analysis of financial statements, budget preparation, fund accounting and financial reporting, contracting of services including transportation and food services, staff salaries and benefits and insurance. The course also includes a number of strategic methods for institutional planning including: Cost Benefit Analysis, Cost Effectiveness Analysis, and enrollment, revenue and expenditure forecasting techniques. Prerequisite: ELPS 852 or its equivalent.

**ELPS 956. District Leadership. 3 Credits.**
The focus of the course is the role of the public school district superintendent. Organized study will include assigned readings, lectures, guest speakers, discussion, and the completion of a study project. The course will include consideration of such topics as boardmanship, community relations, district leadership, professional accountability, district maintenance and operations, professional employment and relationships with other agencies. The course is designed to serve the needs of those graduate students pursuing advanced study with the intention of completing requirements for district certification. Some students will also find the field appealing as an area for dissertation research. Prerequisite: Doctoral status in education administration or permission of instructor.

**ELPS 957. Educational Policy, Ethics and Law. 3 Credits.**
Course focuses on use of legal and moral reasoning in analysis of educational policy issues. Specific topics will vary depending on interests of instructor and students and current controversy. Examples of possible topics to be included: school desegregation, teacher collective bargaining, separation of church and school, equal educational opportunity. Prerequisite: ELPS 752, equivalent, or consent of instructor.

**ELPS 958. American Educational Reform Movements: Past and Present. 3 Credits.**
An examination of the origin, nature, and consequences of educational reform in the United States. The primary goal is to attain a balanced evaluation of current educational reform.

**ELPS 959. Organization and Administration of Services for Exceptional Children. 3 Credits.**
To aid administrators and prospective administrators responsible for organizing and administering programs of education for exceptional children, state and federal guidelines and regulations, legal aspects and financing of special education, planning a program, administering special services. (Same as SPED 971.) Prerequisite: Nine hours of Education including educational psychology and SPED 725.

**ELPS 961. Conducting Quantitative Analysis in Educational Policy and Administration. 3 Credits.**
This seminar addresses basic applied analytical skills for the study of topics in educational policy, leadership, and governance. It is designed to help professional doctoral students apply and extend their existing skills as they are working on their quantitative dissertations. Upon completion of this course, students should be able to: (1) draw on a basic repertoire of key methods that support applied analysis for professional doctoral students, (2) be able to determine the type of data and research design--and associated opportunities and constraints--pertaining to their research interests and the completion of their dissertation, and (3) make progress in aligning the conceptual and empirical components of their dissertation studies. Prerequisite: EPSY 710 or EPSY 711 or EPSY 870, or equivalent.
courses. Completion of quantitative research course requirements for the ELPS Ed.D. program.

**ELPS 962. Advanced Quantitative Educational Policy Analysis. 3 Credits.**
This seminar is designed to help students develop applied econometric skills for analysis of large scale data in policy studies, with particular emphasis on education. The techniques covered in the course are applied to a variety of substantive topics. These topics may change over time given changes in the national and local policy agendas and concerns. At this point, they include teacher and school effects on student performance, faculty productivity in higher education, access to and persistence in higher education, race and class issues in the K-12 achievement gap, decomposition of school and nonschool effects, neighborhood influence on student outcomes, the dropout problem, and minority over-representation in special education. Upon completion of this course, you should be able to: (1) draw on a basic repertoire of models for application to study of key questions in policy analysis, (2) be able to explore more advanced applications of the models covered in the course and also explore new models, and (3) determine the basic requirements of and challenges in designing rigorous empirical studies in policy analysis. Prerequisite: EPSY 810 or EPSY 811 or equivalent courses (note: this course is not a continuation of ELPS 961).

**ELPS 969. Dissertation Seminar. 3 Credits.**
This seminar is designed to facilitate proposal development for doctoral-level research in educational leadership and policy studies. The objective is to help students select and refine a topic, critically analyze existing research, set forth a theoretical framework, and design a research methodology suitable for your topic.

**ELPS 970. Theory and Research in Administration. 3 Credits.**
This course is designed as a graduate seminar to support advanced doctoral students as they begin the early stages of developing a dissertation. Students will explore and develop a research topic of interest for the purposes of their culminating project. The course will introduce students to various approaches to research and published scholarship. Major emphasis is devoted to developing competencies and research skills to complete the dissertation and to engage in future research.

**ELPS 971. Comparative Education. 2 Credits.**
A factual, descriptive, and analytical study of national systems of formal education, or schooling, as exemplified in contemporary educational establishments. Organizational and administrative policies and teaching practices, with emphasis on Germany, France, England, U.S.S.R., People's Republic of China and Japan. Other nations may be examined on an individual project basis. The difference between ELPS 971 and ELPS 772 is the philosophical emphasis of the latter.

**ELPS 973. Research on College Students. 3 Credits.**
The purpose of this course is to critically examine the scholarly research about American college students from societal, developmental, research, and institutional perspectives and to review the policy implications and practical applications of these findings for college and university administrators.

**ELPS 974. Data Informed Decision Making in Higher Education. 3 Credits.**
This course will advance the students' skills needed to consume quantitative data and apply critical analyses of data within the context of higher education recognizing the social, cultural, and organizational factors that influence stakeholders and the stakeholders' acceptance of data-driven conclusions. This course provides students with an opportunity to practice making data-driven decisions to achieve institutional goals and missions.

**ELPS 975. Education, Technology and Social Change. 3 Credits.**
This interdisciplinary course provides an opportunity to read, reflect upon, and discuss ideas drawn from the emerging field of Science and Technology Studies (STS) in connection with education. Its focus is the interrelationships between technology, society, and education (defined broadly to include non-school and adult learning settings). It explores how knowledge, expertise, and authority are constructed within and across social and cultural groups, with particular attention social and economic inequality. It also considers the relationship between emerging technologies, educational experiences and the nature of “the self” in society, among other issues. Prerequisite: Admission to ELPS doctoral program, or permission of instructor.

**ELPS 979. Postsecondary Leadership and Practice. 3 Credits.**
This course is intended for doctoral students with significant administrative experience, this course focuses on the link between leadership theory and practice in postsecondary educational settings. The course content will provide students with a broad base of learning experiences related to leadership and leadership development with a specific focus on cultural dimensions, critical perspectives, and considerations for social justice in leadership. Students will be asked to reflect on their own journey of leadership identity and development and how that informs, supports, and influences practice as a higher education professional.

**ELPS 980. Finance of Higher Education. 3 Credits.**
This course is designed for advanced doctoral students in higher education, particularly those who will be preparing unit budgets or budget presentations and those who make and implement fiscal policy (e.g., financial aid offers). The course material covers different types of college and university budgeting – incremental, zero-based and formula -- and their impact on university revenues; statewide coordination and its impact on programs, program duplication and funding; reenrollment and quality issues; the legislative role in budget preparation; unified and comparative management systems (e.g., WICHE and NCHEMS); and the impact of federal contracting and student aid policies.

**ELPS 981. Higher Education Law. 3 Credits.**
An overview of the developing law of higher education, with emphasis on and analysis of employer-employee relationships, student-faculty/administration relationships, and the impact of federal and state regulation on these relationships.

**ELPS 982. Faculty in Higher Education. 3 Credits.**
This course considers the role and circumstances of faculty in higher education including variations among different types of institutions. Topics include the history and demographics of the professoriate, the academic work environment and labor market, the role of faculty in institutional governance and policy making, and the social and political context of academia.

**ELPS 983. Curriculum Innovation in Higher Education. 3 Credits.**
A study of contemporary post-secondary curriculum with particular emphasis on the nature of curriculum, the organization and structure of academic programs, the nature of change in academic communities and exemplary innovative institutions.

**ELPS 985. Program Evaluation in Higher Education. 3 Credits.**
This course reviews evaluation and assessment processes typically used in higher education with an emphasis on application to practice. Topics such as developing, administering evaluation and assessment plans at the unit or college level, and reporting assessment/evaluation data are also emphasized. Prerequisite: The course assumes some prior knowledge of or experience with assessment and evaluation.

**ELPS 986. Organization and Governance of Higher Education. 3 Credits.**
A theory-based course aimed at providing an understanding of the governance and organization of academic institutions - particularly universities. Emphasis is directed toward an analysis of decision-making in these complex organizations.

ELPS 987. Diversity Leadership in Higher Education. 3 Credits.
This advanced course examines diversity, equity and inclusion in higher education settings, with an emphasis on exploring how theory and research inform practice. This course is intended for doctoral level students.

ELPS 995. Field Experience in: 1-5 Credits.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experience will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

ELPS 996. College Teaching Experience in: 1-4 Credits.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee.

ELPS 997. Individual Study. 1-4 Credits.
Prerequisite: Prior graduate course work in the area of study and consent of instructor.

ELPS 998. Seminar in: 1-4 Credits.
ELPS 999. Doctoral Dissertation. 1-15 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

Educational Psychology Courses

EPSY 106. Multicultural Student Leadership Seminar. 2 Credits.
This course will introduce students of color to leadership theory and develop personal skills in the areas of organizational, career, and community leadership. Topics covered include public speaking, group process, time management, and discussion of the special challenges for leaders of color. Prerequisite: Must have taken Hawk Link UNIV 101 and fewer than 60 hours credit from the University of Kansas.

EPSY 305. Development and Learning of the Child. 3 Credits.
An introduction to the study of children's thinking, behavior, and development in school, home, and community settings. Classic and contemporary theories of developmental and educational psychology will be addressed; these theories will provide a foundation for thinking about important contemporary issues in child development. Specific topics covered will include research methods for studying children's development, cognitive development, intelligence, language, emotional development, aggression, moral development, and family and peer relationships. Emphasis will be placed on the study of individuals and groups, describing the process of development, and considering educational implications of theory and research.

EPSY 306. Development and Learning of the Adolescent. 3 Credits.
An introduction to the study of adolescence (puberty to roughly age 18), with a focus on implications and applications for optimal adolescent development. Approaching development from an applied lens, the course will cover foundational information on brain and biological changes that occur during adolescence, as well as on integrating this foundational knowledge with theories of learning, motivation, cognition, and emotional and social development.

EPSY 310. Career and Life Planning. 3 Credits.
The purpose of this course is to assist students with career, academic, and life planning choices. Designed to be practical and hands-on, the course relies heavily on student engagement. Through conversation and exploration, students will develop a better understanding of themselves and their career options and leave with a road-map for the future. Classes will meet twice a week in small sections. Both in-class and out-of-class activities will focus on helping students identify interests and strengths, clarify values, explore academic and work alternatives, and develop skills that can be applied to career and life planning both now and in the future.

EPSY 320. Basics of Classroom Assessment. 1 Credits.
This course is designed for sophomores in the Teacher Education Program. It presents basic concepts and methods for classroom assessment. It is meant to be an introductory course and students are expected to enroll in EPSY 520 Classroom Assessment in their senior year.

EPSY 450. Introduction to Counseling Psychology. 3 Credits.
An historical and contemporary overview of the science and practice of counseling psychology, including trends in the roles and functions of counseling psychology practitioners, the research and scientific foundations of counseling practice, the psychological theories of counseling and psychotherapy that guide professional practice, and the ethical and professional issues confronting counseling practitioners. Prerequisite: PSYC 104.

EPSY 480. Promoting Student Social-Emotional Well-Being. 3 Credits.
This course is designed for the student interested in learning and applying knowledge of educational psychology. More specifically, the goal is to help students understand how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas resulting in the ability to design and implement developmentally appropriate, relevant, and rigorous learning experiences. In addition, students will learn how to create learning environments that support individual and collaborative learning that includes teacher and student use of technology, and encouraging positive social interaction, active engagement in learning, and self-motivation. An additional goal of the course will be to help students to learn to integrate social-emotional learning (SEL) with character development into their curriculum so that students will learn, practice and model essential personal life habits that contribute to academic, vocational, and personal success. The goal is to be able to support students in making healthy decisions, problem solve effectively, value excellence and be respectful and responsible citizens. Prerequisite: EPSY 305, or EPSY 306.

EPSY 497. Independent Study. 1-2 Credits.
Only one enrollment permitted each semester, a maximum of four hours will apply toward the bachelor's degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Recommendation of advisor and consent of instructor.

EPSY 515. Research Methods for McNair Scholars. 3 Credits.
This course provides participants in the McNair Scholars program with an understanding of research methods appropriate to their field so they can write proposals for their summer research projects. Prerequisite: Acceptance into the McNair Scholars Program.

EPSY 520. Classroom Assessment. 2 Credits.
This course is an introduction to the concepts and skills required to develop and evaluate various forms of formal and informal classroom assessments to determine student learning and teacher instructional effectiveness.

**EPSY 575. Internship Exploration. 1-5 Credits.**
This course provides academic credit for a supervised practical experience in an occupational area of interest. In addition to the work-related activity, students will complete reading and writing assignments, participate in on-line discussion and create a final portfolio of internship accomplishments. Credit hours (1-5) are based on number of hours at internship site in agreement with instructor. Prerequisite: Secured internship of 8 hours per week or more for semester in which student will be enrolled in the course; permission from instructor.

**EPSY 580. Positive Psychology. 3 Credits.**
An introduction to the core assumptions and research findings associated with human strengths and positive emotions. Also an exploration of interventions and applications informed by positive psychology in counseling and psychotherapy, and its application to school, work, family and other close relationships. (Same as PSYC 598.) Prerequisite: PSYC 104 or consent of instructor.

**EPSY 598. Special Course: ______. 1-5 Credits.**
A special course of study to meet current needs of education students--primarily for undergraduates.

**EPSY 703. Constructive Classroom Discipline. 3 Credits.**
This course will examine concepts and techniques of constructive classroom management. Various theoretical orientations including humanism and behaviorism will be considered. Emphasis will be on the identification of strategies that teachers can use (1) to facilitate an environment that reduces the likelihood of misbehavior occurring, and (2) to cope constructively with individuals and groups of children to resolve difficulties that arise in the classroom. The class should have value to classroom teachers, school psychologists, counselors, and other school consultants.

**EPSY 704. Advanced Educational Psychology: Learning Processes in Education. 3 Credits.**
A study of the mental processes that influence learning and comprehension. The scope of the course will include individuals at all developmental levels and in a variety of educational settings. Key issues include the study of language, memory, concepts, motivation and social factors affecting learning processes.

**EPSY 705. Human Development through the Lifespan. 3 Credits.**
This course will cover the social, emotional, psychological, and cognitive changes that occur from conception through death. Methodological issues will also be addressed. Prerequisite: A graduate or undergraduate course in psychology.

**EPSY 710. Introduction to Statistical Analysis. 3 Credits.**
Emphasis on the conceptual underpinnings of statistical analysis of educational data.Includes univariate and bivariate descriptive statistics, sampling distributions, statistical estimation, hypothesis testing and procedures in testing statistical hypothesis for one and two sample designs. Prerequisite: Concurrent enrollment in EPSY 711 required, or with the permission of instructor on the basis of knowledge of statistical packages presented in EPSY 711.

**EPSY 711. Lab for Introduction to Statistical Analysis. 1 Credits.**
Creation and manipulation of data sets. Analysis of data with statistical packages, with an emphasis on descriptive statistics, graphical procedures, and univariate parametric methods. Graded on a satisfactory/fail basis. Prerequisite: Concurrent enrollment in EPSY 710 or EPSY 811 or with the permission of the instructor.

**EPSY 715. Understanding Research in Education. 3 Credits.**
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional course work before being fully prepared to conduct independent research. However this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include qualitative and quantitative methods and designs, historical and descriptive research, and program evaluation. (This course fulfills the requirement of a research methods course in the first 12 hours of graduate study.)

**EPSY 725. Educational Measurement. 3 Credits.**
The course is an introduction to the application of the concepts of reliability, validity, and practicality to the development, selection, use, and interpretation of tests and other measuring instruments in the field of education. The concepts of norm referenced and criterion referenced tests; the interpretation and use of norms; standard scores, percentiles, quotients, and grade equivalents are among the topics covered. An understanding of the role of measurement in evaluation, diagnosis, selection and placement is included.

**EPSY 740. Counseling and Interviewing Skills. 3 Credits.**
An experiential and performance based course having three major objectives: 1) the acquisition of basic counseling skills and strategies by means of microcounseling training; 2) learning to use these skills effectively and appropriately in a simulated counseling session; 3) the students’ understanding of their personal characteristics and how these characteristics relate to functioning as an effective helping professional. This course should normally be taken at the earliest possible time in the student’s program. Open to counseling majors. Non-majors may be admitted only by permission of the instructor, if space permits. Prerequisite: Permission of the instructor.

**EPSY 742. Counseling Theory and Techniques. 3 Credits.**
An introductory examination of several major theories of counseling and therapy including psychodynamic views, person-centered, behavioral, and cognitive-behavioral approaches. Attention given to research reviews and factors various theories have in common. Designed for graduate students in counseling psychology or allied fields. Prerequisite: Graduate student status or permission of the instructor.

**EPSY 760. Ethics, Law, and Professional Issues in School Psychology. 3 Credits.**
This course is intended to introduce the student to a) ethical principles, standards, and issues in the profession of psychology; b) legal issues involved in the practice of school psychology; c) problem-solving models to solve ethical and ethical-legal dilemmas; d) roles and functions of a school psychologist; and e) current topics in the field of school psychology. Prerequisite: Permission of the instructor.

**EPSY 765. Mental Health in the Classroom. 3 Credits.**
This course will help educators identify commonly occurring mental health problems as well as the ways in which they can affect students’ achievement, classroom behavior, and social adjustment. You will also learn how to make effective referrals to resources available for students with mental health issues in both the district and the community.

**EPSY 766. Positive Psychology in the Classroom. 3 Credits.**
Positive psychology is the study of what is right and positive about people and institutions. Positive psychologists call for an equal focus on strengths and weakness, as much attention on positive emotions as negative
emotions, as much interest in building the best things in life as in repairing
the worst, and as much attention to promoting the fulfillment of lives of
healthy people as to healing the wounds of the distressed. This course
will first present an introduction to the core assumptions and research
findings associated with human strengths and positive emotions and
then move on to explore interventions and applications informed by this
perspective in schools, as well as in domains personally relevant to the
lives of educators such as work, family, and other close relationships.

EPSY 767. Social Emotional Learning. 3 Credits.
This course is designed for the student interested in learning and
applying knowledge of educational psychology. More specifically, the
goal is to help students understand how learners grow and develop,
recognizing that patterns of learning and development vary individually
within and across the cognitive, linguistic, social, emotional, and physical
areas resulting in the ability to design and implement developmentally
appropriate, relevant, and rigorous learning experiences. In addition,
students will learn how to create learning environments that support
individual and collaborative learning while encouraging positive social
interaction, active engagement in learning, and self-motivation. An
additional goal of the course will be to help students to learn to integrate
social-emotional learning (SEL) with character development into their
curriculum.

EPSY 770. Developmental Psychopathology: Diagnosis,
Intervention, and Prevention. 3 Credits.
Foundations of child and adolescent psychopathology from a
developmental and educational perspective. Classification, assessment,
etiology of clinical disorders. Examination of risk and protective
factors associated with these various disorders. Coverage of empirically-
based intervention strategies and prevention programs. Graduate student
standing.

EPSY 797. Independent Readings and Research in: _____. 1-3
Credits.
Opportunity for students to participate in supervised reading and research
in special topics of interest (for which regularly scheduled courses are
not given). Topics and credit are arranged by advisement: May not be
used to substitute for regularly scheduled course offerings. Intended
for students with appropriate undergraduate or graduate preparation
but without extensive graduate course background in the area of
proposed study. (Students with extensive graduate work should enroll in
EPSY 997; undergraduate students may enroll in EPSY 497.) Graded on
a satisfactory/unsatisfactory basis.

EPSY 798. Special Course: ____. 1-5 Credits.
A special course of study to meet current needs of education
professionals—primarily for graduate students. Graded on a satisfactory/
unsatisfactory basis.

EPSY 800. Development during Youth and Adulthood. 3 Credits.
An examination from a life-span perspective of major issues affecting
changes after adolescence. Topics include intelligence, identity, intimacy,
the role of work, and moral concepts. Theoretical issues, research
findings, and educational and social policy implications will be examined.
Students will prepare papers on significant issues in the field and survey
extensively the research and theoretical literature. Prerequisite: Prior
enrollment in a course on naturalistic or experimental research methods.

EPSY 801. Advanced Mathematics and Mathematical Statistics
for Educational and Social Scientists. 4 Credits.
Mathematical statistics and their mathematical underpinnings are
presented in a condensed and accessible manner with details on how
they function as parts of commonly used statistical models. Mathematical
topics include advanced algebra, differentiation, multiple integration,
numerical series, matrix algebra, and matrix calculus. Statistical topics
include probability, random variables, probability density/mass functions,
algebra of expectations and variances, sampling, asymptotics, and
general families of distributions. Prerequisite: EPSY 710 or equivalent or
permission of instructor.

EPSY 802. Child Development. 3 Credits.
This course covers core concepts and current research on environmental,
individual, and interpersonal factors influencing development during
childhood (birth - age 12). Topics covered include cognition, emotion,
identity, and key social relationships (e.g., family, peers). Course
emphasizes consideration of educational practices in the context of
research on child development.

EPSY 803. Using R for Data Analysis. 3 Credits.
This course introduces R, the most popular free software environment for
statistical computing, graphics, and data analysis. It will teach students
about basic features of R, knowledge and skills of how to use R, interpret
statistical results generated from R, and write methods and results in
an academic and professional way. It will cover a variety of essential
statistical procedures, including descriptive statistics, t-test, ANOVA,
MANOVA, correlation, regression, reliability analysis, and factor analysis.
The course will employ project-based teaching approach and allow
students to work on research projects that they are interested in by
using their own data or the data provided by the instructor. Prerequisite:
EPSY 810 or EPSY 811 or equivalent course.

EPSY 805. Individual Intelligence Testing. 1-3 Credits.
Supervised experience in the administration, scoring, and interpretation
of the major individual intelligence tests for children, adolescents, and adults.
Other areas to be covered in this course will include models of intelligence
and factors influencing intelligence; measurement characteristics of
instruments used to assess cognitive abilities; ethical and legal issues
in the use of intelligence tests; and the use of cognitive assessments for
identification and diagnosis. Prerequisite: Permission of instructor.

EPSY 806. Issues in Human Growth and Development. 3 Credits.
An overview and analysis of selected issues in the field of human growth
and development. The focus will be on current issues of a theoretical and
methodological nature that affect the field of developmental psychology
and applications to social and educational settings. Prerequisite: Prior
completion of a course in developmental psychology.

EPSY 807. Theories and Research in Human Learning. 3 Credits.
An overview of important models, principles and research findings related
to the learning process. Attention is given to theories of learning and
information processing which attempt to explain perceptual behavior,
verbal learning and memory and social learning processes. Emphasis
is placed on student development of research proposals in the area
of human learning and achievement. Prerequisite: Permission of instructor.

EPSY 808. Advanced Social Psychology: Theory, Research, and
Professional Applications. 3 Credits.
This course presents major theoretical approaches and empirical
findings in social psychology, including attitude formation and change,
social influence, and intergroup relations. Interactions among self,
relationships, group membership, and culture and how each influences
thinking and behavior are addressed. This course also explores how
key social identities, such as gender and race, impact social process
and relationships. Course emphasizes consideration of educational
and clinical practices in the context of research on social psychology.
Prerequisite: Graduate standing in an EPSY program or permission of
instructor.

EPSY 810. Regression and ANOVA: General Linear Models. 3
Credits.
Analysis of variance and regression models are presented under a unified framework. Multiple correlation/regression techniques, including polynomials, analysis of interactions, ANOVA using dummy coding, planned and post hoc comparisons, multivariate ANOVA, orthogonal and non-orthogonal analysis of variance, analysis of covariance. Prerequisite: EPSY 710 or equivalent course.

EPSY 811. Analysis of Variance. 3 Credits.
Analysis of variance techniques including one-way ANOVA, planned and post hoc comparisons, multiway ANOVA, repeated measures ANOVA, and mixed designs. Prerequisite: EPSY 710 and EPSY 711.

EPSY 812. Meta-Analysis. 3 Credits.
Statistical methods to summarize results from multiple studies. Prerequisite: EPSY 811.

EPSY 814. Nonparametric Statistics. 3 Credits.
Methods of analysis for nominal and ranked data, multiway contingency table analysis. Prerequisite: EPSY 811.

EPSY 816. Evaluating School Programs. 3 Credits.
Methods and procedures for evaluating educational programs. Attention is given to the development and evaluation of goals and objectives, creation of designs to monitor processes and outcomes, utilization of test and measurement systems for assessing outcomes, establishing evaluation standards and criteria, and application of statistical analyses. Prerequisite: EPSY 710 or equivalent.

EPSY 818. Social Development. 3 Credits.
This course covers current research on environmental, individual, and interpersonal factors influencing social aspects of development, including the development of key social relationships (e.g., family, friends) across the lifespan, with a primary emphasis on childhood and adolescence. Topics covered include temperament and personality, self and identity, attachment, family relationships, peer relations, aggression, and prosocial behavior. Course emphasizes consideration of educational and clinical practices in the context of research on social development.

EPSY 820. Research and Practice in College Teaching. 3 Credits.
This course emphasizes the application of key concepts from the psychology of learning, including organization of knowledge, motivation, and metacognition, to college-level teaching practice. In this course, students will develop and evaluate course-level learning goals, evaluate instructional materials for their use of inclusive teaching practices, identify characteristics of effective assessments, and reflect on and evaluate their own teaching practices in relation to course concepts.

EPSY 822. Educational Scales, Questionnaires, and Sampling. 3 Credits.
Development, construction, validation and scaling of noncognitive instruments including questionnaires, surveys, checklists, rating scales and unobtrusive measures. The sampling methodology is emphasized. Item construction and analysis and the development of subscales are stressed. Prerequisite: EPSY 720 or EPSY 725 and EPSY 710.

EPSY 825. Positive Psychotherapy and Strength-Based Counseling. 3 Credits.
Positive psychologists call for an equal focus on strengths and weakness, as much attention on positive emotions as negative emotions, as much interest in building the best things in life as in repairing the worst, and as much attention to promoting the fulfillment of lives of healthy people as to healing the wounds of the distressed. This course will first present an introduction to the core assumptions and research findings associated with positive traits and emotions, then move on to explore interventions and applications informed by this perspective in counseling and psychotherapy. Each class will be organized as didactic presentation of core concepts, discussion of the assigned readings, and experiential learning activities. The tracking of the evolution of positive psychology is covered leading to its integration into the core change processes of integrated approaches to psychotherapy. The theories forming the foundation of the class include Broden and Build, Hope Theory, the Complete State Model, and Self Determination. Multicultural perspectives on positive traits and change processes will provide an important context for the course.

EPSY 830. Individual and Group Assessment. 3 Credits.
A consideration of basic concepts pertaining to selection and interpretation of both standardized and non-standardized assessment procedures and devices with attention given to communicating assessment information within the context of the counseling relationship. Prerequisite: EPSY 725 or comparable undergraduate principles of measurement course.

EPSY 835. Clinical Techniques in Academic Assessment and Intervention. 3 Credits.
Students will learn techniques of formal and informal assessment of academic skills in school-aged students. In addition, students will learn consultation and intervention approaches and strategies for use with students who have academic delays. This course has a field-based practicum component. Prerequisite: Graduate student standing in the School Psychology program and permission of instructor.

EPSY 836. Behavioral & Systems Neuroscience in Education. 3 Credits.
This graduate-level course is designed to provide an overview of important models, principles and research findings related to behavioral and systems neuroscience in education. Attention is given to the basic structure of the nervous system, the fundamental units of the nervous system (the neuron and the synapse), the function of different components of the central nervous system, the sensory, motor, and memory systems, and the networking of these systems in perception, learning, and cognition. Also, attention is given to how the nervous system behaves with other brain structures that support fundamental mental abilities such as attention, cognitive control, emotion, language, memory, and social cognition. Finally, within these topics, attention is given to understanding how the nervous system works by studying the physiological basis of adaptive behaviors and maladaptive behaviors of the mind.

EPSY 837. The Neuroscience of Motivation and Emotional Behaviors. 3 Credits.
Using a neuroscience lens, this course focuses on integration of research and theory on motivation and emotion from across developmental, affective, cognitive, and social fields. Emotion and motivation are the core of human life and thought, without which we could not survive even in the most benign environments. This course examines how emotion and motivation innervate thought and behavior to enrich human experience and "bias" the decisions we make in everyday life, as well as how thought, behavior, and environment innervate emotion and motivation.

EPSY 840. Guidance and Counseling in the Public Schools. 3 Credits.
This course is designed to provide information about the organization and administration of guidance and counseling programs in the public schools. Non-majors wishing to know more about the role of the counselor can be admitted with approval of the instructor.

EPSY 841. Center for Psychoeducational Services Practicum. 3 Credits.
The primary purpose of this course is for students to develop individual counseling skills by working with clients in the Center for Psychoeducational Services. In this course you will implement a semi-structured positive psychology intervention with clients experiencing mood
disorders and general psychological distress. Prerequisite: Enrollment in the CPSY MS program.

EPSY 842. Counseling Practicum (Elementary, Secondary, Counseling Psychology). 3-6 Credits.
This course is taken as one of the last courses in the master’s degree counseling program. The primary purpose of the course is for the student to develop individual counseling skills while functioning in a counseling setting. In addition to individual skills, students are also encouraged to participate in group counseling and other counseling related activities within the particular counseling setting. Students enroll in practicum for the level most closely related to their professional goals, i.e., elementary, secondary, counseling psychology. Graded on a satisfactory/fail basis. Prerequisite: EPSY 740, EPSY 742, EPSY 830, EPSY 880, EPSY 890 and EPSY 896 (Advanced Skills) and prior or concurrent enrollment in EPSY 840, EPSY 844, EPSY 846 and EPSY 875. For MS Terminal track, EPSY 845 and EPSY 956 enrollment must be prior or concurrent as well. Pre-enrollment with practicum coordinator. Students currently on academic probation will not be allowed to enroll in practicum.

EPSY 844. Theory of Group Counseling. 3 Credits.
Focuses on issues in group counseling. Topics covered are types of groups, theoretical orientation of groups, stages of group development, group leadership, selection of members, ethical issues, and effectiveness of groups. Prerequisite: Students must be admitted to the Program in Counseling Psychology. Nonmajors must have prior written consent of instructor.

EPSY 845. Substance Abuse Counseling. 3 Credits.
The aim of this course is to provide advanced training in the area of substance abuse and substance addiction counseling to graduate students in the helping professions. Topics covered include practical guidelines, specific intervention strategies, treatment principles, legal and ethical responsibilities, and issues within the field. Prerequisite: EPSY 740, EPSY 742.

EPSY 846. Career Development. 3 Credits.
Stresses the importance of career development in education, with an emphasis on developmental life planning. Course includes topics such as delivery systems, utility of career development theory, sexism and racism in career development and counseling, the effects of sex role socialization, nature of the world of work, evaluation of career information, use of career information in individual and group counseling, and the role of empirical research in career development theory and practice.

EPSY 850. Human Relationship Skills in the Classroom. 3 Credits.
The purpose of this course is to provide educators with an awareness and skill training in basic human relationship/communication skills. The course is focused on skills that provide educators with effective communication skills for working with students, educators, and parents.

EPSY 855. Psychoeducational Clinic I: Assessment, Consultation, and Intervention. 3 Credits.
This is a practical course where students apply previous learning and gain experience in assessment and intervention with children, families, and school consultation. Team collaboration, peer review, and case conferences are essential elements of this course. Students work with clients in the on campus learning center under supervision. Topical seminars also are included throughout the semester. Prerequisite: Graduate student standing in the School Psychology program and permission of instructor.

EPSY 860. Assessment of Behavior Problems and Personality. 3 Credits.
The purpose of this course is to examine appropriate assessment techniques for the evaluation of behavior problems. Interview procedures, behavioral observation strategies, behavior rating scales and checklists, self-report inventories, and rational theoretical techniques will be introduced. The intent is to place these assessment approaches in their theoretical contexts and to discuss how they could be used by pupil personnel specialists to understand the problem behavior and plan interventions to enhance students’ personal adjustment and achievement in the classroom. Prerequisite: EPSY 770, graduate standing in the School of Psychology program, or permission of instructor.

EPSY 865. Psychoeducational Clinic 2: Assessment, Consultation, and Intervention. 3 Credits.
A continuation of School Psychology Clinic I where students will be performing the same activities at a higher level of autonomy and independence. Prerequisite: Graduate student standing in the School Psychology program, EPSY 855, and permission of instructor.

EPSY 870. Quantitative Methods for Research in Educational Leadership and Policy Studies. 3 Credits.
This course addresses the conceptual basis of statistical analysis with an emphasis on applied data analysis. The use of descriptive statistics, distributions, graphic displays, hypothesis testing, group comparison, and analyses of relationships among variables to explore research questions in education will be covered. This course is designed specifically for Ed.D. students in the School of Education. Students in other degree programs may not enroll. Prerequisite: This course is open only to Ed.D. students in the School of Education.

EPSY 871. Crisis and Disaster Counseling. 3 Credits.
This course provides advanced training in Crisis and Disaster Counseling to graduate students in the helping professions, providing students with the knowledge, and skills to effectively help those in crisis. Practical guidelines, specific intervention strategies, treatment principles, legal and ethical responsibilities, and self-care regarding crisis work will be discussed and integrated. Prerequisite: EPSY 740 and EPSY 742; or consent from instructor.

EPSY 875. Understanding Cultural & Individual Differences in Professional Psychology. 3 Credits.
Examines the role of culture in human behavior and its influence in counseling theories, practice, and research. The course will assist students develop multicultural awareness, understanding, and skills in working with people from diverse racial, social, cultural, and individual backgrounds. The course will provide opportunities for self examination of cultural assumptions/values in order to develop multicultural competence. Prerequisite: EPSY 742 or equivalent.

EPSY 880. Ethical and Legal Issues in Psychology and Counseling. 3 Credits.
An examination of legal, ethical, and professional standards and issues affecting the practice of professional psychology. Topics include legislative regulation of professional psychology, ethical standards and codes of conduct for psychology and related mental health professions, standards of professional practice, and issue of practice liability and risk management.

EPSY 882. History and Systems of Psychology. 3 Credits.
A historical survey of the evolution of concepts, theories, and systems of thought in psychology with an emphasis on their relationship to contemporary or psychological theory, research, and practice. Prerequisite: Graduate standing in EPSY or consent of the instructor.

EPSY 885. Projective Assessment. 3 Credits.
The major goal of the course is to integrate information about a person from one or more projective tests into a useful summary. The projective
assessment instruments to be used include the Rorschach (using the Exner system of scoring and interpretation), the Thematic Apperception Test, and projective drawings (e.g., Draw-A-Person test). Prerequisite: At least one graduate-level course in measurement and one graduate course in assessment plus consent of the instructor.

EPSY 888. Evidence Based Practice in Counseling Psychology. 3 Credits.
This course is an introduction to the skills involved in a small number of Evidence Based Treatments, in the context of understanding their place in the pursuit of Evidence Based Practice. The course includes readings, videos, and discussion of the treatments, with a heavy experiential component of role plays and reviews on video through the Center for Psychoeducational Services. The emphasis is on developing initial skills in the selected treatments. Prerequisite: Graduate student in Counseling Psychology or permission of the instructor.

EPSY 890. Diagnosis and Psychopathology. 3 Credits.
An examination of psychological disorders from a counseling psychology perspective that emphasizes strengths. The course will cover the current version of the Diagnostic and Statistical Manual (DSM), as well as alternative taxonomies, exploring personality as it ranges from normal personality styles to personality disorders, and the full range of mental disorders. The emphasis is on identifying and assessing these phenomena and understanding behavioral and possible treatment implications. Prerequisite: Degree seeking status in Counseling Psychology or consent of instructor.

EPSY 893. Internship in School Counseling. 2 Credits.
Two consecutive enrollments covering a period of one academic year. During this time the student prepares a portfolio of skills competencies, classroom guidance programs presented, and other experiences appropriate to the student's school level. Supervision will be conducted on an individual basis and will include a minimum of two site visits per semester. Prerequisite: Must have school counseling position and a completed Masters degree from K.U. in School Counseling.

EPSY 895. Field Experience in: ______. 1-5 Credits.
Supervised and directed experiences in selected educational or mental health settings. The campus-based instructor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the campus-based instructor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit in this and additional field experience enrollments may not exceed eight hours. Graded on a satisfactory/fail basis. Prerequisite: EPSY 842 and consent of the practicum coordinator.

EPSY 896. Seminar in: ______. 1-3 Credits.
Prerequisite: Permission of instructor.

EPSY 897. Independent Study. 1-4 Credits.
Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of advisor and instructor.

EPSY 898. Master's Project. 1-4 Credits.
Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Prior or concurrent enrollment in EPSY 710, EPSY 715, or EPSY 790.

EPSY 899. Master's Thesis. 1-6 Credits.
Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Prior or concurrent enrollment in EPSY 710.

EPSY 901. Research Practicum in: ______. 1-3 Credits.
This course is designed to give students experience in conducting research. It is expected that students will take this course for at least two consecutive semesters. (This course fulfills the requirement by the School of Education for a two semester, research practicum course.) Prerequisite: Doctoral student status in a program in the Department of Educational Psychology.

EPSY 902. Research Methodology in Education. 3 Credits.
An examination and study of the problems and procedures which relate to the validity of research methods. Emphasis will be placed on reading the current literature on research methodology. Students are required to develop a research proposal. Prerequisite: EPSY 811 and EPSY 720 or EPSY 725.

EPSY 905. Fundamentals of Multivariate Modeling. 3 Credits.
In this course, contemporary approaches to multivariate analysis using mixed-effects models estimated with maximum likelihood and Bayesian methods are presented. Classical topics in multivariate analysis including multivariate analysis of variance and exploratory factor analysis, are covered in the context of mixed-effects models, preparing students for subsequent courses and research that use such model-based methods. Topics include extensions of linear models (regression and analysis of variance) for non-normal data with link functions, introductory matrix algebra, missing data modeling techniques, models for repeated measures data, and path analysis models for multivariate regression evaluating both moderation and mediation effects. Prerequisite: EPSY 810 and experience with a statistical software package.

EPSY 906. Latent Trait Measurement and Structural Equation Models. 3 Credits.
Contemporary measurement theory and latent variable models for scale construction and evaluation, including confirmatory factor analysis, item response modeling, diagnostic classification models, and structural equation modeling. (Same as CLDP 948.) Prerequisite: EPSY 905 and instructor permission.

EPSY 908. Structural Equation Modeling II. 3 Credits.
The purpose of this course is to introduce students to advanced topics in Structural Equation Modeling. Topics to be covered include multi-level models, latent growth models, mixture models and approaches to handling missing and/or non-normal data. Students will be exposed to the various statistical software programs and will be expected to become proficient in utilizing EQS. Prerequisite: EPSY 906 or equivalent course.

EPSY 910. Practicum in School Psychology. 3 Credits.
Supervised practice in the application of psychological theory to educational problems. Includes work useful with exceptional children as well as experiences in the application of such areas as mental hygiene and learning theory to problems involving the total school population. Prerequisite: Permission of advisor and instructor.

EPSY 911. Advanced Practicum in School Psychology. 3 Credits.
A continuation of EPSY 910 with special emphasis on remedial techniques associated with learning difficulties. Prerequisite: EPSY 910 and permission of advisor and instructor.

EPSY 914. Generalized Linear Mixed Models. 3 Credits.
In this course, contemporary methods for the analysis of data that are not normally distributed are presented. Generalized linear mixed models are linear models that map independent or predictor variables onto any type of outcome space of dependent variables. Such models involve the choice of distribution for the dependent variables and a link function to map predictors onto key parameters of the dependent variables distributions. Topics include logistic regression, nominal distributions, count distributions, and distributions for censored, skewed, or otherwise
irregular continuous data. Random effects or latent variables are included for each type of model. Prerequisite: EPSY 905 or consent of instructor.

EPSY 918. Seminar in Current Issues in Counseling Psychology. 1 Credit.
An examination of selected current issues in counseling psychology. Prerequisite: Doctoral student status in a program in the Department of Educational Psychology.

EPSY 921. Measurement Theory and Practice I. 3 Credits.
This course provides thorough grounding in modern validity theory including its historical precedents and derivation of classical test theory and item response theory and their application for item analysis and estimation of test reliability and standard error of measurement. Prerequisite: EPSY 725 or EPSY 811 or equivalent.

EPSY 922. Measurement Theory and Practice II. 3 Credits.
Students will learn the assumptions and application of classical test theory and item response theory approaches to scaling and reporting, standard setting, equating, identification of item and test bias, and other topics intended to prepare students for research and development regarding large-scale assessments. Prerequisite: EPSY 921.

EPSY 923. Advanced Theory and Applications of Item Response Theory. 3 Credits.
This course is designed to acquaint students with knowledge of advanced theory and applications in the field of item response theory (IRT). Topics to be covered include: advanced IRT models for dichotomous and polytomous, multidimensional, rater effects, and testlet-based item response data, estimation of parameters for these models and related software, and goodness of fit tests. The course will also focus on some advanced applications using these models, including test development, test score equating, differential item functioning, scoring and score reporting, Monte Carlo simulation studies, and innovative test designs. Prerequisite: EPSY 922 or equivalent course.

EPSY 925. Computer Programming and Applications for Educational Research, Measurement and Statistics. 3 Credits.
The purpose of this course is to provide advanced students in the areas of educational research, psychometrics, and statistics with techniques for computer programming, analysis, and carrying out research using computer simulations. The topics covered are: Programming with Fortran languages, data manipulation and management, analysis, simulation of data according to statistical and psychometric models, numerical techniques for matrix operations, sampling from distributions, solutions for non-linear equations, and Markov-Chain Monte-Carlo techniques. There are no prerequisites for this course, but those students who have coursework through the multivariate statistics level will benefit most from this course. Other suggested courses include those related to psychological and educational measurement, classical test theory, item response theory, and research methods.

EPSY 926. Hierarchical Linear Modeling. 3 Credits.
This course provides students with an introductory background in the basic principles and applications of hierarchical linear modeling (HLM). The course will review both the conceptual issues and methodological issues in using hierarchical linear modeling by working step-by-step with real data sets. Prerequisite: EPSY 810 Regression Analysis (formerly EPSY 904).

EPSY 931. Computer-Based Testing. 3 Credits.
Computer-based testing holds the promise of increasing test validity and reliability while reducing the logistical problems associated with large-scale assessment. This seminar will provide an overview of what we have learned about administering tests on computer between the 1960s and today. The focus will be on measurement issues, but depending on class interest topics will vary. A prior course in item response theory is desirable but not required. Prerequisite: EPSY 725 or equivalent course.

EPSY 932. Diagnostic Testing. 3 Credits.
There is a great demand for more useful, more actionable test scores. Traditional large-scale group administered tests do not provide this kind of information due to low reliabilities of, or high inter-correlations among, sub-scores. This course will explore approaches used by individually administered tests to provide diagnostic information, new psychometric models that hold promise of providing better diagnostic information, and implications for test design. A primary focus will be on how psychometric models can be used with diagnostic subscores that are more reliable and less correlated than traditional approaches. Prerequisite: PRE 922 or equivalent course.

EPSY 940. Advanced Studies in Educational Psychology and Research. 3 Credits.
A course designed to offer a comprehensive view of the field of educational psychology and research. The course will treat a series of thematic areas with a focus on latest developments and emerging theories in learning, development and quantitative methods. Intended for post-master's level students. Prerequisite: Prior graduate level course work in development, learning, measurement, and statistics.

EPSY 941. Bayesian Statistics. 3 Credits.
The purpose of this course is to acquaint advanced quantitative students with the fundamentals of Bayesian data analysis. The goals of the class are to introduce Bayesian inference, starting from the philosophical perspective, and provide methods for implementing Bayesian analysis for a variety of different statistical models. Class time is balanced between theoretical perspectives and practical applications. Topics covered include: a review of basic probability, Bayes' rule, probability distributions, Markov Chain Monte Carlo (MCMC) estimation and software for its implementation, and applications of MCMC to a variety of statistical models. Prerequisite: EPSY 905 or equivalent or consent of instructor.

EPSY 945. Clinical Supervision and Consultation. 3 Credits.
This course is designed to provide students with a knowledge foundation of clinical supervision and consultation theories and models, modes/ formats of supervision, the supervisory/consulting relationship, legal and ethical considerations in the provision of supervision/consultation, and supervision research issues. Prerequisite: EPSY 948.

EPSY 947. Specialist Research. 1-4 Credits.

EPSY 948. Advanced Practicum I. 3 Credits.
Designed to be the initial advanced practicum for first year doctoral students. Attention is directed to development of a broad range of basic and advanced skills. Graded on a satisfactory/fail basis. Prerequisite: EPSY 842 or equivalent.

EPSY 949. Advanced Practicum II. 3 Credits.
Intensive counseling practice, including group and individual supervision, that may be taken either through Counseling and Psychological Services or an approved site outside of the university. Focus is on the acquisition and demonstration of advanced counseling skills. Two consecutive semesters (Fall, Spring) of enrollment are required of doctoral students. Responsibility to the site is for a continuous nine months, with fall semester responsibilities ending on the first day of spring semester classes. A grade of incomplete will be granted at the end of the regular fall grading period, with the regular fall grade being granted after completion of fall semester responsibilities. Graded on a satisfactory/fail basis. Prerequisite: Satisfactory completion of EPSY 948 and prior or concurrent enrollment in EPSY 951.

EPSY 951. Psychodiagnostic Assessment. 3 Credits.
Survey of selected psychodiagnostic instruments currently in use and their administration, scoring, and interpretation. Emphasis will also be placed on the use of the clinical interview as an assessment tool, case conceptualization/diagnosis, and integrative report writing. Prerequisite: Completion of EPSY 830 and degree-seeking status in Counseling Psychology or consent of instructor.

**EPSY 952. Advanced Counseling Theory and Research. 3 Credits.**
An advanced treatment of theory, research, and practice issues central to Counseling Psychology. Topics include theoretical and research paradigms in Counseling Psychology; the relationship of theory and research to practice; and evidence on factors influencing counseling processes and outcomes. Prerequisite: Counseling Psychology doctoral student status or consent of instructor.

**EPSY 954. Vocational Psychology. 3 Credits.**
A survey of the major career development theories in counseling psychology. Models and methods of career counseling will be reviewed and integrated from the different theoretical perspectives. The empirical support of each theory and needed research will be identified. The course will include presentation of theories of career development and their specific applicability in counseling. The career development of special groups (women, the culturally different, non-whites) will be studied as well as alternative methods of delivery in career development and counseling. Prerequisite: Completion of EPSY 846 or equivalent, and Ph.D. degree-seeking status in Counseling Psychology or consent of instructor.

**EPSY 955. Research Methods in Counseling Psychology. 3 Credits.**
This course is a foundational course in research methods and design in counseling psychology. The course covers (a) design type and threats to design validity, (b) the formulation of research problems, (c) research instrumentation/variables, (d) data analytic methods, (e) interpreting data, and (f) ethical issues, research integrity, and the responsible conduct of research. Prerequisite: EPSY 710 and EPSY 711 or equivalent. Doctoral student in Counseling Psychology or consent of instructor.

**EPSY 956. Theory of Couples and Family Counseling. 3 Credits.**
A survey of contemporary systems of couples and family counseling. Consideration of couple and family function/dysfunction, theoretical models of family interaction, models of counseling practice and methods, and research on couples and family counseling. Prerequisite: Degree-seeking status in Counseling Psychology or consent of instructor.

**EPSY 960. Assessment of Infants, Toddlers, and Young Children. 3 Credits.**
The purpose of this course is to introduce the student to the assessment of various domains related to the development of infants, toddlers, and young children. The student will learn how to use formal and informal assessment techniques for screening, diagnosis, educational planning, and educational evaluation purposes. An emphasis will be placed on the linkage between assessment and intervention. This course is designed for students in the applied psychology fields (i.e., school psychology, counseling psychology, clinical child psychology, and clinical psychology). Prerequisite: EPSY 705, EPSY 725, EPSY 805 and permission from the instructor.

**EPSY 965. Foundations of Psychoeducational Consultation. 3 Credits.**
This is the first of a two semester sequence of courses on school-based consultation. The course is a combination lecture-laboratory experience that introduces the student to the literature, theory, and techniques of consultation. Prerequisite: Approval of instructor.

**EPSY 975. Therapeutic Intervention: Home and School. 3 Credits.**
The course includes a review of literature and theory as well as supervised practice. Therapeutic intervention is broadly conceived, including individual and group counseling, and parent and teacher consultation. The importance of the family-school relationship is stressed. Prerequisite: Permission of instructor and completion of course on counseling.

**EPSY 980. Advanced Topics: ____. 1-3 Credits.**
A special course of study to meet current need of education professionals--primarily for post-master's level students.

**EPSY 990. Internship in Counseling Psychology. 1 Credits.**
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved counseling psychology field setting. Supervision and directed experiences coordinated by the student's adviser, the program training director, and internship setting supervisors. Required of all counseling psychology doctoral students. Prerequisite: Doctoral degree-seeking status in counseling psychology, completion of Ph.D. comprehensive examinations, and consent of counseling psychology faculty.

**EPSY 991. Ed.S. Internship. 1-2 Credits.**
This course has two components: 1) a supervised experience as a practicing school psychologist, and 2) a group supervision class emphasizing case presentations and other integrative practice elements. The student functions as a provisionally certified school psychologist. Prerequisite: Completion of Ed.S. degree.

**EPSY 992. Ph.D. Internship in School Psychology. 1-2 Credits.**
This is a one year, supervised experience in an approved setting. The structure and content of the experience follows guidelines of several professional organizations including The American Psychological Association and the National Association of School Psychologists. Prerequisite: Approval of School Psychology committee.

**EPSY 995. Field Experience in: ____. 1-5 Credits.**
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

**EPSY 996. College Teaching Experience in: ____. 1-5 Credits.**
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee.

**EPSY 997. Individual Study. 1-4 Credits.**
Graded on a satisfactory/fail basis. Prerequisite: Prior graduate course work in the area of study and consent of instructor.

**EPSY 998. Seminar in: ____. 1-4 Credits.**
Graded on a satisfactory/fail basis.

**EPSY 999. Doctoral Dissertation. 1-15 Credits.**
Graded on a satisfactory progress/limited progress/no progress basis.
Education Courses

EDUC 698. Professional Development Micro-Credential: _____ 1 Credits.
The Professional Development Micro-credential aims to serve the workforce needs for post-baccalaureate students wishing to expand their professional competencies in the fields the School serves. The credentials will support specific workforce development by enabling professionals to have access to advanced knowledge, skills, and tools in selected areas of identified need, offering not only professional work development, but in addition, the potential for career advancement and change.

EDUC 800. Education as a Field of Scholarship. 3 Credits.
An intensive interdisciplinary examination of classic and current scholarship in education, for students in Ph.D. programs in the School of Education. It surveys the interdisciplinary range of scholarship and inquiry in education, as preparation for careers in research. The course features discussion of exemplary studies, both for their contributions to various fields, but also with regard to research methods, related ethical issues and the responsible conduct of research. Prerequisite: Admission to Ph.D. in Education Program.

Health Sport & Exercise Sci Courses

HSES 104. Physical Activity in: _____ 0.5-1 Credits.
An accurate description of the activity or activities will be given in the Schedule of Classes. Graded on a satisfactory/unsatisfactory basis.

HSES 108. Basic Skill Instruction in: _____ 0.5-2 Credits.
(An accurate description of the activity or activities will be given in the Timetable.)

HSES 110. Intermediate Skill Instruction in: _____ 0.5-2 Credits.
(An accurate description of the activity or activities will be given in the Timetable.)

HSES 112. Advanced Skill Instruction in: _____ 0.5-2 Credits.
(An accurate description of the activity or activities will be given in the Timetable.)

HSES 200. Coaching Certification for Youth Sports. 2 Credits.
This course will examine theories, practices, methods and techniques used to coach youth sports. Emphasis will be upon training, conditioning, sports psychology, nutrition, organization and management as prescribed by the National Federation of Interscholastic Coaches’ Education Program. Students will have opportunity to receive coaching certification. Prerequisite: Open to physical education majors, or by consent of instructor. Students must pass the National Federation of Interscholastic Coaches’ Education Program (NFICEP) examination before exiting the course.

HSES 201. Team Sports. 2 Credits.
This course will deal with Soccer, Touch Football, Basketball, Softball, and Volleyball. Practice in construction of lesson plans and unit plans, skill performance and peer teaching practicum are emphasized in each of the areas of team sports. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and knowledge of the activities. Open to HSES majors and minors, or by consent of instructor.

HSES 202. Individual and Dual Sports. 2 Credits.
Instruction and analysis in individual sports such as track and field, bowling or archery, and dual sports such as tennis, badminton or handball. Development of sport skills and rule knowledge are emphasized. Prerequisite: Basic fitness and knowledge of the activities. Prerequisite: Open to pre-HSES and HSES majors, or by consent of instructor.

HSES 204. Gymnastics. 2 Credits.
Instruction and analysis in the eleven gymnastics events for men and women. Skill performance, spotting and teaching techniques, lesson and unit plan construction, and teaching practicum constitute the basic focus of this course. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and gymnastics/tumbling experience. Open to HSES majors and minors, or by consent of instructor.

HSES 210. Instruction and Analysis in Swimming. 1 Credits.
Study of the skills to be included in the instruction of swimming and the analysis of skill performance involved. Presentation of instructional techniques and practice in construction of learning experiences are included.

HSES 214. Physical Education Activities for Elementary School Children. 3 Credits.
This course will introduce the student to a variety of physical education activities that are appropriate for children in grades K-6. Age appropriate activities demonstrated in this course include: individual and group games, self testing games, stunts and tumbling experiences, physical fitness, modified sports, and movement exploration. Class participation will be expected for all students. Prerequisite: Open to pre-HPE and HPE majors.

HSES 218. Lifeguard Training. 2 Credits.
The course involves American Red Cross certification in lifeguarding which includes rescue techniques and safety procedures. It also includes first aid and CPR certifications. Each student will be asked to identify common hazards associated with various types of aquatic facilities and develop skills necessary to recognize a person in a distress or drowning situation and to effectively rescue that person. This course will help each student to understand the lifeguard/employer and lifeguard/patron relationship as well as provide explanations, demonstrations, practice and review of the rescue skills essential for lifeguards. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor.

HSES 220. Officiating of: _____ 1 Credits.
A study of the rules and techniques of officiating. Students will officiate during laboratory sessions. The activities offered in officiating are: basketball, football, gymnastics, softball, swimming, track and field, and volleyball. Prerequisite: Basic competency in the sport to be officiated, or consent of instructor.

HSES 222. Water Safety Instruction. 2 Credits.
This course is designed to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. Through practice teaching sessions, students will plan and organize skill development utilizing the various educational methods and approaches applicable to swimming and water safety instruction. Students will also learn the correct swimming styles taught by the Red Cross. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor.

HSES 224. Lifeguard Training Instructor. 2 Credits.
This course is designed as a lecture/laboratory course, meeting for one hour three days per week. Each instructor candidate (student) will have an opportunity to coach youth sports. Emphasis will be upon training, conditioning, sports psychology, nutrition, organization and management as prescribed by the National Federation of Interscholastic Coaches’ Education Program. Students will have opportunity to receive coaching certification. Prerequisite: Open to physical education majors, or by consent of instructor. Students must pass the National Federation of Interscholastic Coaches’ Education Program (NFICEP) examination before exiting the course.

HSES 226. Practicum in: _____ 1-3 Credits.
A description of the activities offered will be provided in the Timetable. Prerequisite: Consent of instructor.

**HSES 240. The Coaching of Football. 2 Credits.**
A complete study of the theoretical aspects of the fundamentals of football. Study of defensive and offensive tactics for each position. Prerequisite: Sophomore standing.

**HSES 244. Introduction to Physical Education and Sport Studies. 3 Credits.**
The study of the history, foundational concepts, and current principles of physical education and sport programs.

**HSES 248. First Aid. 2 Credits.**
This course is designed to teach emergency treatment of injuries, wounds, hemorrhage, burns, and poisoning. Emphasis is placed on the techniques of rescue breathing, CPR, and emergency bandaging. American Red Cross certification is included.

**HSES 250. Introduction to Athletic Training. 3 Credits.**
Introduction to the health profession of Athletic Training. Course content includes: risk management, pathology, emergency management, musculoskeletal, and general medical conditions of the injured athlete. Prerequisite: Concurrent enrollment in HSES 251.

**HSES 251. Introduction to Athletic Training Practicum. 1 Credit.**
This course is designed to introduce the beginning skills to the pre-professional athletic training student. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Concurrent enrollment in HSES 250 or transfer credit.

**HSES 252. The Coaching of Basketball. 2 Credits.**
Theory of basketball, including methods of teaching fundamentals; individual and team offense and defense; various styles of play and methods of coaching. Prerequisite: Sophomore standing.

**HSES 260. Personal and Community Health. 3 Credits.**
Emphasis on healthful and intelligent living and the application of the fundamental principles of health.

**HSES 262. Life Skills Training for Intercollegiate Athletics. 2 Credits.**
This course will focus on issues surrounding drug use, testing, and prevention in sports and will incorporate life skills training in the areas of career transition, stress and time management, performance enhancement, strategic learning skills, and the dynamics of communication and leadership.

**HSES 264. The Coaching of Individual Sports. 2 Credits.**
An analysis of coaching techniques and study of materials for the coaching of gymnastics, swimming, golf, tennis, and wrestling.

**HSES 269. Introduction to Exercise Science. 3 Credits.**
A study of the various components of physical fitness and the wellness and the implications for developing programs to promote good health and fitness. Lectures and laboratory sessions will be centered on practical knowledge and experiences designed to help individuals enhance their own health, as well as develop sound programs for others. The topics discussed include cardiovascular fitness, body composition, muscular strength, flexibility, evaluation of fitness components, training program design, nutrition, weight management, and facts and fallacies of nutrition and fitness.

**HSES 289. Introduction to Sport Management. 3 Credits.**
This course provides an overview of the field of sport management including the principles of leadership and management and the fundamentals of personnel management, financial management, marketing, strategic planning, sport ethics, sport law, time management, stress management, facility management, and event management applied to sport settings.

**HSES 290. Safety Education. 3 Credits.**
A survey of safety problems as they exist in society today, with emphasis on preventive, corrective, and compensatory procedures.

**HSES 299. Careers in Sport Management. 3 Credits.**
In this course, students will learn about the professional world of sport management. Specifically, those enrolled will be exposed to the multitude of career paths in the sporting world. Additionally, students will learn numerous internship and job search skills such as political skill, networking, and personal branding.

**HSES 300. Study Abroad Topics in: . 1-5 Credits.**
A course designed to enhance international experience in topic areas related to health, sport, and exercise sciences at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Permission of the department.

**HSES 302. Practicum in Adaptive Physical Education for PK-12 Students. 2 Credits.**
Emphasis will be on instructional techniques that are used for the inclusion of all students in physical education learning experiences. Students will develop an understanding of how to deliver physical education activities that may be part of an individual education program. A practicum experience in a public school adaptive physical education setting will be required. Prerequisite: PE Plus advisor approval required.

**HSES 305. Methods of Strength Training and Conditioning. 3 Credits.**
This course will provide the students with the scientific principles and the hands-on experience to develop resistance exercise and related conditioning programs for a wide range of populations, including those focusing on general fitness, therapeutic rehabilitation and sport performance. Prerequisite: Anatomy, physiology, and admission to the Exercise Science undergraduate program, or permission of instructor.

**HSES 306. Principles of Personal Training. 3 Credits.**
Designed to prepare individuals who are interested in becoming certified personal trainers (CPT) through the National Strength and Conditioning Association, or to enhance their own training goals. Instruction is provided describing basic exercise physiology as well as the principles of developing a personal training regimen for a typical gym trainee. Course experiences will reinforce training principles and teach the basic skills necessary for certification. Prerequisite: Accepted to School of Education or instructor permission.

**HSES 307. Tactical Strength and Conditioning. 3 Credits.**
This course will provide students with methods and techniques associated with assessing, programming, and training tactical-based athletes and professionals. Tactical athletes include military, law enforcement, firefighter, protective services, rescue, and other emergency personnel. Students will apply scientific knowledge to develop training programs to improve performance outcomes, decrease injury, evaluate nutritional strategies, and implement relevant and safe strength and conditioning programs. This course will be designed to prepare students to take the Tactical Strength and Conditioning Facilitator (TSAC-F) certification examination proposed by the National Strength and Conditioning Association (NSCA).

**HSES 308. Drugs and Diseases in Society. 3 Credits.**
This course is an overview of human disease processes as well as legal and illegal use of drugs and narcotics for treatment or recreational
purposes. Both communicable and degenerative diseases will be covered with regards to prevention, transmission, effects, management, and treatment. Legal drugs and illegal drugs will be discussed with regards to their treatment or abuse potential, legislative issues, and consumer education. Reflective thinking will be used to formulate improved perspectives on the roles of drugs and diseases in society. Prerequisite: Admission to Community Health Program or consent of instructor.

HSES 310. Research and Data Analysis in Health, Sport, and Exercise Sciences. 3 Credits.
This course provides formal instruction in the areas of test administration, general statistics, and basic research design. Emphasis will be placed upon the interpretation of statistical data, evaluation of data, and basic methodologies utilized in health, sport, and exercise sciences research. Data collection, analysis, and evaluation will be an integral part of the class.

HSES 315. Health and Fitness Technology. 2 Credits.
The course will prepare physical education majors to use technology effectively to enhance teaching and learning. Students will explore the use of technology appropriate for communication, organization, instruction, and assessment in health and physical education classrooms. Prerequisite: PE Plus advisor approval required.

HSES 320. Methods of Teaching Physical Education. 3 Credits.
This course provides a systematic approach to the development of effective teaching skills in physical education. Students receive practical and field experiences that enable them to observe and practice managerial, instructional, and interpersonal skills necessary to produce student learning in K-12 physical education classrooms. Prerequisite: PE Plus advisor approval required.

HSES 330. Principles of Nutrition and Health. 3 Credits.
This course will provide an introduction to the basic principles of nutrition, with an emphasis on application of these principles to improve overall health. Topics include: guidelines for a balanced diet, index of nutritional quality, energy requirements and balance, weight management and obesity, nutritional quackery, sports nutrition, nutrition for children and elderly, and eating disorders.

HSES 331. Sport and Exercise Nutrition. 3 Credits.
Provides a basic understanding of the influence of nutrition on sport and exercise performance. Nutrition for sport performance, including hydration, nutrient timing strategies for various athletes, and use and regulation of ergogenic aids and nutritional supplements will be covered to apply this knowledge to develop a critical understanding of the nutritional and practical dietary needs of individuals participating in sport and exercise. Prerequisite: Accepted to School of Education or instructor permission

HSES 335. Clinical Field Experience. 1-3 Credits.
Clinical Field Experience is designed to allow students who plan to pursue clinical careers the opportunity to observe and assist (as appropriate) in the evaluation and/or treatment of patients by licensed clinicians in fields such as medicine, physical therapy, and cardiac rehabilitation. Only one enrollment permitted each semester. A maximum of six hours will apply towards the bachelor's degree, or a maximum of three credit hours will apply towards the bachelor's degree if the student subsequently enrolls in HSES 580 (Internship). Prerequisite: Admittance to the Community Health or Exercise Science undergraduate degree program in HSES.

HSES 340. Instructional Strategies in Motor Development. 2 Credits.
This course is designed to provide students with an examination of current theories of motor development throughout the life cycle. Emphasis is placed on content regarding the development of fundamental motor skills, physical growth and development, and assessment. Prerequisite: PE Plus advisor approval required.

HSES 341. Instructional Strategies in Physical Education for Elementary Classroom Teachers. 1 Credits.
The application of child growth and development principles to physical education. The use of materials as related to a sequential physical education curriculum in the elementary school will also be included. Prerequisite: Prior or concurrent enrollment in C&T 322 or equivalent.

HSES 350. Care and Prevention of Athletic Injuries. 3 Credits.
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed to cover the basic fundamentals of injury/illness recognition as well as discuss the various strategies for the prevention and care of injuries to the physically active. Prerequisite: Successful completion of Human Anatomy (BIOL 240) or equivalent course and proof of current first aid certification (i.e. American Red Cross) or successful completion of First Aid course (HSES 248).

HSES 351. Foundations of Athletic Training. 1 Credits.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athletic trainer. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Open to Athletic Training majors only. Prerequisite: Human Anatomy, First Aid, concurrent enrollment in HSES 350.

HSES 352. Therapeutic Modalities. 3 Credits.
This course is the study of therapeutic modalities utilized in treatment and rehabilitation of athletic injuries. Prerequisite: HSES 250 or the transfer equivalent, Admission to the Athletic Training Program.

HSES 353. Athletic Training Practicum I. 2 Credits.
The first in a sequence of six practical/clinical experiences for the Athletic Training Student, under the direct supervision of a Preceptor. Prerequisite: Admission to Athletic Training program, HSES 250 and HSES 251.

HSES 354. Lower Extremity Evaluation. 3 Credits.
This course teaches a systematic approach to athletic injury evaluation of the lower extremity, thorax, and abdomen. Prerequisite: Admission to the Athletic Training Program, HSES 353, concurrent enrollment HSES 355.

HSES 355. Athletic Training Practicum II. 2 Credits.
This course is the second in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission to Athletic Training program and concurrent enrollment in HSES 354.

HSES 358. Creative Movement and Dance Appreciation. 3 Credits.
Students will experience the following types of dance: creative movement, balloonroom dance, folk, square, and line dance. An appreciation for dance will be developed through the study of the pioneers of dance and the critique of local dance performances. Prerequisite: PE Plus advisor approval required.

HSES 365. Peer Health Education. 3 Credits.
The course is designed to train students in peer health education, as peer health educators in college settings, and as trainers, training adolescents in community health settings for grades 6-12 peer health education. Subject content and teaching methodologies will be emphasized in the ten content areas of health with special emphasis on alcohol, drugs, tobacco,
stress reduction, mental health and human sexuality. Prerequisite: HSES 260 or instructor consent.

HSES 369. Kinesiology. 3 Credits.
This course is designed primarily for students in the field of exercise science who have already taken an introductory course in human anatomy and who need a more detailed exposure to concepts of functional movement anatomy. This course will provide a detailed study of the skeletal and muscular systems to include identification of the origin, insertion, and action of the major muscles of the human body. Students will become proficient in the use of directional and movement terminology used to describe movement and be able to identify the plane/axis as well as the agonist and antagonist muscles involved in a movement. Prerequisite: A course in human anatomy, admission to School of Education.

HSES 370. Health and Pathophysiology. 3 Credits.
The course is designed to assist students in the development of a basic understanding of the anatomical structures and physiological processes that are central to the development of various diseases/disorders. Students will apply this knowledge to an evidence-based model for choosing and developing appropriate lifestyle and health-related interventions (e.g., exercise, nutrition, stress management), both for health enhancement and disease prevention. Prerequisite: BIOL 240 and BIOL 246; or admittance to HSES exercise science, community health, or athletic training programs.

HSES 371. Medical Terminology for Health Professionals. 3 Credits.
A study of medical terminology. This course will include: analysis of root words, prefixes and suffixes for understanding medical language; origin, modern usage and abbreviations.

HSES 372. Exercise Physiology. 3 Credits.
A fundamental study of the physiological adjustments that occur within the body during exercise. The presentation of this material is particularly oriented toward a basic understanding of the physiological systems as they are affected by the activity of a normal coaching or teaching situation. The physiological values of exercise are also stressed. Prerequisite: Three hours of physiology.

HSES 375. Neuromuscular Exercise Physiology and Motor Control. 3 Credits.
This course explores the control of human movement from an exercise neurophysiology perspective. Emphasis will be placed on understanding the interactions between the nervous system and muscular systems in the control of muscle force/power production and the control of movement under a variety of contexts. These contexts include responses and adaptations to exercise training, the aging process, and in a variety of neuromuscular disorders. Prerequisite: BIOL 240 and BIOL 246.

HSES 378. The Coaching of Volleyball. 2 Credits.
Theory of volleyball, including methods of teaching fundamentals, individual and team offense and defense. Various styles of play and methods of coaching. Efficient performance of the skills during game conditions will be emphasized.

HSES 379. The Coaching of Softball. 2 Credits.
Theory and fundamentals of coaching softball. Methods of coaching, as well as team offense, defense, and strategies will be stressed. Efficient performance of the skills during game conditions will be emphasized. Prerequisite: Consent of instructor.

HSES 380. Sociology of Sport. 3 Credits.
A survey of the current literature concerning the scope of sociology in sport, the interaction of people in sport, the social systems controlling sport, and the small group dynamics in sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 381. Sport Ethics. 3 Credits.
This course will help students develop their abilities to reason morally through an examination within competitive sports of ethical theories, moral values, intimidation, gamesmanship, and violence, eligibility, elimination, winning, commercialization, racial equity, performance-enhancing drugs, and technology. Students will develop a personal philosophy of sport and learn how to apply a principled decision-making process to issues in sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 382. Sport Facilities and Event Management. 3 Credits.
This course will provide students with a solid grasp of the fundamental skills in sport facility and event management and the knowledge base to apply those skills in a real world environment. Students will learn about planning, designing and financing the construction of new sport facilities, sport facility management of regular and special events, sporting event planning and game day operations. Prerequisite: Admission in the Sport Management major or minor and completion of HSES 289.

HSES 384. Sport Law. 3 Credits.
This course is intended to introduce undergraduate students to the major legal issues in amateur and professional sports including dispute resolution, tort law, contract law, constitutional law, statutory law, labor and antitrust law and intellectual law. Students will also learn about risk management, gender equity, the Americans with Disabilities Act and agency law and sports agents. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 385. Psychological Aspects of Exercise. 3 Credits.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, and physical therapy/rehab). The course content will include a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects influencing individuals' participation in physical activity, and an introduction to strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients. Prerequisite: Admission to the Community Health program or instructor consent.

HSES 390. The Coaching of Track and Field. 2 Credits.
Designed to acquaint the student with the fundamentals of track and field athletics.

HSES 395. Concepts in Health and Wellness. 3 Credits.
This is designed as an introductory course into the profession of School and Community Health Education. Regardless of a person's areas of specialization in Health Education, there are commonalities shared by all of us who are charged with the responsibility of providing education about health. Course emphasis will focus on: defining health education; history of health education; roles and competencies of health educators; theoretical bases for the profession; planning, implementing, administering, and evaluating health programs; settings for health education; future issues. Prerequisite: HSES 260.

HSES 403. Health Behavior Theory. 3 Credits.
This class will be an introduction to the primary models and theories used in health behavior research and health promotion practice. These models and theories undergird the development of successful health-related programs and interventions, and will help guide educators in the development of innovative and effective programming. The course will cover individual, interpersonal, community-level, and ecological theories.
and students will have the opportunity to apply these theories to health behaviors of interest.

HSES 410. Program Design in Physical Education. 3 Credits.
The study of physical education curriculum models and extraclass programs appropriate for students in grades PK-12. Students will receive practical and field experiences related to program design and implementation. They will learn techniques appropriate for program evaluation as well as the assessment of student sport skills and fitness. Prerequisite: PE Plus advisor approval required.

HSES 418. Health Aspects of Aging. 3 Credits.
This course will consist of a Holistic Health approach to the various components of the aging process. Special emphasis will be placed on the demographic aspects of aging; normal aging changes and deviations in the aging process (pathophysiology); the relationship between mental and physical health, and the implications for the promotion of risk reduction and prevention principles that can effectively improve the quality of life for older individuals. Prerequisite: A course in personal and community health.

HSES 434. Consumer Health. 3 Credits.
This course will be a comprehensive examination of the factors involved in the selection of health products and services. Topics of discussion will be: protection laws and services, fraudulent practices and products, consumerism, and traditional and alternative health care. There will also be an in-depth examination of how to assess and evaluate health based products that are available to consumers. Prerequisite: Admission to the Community Health Program or consent of instructor.

HSES 440. Applied Sport and Performance Psychology. 3 Credits.
This course will examine the psychological principles and techniques that are applied to improve sport performance and other fields of achievement (e.g., exercise and wellness, music, and academics). Special attention will be given to psychological aspects of injury and rehabilitation, psychological conditioning, psychological training methods, coaching philosophy, the social psychology of team members, and components of peak performances.

HSES 453. Communicable and Degenerative Diseases. 3 Credits.
This course is designed to introduce the student to the study of the basic concepts/principles of disease process. Special emphasis will be placed on the etiology, origin, symptoms, treatment, body defenses, primary prevention, host, agent, (microbes) and environmental factors affecting disease occurrence, prevention and control measures. Topical application of the fundamental concepts of microbiology in school/community health practice will be critically discussed. The natural history of disease and disease classification will be highlighted. Many disease topics (both communicable and chronic, degenerative diseases) will be discussed. Prerequisite: A course in personal and community health.

HSES 455. Manual Therapy Techniques and Emergency Care Instructor Training. 3 Credits.
The purpose of the course is to train students in a Manual Therapy Technique for use in the clinical setting. The course is also designed to certify students as instructors in American Red Cross First Aid, CPR and AED courses as well as instructors for the CPR/AED for the Healthcare Provider. Prerequisite: Completion of HSES 352, HSES 354, HSES 456 and HSES 459 or equivalency from an accredited Athletic Training Education Program or have current First Aid and CPR/AED for the Healthcare Provider certification.

HSES 456. Upper Extremity Evaluation. 3 Credits.
This course teaches a systematic approach to athletic injury evaluation of the upper extremity, head and spine. Prerequisite: Admission into the Athletic Training program, HSES 354, and HSES 355. Corequisite: HSES 457.

HSES 457. Athletic Training Practicum III. 2 Credits.
This course is third in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training program and concurrent enrollment in HSES 456.

HSES 458. General Medical/Pharmacology. 3 Credits.
This course will cover general medical conditions/illnesses and over the counter, prescription, and illegal pharmacologic agents commonly encountered in physically active populations. The course will cover recognition of illnesses and diseases, immediate care and medical referral, basic principles of pharmacology, pharmacological agents used in the treatment of various pathologies, and other general medical and pharmacological topics encountered by athletic trainers. Prerequisite: Admission into the Athletic Training Program, HSES 459 and HSES 460.

HSES 459. Rehabilitation. 3 Credits.
This course is the study of rehabilitation principles and techniques used to safely return a physically active individual to their sport/ activity following injury. Prerequisite: Admission into the Athletic Training program, HSES 456, and HSES 457.

HSES 460. Athletic Training Practicum IV. 2 Credits.
This course is the fourth in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training program, HSES 457, and concurrent enrollment in HSES 459.

HSES 461. Organization and Administration of Athletic Training. 3 Credits.
This course examines the organizational and administrative aspects of the Athletic Training profession. Course content includes; program management, employment, budget, facility design, risk management, documentation and medical records, insurance, legal and practice regulations, prevention and health promotion, history, and organization of the profession. Prerequisite: HSES 459, HSES 460, and concurrent enrollment in HSES 462.

HSES 462. Athletic Training Practicum V. 2 Credits.
This course is the fifth in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training Program and concurrent enrollment in HSES 461.

HSES 463. Senior Capstone in Athletic Training. 2 Credits.
This course is designed to allow senior Athletic Training Students to review previous content and prepare for the BOC certification exam as well as explore areas of professional development. Prerequisite: Admission into the Athletic Training program, HSES 561, and HSES 562.

HSES 464. Athletic Training Practicum VI. 2 Credits.
This course is the final practicum/clinical experience course for the athletic training student. Prerequisite: Admission into the Athletic Training program and concurrent enrollment in HSES 463.

HSES 465. Program Assessment and Evaluation. 3 Credits.
This course will offer an introduction and hands-on application of program assessment and evaluation techniques in health education. As health educators and program planners, we are required not only to develop innovative programs and interventions to address community- and school-based health concerns, but also to give evidence that our efforts are both adequate and effective. Successful program assessment and evaluation incorporate knowledge of basic research methods as well as the theoretical understanding of health behaviors.

HSES 466. Program Planning in Health Education. 3 Credits.
This course is designed to provide the students with an in-depth knowledge of proven health planning models that can be used for program development and intervention. Students will learn how to develop attainable program goals and objectives which will allow programs and interventions to evolve into useful forms of community based health education. Prerequisite: Students must be admitted to the School of Education and the Community Health Program.

HSES 467. Introduction to Health Education. 3 Credits. 
This course will provide an overview the various health education professions. Topics emphasized in the course are: the nature of health education, an in-depth description of community health, the school health program, and identifying program and services of voluntary and services of voluntary and official health and welfare organizations. Prerequisite: Admission to the School of Education and the Community Health Program.

HSES 468. Methods and Materials in Health Education. 3 Credits. 
Emphasis is placed on the presentation and preparation of health topics along with the recommended resources and materials available. The teaching method is emphasized and student participation is stressed. Students will observe health teachers in the public schools and identify and discuss these methods as they relate to the methods present in the class. Prerequisite: Admission to HPE teacher certification program or consent of instructor.

HSES 470. Biomechanics. 3 Credits. 
The course is designed to cover a basic understanding of the anatomical and mechanical principles of human movement. Areas covered will be joint and segmental movement, muscle actions, time-displacement motion description, forces causing or inhibiting motion, and stability. Special attention will be given to the application of the theoretical concepts in movement activities. Prerequisite: Anatomy, admission to the Exercise Science program, or permission of instructor.

HSES 473. Clinical Fitness Evaluation Techniques. 3 Credits. 
This course will provide the student with the knowledge and skills to assess components of physical fitness in adults including cardiorespiratory fitness, body composition, strength, and flexibility. In addition, specific emphasis will be placed on the development of exercise and weight management prescriptions. Students completing the course will have the skills to take the Health Fitness Instructor Certification exam given by the American College of Sports Medicine. Prerequisite: Exercise physiology and research and data analysis in HSES or equivalents.

HSES 474. Exercise Biochemistry. 3 Credits. 
This course will examine the processes that underlies the use and production of energy for exercise. Topics that will be explored include glycolysis and glycolysis in muscle, cellular oxidation of pyruvate, lipid metabolism, metabolism of proteins and amino acids, molecular biology, neural and endocrine control of metabolism, and local fatigue during exercise. Emphasis will be placed on carbohydrates, protein, and lipid metabolism and the acute and chronic effects that exercise has on these processes. Prerequisite: HSES 472.

HSES 475. Undergraduate Research in Health, Sport, and Exercise Sciences. 1-3 Credits. 
The course is designed to allow students to collaborate on an active research project under the supervision of a faculty member in HSES. Only one enrollment permitted each semester. A maximum of six hours will apply towards the bachelor's degree. Prerequisite: Enrollment by Instructor permission only. Successful completion of IRB training via the CITI training program in the KU eCompliance system.

HSES 480. Physical Activity and Exercise Management Individuals with Disabilities. 3 Credits. 
An in-depth study of how physical activity and exercise can be a part of the treatment plan for people who have chronic disease or a disability. A variety of physical activity and exercise intervention programs and models will be presented and discussed, as well as protocols for baseline testing and post-treatment testing. A portion of this course will focus on how physical activity and exercise can prevent motor functioning deterioration in people who have a disability or limited functional movement. Prerequisite: Admission to the School of Education Exercise Science or Athletic Training programs and a course in human anatomy and physiology, or consent of instructor.

HSES 481. Sport Fundraising and Sponsorship. 3 Credits. 
In this course, students will take an in-depth look at the sport fundraising and sponsorships realms. Specifically, students will focus on revenue-generating operations within sport organizations. Example topics include major gift fundraising, naming rights and other major sponsorships, annual funds, premium inventory, and trends in these evolving fields. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 482. Drugs in Society. 3 Credits. 
This course is designed to provide an in-depth exposure to basic drug classification, pharmacological effects, causes of drug abuse to society, common treatment modalities, and effective prevention/intervention strategies. In addition, consumer issues related to drug use, legislation, and drug education programs for school and community implementation will be discussed. Prerequisite: A course in personal and community health or consent of instructor.

HSES 483. Sport Finance and Economics. 3 Credits. 
This course will help students gain an understanding of the critical importance of budgeting and financing sports-related industries based on sound financial principles and methods of financial control. Students will learn how economic principles shape the major national industry of sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 484. Sport in Film. 3 Credits. 
In the course, students will critically engage and interpret a series of popular sport-related films. By the end of the course, students will be able to write and think critically about the role that film in general, and sport-based films in particular, play in promoting and challenging dominant perceptions of gender, sexuality, nationalism, race, social class, and ability.

HSES 485. Sport Communication. 3 Credits. 
This course examines the complex and evolving field of sport communication including personal, organizational, and external perspectives of sport communication. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 486. Sport Marketing. 3 Credits. 
This course is intended to provide undergraduate students with basic knowledge and competencies in definitions of marketing and sport marketing, understanding the unique aspects of sport marketing, marketing planning process, consumer demographics and psychographics, the marketing mix, segmentation and target marketing, marketing proposal preparation, sponsorship, endorsement, merchandising, fundraising, marketing goals and objectives, sport consumer and consumer behavior, industry segmentation, special events, ticket sales and their use in promotion, the role of the media, television marketing ratings and shares and venue and event marketing. The proposed content of this course will address each of these expectations. Prerequisite: Admission to the Sport Management major or minor and completion of HSES 289.
HSES 487. Personnel Management in Sport. 3 Credits.
This course provides students with an overview of the requisite communication skills and concepts of leadership and management as they relate to sport managers. Students will learn how leadership and management practitioners, utilizing effective communication techniques, shape successful sport organizations. Additional emphasis will be placed on building and nurturing relationships with people as a key to effective management. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 488. Pre-Internship Seminar. 1 Credits.
This course will prepare students for their actual semester-long Internship experience. Students will be provided with background information on available internship sites to assist in their site-selection decision. Students will learn about different management styles they may encounter, the traits and characteristics of effective and productive employees, common rules of the workplace and internship experiences of previous HSES Interns. Prerequisite: All HSES students must be in final semester prior to Internship.

HSES 489. Health and Human Sexuality. 3 Credits.
The course is designed to encompass the various components of human sexuality as well as to demonstrate applicable teaching techniques for sex education. Included in the content of the course are: human sexual response, sexually transmitted diseases, family planning, sex roles, rape, sexual preferences, and topics such as sexuality and the handicapped, sexuality and the mass media, and sexuality and the church. Teaching techniques such as values clarification, non-verbal communications, role playing, tape recordings, and problem solving are demonstrated with appropriate topics.

HSES 490. Issues in Intercollegiate Athletics. 3 Credits.
Intercollegiate athletics is a multi-billion-dollar industry. Because of the high stakes now associated with intercollegiate college athletics, the complexity of issues within athletics have grown as well. This course provides students with an understanding of the operation and decision-making process in intercollegiate athletics. Students will explore subjects such as NCAA compliance, legal aspects of college sport, and financial implications of decisions made within athletics. Prerequisite: Admission to the major or minor in sport management.

HSES 497. Independent Study. 1-3 Credits.
Only one enrollment permitted each semester; a maximum of six hours will apply toward the bachelor’s degree. This course cannot be taken as a substitute for a required course. Prerequisite: Recommendation of advisor and consent of instructor and department chairperson.

HSES 499. Internship in Sport Management. 2-16 Credits.
A full-time work experience in the sport industry (40 hours per week). This experience is actual work in a sport management setting in which management practices are applied. Student interns are directed and evaluated by a faculty member with appropriate supervision by an on-site professional. Student interns must keep an accurate accounting of hours with a performance work diary. Grades/credit for the internship are determined by a faculty member with input from the on-site supervisor. Prerequisite: Completion of all Sport Management coursework. Admission to the Sport Management Internship program.

HSES 500. Student Teaching in Physical Education. 14 Credits.
A supervised teaching experience in an approved school settings, teaching physical education for a minimum of 15 weeks at the elementary (Grades PK-5) and secondary (Grades 6-12) levels. Prerequisite: PE Plus advisor approval required.

HSES 501. Seminar in Teaching Physical Education. 2 Credits.
Student teachers will receive instruction in the completion of a teacher work sample required for teacher licensure in the state of Kansas. They will also be prepared to enter the job market through advisement on resume writing, interviewing skills and online portfolio development. Prerequisite: PE Plus advisor approval required.

HSES 502. Camp Leadership and Counseling. 2 Credits.
Involves a complete study of the organization and administration of the various types of camps. It is designed to familiarize the student with camp leadership responsibilities; the development of the camp, the program involving camp crafts, outdoor cookery, hikes and outings, singing, and simple guidance of the individual camper. Prerequisite: General psychology plus three hours in sociology.

HSES 515. Assessment of Motor Development and Motor Control of Exceptional Children. 3 Credits.
Standardized motor assessment tools appropriate for use with exceptional children with motor difficulty will be critiqued and practiced. A battery of tests to measure developmental lag or structural deviation will be selected and administered to determine the motor control of exceptional children and the results will be interpreted. Prerequisite: Six hours of physical education course work.

HSES 528. Techniques of Athletic Training - I Lower Extremity. 3 Credits.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity, abdomen, and thorax, as well as the study of common illnesses/diseases that affect the physically active. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions, will be discussed. Prerequisite: Human Anatomy, Human Anatomy Lab, Care and Prevention of Athletic Injuries, and admission to the Athletic Training Program.

HSES 529. Techniques of Athletic Training - II Upper Extremity. 3 Credits.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problem as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: HSES 528 Techniques of Athletic Training - I Lower Extremity.

HSES 578. Health Internship Seminar. 2 Credits.
Students enrolled in the internship will learn how to analyze professional health environments, examine intervention programs, and understand models used to develop health based programs. Discussions surrounding the internship experience will be facilitated by the health education faculty. Topics will relate to all phases of the internship experience. The intent of this course is to better prepare the student for entering the health profession. Discussions will be held on conflict resolution in the workplace, professional development, professional behavior and etiquette. Prerequisite: Concurrent enrollment in HSES 580 Internship in Health.

HSES 580. Internship in: ______. 2-16 Credits.
A supervised internship experience in an approved setting. The specific type of internship experience and the credits for that particular experience
HSES 671. Administrative Models and Techniques. 3 Credits.
This course will consist of an analysis of administrative models and techniques used to establish and maintain administrative systems. Prerequisite: Consent of instructor.

HSES 505. Administering Health Related Programs. 3 Credits.
This course will consist of an analysis of administration as it relates to both school and community health programs. The focus will be on administrative models and techniques used to establish and maintain sound health programs in school and community settings. Prerequisite: Six hours of health education or consent of instructor.

HSES 771. Practicum in Health Education and Wellness Promotion. 1-3 Credits.
This course is designed to provide practical community health experiences in health education and wellness promotion, including: assessment, planning, implementation and program evaluation. With approval of the instructor, students may choose their practicum focus in any of the ten content areas of health: mental and emotional, family living, growth and development, nutrition, personal health, alcohol tobacco and other drugs, communicable and chronic diseases, injury prevention and safety, consumer health and environmental health. Prerequisite: Enrolled in graduate school and consent of the instructor.

HSES 779. Physiology of Functional Aging. 3 Credits.
The course has been designed to address issues and concepts relating to the biological aging process as a foundation for physical performance, general fitness, and health status. The biological concepts are applied to the human physiological aging process and the systems involved as well...
as the possible interventions that may effect that process. The several
theories associated with physiological aging are also addressed as related
to the physiological systems and current research that may impact the
understanding of these theories. Prerequisite: A course in basic biology.

HSES 780. Internship in Teaching Physical Education. 1-16
Credits.
A supervised internship experience leading to initial physical education
teacher certification. The student assumes the total professional role as a
teacher of physical education in an approved school setting.

HSES 795. Traditions and Principles in Health Education. 3 Credits.
This course is designed to explore the philosophy and principles which
provide the foundation of health education as an academic discipline.
Specific topics include: history of the profession, theories of health
behavior and behavior change, principles of learning applied to health
communications, health promotion practices, professional preparation,
and the integration of philosophical and ethical ideals into program
planning and implementation.

HSES 798. Special Course: 1-5 Credits.
A special course of in-depth study exploring current trends and issues in
health and physical education - primarily for undergraduates.

HSES 801. Sport Facilities. 3 Credits.
The purpose of this course is to study current developments and trends
in the financing, programming, design, and construction of facilities for
intercollegiate athletics and professional sports. Prerequisite: Admitted to
graduate school. A course in the administration/management of sport or
consent of the instructor.

HSES 803. Health Behavior Theory. 3 Credits.
Given that theories of health behavior drive research and practice in
health education, the purpose of this course is to familiarize students
with the major theories and planning models related to health behavior
change. Particular focus will be applied to the role of theory in health
promotion and critical analysis of the application of theory to guide
research practices. Prerequisite: Health major or consent of the instructor.

HSES 804. Sport Psychology. 3 Credits.
This course is designed to introduce students to the current research and
theoretical perspectives in the sport psychology literature. Specifically,
students will gain a broad understanding of the three major areas of
sport psychology: social psychology (e.g., motivation), performance
enhancement (e.g., mental skills training), and psycho-physiology (e.g.,
impact of anxiety on performance). Prerequisite: Admission in the health
program or consent of the instructor.

HSES 805. Laboratory Experiments and Analysis--Exercise
Physiology. 3 Credits.
Students will learn the techniques of operating various types of laboratory
equipment and will conduct small-scale lab experiments in areas such as
respiration, circulation, metabolism, strength, neuromuscular function,
cardiac function, and body composition. Special emphasis will be placed
on laboratory techniques of assessing physical fitness. Prerequisite: A
course in exercise physiology.

HSES 806. Stress Management. 3 Credits.
The long range objectives of this course are to assist students in
gaining stress management knowledge; to help them to formulate
improved perspectives on various stress management techniques; and
consequently apply the developing constructs in their lives with a sense
of purpose and self-responsibility. Prerequisite: Two courses in health
education or consent of instructor.

HSES 807. Current Literature in Exercise Physiology. 2 Credits.
A wide range of topics from the exercise physiology literature will be
discussed. Instructor and students will present reports to the group
centered on current research findings with discussion aimed at application
of these results to physical exercise and training. Prerequisite: A basic
course in exercise physiology or consent of instructor.

HSES 808. Biomechanics of Human Movement. 3 Credits.
This course will examine the movements and the structure and function
of human beings by means of the methods of mechanics. An emphasis
will be placed on the two primary goals of biomechanics: performance
improvement and injury prevention and rehabilitation. Topics to be
covered include the kinematics and kinetics of human movement,
muscle mechanics, bone and joint mechanics, and the biomechanics
of musculoskeletal injury. Prerequisite: Courses in calculus, physics,
anatomy, and biomechanics, or consent of instructor.

HSES 810. Advanced Exercise Physiology. 3 Credits.
An advanced study of the physiological and biomechanical aspects
of muscular, cardiovascular, and respiratory function as the human is
engaging in exercise. The topics of energy metabolism, hormones, and
nutrition as related to exercise also are presented. Prerequisite: A basic
course in exercise physiology.

HSES 812. Current Issues in Health. 3 Credits.
This course is designed to review and discuss current issues in various
health related areas. The focus will be on relevant issues and topics
that are guiding and directing the health profession. The range of topics
discussed will vary from popular literature to scientific research and cover
such areas as health education, community health, and health over the
lifespan. Students in the course will be expected to report, discuss, and
interact with each other concerning the issues as they are reported.
Prerequisite: A graduate course in health or consent of the instructor.

HSES 814. Implementing Health Programs. 3 Credits.
The purpose of this course is to explore planning models used for
designing, implementing and managing health promotion programs.
Students will be trained to develop objectives, assess determinants,
select methods and strategies, pre-test program materials, and adopt
and implement promotional plans. Problem based and community based
learning experiences will be provided. Prerequisite: A health major or
permission from the instructor.

HSES 817. Practical Aspects of Aerobic and Resistance Training. 3
Credits.
This course will be a discussion of various concepts related to aerobic
and resistance training. By the end of the semester, the student should
be able to demonstrate an understanding of information presented in this
course by achieving satisfactory evaluations of presentations, papers,
and an examination of the following topics: energy metabolism, general
adaptations of aerobic and resistance training, exercise techniques
for aerobic and resistance training, periodization of training, testing
and evaluation of aerobic and resistance training performance, and
exercise prescription for aerobic and resistance training. Prerequisite:
Undergraduate course in exercise physiology or consent of instructor.

HSES 818. Legal Aspects of Public Health Education. 3 Credits.
This course is designed to enhance understanding of the variety of legal
issues which affect health educators and their audiences. Specifically,
this course will survey federal, state, and local public health laws and
regulations which may proscribe health education content and the health
educator’s actions. Legislation will be analyzed and the practical impact
of the health educator upon the legislative process will be emphasized.
Prerequisite: A course in community health or consent of instructor.

HSES 823. Behavior Modification in Health and Exercise. 3 Credits.
This course will examine the behavioral principles that influence health and exercise practices. Theories of human behavior, reinforcement theory, and models of self-esteem will serve as the foundation for studying behavior change. Society influences will be strongly emphasized. Course topics will include exercise determinants, motivation, media representation, negative behaviors, self-efficacy, social support, and effective promotion strategies. Prerequisite: Admitted to Graduate School or consent of instructor.

**HSES 824. Epidemiology and Concepts of Disease Causation. 3 Credits.**

This course involves the study of the etiology and natural history of infectious and non-infectious diseases including vector control, host defenses and resistance, investigation of disease outbreaks, mental health and public health. The course deals with detailed analytic and descriptive epidemiology and their implications for improving our understanding of health and diseases; epidemiologic consequences of nuclear war and retrospective and prospective approaches in epidemiological research. Contemporary developmental methods for disease prevention will be critically reviewed. Prerequisite: HSES 573, or equivalent, or consent of instructor.

**HSES 825. Skeletal Muscle Physiology. 3 Credits.**

This course will provide the student with an in-depth study of the structure and development, contractile mechanics, and neuromuscular system as it relates to the skeletal musculature. Structure and Development - muscle fiber, motor neuron, neuromuscular junction, muscle receptors, muscle formation, development of muscle innervation. Putting Muscles to Work - ion channels, pumps, and binding proteins, axoplasmic transport, rest and action potentials, neuromuscular transmission, muscle contraction, motor units, exercise, muscle metabolism. The Adaptable Neuromuscular System - fatigue, loss of muscle innervation, recovery of muscle innervation, neurotrophism, disuse, muscle training, injury and repair, aging. Prerequisite: HSES 810 or equivalent.

**HSES 828. Sport Finance. 3 Credits.**

A study of the principles and applications of finance and economics in the sport industry. Strategic financial planning as a part of management responsibilities is highlighted. Prerequisite: Admitted to Graduate School.

**HSES 830. Socio-Cultural Dimensions of Sport. 3 Credits.**

Current literature concerning the impact of American social values and cultural patterns of sport and physical activity will be studied. Critiques of related research involving sport and social institutions, and socio-cultural groups in sport will be emphasized. Prerequisite: A course in Sociology of Sport or consent of instructor.

**HSES 831. Ethics in the Sport Industry. 3 Credits.**

This course is designed to help students learn to make morally reasoned decisions in various sport settings. This course will help prepare students to respond more responsibly when faced with challenging ethical dilemmas and guide them in learning to serve as role models for ethical conduct.

**HSES 832. Physical Education Instructional and Assessment Methods. 3 Credits.**

The study of research-based instructional and assessment methods appropriate for PK-12 physical education. Managerial, instructional, and supervisory skills will be developed. Traditional and alternative assessment tools will be discussed. Readings, observations (live and video), and practice teaching will prepare students to complete a practical experience and an action research project in a PK-12 school. Prerequisite: Admission to Graduate School.

**HSES 833. Public Health Aspects of Exercise. 3 Credits.**

This course describes the timeline for physiologic adaptations to long-term physical activity. It describes the effects of physical activity on chronic disease. It describes, from a population perspective, the effects of physical activity on the health of the nation. Prerequisite: 12 hours of HSES courses, or equivalent, or consent of instructor.

**HSES 836. Physical Education Curriculum Models. 3 Credits.**

An examination of the elements and processes of curriculum construction in physical education for elementary, secondary, and post-secondary institution, and the institutional and professional issues that affect these processes. A study of contemporary curricula structures in regard to planning, implementation, and evaluation of K-12 curricula and professional preparation curricula in physical education programs. Prerequisite: A course in physical education curriculum, or equivalent.

**HSES 840. Organizational Behavior in Sport. 3 Credits.**

This course utilizes a micro perspective to analyze the behavior and culture within sport organizations. Specifically, the student will study and learn how to apply management and leadership theories that have the potential to shape the work environment and will discuss how current topics in organizational behavior are particularly relevant to the sport industry. Prerequisite: Admitted to Graduate School. Consent of the instructor.

**HSES 842. Sports Marketing. 3 Credits.**

This course helps students gain a deeper understanding of sport marketing by examining in-depth the sport marketing mix of product, price, place, and promotion as well as marketing research, marketing strategy, market segmentation, branding, sponsorships, licensing, venue and event marketing, public relations, and global sport marketing.

**HSES 850. Analysis Techniques for Health, Sport, and Exercise Sciences Laboratory and Field Data. 3 Credits.**

Techniques for analyzing data gathered in Health, Sport, and Exercise Sciences laboratories and field studies will be presented in this course. Techniques for the recording of raw data, appropriate organization of raw data, selection of test for analysis of data, use of computer software, and computer programming for analysis and reporting results of the data will also be included. Prerequisite: PRE 710, PRE 720, or PRE 725.

**HSES 866. Contemporary Trends in Elementary and Secondary Physical Education. 3 Credits.**

An in-depth study into the research and other forms of literature will be made to study and examine the latest trends in elementary and secondary school physical education. Games, activities, dances, and rhythms will be presented and discussed relative to developmental levels of students grades K-12. Prerequisite: A methods course in teaching physical education or consent of instructor.

**HSES 872. Exercise and the Cardiovascular System. 3 Credits.**

This course will be a discussion of various concepts specifically related to exercise and the cardiovascular system. By the end of the semester, the student should be able to demonstrate an understanding of the interaction of exercise and cardiovascular system by achieving satisfactory evaluations on examinations, abstracts, and classroom presentations. The following topics will be discussed as they relate specifically to exercise: homeostasis and cardiovascular transport mechanisms, basic structure and function; characteristics of cardiac cells; the heart as a pump; the peripheral vascular system; vascular control; venous return and cardiac output; regulation of arterial pressure; cardiovascular responses to stress; and cardiovascular function in pathological situations. Prerequisite: Undergraduate course in exercise physiology or consent of instructor.

**HSES 880. Internship in Sport Management. 1-10 Credits.**

This course will provide for supervised and directed experiences in selected sport management settings. The graduate advisor will schedule
observations of the internship, as well as regular conferences with the student. Written summaries and evaluations of the internship will be prepared by the student, the agency supervisor, and the university graduate faculty member. Prerequisite: Admission to the Graduate Program in Sport Management.

HSES 884. Legal Aspects of Sport. 3 Credits.
This course is intended to introduce graduate students to the basic concepts of the American legal system and the application of them to intercollegiate and professional sports. Particular emphasis will be given to risk management and preventive law. Other topics include: governance issues in intercollegiate and professional sports, contract law, employment discrimination, labor relations and collective bargaining, agency law and athlete agents, regulation of participation in intercollegiate and high school athletics, sport facility and event issues, participant liability issues, product liability issues, premises and spectator liability, participant violence in sports, and intellectual property law. Prerequisite: Admission to graduate program in School of Education

HSES 885. Sport Sponsorship. 3 Credits.
The course provides a detailed examination of the relationship between sport and corporate sponsorship and strategies for selling sponsorship packages. Topics covered will include the theoretical rationale for sponsorship, creating and executing sponsorship agreements, determining the value of a sponsorship, evaluation of sponsorship activities, and techniques used to sell sponsorship packages.

HSES 886. Sport Fundraising. 3 Credits.
This course will serve three primary purposes. First is to provide the student with the ability to identify and explain important principles, models, guidelines, and challenges that come with managing sport fundraising projects. Next, this course will develop the skills necessary to be a successful sports fundraiser through comprehending the various methods woven throughout the book. Finally, this course will develop the ability to apply practical knowledge in an ethical and professional manner.

HSES 890. Seminar in HSES. 3 Credits.
This course is designed to provide a general research seminar learning experience for graduate students in HSES. In particular, students will learn about faculty research activities and interests from a variety of specialty areas both within KU and outside of KU. Through faculty and guest presentations, students will be exposed to a variety of design and methodologies used to conduct research in the specialty areas of HSES.

HSES 892. Psychology of Physical Activity. 3 Credits.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, physical therapy). The course content includes a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects of individuals' participation in physical activity, and strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients/members. Prerequisite: Admission in the health program or consent of the instructor.

HSES 897. Independent Study. 1-4 Credits.
Prerequisite: Consent of advisor and instructor.

HSES 898. Master's Project. 1-4 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

HSES 899. Master's Thesis. 1-6 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

HSES 905. Advanced Concepts in Health Education. 3 Credits.
This course is designed as an in-depth study of the pedagogy of health education. It is concerned with the effects of various health education models, new materials, and innovative teaching techniques. The effectiveness of various media such as films, slides, transparencies, microcomputers, and assessment tools will be analyzed. Research concerning innovations in education will be investigated along with a study of future trends in the field. Timely issues of controversy about health education practices and the effectiveness of values clarification activities will also be discussed.

HSES 910. Biochemistry of Exercise. 3 Credits.
This course will include an in-depth examination of metabolic and endocrine principles as they relate to physical exercise and training. Specific topics will include: substrate utilization in exercise, metabolic controls, muscle biochemistry, body composition, nutritional aspects and hormonal influences in exercise. Both instructor and students will report on the most current literature relating to the topics. Prerequisite: Human biodynamics or a course in biochemistry.

HSES 926. Grant and Research Proposal Writing. 3 Credits.
This is a course for students to examine the sources and areas which provide financial support for research projects. The areas of study include types of research funding available on a local, state, and federal level, the elements and design of writing a proposal and strategies involved in securing financial support for research. A focus for the course will center upon preparing a research proposal for funding. Prerequisite: PRE 710.

HSES 940. Scientific Dimensions of Exercise and Health. 3 Credits.
This course has been designed to bring together the many scientific factors relating exercise and physical activity to health and human function. The course focuses on the interdisciplinary nature of this relationship and reviews the physiological, sociological, psychological, and behavioral factors involved. Prerequisite: Fifteen hours of graduate level course work in health or physical education and admission to health or physical education doctoral program.

HSES 980. Advanced Topics: _____ 1-3 Credits.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students.

HSES 981. Current Issues in Health and Physical Education. 3 Credits.
This course will explore the latest philosophical issues and controversies which are impacting the fields of health, physical education, and athletics. The student will explore the current and future ramifications of each issue and its potential effects on the profession. Prerequisite: Admission to the Health, Sport, and Exercise Sciences Doctoral Program.

HSES 990. Doctoral Seminar. 3 Credits.
This seminar based course will be designed to prepare the doctoral student for academic careers or careers in industry after they graduate. The topics covered will be promotion and tenure procedures and expectations, including but not limited to teaching, responsible conduct of research, professional ethics, historical ethical issues, evaluation of ethical dilemmas, and service expectations at research intensive institutions, regional comprehensive institutions and small liberal arts colleges. Industry career options will be discussed and guest speakers from various disciplines will be brought in to discuss options and expectations with this career path. Prerequisite: Doctoral student or permission of the instructor.

HSES 995. Field Experience in: _____ 1-5 Credits.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations
of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

HSES 996. College Teaching Experience in: ______. 3 Credits.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee.

HSES 997. Individual Study. 1-4 Credits.
Prerequisite: Prior graduate course work in the area of study and consent of instructor.

HSES 999. Doctoral Dissertation. 1-15 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

Special Education Courses

SPED 261. Families and Professional Partnerships. 3 Credits.
This course provides information on issues and practices related to working together in partnership with families of young children including those who have a young child with special needs. Emphasis will be placed on taking a family systems prospective and a family-centered approach to family support. Strategies for effective communication for the purpose of information sharing and collaborative planning with families are provided. Relevant current scientifically based evidence will be reviewed and discussed pertaining to these topics.

SPED 326. Teaching Exceptional Children and Youth in General Education. 3 Credits.
This course is designed for general education teacher trainees. It will provide them information about students with disabilities that they will have in their classrooms and the law governing special education and its implications for them as general educators. The course will address Individualized Educational Plans that are developed for students with disabilities and how general educators contribute to these plans. Students will learn about planning instruction that is differentiated to meet various learner needs, universal design principles and instructional tools, providing meaningful access to general education classrooms and curriculum for students with disabilities and designing and delivering appropriate accommodations and modifications to assist student learning. Prerequisite: Admission to the Teacher Education Program.

SPED 327. Instructional Practices for Students with Disabilities. 3 Credits.
SPED 327 focuses on effective, efficient strategies for delivering inclusive educational opportunities for students with significant support needs. Educator candidates will learn to structure, manage, teach and support social and emotional well-being for students with significant support needs. In this course, students will learn about systematic assessment and instructional procedures designed to meet students’ academic, behavioral, and social-emotional needs.

SPED 328. Using Technology to Plan and Design Instruction for All Students. 3 Credits.
This course addresses the use of technology to explore complex real world problems that impact an inclusive society. The course introduces and provides indepth information of education frameworks including Universal Design for Learning (UDL), Multi-tiered Systems of Support (MTSS), and Positive Behavior Interventions and Supports (PBIS). Students will engage in applying UDL and other support frameworks in content-based learning environments. These experiences will integrate “problem-based learning” (PBL) to understand disciplinary knowledge, solve problems, and develop skills in instruction with technology solutions being an integral component.

SPED 362. Introduction to Early Education and Early Childhood Special Education. 3 Credits.
This course is designed to provide an overview of the field of early education including early childhood education and early childhood special education. The historical, philosophical, research-base, policy and legal foundations for the field are discussed to provide the students with the knowledge to become an advocate for early learning opportunities (birth through grade 3) for all children and their families.

SPED 401. Professional Learning Seminar I. 1 Credits.
The purpose of the professional learning seminars is to collaboratively engage KU students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that our KU students face in the schools. We will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the ethical conduct of professional teachers who make decisions each day that affect the lives of children and their families.

SPED 402. Professional Learning Seminar II. 1 Credits.
The purpose of the professional learning seminars is to collaboratively engage KU students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that our KU students face in the schools. We will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the ethical conduct of professional teachers who make decisions each day that affect the lives of children and their families.

SPED 403. Professional Learning Seminar III. 1 Credits.
The purpose of the professional learning seminars is to collaboratively engage KU students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that our KU students face in the schools. We will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the ethical conduct of professional teachers who make decisions each day that affect the lives of children and their families.

SPED 439. Student Teaching: Unified Early Childhood. 6-9 Credits.
A supervised student teaching experience leading to initial teaching licensure in Kansas Unified Early Childhood (birth through grade 3). The student assumes the professional role as a teacher in an approved inclusive early childhood infant/toddler or preschool. Prerequisite: Admission to the Unified Early Childhood program. Approved application of intent to student teach.

SPED 440. Evid Based Prac in English/Lang Arts Literacy for Students Struggling or w/ IEPs: Beg Read & Writing. 2 Credits.
This course focuses on the development of foundational skills for planning, implementing, and assessing reading and literacy development for students with disabilities served in general education settings. Learning will focus on skills and dispositions to effectively plan with educational practitioners (general education, related services, paraprofessionals), to design curricular and instructional strategies to support and deliver high quality reading and literacy instruction to students with disabilities. The course will focus on how, as a teacher, one participates in tiered support systems and facilitates/provides appropriately focused and intensive literacy instruction. Prerequisite: SPED 326, SPED 327, SPED 328.

SPED 441. Evidence Based Practices in Reading and Literacy for Students w/IEPs:Vocabulary&Comprehension Devel. 2 Credits.
This course focuses on the development of foundational skills for planning, implementing, and assessing reading and literacy development for students with disabilities served in general education settings with a focus on the "reading to learn" skills of vocabulary development, and comprehension in various content domains and texts. Learning will focus on skills and dispositions to effectively plan with educational practitioners (general education, related services, paraprofessionals), to design curricular and instructional strategies to support and deliver high quality reading and literacy instruction to students with disabilities. Prerequisite: SPED 326, SPED 327, SPED 328, SPED 440.

SPED 442. Evidence Based Practices in Mathematics, Science, and Social Studies for Students with IEPs. 2 Credits.
This course focuses on the development of foundational skills for planning, implementing, and assessing math, science, and social studies knowledge and skills for students with IEPs. The course will emphasize many of the "behind-the-scenes" strategies and activities that must be completed regularly and frequently with teaching colleagues to make progress in these three content areas possible for all elementary students. Prerequisite: SPED 326, SPED 327, SPED 328.

SPED 443. Evidence-based Strategies and Practices for Creating Positive, Productive Classrooms. 3 Credits.
This course focuses on effective, efficient strategies for setting up and monitoring classroom management practices for ALL students. In this course, students will learn about tiered systems of supports designed to meet students' academic, behavioral, and social-emotional needs. They will learn about the importance of designing positive behavioral interventions and supports based on the values and cultures of the community, with strong involvement from diverse families and community members. Prerequisite: SPED 326, SPED 327, SPED 328.

SPED 444. Classroom Assessment and Beyond. Practices for Students with IEPs. 3 Credits.
This course focuses on the development of foundational skills for classroom assessment. It includes planning for student learning, assessing student progress, communicating with students and families to track learning over time, and planning with colleagues to address learning needs and challenges that may emerge from progress monitoring.

SPED 446. Professional Learning Seminar UEC. 1 Credits.
The primary purpose of the professional learning seminars is to collaboratively engage KU students, KU faculty, and early childhood professionals in a continuous seminar that focuses on important issues that our KU students face in the ECE (birth - grade 3) programs. We will critically examine instructional practices that support all young learners belonging and success, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the philosophical and psychological. The professional learning seminars are designed around key features of effective professional learning communities and sustained professional development for early childhood educators. Features include supportive, collaborative learning, shared personal and professional practice, and collective inquiry of teaching and learning. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Admission to the Teacher Education Program is required.

SPED 450. Dis/ability in an American Context. 3 Credits.
This course is designed to introduce undergraduate students of any major to important theoretical and practical concepts regarding special education, disability, and diversity. Successful completion of this course fulfills one requirement for the School of Education minor in Education.

SPED 494. Internship-Specialized Instr in Gen Ed Elem Classrooms&Support Settings for Students w/Disabilities. 6 Credits.

A supervised field experience leading to initial teaching licensure in Elementary Education Unified (K-6). The teacher candidate assumes the total professional role as a teacher serving students with high incidence disabilities and low incidence disabilities in inclusive elementary classrooms and in support settings. Prerequisite: Admission to EEU program, completion of EEU program courses with B or better/enrollment in final semester of program, approved application of intent to complete internship.

SPED 495. Developing the ECU Teaching Portfolio. 1 Credits.
This course meets in conjunction with student teaching and includes assigned readings, participation, and writing. The seminar provides opportunities for candidates to discuss their transition from their role as an aspiring early educator to a career in early childhood education within birth to grade 3 community and public-school settings serving young children and their families. Candidates will engage instructional planning, implementation, and outcome assessment including reflection on their own successes and challenges as they move to becoming a qualified reflective early childhood educator. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Admission to the Teacher Education Program is required.

SPED 497. Independent Study. 1-2 Credits.
Only one enrollment permitted each semester, a maximum of four hours will apply toward a bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor.

SPED 501. American Sign Language I (ASL I). 3 Credits. F1
This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction.

SPED 502. American Sign Language II (ASL II). 3 Credits. F2
This is the second level course in American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 501.

SPED 503. American Sign Language III (ASL III). 3 Credits. F3
This is the third level course in American Sign Language. The primary objective of the American Sign Language III “Signing Naturally” Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 502.

SPED 504. American Sign Language IV (ASL IV). 3 Credits. F4
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV “Signing Naturally” Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 503.

SPED 506. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Credits.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers.
within these structures. Prerequisite: Admission to the Teacher Education Program.

**SPED 507. Advanced Practices for Children with Disabilities Middle/ Secondary General Education Classroom. 3 Credits.**
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program.

**SPED 598. Special Course: _____ 1-5 Credits.**
A special course of study designed to meet current needs of education students; primarily for undergraduates.

**SPED 635. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Credits.**
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extent research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent.

**SPED 641. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Credits.**
This course will provide in depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor.

**SPED 642. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Credits.**
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 326.

**SPED 650. Constructing Early Childhood Curriculum. 3 Credits.**
Students in this course will learn to design, implement and evaluate developmentally appropriate curricula and programs for children from birth through kindergarten. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Students analyze and evaluate curriculum that focuses on the five developmental domains a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development; and e) gross and fine motor development and in addition the content domains of literacy, science, math, and fine art. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Prerequisite: Admission to School of Education UEC program.

**SPED 661. Supporting Children with Significant Learning and Behavioral Challenges. 3 Credits.**
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission to the Teacher Education Program.

**SPED 663. Assessment Strategies in Early Education. 3 Credits.**
Examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission to the Teacher Education Program.

**SPED 664. Inclusive Strategies and Intervention for Infants and Toddlers. 3 Credits.**
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical/movement, communication) development domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admission to the Teacher Education Program.

**SPED 665. Inclusive Strategies and Intervention for Preschoolers. 3 Credits.**
Provides the opportunity for students to develop and evaluate inclusive environments for young children. This course emphasizes meeting the needs of all young children through an integrated approach to planning, implementing and assessing instruction in all areas; linking assessment information to individualized instruction; developing Individual Educational Plans (IEPs) and promoting collaboration among families, schools and communities. Service delivery systems and transitions between early childhood programs are reviewed in relation to curriculum. Curriculum development for early childhood content areas (literacy and language, numeracy, science, social studies, physical education and the arts) and domains (language, social/emotional, physical, and cognitive) will be explored. Prerequisite: Admission to the Teacher Education Program.

**SPED 667. Field Experience in Preschool. 1 Credits.**
This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained in SPED 665 Inclusive Strategies and Intervention for Preschoolers, by working with infants and toddlers in early intervention settings/programs. To be taken concurrently SPED 665. Prerequisite: Admission to the Teacher Education Program.
SPED 672. Field Experiences with Exceptional Children and Youth: ____. 1-3 Credits.
A course designed to provide experiences for students to participate with exceptional children in public schools and/or residential facilities and with professional personnel associated with the lives of exceptional students including special education teachers, child care workers, therapists, etc. Students will have opportunities to participate as aides, tutors, and instructors with individual and small groups of exceptional youth in one or more placements. Through weekly meetings with the instructor students are guided to relate their experiences to the needs and services for exceptional children and youth. Prerequisite: SPED 635.

SPED 675. Practicum with Children and Youth with Disabilities: ____. 1-10 Credits.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. The course is differentiated from SPED 775 through the amount of scaffolding undergraduate students will receive when demonstrating skill application (e.g., undergraduates report and receive feedback on practicum experiences on a more frequent basis, reduced data collection requirements, more emphasis on cooperating teacher providing guidance, etc.). This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 675 cannot enroll in SPED 775 within in same curricular area. Prerequisite: SPED 326.

SPED 701. American Sign Language I (ASL I). 3 Credits.
This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction.

SPED 702. American Sign Language II (ASL II). 3 Credits.
This is the second level course American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 701.

SPED 703. American Sign Language III (ASL III). 3 Credits.
This is the third level course in American Sign Language. The primary objective of the American Sign Language III “Signing Naturally” Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 702.

SPED 704. American Sign Language IV (ASL IV). 3 Credits.
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV “Signing Naturally” Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 703.

SPED 725. Introduction to the Psychology and Education of Children and Youth with Disabilities. 3 Credits.
This course provides an overview of current practices in the identification, placement, and education of students with disabilities. This course emphasizes on patterns of social, cognitive, language, and physical development. Social, political, and economic advocacy issues are also addressed. Prerequisite: One course in Child Development.

SPED 726. Exceptionality and Technology. 1 Credits.
Technology has the potential to dramatically improve the education and quality of life for people with disabilities. This course presents you with a basic foundation for understanding technology in special education, a functional model for selecting the best technology applications for students with special needs, and strategies for applying your knowledge to practical situations.

SPED 730. Characteristics, Methods & Assessment: Intro Struggling Learners & Studnts High-Incidence Disabilities. 3 Credits.
The course is designed as an introduction to the characteristics, assessment and identification process, and initial instructional and behavioral interventions needed in meeting the needs of students with high-incidence disabilities under the Kansas Adaptive Teacher Education Standards. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Frameworks for instruction and conceptualizing best practice will be introduced including the principles of Universal Design for Learning and the Multi-Tier System of Support. The role of the educator in identifying, understanding and implementing evidence-based practices is also examined. Curriculum resources and intervention strategies for students with high-incidence disabilities will be introduced with emphasis on tiered planning and implementation. The course is intended for persons working toward the Kansas teaching endorsement in the Special Education Adaptive Area. Prerequisite: Admittance into the Adaptive endorsement teacher education program in the Department of Special Education or permission of the instructor.

SPED 731. Supporting Children with Significant Learning and Behavioral Concerns. 3 Credits.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children birth through 5 years with significant support needs. These include young learners with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments including dual sensory impairments, complex health care needs, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child’s strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor.

SPED 752 or its equivalent, SPED 734 or its equivalent, and SPED 755 or its equivalent.

SPED 734. Inclusive Strategies and Intervention for Infants and Toddlers: ____. 3 Credits.
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child’s development across the five (social-emotional, adaptive, cognitive, physical, communication) developmental domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor.

SPED 735. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Credits.
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent.
SPED 736. Foundations of Early Intervention. 3 Credits.
This course explores evidence-based principles and practices of providing early intervention services, including requirements of IDEA Part C, mission and key principles of early intervention and recommended practices and standards. Students will engage in guided field observations of assessment, intervention and collaborative practices, reflective practice and teaming/coaching activities. (Same as SPLH 736.)

SPED 737. Infants and Toddler with Significant Needs. 3 Credits.
This course explores the challenges infants and toddlers with significant developmental needs face and how to best support their participation in daily activities. Challenges faced by medical, physical, communication, social-emotional, hearing, vision, and mental health issues will be discussed along with how to support these needs across disciplines and in the home and community activities. This course will provide in-depth review of the unique challenges these children and families face and how providers from various backgrounds can work together to best support children and families. Environmental adaptations and direct instructional techniques to maximize independence tailored to the infant and toddler’s strengths and needs will be explored. Information is also provided on assistive technology designed to provide supports. Functional behavioral assessment procedures, proactive intervention strategies and psycho-educational approaches as well as the development of collaborative support plans will be studied. (Same as SPLH 737.)

SPED 739. Special Education Early Childhood Unified Practicum. 1-3 Credits.
A supervised field experience leading to initial teaching licensure in Kansas early childhood unified (birth through kindergarten). The student assumes the total professional role as a teacher in an approved inclusive early childhood program to include infant/toddler and preschool or kindergarten. Prerequisite: Admission to ECU licensure program.

SPED 741. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Credits.
This course will provide in depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor.

SPED 742. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Credits.
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 635 or 735.

SPED 743. Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management. 3 Credits.
This course provides a problem-solving approach and the framework for teaching and assessment strategies to develop pro-social behavior in students with disabilities and their typical peers in classrooms and whole school contexts. Students assess problem behavior, discover the functions of problem behavior, and learn pro-social alternatives in home, school, and community settings. Prerequisite: SPED 730 or permission of instructor.

SPED 750. Curriculum and Methods in Early Childhood. 3 Credits.
This is a curriculum and methods course that addresses how to design, implement and evaluate developmentally appropriate curricula and programs for children from birth to six years of age. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Students analyze and evaluate curriculum that focuses on facilitating progress in the domains of a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development and e) gross and fine motor development. Students also analyze and evaluate curriculum standards and frameworks for the young child's acquisition of concepts, skills and dispositions that support the development of early competencies and interest in literacy, mathematics, the sciences, social studies, the arts and individual and group sports. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent (may be taken concurrently).

SPED 752. Overview of Early Childhood and Early Childhood Special Education. 3 Credits.
The course serves as an introduction to the profession including historical, philosophical, social and psychological foundations, awareness of value, ethical and legal issues, staff relations and the importance of becoming an advocate for children and families. Students will analyze/interpret trends in early education, including diversity, early childhood special education, family centered practices, legislation, public policy, and developmentally appropriate practice. The two key professional organizations, National Association for the Education of Young Children (NAEYC) and Division of Early Childhood for the Council for Exceptional Children (DEC), recommended practices serve as the foundation for understanding the roles, knowledge and competencies of the early educator. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor.

SPED 753. Assessment in Early Education. 3 Credits.
This course examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor.

SPED 755. Inclusive Strategies and Interventions for Preschoolers: 3 Credits.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at-risk for developmental problems and disabilities. It is directed toward: (a) "how" to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the "what" to teach, or the selection
of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 (may be taken concurrently).

SPED 756. Special Education Leadership. 3 Credits.
This is an introductory course in special education law and policy implementation. It is designed to provide school and district administrators, and other special education stakeholders, with a basic understanding of key points in the history of special education law and policy. It focuses primarily on the Individuals with Disabilities Education Act (IDEA) and its core concepts, with particular attention to Least Restrictive Environment (LRE). This course is designed to provide a working knowledge of IDEA's procedural requirements, the preferred practices associated with implementing the procedures in schools, criticism of these practices and their implementation, and ideas for addressing these criticisms in ways that promote more equitable and inclusive special education practices. Prerequisite: Degree in Special Education, School Psychology, or related fields.

SPED 757. History, Context, and Critique of Special Education. 3 Credits.
This course is designed to provide school and district administrators, and other special education stakeholders, with a general understanding of the history of the treatment of individuals with disabilities and the development of special education law and policy over time. It foregrounds current issues in the post-IDEA organization of the field, highlighting the goals and challenges of democratic leadership and civic professionalism in relation to special education. The course concludes with a final paper and online presentation examining how history, disability, difference and justice inform special education leadership, both in theory and in practice. Prerequisite: Degree in Special Education, School Psychology, or related fields.

SPED 758. Appropriate Education and Least Restrictive Environment. 3 Credits.
This course is designed to give school and district administrators, and other special education stakeholders interested in special education leadership, a deep understanding of two core principles of the Individuals with Disabilities Education Act (IDEA). These are: (1) appropriate education; and (2) least restrictive environment. The course continues the same pattern established in the previous courses for this four-course program. It introduces these core IDEA concepts, features a week of discussions of these concepts, and follows with a week on remedies to address key issues identified. The last two modules of the course focus on the Individualized Educational Plan and inclusive practices. The course concludes with a final project. Prerequisite: Degree in Special Education, School Psychology, or related fields.

This course is designed to give school and district administrators, and other special education stakeholders interested in special education leadership, a deep understanding of three of the core principles of the Individuals with Disabilities Education Act (IDEA). These are: (1) non-discriminatory evaluation; (2) parent participation; and (3) procedural due process. The course continues the same pattern established in the previous courses for this four-course program. It introduces these core IDEA concepts, features a week of discussions of these concepts, and follows with a week on remedies to address key issues identified. The last two modules of the course focus on the Individualized Educational Plan and inclusive practices. The course concludes with a final project. Prerequisite: Degree in Special Education, School Psychology, or related fields.

SPED 760. Introduction to Autism Spectrum Disorders. 3 Credits.
An introductory graduate-level course on autism spectrum disorder. Addresses characteristics of children and youth with autism spectrum disorder. Also surveys trends, issues, and evidence-based practices promoting academic, social, behavioral, and communicative development of learners with autism spectrum disorder.

SPED 772. Participation with Children and Youth with Disabilities: _____. 1-3 Credits.
A course designed to provide field experiences with children and youth with disabilities in settings where educational services are provided. Students work directly with professionals such as special education teachers, general education teachers, therapists and other support personnel. Students participate as aides, tutors, and instructors with individual and small groups of children and youth. Ongoing meetings with supervisors are designed to facilitate both reflection and strategic learning.

SPED 775. Practicum with Children and Youth with Disabilities: _____. 1-10 Credits.
An introductory graduate-level course on autism spectrum disorder. 3 Credits.
This course is designed to provide field experiences with children and youth with disabilities in educational settings. This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 775 cannot enroll in SPED 675 within in same curricular area. Prerequisite: Varies by topic.

SPED 785. Application of Assessment Information for Exceptional Children and Youth: Autism Spectrum Disorder. 3 Credits.
An analysis of information derived from assessment instruments and procedures appropriate to measuring the social and cognitive development of exceptional children and youth. Provides experiences in determining assessment data required in the development of individualized educational programs (IEP). Attention is also given to the design of informal assessment procedures, specific to the needs of exceptional children and youth. Experience is provided in the preparation and presentation of assessment data for use in instructional planning conferences. Prerequisite: SPED 760; SPED 860; SPED 785.

SPED 790. Methods for Learners with Higher-Functioning Autism Spectrum Disorder. 3 Credits.
This is a methods course, with special emphasis on learners with high-functioning autism spectrum disorder. Particular attention is given to evidence-based practices and strategies for teaching, managing and promoting social skill and social communication development and proactive social interactions. Prerequisite: SPED 760; SPED 860; SPED 785.

SPED 798. Special Course: _____. 1-5 Credits.
A special course designed to address topical issues. Graded on a satisfactory/unsatisfactory basis.

SPED 800. Teaching Language and Communication Skills to Students with Autism and Developmental Disabilities. 3 Credits.
Course covers aspects of communicative behavior of learners with autism and other developmental disabilities. Emphasis is on a verbal behavior approach and evidence-based practices for teaching communication skills including symbol exchange systems, augmentative and alternative communication strategies, and speech generating devices. Methods for evaluating intervention fidelity and effects on communicative behavior are covered along with strategies to support collaboration between
speech and language pathologists and other individualized education team members. Prerequisite: Completion of SPED 760 and SPED 860 or instructor approval.

SPED 803. Mathematics Development and Intervention for Students with Learning Disabilities (K-5). 3 Credits.
Designed for teachers, specialists who manage intervention programs, and graduate students pursuing intervention research in mathematics, this course explores mathematics development, methods for designing and testing mathematics interventions, and procedures for developing mathematics programs for students. The focus of this course is on the mathematical development and intervention for students with learning disabilities at the elementary level (K-5), considerations for students learning English alongside learning mathematics, and tiered interventions in general and special education.

SPED 841. Advanced Methods & Assessment: Learning Strategies & Content Mastery for Students with Significant Behavior, Social & Emotional Need. 3 Credits.
This course is designed for graduate students enrolled in the Masters of Science Program with an emphasis in school-age populations primarily with high mild disabilities or seeking to obtain a license to teach students needing an adapted curriculum in Kansas. Course experiences focus on how to identify and implement evidenced-based practices designed to increase the success of students with mild disabilities in mathematics, social studies, science, and language arts through their participation in general and special education classrooms primarily in grades 4-12. This course emphasizes practices associated with understanding and evaluating curricular demands, monitoring student progress in content-area courses, providing tiered supports and accommodations in teaching, using assessment and grading alternatives, and incorporating the principles of explicit and strategic instruction to design instruction that will promote and enhance content-area learning. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, SPED 741, admittance into the High Incidence Disabilities program in the Department of Special Education, or permission of the instructor.

SPED 842. Methods in Access and Inclusion in the Core Curriculum. 3 Credits.
This course focuses on foundational skills for setting up an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the "behind-the-scenes" strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742.

SPED 843. Advanced Methods & Assessment: Strategies for Students with Significant Behavior, Social & Emotional Need. 3 Credits.
This course is designed to introduce educators and related service professionals to prevention and intervention related to a broad range of antisocial, aggressive, and behavioral problems. Approaches focus on understanding and addressing the precipitating factors related to inappropriate behavior, short-term approaches for immediate crises, and problem-solving strategies for longer-term change. Course content will include antisocial, aggressive, and violent behavior; options for classroom interventions; school and system-oriented interventions, and ethical and legal issues involved in various prevention and intervention approaches. Class work will focus on literature, research-based intervention approaches, and case work illustrating specific approaches and programs. Prerequisite: SPED 631 or SPED 731, SPED 741, and SPED 743.

SPED 844. Advanced Methods in Access and Inclusion in the Core Curriculum. 3 Credits.
This course develops critical skills for implementing an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the day-to-day strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient for all learners. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742.

SPED 851. Law and Special Education. 3 Credits.
This course focuses on laws that apply to special education, especially "Individuals with Disabilities Education Act" and "No Child Left Behind Act." The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law, and judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting students with disabilities and examines the six principles of P. L. 94-142 and similar principles in state legislation. (Same as ELPS 856.)

SPED 852. Citizens with Disabilities, Public Policy, and Policy Analysis. 3 Credits.
Students to analyze public policy that affects citizens with disabilities, various models of analysis are brought to bear on federal policy (e.g., education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation, and others). This course is not valid for core requirement in history and/or philosophy of education. Prerequisite: SPED 851 or permission of instructor.

SPED 854. Family and Interprofessional Collaboration in Special Education. 3 Credits.
This course is designed to provide knowledge and skills to implement federal and state mandates for special education and related services programs as they relate to building and maintaining relationships with families of students with disabilities, and developing effective school programs. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for special education students' participation in district and state assessment; (b) relationships between general and special education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of children and youth with disabilities. Course topics will include collaboration in schools, community systems and families, historical perspectives of family life and school involvement, effective relationships between home, school, community, communication among professionals and with families, school-based programs, home-based programs, and multicultural considerations. Prerequisite: SPED 631 or SPED 731, or SPED 632 or SPED 732, or SPED 735.

SPED 856. Transition Education and Services from Childhood through Adulthood. 3 Credits.
The purpose of this course is to provide a background in career development and transition education for persons with disabilities from middle school through adulthood. Emphasis is placed on IDEA requirements for transition services, career development and transition processes, transition services assessment, secondary special education curricular implications, career development and transition service needs, collaborative services in schools and communities to promote quality transition services, and issues and trends in transition education and services.

SPED 857. Career Development for Youth. 3 Credits.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of career development for youth with
disabilities. Emphasis is placed upon theory and practice related to career development, workbased learning, and school and community vocational training models. Prerequisite: SPED 856.

SPED 858. Assessment for Transition Planning. 3 Credits. This course is designed to provide a review of psychometric principles and their utility as a foundation for quality assessment in transition assessment and planning for youth with disabilities. Formal and informal assessments across a range of transition planning areas are reviewed and evaluated. Skills in curriculum-based assessment, rating scales, situational assessment, and functional assessment are emphasized. Prerequisite: SPED 856 or permission of instructor.

SPED 859. Interagency Services for Transition to Adulthood. 3 Credits. The purpose of this course is to provide an overview of interagency and community services and systems for adolescents and young adults with disabilities. Emphasis is placed on theory and practice related to interagency collaboration; systems change efforts in transition services; and state-of-art practices regarding supporting individuals with disabilities in community employment, living, socialization, community participation, and other areas of adult life. Prerequisite: SPED 856.

SPED 860. Education of Children and Youth with Disabilities: Autism Spectrum Disorder. 3 Credits. This course is designed to prepare students to implement evidence-based strategies for individualized and group instruction. Methods for developing and implementing overall treatment/educational programs, planning or selecting curriculum/service models for programs, and developing instructional materials are emphasized. Procedures for managing classroom staff and service resources, coordinating educational programs with families, other service personnel and program support staff, and monitoring overall program effectiveness are addressed. Prerequisite: SPED 760.

SPED 861. Blending Academics and Transition. 3 Credits. The purpose of this course is to provide graduate students with research evidence of each of the components of universal design for learning within access to the general academic curriculum: multiple means of representation, expression, and engagement. Prerequisite: SPED 856.

SPED 862. Work-Based Learning. 3 Credits. The purpose of this course is to provide graduate students with models and strategies to develop and coordinate meaningful work experiences for youth with disabilities. Emphasis is placed on practical strategies for engaging with community businesses, developing and customizing jobs and supporting youth in the workplace. Prerequisite: SPED 856.

SPED 863. Student Engagement in School and Community. 3 Credits. The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of models and issues pertaining to school and community engagement for secondary age youth. Prerequisite: SPED 856.

SPED 871. Advanced Practicum with Exceptional Children Needing an Autism Spectrum Curriculum. 3 Credits. This is an advanced practicum experience for the graduate student teaching children and youth with autism spectrum disorder (ASD). The practicum is designed to provide intense, diverse and direct teaching experiences with children and youth who have learning and behavioral needs in the mild through moderate range and who have been identified with ASD. Prerequisite: SPED 760; SPED 860; SPED 785; SPED 790; SPED 800; SPED 743.

SPED 875. Practicum with Children and Youth with Disabilities: _____ 1-10 Credits. This course is designed to provide intensive field work and direct teaching experiences with children and youth with disabilities in educational, residential, and clinical settings. Prerequisite: SPED 775.

SPED 897. Independent Study. 1-4 Credits. Prerequisite: Consent of advisor and instructor.

SPED 898. Master's Project. 1-4 Credits. Graded on a satisfactory progress/limited progress/no progress basis.

SPED 899. Master's Thesis. 1-6 Credits. Graded on a satisfactory progress/limited progress/no progress basis.

SPED 910. Advanced Application of Behavioral Management Techniques to Exceptional Children and Youth. 3 Credits. Theory and principles of behavioral analysis. Emphasis will be given to observation, measurement, recording, and visual display techniques. Other topics include maintenance and generalization of behavior change. Students will be provided experience in the design and carrying out of research studies related to exceptional children and youth using principles and methods of behavioral analysis. Prerequisite: SPED 425 or SPED 725 and SPED 839.

SPED 915. Advanced Curriculum Development for Children and Youth with Disabilities. 3 Credits. This course is designed to provide principles of development, needs assessment, evaluation and dissemination applied to curriculum products. Analysis of organizational and conceptual features of major curriculum development projects for students with disabilities are addressed; participants design curriculum procedures. Prerequisite: Twelve semester hours in special education and a general curriculum course.

SPED 920. Management of Instructional Resources for Exceptional Children and Youth. 3 Credits. Designed for individuals with responsibilities for the operation of instructional resource centers and educational programs serving exceptional children and youth. Experiences relate to: selection, acquisition, circulation, and management of special education instructional media/materials and the delivery of in-service training specific to their skills. Prerequisite: Professional preparation and/or experience in the Education of Exceptional Children and Youth and C&I 616, Introduction to Educational Communications.

SPED 930. Praxis Seminar: Scholarship and Writing. 3 Credits. Course assists first-year doctoral students in (a) developing a scholarly identity and technical skills in the areas of teaching, scholarship, and service, (b) developing a critical understanding of the scholarship informing special education practices and policies through course readings and seminar discussions, and (c) developing the skills to complete a comprehensive, critical review of a topic in the field of special education and disability. Prerequisite: Doctoral student status in Special Education.

SPED 932. Praxis Seminar: Scholarship of Teaching. 3 Credits. Course assists doctoral students in learning (a) what is known about effective teacher education, (b) how that knowledge is translated into practice, and (c) what methodologies can be enlisted to conduct cutting-edge teacher education research. Prerequisite: Doctoral student status in Special Education.

SPED 936. Cross-Spec I: Conceptual Issues in Special Education. 3 Credits. The focus of the seminar is current and historically-significant disability-related special education issues and problems (e.g., inclusive education, effective instruction, race and social class bias) that both intersect and
implicate the various special education doctoral specializations. Because such problems tend to be intractable, the seminar is designed to build student capacity for conceptualizing and addressing them by exploring forms of disciplinary, interdisciplinary, and specialization scholarship and inquiry applicable to (re)framing and potentially resolving them. Prerequisite: Doctoral student status in Special Education.

**SPED 937. Cross-Specialization Seminar: Methodological and Conceptual Issues in Special Education. 3 Credits.**

The purpose of this seminar is to enable doctoral students to develop an interdisciplinary stance in their research and teaching by building meaningful connections across three types of knowledge-metatheoretical foundations of the social science and humanities disciplines; methodological and theoretical knowledge of the social sciences/humanities and theoretically-oriented social professions; and specialized knowledge of education, special education, and related professions. The primary focus of the seminar is the methodological traditions of the social sciences/humanities and education and their application to historically-significant, intractable special education problems such as exclusion/segregation, instructional ineffectiveness, and race and class bias, all of which intersect and implicate our various doctoral specialization areas. The secondary focus is application of the theoretical knowledge of the social science/humanities disciplines and theoretically-oriented social professions to these and related contemporary special education problems.

**SPED 949. Specialist Research. 1-4 Credits.**

**SPED 950. Civic Professionalism. 3 Credits.**

This course is concerned with the relationship between professions and society in a democracy, and specifically, with the ethics and practices associated with the professions of education, special education, and other disability-related fields. Models of professionalism are compared and advantages of civic professionalism for individuals with disabilities and their families, the professions, and society as a whole are explored. Lessons drawn from disagreements over questions such as the nature and social consequences of the professions are used to broaden understanding of what professionalism could and should be in a democracy. Prerequisite: Admission to doctoral program.

**SPED 951. Supporting Early Childhood/Early Childhood Special Education Practitioners in Evidence Based Practice. 3 Credits.**

This course will add to the formation of doctoral students as scholars who support practitioners as they strive to be effective consumers of research and implement evidence based practice. The course will address history and current trends, issues/problems and associated methodologies, key leaders, and schools of thought for the fields of Early Education/Early Childhood Special Education with a focus on educator preparation. This course includes active involvement in teaching Early Childhood Unified masters degree students participating in SPED 752, Overview of Early Childhood/Early Childhood Special Education. Doctoral students will help plan and teach SPED 752 course sessions as well as mentor SPED 752 students, who are developing understandings of and writing about evidence based practice. Prerequisite: Admission to the Special Education Doctoral program or instructor permission.

**SPED 954. Disability, Justice and Democracy. 3 Credits.**

This course is concerned with what justice requires for people with disabilities, and in this regard, with the institutional, political, and cultural barriers to these requirements today and historically. As such, it is an interdisciplinary treatment of the place of disability in theories of justice from Rawls's contractualist theory of justice through Nussbaum's capabilities approach, as well as a critical-theoretic analysis of injustice toward people with disabilities from the Enlightenment to contemporary society. Prerequisite: SPED 950 or permission of the instructor.

**SPED 955. Intersectional Oppression in Special Education Policy and Practice. 3 Credits.**

This course is designed to explore the ways in which difference is traditionally perceived and responded to in special education policy and practices in the United States. We will examine how larger systems and individual perceptions about multiple forms of difference and larger social processes, intersectionality, conspire to create particular forms of injustice. Students in the course will analyze the processes of intersectionality to understand how students at the intersections of multiple oppressions experience education within communities of practice that enact, reproduce, and resist policies through their daily activities. We will build an understanding of intersectionality as a "method and a disposition, a heuristic and an analytic tool." Furthermore, we will explore how these students need access to opportunities to dismantle systemic inequities, which will support their engagement with formal learning communities such as schools. Prerequisite: Admission to the Special Education doctoral program or instructor permission.

**SPED 956. Families, Diversity, and Special Education. 3 Credits.**

This course will engage students in analyzing, evaluating, and planning for conducting research into an array of equity issues for families of students with or considered "at risk" for disabilities associated with the programs and professionals that serve them. Students will critically engage the origins and reproduction of dominant discourses regarding families from diverse backgrounds, drawing on interdisciplinary frames and research approaches for identifying systemic inequities within educational institutions for families and their children from diverse racial, ethnic, social class, and linguistic backgrounds. Prerequisite: Admission to a doctoral program.

**SPED 957. Instructional Technology and Design for Individuals with Diverse Learning Needs. 3 Credits.**

This course is designed to provide students with a foundational understanding and analysis of emerging critical topics and research in instructional design, technology innovation, implementation of innovation across higher education and k-12 environments as it relates to struggling learners, especially individuals with disabilities. The focus of the course is to contextualize issues in design, planning, development, implementation, and evaluation of technology as it aligns to the needs of struggling learners and their peers with identified disabilities. Topics will include Assistive Technology (AT), Instructional Technology (IT), Universal Design (UD), Universal Design for Learning (UDL), models of instructional design, usability, human-factors/performance measurement, blended and online learning (higher education k-12), adoption/abandonment, outcome measures, Technological Pedagogical Content Knowledge (TPACK) and current trending topics related to research, teacher education, and implementation of IDT in higher education and k-12 education, again, as it applies to the relevant needs of struggling learners and their peers with disabilities. Students will be required to coordinate requirements with research & teaching competencies and outcomes of the special education doctoral program specific to the IDTI specialization. Prerequisite: Admission to a doctoral program.

**SPED 958. Advanced Research in Universal Design for Learning. 3 Credits.**

As we understand more about the learning process, the more we recognize the importance of design. Simple modifications to the learning environment and the instructional process can shape whether learners access, process, and develop understandings within the experience. As future leaders, it is important for you to understand and continually reflect on how the design elements within your research, teaching, and service will impact learners. Universal Design for Learning (UDL) provides a basis for thinking about the use of design within the learning process. As a scientifically-based instructional framework, UDL is focused on supporting
the variability that exists in all learners. UDL integrates proactive as well as iterative instructional design across goals, methods, materials, and assessments to support the development of expert learners. This course is designed to expand on the foundational knowledge of UDL to support an interdisciplinary understanding across various fields of study that engage in the framework’s advancement. Learners will develop understanding surrounding the contemporary issues and topics facing UDL in research, development, and implementation. Prerequisite: Admission to a doctoral program.

SPED 959. Advanced Research and Analysis of Instructional Design and Technology for Diverse Learners. 3 Credits.
Covers four themes relative to instructional design and technology innovation research for students with disabilities and diverse learning needs: (1) understanding initial usability testing in design and development of innovations, (2) basic comprehension of research methodologies applicable to design and technology analysis, (3) expansion of usability testing and similar formats to the increasingly K-12 environments within and outside the traditional brick-and-mortar setting, and (4) applying knowledge to initial design and implementation of research. Prerequisite: Admission to a doctoral program.

SPED 960. Special Education Policy and Politics. 3 Credits.
This course is concerned with political struggles associated with the formation of special education law and policy and its implementation in schools and associated institutions. Using an interdisciplinary theoretical framework that views policy development historically and institutionally, it analyzes the formation and implementation of the Individuals with Disabilities Education Act from its origins in disability-focused social movements to its implementation in largely resistive school organizations. Prerequisite: SPED 950 or permission of instructor.

SPED 963. Self-Determination, Support Needs, and the Application of Positive Psychology to Disability. 3 Credits.
Practices pertaining to the third wave of the disability movement and the third generation of inclusive education emphasize strengths-based models that conceptualization disability not as a deficit within the person, but in the context of the gap between personal capacity and the demands of the environment. This course will provide students with in-depth instruction and reading pertaining to 21st century understandings of disability, how strengths-based positive psychology can contribute to the education of students with extensive and pervasive support needs, and how supports-paradigms and assessments (Supports Intensity Scale for Children) can be used to identify and provide needed supports to students with more extensive support needs. Because the aforementioned changing understandings of disability and a movement to a supports paradigm emphasizes the importance of promoting the self-determination of all students, including students with extensive and pervasive support needs, the second half of the course will provide a life span survey of the self-determination construct, examining evidence-based theories of the construct and their application to the education of students with disabilities; the importance of promoting self-determination to academic and transition-related outcomes, and roles of families and others in the development of self-determination. Prerequisite: Admission to a Doctoral program.

SPED 964. Inclusion & Access to General Education Curriculum for Secondary Students w/Extensive Support Needs. 3 Credits.
IDEA requires that all students be involved with and progress in the general education curriculum. This course will build on the previous two courses in the specialization to overview supplementary aids and services, special education services, and related services necessary to ensure that students with extensive and pervasive support needs are provided instruction and are successful in the general education curriculum. The course will focus on the importance of inclusive education, and the role of universal design for learning in the education of students with significant cognitive disabilities. Prerequisite: Admission to a doctoral program.

SPED 965. College and Career Readiness for Students with Extensive and Pervasive Support Needs. 3 Credits.
School reform has emphasized college and career readiness for all students. This course will examine the application of College and Career Readiness (CCR) to students with extensive and pervasive support needs. Theory and research will be examined during this class focusing on methods, materials, and strategies to ensure a successful transition from secondary education to college or a career for students with significant cognitive disabilities. Three themes, reflecting improvement science, research and translation to practice, serve as foundations this course: (1) What is known about CCR from interdisciplinary theory and practice, (2) How do critical elements translate into successful translation for systems supporting students with significant disabilities, and (3) Is there consensus related to application of CCR theory and research for students with significant disabilities. Prerequisite: Admission to a doctoral program.

SPED 966. Issues Related to Serving Students with Intensive Support Needs. 3 Credits.
Course focuses broadly on current issues and trends in scientifically supported methods for identifying, assessing, and serving students with intensive support needs. Prerequisite: Admittance to the Special Education doctoral program or instructor permission.

SPED 968. Evidence-Based Practices for Students with Intensive Academic, Behavior, and Social Support Needs. 3 Credits.
This course will focus on preventing the development of academic, behavior, and social challenges and responding effectively when challenges do occur. Course content will include the use of behavior and academic screening tools to detect and support students with and at risk for academic, behavior, and social challenges within comprehensive, integrated, three-tiered (CI3T) models of prevention. In addition, students will learn about evidence-based strategies, practices, and programs for supporting students with and without identified disabilities for whom Tier 1 efforts are insufficient. Students will develop their abilities to analyze, synthesize, and apply research methods related to design, implementation, and evaluation of Tiers 1, 2, and 3. Students will be required to coordinate requirements with research and teaching competencies and outcomes of the special educational doctoral program. Prerequisite: Admission to a doctoral program or permission from the instructor.

SPED 970. Problems of Exceptionality: _____. 3 Credits.
An extensive analysis of the literature and research pertinent to issues in a given disability. Separate sections are organized for various disabilities. Students may enroll in more than one section as a part of a graduate program. Prerequisite: Three courses in special education or permission of instructor.

SPED 971. Organization and Administration of Services for Children and Youth with Disabilities. 3 Credits.
This course is designed to prepare administrators and prospective administrators for organizing and administering educational programs for students with disabilities. Major topics include a review of current trends in special education, state and federal guidelines and regulations, legal and financing aspects of special education, program planning, and administration of special services. (Same as ELPS 959.) Prerequisite: Nine hours of education including educational psychology and SPED 725.

SPED 972. Issues and Trends in Special Education I. 2 Credits.
This course is designed to assist first-year special education doctoral students organize and synthesize a conceptual and substantive map of the field of special education and introduce them to corresponding faculty research interests and resources. Emphasis is placed on the academic writing expectations and resources of the field, university, and department, and on building a cohort of students to address common issues and to provide a foundation for peer support throughout the doctoral program. Prerequisite: Admission to special education doctoral program or permission of instructor.

**SPED 973. Issues and Trends in Special Education II. 2 Credits.**
This capstone seminar is designed to assist advanced doctoral students synthesize and evaluate information on a broad range of current and historically significant special education issues and trends in preparation for comprehensive examinations and future professional roles. Substantively, its primary focus is issues and trends that affect the entire field or cut across several areas of study and practice. Its secondary focus is significant issues and trends that affect particular categorical or functional sub-areas of study and practice within the field. Prerequisite: Completion of nine doctoral courses in special education, including 4 of 6 departmental Core courses.

**SPED 974. Issues and Trends: Students with Learning Disabilities. 3 Credits.**
This doctoral level course will explore current issues related to characteristics, educational methods and curriculum, and questions, problems, concerns and movements connected to the education of children and youth with learning disabilities, emotional/behavioral disorders and autism spectrum disorders. Prerequisite: Doctoral program admission or permission of instructor.

**SPED 975. Advanced Practicum with Children and Youth with Disabilities: _____, 1-10 Credits.**
Advanced development of conceptual and practical field-based skills. Prerequisite: SPED 775.

**SPED 977. Learning Disabilities/Behavior Disorders Issues II. 3 Credits.**
This course is designed to provide students an opportunity to engage in an extensive analysis of the literature and research pertinent to critical issues in the field of learning and behavioral exceptionality. Prerequisite: SPED 970 LD/BD Issues I; SPED 972 Trends and Issues in Special Education I.

**SPED 980. Advanced Topics: _____, 1-3 Credits.**
A special course of study to meet current needs of education professionals -- primarily for post-master's level students.

**SPED 981. Changing Complex Systems. 3 Credits.**
This course is designed to provide students with an overview of seminal leadership and systems change literature. Prerequisite: Admission to doctoral program.

**SPED 982. Preparing Future Faculty. 3 Credits.**
This course is designed to give students an introduction and overview of academic life and the roles and responsibilities of an academic career. Its primary purpose is to help develop a realistic perspective of the expectations of academic life and the competencies required for a successful start in an academic career. Organized around the broad themes of understanding the academy, faculty life and work, and academic career paths, course content addresses the roles and responsibilities of faculty life in different types of institutions and the issues faculty face as they pursue their academic careers. The course offers an opportunity for students to critically review their doctoral program in the context of preparing them for a successful start in an academic career and to explore options for academic career choices. Prerequisite: Doctoral program admission.

**SPED 983. Research Funding and Proposal Development. 3 Credits.**
This course is designed to teach a broad array of strategies associated with the development of successful proposals that will generate funds to support programmatic work. Among the topics covered in this course are sources of funding, strategies for conceptualizing and writing proposals, collaboration strategies, proposal peer-review process, and integrating proposal development activities into other professional responsibilities. Prerequisite: Admission to doctoral program and EPSY 710.

**SPED 984. School Reform and School Community Partnerships. 3 Credits.**
This is an interprofessional course in public policy and school reform that is concerned with current policy and systems transformations in education and child/family services, including educational, social and health service systems and the movement toward school-linked service integration strategies and family partnerships, called the "community school" movement. Issues connected with comprehensive school reform including the role of special education and mental health in this process will be emphasized. Particular emphasis will be placed on urban, multicultural issues affecting community schools. Prerequisite: Doctoral program admission or permission of instructor.

**SPED 985. Naturalistic Research. 3 Credits.**
This course is designed to develop skills in naturalistic or constructivist research, while situating it theoretically within the broader framework of modern and postmodern social inquiry, and exploring its social, political and ethical implications. The course develops students' skills in using this form of interpretive qualitative research, provides a theoretical framework for selecting inquiry paradigms, compares and contrasts positivist and constructivist inquiry, and reviews social and political implications of constructivist inquiry. Prerequisite: Six hours of statistics, measurement, and/or large or small group research design.

**SPED 986. Trends and Issues Associated with Online Instruction. 3 Credits.**
The course examines the opportunities, challenges, cautions, and demands of web-based instruction in higher education. It explores the policy implications of web-based instruction, development of collaborative teaming skills utilizing telecommunications resources, and the design and technical aspects of online instruction. Particular attention is given to the implications of online instruction for accommodating needs presented by diverse learners through strategies such as universal designs. Prerequisite: Admission to doctoral program or permission of instructor.

**SPED 990. Small Sample Empirical Research Methods. 3 Credits.**
This course provides a detailed examination of research methods for advancing knowledge and validating hypothetically useful treatments in situations in which sufficient sample sizes to conduct formal experiments are lacking, the question of interest is better addressed by multiple observations of treatment effects over time, and/or the question is best addressed by taking a variety of observations of a single unit of interest. Specifically, two small sample research methods will be examined in depth with examples and practical application experience: interrupted time series design for small samples ("single case" design), and Yin's empirical case study method. Prerequisite: Doctoral program admission or permission of instructor.

**SPED 991. Family Outcomes in Special Education. 3 Credits.**
This course focuses on analyzing and synthesizing research literature focusing on intermediate outcomes (e.g., family-professional partnerships) and long-term outcomes (e.g., family quality of life) related to families of children, youth, and adults with disabilities. Key family theories are
discussed and applied in the development and implementation of interventions that have potential to increase intermediate and long-term family outcomes. Prerequisite: Three courses in special education or permission of instructor.

**SPED 992. Seminar in Early Childhood/Intervention. 3 Credits.**
This seminar examines research to support evidence-based practices that currently exist in the areas of early intervention and early childhood special education. The primary objective is to learn how to read and critically analyze studies that form the evidence base for several early intervention and early childhood special education practices. Primary goals of the class include the development of skills for evaluating research studies in early intervention and early childhood special education, and increasing knowledge of evidence-based practices in the early intervention literature. Prerequisite: Three courses in special education or permission of instructor.

**SPED 993. Advanced Concepts, Issues, and Trends Single Case Research for Special Education. 3 Credits.**
This course covers advanced concepts, issues, and trends in single case research. Topics include theoretical frameworks for single case, combining single case designs, observational measurement, rigor and outcomes analysis, and synthesis. Emerging statistical methods of analyzing single case experimental research are also covered. Prerequisite: SPED 990 or equivalent course.

**SPED 995. Field Experience in: _____ . 1-5 Credits.**
Supervised and directed experiences in selected educational settings. Instructors conduct regular observations and conference with students. Written summaries and evaluations of field experiences are prepared independently by the student, a representative of the cooperating agency, and the instructor. Open only to advanced students and field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

**SPED 996. College Teaching Experience. 2 Credits.**
This course is designed to prepare students for college teaching. Enrolled students shall engage in semester-long, planned, instruction that includes college classroom teaching under supervision. Planning shall be done with a member of the faculty who will supervise the experience.

**SPED 997. Individual Study. 1-4 Credits.**
Prerequisite: Prior graduate course work in the area of study and consent of instructor.

**SPED 998. Seminar in: _____ . 1-4 Credits.**

**SPED 999. Doctoral Dissertation. 1-15 Credits.**
Graded on a satisfactory progress/limited progress/no progress basis.

## Minor in Education Studies

The minor in Education Studies provides a solid grasp of essential theory and research in education, along with an opportunity to focus on particular aspects of the process of the educational system. The minor in Education Studies does not lead to teacher licensure, nor does it prepare students to teach. Rather, it offers a broad introduction to education as a field of study and as a fundamental human activity.

### Benefits of the minor in Education Studies:

The Education Studies minor will provide a foundation for students interested in roles or careers that intersect with the schools, policy related to education and human development, and participation in a democratic society that is based on universal access to education. The goal is to provide undergraduates of any major the opportunity to develop an understanding of the legal, social, political, and economic forces that influence and shape educational policies by choosing from lower and upper division elective courses in three areas:

1. **Diversity Perspectives in Education,**
2. **Educational Psychology and**
3. **Human Development, and Ethical, Legal, and International Perspectives in Education.**

Any student desiring to complete the minor in Education Studies should develop a program plan with their academic advisor from their major department. However, the School of Education & Human Sciences can provide advising information specific to the Education Studies minor, if desired. Contact your academic advisor today to see if a minor in Education Studies aligns with your career goals and academic program.

The Education Studies minor requires 18 hours of coursework.

### Code Title Hours

**Required Courses:**

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<tr>
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<th>Hours</th>
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<tr>
<td>ELPS 250</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 100</td>
<td>Introduction to the Education Profession</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 537</td>
<td>The Governance and Organization of Schools</td>
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**Choose one Learning and Development Course from the following two:**

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<tr>
<td>EPSY 305</td>
<td>Development and Learning of the Child</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 306</td>
<td>Development and Learning of the Adolescent</td>
<td>3</td>
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**Choose one Elective Course from the following:**

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<tr>
<td>SPED 261</td>
<td>Families and Professional Partnerships</td>
<td>3</td>
</tr>
<tr>
<td>SPED 326</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 580</td>
<td>Positive Psychology</td>
<td>3</td>
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## Department of Curriculum and Teaching

### Curriculum and Teaching

The Department of Curriculum and Teaching ([http://ct.soe.ku.edu/](http://ct.soe.ku.edu/)) offers undergraduate programs that lead to teacher licensure in unified early childhood and at the elementary, middle, and secondary levels and a broad range of graduate professional programs in curriculum and instruction that promote the professional and intellectual development of practitioners and scholars in this field at all levels of education.

The faculty is known for its field leadership and commitment to high-quality education for youth and adults in a variety of educational settings, innovative field-based research, and preparation of highly effective program graduates.

### Undergraduate Programs

Students can prepare for teaching careers in the Department of Curriculum and Teaching. Undergraduate programs are offered in:
• Elementary Education – grades Kindergarten – 6th
• Elementary Education Unified - grades Kindergarten - 6th
• English Education Secondary – grades 6th – 12th
• Foreign Language Education – grades pre-Kindergarten – 12th
• History & Government Education Secondary – grades 6th – 12th
• Unified Early Childhood Education – Birth – 3rd grade, for both general and special education classrooms

All programs offer multiple field experiences in Pre-Kindergarten – 12th grade classrooms in addition to teacher education courses and rigorous preparation in content areas.

The Academic Catalog is a guideline for policies and procedures in the School of Education and Human Sciences. However, academic program requirements change. Students are strongly encouraged to check the school's website (https://soehs.ku.edu/) and the department for the most current information.

Curriculum and Teaching

Graduate Programs

Programs in curriculum and instruction prepare students to complete advanced degrees by addressing critical issues in learning, teaching, and curriculum, from local to global levels.

The department offers a broad range of graduate professional programs in curriculum and instruction both online and at the KU Lawrence and Edwards campuses. Students should contact the appropriate program advisor for specific program requirements. Information about the department faculty is in the Faculty/Staff section of the department’s website.

For complete program information, visit the Department of Curriculum and Teaching (http://ct.soe.ku.edu/) or send an inquiry to ctdepartment@ku.edu.

Degree requirements are subject to change. Prospective and current students should obtain the current degree requirements from the department.

The Master of Arts (M.A.) with an emphasis in Teaching English to Speakers of Other Languages (TESOL) and Master of Science in Education (M.S.Ed.) are available for students who hold the bachelor’s degree and seek to advance their knowledge and skills in their professional areas or areas of interest. The department also offers Certificate programs in Teaching English to Speakers of Other Languages (TESOL) and Reading. The Doctor of Education (Ed.D.) and Doctor of Philosophy (Ph.D.) with a major in curriculum and instruction are for students who plan to pursue employment at the college level or assume major leadership positions in schools.

Graduate classes for the Ph.D. and M.A. programs are taught on the main campus in Lawrence. Courses for the Ed.D. program are taught in hybrid format on the KU Edwards Campus (https://edwardscampus.ku.edu/) in Overland Park in suburban Kansas City, about 40 miles from Lawrence. Courses for the M.S.Ed. program and the certificate programs are offered fully online.

Courses

C&T 100. Introduction to the Education Profession. 3 Credits.
This course is designed to acquaint students with the profession of education by helping to increase awareness of the role and characteristics of an effective teacher. Large and small group activities and assignments are dispersed throughout the semester to facilitate these outcomes. Students will be involved in observation of and participation with teachers and pupils in public school classrooms, which complement course activities and assignments. Students will work with a mentor pre-service teacher from the KU School of Education to provide discussions about each of the course objectives. C&T 100 is a pre-professional course. Successful completion of the course does not guarantee eventual admission to the School of Education's Teacher Education Program.

C&T 175. Introduction to Career Development. 1-5 Credits.
This is the first course in a series of 2 courses focused on student career development. The purpose of this course is to provide structured career exploration and other experiences for students to: identify career interests, strengths, and skills through career assessments; job shadows, informational interviews, and short-term work experiences; develop an individualized career plan; begin developing a career portfolio by developing a resume, references list and cover letters. Students participate in structured, recurring work-based learning opportunities, and coursework as well as individual meetings with the instructor. Instruction and practice job-seeking and job maintenance skills are provided both in the classroom and in work-based learning experiences.

C&T 177. First Year Seminar: 00, 3 Credits.
A limited-enrollment seminar course for first-time freshmen, addressing current issues related to curriculum and instruction in the field of education. Course is designed to meet the critical thinking outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

C&T 220. Career Development. 1-5 Credits.
This is the second course in a series of 2 courses providing structured career development and is by appointment with the instructor. It provides structured experiences for students to: refine their career plan based on individual interests, strengths, and skills; learn and practice job-seeking and maintenance skills; participate in work-based learning; apply skills and experiences learned to enhance career plan and develop a career portfolio. Students participate in structured, recurring work-based learning opportunities and complete individualized projects related to career plans to contribute to students' career portfolios. Students consult with the instructor on their individualized projects and career portfolios. Prerequisite: Successful completion of C&T 175.

C&T 235. Cultural Diversity, Equity, and Inclusion in K-12 Schools. 3 Credits.
This course explores cultural diversity in K-12 settings through a critical analysis of several key themes: power, privilege, and difference. Students will examine the social construction of race, ethnicity, gender, social class, sexuality, language, and abilities within the classroom. This course examines topics including: gender bias, racism, white privilege, income inequality, as well as the educational and social experiences of students from historically marginalized backgrounds. Fieldwork experience is a required component of this course.

C&T 290. Introduction to Secondary Science and Mathematics Teaching. 1 Credit.
This course allows KU students to explore teaching in science or mathematics as a career as well as gain and practice collaborative and communication skills. Students teach combined science/math lessons in local elementary classrooms in order to obtain firsthand experience with planning and implementing inquiry-based curriculum. This course is part of a STEM Teach sequence. C&T 290 is part of a sequence of courses that allow STEM Teach students to earn a KU service learning certificate.

C&T 291. Introduction to Science and Mathematics Teaching 2 (STEM Teach 2). 1 Credits.
This course is for students who want to continue to explore math or science teaching. This goal will be accomplished by observing a mentor teacher and by teaching several lessons to a middle school math or science class. Students will build upon and practice lesson design skills that were developed in STEM Teach 1 and become familiar with excellent science and mathematics resources for middle school. As a result of the STEM Teach 2 experiences, students generally will able to make a decision as to whether they want to pursue a pathway to teacher licensure through the STEM Teach program. C&T 291 is part of a sequence of courses that allow STEM Teach students to earn a KU service learning certificate. Prerequisite: Successful completion of STEM Teach 1 (C&T 290).

C&T 301. Educational Technology in Elementary-Middle Education. 3 Credits.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to elementary and middle school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program.

C&T 302. Educational Technology in Middle/Secondary Education. 3 Credits.
The focus of this course is on developing integration strategies and acquiring computer skills for using instructional technology and educational software, digital media, and information technologies appropriate to middle school and high school teaching environments. Students will gain expertise in (a) the selection of appropriate instructional technologies and digital media for use in the classroom; (b) production of technology-based instructional materials; and (c) the evaluation and validation of a variety of electronic information sources. Prerequisite: Admission to the Teacher Education Program.

C&T 303. Curriculum and the Learner in the Elementary School. 3 Credits.
Building on the experiences in C&T 100, this course will focus on the learner in the elementary setting. Learning occurs as a result of interaction among learners, teacher and subject matter within the classroom and school in a community. The impact of the interactions of these students of learning of young children is studied in this course. Emphasis is given to the factors that influence curriculum decision-making, and methods that are considered in elementary grades curriculum and how it is delivered. Prerequisite: Admission to the Teacher Education Program.

C&T 304. Curriculum Learner in the Middle School and High School. 3 Credits.
Building on experiences in C&T 100, this course will focus on the learner within the high school setting. Learning occurs in a classroom within a school in a community, and the nature and structure of these settings as well as their impact on learning is studied in this course. Emphasis is given to the curriculum, the factors that influence the curriculum, and the ways that goals for high school students are reflected in the high school curriculum. Prerequisite: Admission to the Teacher Education Program.

C&T 330. Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom. 3 Credits.
Teaching English as a Second or Additional Language/Bilingual Education is designed to provide preservice elementary teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teaching skills needed to work with English language learners of elementary age, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are-or should be-available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program.

C&T 331. Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom. 3 Credits.
This course is designed to provide preservice middle/secondary discipline specific teachers with an understanding of the history and methodology of teaching English to speakers of other languages, both as a foreign language and as an additional language within American English settings. Future ESL/EFL/EB teachers will be prepared to develop the investigative, decision-making, and reflective teachings skills needed to work with English language learners of all ages, and to impart language instruction in the appropriate context. Emphasis is placed on developing a clear understanding of who English language learners are; what programs and services are-or should be-available to the ESOLs/EBs; the critical pedagogical aspects of teaching ESL/EFL/EB; and the preparation of teaching materials for classroom use. Prerequisite: Admission to the teacher education program.

C&T 332. Curriculum and Instruction in Middle and Secondary History and Government Classrooms. 3 Credits.
The purpose of this course is to help prepare students to teach social studies in the middle and secondary grades. Prerequisite: Admission to the teacher education program.

C&T 344. Children's Literature in the Elementary School. 3 Credits.
A study of literature (poetry, folk literature, fiction, and nonfiction) appropriate for elementary school children with a focus on contemporary children's books. Emphasis will be on selection of literature based on child development, literary quality, curriculum, and pluralism and the engagement of children in literature experiences from the interactive, reader response, and critical perspectives. Prerequisite: Admission to the Teacher Education Program.

C&T 347. Social Studies in the Elementary Classroom. 3 Credits.
A study of curricula, instructional strategies, and classroom organization for social studies education K-6. Emphasis is placed on the effective implementation of social studies programs in classroom settings. Prerequisite: Admission to the School of Education in elementary, middle, or secondary, or the Unified Early Childhood programs.

C&T 349. Science in the Elementary Classroom. 3 Credits.
In this course, you will develop an understanding of how children learn science and why science education is important. You will examine effective approaches to teaching, instructional materials, and student assessment and will learn how to plan and implement a science unit. The course will emphasize a guided-inquiry approach to science instruction appropriate for the abilities and interests of children in grades K-6. Prerequisite: Admission to the School of Education.

C&T 351. Mathematics for the Elementary Classroom. 3 Credits.
This course is a study of the curriculum, instructional strategies, and classroom organization for mathematics in grades K-6. Emphasis is placed on the effective implementation of mathematics programs in classroom settings. Prerequisite: Admission to the School of Education.

C&T 352. Literacy Instruction in the Primary Grades (K-3). 3 Credits.
This course is intended to develop the attitudes, knowledge, and skills necessary to effectively instruct primary grades (K-3) children through the development of literacy skills: reading, writing, listening, speaking, spelling, and handwriting. The major goals of this course are for the prospective teacher to develop an understanding of literacy development of the primary-grades child, current literacy theories, and the ability to work with a number of approaches to promote literacy learning and a positive attitude toward literacy in all primary-grades students who may have different needs due to language, culture, learning challenges, and/or differing stages of development. This course is to be taken concurrently with C&T 353, Literacy Practicum in the Primary Grades. Prerequisite: Admission to the Teacher Education Program.

C&T 353. Literacy Practicum in the Primary Grades. 1 Credits.

This supervised practicum is intended to allow the pre-service teacher to apply the knowledge gained in C&T 352, Literacy Instruction in the primary grades (K-3), by teaching children in the primary grades. To be taken concurrently with C&T 352 Prerequisite: Admission to the Teacher Education Program.

C&T 354. Literacy Instruction in the Intermediate Grades. 3 Credits.

C&T 354 is designed to introduce pre-service teachers to the principles and methods of facilitating language and literacy development of students in third through sixth grade. Pre-service teachers also will have an opportunity to teach an elementary grade student(s). Prerequisite: Admission to the Teacher Education Program. This course is to be taken concurrently with C&T 355, Literacy Practicum in the Intermediate Grades.

C&T 355. Literacy Practicum in the Intermediate Grades (4-6). 1 Credits.

This supervised practicum is intended to allow the preservice teacher to apply the knowledge gained in C&T 354, Literacy Instruction in the intermediate grades (4-6), by teaching children in the intermediate grades. To be taken concurrently with C&T 354. Prerequisite: Admission to the Teacher Education Program.

C&T 359. Literacy in the Content Areas. 1 Credits.

An introduction to reading in relation to specific areas of art, music and health and physical education. Focus on specialized vocabulary and literature related to each area. Introduction of specific strategies to teach vocabulary and comprehension and to integrated units of study. Prerequisite: Admission to certification program in music education, art education, health education, or physical education.

C&T 360. Knowing and Learning in Mathematics and Science. 3 Credits.

This course focuses on issues of what it means to learn and know science and mathematics. What are the standards for knowing we will use? How is knowing and learning structured and how does what we know change and develop? For the science and mathematics educator, what are the tensions between general, cross-disciplinary characterizations of knowing (e.g. intelligence) and the specifics of coming to understand powerful ideas in mathematics and science? What are the links between knowing and developing in learning theory, and the content and evolution of scientific ideas. Also, current issues and tensions in education will be discussed, especially as it relates to mathematics and science instruction.

C&T 366. Classroom Interactions in Mathematics and Science. 3 Credits.

To make prospective teachers aware of multiple models of teaching (including direct instruction, inquiry teaching and use of small groups); the advantages, disadvantages and uses of each; and what each model requires of teachers. To allow prospective teachers to explore ways of probing student understanding through authentic assessment, evaluating student understanding through student artifacts, and enhancing student understanding through lesson plans built around models of how people learn. To make prospective teachers aware of equity and diversity issues in classroom teaching and ways of ensuring that all students have an opportunity to learn. To make students aware of the proficiencies for licensure recognized by UKanTeach and Kansas State Board of Education and facilitate students’ demonstration and documentation of these through their development of a professional portfolio. To develop students’ capacity to identify and evaluate best teaching practices as presented in research literature. Prerequisite: C&T 360.

C&T 380. English as a Global Language. 3 Credits.

In this course, we will explore the political, cultural, historical, and economic factors that drive English’s status as a global language and the demand to learn it. We will attend to such questions as, Why a global language, and why English? Is the spread of English necessarily natural, neutral, and beneficial? Then, we will consider implications of answers to the above questions on teaching English internationally, since TESOL positions overseas provide ideal opportunities for college-age Americans to live and work abroad. The projects assigned are intended to teach students to think critically about issues related to prominence of English teaching/learning around the world.

C&T 401. Professional Learning Seminar I. 1 Credits.

This is the first in a series of three consecutive professional learning seminars. The primary purpose of the professional learning seminars is to collaboratively engage KU teacher education students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that pre-service teacher education students face in the schools. Faculty and students will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the philosophical, and psychological. The professional learning seminars are designed around key features of effective professional learning communities and sustained professional development for teachers. Features include supportive, collaborative learning, shared personal and professional practice, and collective inquiry of teaching and learning. Prerequisite: Admission to the Teacher Education Program.

C&T 402. Professional Learning Seminar II. 1 Credits.

This is the second in a series of three consecutive professional learning seminars. The primary purpose of the professional learning seminars is to collaboratively engage KU teacher education students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that pre-service teacher education students face in the schools. Faculty and students will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the philosophical, and psychological. The professional learning seminars are designed around key features of effective professional learning communities and sustained professional development for teachers. Features include supportive, collaborative learning, shared personal and professional practice, and collective inquiry of teaching and learning. Prerequisite: Admission to the Teacher Education Program.

C&T 403. Professional Learning Seminar III. 1 Credits.

This is the third in a series of three consecutive professional learning seminars. The primary purpose of the professional learning seminars is to collaboratively engage KU teacher education students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that pre-service teacher education students face in the schools. Faculty and students will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the philosophical, and psychological.
The professional learning seminars are designed around key features of effective professional learning communities and sustained professional development for teachers. Features include supportive, collaborative learning, shared personal and professional practice, and collective inquiry of teaching and learning. Prerequisite: Admission to the Teacher Education Program and successful completion of both C&T 401 and C&T 402.

C&T 420. Teaching Kansas Government and Contemporary Public Policy Issues. 3 Credits.
A study of the constitution, organization, functions, and processes of Kansas government, of contemporary public policy issues with local, state and national implications, and of strategies for teaching these in middle and secondary classrooms. Prerequisite: Admission to the School of Education and POLS 110.

C&T 423. Assessing English Language Learners. 3 Credits.
This course provides an introduction and overview of basic principles in assessing English language learners (ELLs) in the context of U.S. preK-12 classrooms and schools. With a focus on addressing equity issues, the course: 1) provides the context and rationale for variety of approaches to assessment; 2) discusses assessment related academic language in the content classroom; 3) discusses the multiple purposes of assessments; and 4) reviews how assessment results can inform educators, students, families, and community members. Prerequisite: C&T 330 or C&T 331.

C&T 424. Second Language Acquisition for preK-12 TESOL Educators. 3 Credits.
This course provides an introduction to the process of second language acquisition as it relates to English language learners (ELLs) in a U.S. preK-12 context. Particular attention is given to the influence of cognitive, affective, and sociocultural factors in second language acquisition. Current developments in second language acquisition are reviewed and evaluated in keeping with the needs of professionals in the context of second language education. Prerequisite: C&T 330 or C&T 331.

C&T 430. Teaching Literature for Young Adults. 3 Credits.
Teaching literature (novel, short story, poetry, drama, nonfiction) suitable for students in the middle school, the junior high school, and the senior high school. Ethnic literature, censorship, bibliographies, and other relevant sources of information about books for young adults will be studied. Prerequisite: Admission to the School of Education.

C&T 448. Reading and Writing Across the Curriculum. 3 Credits.
Content area teachers do far more than impart information to students. They play an important role in guiding middle/secondary students as they use reading and writing as tools for learning. This course includes an overview of the state and national reading and writing scores of adolescents. Students will then be introduced to the basic processes or ways in which individuals may learn to read and write. The course continues with a focus on the instructional strategies and materials that promote the development of reading and writing in the context of teaching new information. Additionally, the course emphasizes the informal methods educators can use, on an on-going basis, to diagnose their students ability to comprehend content material. Finally, appropriate fix-up strategies will be modeled. Prerequisite: Admission to the Teacher Education Program.

C&T 449. Understanding Dyslexia and Supporting Students in Middle and Secondary Schools. 1 Credits.
In this 1-credit online course, middle and secondary preservice teachers to begin acquiring an understanding of dyslexia and the characteristics that students with dyslexia might display in the classroom and on academic/social tasks. Preservice teachers will learn how dyslexia is identified, how to teach students identified with dyslexia, and how to help students address some co-morbidities that are often associated with dyslexia such as organization, memory and concentration. Prerequisite: Admission to the Teacher Education Program.

C&T 460. Project Based Instruction in Mathematics and Science. 3 Credits.
This course will have three essential components. The first will be a theory driven perspective accounting for what we know of how people learn and how project-based instruction improves student learning in math and science. The second component will provide the students with support as they develop their own project-based unit. The third component will be field experiences consisting of two parts: 1) observation of well-implemented project-based instruction in local schools and 2) teaching project-based activities in an informal education setting. Prerequisite: C&T 360.

C&T 489. Advanced Teaching Practicum. 1 Credits.
This supervised practicum is intended to allow the pre-service teacher to apply knowledge gained in SPED 507; C&T 448, ELPS 537; and C&T 540, C&T 541, C&T 542, C&T 543 and C&T 544: Advanced (Content Area) Methods by teaching children in the middle/secondary grades. To be taken concurrently with SPED 507; C&T 448, ELPS 537; and C&T 540, C&T 541, C&T 542, C&T 543 and C&T 544: Advanced (Content Area) Methods. Prerequisite: Admission to the Teacher Education Program.

C&T 490. Student Teaching. 6-7 Credits.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of fall practicum experiences and demonstration of appropriate professional dispositions.

C&T 491. TESOL Practicum for Kansas State Endorsement. 3 Credits.
The TESOL Practicum allows individuals to gain supervised experience in Teaching English to Speakers of Other Languages (TESOL) for a professional KSDE ESOL endorsement and advancement. Prerequisite: Completion of all TESOL endorsement courses.

C&T 494. Internship. 6-7 Credits.
A supervised internship experience leading to initial certification. The student assumes the total professional role as a teacher in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Successful completion of all practicum experiences and demonstration of appropriate professional dispositions.

C&T 495. Seminar: Developing the Teaching Portfolio. 3 Credits.
This course serves to instruct students in the research, teaching, and writing components of developing a teaching portfolio. The seminar will provide a focus for discussion and deeper exploration into topics and issues related to working in the school setting, teaching, and developing a professional teaching philosophy. Graded on a satisfactory/fail basis. Prerequisite: Enrollment in Student Teaching or Internship during the Spring semester.

C&T 497. Independent Study in: ______. 1-2 Credits.
Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor.

C&T 499. Bachelor's Project. 4-6 Credits.
A formal report of some aspect of the field experience that relates formal learning and in situ experience to program planning, implementation, and evaluation. Topic will be selected in consultation with the project advisor. Prerequisite: C&T490 and C&T 491 (C&T 491 may be taken concurrently).

C&T 500. Student Teaching in: ______. 1-6 Credits.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Prerequisite: Admission to the Student Teaching program.

C&T 501. Student Teaching Practicum in: _______. 1-6 Credits.
A supervised classroom teaching experience under the direction of an experienced teacher and in close relationship with a university supervisor. Prerequisite: Admission to the Graduate Certification Program and approval of advisor.

C&T 503. International Perspectives in Primary and Secondary Education. 3 Credits.
This course is will expose students to a variety of debates and developments related to primary and secondary education in our globalized era. Students will survey educational systems from the US and selected world regions, comparing and contrasting them in terms of access, funding, curriculum, and pedagogy. They will investigate educational systems from the perspective of international development while addressing issues of local vs. national or international control, tradition vs. global advancement, and other challenges and trade-offs. Prerequisite: Junior standing or higher, or permission of instructor: The course is suitable for advanced undergraduate and master’s degree seeking students.

C&T 530. Curriculum and Instruction in Foreign Language Classrooms. 3 Credits.
A study of philosophy, objectives, curriculum, instructional strategies, and evaluation in teaching foreign language at the K-12 levels. Prerequisite: Admission to the Teacher Education Program.

C&T 533. Curriculum and Instruction in Middle & Secondary English/Language Arts Classrooms. 3 Credits.
This is an English/Language Arts methods course that focuses on curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12. Prerequisite: Admission to the Teacher Education Program.

C&T 537. Curriculum and Instruction in Middle and Secondary Science Classrooms. 3 Credits.
The purpose of this course is to help you prepare to teach science in the middle and secondary grades. The instructor designed the class sessions and learning tasks to enable you to make progress toward achieving the Kansas Science Teaching Standards and Kansas Professional Education Standards. Prerequisite: Admission to the Teacher Education Program.

C&T 539. Curriculum and Instruction in Middle and Secondary Mathematics Classrooms. 3 Credits.
This course is designed to provide focused study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12. Prerequisite: Admission to the Teacher Education Program.

C&T 540. Advanced Practices in Teaching English in the Middle and Secondary Schools. 3 Credits.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching English/Language Arts in grades 5-12 and as a final readiness for the undergraduate student teaching experience. Prerequisite: Admission to the Teacher Education Program.

C&T 541. Advanced Practices in Teaching Social Studies in Middle/Secondary Schools. 3 Credits.
Advanced study of curriculum development and instructional strategies appropriate for teaching social studies in grades 6-12 and application of learning in a middle/secondary classroom. Prerequisite: C&T 335; SPED 326 and, C&T 324

C&T 542. Advanced Practices in Teaching Science in the Middle and Secondary Schools. 3 Credits.
This course is designed as a final readiness for the semester-long student teaching experience and the Kansas Performance Teaching Portfolio to be completed during that student teaching experience. The course deals with the analysis, adaptation, and application of varied instructional designs to implement curricula in specific science areas in grades 5-12. Prerequisite: Admission to the middle-level licensure program in science education at the undergraduate level or one of the graduate licensure programs in middle/secondary science. Successful completion of C&T 537.

C&T 543. Advanced Practices in Teaching Mathematics in the Middle and Secondary Schools. 3 Credits.
The course is designed to provide continued study of curriculum development and instructional strategies appropriate for teaching mathematics in grades 5-12 and as a final readiness for the undergraduate of GLP student teaching experience. Prerequisite: Admission to the middle-level licensure program in mathematics education at the undergraduate level or the GLP in middle or secondary mathematics. Successful completion of C&T 539.

C&T 544. Advanced Practices: Situating Foreign Language Content, Dispositions, Skills & Tools Language Classroom. 3 Credits.
This is an advanced Foreign Language methods course that focuses on the critical importance of the socio-linguistic environment of foreign language classrooms. Prerequisite: Admission to the Teacher Education Program.

C&T 598. Special Course: _______. 1-5 Credits.
A special course of study to meet current needs of education students, primarily for undergraduates.

C&T 649. An International Teaching Experience. 3 Credits.
This study abroad focuses on professional growth in teaching and understanding education based on an international experience. Students learn about curriculum and teaching from an international perspective, and engage in professional discussions with Italian teachers and administrators. Students engage in culturally responsive teaching in preschool-secondary settings, they participate in family and community activities/events, and they visit renowned museums and cities. Prerequisite: Application through the Office of Study Abroad and interview with the director.

C&T 707. Project Based Instruction. 3 Credits.
This course will emphasize exploring, designing, and evaluating materials and pedagogy to work toward the design of project-based curriculum and instruction. Topics focus on the principles of project-based instruction as well as multiple models for its use in the classroom.

C&T 709. Foundations of Curriculum and Instruction. 3 Credits.
Basic concepts and processes of curriculum and instruction, including theories, planning models, resources for decision-making, current trends, research, and proposals for improvement of curriculum and instruction.

C&T 730. Understanding Talent. 3 Credits.
This course addresses the social, cognitive, affective, and other developmental aspects of talent as manifested in children and youth with high potential. The course provides an opportunity to examine characteristics, strengths, and needs of these children and their families. The course focuses on the foundational aspects of gifted/talented education: educational and political history of the field, etiology of extraordinary potential, and identification and assessment techniques, instruments, and systems. Included in the course are relevant research, policies and regulations, services, and information resources.
Prerequisite: SPED 425, SPED 431, SPED 725, or equivalent introductory
course on exceptional children and youth.

C&T 739. Internship in Teaching: _____. 1-6 Credits.
A supervised internship experience leading to initial certification. The
student assumes the total professional role as a teacher in an approved
school setting, with level and subject area to be selected according to the
teaching field. Prerequisite: Admission to a Curriculum and Instruction
licensure program. Instructor permission required to enroll.

C&T 740. Foundations of Reading: Process, Theory, and
Instruction. 3 Credits.
It is the purpose of this course to introduce students to the foundations
of the reading process, developmental levels, theory, models, and
procedures at the emergent, elementary, and secondary levels. Elements
of cultural, linguistic, and ethnic diversity that affect the reading process
are included. Students work with research related to the reading process,
remediation, and assessment.

C&T 741. Comprehension and Study Strategies for Use with Multiple
Texts. 3 Credits.
It is the purpose of this course to examine research, theory, and practice
in reading comprehension. Emphasis is placed on the application of
strategies for various text types (expository, narrative, persuasive,
and technical) for teaching reading comprehension and study skills
across content areas in the K-12 classrooms. Prerequisite: C&T 740 or
permission of the instructor.

C&T 743. Writing and Spelling Development and Instruction. 3
Credits.
A study of the research base on writing, spelling, speaking, and listening
for teaching the language arts; an overview of development in writing and
spelling, the writing and spelling processes and instruction, and strategies
for integrating the language arts. Prerequisite: Admission to a masters
program within the School of Education, C&T 740 or permission of the
instructor.

C&T 745. Reading and the English Language Learner. 3 Credits.
The course focuses on the literacy development, research, and effective
teaching practices that support emerging bilinguals (EBs) becoming
literate. The course examines how reading, writing, speaking, and viewing
in a new language are similar and/or dissimilar from these modalities
in a first language. Cognitive, sociocultural, linguistic and educational
perspectives are investigated as part of this examination.

C&T 748. Reading and Writing Across the Curriculum. 3 Credits.
In C&T 748, preservice content teachers, who have had no previous
literacy courses, are introduced to the basic processes of reading and to
instructional strategies and materials that promote the development of
reading, writing, and studying in the context of teaching new information.
Additionally, we discuss the ways in which teachers diagnose, in an
informal, on-going basis, their students’ abilities to comprehend
the material they are teaching.

C&T 749. An International Teaching Experience. 3 Credits.
This study abroad focuses on professional growth in teaching and
understanding education based on an international experience.
Students learn about curriculum and teaching from an international
perspective, and engage in professional discussions with Italian
teachers and administrators. Students engage in culturally responsive
teaching in preschool-secondary settings, they participate in family and
community activities/events, and they visit renowned museums and cities.
Prerequisite: Application through the Office of Study Abroad and interview
with the director.

C&T 770. Pedagogical Considerations in the 21st Century
Classrooms. 3 Credits.
Exploration of pedagogy in the 21st century classroom and examination of
current learning environments and strategies available to enhance student
learning and engagement. Prerequisite: Admission to graduate program
in the School of Education. Admission to a non-degree program in the
School of Education.

C&T 797. Special Project in: _____. 2 Credits.
Implementation of the curriculum project planned in C&T 734 or C&T 735;
implementation and assessment of the special project will occur during the
internship. Prerequisite: C&T 734, C&T 735, and C&T 736.

C&T 798. Special Course: _____. 1-5 Credits.
A special course of study to meet current needs of education
professionals—primarily for graduate students.

C&T 800. Foundations of Curriculum Development. 3 Credits.
This course is designed for students to gain a functional understanding
of the historical, philosophical, political, psychological, and cultural
factors which affect the designing and implementation of curriculum at
several levels: the individual classroom, the team, the school, the larger
administrative unit, the state, and the nation. Prerequisite: C&T 709 or
permission of instructor.

C&T 801. Planning for School Improvement. 3 Credits.
This course will emphasize the latest research and practice related to
school reform and student success, particularly professional development
and data analysis as they relate to standards, curricula, assessment,
and instruction embedded in a school improvement plan. Discussions
will provide a pathway for teachers to contribute to the development and
implementation of an identified district's school improvement plan. You
will function as a teacher member of a school improvement team to assimilate
and synthesize research and practice into the development, revision, and/or
assessment of a school improvement plan for a specific school site.
Prerequisite: Enrollment is restricted to students admitted to the online
Curriculum and Instruction Master's program.

C&T 802. Curriculum Planning for Educational Settings. 3 Credits.
A focus on organizing and managing curriculum development in
educational settings. Such curricular decisions as writing philosophies,
setting goals and objectives, selecting and organizing content, and
designing and monitoring evaluation procedures will be emphasized.
Providing leadership for the collaborative process of curriculum planning
in organizational settings will receive attention.

C&T 803. Differentiating Curriculum and Instruction. 3 Credits.
This course is designed for educators interested in expanding curriculum
and instruction to accommodate diverse learners in the classroom,
K-12. Topics include: models, methods, and resources for differentiating
curriculum and instruction, designing and modifying differentiated
curriculum, evaluating student learning, and introducing students, parents
and colleagues to differentiation. An evidence-based, practical course for
teachers, administrators, and support personnel. Prerequisite: Admission
to Graduate School.

C&T 806. Instructional Strategies and Models. 3 Credits.
Analysis of models of teaching which represent distinct orientations
toward students and how they learn. The application of these models is
complemented by the study of research evidence on effective teaching
strategies. Prerequisite: C&T 709.

C&T 807. Multicultural Education. 3 Credits.
In order to provide the student with an understanding of multicultural
education, the course will examine the effects of such issues as ethnicity
in America, the melting pot theory, separation, cultural pluralism, legal
issues, and bilingual education upon the curriculum and instruction in
today’s classrooms. It will include an evaluation of materials for bias and stereotypes.

C&T 808. Qualitative Research: Curriculum Inquiry. 3 Credits.
Curriculum Inquiry provides an opportunity to reflect, explore, understand, and broaden perspectives of curriculum through examining the theories, methodologies, strategies, and design of qualitative research. This course is designed to develop a common understanding of the major elements of qualitative research, while offering each student an opportunity to examine research topics and methods of personal interest, with particular attention to curricular issues. The course also includes practical experience with various modes of data collection and analysis.

C&T 809. Creative Thinking and Learning. 3 Credits.
This course provides an opportunity to investigate the nature of the creative process in educational settings. The knowledge base for the course builds from foundations of creativity, principles and theories of identifying and enhancing creative production, and affective learner variables. The course blends classic and contemporary works in creativity, and features the application of theories and models of the origins and development of creativity to promoting creative thinking and learning among children, youth and adults. Participants learn about, apply, and adapt techniques for defining and identifying creative potential and for encouraging creative thinking in educational settings. Prerequisite: Admission to graduate school.

C&T 816. Culturally Responsive Pedagogy. 3 Credits.
U.S. schools are increasingly multilingual spaces, where new waves of migration and refugee resettlement are reshaping the linguistic landscape of previously English-dominant spaces. It is from this perspective that this course explores the history and evolution of culturally responsive pedagogy—beginning with its origin in U.S. multicultural education, to its expansion into the education of culturally and linguistically diverse learners, to its adoption in English language education more broadly, and TESOL teacher education more specifically (in the U.S. and abroad). The course will highlight the curricular and instructional approaches that undergird CRP and the future global direction of this pedagogical approach.

C&T 817. Contact, Change & American English. 3 Credits.
This course introduces the sociolinguistic topics of language change and variation through a study of the historical evolution of what has come to be known as modern American (U.S.) English. The course will explore the historical instances of contact between English and other languages that have resulted in significant and minor changes, as well as regional variations to spoken and written American English. It will also discuss the pedagogical and research implications of these changes for teaching English in the U.S. and abroad.

C&T 818. Language, Discourse and Ideology. 3 Credits.
Language, Discourse and Ideology adopts an interdisciplinary approach to exploring the language ideologies that shape English language development in EFL, ESL, and Bilingual / Dual Immersion contexts. The study of language ideology is a subfield of Sociolinguistics and is linked to issues of language, ideologies about language, and language as a vehicle for ideology. Though language is a focus of this course, the course is “not about language alone. Rather…[it addresses] lies of language to identity, to aesthetics, to morality, and to epistemology” (Woolard 1998: 3) and the ways in which these uses of language reflect and reproduce language ideologies. The course is open to graduate students across the School of Education with an interest in language, English as a Second/Foreign language, and policy planning and curriculum studies. It is also open to students in anthropology, linguistics, sociology and related fields with an interest in language use in educational contexts.

C&T 819. Foreign Language/EFL Teaching Methods. 3 Credits.
This course addresses foreign language/EFL teaching methods and techniques that are related to second language acquisition theories and appropriate for the teaching of foreign languages/EFL to children, adolescents, and adult learners. Prerequisite: Admission to a graduate program (Master or Doctorate.)

C&T 820. Methods of Teaching English to Speakers of Other Languages (TESOL). 3 Credits.
The purpose of this course is to study the objectives and methods of ESL/ Bilingual education. Students will examine methods and techniques of teaching: listening, speaking, reading, and writing in the ESL/Bilingual Education settings. The course will also emphasize the importance of culture in second language teaching, and self-evaluation of teaching and instructional materials. Prerequisite: Corequisite: C&T 709.

C&T 821. Assessment in Teaching English to Speakers of Other Languages (TESOL). 3 Credits.
This course provides an overview of diagnostic techniques and instruments used to identify and remediate specific learning difficulties associated with normal second language development in the area of listening, speaking, reading, and writing. The course includes a review of research concerning assessment as it relates to error analysis in the second language context. Prerequisite: Corequisite: C&T 820.

C&T 822. Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Credits.
This course provides an intensive review of the theory and research base of second language acquisition. Particular attention is given to the influence of research trends in linguistics and psychology on second language education theory and practice. Current trends in second language education are examined in light of the historical theory base. Prerequisite: C&T 820.

C&T 823. Intercultural Competence for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Credits.
This course includes the study of the interrelationship of language and culture and the use of multicultural training techniques to develop cultural awareness and positive attitudes in the second language classroom. Emphasis is on the integration of culture in the second language curriculum. Prerequisite: C&T 820 or C&T 803.

C&T 824. Problems in Second Language Instruction. 3 Credits.
This course presents a study of curricula and instruction in the second language setting at all levels with emphasis on educational research concerning these issues. Particular attention is given to developing competency in locating and utilizing sources of information and to preparing the research document. The course facilitates practical problem solving in the second language learning context. Prerequisite: C&T 820.

C&T 825. Advanced Practicum in Teaching English to Speakers of Other Languages (TESOL). 3 Credits.
This course provides a supervised teaching experience in a setting appropriate to the goals of the prospective ESL/Bilingual teacher: elementary, secondary, or adult. Particular attention is given to lesson planning, classroom management, and the development of self-evaluation techniques. This course will also emphasize structured classroom observation prior to teaching and techniques for developing and maintaining positive working relationships with other professionals in the school setting. Prerequisite: C&T 820, C&T 821, and C&T 822 or C&T 824.

C&T 826. Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL). 3 Credits.
This course offers pre- and in-service teachers the basic foundations of language analysis necessary for the teaching of second/foreign languages. The course covers basic linguistic topics common to all human
languages (grammatical, phonological, and semantic aspects) with the intent to help teachers understand and address common languages problems that students face when learning English as a second/foreign language.

C&T 827. Teaching Pronunciation for Foreign Language/Teaching English to Speakers of Other Languages (TESOL). 3 Credits.
The objective of this course is to give prospective language teachers the requisite theoretical and practical background for making decisions concerning pronunciation teaching. This course provides second and foreign language teachers with the necessary knowledge and skills to address the teaching of pronunciation in the foreign /language classroom. After a review of theoretical and practical research dealing with universal human speech perception and production, implications for the design of appropriate strategies and lessons to teaching pronunciation, both at the segmental and suprasegmental levels, are addressed. Prerequisite: C&T 444, C&T 820 or C&T 822.

C&T 828. Language and Identity. 3 Credits.
This interdisciplinary seminar explores the interrelationship between language and identity, and the role of language in developing identities of second language learners.

C&T 829. Teaching English to Speakers of Other Languages in Global Context (TESOL). 3 Credits.
The purpose of this course is to investigate contemporary issues in and key concepts pertaining to Teaching English to Speakers of Other Languages (TESOL) throughout the world. We will examine primary research and employ a sociocultural lens to better understand how the phenomenon of globalization has shaped how, why, and the conditions under which English is taught and learned on different continents, as well as critiquing research methods and approaches to studying English language teaching and learning.

C&T 840. Emergent Literacy and Beginning Reading. 3 Credits.
A study of emergent literacy through the beginning stages of literacy development. Course content focuses on the history, theory, and research that supports instructional reading practices for children Pre-kindergarten through grade 2. Prerequisite: C&T 740, C&T 741, or permission of instructor.

C&T 841. Early Intervention in Reading Practicum. 3 Credits.
A case study approach to the instruction of children in need of early intervention in reading. Requires assessment, instruction, and case reports of tutored children. Prerequisite: C&T 740 or permission of instructor. Concurrent enrollment or previous enrollment in C&T 840 is required.

C&T 842. Supporting Striving Readers: Adolescent through Adult. 3 Credits.
A study of the characteristics and multiple causes of reading and writing difficulties, principles and procedures for diagnosing and remediating reading difficulties, how to provide individual and group intervention strategies, communicate diagnostic information, and gain awareness of the impact of research on instructional decision-making for students with reading difficulties. Prerequisite: Admission to a masters program within the School of Education, C&T 740, C&T 741, C&T 840, and C&T 841, or permission of instructor.

C&T 843. Supporting Striving Readers Practicum. 3 Credits.
Case study approach to the treatment of pre-adolescent through adults with reading disabilities. Requires diagnostic testing of the learner, compilation of case study reports, and participating in staffing for the purpose of designing remedial reading programs. Students also participate in implementation of remedial programs with pre-adolescent through adults through tutoring in either a clinical setting or a public school setting. Prerequisite: C&T 740, C&T 840, C&T 841, or permission of instructor. Concurrent enrollment or previous enrollment in C&T 842 is required.

C&T 844. The Reading Program: Coordination and Supervision. 3 Credits.
An overview of the role of the reading coordinator/supervisor and that individual's responsibility for the components of a balanced reading program. Emphasis will be given to assessment of the reading program, strategies for change, improving the reading program, in-service programs, working with other school personnel, providing services, and public relations. Prerequisite: C&T 740, C&T 741, C&T 840, C&T 841, C&T 842, and C&T 843.

C&T 850. Seminar in Science and Mathematics Educational Research. 3 Credits.
The primary purpose of this course is to examine literature in science and mathematics education in order to better understand research in these fields from both a historical and contemporary perspective. The process of examining literature in these fields will be used to help understand how to plan, conduct, and evaluate research in science and math education. This course emphasizes both qualitative and quantitative research in science and math education.

C&T 851. Modern Approaches to Middle/Secondary School Mathematics. 3 Credits.
A study of aspects of curriculum and instruction in middle/secondary school mathematics programs, including research on teaching and learning mathematics. Prerequisite: Teaching experience in middle-level or high school mathematics or permission of instructor.

C&T 852. Instruction in Mathematics and Science. 3 Credits.
In this course, students will explore a variety of research-based instructional theories, models, and strategies for teaching and learning of mathematics and science. They will apply and evaluate the usage of one instructional strategy in an action research project in their classrooms. Prerequisite: C&T 709.

C&T 854. Assessment and Evaluation in Science and Mathematics. 3 Credits.
The primary purpose of this course is to examine assessment and evaluation in science and mathematics, including assessment of students, teachers, schools, and educational programs. The course will examine technical characteristics of various assessment methods including both traditional and alternative methods. In additional and alternative methods. In addition, the course will analyze and discuss various controversial issues in assessment such as authentic assessment, and large scale assessment, and large scale assessments, assessment for accountability, and equity issues.

C&T 855. Curriculum in Science and Mathematics. 3 Credits.
A survey of the concepts and processes that provide the focus of modern science and mathematics curricula will be central to the course. Students develop a standards-based framework for a school science or mathematics program. The course includes an analysis of national and state recommendations for the reform of science and mathematics education in the context of our state and local educational systems, which is applied by evaluating exemplary instructional materials and activities appropriate for classroom use. Prerequisite: C&T 709.

C&T 857. Practicum in Mathematics Education. 1-3 Credits.
Intensive supervised experience working with improvement of mathematics curriculum and/or instruction in an educational setting. Credit in any one semester may range from one to three hours; and total credit may not exceed three hours. Prerequisite: Two graduate courses in mathematics education and prior consent of practicum supervisor.
C&T 856. Connecting Research to Classroom Practice in Mathematics. 3 Credits.
This course will explore current research on issues important to mathematics teachers so they can use research to support and improve their classroom practice. Prerequisite: Teaching experience or permission of instructor.

C&T 859. Issues in Mathematics or Science Education: _____ 1-3 Credits.
A study of issues in a particular area of mathematics or science education. The course may be repeated for different topics. Prerequisite: Admission to graduate study.

C&T 862. Trends and Issues in Social Studies Instruction. 3 Credits.
A study of trends and issues relating to, and needed changes in the content, organization, emphasis, resources and equipment, methods, devices and evaluation in the social studies. Consideration of related problems such as achieving meaning and understanding, providing for individual differences, providing motivation, the cooperative assignment and socialized recitation. Students will be permitted to concentrate on those problems of particular interest to them. Prerequisite: Nine hours of Education including educational psychology.

C&T 896. Seminar in: _____ 1-4 Credits.

C&T 897. Independent Study. 1-4 Credits.
Prerequisite: Consent of advisor and instructor.

C&T 898. Master's Project. 1-4 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

C&T 899. Master's Thesis. 1-6 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

C&T 900. Current Trends & Issues in Curriculum & Instruction. 3 Credits.
The course, taught as a capstone seminar, will provide a review of current trends and issues in theories, practices, and events within curricular and instructional efforts in American education. Topics studied may include constructivism, connectivism in the digital age, contemporary theories and theorists such as Vygotsky, online instruction and the Internet's potential and growth, the new Cult of Efficiency, stigmatization and standardized testing, and charter schools. Student composition of each class will influence the final syllabus, which may include other topics reflective of student interests and goals. The class is designed for those in the final course phase of their doctoral studies. Students in their first or second semester of their programs will not be encouraged to enroll in the class.

C&T 901. Contemporary Research of Teaching Effectiveness. 3 Credits.
A review of recent research on the conceptualization, measurement, and improvement of teaching effectiveness. Particular attention is given to the history of efforts to improve teaching, to the reasons why such efforts have often been unsuccessful, and to the recent contributions of the "micro-criteria" approach to the problem.

C&T 902. Directed Readings. 3 Credits.
Directed Readings course is intended for students wishing to study an area not covered by or regularly offered in an existing course, or the subject of a course that is not regularly offered in the Curriculum & Teaching Department. This course is individually designed by C&T faculty with reading loads, writing requirements and academic expectations comparable to other doctoral level courses in the department. Prerequisite: Admission to the Ph.D. or Ed.D. program. Successful completion of C&T 920 or C&T 922 or by instructor permission.

C&T 903. Curriculum Supervision. 3 Credits.
An intensive study of the theoretical and research bases for curriculum supervision and improvement. Topics include models and practices in supervision and staff development, skills and instruments used in curriculum assessment, coordination of both human and material resources, and the dynamics of change strategies.

C&T 904. Philosophical Questions in Curriculum and Teaching. 3 Credits.
This course addresses philosophical questions pertaining to curriculum and teaching across a range of educational contexts. These questions center on epistemology, ethics, and the assumptions underlying alternative approaches to research in education. Students completing this course should be able to engage in philosophical inquiry and apply relevant philosophical literature and principles to the examination of curriculum and teaching.

C&T 905. Teacher Education in the U.S.. 2 Credits.
A study of the development, issues, and programs for the preparation of teachers. Open to all regular graduate students.

C&T 906. Qualitative and Curriculum Inquiry: Analysis and Interpretation. 3 Credits.
Supports novice researchers in extending their understanding of the theoretical frameworks underlying qualitative research, qualitative methodologies, the research process and its relationship with curriculum inquiry. During the course we will discuss various forms of qualitative research methods, approaches to research, and perspectives in methodology relate to curriculum inquiry. We will explore the intertwining of data generation, analysis, and writing. In addition, we will focus on refining data generation techniques, strategies for data analysis, data interpretation, and various forms of reporting/writing. Prior coursework: Introduction to a graduate level qualitative research course or permission from the instructor. Prerequisite: Introduction to a graduate level qualitative research course or permission from the instructor.

C&T 907. Critical Pedagogies. 3 Credits.
This course examines the theories and practices of several educational orientations that comprise "critical pedagogy." Students examine the historical roots and evolution of this broad orientation toward education. Recurring themes in the class are relations between knowledge and curriculum, the school and society, and teachers and students. Students completing the course should be able to analyze educational phenomena through a critical theoretical lens. Open to all doctoral students and advanced masters students with instructor permission.

C&T 920. Introduction to the Curriculum & Instruction Doctor of Education Program. 1 Credits.
This course is designed to provide first-year doctoral students an introduction of graduate study in the Doctor of Education (Ed.D.) program. The course will help students acclimate to University and Graduate School level expectations and conditions, and to begin the development of skills and abilities to translate theory and research into practice. Students will be guided through the critical skills of how planning and conducting research can translate to academic writing and scholarship in a field of study. Prerequisite: Admission to the Ed.D. program in curriculum and instruction.

C&T 922. Introduction to the Curriculum & Instruction Doctor of Philosophy Program. 1 Credits.
This seminar course introduces students to doctoral education, the faculty with whom they will work, the regulations and policies that guide their work and the structure and assessment for the Ph.D. program. This course will also assist students in becoming familiar with scholarship and planning, conducting, and sharing (writing and presenting) results of research. Prerequisite: Admission to the C&I Ph.D. program.
C&T 924. Advanced Research in 2nd Language Teaching and Learning. 3 Credits.
This course provides doctoral level students an in-depth overview of current issues in second language teaching and learning. Each week, we will explore research methodologies most appropriate for investigations of second language learning and teaching processes and the theoretical foundations that such research brings to light. Class reading assignments will draw from both "how to" handbooks and actual primary research, and students will engage in weekly reactions to and discussions of the readings. Students will also be guided in the development of research questions that target critical gaps in our current understanding of language teaching and learning. The culminating assignment is the preparation of a research proposal, an initial step toward the doctoral dissertation. Prerequisite: C&T 820, C&T 821, C&T 822, Admission to Doctoral Program; or permission of Instructor.

C&T 940. Evaluation of Research in Reading. 3 Credits.
This course is designed to support doctoral level students' ability to evaluate research around the teaching of reading. Issues of theory, research design, and methodology will be taken into consideration. Additional purposes include fostering discussion about prominent literacy researchers, influential journals, and writing, as well as factors that influence reading research.

C&T 951. Research and Evaluation in Mathematics and Science. 3 Credits.
This course introduces students to the processes of planning, conducting, and evaluating mathematics and science research and evaluation in education. This course emphasizes the methods and techniques used in both quantitative mathematics and science research and evaluation methodologies. Prerequisite: A PRE course in statistics.

C&T 970. Fostering Teacher Growth and Inquiry. 3 Credits.
Students will explore theory and research related to professional learning with a focus on the professional learner, professional contexts, and professional learning activities. Students will also learn about designing a pilot study that is set in a relevant professional context. Prerequisite: Admission to the Ed.D. program in the Department of Curriculum & Teaching or consent of instructor.

C&T 971. Planning and Conducting Educator Inquiry in Professional Settings. 3 Credits.
Students will explore theory and research related to student learning and its relationship to the professional learner, professional contexts, and professional learning activities. Students will learn how to conduct needs assessment in educational settings, and design and implement professional learning based on the needs assessment data. Students will also implement the pilot study that they designed in C&T 970. Prerequisite: C&T 970.

C&T 972. Connecting Professional Growth and Student Learning. 3 Credits.
Students will synthesize theory and research related to (a) curriculum and instruction, and (b) the relationship between student learning and professional learner, with respect to their career goals. Students will write a report and present findings from their pilot study and the professional learning they implemented in C&T 971. Prerequisite: C&T 970 and C&T 971.

C&T 975. Writing Literature Reviews. 1 Credits.
This course is designed to give doctoral students an introduction to writing literature reviews. The course will address the process of writing a literature review as well as the types of literature reviews that appear in dissertation study proposals and dissertations. The course is a 1-credit seminar that is designed to complement other coursework taken in the doctoral program. Prerequisite: Admission to a doctoral program in the University of Kansas, or permission from the instructor.

C&T 990. Capstone Seminar. 3 Credits.
This course will provide students in the Doctor of Education program with capstone experiences in the areas of curriculum and instruction in preparation for comprehensive examinations. Prerequisite: Admission to the Curriculum & Instruction Ed.D. program.

C&T 994. Advanced Topics: _____ 1-3 Credits.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students.

C&T 995. Field Experience in: _____ 1-5 Credits.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

C&T 996. Teaching and Learning in the College Classroom. 3 Credits.
This course identifies strategies of instruction, both face-to-face and online, for post-secondary learners. Students will analyze characteristics and needs of post-secondary learners and develop curriculum; for example, a syllabus, units, lessons, assessments, and course objectives, aligning objectives with assessments to learner outcomes for post-secondary learners. Prerequisite: Admission to a graduate program in the University of Kansas.

C&T 997. Individual Study. 1-4 Credits.
Prerequisite: Prior graduate course work in the area of study and consent of instructor.

C&T 998. Seminar in: _____ 1-4 Credits.

C&T 999. Doctoral Dissertation. 1-15 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Science in Education

Bachelor of Science in Education degrees from the Department of Curriculum and Teaching are offered in:

- Elementary Education – grades Kindergarten – 6th
- Elementary Education Unified - grades Kindergarten - 6th
- English Education Secondary – grades 6th – 12th
- Foreign Language Education – grades pre-Kindergarten – 12th
- History & Government Education Secondary – grades 6th – 12th
- Unified Early Childhood Education – Birth – 3rd grade, in both general and special education classrooms

All programs prepare students to be leaders and professionals in education and to positively impact children, classrooms, families, and society. Undergraduate programs feature extensive coursework in subject areas taught by expert faculty and multiple field experiences in rural, urban and suburban communities. Added endorsement options in Teaching English to Speakers of Other Languages and Special Education are available.

The Elementary education program prepares students to teach all subjects to children in kindergarten through sixth grade. Students have a broad background in English, mathematics, humanities, social sciences, and the sciences coupled with teaching methods classes. Multiple classes
include fieldwork in elementary schools to practice and refine teaching skills.

The Elementary Education Unified (EEU) education program prepares students to teach children in kindergarten through sixth grades in general education, special education, and inclusive classrooms, meeting the needs of all elementary students including those with identified disabilities and those at risk for delays. Students learn to structure rigorous learning experiences in multiple core academic content areas as well as address the social/emotional needs of individuals within and beyond each classroom, school, and into the global community.

The Secondary English education program mixes literature-based theory and knowledge with culturally rich readings and discussions. Courses taught by the English Department offer students learning options in rhetoric, linguistics, and literature.

The Foreign Languages education program offers majors in seven foreign languages: Chinese, French, German, Japanese, Latin, Russian or Spanish. Students in this program are encouraged to immerse themselves in the language by adding a Study Abroad experience.

The Secondary History and Government education program includes multiple content courses in history, economics, political science and geography from the College of Liberal Arts & Sciences. Students in the program learn how to engage middle and high school students in historical and contemporary topics using effective teaching strategies.

The Unified Early Childhood (UCE) education program leads to licensure for both general education and special education in infant, toddler, preschool, and kindergarten through third grade. Students in this program prepare to work in inclusive settings to meet the learning needs of young children, including those with disabilities.

Undergraduate Admission

Successful applicants to the teacher education program demonstrate academic competency, the potential to become an outstanding teacher, leadership skills, personal integrity and professional dispositions.

Teacher education students will be admitted as freshman if they are admitted to KU and declare Teacher Education as their major.

Students will be considered for transfer into the Teacher Education program (from another institution or academic program) if they are admitted to KU, declare Teacher Education as their major, and receive advisor approval verifying that they have met the following criteria:

- A GPA of at least 2.75 from a post-secondary institution or other academic program, no test scores required or regardless of test score submitted AND
- Transfer grades of "C-" or above. See an SOEHS advisor for course substitutions.

Bachelor of Science in Education Degree Requirements

Primary responsibility for meeting graduation requirements rests with the student.

- Complete an approved program with a minimum of 120 credit hours of course work. At least 30 hours must be taken in residence.
- A 2.75 minimum grade-point average for all academic coursework, including transfer hours.

- No grade lower than a C in any teacher education course.
- For History & Government, English, and Foreign Language: A 2.5 minimum grade-point average in content area courses.
- Other general regulations of the School and University, including KU Core Goal requirements. Successful completion of student teaching and/or internship.

Requirements to begin student teaching and/or internship:

- A minimum overall grade-point average of 2.75 with no grade lower than a C in any course in professional education.
- Continued demonstration throughout the program of professional dispositions as evaluated by program faculty each semester.
- For History & Government, English, and Foreign Language: A 2.5 minimum grade-point average in content area courses

Kansas Licensure Requirements

- Passing score on the Kansas Performance Teaching Portfolio (KPTP).
- Passing score on the Principles of Learning and Teaching Examination and Praxis content examination(s).
- Completion of Bachelor of Science in Education degree – see above.

Please note: Each state has its own licensure requirements. Being eligible for a license in Kansas does not ensure that the applicant is eligible for licensure in other states.

Unified Early Childhood (Birth–Grade 3) Major

Admission Requirements

Freshmen will be admitted to the Unified Early Childhood Education program if they are admitted to KU with assured admission criteria and declare Unified Early Childhood Education as their major.

Transfer Requirements

Students will be admitted to the Unified Early Childhood Education program (from another institution or academic program) if they are admitted to KU with a minimum 2.75 GPA and declare Unified Early Childhood Education as their major.

TRANSITION POINTS

Transition Point #1: Progression to the Professional Block 1 requires that all Pre-Professional coursework is completed with a minimum cumulative GPA of 2.75. Must consult with a SOEHS advisor before entering the Professional Block. Students must complete the following:

1. Declare intent to continue in teacher education program and enter the professional sequence.
2. Earn a minimum cumulative grade point average of 2.75.
3. Clear a criminal background check prior to placement in schools.
4. Respond to Question(s).
5. Submit two letters of reference (optional).
6. Administrative review of GPA in Prerequisite Courses. Students must have 2.50 GPA in the KU Core Curriculum and General Education courses.
7. Administrative review of dispositions for any concerns.
Transition Point #2: Progression into Professional Block 2 requires:

1. Administrative review of grades completed in required education courses. A final grade of C or better is required.
2. Clear a criminal background check prior to placement in schools.
3. Students must have maintained an overall GPA of at least 2.75.
4. Completion of the non-academic factor survey.
5. Administrative review of disposition assessment completed by education and academic supervisors and mentor/cooperating teacher(s).

Transition Point #3: Progression into Professional Block 3 requires:

1. Students have earned a final grade of “C” or better in Student Teaching.
2. Administrative review of disposition assessment completed by faculty.

Transition Point #4: Completion of Program requires:

1. Successful completion of the KU-Educator Performance Assessment and all other School of Education & Human Sciences requirements.
2. Completion of all required degree coursework and requirements with a 2.75 or higher cumulative grade point average.
3. Achievement of a grade of “C” or better in professional education courses including internship.
4. Students must earn a baccalaureate degree.
5. Students must meet the minimum score on the Principles of Learning and Teaching exam and any other exams required by the Kansas State Department of Education (for program completion and licensure).
6. Students must meet the minimum score on the content area exam(s) (for program completion and licensure).

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>C&amp;T 100</td>
<td>Introduction to the Education Profession (C&amp;T 100 and LING 106 fulfill KU Core Goal 1: Critical Thinking and Quantitative Literacy)</td>
<td>3</td>
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<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools (C&amp;T 235 fulfills KU Core Goal 4: Culture &amp; Diversity - Human Diversity)</td>
<td>3</td>
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<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (COMS 130 fulfills KU Core Goal 2: Communication (oral))</td>
<td>3</td>
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<tr>
<td>ENGL 101</td>
<td>Composition (ENGL 101 and ENGL 102 fulfill KU Core Goal 2: Communication (written))</td>
<td>3</td>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (ENGL 101 and ENGL 102 fulfill KU Core Goal 2: Communication (written))</td>
<td>3</td>
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<tr>
<td>GEOG 104</td>
<td>Introduction to Physical Geography (GEOG 104 fulfills KU Core Goal 3: Breadth of Knowledge - Natural Sciences)</td>
<td>3</td>
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<tr>
<td>MATH 101</td>
<td>College Algebra: ______ (MATH 101 and MATH 104 fulfill KU Core Goal 1: Critical Thinking and Quantitative Literacy)</td>
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<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
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<tr>
<td>SPED 261</td>
<td>Families and Professional Partnerships</td>
<td>3</td>
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**General Education Courses**

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience (ANTH 160 fulfill KU Core Goal 4: Culture &amp; Diversity - Global &amp; Cultural Awareness)</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 130</td>
<td>Comparative Societies</td>
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<tr>
<td>BIOL 100 &amp; BIOL 102</td>
<td>Principles of Biology and Principles of Biology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>HIST 128</td>
<td>History of the United States Through the Civil War (HIST 128 fulfills KU Core Goal 3: Breadth of Knowledge - Arts &amp; Humanities)</td>
<td>3</td>
</tr>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics (C&amp;T 100 and LING 106 fulfill KU Core Goal 1: Critical Thinking and Quantitative Literacy)</td>
<td>3</td>
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<tr>
<td>or LING 110</td>
<td>Language and Mind</td>
<td>4-5</td>
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Select one of the following options:

- Introductory Physics Class & Lab
- CHEM 110 Introductory Chemistry (CHEM 110 - 5 cr. hrs.)
- CHEM 130 General Chemistry I (CHEM 130 - 5 cr. hrs.)

**Professional Block 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 322</td>
<td>Curriculum and the Learner in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 330</td>
<td>Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 344</td>
<td>Children's Literature in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 347</td>
<td>Social Studies in the Elementary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 349</td>
<td>Science in the Elementary Classroom</td>
<td>3</td>
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<tr>
<td>C&amp;T 351</td>
<td>Mathematics for the Elementary Classroom</td>
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</tr>
<tr>
<td>C&amp;T 352</td>
<td>Literacy Instruction in the Primary Grades (K-3)</td>
<td>3</td>
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<tr>
<td>C&amp;T 353</td>
<td>Literacy Practicum in the Primary Grades</td>
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<tr>
<td>C&amp;T 402</td>
<td>Professional Learning Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>EPSY 305</td>
<td>Development and Learning of the Child (EPSY 305 fulfill KU Core Goal 3: Breadth of Knowledge - Social Sciences)</td>
<td>3</td>
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<tr>
<td>EPSY 480</td>
<td>Promoting Student Social-Emotional Well-Being</td>
<td>3</td>
</tr>
<tr>
<td>HSES 341</td>
<td>Instructional Strategies in Physical Education for Elementary Classroom Teachers</td>
<td>1</td>
</tr>
<tr>
<td>MATH 109</td>
<td>Mathematics for Elementary School Teachers I</td>
<td>3</td>
</tr>
<tr>
<td>MEMT 341</td>
<td>Instructional Strategies in Music for Elementary Classroom Teachers</td>
<td>2</td>
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<tr>
<td>or VAE 341</td>
<td>Instructional Strategies in Art for Elementary Classroom Teachers</td>
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<tr>
<td>SPED 650</td>
<td>Constructing Early Childhood Curriculum</td>
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<td>SPED 446</td>
<td>Professional Learning Seminar UEC</td>
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<td>SPED 661</td>
<td>Supporting Children with Significant Learning and Behavioral Challenges</td>
<td>3</td>
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<tr>
<td>SPED 663</td>
<td>Assessment Strategies in Early Education</td>
<td>3</td>
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<tr>
<td>SPED 665</td>
<td>Inclusive Strategies and Intervention for Preschoolers</td>
<td>3</td>
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<tr>
<td>SPED 667</td>
<td>Field Experience in Preschool (SPED 667 tied to Service Learning Certificate) fulfill KU Core Goal 5: Social Responsibility &amp; Ethics</td>
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</tbody>
</table>

**Professional Block 2**
Transition Point #2: Progression into Professional Block 2 requires:

1. Students have earned a final grade of “C” or better in Student Teaching.
2. Administrative review of disposition assessment completed by education and academic supervisors and mentor/cooperating teacher(s).

Transition Point #3: Progression into Professional Block 3 requires:

1. Successful completion of the KU-Educator Performance Assessment and all other School of Education & Human Sciences requirements.
2. Completion of all required degree coursework and requirements with a 2.75 or higher cumulative grade point average.
3. Achievement of a grade of “C” or better in professional education courses including internship.
4. Students must earn a baccalaureate degree.
5. Students must meet the minimum score on the Principles of Learning and Teaching exam and any other exams required by the Kansas State Department of Education (for program completion and licensure).
6. Students must meet the minimum score on the content area exam(s) (for program completion and licensure).

Elementary (K–6) Major

Admission Requirements

Freshmen will be admitted to the Elementary Education program if they are admitted to KU and declare Elementary Education as their major.

Transfer Requirements

Students will be admitted to the Elementary Education program (from another institution or academic program) if they are admitted to KU and declare Elementary Education as their major.

TRANSITION POINTS

Transition Point #1: Progression to the Professional Block 1 requires that all Pre-Professional coursework is completed with a minimum cumulative GPA of 2.75. Must consult with a SOEHS advisor before entering the Professional Block. Students must complete the following:

1. Declare intent to continue in teacher education program and enter the professional sequence.
2. Earn a minimum cumulative grade point average of 2.75.
3. Clear a criminal background check prior to placement in schools.
4. Respond to Question(s).
5. Submit two letters of reference (optional).
6. Administrative review of GPA in Prerequisite Courses. Students must have 2.50 GPA in the KU Core Curriculum and General Education courses.
7. Administrative review of dispositions for any concerns.

Transition Point #2: Progression into Professional Block 2 requires:

1. Administrative review of grades completed in required education courses. A final grade of C or better is required.
2. Clear a criminal background check prior to placement in schools.
3. Students must have maintained an overall GPA of at least 2.75.
4. Completion of the non-academic factor survey.
5. Administrative review of student dispositions by faculty.
6. Approval by the Associate Dean for Teacher Education and Undergraduate Programs.

Transition Point #4: Completion of Program requires:

1. Successful completion of the KU-Educator Performance Assessment and all other School of Education & Human Sciences requirements.
2. Completion of all required degree coursework and requirements with a 2.75 or higher cumulative grade point average.
3. Achievement of a grade of “C” or better in professional education courses including internship.
4. Students must earn a baccalaureate degree.
5. Students must meet the minimum score on the Principles of Learning and Teaching exam and any other exams required by the Kansas State Department of Education (for program completion and licensure).
6. Students must meet the minimum score on the content area exam(s) (for program completion and licensure).
Bachelor of Science in Education

**Professional Block 1**
- **C&T 301** Educational Technology in Elementary-Middle Education
- **C&T 322** Curriculum and the Learner in the Elementary School
- **C&T 330** Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom
- **C&T 344** Children's Literature in the Elementary School
- **C&T 347** Social Studies in the Elementary Classroom
- **C&T 349** Science in the Elementary Classroom
- **C&T 351** Mathematics for the Elementary Classroom
- **C&T 352** Literacy Instruction in the Primary Grades (K-3)
- **C&T 353** Literacy Practicum in the Primary Grades
- **C&T 354** Literacy Instruction in the Intermediate Grades
- **C&T 355** Literacy Practicum in the Intermediate Grades (4-6)
- **C&T 402** Professional Learning Seminar II
- **EPSY 305** Development and Learning of the Child (EPSY 305 meets KU Core Goal 3: Breadth of Knowledge - Social Sciences)
- **EPSY 320** Basics of Classroom Assessment
- **HSES 341** Instructional Strategies in Physical Education for Elementary Classroom Teachers
- **MATH 109** Mathematics for Elementary School Teachers I (MATH 109)
- **MATH 110** Mathematics for Elementary School Teachers II (MATH 110)
- **MEMT 341** Instructional Strategies in Music for Elementary Classroom Teachers
- **SPED 326** Teaching Exceptional Children and Youth in General Education

**Professional Block 2**
- **C&T 403** Professional Learning Seminar III
- **C&T 490** Student Teaching
- **ELPS 537** The Governance and Organization of Schools
- **EPSY 480** Promoting Student Social-Emotional Well-Being
- **SPED 506** Advanced Practices for Children with Disabilities in the Elementary General Education Classroom

**Professional Block 3**
- **C&T 494** Internship
- **C&T 495** Seminar: Developing the Teaching Portfolio (C&T 495 meets KU Core Goal 6: Integration & Creativity)

**Transition Point #1:** Progression to the Professional Block 1 requires that all Pre-Professional coursework is completed with a minimum cumulative GPA of 2.75. Must consult with a SOEHS advisor before entering the Professional Block. Students must complete the following:

1. Declare intent to continue in teacher education program and enter the professional sequence.
2. Earn a minimum cumulative grade point average of 2.75.
3. Clear a criminal background check prior to placement in schools.
4. Respond to Question(s).
5. Submit two letters of reference (optional).
6. Administrative review of GPA in Prerequisite Courses. Students must have 2.50 GPA in the KU Core Curriculum and General Education courses.
7. Administrative review of dispositions for any concerns.

**Transition Point #2:** Progression into Professional Block 2 requires:

1. Administrative review of grades completed in required education courses. A final grade of C or better is required.
2. Clear a criminal background check prior to placement in schools.
3. Students must have maintained an overall GPA of at least 2.75.
4. Completion of the non-academic factor survey.
5. Administrative review of student dispositions by faculty.
6. Approval by the Associate Dean for Teacher Education and Undergraduate Programs.

**Transition Point #3:** Progression into Professional Block 3 requires:

1. Students have earned a final grade of “C” or better in Student Teaching.
2. Administrative review of disposition assessment completed by education and academic supervisors and mentor/cooperating teacher(s).

**Transition Point #4:** Completion of Program requires:

1. BIOL 100 and BIOL 102 or another approved science with lab can be substituted for GEOG 104 for transition purposes only. Both courses must be completed before student teaching.

**Elementary Unified Major**

**Admission Requirements**
Freshmen will be admitted to the Elementary Education/Elementary Education Unified program if they are admitted to KU and declare Elementary Education/Elementary Education Unified as their major.

**Transfer Requirements**
Students will be admitted to the Elementary Education/Elementary Education Unified program (from another institution or academic program) if they are admitted to KU and declare Elementary Education/Elementary Education Unified as their major.

**Total Hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 102</td>
<td>Principles of Biology Laboratory</td>
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<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics (LING 106 and LING 110 meet KU Core Goal 1: Critical Thinking)</td>
<td>3</td>
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<tr>
<td>or LING 110</td>
<td>Language and Mind</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 148</td>
<td>Scientific Principles of Environmental Studies</td>
<td>4-5</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>POLS 110</td>
<td>Introduction to U.S. Politics</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 301</td>
<td>Educational Technology in Elementary-Middle Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 322</td>
<td>Curriculum and the Learner in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 330</td>
<td>Instructional Approaches for ESOL Learners in the Elementary/Early Childhood Classroom</td>
<td>3</td>
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<tr>
<td>C&amp;T 344</td>
<td>Children's Literature in the Elementary School</td>
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<tr>
<td>C&amp;T 347</td>
<td>Social Studies in the Elementary Classroom</td>
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<tr>
<td>C&amp;T 349</td>
<td>Science in the Elementary Classroom</td>
<td>3</td>
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<tr>
<td>C&amp;T 351</td>
<td>Mathematics for the Elementary Classroom</td>
<td>3</td>
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<tr>
<td>C&amp;T 352</td>
<td>Literacy Instruction in the Primary Grades (K-3)</td>
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<tr>
<td>C&amp;T 353</td>
<td>Literacy Practicum in the Primary Grades</td>
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<tr>
<td>C&amp;T 354</td>
<td>Literacy Instruction in the Intermediate Grades</td>
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<tr>
<td>C&amp;T 355</td>
<td>Literacy Practicum in the Intermediate Grades (4-6)</td>
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<tr>
<td>C&amp;T 402</td>
<td>Professional Learning Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>EPSY 305</td>
<td>Development and Learning of the Child (EPSY 305 meets KU Core Goal 3: Breadth of Knowledge - Social Sciences)</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 320</td>
<td>Basics of Classroom Assessment</td>
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<tr>
<td>HSES 341</td>
<td>Instructional Strategies in Physical Education for Elementary Classroom Teachers</td>
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<tr>
<td>MATH 109</td>
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<td>MATH 110</td>
<td>Mathematics for Elementary School Teachers II (MATH 110)</td>
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<tr>
<td>MEMT 341</td>
<td>Instructional Strategies in Music for Elementary Classroom Teachers</td>
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<tr>
<td>or VAE 341</td>
<td>Instructional Strategies in Art for Elementary Classroom Teachers</td>
<td>3</td>
</tr>
<tr>
<td>SPED 326</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 403</td>
<td>Professional Learning Seminar III</td>
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<tr>
<td>C&amp;T 490</td>
<td>Student Teaching</td>
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<tr>
<td>ELPS 537</td>
<td>The Governance and Organization of Schools</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 480</td>
<td>Promoting Student Social-Emotional Well-Being</td>
<td>3</td>
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<tr>
<td>SPED 506</td>
<td>Advanced Practices for Children with Disabilities in the Elementary General Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 494</td>
<td>Internship</td>
<td>6</td>
</tr>
<tr>
<td>C&amp;T 495</td>
<td>Seminar: Developing the Teaching Portfolio (C&amp;T 495 meets KU Core Goal 6: Integration &amp; Creativity)</td>
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</tr>
<tr>
<td>EPSY 520</td>
<td>Classroom Assessment</td>
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</table>

**Total Hours:** 120-121
1. Successful completion of the KU-Educator Performance Assessment and all other School of Education & Human Sciences requirements.

2. Completion of all required degree coursework and requirements with a 2.75 or higher cumulative grade point average.

3. Achievement of a grade of "C" or better in professional education courses including internship.

4. Students must earn a baccalaureate degree.

5. Students must meet the minimum score on the Principles of Learning and Teaching exam and any other exams required by the Kansas State Department of Education (for program completion and licensure).

6. Students must meet the minimum score on the content area exam(s) (for program completion and licensure).

**Pre-Professional Coursework**

<table>
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<tr>
<th>Code</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>C&amp;T 100</td>
<td>Introduction to the Education Profession (C&amp;T 100 meets KU Core Goal 1: Critical Thinking)</td>
<td>3</td>
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<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (COMS 130 meets KU Core Goal 2: Communication - Oral)</td>
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<tr>
<td>ELPS 250</td>
<td>Education and Society</td>
<td>3</td>
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<tr>
<td>ENGL 101</td>
<td>Composition (ENGL 101 and ENGL 102 meet KU Core Goal 2: Communication - Written)</td>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (ENGL 101 and ENGL 102 meet KU Core Goal 2: Communication - Written)</td>
<td>3</td>
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<tr>
<td>GEOG 104</td>
<td>Introduction to Physical Geography (GEOG 104 meets KU Core Goal 3: Breadth of Knowledge - Natural Sciences)</td>
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<tr>
<td>HIST 128</td>
<td>History of the United States Through the Civil War (HIST 128 meets KU Core Goal 3: Breadth of Knowledge - Arts &amp; Humanities)</td>
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<tr>
<td>MATH 101</td>
<td>College Algebra: (MATH 101 or higher meets KU Core Goal 1: Quantitative Literacy)</td>
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<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
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**Total Hours** 27

**General Education Requirements**

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<tr>
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<tbody>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience (ANTH 160 or approved study abroad experience) meets KU Core Goal 4: Culture &amp; Diversity - Global &amp; Cultural Awareness)</td>
<td>3</td>
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<tr>
<td>or SOC 130</td>
<td>Comparative Societies</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology (BIOL 100 meets KU Core Goal 3: Breadth of Knowledge - Natural Sciences)</td>
<td>3</td>
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<tr>
<td>BIOL 102</td>
<td>Principles of Biology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
<td>3</td>
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<tr>
<td>or LING 110</td>
<td>Language and Mind</td>
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<tr>
<td>Select one of the following options:</td>
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<td>4-5</td>
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<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry (CHEM 110 - 5 cr. hrs.)</td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I (CHEM 130 - 5 cr. hrs.)</td>
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<tr>
<td>PHSX 111 &amp; PHSX 116</td>
<td>Introductory Physics and Introductory Physics Laboratory (PHSX 111 meets KU Core Goal 3: Breadth of Knowledge - Social Sciences. PHSX 111 with PHSX 116 - 4 cr. hrs.)</td>
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<tr>
<td>POLS 110</td>
<td>Introduction to U.S. Politics (POL 110 Meets KU Core Goal 3: Breadth of Knowledge - Social Sciences)</td>
<td>3</td>
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</table>

**Total Hours** 20-21

**Professional Block 1**

<table>
<thead>
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<th>Title</th>
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<tr>
<td>C&amp;T 322</td>
<td>Curriculum and the Learner in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 344</td>
<td>Children's Literature in the Elementary School</td>
<td>3</td>
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<tr>
<td>C&amp;T 347</td>
<td>Social Studies in the Elementary Classroom</td>
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<tr>
<td>C&amp;T 349</td>
<td>Science in the Elementary Classroom</td>
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<tr>
<td>C&amp;T 351</td>
<td>Mathematics for the Elementary Classroom</td>
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</tr>
<tr>
<td>C&amp;T 352</td>
<td>Literacy Instruction in the Primary Grades (K-3)</td>
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<tr>
<td>C&amp;T 353</td>
<td>Literacy Practicum in the Primary Grades</td>
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<tr>
<td>C&amp;T 354</td>
<td>Literacy Instruction in the Intermediate Grades</td>
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<tr>
<td>C&amp;T 355</td>
<td>Literacy Practicum in the Intermediate Grades (4-6)</td>
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<tr>
<td>C&amp;T 402</td>
<td>Professional Learning Seminar II</td>
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<tr>
<td>or SPED 402</td>
<td>Professional Learning Seminar II</td>
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</tr>
<tr>
<td>EPSY 305</td>
<td>Development and Learning of the Child (EPSY 305 meets KU Core Goal 3: Breadth of Knowledge - Social Sciences)</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 320</td>
<td>Basics of Classroom Assessment</td>
<td>1</td>
</tr>
<tr>
<td>HSES 341</td>
<td>Instructional Strategies in Physical Education for Elementary Classroom Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109</td>
<td>Mathematics for Elementary School Teachers I (MATH 109 meets KU Core Goal 1: Quantitative Literacy)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110</td>
<td>Mathematics for Elementary School Teachers II (MATH 110 meets KU Core Goal 1: Quantitative Literacy)</td>
<td>3</td>
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<tr>
<td>MEMT 341</td>
<td>Instructional Strategies in Music for Elementary Classroom Teachers</td>
<td>2</td>
</tr>
<tr>
<td>or VAE 341</td>
<td>Instructional Strategies in Art for Elementary Classroom Teachers</td>
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<tr>
<td>SPED 261</td>
<td>Families and Professional Partnerships</td>
<td>3</td>
</tr>
<tr>
<td>SPED 326</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
<td>3</td>
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<tr>
<td>SPED 328</td>
<td>Using Technology to Plan and Design Instruction for All Students</td>
<td>3</td>
</tr>
<tr>
<td>SPED 440</td>
<td>Evid Based Prac in English/Lang Arts Literacy for Students Struggling or w/ IEPs: Beg Read &amp; Writing (blocked with literacy methods courses)</td>
<td>2</td>
</tr>
<tr>
<td>SPED 441</td>
<td>Evidence Based Practices in Reading and Literacy for Students w/IEPs:Vocabulary&amp;Comprehension Devel (blocked with literacy methods courses)</td>
<td>2</td>
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</table>
SPED 442 Evidence Based Practices in Mathematics, Science, and Social Studies for Students with IEPs (blocked with inquiry methods courses) 2

Total Hours 54

Professional Blocks 2 and 3

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>Professional Block 2</td>
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<tr>
<td>C&amp;T 490</td>
<td>Student Teaching (Must have a grade of C or higher)</td>
<td>6</td>
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<tr>
<td>ELPS 537</td>
<td>The Governance and Organization of Schools</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 480</td>
<td>Promoting Student Social-Emotional Well-Being</td>
<td>3</td>
</tr>
<tr>
<td>SPED 403</td>
<td>Professional Learning Seminar III</td>
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<td>or C&amp;T 403</td>
<td>Professional Learning Seminar III</td>
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<tr>
<td>SPED 443</td>
<td>Evidence-based Strategies and Practices for Creating Positive, Productive Classrooms</td>
<td>3</td>
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<tr>
<td>Professional Block 3</td>
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<tr>
<td>C&amp;T 495</td>
<td>Seminar: Developing the Teaching Portfolio (C&amp;T 495 meets KU Core Goal 6: Integration &amp; Creativity)</td>
<td>3</td>
</tr>
<tr>
<td>SPED 444</td>
<td>Classroom Assessment and Beyond. Practices for Students with IEPs</td>
<td>3</td>
</tr>
<tr>
<td>SPED 494</td>
<td>Intmshp-Specialized Instr in Gen Ed Elem Classrooms&amp;Support Settings for Students w/ Disabilities</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Hours 28

Admission and Transfer Requirements

Admission Requirements

Freshmen will be admitted to the Secondary Teacher Education program if they are admitted to KU meeting assured admission criteria and declare Secondary Teacher Education as their major.

Transfer Requirements

Students will be admitted to the Secondary Teacher Education program (from another institution or academic program) if they are admitted to KU with 2.75 GPA or higher and declare Secondary Teacher Education as their major.

TRANSMITION POINTS

Transition Point #1: Progression to the Professional Block 1 requires that all Pre-Professional coursework is completed with a minimum cumulative GPA of 2.75. Must consult with a SOEHS advisor before entering the Professional Block. Students must complete the following:

1. Declare intent to continue in teacher education program and enter the professional sequence.
2. Earn a minimum cumulative grade point average of 2.75.
3. Clear a criminal background check prior to placement in schools.
4. Respond to Question(s).
5. Submit two letters of reference (optional).
6. Administrative review of GPA in Prerequisite Courses. Students must have 2.50 GPA in the KU Core Curriculum and General Education courses.
7. Administrative review of dispositions for any concerns.

Transition Point #2: Progression into Professional Block 2 requires:

1. Administrative review of grades completed in required education courses. A final grade of C or better is required.
2. Clear a criminal background check prior to placement in schools.
3. Students must have maintained an overall GPA of at least 2.75.
4. Completion of the non-academic factor survey.
5. Administrative review of student dispositions by faculty.
6. Approval by the Associate Dean for Teacher Education and Undergraduate Programs.

Transition Point #3: Progression into Professional Block 3 requires:

1. Students have earned a final grade of “C” or better in Advanced Field Practicum.
2. Administrative review of disposition assessment completed by education and academic supervisors and mentor/cooperating teacher(s).

Transition Point #4: Completion of Program requires:

1. Successful completion of the KU-Educator Performance Assessment and all other School of Education & Human Sciences requirements.
2. Completion of all required degree coursework and requirements with a 2.75 or higher cumulative grade point average.
3. Achievement of a grade of “C” or better in professional education courses including internship.
4. Students must earn a baccalaureate degree.
5. Students must meet the minimum score on the Principles of Learning and Teaching exam and any other exams required by the Kansas State Department of Education (for program completion and licensure).
6. Students must meet the minimum score on the content area exam(s) (for program completion and licensure).

Secondary (6-12) English Major

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Professional Coursework</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C&amp;T 100</td>
<td>Introduction to the Education Profession (C&amp;T 100 fulfills KU Core Goal 1: Critical Thinking)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools (C&amp;T 235 fulfills KU Core Goal 4: Culture &amp; Diversity - Human Diversity)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (COMS 130 fulfills KU Core Goal 2: Communication - Oral)</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 250</td>
<td>Education and Society (ELPS 250 fulfills KU Core Goal 5: Social Responsibility &amp; Ethics - Education &amp; Society)</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition (ENGL 101 fulfills KU Common Core Goal 2: Communication - Written)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (ENGL 102 fulfills KU Common Core Goal 2: Communication - Written)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 104</td>
<td>Introduction to Physical Geography (GEOG 104 fulfills KU Core Goal 3: Breadth of Knowledge - Natural Sciences)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 128</td>
<td>History of the United States Through the Civil War (HIST 128 fulfills KU Core Goal 3: Breadth of Knowledge - Arts &amp; Humanities)</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 129</td>
<td>History of the United States After the Civil War</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (MATH 101 and MATH 104 fulfill KU Core Goal 1: Quantitative Literacy) recommended</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
<td></td>
</tr>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience (ANTH 160 [or approved study abroad experience] fulfills KU Core Goal 4: Culture &amp; Diversity - Global &amp; Cultural Awareness)</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 130</td>
<td>Comparative Societies</td>
<td></td>
</tr>
<tr>
<td>BIOL 100 &amp; BIOL 102</td>
<td>Principles of Biology and Principles of Biology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
</tbody>
</table>

**Content Area Courses (English)**

Select one of the following courses:

- ENGL 203 Topics in Reading and Writing: _____
- ENGL 209 Introduction to Fiction
- ENGL 210 Introduction to Poetry
- ENGL 211 Introduction to the Drama
- ENGL 312 Major British Writers to 1800
- or ENGL 314 Major British Writers after 1800
- ENGL 320 American Literature I
- or ENGL 322 American Literature II
- ENGL 332 Shakespeare

Select one of the following courses in Creative Writing:

- ENGL 351 Fiction Writing I
- ENGL 352 Poetry Writing I
- ENGL 353 Screenwriting I
- ENGL 354 Playwriting I
- ENGL 355 Nonfiction Writing I
- ENGL 360 Topics in Writing: _____
- ENGL 551 Fiction Writing II
- ENGL 552 Poetry Writing II
- ENGL 554 Playwriting II
- ENGL 555 Nonfiction Writing II

Select one of the following courses in Transcultural Literature:

- ENGL 305 World Indigenous Literatures
- ENGL 306 Global Environmental Literature
- ENGL 326 Introduction to African Literature
- ENGL 336 Jewish American Literature and Culture
- ENGL 337 Introduction to U.S. Latino/a Literature
- ENGL 338 Introduction to African-American Literature
- ENGL 339 Introduction to Caribbean Literature
- ENGL 340 Topics in U.S. Ethnic Literature: _____
- ENGL 341 American Literature of Social Justice
- ENGL 572 Women and Literature: _____
- ENGL 574 African American Literature: _____
- HUM 304 World Literature I
- HUM 308 World Literature II
- HUM 312 World Literature III

Select two of the following courses in Individual Authors/Movements:

- ENGL 301 Topics in British Literature to 1800: _____
- ENGL 302 Topics in British Literature Since 1800: _____
- ENGL 310 Literary History I
- ENGL 315 Studies in British Literature
- ENGL 317 Topics in American Literature to 1865: _____
- ENGL 318 Topics in American Literature Since 1865: _____
- ENGL 324 Contemporary Authors: _____
- ENGL 325 Recent Popular Literature
- ENGL 327 Studies in Twentieth-Century Drama: _____
- ENGL 330 Literary History II
- ENGL 331 Chaucer
- ENGL 334 Major Authors: _____
- ENGL 340 Topics in U.S. Ethnic Literature: _____
- ENGL 479 The Literature of: _____

Select one of the following courses in English Language Studies:

- ENGL 385 The Development of Modern English
- ENGL 387 Introduction to the English Language

Select one of the following courses in Advanced Composition Studies:

- ENGL 360 Topics in Writing: _____
- ENGL 380 Introduction to Rhetoric and Composition
- ENGL 400 Teaching and Tutoring Writing
- ENGL 580 Rhetoric and Writing: _____

**Professional Block 1**

- C&T 302 Educational Technology in Middle/Secondary Education
- C&T 324 Curriculum Learner in the Middle School and High School
- C&T 331 Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom
- C&T 402 Professional Learning Seminar II
- C&T 430 Teaching Literature for Young Adults
- C&T 448 Reading and Writing Across the Curriculum
- C&T 533 Curriculum and Instruction in Middle & Secondary English/Language Arts Classrooms
- EPSY 306 Development and Learning of the Adolescent (EPSY 306 fulfills KU Core Goal 3: Breadth of Knowledge - Social Sciences)
- EPSY 320 Basics of Classroom Assessment
- EPSY 480 Promoting Student Social-Emotional Well-Being
- SPED 326 Teaching Exceptional Children and Youth in General Education

**Professional Block 2**

- C&T 403 Professional Learning Seminar III
- C&T 489 Advanced Teaching Practicum
Middle (5-8) Mathematics Major

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 130</td>
<td>Comparative Societies</td>
<td></td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>&amp; BIOL 102</td>
<td>and Principles of Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>C&amp;T 100</td>
<td>Introduction to the Education Profession</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIST 128</td>
<td>History of the United States Through the Civil War</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 129</td>
<td>History of the United States After the Civil War</td>
<td></td>
</tr>
</tbody>
</table>
| MATH 101 | College Algebra: _____
| or MATH 104 | Precalculus Mathematics                                      | 3-5   |
|           | Select one of the following:                               |       |
| MATH 105 | Introductory Quantitative Reasoning                        | 3-5   |
| MATH 115 | Calculus I
|           | recommended                                               |       |
| PSYC 104 | General Psychology                                         | 3     |
| HSES 260 | Personal and Community Health                              | 3     |

Select one of the following Physical science lecture and labs:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 105</td>
<td>Introductory Meteorology</td>
<td>4-5</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td></td>
</tr>
<tr>
<td>GEOG 104</td>
<td>Introduction to Physical Geography</td>
<td>4</td>
</tr>
<tr>
<td>&amp; GEOG 105</td>
<td>and Introductory Laboratory in Physical Geography</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td>4</td>
</tr>
<tr>
<td>&amp; GEOL 103</td>
<td>and Geology Fundamentals Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td></td>
</tr>
<tr>
<td>MATH 109</td>
<td>Mathematics for Elementary School Teachers I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110</td>
<td>Mathematics for Elementary School Teachers II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 409</td>
<td>Topics in Geometry for Secondary and Middle School Teachers</td>
<td>2</td>
</tr>
</tbody>
</table>

MATH 410 | Topics in History of Mathematics for Secondary and Middle School Teachers | 1     |
| MATH 450 | Discrete Mathematics                                        | 3     |
| MATH 558 | Introductory Modern Algebra                                 | 3     |
| MATH elective (MATH 290 is recommended) | 2-5 |

NOTE: No revisions are submitted for the Middle Level Mathematics Major at this time. Admission to this major is suspended pending licensure changes.

Second (6-12) History/Government and the Social Studies Major

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 100</td>
<td>Introduction to the Education Profession (C&amp;T 100 fulfills KU Core Goal 1: Critical Thinking)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools (C&amp;T 235 fulfills KU Core Goal 4: Culture &amp; Diversity - Human Diversity)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (COMS 130 fulfills KU Core Goal 2: Communication - Oral)</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 250</td>
<td>Education and Society (ELPS 250 fulfills KU Core Goal 5: Social Responsibility &amp; Ethics - Education &amp; Society)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition (ENGL 101 fulfills KU Common Core Goal 2: Communication - Written)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (ENGL 102 fulfills KU Common Core Goal 2: Communication - Written)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 100</td>
<td>World Regional Geography (Admission Requirement - GEOG 100 fulfills KU Core Goal 4: Culture &amp; Diversity - Global &amp; Cultural Awareness)</td>
<td>3</td>
</tr>
</tbody>
</table>
GEOG 104  Introduction to Physical Geography (Admission Requirement - GEOG 104 fulfills KU Core Goal 3: Breadth of Knowledge - Natural Sciences)  3
HIST 128  History of the United States Through the Civil War (Admission Requirement - HIST 128 fulfills KU Core Goal 3: Breadth of Knowledge - Arts & Humanities)  3
MATH 101  College Algebra: _____ (MATH 101 and MATH 104 fulfill KU Core Goal 1: Quantitative Literacy) recommended  3
or MATH 104  Precalculus Mathematics

Content Area Courses (History/Government and the Social Studies)

ECON 104  Introductory Economics  4
HIST 129  History of the United States After the Civil War  3
HIST 308  Key Themes in Modern Global History  3
HIST 348  History of the Peoples of Kansas  3

Select a course in each of the following categories:

HIST (300 level or higher) A course in American history  3
HIST - A course in Latin American history  3
HIST - A course in Asian or African history  3
HIST (300 level or higher) A course in European history  3
GEOG - A Geography Mapping course  3
GEOG - A non-western Geography course  3
POLS 110  Introduction to U.S. Politics  3
POLS 150  Introduction to Comparative Politics  3
POLS (300 level or higher) Political Science course  3

Professional Block 1

C&T 302  Educational Technology in Middle/Secondary Education  3
C&T 324  Curriculum Learner in the Middle School and High School  3
C&T 331  Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom  3
C&T 335  Curriculum and Instruction in Middle and Secondary History and Government Classrooms  3
C&T 402  Professional Learning Seminar II  1
C&T 420  Teaching Kansas Government and Contemporary Public Policy Issues: _____ (Intended to meet state's Kansas government standard)  3
C&T 448  Reading and Writing Across the Curriculum  3
EPSY 306  Development and Learning of the Adolescent (EPSY 306 fulfills KU Core Goal 3: Breadth of Knowledge - Social Sciences)  3
EPSY 320  Basics of Classroom Assessment  1
EPSY 480  Promoting Student Social-Emotional Well-Being  3
SPED 326  Teaching Exceptional Children and Youth in General Education  3

Professional Block 2

C&T 403  Professional Learning Seminar III  1
C&T 489  Advanced Teaching Practicum  1
C&T 541  Advanced Practices in Teaching Social Studies in Middle/Secondary Schools  3
ELPS 537  The Governance and Organization of Schools  3

SPED 507  Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom  3

Professional Block 3

C&T 490  Student Teaching  6
C&T 495  Seminar: Developing the Teaching Portfolio (C&T 495 fulfills KU Core Goal 6: Integration & Creativity)  3
EPSY 520  Classroom Assessment  2

Total Hours 121

NOTE: No revisions are submitted for the Middle Level Science Major at this time. Admission to this major is suspended pending licensure changes.

Middle (5-8) Science Major

Code Title Hours

Admission Requirements

ANTH 160  The Varieties of Human Experience  3
or SOC 130  Comparative Societies  3
BIOL 150  Principles of Molecular and Cellular Biology  3
C&T 100  Introduction to the Education Profession  3
COMS 130  Speaker-Audience Communication  3
ENGL 101  Composition  3
ENGL 102  Critical Reading and Writing  3
MATH 101  College Algebra: _____ recommended  3-5
or MATH 104  Precalculus Mathematics

Select one of the following:

MATH 105  Introductory Quantitative Reasoning  3-5
MATH 115  Calculus I recommended
or higher level mathematics class

PSYC 104  General Psychology  3

Major Requirements

ASTR 191  Contemporary Astronomy  3
ATMO 105  Introductory Meteorology  5
BIOL 152  Principles of Organismal Biology  3
CHEM 130  General Chemistry I  5
CHEM 135  General Chemistry II  5
GEOL 101  The Way The Earth Works  5
& GEOL 103  and Geology Fundamentals Laboratory

History of science course  2-3

Select one of the following:

MATH 101  College Algebra: _____ & MATH 103  and Trigonometry
MATH 104  Precalculus Mathematics

PHSX 114  College Physics I  4
PHSX 115  College Physics II  4
Elective in science (300 level or higher)  3
Undergraduate science research course (300 level or higher)  3

Teacher Education Courses

C&T 235  Cultural Diversity, Equity, and Inclusion in K-12 Schools  3
ELPS 250  Education and Society  3
C&T 302  Educational Technology in Middle/Secondary Education  3
EPSY 306 Development and Learning of the Adolescent 3
SPED 326 Teaching Exceptional Children and Youth in General Education 3
C&T 324 Curriculum Learner in the Middle School and High School 3
EPSY 480 Promoting Student Social-Emotional Well-Being 3
C&T 331 Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom 3
C&T 537 Curriculum and Instruction in Middle and Secondary Science Classrooms 3
C&T 542 Advanced Practices in Teaching Science in the Middle and Secondary Schools 3
C&T 448 Reading and Writing Across the Curriculum 3
C&T 489 Advanced Teaching Practicum 1
ELPS 537 The Governance and Organization of Schools 3
SPED 507 Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom 3
C&T 490 Student Teaching 6
C&T 495 Seminar: Developing the Teaching Portfolio 3
EPSY 520 Classroom Assessment 2

Foreign Language Majors (PreK-12) Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience (ANTH 160 [or approved study abroad experience] fulfills KU Core Goal 4: Culture &amp; Diversity - Global &amp; Cultural Awareness)</td>
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</tr>
<tr>
<td>or SOC 130</td>
<td>Comparative Societies</td>
<td></td>
</tr>
<tr>
<td>BIOL 100 &amp; BIOL 102</td>
<td>Principles of Biology and Principles of Biology Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;T 100</td>
<td>Introduction to the Education Profession (C&amp;T 100 fulfills KU Core Goal 1: Critical Thinking)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (COMS 130 fulfills KU Core Goal 2: Communication - Oral)</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 250</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition (ENGL 101 fulfills KU Common Core Goal 2: Communication - Written)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (ENGL 102 fulfills KU Common Core Goal 2: Communication - Written)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 128</td>
<td>History of the United States Through the Civil War (HIST 128 fulfills KU Core Goal 3: Breadth of Knowledge - Arts &amp; Humanities)</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 129</td>
<td>History of the United States After the Civil War</td>
<td></td>
</tr>
<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (MATH 101 and MATH 104 fulfill KU Core Goal 1: Quantitative Literacy) recommended</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

A Physical Science lecture course (for Spanish and Japanese language areas only) 3

**Total Hours 37**

PreK-12 Foreign Language Teacher Education Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 302</td>
<td>Educational Technology in Middle/Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 324</td>
<td>Curriculum Learner in the Middle School and High School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 331</td>
<td>Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 402</td>
<td>Professional Learning Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>C&amp;T 448</td>
<td>Reading and Writing Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 530</td>
<td>Curriculum and Instruction in Foreign Language Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 306</td>
<td>Development and Learning of the Adolescent</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 320</td>
<td>Basics of Classroom Assessment</td>
<td>1</td>
</tr>
<tr>
<td>EPSY 480</td>
<td>Promoting Student Social-Emotional Well-Being</td>
<td>3</td>
</tr>
<tr>
<td>SPED 326</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 48**

NOTE: No revisions are submitted for the Chinese Major at this time. Admission to this major is suspended pending licensure changes.

Chinese Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 104</td>
<td>Elementary Chinese I</td>
<td>5</td>
</tr>
<tr>
<td>CHIN 108</td>
<td>Elementary Chinese II</td>
<td>5</td>
</tr>
<tr>
<td>CHIN 204</td>
<td>Intermediate Chinese I</td>
<td>5</td>
</tr>
<tr>
<td>CHIN 208</td>
<td>Intermediate Chinese II</td>
<td>5</td>
</tr>
<tr>
<td>CHIN 504</td>
<td>Advanced Modern Chinese I</td>
<td>5</td>
</tr>
<tr>
<td>CHIN 508</td>
<td>Advanced Modern Chinese II</td>
<td>5</td>
</tr>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
<td>3</td>
</tr>
</tbody>
</table>
Select one of the following courses:  
CHIN 562  Modern Chinese Texts I  
EALC 318  Modern Chinese Fiction and Film  
EALC 319  Contemporary Chinese Fiction and Film  
EALC 330  China’s Cultural Legacy

Select one of the following courses:  
CHIN 564  Modern Chinese Texts II  
EALC 368  The Peoples of China  
EALC 420  Daily Life in China From the Opium War to 1911

**Total Hours**: 39

### French Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 110</td>
<td>Elementary French I</td>
<td>5</td>
</tr>
<tr>
<td>or FREN 111</td>
<td>Introduction to French I</td>
<td></td>
</tr>
<tr>
<td>FREN 120</td>
<td>Elementary French II</td>
<td>5</td>
</tr>
<tr>
<td>FREN 230</td>
<td>Intermediate French I</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 231</td>
<td>Intermediate French I, Honors</td>
<td></td>
</tr>
<tr>
<td>FREN 240</td>
<td>Intermediate French II</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 241</td>
<td>Intermediate French II, Honors</td>
<td></td>
</tr>
<tr>
<td>FREN 301</td>
<td>French Written and Oral Communication 1</td>
<td>3</td>
</tr>
<tr>
<td>FREN 302</td>
<td>French Written and Oral Communication 2</td>
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</tr>
<tr>
<td>FREN 310</td>
<td>French Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>FREN 326</td>
<td>Introduction to French Literature</td>
<td>3</td>
</tr>
<tr>
<td>FREN 350</td>
<td>Applied French Grammar and Composition I</td>
<td>3</td>
</tr>
<tr>
<td>FREN 375</td>
<td>Intermediate French Conversation</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FREN 410</td>
<td>Survey of French Culture I</td>
<td></td>
</tr>
<tr>
<td>FREN 450</td>
<td>French Literature of the Middle Ages</td>
<td></td>
</tr>
<tr>
<td>FREN 460</td>
<td>Identity, Absolutism, and Power in France, 1589-1715</td>
<td></td>
</tr>
<tr>
<td>FREN 465</td>
<td>French Literature of the 19th Century</td>
<td></td>
</tr>
<tr>
<td>FREN 470</td>
<td>French Literature of the Twentieth Century</td>
<td></td>
</tr>
<tr>
<td>FREN 480</td>
<td>Studies in French Literature:</td>
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<tr>
<td>Select one of the following courses:</td>
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<tr>
<td>FREN 420</td>
<td>Survey of French Culture II</td>
<td></td>
</tr>
<tr>
<td>or FREN 430La France d’Aujourd’hui</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FREN 431</td>
<td>French-Speaking World (Outside France)</td>
<td></td>
</tr>
<tr>
<td>FREN 440</td>
<td>Studies in French Culture:</td>
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</tr>
</tbody>
</table>

**Total Hours**: 34

**NOTE**: No revisions are submitted for the Japanese Major at this time. Admission to this major is suspended pending licensure changes.

### Japanese Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>JPN 104</td>
<td>Elementary Japanese I</td>
<td>5</td>
</tr>
<tr>
<td>JPN 108</td>
<td>Elementary Japanese II</td>
<td>5</td>
</tr>
<tr>
<td>JPN 204</td>
<td>Intermediate Japanese I</td>
<td>5</td>
</tr>
<tr>
<td>JPN 208</td>
<td>Intermediate Japanese II</td>
<td>5</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
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<tr>
<td>FMS 315</td>
<td>Survey of Japanese Film</td>
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</tr>
<tr>
<td>HIST 398</td>
<td>Introduction to History of Japan: Anime to Zen</td>
<td></td>
</tr>
<tr>
<td>HIST 399</td>
<td>The Samurai</td>
<td></td>
</tr>
<tr>
<td>REL 509</td>
<td>Religion in Japan</td>
<td></td>
</tr>
<tr>
<td>JPN 504</td>
<td>Advanced Modern Japanese I</td>
<td>5</td>
</tr>
<tr>
<td>JPN 508</td>
<td>Advanced Modern Japanese II</td>
<td>5</td>
</tr>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following courses:</td>
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<tr>
<td>JPN 562</td>
<td>Modern Japanese Texts I</td>
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</tr>
<tr>
<td>EALC 312</td>
<td>Japan’s Literary Legacy</td>
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<tr>
<td>EALC 575</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
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**Total Hours**: 39

### Latin Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>LAT 104</td>
<td>Elementary Latin I</td>
<td>5</td>
</tr>
<tr>
<td>or LAT 105</td>
<td>Elementary Latin I, Honors</td>
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<tr>
<td>LAT 108</td>
<td>Elementary Latin II</td>
<td>5</td>
</tr>
<tr>
<td>or LAT 109</td>
<td>Elementary Latin II, Honors</td>
<td></td>
</tr>
<tr>
<td>LAT 112</td>
<td>Readings in Latin Literature</td>
<td>3</td>
</tr>
<tr>
<td>or LAT 113</td>
<td>Readings in Latin Literature, Honors</td>
<td></td>
</tr>
<tr>
<td>Select three of the following courses:</td>
<td></td>
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<tr>
<td>LAT 300</td>
<td>Intermediate Latin Composition</td>
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</tr>
<tr>
<td>LAT 301</td>
<td>Prose Fiction and Epistolography</td>
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</tr>
<tr>
<td>LAT 302</td>
<td>Hexameter Poetry</td>
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**Total Hours**: 39
### Russian Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>RUSS 104</td>
<td>Elementary Russian I</td>
<td>5</td>
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<tr>
<td>RUSS 108</td>
<td>Elementary Russian II</td>
<td>5</td>
</tr>
<tr>
<td>RUSS 204</td>
<td>Intermediate Russian I</td>
<td>5</td>
</tr>
<tr>
<td>RUSS 208</td>
<td>Intermediate Russian II</td>
<td>5</td>
</tr>
<tr>
<td>RUSS 504</td>
<td>Advanced Russian I</td>
<td>3</td>
</tr>
<tr>
<td>RUSS 508</td>
<td>Advanced Russian II</td>
<td>3</td>
</tr>
<tr>
<td>RUSS 700</td>
<td>Classics of Russian Culture</td>
<td>3</td>
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<tr>
<td>RUSS 704</td>
<td>Contemporary Russian Culture</td>
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<tr>
<td>RUSS 708</td>
<td>Russian Phonetics and Grammar</td>
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</tr>
<tr>
<td>RUSS 712</td>
<td>Introduction to Russian Literature</td>
<td>3</td>
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<tr>
<td>RUSS 716</td>
<td>Stylistics</td>
<td>3</td>
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<tr>
<td>SLAV 140</td>
<td>Understanding Russia</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 340</td>
<td>The Language Landscape of Eastern Europe</td>
<td>3</td>
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**Total Hours**: 47

### Spanish Major Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>SPAN 104</td>
<td>Elementary Spanish I</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 108</td>
<td>Elementary Spanish II</td>
<td>5</td>
</tr>
<tr>
<td>SPAN 212</td>
<td>Intermediate Spanish I</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 216</td>
<td>Intermediate Spanish II</td>
<td>3</td>
</tr>
<tr>
<td>or SPAN 217</td>
<td>Honors Intermediate Spanish II</td>
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</tr>
<tr>
<td>SPAN 324</td>
<td>Grammar and Composition</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 328</td>
<td>Intermediate Spanish Conversation</td>
<td>2</td>
</tr>
<tr>
<td>SPAN 340</td>
<td>Textual Analysis and Critical Reading</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 424</td>
<td>Advanced Spanish Composition and Grammar</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 428</td>
<td>Advanced Spanish Conversation</td>
<td>2</td>
</tr>
<tr>
<td>SPAN 429</td>
<td>Spanish Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 446</td>
<td>Spanish Culture</td>
<td>3</td>
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<tr>
<td>or SPAN 447</td>
<td>Latin American Cultures: __________</td>
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</table>

Select two of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SPAN 474</td>
<td>Studies in Spanish Literature and Culture:</td>
<td>1</td>
</tr>
<tr>
<td>SPAN 475</td>
<td>Studies in Latin-American Literature and Culture:</td>
<td>1</td>
</tr>
<tr>
<td>SPAN 451</td>
<td>Early Modern Spanish Studies:</td>
<td>2</td>
</tr>
<tr>
<td>SPAN 453</td>
<td>Twentieth Century Spanish Studies:</td>
<td>2</td>
</tr>
<tr>
<td>SPAN 462</td>
<td>Twentieth Century Spanish-American Studies:</td>
<td>2</td>
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<tr>
<td>SPAN 463</td>
<td>National Traditions in Spanish America:</td>
<td>2</td>
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</table>

**Total Hours**: 41

### Teacher Education Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 302</td>
<td>Educational Technology in Middle/Secondary Education</td>
<td>3</td>
</tr>
<tr>
<td>ELP 250</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>ELP 306</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 324</td>
<td>Curriculum Learner in the Middle School and High School</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 331</td>
<td>Instructional Approaches for ESOL Learners in the Middle/Secondary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 530</td>
<td>Curriculum and Instruction in Foreign Language Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 544</td>
<td>Advanced Practices:Situating Foreign Language Content, Dispositions, Skills &amp; Tools Language Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 448</td>
<td>Reading and Writing Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 489</td>
<td>Advanced Teaching Practicum</td>
<td>1</td>
</tr>
<tr>
<td>ELP 537</td>
<td>The Governance and Organization of Schools</td>
<td>3</td>
</tr>
<tr>
<td>SPED 507</td>
<td>Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom</td>
<td>3</td>
</tr>
<tr>
<td>SPED 580</td>
<td>Advanced Practices: Situating Foreign Language Content, Dispositions, Skills &amp; Tools Language Classroom</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 490</td>
<td>Student Teaching</td>
<td>6</td>
</tr>
<tr>
<td>C&amp;T 495</td>
<td>Seminar: Developing the Teaching Portfolio</td>
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<tr>
<td>ELP 520</td>
<td>Classroom Assessment</td>
<td>2</td>
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### Add-On Endorsements

Additional endorsements can be completed by students admitted to any of the above undergraduate teacher education programs. Endorsements are also available on a graduate level to those holding a valid teaching license.

### English for Speakers of Other Languages (ESOL)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>or LING 110</td>
<td>Language and Mind</td>
<td></td>
</tr>
<tr>
<td>ENGL 387</td>
<td>Introduction to the English Language</td>
<td></td>
</tr>
<tr>
<td>LING 700</td>
<td>Introduction to Linguistic Science</td>
<td></td>
</tr>
<tr>
<td>ENGL 787</td>
<td>Modern English Grammar</td>
<td></td>
</tr>
<tr>
<td>C&amp;T 826</td>
<td>Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL)</td>
<td>3</td>
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</tbody>
</table>

Choose one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 320</td>
<td>Language in Culture and Society</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 823</td>
<td>Intercultural Competence for Teaching English to Speakers of Other Languages Educators (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 807</td>
<td>Multicultural Education</td>
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</tr>
<tr>
<td>ELP 830</td>
<td>Foundations of Multicultural Education</td>
<td></td>
</tr>
</tbody>
</table>

Choose one of the following: 3
The TEFL Certificate is an online undergraduate program totaling 12 credit hours. The culminating experience is a supervised EFL practicum in which students are placed in a TESOL course for immigrants, refugees, or international students, such as the Applied English Center at KU, or they may complete their practicum as part of a study abroad experience, such as the TESOL Practicum in Korea.

The certificate courses will meet industry standards as provided by TESOL International. This certificate does not provide sufficient qualifications for a state license or endorsement to teach English as a Second Language (ESL) in U.S. K-12 public schools.

Effective December 2020: The School of Education & Human Sciences is not currently accepting applications for TEFL certificate program.

The TEFL Certificate is an online undergraduate program totaling 12 credit hours. The culminating experience is a supervised EFL practicum in which students are placed in a TESOL course for immigrants, refugees, or international students, such as the Applied English Center at KU, or they may complete their practicum as part of an approved study abroad experience, such as the TESOL Practicum in Korea.

Four courses comprise this online-delivered program. Students will take the following sequence as a cohort: C&T 380 - English as a Global Language, C&T 330 - Methods of Teaching English as a Foreign Language, C&T 424 - Second Language Acquisition, and C&T 491 - Practicum in Teaching English as a Foreign Language.

C&T 380: English as a Global Language

In this course, students explore the political, cultural, historical, and economic factors that drive English’s status as a global language and the demand to learn it. They attend to such questions as, Why a global language, and why English? Is the spread of English necessarily natural, neutral, and beneficial? Then, they consider implications of answers to the above questions on teaching English internationally, since English teaching positions overseas provide ideal opportunities for college-age Americans to live and work abroad. The projects assigned in the course are designed to teach students to think critically about issues related to prominence of English teaching and learning around the world. In addition, students will learn about employment and career opportunities as teachers of English as a Foreign Language, and prepare a resume that highlights their professionalism in EFL.

C&T 330: Methods of Teaching English as a Foreign Language

This course provides an overview of Teaching English as a Foreign Language, including theories of second language acquisition and the methodological practices that derive from those theories. Students will gain knowledge in and practice with a variety of EFL approaches for teaching and assessing skills in speaking, listening, reading, and writing, and will compare the appropriateness of those approaches with respect to different international contexts and learners of different ages and linguistic and cultural backgrounds. Students will also gain knowledge of common EFL curricular designs, and skills in curricular planning, lesson planning, and student assessment.

C&T 424: Second Language Acquisition

This course provides an introduction to the process of second language acquisition as it relates to English language learners (ELLs) in a U.S. preK-12 context. Particular attention is given to the influence of cognitive, affective, and sociocultural factors in second language acquisition. Current developments in second language acquisition are reviewed and evaluated in keeping with the needs of professionals in the context of second language education.

C&T 491: Practicum in Teaching English as a Foreign Language
The Practicum in TEFL allows individuals to gain supervised experience in Teaching English as a Foreign Language. It engages students in the direct application of theories of second language acquisition and models of English as a Foreign Language practice, either with immigrants, refugees, or international students in a U.S. setting or with children or adults of EFL abroad. In addition, students will acquire cross-cultural knowledge of educational settings in general and the English language classroom in particular through activities and experiences aimed at developing critical understandings of how culture affects educational practice and the role of English as an international language.

Master of Arts in Curriculum and Instruction

Master of Arts in Curriculum and Instruction

Programs in Curriculum and Instruction prepare students to complete advanced degrees by addressing critical issues in learning, teaching, and curriculum, from local to global levels.

The Master of Arts, Education (M.A.) in Curriculum and Instruction is a degree with a focus in Teaching English to Speakers of Other Languages (TESOL). TESOL is a term that comprises both TESL, Teaching English as a Second Language, and TEFL, Teaching English as a Foreign Language. This degree program is offered at the KU Lawrence campus only. The M.A. candidate completes graduate courses both in education and in TESOL. This provides the candidate an opportunity to gain advanced knowledge in education as well as in TESOL.

The M.A./TESOL is a cohort program that starts each fall semester, with required courses to help graduates achieve their goals. Students work with an advisor to choose electives based on individual career goals. There are three options for completing the M.A. degree: thesis, project, and examination. The thesis and project options each require a minimum of 30 graduate credit hours, culminating in successful defense of a thesis or project. The examination option requires a minimum of 36 graduate credit hours, culminating in successful completion of a comprehensive written examination.

Students who select the thesis or project options must complete at least 20 of the credit hours in regular course work, as contrasted with independent study and similar enrollments. Students who select the examination option must complete at least 26 credit hours in regular course work, as contrasted with independent study and similar enrollments.

Graduate Admission to the Department of Curriculum and Teaching

In addition to general requirements for admission to graduate study in the School of Education, master’s degree programs in Curriculum and Instruction require completion of an appropriate undergraduate program and, in some instances, a teaching license. Materials describing all Curriculum and Instruction programs may be obtained from the department (http://ct.soe.ku.edu/).

The deadline for the master’s application (domestic and international) is February 1 for consideration of fall admission the same year.

Admission to the Master of Arts in Curriculum and Instruction Program (Domestic Applicants)

The following materials must be submitted:

- A completed domestic online graduate application (https://gradapply.ku.edu/).
- 1 official transcript of all college records with at least a 3.0 grade-point average on a 4.0 scale.
- 3 letters of recommendation. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- A statement of career goals.
- A vita or résumé.

Admission to the Master of Arts in Curriculum and Instruction Program (International Applicants)

The following materials must be submitted:

- A completed international online graduate application (https://gradapply.ku.edu/).
- 2 official transcripts of all undergraduate credit including degree conferral (1 in the original language and 1 in English translation) with at least a 3.0 grade-point average on a 4.0 scale. The transcript must contain the following information:
  - Completion of coursework required for degree
  - Degree earned and date the degree was conferred; if this is not on the transcript, applicants must also submit a degree certificate and/or diploma
  - Official stamp/seal from the school
- 3 letters of recommendation. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- A statement of career goals.
- A vita or résumé.
- A statement of account balance from the applicant’s sponsor’s bank. This statement must be on bank stationery. There must also be a letter of support from his/her sponsor if the bank statement is not in the applicant’s name.
- For students whose native language is not English, official scores on the TOEFL (ibt) of at least 23 in Listening, Reading and Writing must be submitted for consideration of admission to the Curriculum and Teaching Department. The IELTS (Academic) official score is also accepted, with an overall score of at least 6.5, and scores of at least 6.0 in Listening, Reading and Writing. The PTE (Academic) official score is also accepted, with an overall score of at least 60 and scores of at least 55 in Listening, Reading and Writing. The TOEFL, IELTS or PTE scores must be less than two years old at the time of admission. TOEFL/IELTS/PTE scores may not be required if applicant meets the verification of English proficiency requirements as specified below:

- Completion of coursework required for degree
- Degree earned and date the degree was conferred; if this is not on the transcript, applicants must also submit a degree certificate and/or diploma
- Official stamp/seal from the school
- 3 letters of recommendation. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- A statement of career goals.
- A vita or résumé.
- A statement of account balance from the applicant’s sponsor’s bank. This statement must be on bank stationery. There must also be a letter of support from his/her sponsor if the bank statement is not in the applicant’s name.
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Applicants who have earned a baccalaureate degree (or higher) in residence from an accredited university or from a foreign university which conducts all instruction in English and which maintains substantially equivalent bachelor's, master's, or doctoral degree requirements, will be considered fully proficient and will not be required to complete AEC testing or coursework. Degrees earned online may not be used to verify English proficiency.

Please note: Meeting minimum admission standards does not guarantee admission to the program.

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045

Contact us: ctdepartment@ku.edu

There are three options for completing the M.A. degree: thesis, project and examination. The thesis and project options each require a minimum of 30 graduate credit hours culminating in successful defense of a thesis or project. The examination option requires a minimum of 36 graduate credit hours culminating in successful completion of a comprehensive examination.

The Curriculum and Instruction M.A. degree program is designed to produce graduates who possess a high level of knowledge of their subject area specialty and contemporary theories, procedures and research in curriculum and instruction.

Sample course work for the M.A.:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 709</td>
<td>Foundations of Curriculum and Instruction (required)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 823</td>
<td>Intercultural Competence for Teaching English to Speakers of Other Languages Educators (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 820</td>
<td>Methods of Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
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<td>C&amp;T 821</td>
<td>Assessment in Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 822</td>
<td>Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education (required)</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional 10-15 Hours from outside of the program area, such as Linguistics

For Thesis/Project Option - additional hours from the following list to TOTAL at least 30 hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 898</td>
<td>Master's Project</td>
<td>1-2</td>
</tr>
<tr>
<td>OR</td>
<td>Master's Thesis</td>
<td>1-2</td>
</tr>
</tbody>
</table>

For Exam Option - additional course work to TOTAL 36 hours

**Master of Science in Education in Curriculum and Instruction**

**Master of Science in Education in Curriculum and Instruction**

Programs in Curriculum and Instruction prepare students to complete advanced degrees by addressing critical issues in learning, teaching, and curriculum, from local to global levels.

The Master of Science in Education candidate completes graduate courses in Curriculum and Instruction. This provides the candidate an opportunity to:

- Develop a thorough understanding of the relationship of content and content-specific pedagogy
- Demonstrate an in-depth understanding of the content that they plan to teach and provide multiple explanations and instructional strategies so that all students learn
- Apply the ability to critique research and theories related to pedagogy and learning
- Convey an in-depth knowledge of research-based instructional strategies and technologies that help all students learn.

The culminating experience for completion of the Master of Science in Education degree is the Master's Project as a portfolio. The portfolio will be a collection of artifacts completed during courses in the program along with documentation of other activities exemplifying the degree learning outcomes.

**Graduate Admission to the School of Education and Human Sciences**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

**Graduate Admission to the Department of Curriculum and Teaching**

In addition to general requirements for admission to graduate study in the School of Education and Human Sciences, master's degree programs in Curriculum and Instruction require completion of an appropriate undergraduate program and, in some instances, a teaching license.
Materials describing all Curriculum and Instruction programs may be obtained from the department (http://ct.soe.ku.edu/).

Deadlines for the online master’s application vary by year and initial term. Check the Curriculum and Teaching online program web page for application deadlines.

Admission to the online Master of Science in Education in Curriculum and Instruction Program (Domestic Applicants)

The following materials must be submitted:

- A completed domestic online graduate application (https://gradapply.ku.edu/).
- 1 official transcript of all college records with at least a 3.0 grade-point average on a 4.0 scale.
- 3 letters of recommendation. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- A statement of career goals.
- A vita or résumé.

Admission to the online Master of Science in Education in Curriculum and Instruction Program (International Applicants)

The following materials must be submitted:

- A completed international online graduate application (https://gradapply.ku.edu/).
- 2 official transcripts of all undergraduate credit including degree conferral (1 in the original language and 1 in English translation) with at least a 3.0 grade-point average on a 4.0 scale. The transcript must contain the following information:
  - Completion of course work required for degree
  - Degree earned and date the degree was conferred; if this is not on the transcript, applicants must also submit a degree certificate and/or diploma
  - Official stamp/seal from the school
- 3 letters of recommendation. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- A statement of career goals.
- A vita or résumé.

For students whose native language is not English, official scores on the TOEFL (IBT) of at least 23 in Listening, Reading and Writing must be submitted for consideration of admission to the Curriculum and Teaching Department. The IELTS (Academic) official score is also accepted, with an overall score of at least 6.5, and scores of at least 6.0 in Listening, Reading and Writing. The PTE (Academic) official score is also accepted, with an overall score of at least 60, and scores of at least 55 in Listening, Reading and Writing. The TOEFL, IELTS or PTE scores must be less than two years old at the time of admission. TOEFL/IELTS/PTE scores may not be required if the applicant meets the verification of English proficiency requirements as specified below:

Applicants who have earned a baccalaureate degree (or higher) in residence from an accredited university or from a foreign university which conducts all instruction in English and which maintains substantially equivalent bachelor’s, master’s, or doctoral degree requirements, will be considered fully proficient and will not be required to complete AEC testing or coursework. Degrees earned online may not be used to verify English proficiency.

Please note: Meeting minimum admission standards does not guarantee admission to the program.

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045

Contact us: ctdepartment@ku.edu

Master of Science in Education - Curriculum & Instruction - online program

The online Master of Science in Education degree in Curriculum & Instruction is a practitioner-focused master's degree for current educators who want to make a difference with effective instructional practices and curriculum development strategies. It is comprised of 10 courses for 30 total credit hours and can be completed in two years. The courses are delivered online in an 8-week format.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 709</td>
<td>Foundations of Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 770</td>
<td>Pedagogical Considerations in the 21st Century Classrooms</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 801</td>
<td>Planning for School Improvement</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 802</td>
<td>Curriculum Planning for Educational Settings</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 803</td>
<td>Differentiating Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 806</td>
<td>Instructional Strategies and Models</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 807</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 811</td>
<td>Constructivist Learning Technology</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 898</td>
<td>Master's Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 30

Master of Science in Education - Curriculum & Instruction with an emphasis in Reading Non-Licensure Track - online program

The Reading Non-Licensure master's track option is not intended for initial teacher licensure nor for licensure as a reading specialist; most students enter the program with an active teacher's license. It is best for administrators and those looking to deepen their knowledge of literacy strategies and language acquisition techniques.
### Master of Science in Education - Curriculum & Instruction with an emphasis in Teaching English to Speakers of Other Languages (TESOL)

**Teacher Track - online program**

The TESOL Teacher Track master's option includes practica for classroom educators who intend to acquire a licensure endorsement to teach English learners from diverse cultures in their classrooms and schools. It is best for educators looking to transition to or start a career in TESOL, who already hold initial licensure in their state. Completion of this degree is not a guarantee of licensure or endorsement of any kind. It is each student’s responsibility to determine the licensure and endorsement requirements in his or her state and to apply for the licenses or endorsements necessary for his or her career goals.

<table>
<thead>
<tr>
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</tr>
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<tbody>
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<td>C&amp;T 709</td>
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<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 740</td>
<td>Foundations of Reading: Process, Theory, and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 741</td>
<td>Comprehension and Study Strategies for Use with Multiple Texts</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 743</td>
<td>Writing and Spelling Development and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 745</td>
<td>Reading and the English Language Learner</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 807</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 840</td>
<td>Emergent Literacy and Beginning Reading</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 842</td>
<td>Supporting Striving Readers: Adolescent through Adult</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 898</td>
<td>Master's Project</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Non-Teacher Track - online program**

The TESOL Non-Teacher track master's option substitutes course work for the practicum requirement with the expectation that participants want to gain knowledge about how English as a second or other language students learn within English-speaking classrooms, but are not pursuing a teaching license. It is best for consultants, advocates and administrative or government positions within the field of TESOL; it will not prepare students for a TESOL endorsement.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 807</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 820</td>
<td>Methods of Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 821</td>
<td>Assessment in Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 822</td>
<td>Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 824</td>
<td>Problems in Second Language Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 825</td>
<td>Advanced Practicum in Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 826</td>
<td>Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 898</td>
<td>Master's Project</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

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**Master of Science in Education - Curriculum & Instruction with an emphasis in Reading Specialist Licensure Endorsement Track - online program**

The Reading Specialist Licensure Endorsement track master's option is intended for those seeking to earn their master's degree in order to pursue state of Kansas licensure as a reading specialist. It is best for educators looking to transition to or start a career in reading education, who already hold initial licensure in their state.

Completion of this degree is not a guarantee of licensure or endorsement of any kind. It is each student’s responsibility to determine the licensure and endorsement requirements in his or her state and to apply for the licenses or endorsements necessary for his or her career goals.

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<td>Foundations of Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 740</td>
<td>Foundations of Reading: Process, Theory, and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 741</td>
<td>Comprehension and Study Strategies for Use with Multiple Texts</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 743</td>
<td>Writing and Spelling Development and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 745</td>
<td>Reading and the English Language Learner</td>
<td>3</td>
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</tr>
<tr>
<td>C&amp;T 898</td>
<td>Master's Project</td>
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</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>30</strong></td>
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</table>
Doctor of Education in Curriculum and Instruction

Introduction
The Doctor of Education (Ed.D.) in Curriculum and Instruction prepares graduates for leadership positions working with teachers and other education professionals in a variety of settings that may include school districts, colleges and universities, state and federal education agencies, and educational non-profit organizations. The Ed.D. program places an emphasis on preparing leaders who can translate theory and research into practice and who can solve practical problems in an educational context. Graduates are prepared to be leaders in the profession by effectively fulfilling responsibilities in the areas of teaching, research, and service. The Ed.D. is a cohort program that starts each fall semester, with required courses to help graduates achieve these goals. Students work with an advisor and committee members to choose electives based on individual career goals.

Graduate Admission to the School of Education and Human Sciences
Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission to the Department of Curriculum and Teaching
In addition to general requirements for admission to graduate study in the School of Education and Human Sciences, doctoral programs in Curriculum and Instruction require completion of appropriate undergraduate and graduate degree programs. Materials describing all Curriculum and Instruction programs may be obtained from the department (http://ct.soe.ku.edu/).

The deadline for doctoral application is February 1 for consideration of fall admission the same year.

C&T 821  Assessment in Teaching English to Speakers of Other Languages (TESOL)  3
C&T 822  Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL)  3
C&T 824  Problems in Second Language Instruction  3
C&T 826  Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL)  3
C&T 898  Master's Project  3
Total Hours  30

Doctor of Education in Curriculum and Instruction

Admission to the Doctor of Education, Curriculum and Instruction Program (Domestic Applicants)
The following materials must be submitted:

- A completed domestic online graduate application (http://www.graduate.ku.edu/application-process/).
- 1 official transcript of all previous undergraduate and graduate credit. Doctoral applicants must have earned a Master's degree or equivalent with at least a 3.5 grade-point average on a 4.0 scale.
- A statement of career goals addressing how this degree will help meet professional aspirations and areas of interest in curriculum and instruction. An appropriate length is 1 to 2 pages.
- 3 letters of recommendation; a letter from the master’s advisor is appropriate to include. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- Writing sample: an article, paper or other scholarly composition originally written by the applicant. An appropriate length is 8 to 10 pages.
- A vita or resume.

Please note: Meeting minimum admission standards does not guarantee admission to the program.

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045

Contact us: ctdepartment@ku.edu

Doctor of Education, Curriculum and Instruction
The Doctor of Education (Ed.D.) in Curriculum and Instruction prepares graduates for leadership positions working with teachers and other education professionals in a variety of settings that may include school districts, colleges and universities, state and federal education agencies, and educational non-profit organizations.

Elective areas for advanced degrees in curriculum and instruction may include Curriculum Studies, Foreign Language Education, Language Arts/English Education, Literacy Education, Mathematics Education, Science Education, Social Studies Education, or Teachers of English to Speakers of Other Languages (TESOL) Education.

Doctoral aspirants should develop a program plan at the first enrollment or promptly thereafter. A copy of this program should be filed with the Graduate Division of the School of Education. The program plan must include:

- A minimum of 27 graduate credit hours in Curriculum and Instruction
- A minimum of 9 graduate credit hours in Research Skills
- Completion of the Responsible Conduct of Research requirement
- Completion of a structured 3-credit-hour practicum in a supervised internship setting
Doctor of Philosophy in Curriculum and Instruction

Introduction

The Doctor of Philosophy (Ph.D.) in Curriculum and Instruction prepares graduates for faculty positions at research or teaching universities and for positions as research scientists and post-doctoral fellows at universities or research centers. The Ph.D. program places an emphasis on preparing graduates whose primary interests are to engage in research and scholarship to advance the field of curriculum and instruction. Graduates are prepared to be leaders in the profession by effectively fulfilling responsibilities in the areas of research and scholarship, teaching, and service. The Ph.D. is a cohort program that starts each fall semester, with required courses to help graduates achieve these goals. Students work with an advisor and committee members to choose electives based on individual career goals. The Ph.D. may include electives such as Culturally Responsive Pedagogy, Curriculum and Instruction, Foreign Language Education, Language Arts/English Education, Literacy Education, Mathematics Education, Science Education, Social Studies Education, or Teachers of English to Speakers of Other Languages (TESOL) Education. Doctoral work includes a majority of credit hours in curriculum and instruction, additional hours in basic and applied research skills, and a dissertation involving original research in the student’s specialization.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission to the Department of Curriculum and Teaching

In addition to general requirements for admission to graduate study in the School of Education and Human Sciences, doctoral programs in Curriculum and Instruction require completion of appropriate undergraduate and graduate degree programs. Materials describing all Curriculum and Instruction programs may be obtained from the department (http://ct.soe.ku.edu/).

The deadline for doctoral application (domestic and international) is February 1 for consideration of fall admission the same year.

Admission to the Doctor of Philosophy, Curriculum and Instruction Program (Domestic Applicants)

The following materials must be submitted:

- A completed domestic online graduate application (http://www.graduate.ku.edu/application-process/).
- 1 official transcript of all previous undergraduate and graduate credit. Doctoral applicants must have earned a Master's degree or equivalent with at least a 3.5 grade-point average on a 4.0 scale.
- Graduate Record Examination (GRE) general test scores. The scores must be no older than 5 years prior to the application term. Official scores are required, sent from the testing institution directly to the Office of Graduate Studies.
- A statement of career goals addressing how this degree will help meet professional aspirations and areas of interest in curriculum and instruction. An appropriate length is 1 to 2 pages.
- 3 letters of recommendation; a letter from the master's advisor is appropriate to include. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- Writing sample: an article, paper or other scholarly composition originally written by the applicant. An appropriate length is 8 to 10 pages.
- A vitae or resume.

Admission to the Doctor of Philosophy, Curriculum and Instruction Program (International Applicants)

The following materials must be submitted:

- A completed international online graduate application (http://www.graduate.ku.edu/application-process/).
- 2 official transcripts of all undergraduate and graduate credit including degree conferred (1 in the original language and 1 in English translation). Doctoral applicants must have earned a Master's degree or equivalent with at least a 3.5 grade-point average on a 4.0 scale. The transcripts must contain the following information:
  - Completion of course work required for degree
  - Degree earned and date the degree was conferred; if this is not on the transcript, applicants must also submit a degree certificate and/or diploma
  - Official stamp/seal from the school
promptly thereafter. The program plan must include:

- Doctoral aspirants should develop a program plan at the first enrollment or

Contact us:
1122 W. Campus Road, Room 321
Joseph R. Pearson Hall
Department of Curriculum and Teaching
The University of Kansas
department:
with the online application, they may be emailed or mailed to the
application. If there are application materials that cannot be uploaded
admission to the program.

Please note: Meeting minimum admission standards does not guarantee
admission to the program.

All application materials should be submitted online with the graduate
application. If there are application materials that cannot be uploaded
with the online application, they may be emailed or mailed to the
department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045
Contact us: ctdepartment@ku.edu

Doctoral aspirants should develop a program plan at the first enrollment or
promptly thereafter. The program plan must include:

- A minimum of 36 graduate credit hours taken at the University
  of Kansas, exclusive of dissertation credits and the research
  requirement. At least 24 of these hours must be in the area of
  Curriculum and Instruction. A minimum of 18 of these hours must
  be at the 800-level or above, and at least six of these hours must be
  outside the area of study.
- A minimum of 12 graduate credit hours in Research Skills (basic
  and applied research skills, including statistics, research design, and
  related requirements appropriate to the degree).
- Completion of EDUC 800, Education as a Field of Scholarship. This
course fulfills the Responsible Conduct of Research requirement.
- Completion of C&T 996, Teaching and Learning in the College
  Classroom. The doctoral aspirant assists a professor for one
  semester or may be assigned to teach an undergraduate course
  under faculty supervision during the aspirant's doctoral program.
- 2 semesters, usually consecutive, must be spent in resident study at
  the University of Kansas.
- Successful completion of written and oral comprehensive exams
- Enrollment in dissertation hours. Please refer to the School of
  Education Graduate Regulations section of the Graduate Catalog for
detailed enrollment requirements.
- Successful defense and submission for publication of the doctoral
dissertation.

A copy of this program should be filed with the Graduate Division of the
School of Education.

Although the courses and the research leading to the Ph.D. are
necessarily specialized, the attainment of this degree should not be an
isolated event in the enterprise of learning. The aspirant for the Ph.D. is
expected to be a well-educated person and should have acquired a broad
base of general knowledge, both as preparation for more advanced work
and as a means of knowing how curriculum and instruction is related to
other fields of human thought.

Note: Contact your department or program for more information about
research skills and responsible scholarship, and the current requirements
for doctoral students. Current Lawrence and Edwards Campus
policies on Doctoral Research Skills and Responsible Scholarship
(https://policy.ku.edu/graduate-studies/research-skills-responsible-
scholarship/) are listed in the KU Policy Library.

Graduate Certificate in Reading

The online Graduate Certificate in Reading program at KU is an area
of emphasis within the Curriculum and Instruction graduate program.
The program is designed to provide individuals with the knowledge to
support the reading development and achievement of individuals from
varied cultural and linguistic backgrounds; expand knowledge in reading
assessment and methodologies; and develop instructional practices for
students in the classroom and in intervention/remediation settings.

Completion of a graduate certificate is not a guarantee of licensure or
endorsement of any kind.

Graduate Admission to the School of
Education and Human Sciences

Graduate programs in education are open to students with acceptable
baccalaureate and graduate degrees whose academic records indicate
that they can do successful work at the graduate level. Applicants must
provide evidence of ability to work successfully at the graduate level,
including experience in and commitment to the profession.
The Reading Certificate includes completion of 6 courses:

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>C&amp;T 740</td>
<td>Foundations of Reading: Process, Theory, and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 741</td>
<td>Comprehension and Study Strategies for Use with Multiple Texts</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 743</td>
<td>Writing and Spelling Development and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 745</td>
<td>Reading and the English Language Learner</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 840</td>
<td>Emergent Literacy and Beginning Reading</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 842</td>
<td>Supporting Striving Readers: Adolescent through Adult</td>
<td>3</td>
</tr>
</tbody>
</table>

**Admissions Requirements**

In addition to a completed online application (https://gradapply.ku.edu/), applicants also need to provide:

- Official transcript(s) for all undergraduate and post-baccalaureate course work, showing a GPA of 3.0 or higher (on a 4.0 scale)
- Resume or curriculum vitae (CV)
- Statement of goals/purpose
- Application fee of $30

For students whose native language is not English, official scores on the TOEFL (iBT) of at least 23 in Listening, Reading and Writing must be submitted for consideration of admission to the Curriculum and Teaching Department. The IELTS (Academic) official score is also accepted, with an overall score of at least 6.5, and scores of at least 6.0 in Listening, Reading and Writing. The PTE (Academic) official score is also accepted, with an overall score of at least 60, and scores of at least 55 in Listening, Reading and Writing. The TOEFL, IELTS or PTE scores must be less than two years old at the time of admission. TOEFL/IELTS/PTE scores may not be required if the applicant meets the verification of English proficiency requirements as specified below:

Applicants who have earned a baccalaureate degree (or higher) in residence from an accredited university or from a foreign university which conducts all instruction in English and which maintains substantially equivalent bachelor's, master's, or doctoral degree requirements, will be considered fully proficient and will not be required to complete AEC testing or coursework. Degrees earned online may not be used to verify English proficiency.

*Please note: Meeting minimum admission standards does not guarantee admission to the program.*

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department:

**The University of Kansas**  
**Department of Curriculum and Teaching**  
**Joseph R. Pearson Hall**  
**1122 W. Campus Road, Room 321**  
**Lawrence, KS 66045**

Contact us: ctdepartment@ku.edu

**Requirements for the Graduate Certificate in Reading:**

The Reading Certificate includes completion of 6 courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 740</td>
<td>Foundations of Reading: Process, Theory, and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 741</td>
<td>Comprehension and Study Strategies for Use with Multiple Texts</td>
<td>3</td>
</tr>
</tbody>
</table>

**Reading Specialist Endorsement**

The Reading Specialist Licensure Endorsement* program is intended for educators who wish to complete the requirements for state licensure as a reading specialist in the State of Kansas. It is best for currently licensed teachers who already hold a master's degree, in states where an additional endorsement in reading education is required.

*This academic program satisfies the requirements for the reading specialist licensure endorsement in Kansas. It is each student's responsibility to determine the licensure requirements in his or her state and to apply for the licenses or endorsements necessary for his or her career goals. No program can guarantee licensure.

**Graduate Admission to the School of Education and Human Sciences**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

**Admissions Requirements**

In addition to a completed online application (https://gradapply.ku.edu/), applicants also need to provide:

- Official transcripts for all undergraduate and graduate course work, showing a GPA of 3.0 or higher (on a 4.0 scale). Both bachelor's and master's degrees earned in a regionally-accredited college or university are required.
- Resume or curriculum vitae (CV)
- Statement of career goals/purpose
- 3 letters of recommendation from professional or academic references. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- Application fee of $30

For students whose native language is not English, official scores on the TOEFL (iBT) of at least 23 in Listening, Reading and Writing must be submitted for consideration of admission to the Curriculum and Teaching Department. The IELTS (Academic) official score is also accepted, with an overall score of at least 6.5, and scores of at least 6.0 in Listening, Reading and Writing. The PTE (Academic) official score is also accepted, with an overall score of at least 60, and scores of at least 55 in Listening, Reading and Writing. The TOEFL, IELTS or PTE scores must be less than two years old at the time of admission. TOEFL/IELTS/PTE scores may not be required if applicant...
meets the verification of English proficiency requirements as specified below:

Applicants who have earned a baccalaureate degree (or higher) in residence from an accredited university or from a foreign university which conducts all instruction in English and which maintains substantially equivalent bachelor’s, master’s, or doctoral degree requirements, will be considered fully proficient and will not be required to complete AEC testing or coursework. Degrees earned online may not be used to verify English proficiency.

Please note: Meeting minimum admission standards does not guarantee admission to the program.

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045

Contact us: ctdepartment@ku.edu

Courses required for the Reading Specialist Licensure Endorsement program (21 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>C&amp;T 740</td>
<td>Foundations of Reading: Process, Theory, and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 741</td>
<td>Comprehension and Study Strategies for Use with Multiple Texts</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 840</td>
<td>Emergent Literacy and Beginning Reading</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 841</td>
<td>Early Intervention in Reading Practicum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 842</td>
<td>Supporting Striving Readers: Adolescent through Adult</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 843</td>
<td>Supporting Striving Readers Practicum</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 844</td>
<td>The Reading Program: Coordination and Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate Certificate in Teaching English to Speakers of Other Languages

The online Graduate Certificate in Teaching English to Speakers of Other Languages (TESOL) helps to prepare educators to clear the language barrier for their students. This certificate program helps instructors of students from many culturally diverse backgrounds to succeed in early childhood, K-12 or adult education classrooms.

This program does not provide instruction in speaking English. It prepares educators to teach English to speakers of other languages and is not an English language program for second or other language learners.

Completion of a graduate certificate is not a guarantee of licensure or endorsement of any kind.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Admissions Requirements

In addition to a completed online application (http://graduate.ku.edu/ku-graduate-application/), applicants also need to provide:

- Official transcript(s) for all undergraduate and post-baccalaureate coursework, showing a GPA of 3.0 or higher (on a 4.0 scale)
- Resume or curriculum vitae (CV)
- Statement of goals/purpose
- Application fee of $30

For students whose native language is not English, official scores on the TOEFL (IBT) of at least 23 in Listening, Reading and Writing must be submitted for consideration of admission to the Curriculum and Teaching Department. The IELTS (Academic) official score is also accepted, with an overall score of at least 6.5, and scores of at least 6.0 in Listening, Reading and Writing. The PTE (Academic) official score is also accepted, with an overall score of at least 60, and scores of at least 55 in Listening, Reading and Writing. The TOEFL, IELTS or PTE scores must be less than two years old at the time of admission. TOEFL/IELTS/PTE scores may not be required if the applicant meets the verification of English proficiency requirements as specified below:

Applicants who have earned a baccalaureate degree (or higher) in residence from an accredited university or from a foreign university which conducts all instruction in English and which maintains substantially equivalent bachelor’s, master’s, or doctoral degree requirements, will be considered fully proficient and will not be required to complete AEC testing or coursework. Degrees earned online may not be used to verify English proficiency.

Please note: Meeting minimum admission standards does not guarantee admission to the program.

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045
Courses required for Graduate Certificate in Teaching English to Speakers of Other Languages (TESOL) (15 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>C&amp;T 807</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 820</td>
<td>Methods of Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 821</td>
<td>Assessment in Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 822</td>
<td>Second Language Acquisition for Teaching English to Speakers of Other Languages Educators (TESOL)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 826</td>
<td>Linguistic Analysis for Teaching English to Speakers of Other Languages Educators (TESOL)</td>
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</table>

Kansas educators interested in an endorsement in TESOL take an additional course for a total of 18 credit hours:

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>C&amp;T 825</td>
<td>Advanced Practicum in Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
</tr>
</tbody>
</table>

Teaching English to Speakers of Other Languages Endorsement

The online Graduate Licensure Endorsement in TESOL program provides graduate-level knowledge about English language learners and how to best serve their needs in the classroom. This program is designed for currently licensed teachers in the state of Kansas.

In states where additional licensure endorsement is required for roles that involve the teaching of English language learners, it is each student’s responsibility to determine the licensure requirements in his or her state and to apply for the licenses or endorsements necessary to his or her career goals.

This program does not provide instruction in speaking English. It prepares educators to teach English to speakers of other languages and is not an English language program for second or other language learners.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Admissions Requirements

In addition to a completed online application (https://gradapply.ku.edu), applicants also need to provide:

- Official transcripts for all undergraduate and graduate course work, showing a GPA of 3.0 or higher (on a 4.0 scale). A bachelor’s degree earned in a regionally-accredited college or university is required.
- Resume or curriculum vitae (CV)
- Statement of career goals/purpose
- 3 letters of recommendation from professional or academic references. Each letter should be attached to the online recommendation form when it is submitted by the recommender.
- Application fee of $30

For students whose native language is not English, official scores on the TOEFL (IBT) of at least 23 in Listening, Reading and Writing must be submitted for consideration of admission to the Curriculum and Teaching Department. The IELTS (Academic) official score is also accepted, with an overall score of at least 6.5, and scores of at least 6.0 in Listening, Reading and Writing. The PTE (Academic) official score is also accepted, with an overall score of at least 60 and scores of at least 55 in Listening, Reading and Writing. The TOEFL, IELTS or PTE scores must be achieved not more than two years prior to the semester of first enrollment. TOEFL/IELTS/PTE scores may not be required if applicant meets the verification of English proficiency requirements as specified below:

Applicants who have earned a baccalaureate degree (or higher) in residence from an accredited university or from a foreign university which conducts all instruction in English and which maintains substantially equivalent bachelor’s, master’s, or doctoral degree requirements, will be considered fully proficient and will not be required to complete AEC testing or coursework. Degrees earned online may not be used to verify English proficiency.

Please note: Meeting minimum admission standards does not guarantee admission to the program.

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department:

The University of Kansas
Department of Curriculum and Teaching
Joseph R. Pearson Hall
1122 W. Campus Road, Room 321
Lawrence, KS 66045

Contact us: ctdepartment@ku.edu

Courses required for the Teaching English to Speakers of Other Languages Licensure Endorsement program (18 credit hours)

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>C&amp;T 807</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 820</td>
<td>Methods of Teaching English to Speakers of Other Languages (TESOL)</td>
<td>3</td>
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</tbody>
</table>
Department of Educational Leadership and Policy Studies

Educational Leadership and Policy Studies Graduate Programs

The Department of Educational Leadership and Policy Studies (http://elps.soe.ku.edu/) offers a broad range of graduate professional programs in educational leadership and policy. For complete program information, contact the department.

Graduate programs in educational leadership and policy studies promote the professional and intellectual development of practitioners, teachers, and scholars at all levels of education. The department offers Master of Science in Education degrees in educational administration (PK-12), education and social policy, and higher education, as well as Ed.D. and Ph.D. degrees in educational leadership and policy studies with concentrations in educational administration, higher education, policy studies, and social and cultural studies (Ph.D only).

Note: Prospective and current students should obtain the current degree requirements from the department.

Courses

ELPS 200. Making Connections Between Schools and Community. 3 Credits.
This course is designed to increase the students’ awareness of learning in the classroom and to familiarize them with the role of the school and the community. Institutions and resources that support children and families will be addressed through large and small group sessions and field experiences. Emphasis is given to the diverse nature of schools, communities, and their populations. In addition, the course will acclimate students with the School of Education programs, admissions procedures, and curriculum offerings. Successful completion of this course does not guarantee eventual admission of the School of Education’s Teacher Education Program. Prerequisite: Successful completion of C&T 100.

ELPS 250. Education and Society. 3 Credits.
This course provides students with an introduction to key ideas and socio-historical forces that have shaped the contemporary educational system in the United States, drawing upon the disciplines of the historical, philosophical, and social foundations of education. The development of school and community relations will be a point of emphasis.

ELPS 450. Foundations of Education. 3 Credits.
A historical approach to the major social and philosophical foundations of American education, with an emphasis on the relation of educational theory to classroom practice.

ELPS 497. Independent Study in... 1-2 Credits.

Only one enrollment permitted each semester. A maximum of four hours will apply toward the bachelor’s degree. Prerequisite: Recommendation of advisor and consent of instructor.

ELPS 537. The Governance and Organization of Schools. 3 Credits.
The course provides the prospective teacher with an overview of the legal foundations of the American educational system including the ways schools and school districts are organized and run; the role of various levels of government and various governmental and educational officials in controlling education; the rights of students and teachers; the terms, conditions, and responsibilities of teacher employment. Prerequisite: Admission to the Teacher Education Program.

ELPS 540. Ethics in Education. 3 Credits.
This course examines practices and policies occurring in k-12 and postsecondary educational institutions through the lenses provided by ethics. During the semester, we will read, discuss, and write about ethics in education from both theoretical and practical perspectives. Prerequisite: Junior standing or higher. The course is suitable for advanced undergraduate and master’s degree seeking students.

ELPS 598. Special Course: 1-5 Credits.
A special course of study to meet current needs of education students, primarily for undergraduates.

ELPS 627. Growing Up in Urbanizing America. 3 Credits.
A study of the changing role and character of childhood and youth as stages of life in the context of American urban and social history, with particular attention to education and human development. Prerequisite: Junior standing or higher.

ELPS 712. Instructional Media Development. 3 Credits.
The purpose of this course is to help students acquire fundamental technical skills required for developing various instructional media products. This course takes a hands-on, practical approach to creating various computer-based instructional materials, such as digital image, audio, video, and computer animation for Web and mobile devices. This course is prerequisite for several courses in the program. No previous design or development experience is required.

ELPS 714. Foundations of Learning Technology. 3 Credits.
This course provides a comprehensive overview of the historical and theoretical foundations of learning technologies. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field. Special emphasis is on current and emerging learning science research and how it can be applied to the creation of technology supported learning environments.

ELPS 718. Human Performance Technology. 3 Credits.
This course will provide an introduction to the field of human performance technology (HPT) and how it is applied to productivity and efficiency problems in the workplace. Performance improvement methods include data gathering, analysis, change management, implementation, measurement and the integration of technology. The goal of this course is to provide students with a survey of the research literature and definitions of terminology central to the field of performance improvement. Special emphasis is on current and emerging technology and how it can be applied to human performance improvement in education and the workplace.

ELPS 720. Social Media Technology. 3 Credits.
This course provides students with an introduction to the use of social media and cloud computing. Social media and cloud computing enable individuals to create, collaborate, and share information. Students will develop implementation strategies and acceptable use policies for the
use of social media and cloud computing in the context of K-16 education, government, and corporate settings.

ELPS 750. Principalship. 3 Credits.
An introduction to the role, responsibilities, expectations and major duties of elementary, middle, and high school building administrators. Students are presented typical problems faced by school administrators through simulations and role playing and are expected, through reflection and discussion, to develop viable solutions.

ELPS 752. Education Law. 3 Credits.
A study of legal principles and issues affecting educational policy making and practice with emphasis on student and teacher rights, equity, and the administration of schools. Prerequisite: Admission to graduate study.

ELPS 755. Human Resource Management. 3 Credits.
An overview of the theory and practice of the management, recruitment, selection, compensation, placement, and development of personnel in the school setting.

ELPS 756. Data-Driven Leadership. 3 Credits.
The course focuses on the role and effective use of school related data and its analysis in making decisions regarding school improvement, meeting the needs of students with exceptionalities, evaluating educational programs, developing student management strategies, and using instructional technology.

ELPS 757. Education in American Society. 3 Credits.
A study of the roles and goals of education in the United States, the interrelationships among schools and students, teachers, administrators, and parents, and the culture of schools.

ELPS 760. Integration of Learning Technology. 3 Credits.
This course focuses on strategies for integrating learning technologies in K-12 schools, universities, corporate and government settings. Topics cover the National Educational Technology Standards that apply information technology to: a) inspire learning and creativity, b) develop digital-age learning experiences and assessments, c) model digital-age work, d) advance digital citizenship, and e) engage in professional growth and leadership. Students produce a comprehensive electronic portfolio that describes the theoretical perspectives that guide their technology integrations strategies and presents evidence that demonstrates their competencies.

ELPS 773. School and Society in Comparative Education. 3 Credits.
Analysis of the role of social science in comparative education as perceived by different philosophies or schools of thought, such as Marxism, phenomenology, empiricism, pragmatism, and linguistic analysis.

ELPS 774. Modern Educational Theorists. 3 Credits.
An in-depth study of prominent European thinkers who have contributed to educational theory and practice (e.g., Rousseau, Pestalozzi, Herbert, Froebel, Montessori, Nietzsche, Freud, Piaget, Ortega, Gasset, et al.). Prerequisite: ELPS 770 or ELPS 771 is recommended.

ELPS 780. Introduction to Higher Education Administration. 3 Credits.
This course is designed for beginning master's degree students and for doctoral students who have had no previous administrative experience in college or university settings. Students will be introduced to the function and responsibilities of major administrative divisions of a college or university and to the major tasks of administration: planning, programming, budgeting, staffing, managing. An emphasis will be placed on current issues facing higher education and students will be introduced to the major journals of the field. As part of the course requirements, students will spend some time familiarizing themselves with one or more administrative offices on a college campus. Prerequisite: Admission to study in higher education at the graduate level.

ELPS 781. Student Affairs Administration in Higher Education. 3 Credits.
This course is designed to include the study of the history and development of student personnel services in higher education, the role and function of the student affairs administrator, contemporary issues and problems, and an understanding of the organization and role of student affairs administration within higher education settings. Prerequisite: Admission to the higher education program or permission of instructor.

ELPS 782. Diversity, Equity and Inclusion in Higher Education. 3 Credits.
This course provides an introduction to diversity, equity, and inclusion in higher education settings. The content introduces and applies key theories and concepts to the practice of student affairs.

ELPS 786. Introduction to College Leadership. 3 Credits.
This is an introductory course about college leadership that will provide an overview of concepts and theories for the practice of leadership in colleges and universities. Particularly, the content focuses on the application of theoretical perspectives for leadership practice. The aim of the course is to have students analyze and situate themselves as future higher education leaders and administrators. Subject matter includes, but is not limited to, topics such as: administrative leadership in higher education, fundamental leadership theories, managing people and conflict, fostering collaboration and leadership for diverse institutions.

ELPS 798. Special Course. 1-5 Credits.
A special course of study to meet current needs of education professionals -- primarily for graduate students.

ELPS 811. Constructivist Learning Technology. 3 Credits.
To be effective, educational technologies must be designed based on what we know about how people learn. This course explores (1) important constructivist learning theories, (2) how such learning theories can be used in designing and developing computer-based learning environments, and (3) how student learning can be assessed in those environments. This course is suitable for students who wish to learn how constructivist learning technologies can change the way we teach and learn new knowledge to improve student learning.

ELPS 812. Design of Learning Technology. 3 Credits.
This course introduces instructional design theories and production techniques for developing and evaluating learning technology resources and systems. Students apply their understandings of instructional systems design and learning theories as they work in teams to develop learning technology solutions for specific clients in real-world settings.

ELPS 814. Online Learning Design and Development. 3 Credits.
The course provides an overview of the knowledge and skills for that are essential for designing and developing online instruction. The goal of the course is for students to acquire the analysis, design, development, and evaluation skills needed to facilitate learning in both asynchronous and synchronous online learning environments. Special emphasis is on learning design, and the evaluation of online learning solutions for education, medicine, military, business, and industry.

ELPS 818. Games and Simulations for Learning. 3 Credits.
This course provides an introduction to the design and development of games, gamification, and simulations for learning and instruction. Emphasis is on the selection and design of interactive learning environments for K-16 education and workforce training. Topics include a review of the essential elements of game design, rapid prototyping, the psychology of gaming, game technology, and research related to the use
of games, gamification, and simulations in K-16 education and workforce training.

ELPS 820. Practicum in Educational Technology. 1-3 Credits. Supervised practice in a media center in selection, classifying, designing, producing, and/or managing instructional materials. Prerequisite: C&T 770 and C&T 871.

ELPS 830. Foundations of Multicultural Education. 3 Credits. This class provides students with an understanding of multicultural education as an instructional concept, educational reform movement, and systemic process meant to ensure educational equity for all people, especially those who have been inadequately served and/or historically discriminated against because of their racial/ethnic or linguistic backgrounds, gender or sexual orientation, socio-economic status, and special needs. Students will examine different theoretical approaches that inform the practice of multicultural education and explore the contribution of various social sciences to the field.

ELPS 831. Sociology of Education. 3 Credits. This course will provide an introduction to the sociology of education. Specific topics will include: conflict over the purposes of education; how those purposes are-or are not-translated into actual classroom life; how educational systems have developed historically, how status, and more specifically race, class and gender relations, affect student experiences; and contemporary policy and reform movements. Prerequisite: Graduate Standing.

ELPS 832. History of Educational Thought. 3 Credits. An examination of the major ideas that have shaped practice in the schools. Emphasis is placed on assisting the student with the development of a coherent and consistent personal philosophy of education upon which administrative practice can be based.

ELPS 833. Social Context of Urban Education. 3 Credits. This course examines education in urban communities through the foundational disciplines of history, philosophy, and the social sciences. Particular attention is given to ways in which the changing social and political contexts of American cities affect the educational process.

ELPS 834. History and Philosophy of Education. 3 Credits. A comprehensive study of influential persons and movements in the development of educational thought, Eastern and Western, from ancient times to the present. Emphasis on those ideas and historical roots which are relevant to contemporary issues in teaching and school administration.

ELPS 835. Philosophy of Education. 3 Credits. An analytic inquiry into basic philosophical positions and issues relevant to education. The difference between ELPS 770 and ELPS 771 is that the latter is topically arranged and does not necessarily follow a historical sequence; it normally proceeds by problems and schools of thought.

ELPS 837. History of Education and Culture in America. 3 Credits. A study of the relation between education and culture in America from colonial times to the present. American schools are considered in the wider context of cultural and social change.

ELPS 839. Historical Inquiry in Education. 3 Credits. This course will provide an introduction to the methodology of historical research in education. This course is designed to fulfill the doctoral core requirement for research methods in education for students interested in doing this type of research. Specific topics will include: the historiography of education; working with primary and secondary documents; oral history as method and documentation; quantitative approaches to history; constructing historical narratives; the question of interpretation.

ELPS 852. School Resource Management. 3 Credits. An examination of the sources and uses of fiscal resources in education including underlying concepts from economic theory, the impact of values on fiscal policy, state funding formulas, and school budgeting and accounting practices.

ELPS 853. Staff Evaluation and Development. 3 Credits. An examination of current trends in personnel evaluation with a focus on clinical supervision and adult development. Students will participate in simulation exercises to develop skills in classroom observation, conferencing techniques, evaluation of teaching artifacts, and the construction of staff development plans.

ELPS 854. The Student in Society. 3 Credits. A study of children and youth with particular emphasis on demographic characteristics of the population served by schools and implications of those characteristics for schools and schooling.

ELPS 856. Law and Special Education. 3 Credits. This course focuses on laws that apply to special education. The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law and the judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting disabled children and examines the sex principles of P.L. 94-142 and similar principles in state legislation. This course is not the equivalent of or a substitute for ELPS 752. (Same as SPED 851.) Prerequisite: SPED 750 or permission of instructor.

ELPS 871. Introduction to Qualitative Research. 3 Credits. An introduction to the foundations of and techniques associated with qualitative research methods. Students will practice interview and participant observation skills and will analyze and interpret data. Additional topics include crafting qualitative research questions, ethics of fieldwork, and establishing trustworthiness of data. Common traditions of qualitative methods employed in education and other related fields will be introduced.

ELPS 881. Leadership Theory and Practice in Education. 3 Credits. The purpose of this course is to explore leadership in educational settings from a variety of perspectives. Readings come from a variety of disciplinary perspectives, such as sociology, organizational behavior, and psychology. The course considers various aspects of leadership and analyzes the leader’s role from a symbolic perspective, as a manager of meaning, and critical change agent. The course challenges students to deconstruct leadership realities with the help of several critical perspectives with the goal of examine who the leaders are, who they will be in the future to address diverse educational organizations of tomorrow.

ELPS 882. Higher Education in the United States. 3 Credits. The purpose of the course is to acquaint students in higher education, and students from other areas who intend to work in the post-secondary setting, with the history, philosophy and development of higher education in the United States. The course focuses on three periods: 1) the founding of Harvard to 1965; 2) dissent, disruption, and change, 1965-1979; and 3) the future and crucial issues, the 1980’s. European higher education and its early influence on higher education in the United States is also examined.

ELPS 883. The College Student. 3 Credits. The characteristics of college students; impact of college on student behavior, changing attitudes, values, beliefs, and the implications of recent research on traditional and new students for instructional and administrative practices.
ELPS 884. College Student Access, Persistence, and Success. 3 Credits.
The purpose of this course is to provide an introduction to the scholarly research about American college students, with a specific focus on college access, persistence and student success for various student populations. The course also provides an overview of the policy implications and practical applications of this research for college and university administrators.

ELPS 885. Assessment and Program Evaluation in Higher Education. 3 Credits.
Nature, objectives, and basic procedures of assessment and program evaluation as applied to the various aspects of higher education settings. In addition to basic procedures for evaluating programs, topics covered include accreditation, program review, benchmarking, student outcomes assessment, and evaluation of teaching in colleges and universities. Prerequisite: ELPS 715 or equivalent.

ELPS 886. Theory into Practice in Higher Education. 3 Credits.
This course is required as a final course for all master's students in higher education. It is designed to prepare students for professional life after graduation. Using a case study approach, students will examine the reality of practice in a variety of higher educational settings including relevant political and ethical factors. Prerequisite: Higher education students in last semester of master's coursework.

ELPS 887. Race and Social Class in Higher Education. 3 Credits.
The purpose of this course is to examine the ways in which race and class shape access to, and experiences in, American postsecondary education. To deepen our understanding of these matters, we will engage five books that explore the topic from a different perspective (e.g., for profit colleges, admissions at selective institutions, race conscious admissions, Students of Color at highly selective institutions, etc.)

ELPS 889. Master's Thesis. 1-6 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

ELPS 945. District Strategic Planning. 3 Credits.
A study of the principles and techniques necessary for planning, developing, implementing, and monitoring a district strategic plan for improving the educational programs of elementary and secondary schools.

ELPS 948. Research in Education Policy and Leadership. 3 Credits.
This course is an introduction to methods of inquiry in education policy and leadership studies. It is designed to help doctoral students explore possible research interests, formulate research questions, and to review a rich variety of approaches to inquiry in the field of education. Specific topics include: interview- and observation-driven studies, ethnography, feminist and narrative methods, legal and historical methods, questionnaire-driven studies, quantitative evaluation studies, and studies using administrative and large national data sources.

ELPS 949. Educational Policy and Politics. 3 Credits.
This course is an introduction to the field of education policy and the politics of education. The objective of the course is to provide students with an understanding of the forces that shape educational policy, with an emphasis on governance structures, stakeholders, public engagement, and current policy issues and political contexts.

ELPS 951. Supervision of Instruction. 3 Credits.
A study of the principles and techniques necessary for coordinating, monitoring, and improving the educational programs of elementary and secondary schools.

ELPS 952. School Finance: Policy and Practice. 3 Credits.
The objective of this course is to understand the financial systems and mechanisms used by states in the funding of elementary and secondary education in the United States. In simple language, we will be concerned with five basic issues: (1) Where the money comes from; (2) How it is redistributed; (3) How it is spent; (4) The relative effectiveness of spending decisions including selected international comparisons; and (5) How the previous four financial activities participate in a common financial ecology. The course provides an overview of theory and concepts central to the understanding of school finance with an emphasis on policy issues. It also examines the mechanics of school finance funding in light of state policies.

ELPS 953. District Human Resource Management. 3 Credits.
An in-depth study of theory and research in personnel administration. The focus will be on current literature dealing with empirical assessments of personnel theory and techniques. Specific concepts to be considered include the following: educator characteristics, job analysis and design, personnel recruitment, selection and evaluation techniques, staffing and development, and labor relations. Prerequisite: ELPS 755 or its equivalent.

ELPS 954. Sociology of Educational Organizations. 3 Credits.
This class is an overview of basic and advanced sociological and political theories of organization, with specific application to issues and problems in K-12 education. It is designed for graduate students and practicing educational leaders and administrators who intend to utilize research on organizations in their studies of the governance of schools, the sociology and politics of education, and education policy. The topics covered include the origins and nature of modern bureaucracy, formal structure and function, organizational control, transaction cost economics, population ecology, resource dependence, the new institutionalism, organizational effectiveness and legitimacy, organizational culture, power and politics, and change.

ELPS 955. District Business Management. 3 Credits.
This course emphasizes skills for effective and efficient business and financial management of school districts in a Kansas or Missouri context. Basic topics include: Short range and long range financial planning, analysis of financial statements, budget preparation, fund accounting and financial reporting, contracting of services including transportation and food services, staff salaries and benefits and insurance. The course also includes a number of strategic methods for institutional planning including: Cost Benefit Analysis, Cost Effectiveness Analysis, and enrollment, revenue and expenditure forecasting techniques. Prerequisite: ELPS 852 or its equivalent.

ELPS 956. District Leadership. 3 Credits.
The focus of the course is the role of the public school district superintendent. Organized study will include assigned readings, lectures, guest speakers, discussion, and the completion of a study project. The course will include consideration of such topics as boardmanship, community relations, district leadership, professional accountability, district maintenance and operations, professional employment and relationships with other agencies. The course is designed to serve
the needs of those graduate students pursuing advanced study with the intention of completing requirements for district certification. Some students will also find the field appealing as an area for dissertation research. Prerequisite: Doctoral status in education administration or permission of instructor.

**ELPS 957. Educational Policy, Ethics and Law. 3 Credits.**

Course focuses on use of legal and moral reasoning in analysis of educational policy issues. Specific topics will vary depending on interests of instructor and students and current controversy. Examples of possible topics to be included: school desegregation, teacher collective bargaining, separation of church and school, equal educational opportunity. Prerequisite: ELPS 752, equivalent, or consent of instructor.

**ELPS 958. American Educational Reform Movements: Past and Present. 3 Credits.**

An examination of the origin, nature, and consequences of educational reform in the United States. The primary goal is to attain a balanced evaluation of current educational reform.

**ELPS 959. Organization and Administration of Services for Exceptional Children. 3 Credits.**

To aid administrators and prospective administrators responsible for organizing and administering programs of education for exceptional children, state and federal guidelines and regulations, legal aspects and financing of special education, planning a program, administering special services. (Same as SPED 761.) Prerequisite: Nine hours of Education including educational psychology and SPED 725.

**ELPS 961. Conducting Quantitative Analysis In Educational Policy and Administration. 3 Credits.**

This seminar addresses basic applied analytical skills for the study of topics in educational policy, leadership, and governance. It is designed to help professional doctoral students apply and extend their existing skills as they are working on their quantitative dissertations. Upon completion of this course, students should be able to: (1) draw on a basic repertoire of key methods that support applied analysis for professional doctoral students, (2) be able to determine the type of data and research design--and associated opportunities and constraints--pertaining to their research interests and the completion of their dissertation, and (3) make progress in aligning the conceptual and empirical components of their dissertation studies. Prerequisite: EPSY 710 or EPSY 711 or EPSY 870, or equivalent courses. Completion of quantitative research course requirements for the ELPS Ed.D. program.

**ELPS 962. Advanced Quantitative Educational Policy Analysis. 3 Credits.**

This seminar is designed to help students develop applied econometric skills for analysis of large scale data in policy studies, with particular emphasis on education. The techniques covered in the course are applied to a variety of substantive topics. These topics may change over time given changes in the national and local policy agendas and concerns. At this point, they include teacher and school effects on student performance, faculty productivity in higher education, access to and persistence in higher education, race and class issues in the K-12 achievement gap, decomposition of school and non-school effects, neighborhood influence on student outcomes, the dropout problem, and minority over-representation in special education. Upon completion of this course, you should be able to: (1) draw on a basic repertoire of models for application to study of key questions in policy analysis, (2) be able to explore more advanced applications of the models covered in the course and also explore new models, and (3) determine the basic requirements of and challenges in designing rigorous empirical studies in policy analysis. Prerequisite: EPSY 810 or EPSY 811 or equivalent courses (note: this course is not a continuation of ELPS 961).

**ELPS 969. Dissertation Seminar. 3 Credits.**

This seminar is designed to facilitate proposal development for doctoral-level research in educational leadership and policy studies. The objective is to help students select and refine a topic, critically analyze existing research, set forth a theoretical framework, and design a research methodology suitable for your topic.

**ELPS 970. Theory and Research in Administration. 3 Credits.**

This course is designed as a graduate seminar to support advanced doctoral students as they begin the early stages of developing a dissertation. Students will explore and develop a research topic of interest for the purposes of their culminating project. The course will introduce students to various approaches to research and published scholarship. Major emphasis is devoted to developing competencies and research skills to complete the dissertation and to engage in future research.

**ELPS 971. Comparative Education. 2 Credits.**

A factual, descriptive, and analytical study of national systems of formal education, or schooling, as exemplified in contemporary educational establishments. Organizational and administrative policies and teaching practices, with emphasis on Germany, France, England, U.S.S.R., People’s Republic of China and Japan. Other nations may be examined on an individual project basis. The difference between ELPS 971 and ELPS 772 is the philosophical emphasis of the latter.

**ELPS 973. Research on College Students. 3 Credits.**

The purpose of this course is to critically examine the scholarly research about American college students from societal, developmental, research, and institutional perspectives and to review the policy implications and practical applications of these findings for college and university administrators.

**ELPS 974. Data Informed Decision Making in Higher Education. 3 Credits.**

This course will advance the students’ skills needed to consume quantitative data and apply critical analyses of data within the context of higher education recognizing the social, cultural, and organizational factors that influence stakeholders and the stakeholders’ acceptance of data-driven conclusions. This course provides students with an opportunity to practice making data-driven decisions to achieve institutional goals and missions.

**ELPS 975. Education, Technology and Social Change. 3 Credits.**

This interdisciplinary course provides an opportunity to read, reflect upon, and discuss ideas drawn from the emerging field of Science and Technology Studies (STS) in connection with education. Its focus is the interrelationships between technology, society, and education (defined broadly to include non-school and adult learning settings). It explores how knowledge, expertise, and authority are constructed within and across social and cultural groups, with particular attention social and economic inequality. It also considers the relationship between emerging technologies, educational experiences and the nature of “the sell” in society, among other issues. Prerequisite: Admission to ELPS doctoral program, or permission of instructor.

**ELPS 979. Postsecondary Leadership and Practice. 3 Credits.**

This course is intended for doctoral students with significant administrative experience, this course focuses on the link between leadership theory and practice in postsecondary educational settings. The course content will provide students with a broad base of learning experiences related to leadership and leadership development with a specific focus on cultural dimensions, critical perspectives, and considerations for social justice in leadership. Students will be asked to reflect on their own journey of leadership identity and development and how that informs, supports, and influences practice as a higher education professional.
ELPS 980. Finance of Higher Education. 3 Credits.
This course is designed for advanced doctoral students in higher education, particularly those who will be preparing unit budgets or budget presentations and those who make and implement fiscal policy (e.g., financial aid offers). The course material covers different types of college and university budgeting -- incremental, zero-based and formula -- and their impact on university revenues; statewide coordination and its impact on programs, program duplication and funding; retrenchment and quality issues; the legislative role in budget preparation; unified and comparative management systems (e.g., WICHE and NCHEMS); and the impact of federal contracting and student aid policies.

ELPS 981. Higher Education Law. 3 Credits.
An overview of the developing law of higher education, with emphasis on and analysis of employer-employee relationships, student-faculty/administration relationships, and the impact of federal and state regulation on these relationships.

ELPS 982. Faculty in Higher Education. 3 Credits.
This course considers the role and circumstances of faculty in higher education including variations among different types of institutions. Topics include the history and demographics of the professoriate, the academic work environment and labor market, the role of faculty in institutional governance and policy making, and the social and political context of academia.

ELPS 983. Curriculum Innovation in Higher Education. 3 Credits.
A study of contemporary post-secondary curriculum with particular emphasis on the nature of curriculum, the organization and structure of academic programs, the nature of change in academic communities and exemplary innovative institutions.

ELPS 985. Program Evaluation in Higher Education. 3 Credits.
This course reviews evaluation and assessment processes typically used in higher education with an emphasis on application to practice. Topics such as developing, administering evaluation and assessment plans at the unit or college level, and reporting assessment/evaluation data are also emphasized. Prerequisite: The course assumes some prior knowledge of or experience with assessment and evaluation.

ELPS 986. Organization and Governance of Higher Education. 3 Credits.
A theory-based course aimed at providing an understanding of the governance and organization of academic institutions -- particularly universities. Emphasis is directed toward an analysis of decision-making in these complex organizations.

ELPS 987. Diversity Leadership in Higher Education. 3 Credits.
This advanced course examines diversity, equity and inclusion in higher education settings, with an emphasis on exploring how theory and research inform practice. This course is intended for doctoral level students.

ELPS 995. Field Experience in: 1-5 Credits.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experience will be prepared independently by the student, a representative of the cooperating agencies, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

ELPS 996. College Teaching Experience in: ____. 2 Credits.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester-long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or the member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee.

ELPS 997. Individual Study. 1-4 Credits.
Prerequisite: Prior graduate course work in the area of study and consent of instructor.

ELPS 998. Seminar in: ____. 1-4 Credits.

ELPS 999. Doctoral Dissertation. 1-15 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

Master of Science in Education in Educational Administration

Master of Science in Education in Education Administration

The blended Master’s degree program in Education Administration is not currently accepting applications; please consider the Online format version of the degree program.

The Master’s degree in Education Administration (PK-12) at the University of Kansas School of Education and Human Sciences consists of 36 credit hours of coursework, including an extensive field-based practicum and a comprehensive interactive electronic portfolio for licensure candidates and a comprehensive exam for non-licensure candidates - all of which can be completed within two years. This program fulfills the academic requirements necessary for Kansas state licensure at the school (building) level, and is designed to accommodate working educators. The program is designed for part-time graduate students who currently hold initial teaching licensure and work in the classroom (or other positions such as instructional coach) in their schools. Depending on students educational administration career aspirations they will develop a demonstrated understanding of content and skills that have been aligned with universally-recognized standards such as the Professional Standards for Educational Leaders (http://npbea.org/wp-content/uploads/2017/06/Professional-Standards-for-Educational-Leaders_2015.pdf).

Graduate students will learn from expert scholars and practitioners, as well as fellow classmates, who bring diverse leadership experiences to the principal preparation program at KU. The rigorous program stresses fundamental knowledge and educational policy development necessary for effective leadership. Taught by a mix of full-time tenure track faculty members who are experts in their field and by practitioners who were leaders in their schools. Graduate students enrolled in this program, can expect to:

- Extend their knowledge of pedagogy and leadership
- Enlarge their understanding of schooling & develop an appreciation of the political, economic and social forces that influence the decisions of educational leaders
- Share in-depth analyses and discussions of theory for application to real-world experiences in an online forum
- Build upon the skills and knowledge acquired in the previous terms with progressive sequence of coursework
- Develop and submit an e-portfolio during their final practicum experience to illustrate personal perspectives and experiences
• If seeking non-licensure, the candidate will complete a comprehensive exam during their final semester demonstrating their competencies in educational leadership.

The blended Master's degree program in Education Administration is not currently accepting applications; please consider the Online format version of the degree program.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission

Applications for all programs must submit the following materials:

(Individual program concentrations may require additional application materials. Please check the departmental website or program advisor for additional requirements.)

1. Graduate application (http://gradapply.ku.edu). (http://graduate.ku.edu/ku-graduate-application/)
2. 1 official transcript from each post-secondary collegiate institution attended.
3. Statement of purpose with relevance of degree to career aspirations.
4. Graduate Record Examination (GRE) scores are not required for master's applicants and are optional for doctoral candidates.
5. 3 letters of recommendation evaluating the applicant's capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.
6. A vita or resume.
8. Writing sample (doctoral applicants).

The following application deadlines apply:

Educational Administration

<table>
<thead>
<tr>
<th>Semester</th>
<th>Program Type</th>
<th>Deadline</th>
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</thead>
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<tr>
<td>Fall</td>
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<tr>
<td>Summer</td>
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Higher Education

Master's degree deadlines

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<tr>
<td>Summer</td>
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Education and Social Policy

Master's degree deadlines

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Social and Cultural Studies in Education

Doctoral degree deadline

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<tr>
<td>Fall</td>
<td>Ph.D applicants</td>
<td>March 1</td>
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</table>
Policy Studies

Doctoral degree

deadline

Fall Ph.D applicants March 1

The blended Master’s degree program in Educational Administration is not currently accepting applications; please consider the Online format version of the degree program.

Educational Administration

This program is not admitting students to the face-to-face blended program at this time. To learn more about the online Masters in Educational Administration click here (p. 253).

The Master of Science in Educational Administration program is designed to prepare experienced teachers for leadership roles at the building level. The program stresses fundamental knowledge degrees in educational leadership and educational policy development necessary for effective leadership. It consists of a set of integrated courses Graduate programs in educational leadership and experiences that provide opportunities for participants to extend their knowledge of pedagogy policy studies promote the professional and leadership, to enlarge their understanding of schooling, and to develop an appreciation of the political, economic and social forces that influence the decisions of educational leaders.

Program Format

The program is designed for part-time students who currently hold teaching or other positions such as instructional coaches in the schools. Course work in each term is sequenced to build upon the skills and knowledge acquired in the previous terms.

Blended Format (not accepting applicants at this time for the blended, face-to-face program)

Course of Instruction

The M.S.E. in Educational Administration consists of a 36-hour block of course work. The course work is sequenced as described below, and builds upon itself as the student progresses through the program. Students take a comprehensive exam in the spring of the second year of the program that covers core coursework within the program.

The sequence of courses follows:
(Sequence subject to change)

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<tr>
<th>Year 1</th>
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<th>Hours</th>
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<th>Hours</th>
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</table>

Total Hours 36

NOTE: EPSY = Educational Psychology, C&T = Curriculum & Teaching

MSE in Educational Administration (online format)

Online Format

This flexible program is ideal for experienced PK-12 educators who want the skills and knowledge needed to transition to leadership roles such as principals, department heads or directors. This program stresses the fundamental knowledge and policy development skills necessary for an administrator. Improve your knowledge of pedagogy and leadership, expand your understanding of schooling and develop an appreciation of the political, economic and social forces that influence the decisions of educational leaders.

There are two tracks for this program:

The online master’s in educational administration Building Leadership Track includes an internship for students who intend to acquire a license as a principal or other building leader, either immediately following the program or at some point in the future. For licensure candidates, we require an extensive field-based practicum and a comprehensive interactive electronic portfolio.

The online master’s in educational administration Non-Licensure Track* substitutes coursework for the internship requirement with the expectation that participants want to earn their Master’s and gain knowledge about leadership, but are not pursuing a license. For non-licensure candidates, we require a comprehensive exam.

COURSES INCLUDED IN THIS PROGRAM:

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<th>Code</th>
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<td>ELPS 756</td>
<td>Data-Driven Leadership</td>
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</tr>
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<td>EPSY 715</td>
<td>Understanding Research in Education</td>
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<td>ELPS 757</td>
<td>Education in American Society</td>
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<td>ELPS 752</td>
<td>Education Law</td>
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<td>ELPS 854</td>
<td>The Student in Society</td>
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<td>SPED 756</td>
<td>Special Education Leadership</td>
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<td>ELPS 853</td>
<td>Staff Evaluation and Development</td>
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<td>C&amp;T 806</td>
<td>Instructional Strategies and Models</td>
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<td>ELPS 895</td>
<td>Internship (for non-licensure track, the internship is replaced by one of the elective courses below)</td>
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*These elective courses are for non-licensure track students only. Please choose one of the following courses to replace ELPS 895 from the building leadership track.

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<td>C&amp;T 803</td>
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<td>SPED 854</td>
<td>Family and Interprofessional Collaboration in Special Education</td>
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<td>SPED 856</td>
<td>Transition Education and Services from Childhood through Adulthood</td>
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<td>SPED 857</td>
<td>Career Development for Youth</td>
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</table>
Master of Science in Educational Technology

Masters of Science in Education in Educational Technology

The School of Education and Human Sciences is not accepting students for the online and on-campus M.S.E in Educational Technology at this time.

The School of Education and Human Sciences is not accepting students for the online and on-campus M.S.E in Educational Technology at this time.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission

Applicants for all programs must submit the following materials:

(Individual program concentrations may require additional application materials. Please check the departmental website or program advisor for additional requirements.)

1. Graduate application (http://gradapply.ku.edu). (http://graduate.ku.edu/ku-graduate-application/)
2. 1 official transcript from each post-secondary collegiate institution attended
3. Statement of purpose with relevance of degree to career aspirations.
4. Graduate Record Examination (GRE) scores are not required for master's applicants and are optional for doctoral candidates.
5. 3 letters of recommendation evaluating the applicant's capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.
6. A vita or resume.
8. Writing sample (doctoral applicants).

The following application deadlines apply:

Educational Administration

<table>
<thead>
<tr>
<th>Semester</th>
<th>Degree</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>Ed.D applicants</td>
<td>April 1</td>
</tr>
<tr>
<td>Fall</td>
<td>Ph.D applicants</td>
<td>March 1</td>
</tr>
</tbody>
</table>

Higher Education

Master's degree deadlines

<table>
<thead>
<tr>
<th>Semester</th>
<th>Degree</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Master's applicants who intend to enroll full-time and seek graduate assistantships</td>
<td>January 5</td>
</tr>
<tr>
<td></td>
<td><em>The priority deadline is to participate in the assistantship process for full-time applicants. We are unable to guarantee availability of assistantships for students who submit after the priority deadline.</em></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Master's applicants who intend to enroll full time and seek graduate assistantships in housing only</td>
<td>Contact department</td>
</tr>
<tr>
<td></td>
<td>are not required to submit an academic application prior to the Oshkosh Placement Exchange (OPE). More information can be found at: <a href="https://housing.ku.edu/employment-graduate-staff">https://housing.ku.edu/employment-graduate-staff</a> (<a href="https://housing.ku.edu/employment-graduate-staff/">https://housing.ku.edu/employment-graduate-staff/</a>)</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Master's applicants who are working professionals</td>
<td>July 1</td>
</tr>
<tr>
<td>Spring</td>
<td>Master's applicants who are working professionals</td>
<td>December 1</td>
</tr>
<tr>
<td>Summer</td>
<td>Master's applicants who are working professionals</td>
<td>May 1</td>
</tr>
</tbody>
</table>

Doctoral degree deadlines

<table>
<thead>
<tr>
<th>Semester</th>
<th>Degree</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Ph.D. applicants</td>
<td>March 1</td>
</tr>
<tr>
<td>Summer</td>
<td>Ed.D applicants</td>
<td>April 1</td>
</tr>
</tbody>
</table>
Education and Social Policy
Master's degree deadlines

<table>
<thead>
<tr>
<th>Season</th>
<th>Application Type</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Master's applicants</td>
<td>March 1</td>
</tr>
<tr>
<td>Spring</td>
<td>Master's applicants</td>
<td>October 1</td>
</tr>
<tr>
<td>Summer</td>
<td>Master's applicants</td>
<td>April 1</td>
</tr>
</tbody>
</table>

Social and Cultural Studies in Education
Doctoral degree deadline

| Fall | Ph.D applicants | March 1 |

Policy Studies
Doctoral degree deadline

| Fall | Ph.D applicants | March 1 |

The School of Education and Human Sciences is not accepting students for the online and on-campus M.S.E in Educational Technology at this time.

Educational Technology
The Master of Science in Educational Technology program consists of 36 hours of coursework, a practicum, an exam and the production of a portfolio that reflects the student’s competencies. The program supports a wide range of career opportunities for positions at various institutions including: PK-12 school districts, community colleges, universities, governmental agencies and business organizations. The program addresses the needs of professional specialties to foster leadership in the integration, administration and design of educational technology. It is intended for those who are currently working in areas related to corporate training, human resource management, government and education.

Students are able to select tailored program coursework in consultation with their advisor and enhance their learning to fit their professional and educational needs.

Course plan includes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 712</td>
<td>Instructional Media Development</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 714</td>
<td>Foundations of Learning Technology (OR)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 709</td>
<td>Foundations of Curriculum andInstruction</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 896</td>
<td>Seminar in: (Theory of Educational Technology)</td>
<td>3</td>
</tr>
</tbody>
</table>

ELPS TECHNOLOGY COURSE ELECTIVES

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS Technology Course Elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELPS Technology Course Elective 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELPS Technology Course Elective 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELPS Technology Course Elective 4</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELPS Technology Course Elective 5</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELECTIVE COURSES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 3</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL PROGRAM CREDIT HOURS 36

Suggested Selective Courses
Electives are selected in consultation with student's advisor and may be taken form the ELPS department or other departments at KU including: Design, Computer Science, Curriculum & Teaching, Business, Communication Studies, Information Technology, and Special Education.

ELPS Technology Course Electives Include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS 720</td>
<td>Social Media Technology</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 718</td>
<td>Human Performance Technology</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 760</td>
<td>Integration of Learning Technology</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 811</td>
<td>Constructivist Learning Technology</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 812</td>
<td>Design of Learning Technology</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 814</td>
<td>Online Learning Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 818</td>
<td>Games and Simulations for Learning</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 820</td>
<td>Practicum in Educational Technology</td>
<td>3</td>
</tr>
</tbody>
</table>

Suggested interdisciplinary course electives include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 709</td>
<td>Foundations of Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>COMS 810</td>
<td>Organizational Communication: Theory and Research</td>
<td>3</td>
</tr>
<tr>
<td>ADS 710</td>
<td>Advanced Human Factors in Interaction Design</td>
<td>3</td>
</tr>
<tr>
<td>ADS 765</td>
<td>Interaction Design</td>
<td>3</td>
</tr>
<tr>
<td>ADS 770</td>
<td>Design Cognition</td>
<td>3</td>
</tr>
</tbody>
</table>

The School of Education and Human Sciences is not accepting students for the online and on-campus M.S.E in Educational Technology at this time.

Master of Science in Education in Higher Education Administration

Masters of Science in Education in Higher Education Administration
The Master's degree in Higher Education Administration at KU is primarily designed for individuals preparing for administrative careers in higher education. The program consists of 36 credit hours of integrated courses and hands-on experiences - all of which can be completed in two years.
The graduate program allows students to extend and apply their knowledge of colleges and universities, and to gain relevant experience in higher education administration. Graduate students will learn from expert scholars and practitioners, as well as fellow classmates, who bring diverse leadership experiences to the higher education administration program at KU.

Graduate students enrolled in the program, can expect to complete coursework and gain experiences that meet specific learning objectives, such as:

- Gain knowledge of organization, culture, diversity & history of higher education Institutions
- Understand relevant research on student development theories and its impact on students
- Incorporate a professional expression of cultural competence
- Use literature to link higher education administration theory with practice
- Relate relevant assistantship experiences to classroom learning
- Consider hands-on internship experiences for graduate course credit
- Demonstrate proficient writing skills and mastery of APA format

Students admitted to the full-time Master’s degree program are required to secure and maintain a graduate assistantship at KU (or another local higher education institution). Students receive in-state tuition, health insurance and a stipend as part of their assistantship at KU where they typically work between 20-30 hours per week.

The number and type of available assistantships will vary slightly from year to year, though assistantship positions are typically available in the following offices:

- KU Student Housing
- Office of Admissions
- Office of First Year Experience (FYE)
- Undergraduate Advising Center (UAC)
- Student Involvement & Leadership Center (SILC)
- Office of Multicultural Affairs (OMA)
- Financial Aid & Scholarships

**Graduate Admission to the School of Education and Human Sciences**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

**Graduate Admission**

Applicants for all programs must submit the following materials:

1. Graduate application (http://gradapply.ku.edu). (http://graduate.ku.edu/ku-graduate-application/)
2. 1 official transcript from each post-secondary collegiate institution attended
3. Statement of purpose with relevance of degree to career aspirations.
4. Graduate Record Examination (GRE) scores are not required for master's applicants and are optional for doctoral candidates.
5. 3 letters of recommendation evaluating the applicant’s capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.
6. A vita or resume.
8. Writing sample (doctoral applicants).

**The following application deadlines apply:**

**Educational Administration**

<table>
<thead>
<tr>
<th></th>
<th>Summer Ed.D applicants</th>
<th>April 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall Ph.D applicants</td>
<td>March 1</td>
</tr>
</tbody>
</table>

**Higher Education**

Master’s degree deadlines

|                | Fall Master’s applicants who intend to enroll full-time and seek graduate assistantships. *The priority deadline is to participate in the assistantship process for full-time applicants. We are unable to guarantee availability of assistantships for students who submit after the priority deadline. | January 5 |

*Individual program concentrations may require additional application materials. Please check the departmental website or program advisor for additional requirements.*
Fall

Master's applicants who intend to enroll full time and seek graduate assistantships in housing only are not required to submit an academic application prior to the Oshkosh Placement Exchange (OPE). More information can be found at: https://housing.ku.edu/employment-graduate-staff/

More information can be found at: https://housing.ku.edu/employment-graduate-staff/

Contact department

Fall

Master's applicants who are working professionals

July 1

Spring

Master's applicants who are working professionals

December 1

Summer

Master's applicants who are working professionals

May 1

Doctoral degree deadlines

Fall

Ph.D. applicants

March 1

Summer

Ed.D applicants

April 1

Education and Social Policy

Master's degree deadlines

Fall

Master's applicants

March 1

Spring

Master's applicants

October 1

Summer

Master's applicants

April 1

Social and Cultural Studies in Education

Doctoral degree deadline

Fall

Ph.D applicants

March 1

Policy Studies

Doctoral degree deadline

Fall

Ph.D applicants

March 1

Higher Education Administration

The M.S.E. in Higher Education Administration consists of a set of integrated courses and experiences that provide an opportunity for participants to extend their knowledge of the histories, clienteles, and administrative functions of colleges and universities, and to gain relevant experience in higher education administration. The program consists of 36 hours of course work. Courses are scheduled in 16-week formats during the fall and spring semesters, usually scheduled after 4:30 p.m.

The summer session classes vary in time and format. The course work provides a substantive knowledge base in higher education and student affairs administration. Students must hold an assistantship (https://elps.ku.edu/academics/higher-education-administration/masters/) or a full-time job in a related area while completing coursework. For the culminating activity, students take a comprehensive examination. A sample sequence of courses is listed below:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ELPS 780</td>
<td>3</td>
<td>EPSY 715</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELPS 782</td>
<td>3</td>
<td>ELPS 781</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELPS 883</td>
<td>3</td>
<td>ELPS 884</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>9</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>Hours</td>
<td>Hours</td>
<td>Hours</td>
</tr>
<tr>
<td></td>
<td>ELPS 885</td>
<td>3</td>
<td>ELPS 886</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Hours 36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regularly offered electives include the following:

Since electives can vary by semester, please consult with your faculty advisor before choosing electives.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS 798</td>
<td>Special Course: (Current Topics - Readings in Higher Education)</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 895</td>
<td>Internship</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 981</td>
<td>Higher Education Law</td>
<td>3</td>
</tr>
</tbody>
</table>

Masters of Science in Education/ Education and Social Policy

Masters of Science in Education/ Education and Social Policy

The Master's degree in Education and Social Policy offered at the University of Kansas School of Education and Human Sciences provides graduate students a 30 (or 36) credit hour program, with both a non-thesis or thesis option. The program permits students to complete a variety of courses, focusing on foundational questions and applications such as:

- How has the present educational system developed, in the U.S. and worldwide?
- How does poverty and inequality affect the school performance of children?
- What knowledge should schools aim to impart?
- How can education help achieve a more just, democratic and multicultural society?
- What are the ethical responsibilities of teachers and other educators in an unequal and changing society?
- What are the competing purposes of education, and how do we make choices among them?
As a field of study, Education and Social Policy is also known as Social Foundations of Education at some institutions. At KU, this Master’s level degree program offers an individualized student experience that addresses big questions in education, such as inequity, multiculturalism and social justice – and can be completed in less than two calendar years. The program is designed for full-time and part-time graduate students. Graduate students enrolled in the program can expect to:

- Increase their knowledge and ability to assess problems in contemporary education, particularly concerning questions of inequity, multiculturalism and social justice.
- Apply knowledge from a diverse array of courses and departmental perspectives including: sociology, philosophy, history, political science, and more.
- Examine problems in curriculum and learning, especially around questions of language and culture.
- Gain understanding of schooling & develop an appreciation of the political, economic and social forces that influence the decisions of educational leaders.
- Share in-depth analyses and discussions of theory for application to real-world experiences in classes and other settings.
- Complete a thesis or project, or a comprehensive exam during their final semester demonstrating your competencies in social and cultural dimensions of education.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission

Applicants for all programs must submit the following materials:

(Individual program concentrations may require additional application materials. Please check the departmental website or program advisor for additional requirements.)

1. Graduate application (http://gradapply.ku.edu).
2. 1 official transcript from each post-secondary collegiate institution attended
3. Statement of purpose with relevance of degree to career aspirations.
4. Graduate Record Examination (GRE) scores are not required for master’s applicants and are optional for doctoral candidates.
5. 3 letters of recommendation evaluating the applicant’s capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.
6. A vita or resume.


8. Writing sample (doctoral applicants).

The following application deadlines apply:

Educational Administration

<table>
<thead>
<tr>
<th></th>
<th>Summer</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed.D applicants</td>
<td>April 1</td>
<td>March 1</td>
</tr>
</tbody>
</table>

Higher Education

Master's degree deadlines

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed.D applicants</td>
<td>January 5</td>
</tr>
</tbody>
</table>

Doctoral degree deadlines

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed.D applicants</td>
<td>July 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed.D applicants</td>
<td>December 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed.D applicants</td>
<td>May 1</td>
</tr>
</tbody>
</table>
Education and Social Policy

Master's degree deadlines

<table>
<thead>
<tr>
<th>Season</th>
<th>Program Type</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Master's applicants</td>
<td>March 1</td>
</tr>
<tr>
<td>Spring</td>
<td>Master's applicants</td>
<td>October 1</td>
</tr>
<tr>
<td>Summer</td>
<td>Master's applicants</td>
<td>April 1</td>
</tr>
</tbody>
</table>

Social and Cultural Studies in Education

Doctoral degree deadline

<table>
<thead>
<tr>
<th>Season</th>
<th>Program Type</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Ph.D applicants</td>
<td>March 1</td>
</tr>
</tbody>
</table>

Policy Studies

Doctoral degree deadline

<table>
<thead>
<tr>
<th>Season</th>
<th>Program Type</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Ph.D applicants</td>
<td>March 1</td>
</tr>
</tbody>
</table>

Education and Social Policy

A sample program plan is provided below:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 757</td>
<td>Education in American Society</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 830</td>
<td>Foundations of Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>ELPS Law Class</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELPS Class on Education Policy/Social Science Research</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ELPS Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Non-ELPS Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Flexible Elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Flexible Elective 2</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT - Additional Requirements</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELPS 898</td>
<td>Master's Project</td>
<td>3</td>
</tr>
<tr>
<td>Project Defense</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL CREDIT HOURS: 30

Capstone Project: Students will select one of two options for a capstone project:

Policy brief. The policy brief option gives students an artifact they can use on the job market. The brief will analyze a contemporary educational policy issue and may include policy origin, intended objectives, surrounding debates, potential outcomes, unintended consequences, and other policy features.

Online portfolio. The online portfolio option allows students to create a portfolio of their learnings in the master’s program. The online portfolio may include a page for curriculum vitae, research, teaching and learning, service, and other educational projects.

Admissions criteria:

- A bachelor’s degree and a grade-point average (GPA) of at least a B (3.0 on a 4.0 scale) from a regionally accredited institution, like KU, or a foreign university with substantially equivalent bachelor’s degree requirements. Faculty may make exceptions on a limited basis.

- A statement of purpose describing the applicant’s interests related to education and social policy. Applicants must address their personal and academic background, professional goals, and life experiences that shaped the decision to pursue a master’s degree. Applicants should also describe experiences or achievements that would help them contribute to the ELPS program; KU’s mission for promoting diversity, equity, and inclusiveness; and their professional aspirations once they complete the degree.

- A resume or curriculum vitae

- TOEFL scores (only for international applicants).

Doctor of Education in Educational Leadership and Policy Studies

Educational Leadership and Policy Studies Graduate Programs

The Department of Educational Leadership and Policy Studies (http://elps.soe.ku.edu/) offers a broad range of graduate professional programs in educational leadership and policy. For complete program information, contact the department.

Graduate programs in educational leadership and policy studies promote the professional and intellectual development of practitioners, teachers, and scholars at all levels of education. The department offers Master of Science in Education degrees in educational administration (PK-12), education and social policy, and higher education, as well as Ed.D. and Ph.D. degrees in educational leadership and policy studies with concentrations in educational administration, higher education, policy studies, and social and cultural studies (Ph.D only).

Note: Prospective and current students should obtain the current degree requirements from the department.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission

Applicants for all programs must submit the following materials:
Doctor of Education in Educational Leadership and Policy Studies

(Individual program concentrations may require additional application materials. Please check the departmental website or program advisor for additional requirements.)

1. Graduate application (http://gradapply.ku.edu). (http://graduate.ku.edu/ku-graduate-application/)
2. 1 official transcript from each post-secondary collegiate institution attended
3. Statement of purpose with relevance of degree to career aspirations.
4. Graduate Record Examination (GRE) scores are not required for master's applicants and are optional for doctoral candidates.
5. 3 letters of recommendation evaluating the applicant’s capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.
6. A vita or resume.
8. Writing sample (doctoral applicants).

The following application deadlines apply:

Ed.D. Degree Programs

The Ed.D. trains educational practitioners to understand and apply the most advanced knowledge to their work. All doctoral students must complete a program that provides a broad understanding of educational leadership and policy as well as a concentration in educational administration, higher education, social and cultural studies in education, or policy studies.
All Ed.D. students must complete a minimum of 27 hours in the major/concentration (e.g., educational administration, higher education administration), 9 hours of research, a 3 credit hour practicum or field experience, and a dissertation. In addition, all Ed.D. aspirants complete a responsible conduct of research component that is integrated with the required coursework.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (http://policy.ku.edu/graduate-studies/doctoral-research-skills-requirement/) are listed in the KU Policy Library.

A general description of each concentration is given here.

**Educational Administration**

The educational administration concentration prepares teachers and administrators for school district leadership roles. Studies stress fundamental fields of knowledge and educational policy development necessary for effective leadership of school districts. The Ed.D. leads to licensure in Kansas at the district level. Students pursuing this degree from outside of Kansas should contact their licensing board to determine requirements for district level license. This concentration requires students to take classes in the summer.

**Major courses in consultation with your faculty advisor:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS 956</td>
<td>District Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 948</td>
<td>Research in Education Policy and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 953</td>
<td>District Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 871</td>
<td>Introduction to Qualitative Research</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 954</td>
<td>Sociology of Educational Organizations</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 951</td>
<td>Supervision of Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 903</td>
<td>Curriculum Supervision</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 949</td>
<td>Educational Policy and Politics</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 955</td>
<td>District Business Management</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 957</td>
<td>Educational Policy, Ethics and Law</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 870</td>
<td>Quantitative Methods for Research in Educational</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Leadership and Policy Studies</td>
<td></td>
</tr>
<tr>
<td>ELPS 969</td>
<td>Dissertation Seminar (Applied Statistics)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Dissertation Requirements:**

After successfully completing the comprehensive exam, students must enroll in 6 credit hours of dissertation per semester, excluding summer semester, until the dissertation is complete or 18 credit hours are completed. After 18 credit hours of dissertation are completed, a student must enroll in 1 hour per semester, excluding summer semester, until the dissertation is completed. Post-comprehensive enrollment credit hours can include Dissertation Seminar (ELPS 989) or additional research courses.

**Doctor of Philosophy in Educational Leadership and Policy Studies**

**Educational Leadership and Policy Studies Graduate Programs**

The Department of Educational Leadership and Policy Studies (http://elps.soe.ku.edu/) offers a broad range of graduate professional programs in educational leadership and policy. For complete program information, contact the department.

Graduate programs in educational leadership and policy studies promote the professional and intellectual development of practitioners, teachers, and scholars at all levels of education. The department offers Master of Science in Education degrees in educational administration (PK-12), education and social policy, and higher education, as well as Ed.D. and Ph.D. degrees in educational leadership and policy studies with concentrations in educational administration, higher education, policy studies, and social and cultural studies (Ph.D only).

Note: Prospective and current students should obtain the current degree requirements from the departments.

**Graduate Admission to the School of Education and Human Sciences**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate
that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

**Ph.D. program application requirements:**

1. A bachelor’s and master’s degree from a regionally accredited institution, or an international university with substantially equivalent degree requirements are required for consideration. However, a bachelor’s degree followed by at least 30 hours of master’s level coursework that has not been applied toward another degree may be acceptable in some circumstances.

2. All postsecondary transcripts.

3. A minimum of 3.00 undergraduate GPA, or an undergraduate GPA of less than 3.0 combined with a master’s or doctoral degree GPA of at least 3.0.


5. Graduate Record Examination (GRE) scores (optional). GRE scores are optional. The ELPS department relies on a holistic approach to evaluating applicants, involving a plurality of methods and information, rather than prioritizing standardized test scores such as GRE performance. While you are welcome to submit GRE scores as additional information, we do not have any cutoffs; and, not submitting your GRE score will not affect your application negatively.

6. Statement of purpose (5-8 pages maximum). Please describe your interests and commitment to the goals and curriculum of the ELPS Ph.D. program. It is recommended that you address your personal and academic background and your scholarly and related professional goals. You also could explain a specific research interest or a faculty member with whom you want to work. It is important that you thoroughly address your preferred area of specialization in the ELPS program and explain reasons why you would be a good fit (e.g., education policy, social and cultural studies in education, higher education administration, educational leadership). In addition, please address any life experiences that have shaped your decision to pursue a doctorate, along with personal experiences or achievements that would help you contribute to the ELPS program; to KU’s mission for promoting diversity, equity, and inclusiveness; and to your professional aspirations once you complete the degree.

7. CV or resume. Please include a minimum: post-high school education; relevant professional and/or scholarly experience; research experience and other pertinent experience; honors, other recognitions received; conference presentations, publications, reports.

8. Writing samples. These can include professional works (not necessarily academic papers), formal reports, other pertinent work. The writing sample(s) should demonstrate your ability to think critically and/or analytically about an issue or a task. We are looking for documents of substantive quality and length, though there is no official minimum or maximum page limit.

9. Letters of recommendations from three individuals who can speak directly to the applicant’s academic skills and potential for rigorous, independent doctoral level work. Preferably the letters will be from current or former professors but can also include a letter from an immediate supervisor.

10. Phone or video conference interview. After initial screening, ELPS faculty may invite you for an interview to address remaining questions about your objectives and fit for the program. The interview may also involve an interactive evaluation of your scholarly skills and potential.

**Graduate Admission**

Applications for all programs must submit the following materials:

(Individual program concentrations may require additional application materials. Please check the departmental website or program advisor for additional requirements.)

1. Graduate application (http://gradapply.ku.edu). (http://graduate.ku.edu/ku-graduate-application/)

2. 1 official transcript from each post-secondary collegiate institution attended.

3. Statement of purpose with relevance of degree to career aspirations.

4. Graduate Record Examination (GRE) scores are not required for master's applicants and are optional for doctoral candidates.

5. 3 letters of recommendation evaluating the applicant’s capacity for rigorous graduate study and qualifications for leadership positions in education and related fields.

6. A vita or resume.


8. Writing sample (doctoral applicants).

**The following application deadlines apply:**

**Educational Administration**

<table>
<thead>
<tr>
<th>Season</th>
<th>Ed.D applicants</th>
<th>Ph.D applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>April 1</td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>March 1</td>
<td></td>
</tr>
</tbody>
</table>

**Higher Education**

Master's degree deadlines
### Policy Studies

**Doctoral degree deadlines**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Ph.D. applicants</th>
<th>March 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s applicants who intend to enroll full-time and seek graduate assistantships. <em>The priority deadline is to participate in the assistantship process for full-time applicants. We are unable to guarantee availability of assistantships for students who submit after the priority deadline.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s applicants who are working professionals</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s applicants who are working professionals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The SOEHS requires 36 hours in the major area. For the ELPS PhD, the 36 hours are distributed as follows:

1. **Departmental Core**—12 hours
   - EDUC 800 Education as a Field of Scholarship
   - ELPS 831 Sociology of Education
   - ELPS 949 Educational Policy and Politics
   - ELPS 998 Educational change/innovation

2. **Concentration courses** are determined in conjunction with advisor and advising committee—24 hours.
   - 12-15 hours must be in ELPS. These are in addition to the courses in the departmental core. Typically, no more than two of the program courses may be taken as independent studies. More than two independent studies requires justification by student and advisor.
   - 9-12 hours will be taken outside of ELPS
   - One of the 8 total concentration courses must be a Diversity, Equity, and Inclusion course.

3. **Research** -- Minimum of 15 hours (EPSY 715 or its equivalent does not count toward the PhD)
   - Basic quantitative research course, e.g., EPSY 710/11
   - Basic qualitative research, e.g., ELPS 871
   - 2 Intermediate or advanced qualitative or quantitative courses (or equivalent depth in historical or philosophical methods)
   - A research design course taken early in a student’s program
   - Note: Students may seek to waive 6 hours of prior graduate statistics, qualitative, or methods courses upon approval of advisor/advising committee. For students seeking waivers, depending on career aspirations, it may be in their best interest to begin research courses at a higher level and take 12 hours of advanced research courses at KU.

4. **Full-time study.** Students must complete at least one year of full-time study (defined as 9 credit hours per semester). If one holds a GTA position or a related GRA position, full-time is defined as 6 credit hours per semester.

A College Teaching Experience is no longer required but is highly recommended for students who are not GTAs but who are interested in pursuing a faculty position.

PhD students should expect to engage in “co-curricular” activities appropriate to their career aspirations above and beyond the specific degree requirements. These include conducting and presenting research at conferences, engaging in internships with policy organizations, etc.

The Responsible Conduct of Research requirement is met through EDUC 800.

The program is offered in-person on the Lawrence Campus although some courses may be online or taken at the Edwards Campus.

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### Education and Social Policy

**Master's degree deadlines**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Master's applicants</th>
<th>March 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>Master's applicants</td>
<td>October 1</td>
</tr>
<tr>
<td>Summer</td>
<td>Master's applicants</td>
<td>April 1</td>
</tr>
</tbody>
</table>

### Social and Cultural Studies in Education

**Doctoral degree deadline**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Ph.D applicants</th>
<th>March 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
Graduate Certificate in K-12 Building Leadership

Graduate Certificate in PK-12 Building Leadership in Educational Administration

Program Info:

The Graduate Certificate in Educational Leadership consists of a 24 hour block of coursework, including an extensive field-based practicum and a comprehensive interactive electronic portfolio. The typical sequence of required coursework takes four semesters to complete, two courses each term. The first semester includes the foundational course, ELPS 750 The Principalship, and the final semester includes ELPS 895, Internship. The additional 18 credit hours of required coursework can be taken in any sequence. Students submit a comprehensive electronic portfolio at the end of the program that documents their proficiencies with national and state standards in building leadership.

The Graduate Certificate in Educational Leadership is fully online and will have two designated start dates in any given academic year. Students are asked to reference exact dates for application deadlines and start dates.

The Graduate Certificate in Educational Leadership is a component of the University of Kansas’s state of Kansas approved licensure endorsement program in Building Leadership PK-12. To add “Building Leadership PK-12” endorsement to a professional license in the state of Kansas, candidates must complete the following: 1) the 24 credit hours that constitute the Graduate Certificate in Educational Leadership, 2) have an earned master’s and/or doctoral degree in an education related field, 3) have 5 years of accredited teaching experience, and 4) a passing score on the state-mandated licensure exam.

Completion of a graduate certificate is not a guarantee of licensure or endorsement of any kind. It is each student’s responsibility to determine the licensure and endorsement requirements in his or her state and to apply for the licenses or endorsements necessary for his or her career goals.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

To be considered for acceptance into the certificate program in Educational Administration at the University of Kansas, the student must have:

- A current teaching license with 3-5 years of teaching experience in schools (most states require)
- A master’s or doctorate degree from an accredited program in an education-related field of study
- Current resume or C.V.
- Statement of Purpose: indicate relationship of licensure-only program of study to career goals
- One official copy of all previous university academic transcripts
- Three letters of recommendation from qualified education individuals that attest to candidate’s leadership abilities

Completion of Program:

Students will be able to complete this program in 2 years or less. Upon successful completion of the program and successful passing of a required state building leadership licensure exam, students will be eligible to add the building administration endorsement to their license in their corresponding state. It is strongly recommended that students check specific licensure requirements in their individual states.

K-12 Building Leadership Certificate Program Requirements:

Completion of 24 credit hours:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELPS 750</td>
<td>Principalship</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 752</td>
<td>Education Law</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 755</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 854</td>
<td>The Student in Society</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 852</td>
<td>School Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 853</td>
<td>Staff Evaluation and Development</td>
<td>3</td>
</tr>
<tr>
<td>SPED 756</td>
<td>Special Education Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 895</td>
<td>Internship</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Department of Educational Psychology

Educational Psychology Graduate Programs

The Department of Educational Psychology (http://pre.soe.ku.edu/) offers critical knowledge and skills needed in society today including research design, statistics, educational measurement, program evaluation, educational and psychological assessment, counseling and consultation.

The department offers graduate training programs in counseling psychology, educational psychology and research, and school psychology.

Courses

EPsy 106. Multicultural Student Leadership Seminar. 2 Credits. This course will introduce students of color to leadership theory and develop personal skills in the areas of organizational, career, and community leadership. Topics covered include public speaking, group process, time management, and discussion of the special challenges for leaders of color. Prerequisite: Must have taken Hawk Link UNIV 101 and fewer than 60 hours credit from the University of Kansas.

EPsy 305. Development and Learning of the Child. 3 Credits. An introduction to the study of children’s thinking, behavior, and development in school, home, and community settings. Classic and contemporary theories of developmental and educational psychology will be addressed; these theories will provide a foundation for thinking about important contemporary issues in child development. Specific
topics covered will include research methods for studying children’s
development, cognitive development, intelligence, language, emotional
development, aggression, moral development, and family and peer
relationships. Emphasis will be placed the study of individuals and groups,
describing the process of development, and considering educational
implications of theory and research.

EPSY 306. Development and Learning of the Adolescent. 3 Credits.

An introduction to the study of adolescence (puberty to roughly age 18),
with a focus on implications and applications for optimal adolescent
development. Approaching development from an applied lens, the course
will cover foundational information on brain and biological changes that
occur during adolescence, as well as on integrating this foundational
knowledge with theories of learning, motivation, cognition, and emotional
and social development.

EPSY 310. Career and Life Planning. 3 Credits.
The purpose of this course is to assist students with career, academic,
and life planning choices. Designed to be practical and hands-on, the
course relies heavily on student engagement. Through conversation and
exploration, students will develop a better understanding of themselves
and their career options and leave with a road-map for the future. Classes
will meet twice a week in small sections. Both in-class and out-of-class
activities will focus on helping students identify interests and strengths,
clarify values, explore academic and work alternatives, and develop skills
that can be applied to career and life planning both now and in the future.

EPSY 320. Basics of Classroom Assessment. 1 Credits.
This course is designed for sophomores in the Teacher Education
Program. It presents basic concepts and methods for classroom
assessment. It is meant to be an introductory course and students are
expected to enroll in EPSY 520 Classroom Assessment in their senior
year.

EPSY 450. Introduction to Counseling Psychology. 3 Credits.
An historical and contemporary overview of the science and practice
of counseling psychology, including trends in the roles and functions
of counseling psychology practitioners, the research and scientific
foundations of counseling practice, the psychological theories of
counseling and psychotherapy that guide professional practice, and the
ethical and professional issues confronting counseling practitioners.
Prerequisite: PSYC 104.

EPSY 480. Promoting Student Social-Emotional Well-Being. 3
Credits.
This course is designed for the student interested in learning and
applying knowledge of educational psychology. More specifically, the
goal is to help students understand how learners grow and develop,
recognizing that patterns of learning and development vary individually
within and across the cognitive, linguistic, social, emotional, and physical
areas resulting in the ability to design and implement developmentally
appropriate, relevant, and rigorous learning experiences. In addition,
students will learn how to create learning environments that support
individual and collaborative learning that includes teacher and student
use of technology, and encouraging positive social interaction, active
generation in learning, and self-motivation. An additional goal of the
course will be to help students learn to integrate social-emotional
learning (SEL) with character development into their curriculum so that
students will learn, practice and model essential personal life habits that
contribute to academic, vocational, and personal success. The goal
is to be able to sustain a caring and civil classroom environment, to
help learners make healthy decisions, problem solve effectively, value
excellence and be respectful and responsible citizens. Prerequisite:
EPSY 305, or EPSY 306.

EPSY 497. Independent Study. 1-2 Credits.
Only one enrollment permitted each semester, a maximum of four
hours will apply toward the bachelor's degree. Graded on a satisfactory/
unsatisfactory basis. Prerequisite: Recommendation of advisor and
consent of instructor.

EPSY 515. Research Methods for McNair Scholars. 3 Credits.
This course provides participants in the McNair Scholars program with
an understanding of research methods appropriate to their field so they
can write proposals for their summer research projects. Prerequisite:
Acceptance into the McNair Scholars Program.

EPSY 520. Classroom Assessment. 2 Credits.
This course is introduction to the concepts and skills required to
develop and evaluate various forms of formal and informal classroom
assessments to determine student learning and teacher instructional
effectiveness.

EPSY 575. Internship Exploration. 1-5 Credits.
This course provides academic credit for a supervised practical
experience in an occupational area of interest. In addition to the work-
related activity, students will complete reading and writing assignments,
participate in on-line discussion and create a final portfolio of internship
accomplishments. Credit hours (1-5) are based on number of hours
at internship site in agreement with instructor. Prerequisite: Secured
internship of 8 hours per week or more for semester in which student will
be enrolled in the course; permission from instructor.

EPSY 580. Positive Psychology. 3 Credits.
An introduction to the core assumptions and research findings associated
with human strengths and positive emotions. Also an exploration of
interventions and applications informed by positive psychology in
counseling and psychotherapy, and its application to school, work,
family and other close relationships. (Same as PSYC 598.) Prerequisite:
PSYC 104 or consent of instructor.

EPSY 598. Special Course: _____. 1-5 Credits.
A special course of study to meet current needs of education students--
primarily for undergraduates.

EPSY 703. Constructive Classroom Discipline. 3 Credits.
This course will examine concepts and techniques of constructive
classroom management. Various theoretical orientations including
humanism and behaviorism will be considered. Emphasis will be on
the identification of strategies that teachers can use (1) to facilitate an
environment that reduces the likelihood of misbehavior occurring, and (2)
to cope constructively with individuals and groups of children to resolve
difficulties that arise in the classroom. The class should have value to
classroom teachers, school psychologists, counselors, and other school
consultants.

EPSY 704. Advanced Educational Psychology: Learning Processes
in Education. 3 Credits.
A study of the mental processes that influence learning and
comprehension. The scope of the course will include individuals at all
developmental levels and in a variety of educational settings. Key issues
include the study of language, memory, concepts, motivation and social
factors affecting learning processes.

EPSY 705. Human Development through the Lifespan. 3 Credits.
This course will cover the social, emotional, psychological, and cognitive
changes that occur from conception through death. Methodological issues
will also be addressed. Prerequisite: A graduate or undergraduate course
in psychology.

EPSY 710. Introduction to Statistical Analysis. 3 Credits.
Emphasis on the conceptual underpinnings of statistical analysis of educational data. Includes univariate and bivariate descriptive statistics, sampling distributions, statistical estimation, hypothesis testing and procedures in testing statistical hypothesis for one and two sample designs. Prerequisite: Concurrent enrollment in EPSY 711 required, or with the permission of instructor on the basis of knowledge of statistical packages presented in EPSY 711.

EPSY 711. Lab for Introduction to Statistical Analysis. 1 Credits. Creation and manipulation of data sets. Analysis of data with statistical packages, with an emphasis on descriptive statistics, graphical procedures, and univariate parametric methods. Graded on a satisfactory/fail basis. Prerequisite: Concurrent enrollment in EPSY 710 or EPSY 811 or with the permission of the instructor.

EPSY 715. Understanding Research in Education. 3 Credits. This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional course work before being fully prepared to conduct independent research. However this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. (This course fulfills the requirement of a research methods course in the first 12 hours of graduate study.)

EPSY 725. Educational Measurement. 3 Credits. The course is an introduction to the application of the concepts of reliability, validity, and practicality to the development, selection, use, and interpretation of tests and other measuring instruments in the field of education. The concepts of norm referenced and criterion referenced tests; the interpretation and use of norms; standard scores, percentiles, quotients, and grade equivalents are among the topics covered. An understanding of the role of measurement in evaluation, diagnosis, selection and placement is included.

EPSY 740. Counseling and Interviewing Skills. 3 Credits. An experiential and performance based course having three major objectives: 1) the acquisition of basic counseling skills and strategies by means of microcounseling training; 2) learning to use these skills effectively and appropriately in a simulated counseling session; 3) the students' understanding of their personal characteristics and how these characteristics relate to functioning as an effective helping professional. This course should normally be taken at the earliest possible time in the student's program. Open to counseling majors. Non-majors may be admitted only by permission of the instructor, if space permits. Prerequisite: Permission of the instructor.

EPSY 742. Counseling Theory and Techniques. 3 Credits. An introductory examination of several major theories of counseling and therapy including psychodynamic views, person-centered, behavioral, and cognitive-behavioral approaches. Attention given to research reviews and factors various theories have in common. Designed for graduate students in counseling psychology or allied fields. Prerequisite: Graduate student status or permission of the instructor.

EPSY 760. Ethics, Law, and Professional Issues in School Psychology. 3 Credits. This course is intended to introduce the student to a) ethical principles, standards, and issues in the profession of psychology; b) legal issues involved in the practice of school psychology; c) problem-solving models to solve ethical and ethical-legal dilemmas; d) roles and functions of a school psychologist; and e) current topics in the field of school psychology. Prerequisite: Permission of the instructor.

EPSY 765. Mental Health in the Classroom. 3 Credits. This course will help educators identify commonly occurring mental health problems as well as the ways in which they can affect students' achievement, classroom behavior, and social adjustment. You will also learn how to make effective referrals to resources available for students with mental health issues in both the district and the community.

EPSY 766. Positive Psychology in the Classroom. 3 Credits. Positive psychology is the study of what is right and positive about people and institutions. Positive psychologists call for an equal focus on strengths and weaknesses, as much attention on positive emotions as negative emotions, as much interest in building the best things in life as in repairing the worst, and as much attention to promoting the fulfillment of lives of healthy people as to healing the wounds of the distressed. This course will first present an introduction to the core assumptions and research findings associated with human strengths and positive emotions and then move on to explore interventions and applications informed by this perspective in schools, as well as in domains personally relevant to the lives of educators such as work, family, and other close relationships.

EPSY 767. Social Emotional Learning. 3 Credits. This course is designed for the student interested in learning and applying knowledge of educational psychology. More specifically, the goal is to help students understand how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas resulting in the ability to design and implement developmentally appropriate, relevant, and rigorous learning experiences. In addition, students will learn how to create learning environments that support individual and collaborative learning while encouraging positive social interaction, active engagement in learning, and self-motivation. An additional goal of the course will be to help students to learn to integrate social-emotional learning (SEL) with character development into their curriculum.


EPSY 797. Independent Readings and Research in: ______. 1-3 Credits. Opportunity for students to participate in supervised reading and research in special topics of interest (for which regularly scheduled courses are not given). Topics and credit are arranged by advisement: May not be used to substitute for regularly scheduled course offerings. Intended for students with appropriate undergraduate or graduate preparation but without extensive graduate course background in the area of proposed study. (Students with extensive graduate work should enroll in EPSY 997; undergraduate students may enroll in EPSY 497.) Graded on a satisfactory/unsatisfactory basis.

EPSY 798. Special Course: ______. 1-5 Credits. A special course of study to meet current needs of education professionals--primarily for graduate students. Graded on a satisfactory/fail basis.

EPSY 800. Development during Youth and Adulthood. 3 Credits.
An examination from a life-span perspective of major issues affecting changes after adolescence. Topics include intelligence, identity, intimacy, the role of work, and moral concepts. Theoretical issues, research findings, and educational and social policy implications will be examined. Students will prepare papers on significant issues in the field and survey extensively the research and theoretical literature. Prerequisite: Prior enrollment in a course on naturalistic or experimental research methods.

EPSY 801. Advanced Mathematics and Mathematical Statistics for Educational and Social Scientists. 4 Credits.
Mathematical statistics and their mathematical underpinnings are presented in a condensed and accessible manner with details on how they function as parts of commonly used statistical models. Mathematical topics include advanced algebra, differentiation, multiple integration, numerical series, matrix algebra, and matrix calculus. Statistical topics include probability, random variables, probability density/mass functions, algebra of expectations and variances, sampling, asymptotics, and general families of distributions. Prerequisite: EPSY 710 or equivalent or permission of instructor.

EPSY 802. Child Development. 3 Credits.
This course covers core concepts and current research on environmental, individual, and interpersonal factors influencing development during childhood (birth - age 12). Topics covered include cognition, emotion, identity, and key social relationships (e.g., family, peers). Course emphasizes consideration of educational practices in the context of research on child development.

EPSY 803. Using R for Data Analysis. 3 Credits.
This course introduces R, the most popular free software environment for statistical computing, graphics, and data analysis. It will teach students about basic features of R, knowledge and skills of how to use R, interpret statistical results generated from R, and write methods and results in an academic and professional way. It will cover a variety of essential statistical procedures, including descriptive statistics, t-test, ANOVA, MANOVA, correlation, regression, reliability analysis, and factor analysis. The course will employ project-based teaching approach and allow students to work on research projects that they are interested in by using their own data or the data provided by the instructor. Prerequisite: EPSY 810 or EPSY 811 or equivalent course.

EPSY 805. Individual Intelligence Testing. 1-3 Credits.
Supervised experience in the administration, scoring, and interpretation of the major individual intelligence tests for children, adolescents, and adults. Other areas to be covered in this course will include models of intelligence and factors influencing intelligence; measurement characteristics of instruments used to assess cognitive abilities; ethical and legal issues in the use of intelligence tests; and the use of cognitive assessments for identification and diagnosis. Prerequisite: Permission of instructor.

EPSY 806. Issues in Human Growth and Development. 3 Credits.
An overview and analysis of selected issues in the field of human growth and development. The focus will be on current issues of a theoretical and methodological nature that affect the field of developmental psychology and applications to social and educational settings. Prerequisite: Prior completion of a course in developmental psychology.

EPSY 807. Theories and Research in Human Learning. 3 Credits.
An overview of important models, principles and research findings related to the learning process. Attention is given to theories of learning and information processing which attempt to explain perceptual behavior, verbal learning and memory and social learning processes. Emphasis is placed on student development of research proposals in the area of human learning and achievement. Prerequisite: Permission of instructor.

EPSY 808. Advanced Social Psychology: Theory, Research, and Professional Applications. 3 Credits.
This course presents major theoretical approaches and empirical findings in social psychology, including attitude formation and change, social influence, and intergroup relations. Interactions among self, relationships, group membership, and culture and how each influences thinking and behavior are addressed. This course also explores how key social identities, such as gender and race, impact social process and relationships. Course emphasizes consideration of educational and clinical practices in the context of research on social psychology. Prerequisite: Graduate standing in an EPSY program or permission of instructor.

EPSY 810. Regression and ANOVA: General Linear Models. 3 Credits.
Analysis of variance and regression models are presented under a unified framework. Multiple correlation/regression techniques, including polynomials, analysis of interactions, ANOVA using dummy coding, planned and post hoc comparisons, multivariate ANOVA, orthogonal and non-orthogonal analysis of variance, analysis of covariance. Prerequisite: EPSY 710 or equivalent course.

EPSY 811. Analysis of Variance. 3 Credits.
Analysis of variance techniques including one-way ANOVA, planned and post hoc comparisons, multivariate ANOVA, repeated measures ANOVA, and mixed designs. Prerequisite: EPSY 710 and EPSY 711.

EPSY 812. Meta-Analysis. 3 Credits.
Statistical methods to summarize results from multiple studies. Prerequisite: EPSY 811.

EPSY 814. Nonparametric Statistics. 3 Credits.
Methods of analysis for nominal and ranked data, multiway contingency table analysis. Prerequisite: EPSY 811.

EPSY 816. Evaluating School Programs. 3 Credits.
Methods and procedures for evaluating educational programs. Attention is given to the development and evaluation of goals and objectives, creation of designs to monitor processes and outcomes, utilization of test and measurement systems for assessing outcomes, establishing evaluation standards and criteria, and application of statistical analyses. Prerequisite: EPSY 710 or equivalent.

EPSY 818. Social Development. 3 Credits.
This course covers current research on environmental, individual, and interpersonal factors influencing social aspects of development, including the development of key social relationships (e.g., family, friends) across the lifespan, with a primary emphasis on childhood and adolescence. Topics covered include temperament and personality, self and identity, attachment, family relationships, peer relations, aggression, and prosocial behavior. Course emphasizes consideration of educational and clinical practices in the context of research on social development.

EPSY 820. Research and Practice in College Teaching. 3 Credits.
This course emphasizes the application of key concepts from the psychology of learning, including organization of knowledge, motivation, and metacognition, to college-level teaching practice. In this course, students will develop and evaluate course-level learning goals, evaluate instructional materials for their use of inclusive teaching practices, identify characteristics of effective assessments, and reflect on and evaluate their own teaching practices in relation to course concepts.

EPSY 822. Educational Scales, Questionnaires, and Sampling. 3 Credits.
Development, construction, validation and scaling of noncognitive instruments including questionnaires, surveys, checklists, rating scales and unobtrusive measures. The sampling methodology is emphasized.
Item construction and analysis and the development of subscales are stressed. Prerequisite: EPSY 720 or EPSY 725 and EPSY 710.

**EPSY 825. Positive Psychotherapy and Strength-Based Counseling. 3 Credits.**
Positive psychologists call for an equal focus on strengths and weakness, as much attention on positive emotions as negative emotions, as much interest in building the best things in life as in repairing the worst, and as much attention to promoting the fulfillment of lives of healthy people as to healing the wounds of the distressed. This course will first present an introduction to the core assumptions and research findings associated with positive traits and emotions, then move on to explore interventions and applications informed by this perspective in counseling and psychotherapy. Each class will be organized as didactic presentation of core concepts, discussion of the assigned readings, and experiential learning activities. The tracking of the evolution of positive psychology is covered leading to its integration into the core change processes of integrated approaches to psychotherapy. The theories forming the foundation of the course include Broaden and Build, Hope Theory, the Complete State Model, and Self Determination. Multicultural perspectives on positive traits and change processes will provide an important context for the course.

**EPSY 830. Individual and Group Assessment. 3 Credits.**
A consideration of basic concepts pertaining to selection and interpretation of both standardized and non-standardized assessment procedures and devices with attention given to communicating assessment information within the context of the counseling relationship. Prerequisite: EPSY 725 or comparable undergraduate principles of measurement course.

**EPSY 835. Clinical Techniques in Academic Assessment and Intervention. 3 Credits.**
Students will learn techniques of formal and informal assessment of academic skills in school-aged students. In addition, students will learn consultation and intervention approaches and strategies for use with students who have academic delays. This course has a field-based practicum component. Prerequisite: Graduate student standing in the School Psychology program and permission of instructor.

**EPSY 836. Behavioral & Systems Neuroscience in Education. 3 Credits.**
This graduate-level course is designed to provide an overview of important models, principles and research findings related to behavioral and systems neuroscience in education. Attention is given to the basic structure of the nervous system, the fundamental units of the nervous system (the neuron and the synapse), the function of different components of the central nervous system, the sensory, motor, and memory systems, and the networking of these systems in perception, learning, and cognition. Also, attention is given to how the nervous system behaves with other brain structures that support fundamental mental abilities such as attention, cognitive control, emotion, language, memory, and social cognition. Finally, within these topics, attention is given to understanding how the nervous system works by studying the physiological basis of adaptive behaviors and maladaptive behaviors of the mind.

**EPSY 837. The Neuroscience of Motivation and Emotional Behaviors. 3 Credits.**
Using a neuroscience lens, this course focuses on integration of research and theory on motivation and emotion from across developmental, affective, cognitive, and social fields. Emotion and motivation are the core of human life and thought, without which we could not survive even in the most benign environments. This course examines how emotion and motivation innervate thought and behavior to enrich human experience and "bias" the decisions we make in everyday life, as well as how thought, behavior, and environment innervate emotion and motivation.

**EPSY 840. Guidance and Counseling in the Public Schools. 3 Credits.**
This course is designed to provide information about the organization and administration of guidance and counseling programs in the public schools. Non-majors wishing to know more about the role of the counselor can be admitted with approval of the instructor.

**EPSY 841. Center for Psychoeducational Services Practicum. 3 Credits.**
The primary purpose of this course is for students to develop individual counseling skills by working with clients in the Center for Psychoeducational Services. In this course you will implement a semi-structured positive psychology intervention with clients experiencing mood disorders and general psychological distress. Prerequisite: Enrollment in the CPSYS MS program.

**EPSY 842. Counseling Practicum (Elementary, Secondary, Counseling Psychology). 3-6 Credits.**
This course is taken as one of the last courses in the master's degree counseling program. The primary purpose of the course is for the student to develop individual counseling skills while functioning in a counseling setting. In addition to individual skills, students are also encouraged to participate in group counseling and other counseling related activities within the particular counseling setting. Students enroll in practicum for the level most closely related to their professional goals, i.e., elementary, secondary, counseling psychology. Graded on a satisfactory/fail basis. Prerequisite: EPSY 740, EPSY 742, EPSY 830, EPSY 880, EPSY 890 and EPSY 896 (Advanced Skills) and prior or concurrent enrollment in EPSY 840, EPSY 844, EPSY 846 and EPSY 875. For MS Terminal track, EPSY 845 and EPSY 956 enrollment must be prior or concurrent as well. Pre-enrollment with practicum coordinator. Students currently on academic probation will not be allowed to enroll in practicum.

**EPSY 844. Theory of Group Counseling. 3 Credits.**
Focuses on issues in group counseling. Topics covered are types of groups, theoretical orientation of groups, stages of group development, group leadership, selection of members, ethical issues, and effectiveness of groups. Prerequisite: Students must be admitted to the Program in Counseling Psychology. Nonmajors must have prior written consent of instructor.

**EPSY 845. Substance Abuse Counseling. 3 Credits.**
The aim of this course is to provide advanced training in the area of substance abuse and substance addictions counseling to graduate students in the helping professions. Topics covered include practical guidelines, specific intervention strategies, treatment principles, legal and ethical responsibilities, and issues within the field. Prerequisite: EPSY 740, EPSY 742.

**EPSY 846. Career Development. 3 Credits.**
Stresses the importance of career development in education, with an emphasis on developmental life planning. Course includes topics such as delivery systems, utility of career development theory, sexism and racism in career development and counseling, the effects of sex role socialization, nature of the world of work, evaluation of career information, use of career information in individual and group counseling, and the role of empirical research in career development theory and practice.

**EPSY 850. Human Relationship Skills in the Classroom. 3 Credits.**
The purpose of this course is to provide educators with an awareness and skill training in basic human relationship/communication skills. The course
is focused on skills that provide educators with effective communication skills for working with students, educators, and parents.

**EPSY 855. Psychoeducational Clinic I: Assessment, Consultation, and Intervention. 3 Credits.**
This is a practical course where students apply previous learning and gain experience in assessment and intervention with children, families, and school consultation. Team collaboration, peer review, and case conferences are essential elements of this course. Students work with clients in the on-campus learning center under supervision. Topical seminars also are included throughout the semester. Prerequisite: Graduate student standing in the School Psychology program and permission of instructor.

**EPSY 860. Assessment of Behavior Problems and Personality. 3 Credits.**
The purpose of this course is to examine appropriate assessment techniques for the evaluation of behavior problems. Interview procedures, behavioral observation strategies, behavior rating scales and checklists, self-report inventories, and rational theoretical techniques will be introduced. The intent is to place these assessment approaches in their theoretical contexts and to discuss how they could be used by pupil personnel specialists to understand the problem behavior and plan interventions to enhance students’ personal adjustment and achievement in the classroom. Prerequisite: EPSY 770, graduate standing in the School Psychology program, or permission of instructor.

**EPSY 865. Psychoeducational Clinic 2: Assessment, Consultation, and Intervention. 3 Credits.**
A continuation of School Psychology Clinic I where students will be performing the same activities at a higher level of autonomy and independence. Prerequisite: Graduate student standing in the School Psychology program, EPSY 855, and permission of instructor.

**EPSY 870. Quantitative Methods for Research in Educational Leadership and Policy Studies. 3 Credits.**
This course addresses the conceptual basis of statistical analysis with an emphasis on applied data analysis. The use of descriptive statistics, distributions, graphic displays, hypothesis testing, group comparison, and analyses of relationships among variables to explore research questions in education will be covered. This course is designed specifically for Ed.D. students in the School of Education. Students in other degree programs may not enroll. Prerequisite: This course is open only to Ed.D. students in the School of Education.

**EPSY 871. Crisis and Disaster Counseling. 3 Credits.**
This course provides advanced training in Crisis and Disaster Counseling to graduate students in the helping professions, providing students with the foundation, knowledge, and skills to effectively help those in crisis. Practical guidelines, specific intervention strategies, treatment principles, legal and ethical responsibilities, and self-care regarding crisis work will be discussed and integrated. Prerequisite: EPSY 740 and EPSY 742; or consent from instructor.

**EPSY 875. Understanding Cultural & Individual Differences in Professional Psychology. 3 Credits.**
Examines the role of culture in human behavior and its influence in counseling theories, practice, and research. The course will assist students develop multicultural awareness, understanding, and skills in working with people from diverse racial, social, cultural, and individual backgrounds. The course will provide opportunities for self-examination of cultural assumptions/values in order to develop multicultural competence. Prerequisite: EPSY 742 or equivalent.

**EPSY 880. Ethical and Legal Issues in Psychology and Counseling. 3 Credits.**
An examination of legal, ethical, and professional standards and issues affecting the practice of professional psychology. Topics include legislative regulation of professional psychology, ethical standards and codes of conduct for psychology and related mental health professions, standards of professional practice, and issue of practice liability and risk management.

**EPSY 882. History and Systems of Psychology. 3 Credits.**
A historical survey of the evolution of concepts, theories, and systems of thought in psychology with an emphasis on their relationship to contemporary issues in psychological theory, research, and practice. Prerequisite: Graduate standing in psychology theory, research, and practice. Prerequisite: EPSY consent or of the instructor.

**EPSY 885. Projective Assessment. 3 Credits.**
The major goal of the course is to integrate information about a person from one or more projective tests into a useful summary. The projective assessment instruments to be used include the Rorschach (using the Exner system of scoring and interpretation), the Thematic Apperception Test, and projective drawings (e.g., Draw-A-Person test). Prerequisite: At least one graduate-level course in measurement and one graduate course in assessment plus consent of the instructor.

**EPSY 888. Evidence Based Practice in Counseling Psychology. 3 Credits.**
This course is an introduction to the skills involved in a small number of Evidence Based Treatments, in the context of understanding their place in the pursuit of Evidence Based Practices. The course includes readings, videos, and discussion of the treatments, with a heavy experiential component of role plays and reviews on video through the Center for Psychoeducational Services. The emphasis is on developing initial skills in the selected treatments. Prerequisite: Graduate student in Counseling Psychology or permission of the instructor.

**EPSY 890. Diagnosis and Psychopathology. 3 Credits.**
An examination of psychological disorders from a counseling psychology perspective that emphasizes strengths. The course will cover the current version of the Diagnostic and Statistical Manual (DSM), as well as alternative taxonomies, exploring personality as it ranges from normal personality styles to personality disorders, and the full range of mental disorders. The emphasis is on identifying and assessing these phenomena and understanding behavioral and possible treatment implications. Prerequisite: Degree seeking status in Counseling Psychology or consent of instructor.

**EPSY 893. Internship in School Counseling. 2 Credits.**
Two consecutive enrollments covering a period of one academic year. During this time the student prepares a portfolio of skills competencies, classroom guidance programs presented, and other experiences appropriate to the student’s school level. Supervision will be conducted on an individual basis and will include a minimum of two site visits per semester. Prerequisite: Must have school counseling position and a completed Masters degree from K.U. in School Counseling.

**EPSY 895. Field Experience in: _____, 1-5 Credits.**
Supervised and directed experiences in selected educational or mental health settings. The campus-based instructor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the campus-based instructor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit in this and additional field experience enrollments may not exceed eight hours. Graded on a satisfactory/fail basis. Prerequisite: EPSY 842 and consent of the practicum coordinator.

**EPSY 896. Seminar in: _____, 1-3 Credits.**
Prerequisite: Permission of instructor.

EPSY 897. Independent Study. 1-4 Credits.
Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of advisor and instructor.

EPSY 898. Master’s Project. 1-4 Credits.
Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Prior or concurrent enrollment in EPSY 710, EPSY 715, or EPSY 790.

EPSY 899. Master’s Thesis. 1-6 Credits.
Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Prior or concurrent enrollment in EPSY 710.

EPSY 901. Research Practicum in: 1-3 Credits.
This course is designed to give students experience in conducting research. It is expected that students will take this course for at least two consecutive semesters. (This course fulfills the requirement by the School of Education for a two semester, research practicum course.) Prerequisite: Doctoral student status in a program in the Department of Educational Psychology.

EPSY 902. Research Methodology in Education. 3 Credits.
An examination and study of the problems and procedures which relate to the validity of research methods. Emphasis will be placed on reading the current literature on research methodology. Students are required to develop a research proposal. Prerequisite: EPSY 811 and EPSY 720 or EPSY 725.

EPSY 905. Fundamentals of Multivariate Modeling. 3 Credits.
In this course, contemporary approaches to multivariate analysis using mixed-effects models estimated with maximum likelihood and Bayesian methods are presented. Classical topics in multivariate analysis including multivariate analysis of variance and exploratory factor analysis, are covered in the context of mixed-effects models, preparing students for subsequent courses and research that use such model-based methods. Topics include extensions of linear models (regression and analysis of variance) for non-normal data with link functions, introductory matrix algebra, missing data modeling techniques, models for repeated measures data, and path analysis models for multivariate regression evaluating both moderation and mediation effects. Prerequisite: EPSY 810 and experience with a statistical software package.

EPSY 906. Latent Trait Measurement and Structural Equation Models. 3 Credits.
Contemporary measurement theory and latent variable models for scale construction and evaluation, including confirmatory factor analysis, item response modeling, diagnostic classification models, and structural equation modeling. (Same as CLDP 948.) Prerequisite: EPSY 905 and instructor permission.

EPSY 908. Structural Equation Modeling II. 3 Credits.
The purpose of this course is to introduce students to advanced topics in Structural Equation Modeling. Topics to be covered include multilevel models, latent growth models, mixture models and approaches to handling missing and/or non-normal data. Students will be exposed to the various statistical software programs and will be expected to become proficient in utilizing EQS. Prerequisite: EPSY 906 or equivalent course.

EPSY 910. Practicum in School Psychology. 3 Credits.
Supervised practice in the application of psychological theory to educational problems. Includes work useful with exceptional children as well as experiences in the application of such areas as mental hygiene and learning theory to problems involving the total school population. Prerequisite: Permission of advisor and instructor.

EPSY 911. Advanced Practicum in School Psychology. 3 Credits.
A continuation of EPSY 910 with special emphasis on remedial techniques associated with learning difficulties. Prerequisite: EPSY 910 and permission of advisor and instructor.

EPSY 914. Generalized Linear Mixed Models. 3 Credits.
In this course, contemporary methods for the analysis of data that are not normally distributed are presented. Generalized linear mixed models are linear models that map independent or predictor variables onto any type of outcome space of dependent variables. Such models involve the choice of distribution for the dependent variables and a link function to map predictors onto key parameters of the dependent variables distributions. Topics include logistic regression, nominal distributions, count distributions, and distributions for censored, skewed, or otherwise irregular continuous data. Random effects or latent variables are included for each type of model. Prerequisite: EPSY 905 or consent of instructor.

EPSY 918. Seminar in Current Issues in Counseling Psychology. 1 Credits.
An examination of selected current issues in counseling psychology. Prerequisite: Doctoral student status in a program in the Department of Educational Psychology.

EPSY 921. Measurement Theory and Practice I. 3 Credits.
This course provides thorough grounding in modern validity theory including its historical precedents and derivation of classical test theory and item response theory and their application for item analysis and estimation of test reliability and standard error of measurement. Prerequisite: EPSY 725 or EPSY 811 or equivalent.

EPSY 922. Measurement Theory and Practice II. 3 Credits.
Students will learn the assumptions and application of classical test theory and item response theory approaches to scaling and reporting, standard setting, equating, identification of item and test bias, and other topics intended to prepare students for research and development regarding large-scale assessments. Prerequisite: EPSY 921.

EPSY 923. Advanced Theory and Applications of Item Response Theory. 3 Credits.
This course is designed to acquaint students with knowledge of advanced theory and applications in the field of item response theory (IRT). Topics to be covered include: advanced IRT models for dichotomous and polytomous, multidimensional, rater effects, and testlet-based item response data, estimation of parameters for these models and related software, and goodness of fit tests. The course will also focus on some advanced applications using these models, including test development, test score equating, differential item functioning, scoring and score reporting, Monte Carlo simulation studies, and innovative test designs. Prerequisite: EPSY 922 or equivalent course.

EPSY 925. Computer Programming and Applications for Educational Research, Measurement and Statistics. 3 Credits.
The purpose of this course is to provide advanced students in the areas of educational research, psychometrics, and statistics with techniques for computer programming, analysis, and carrying out research using computer simulations. The topics covered are: Programming with Fortran languages, data manipulation and management, analysis, simulation of data according to statistical and psychometric models, numerical techniques for matrix operations, sampling from distributions, solutions for non-linear equations, and Markov-Chain Monte-Carlo techniques. There are no prerequisites for this course, but those students who have coursework through the multivariate statistics level will benefit most from this course. Other suggested courses include those related to psychological and educational measurement, classical test theory, item response theory, and research methods.

EPSY 926. Hierarchical Linear Modeling. 3 Credits.
This course provides students with an introductory background in the basic principles and applications of hierarchical linear modeling (HLM). The course will review both the conceptual issues and methodological issues in using hierarchical linear modeling by working step-by-step with real data sets. Prerequisite: EPSY 810 Regression Analysis (formerly EPSY 904).

EPSY 931. Computer-Based Testing. 3 Credits.
Computer-based testing holds the promise of increasing test validity and reliability while reducing the logistical problems associated with large-scale assessment. This seminar will provide an overview of what we have learned about administering tests on computer between the 1960s and today. The focus will be on measurement issues, but depending on class interest topics will vary. A prior course in item response theory is desirable but not required. Prerequisite: EPSY 725 or equivalent course.

EPSY 932. Diagnostic Testing. 3 Credits.
There is a great demand for more useful, more actionable test scores. Traditional large-scale group administered tests do not provide this kind of information due to low reliabilities of, or high inter-correlations among, sub-scores. This course will explore approaches used by individually administered tests to provide diagnostic information, new psychometric models that hold promise of providing better diagnostic information, and implications for test design. A primary focus will be on how psychometric models can be used with diagnostic subscores that are more reliable and less correlated than traditional approaches. Prerequisite: PRE 922 or equivalent course.

EPSY 940. Advanced Studies in Educational Psychology and Research. 3 Credits.
A course designed to offer a comprehensive view of the field of educational psychology and research. The course will treat a series of thematic areas with a focus on latest developments and emerging theories in learning, development and quantitative methods. Intended for post-master's level students. Prerequisite: Prior graduate level course work in development, learning, measurement, and statistics.

EPSY 941. Bayesian Statistics. 3 Credits.
The purpose of this course is to acquaint advanced quantitative students with the fundamentals of Bayesian data analysis. The goals of the class are to introduce Bayesian inference, starting from the philosophical perspective, and provide methods for implementing Bayesian analysis for a variety of different statistical models. Class time is balanced between theoretical perspectives and practical applications. Topics covered include: a review of basic probability, Bayes' rule, probability distributions, Markov Chain Monte Carlo (MCMC) estimation and software for its implementation, and applications of MCMC to a variety of statistical models. Prerequisite: EPSY 905 or equivalent or consent of instructor.

EPSY 945. Clinical Supervision and Consultation. 3 Credits.
This course is designed to provide students with a knowledge foundation of clinical supervision and consultation theories and models, modes/forms of supervision, the supervisory/consulting relationship, legal and ethical considerations in the provision of supervision/consultation, and supervision research issues. Prerequisite: EPSY 948.

EPSY 947. Specialist Research. 1-4 Credits.

EPSY 948. Advanced Practicum I. 3 Credits.
Designed to be the initial advanced practicum for first year doctoral students. Attention is directed to development of a broad range of basic and advanced skills. Graded on a satisfactory/fail basis. Prerequisite: EPSY 842 or equivalent.

EPSY 949. Advanced Practicum II. 3 Credits.
Intensive counseling practice, including group and individual supervision, that may be taken either through Counseling and Psychological Services or an approved site outside of the university. Focus is on the acquisition and demonstration of advanced counseling skills. Two consecutive semesters (Fall, Spring) of enrollment are required of doctoral students. Responsibility to the site is for a continuous nine months, with fall semester responsibilities ending on the first day of spring semester classes. A grade of incomplete will be granted at the end of the regular fall grading period, with the regular fall grade being granted after completion of fall semester responsibilities. Graded on a satisfactory/fail basis. Prerequisite: Satisfactory completion of EPSY 948 and prior or concurrent enrollment in EPSY 951.

EPSY 951. Psychodiagnostic Assessment. 3 Credits.
Survey of selected psychodiagnostic instruments currently in use and their administration, scoring, and interpretation. Emphasis will also be placed on the use of the clinical interview as an assessment tool, case conceptualization/diagnosis, and integrative report writing. Prerequisite: Completion of EPSY 830 and degree-seeking status in Counseling Psychology or consent of instructor.

EPSY 952. Advanced Counseling Theory and Research. 3 Credits.
An advanced treatment of theory, research, and practice issues central to Counseling Psychology. Topics include theoretical and research paradigms in Counseling Psychology; the relationship of theory and research to practice; and evidence on factors influencing counseling processes and outcomes. Prerequisite: Counseling Psychology doctoral student status or consent of instructor.

EPSY 954. Vocational Psychology. 3 Credits.
A survey of the major career development theories in counseling psychology. Models and methods of career counseling will be reviewed and integrated from the different theoretical perspectives. The empirical support of each theory and needed research will be identified. The course will include presentation of theories of career development and their specific applicability in counseling. The career development of special groups (women, the culturally different, non-whites) will be studied as well as alternative methods of delivery in career development and counseling. Prerequisite: Completion of EPSY 846 or equivalent, and Ph.D. degree-seeking status in Counseling Psychology or consent of instructor.

EPSY 955. Research Methods in Counseling Psychology. 3 Credits.
This course is a foundational course in research methods and design in counseling psychology. The course covers (a) design type and threats to design validity, (b) the formulation of research problems, (c) research instrumentation/measures, (d) data analytic methods, (e) interpreting data, and (f) ethical issues, research integrity, and the responsible conduct of research. Prerequisite: EPSY 710 and EPSY 711 or equivalent. Doctoral student in Counseling Psychology or consent of instructor.

EPSY 956. Theory of Couples and Family Counseling. 3 Credits.
A survey of contemporary systems of couples and family counseling. Consideration of couple and family function/dysfunction, theoretical models of family interaction, models of counseling practice and methods, and research on couples and family counseling. Prerequisite: Degree-seeking status in Counseling Psychology or consent of instructor.

EPSY 960. Assessment of Infants, Toddlers, and Young Children. 3 Credits.
The purpose of this course is to introduce the student to the assessment of various domains related to the development of infants, toddlers, and young children. The student will learn how to use formal and informal assessment techniques for screening, diagnostic, educational planning, and educational evaluation purposes. An emphasis will be placed on the linkage between assessment and intervention. This course is designed for students in the applied psychology fields (i.e., school psychology,
counseling psychology, clinical child psychology, and clinical psychology). Prerequisite: EPSY 705, EPSY 725, EPSY 805 and permission from the instructor.

**EPSY 965. Foundations of Psychoeducational Consultation. 3 Credits.**

This is the first of a two semester sequence of courses on school-based consultation. The course is a combination lecture-laboratory experience that introduces the student to the literature, theory, and techniques of consultation. Prerequisite: Approval of instructor.

**EPSY 975. Therapeutic Intervention: Home and School. 3 Credits.**

The course includes a review of literature and theory as well as supervised practice. Therapeutic intervention is broadly conceived, including individual and group counseling, and parent and teacher consultation. The importance of the family-school relationship is stressed. Prerequisite: Permission of instructor and completion of course on counseling.

**EPSY 980. Advanced Topics: ____. 1-3 Credits.**

A special course of study to meet current need of education professionals—primarily for post-master's level students.

**EPSY 990. Internship in Counseling Psychology. 1 Credits.**

Three consecutive enrollments, covering a minimum of eleven months of experience in an approved counseling psychology field setting. Supervision and directed experiences coordinated by the student's adviser, the program training director, and internship setting supervisors. Required of all counseling psychology doctoral students. Prerequisite: Doctoral degree-seeking status in counseling psychology, completion of Ph.D. comprehensive examinations, and consent of counseling psychology faculty.

**EPSY 991. Ed.S. Internship. 1-2 Credits.**

This course has two components: 1) a supervised experience as a practicing school psychologist, and 2) a group supervision class emphasizing case presentations and other integrative practice elements. The student functions as a provisionally certified school psychologist. Prerequisite: Completion of Ed.S. degree.

**EPSY 992. Ph.D. Internship in School Psychology. 1-2 Credits.**

This is a one year, supervised experience in an approved setting. The structure and content of the experience follows guidelines of several professional organizations including The American Psychological Association and the National Association of School Psychologists. Prerequisite: Approval of School Psychology committee.

**EPSY 995. Field Experience in: ____. 1-5 Credits.**

Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

**EPSY 996. College Teaching Experience in: ____. 1-5 Credits.**

To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate's committee.

**EPSY 997. Individual Study. 1-4 Credits.**

Graded on a satisfactory/fail basis. Prerequisite: Prior graduate course work in the area of study and consent of instructor.

**EPSY 998. Seminar in: ____. 1-4 Credits.**

Graded on a satisfactory/fail basis.

**EPSY 999. Doctoral Dissertation. 1-15 Credits.**

Graded on a satisfactory progress/limited progress/no progress basis.

---

**Master of Science in Counseling Psychology**

**M.S. Degree Program**

The master's program in counseling psychology prepares individuals aspiring to work as counselors or in counseling-related fields or those hoping to proceed on into doctoral training. The curriculum provides a broad and general introduction to Counseling Psychology theory, research, and clinical practice. For the Master of Science in counseling psychology degree, students earn a concentration in mental health counseling.

**Graduate Admission to the School of Education and Human Sciences**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

**Graduate Admission**

**Prerequisites for Regular Admission**

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores (School Psychology only)
- For Counseling Psychology - Completed bachelor’s or master’s degree in counseling, psychology, or a related area. An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 15 undergraduate credit hours in the behavioral sciences.

For Educational Psychology and Research - Completed bachelor’s or master’s degree. Educational Psychology and Research does not have a requirement for a specific undergraduate background.

For School Psychology - Completed bachelor’s or master’s degree. School Psychology does not have a requirement for a specific undergraduate background.

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student
is deficient. Students holding master's degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://gradapply.ku.edu).

**Admission Requirements**

The admission deadline is January 1 to begin course work in the following summer or fall.

**Required Admission Materials**

1. Graduate application (https://gradapply.ku.edu/) and application fee. See Admission in the (https://catalog.ku.edu/graduate-studies/)Graduate Studies (p. 2408) section of the online catalog.
2. 1 copy of official transcripts of all previous college work, sent directly to Graduate Studies (http://www.graduate.ku.edu/). The original transcript is forwarded to the School of Education and Human Sciences to complete licensing and/or certification paperwork.
3. GRE (general test) scores: Institution code, R6871; Major Field code, 2005. The GRE should have been taken within five years of the application date, and scores should typically equal or exceed the 50th percentile.
4. Letter of intent.
5. Resumé.
6. 3 letters of recommendation from people who can assess the applicant’s prospects for completing the program.

**M.S. Degree Requirements**

The mental health concentration requires about 60 credit hours of course work. Individuals wishing to become licensed professional counselors in Kansas need to meet additional requirements, described online (https://ksbsrb.ks.gov/). You also may wish to consult the American Counseling Association’s website (http://www.counseling.org/) for additional information. Besides a core of work in counseling psychology (including counseling theory, career development, interviewing, assessment, group counseling, professional issues, and practicum), work is required in developmental psychology, research, and diagnosis and psychopathology. All students complete either a thesis, a research project, or a comprehensive examination. After entering the program, students should meet with an advisor to plan a schedule for completing degree requirements. Students in the Kansas City area may take a few courses at the KU Edwards Campus (http://edwardscampus.ku.edu/) in Overland Park.

**M.S. Counseling Psychology - Comprehensive Exam option**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Summer</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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(Summer enrollment recommended, but can be taken in the fall)

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<th>Year 2</th>
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<th>Hours</th>
<th>Fall</th>
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<th>Hours</th>
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| Total Hours | 64 |
Students that wish to gain their PhD are encouraged to follow the following Master's programs:

**Masters of Counseling Psychology - Ph.D. Aspirant Track - Comprehensive Exam option**

**Year 1**

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**Year 2**

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**Masters of Counseling Psychology - Ph.D. Aspirant Track - Thesis option**

**Year 1**

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**Masters of Counseling Psychology - Ph.D. Aspirant Track - Project option**

**Year 1**

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</table>

**Total Hours 60**

**Doctor of Philosophy in Counseling Psychology**

The doctoral program in counseling psychology trains generalists who are able to engage in a variety of activities ranging from clinical treatment to academic research. Reflecting a "scientist-practitioner" model, the curriculum prepares clinicians who apply the best and most current theory and research to their practice, and academicians who are grounded in the realities of practice. Although preparing students to be able to assess and treat the full range of disorders that psychologists address, our emphasis as counseling psychologists is upon personal, social, and career development of the whole person, and upon enhancing the environments in which people learn and work.

Students learn to critically evaluate major approaches to counseling, to evaluate, design, and conduct research, and to gain clinical experience working with people of diverse cultural backgrounds and worldviews. The program is intended for full-time students.
Since 1955, the Ph.D. program in Counseling Psychology has been accredited by the Commission on Accreditation of the American Psychological Association. If you have questions about our program's accreditation status, please contact: American Psychological Association, 750 1st Street, NE, Washington, DC 20002-4242 Phone: (202) 336-5979.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission

Prerequisites for Regular Admission

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores (School Psychology only)
- For Counseling Psychology - Completed bachelor's or master's degree in counseling, psychology, or a related area. An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 15 undergraduate credit hours in the behavioral sciences.
- For Educational Psychology and Research - Completed bachelor's or master's degree. Educational Psychology and Research does not have a requirement for a specific undergraduate background.
- For School Psychology - Completed bachelor's or master's degree. School Psychology does not have a requirement for a specific undergraduate background.

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master's degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://gradapply.ku.edu).

Admission

The admission deadline is December 1 to begin course work the following summer or fall.

Admission Criteria

The Counseling Psychology doctoral program at KU admits approximately 6-8 students each fall. Both bachelor's level and master's level applicants are considered for admission. The admissions committee will select approximately 30 candidates to be interviewed. All faculty members and current students will have opportunities to participate in the interviews. Both group and individual interview activities will be conducted by faculty and current students on the Interview Day. Candidates who are offered admission are required to "accept" or "decline" the offer no later than April 15th. If a candidate on the alternate list receives an admission offer (which is usually close to April 15th), he/she has 7 days to act on the offer. If the offer is made on or after April 15th, the candidate has 3 days to make a definite decision.

Recommended minimums for bachelor's level applicants

- Completion of bachelor's degree in psychology or related field
- GRE verbal, quantitative, and writing scores at 50th percentile, obtained within the past 5 years
- Cumulative undergraduate GPA of 3.0 or GPA of 3.25 for the major courses or the last 60 credits of the bachelor's degree
- Prior undergraduate course work in psychological research methods, measurement, and statistics (recommended).

Recommended minimums for master's level applicants

- Completion of master's degree in counseling or closely related field
- GRE verbal, quantitative, and writing scores at 50th percentile, obtained within the past 5 years
- Graduate GPA of 3.5 or above.

Alternative Criteria

Applicants may be admitted under alternative criteria provided there is evidence that regular criteria do not adequately reflect the student's potential to succeed in the program. The faculty will review and make decisions on such applications on a case-by-case basis. The faculty reserves the right to require those who are admitted under the alternative criteria to take some background core courses before or during the first year of their doctoral training in the areas of general psychology, experimental psychology, and introductory statistics. This decision will be made by the admission committee and the student's assigned advisor, and communicated to the student before he or she accepts admission to the program.

Required Admission Materials

1. Graduate application (https://gradapply.ku.edu) and application fee. See Admission in the Graduate Studies (p. 2408) section of the online catalog.
2. 1 copy of official transcripts of all previous college work, sent directly to Graduate Studies (http://www.graduate.ku.edu/). The original transcript is forwarded to the School of Education to complete licensing and/or certification paperwork.
3. GRE (general test) scores: Institution code, R6871; Major Field code, 2005. The GRE should have been taken within five years of the application date, and scores should typically equal or exceed the 50th percentile.
4. Letter of intent.
5. Résumé.
6. 3 letters of recommendation from people who can assess the applicant's prospects for completing the program. If the applicant has completed a practicum in counseling or a related area, 1 recommendation should be completed by the practicum supervisor.

**Additional Requirement for Students whose First Language is not English**

Students' oral expression and communication skills play an important role in their success in counseling psychology training programs. Therefore, the counseling psychology program faculty requires that all non-native English speaking applicants (international or domestic applicants) demonstrate their English proficiency by following the guidelines listed below before their applications are reviewed by the admissions committee.

(1) Following are the acceptable means of verifying English proficiency for purposes of admitting international students to the CPSY MS or Ph.D. program. These guidelines also apply to U.S. citizens and permanent residents who are not native speakers of English.

Specifically, see KU's policy on English Proficiency Requirements for International Students:

For Admission to the University (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/)

For an English proficiency chart

For Board of Regents Policy on English proficiency requirements for GTAs (http://policy.ku.edu/KBOR/spoken-english-competency-BOR-policy/)

Please note: Due to the high demand for English proficiency in conducting counseling, our program requires each subscale score in the iBT TOEFL to be at least 24 or above, with no section score lower than 23. The score requirement for admission to KU, set by KU international Student Services, may be different.

(2) Zoom interviews or interviews through other on-line media will be required if the applicant is unable to appear for an in-person interview in the admission process.

(3) The Applied English Center (AEC) maintains a check-in process for international students and non-native speakers of English. This process serves to confirm each student's level of English proficiency and determine whether English courses will be included as a requirement of the student's academic program. In order to graduate, students who are required to complete AEC courses must meet KU's English proficiency standards as demonstrated by their performance in AEC coursework and evaluations.

- Students who demonstrate English proficiency at the waiver level or who have earned a degree from one of the specified English-speaking countries listed above are not required to check in at the AEC.
- All other international students and non-native speakers of English who gain admission to campus-based programs are required to check in at the AEC upon arrival on campus.

**Review of Graduate Status**

At the beginning of each fall semester, the department formally evaluates the progress and status of all students in the program.

**Counseling Psychology Ph.D. Degree Requirements**

**Required Major Courses:**

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<td>EPSY 836</td>
<td>Behavioral &amp; Systems Neuroscience in Education</td>
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<tr>
<td>EPSY 880</td>
<td>Ethical and Legal Issues in Psychology and Counseling</td>
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<td>EPSY 740</td>
<td>Counseling and Interviewing Skills</td>
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<td>Counseling Theory and Techniques</td>
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<td>EPSY 830</td>
<td>Individual and Group Assessment</td>
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</tr>
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<td>EPSY 844</td>
<td>Theory of Group Counseling</td>
<td>3</td>
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<td>Advanced Counseling Theory and Research</td>
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<td>EPSY 945</td>
<td>Clinical Supervision and Consultation</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 918</td>
<td>Seminar in Current Issues in Counseling Psychology</td>
<td>1</td>
</tr>
<tr>
<td>EPSY 842</td>
<td>Counseling Practicum (Elementary, Secondary, Counseling Psychology) (2 semesters =12 hrs.)</td>
<td>6</td>
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<tr>
<td>EPSY 948</td>
<td>Advanced Practicum I (2 semesters = 6 hrs.)</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 949</td>
<td>Advanced Practicum II (2 semesters=6 hrs.)</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 996</td>
<td>College Teaching Experience in: _____</td>
<td>2</td>
</tr>
<tr>
<td>EPSY 990</td>
<td>Internship in Counseling Psychology (three semesters =3 hrs.)</td>
<td>1</td>
</tr>
<tr>
<td>EPSY 807</td>
<td>Theories and Research in Human Learning</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 808</td>
<td>Advanced Social Psychology: Theory, Research, and Professional Applications (OR)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 774</td>
<td>Advanced Social Psychology I (OR)</td>
<td></td>
</tr>
<tr>
<td>PSYC 775</td>
<td>Advanced Social Psychology II</td>
<td></td>
</tr>
<tr>
<td>PSYC 805</td>
<td>History of Psychology (OR)</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 882</td>
<td>History and Systems of Psychology</td>
<td></td>
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<tr>
<td>EPSY 705</td>
<td>Human Development through the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 890</td>
<td>Diagnosis and Psychopathology (OR)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 960</td>
<td>Advanced Psychopathology</td>
<td></td>
</tr>
<tr>
<td>EPSY 875</td>
<td>Understanding Cultural &amp; Individual Differences in Professional Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Elective 1-course selection with advisor</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective 2-course selection with advisor</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EPSY 999</td>
<td>Doctoral Dissertation</td>
<td>1-15</td>
</tr>
</tbody>
</table>

**Required Research Skills:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 810</td>
<td>Regression and ANOVA: General Linear Models</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 905</td>
<td>Fundamentals of Multivariate Modeling</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 955</td>
<td>Research Methods in Counseling Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 822</td>
<td>Educational Scales, Questionnaires, and Sampling (OR)</td>
<td></td>
</tr>
<tr>
<td>EPSY 921</td>
<td>Measurement Theory and Practice I</td>
<td></td>
</tr>
<tr>
<td>EPSY 901</td>
<td>Research Practicum in: _____</td>
<td>3</td>
</tr>
</tbody>
</table>
Timing of Comprehensive Exams.

Given the timing of internship placements through the national match process, School Psychology and Counseling Psychology Ph.D. students may be allowed to take comprehensive exams with up to 6 hours of non-required coursework remaining, so long as the remaining courses are not considered part of the research skills requirement or part of the program core that will be the subject of examination. These remaining hours can count towards the required 18 post-comp hours although students are still required to enroll in dissertation hours.

Master of Science in Education in Educational Psychology and Research

Masters of Science in Education (M.S.Ed.) in Educational Psychology and Research

M.S.Ed. in Educational Psychology and Research

The department of Educational Psychology (EPSY) (http://epsy.ku.edu/) offers the Educational Psychology and Research (EPR) program leading to a Master of Science in Education (M.S.Ed.) degree. This program includes instruction within two specialized areas of emphasis referred to as "tracks:" Development & Learning (D&L) and Research, Evaluation, Measurement and Statistics (REMS).

The Development & Learning track for the M.S.Ed. degree program prepares students for work in schools, nonprofit agencies, and other applied settings, or for future doctoral training. The program includes coursework in the areas of human development, learning and cognition, and educational research methods, as well as completion of a master's thesis or project. The M.S.Ed. is typically completed in 2-3 years of full-time study.

The Research, Evaluation, Measurement, and Statistics (REMS) track prepares students for careers in educational measurement and quantitative methods. The program includes coursework in research methods, psychometrics, and statistical analysis. Students typically complete the M.S.Ed. in 2-3 years of full-time study.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission

Prerequisites for Regular Admission

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores (School Psychology only)
- For Counseling Psychology - Completed bachelor’s or master’s degree in counseling, psychology, or a related area. An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 15 undergraduate credit hours in the behavioral sciences.
- For Educational Psychology and Research - Completed bachelor’s or master’s degree. Educational Psychology and Research does not have a requirement for a specific undergraduate background.
- For School Psychology - Completed bachelor’s or master’s degree. School Psychology does not have a requirement for a specific undergraduate background.

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://gradapply.ku.edu).

Admission

In order to be eligible for admission to the M.S.Ed. degree program in EPR, students must first meet the admission requirements for graduate study at the University of Kansas. Admission to the degree program also requires recommendation for acceptance by the Educational Psychology and Research Program Committee.

January 5th is the application deadline for the M.S.Ed. program in Educational Psychology and Research. If accepted as an M.S.Ed. candidate, enrollment begins in the summer or fall semester following the application deadline. The Educational Psychology and Research Program Committee can review only complete applications. It is the applicant’s responsibility to ensure that her or his application is complete. Applicants are encouraged to email the department at epsy@ku.edu if they wish to check on the status of their application.

Required Admission Materials

1. Graduate application (https://gradapply.ku.edu/) and application fee. See Admission in the Graduate Studies (http://catalog.ku.edu/graduate-studies/) section of the online catalog.

2. 1 copy of official transcripts of all previous college work, sent directly to Graduate Studies (http://www.graduate.ku.edu). The original transcript is forwarded to the School of Education to complete licensing and/or certification paperwork.

- An undergraduate grade point average of 3.0 or higher is required for regular admission. If applicable, a graduate grade point average of 3.5 or higher is required for regular admission.
- At the discretion of the university, an applicant may be admitted as a provisional graduate student when either the quality or kind
of undergraduate preparation is deficient, i.e., the undergraduate grade-point average is below 3.0 or the student has not met the prerequisites for graduate study.

3. GRE (general test) scores: Institution code, R6871; Major Field code, 3403. (optional)

4. The letter of intent should include the following:
   - Indicate whom you would like for an advisor and why.
   - Describe your career goals.
   - Describe how you see your career goals relating to this degree program; that is, describe how you see this program preparing you to meet your career objectives.
   - Describe past work or educational experiences related to this degree program.
   - Describe what skills/competencies and experiences you hope to gain in this program.
   - Describe any past research experiences and accomplishments.
   - Describe one research topic/issue that you would like to pursue in this program.
   - Please provide additional information concerning your background, experience, goals, or accomplishments/awards you believe are pertinent to your application.

5. Résumé.

6. 3 letters of recommendation from individuals in a position to evaluate the applicant’s qualifications for graduate study.

7. Official TOEFL or IELTS scores are required for non-native speakers of English (http://www.graduate.ku.edu/english-proficiency-requirements/).

8. Writing Sample

ADDITIONAL REQUIREMENTS FOR STUDENTS WHOSE FIRST LANGUAGE IS NOT ENGLISH

The Applied English Center (AEC) maintains a check-in process for international students and non-native speakers of English. This process serves to confirm each student’s level of English proficiency and determine whether English courses will be included as a requirement of the student’s academic program. In order to graduate, students who are required to complete AEC courses must meet KU’s English proficiency standards as demonstrated by their performance in AEC coursework and evaluations.

- Students who demonstrate English proficiency at the waiver level or who have earned a degree from one of the specified English-speaking countries listed in the policy (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/) are not required to check in at the AEC.
- All other international students and non-native speakers of English who gain admission to campus-based programs are required to check in at the AEC upon arrival on campus.

It takes approximately eight to twelve weeks to process requests for visa documents to enter the United States for incoming international students. These requests cannot be processed unless all documentation has been received. Please consult the KU web site for International Support Services http://www.iss.ku.edu for important information.

M.S.E. Degree Requirements

Area of Focus

Students in the M.S.Ed. degree program select the area of Development & Learning (D&L) or Research, Evaluation, Measurement, and Statistics (REMS) on which to focus their studies.

M.S.Ed. students are required to:

- Take courses to satisfy our “Core Course Requirement” (18 credit hours),
- Take an additional two EPR courses (minimum of six credit hours) to establish an area of emphasis in one of the two tracks,
- Take an additional two courses (minimum of six credit hours) from departments other than EPSY, one of which must be from a department in the School of Education,
- Complete a master's thesis or project.

Core Course Requirement

Students must take at least one course in each of the 5 core areas:

Learning and Instruction

Human Development

Research and Evaluation Methods

Measurement

Statistics

Examples of courses that satisfy the core course requirements include, but are not limited to:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 704</td>
<td>Advanced Educational Psychology: Learning Processes in Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 705</td>
<td>Human Development through the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education (All students must take EPSY 715 to satisfy this core course requirement.)</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 725</td>
<td>Educational Measurement</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 710</td>
<td>Introduction to Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 711</td>
<td>Lab for Introduction to Statistical Analysis</td>
<td>1</td>
</tr>
</tbody>
</table>

Program Emphasis Courses

Students must take an additional two courses beyond the core requirements. These courses should reflect your area of interest. EPSY offers a variety of elective courses and seminars on special topics that satisfy this requirement.
Outside EPSY Courses

Students must take at least two courses offered by departments outside of EPSY. One of these courses must be from a department in the School of Education and Human Sciences and one from another department at the University of Kansas. For example, students have enrolled in courses from the Department of Psychology, Applied Behavioral Science, Mathematics, Communication Studies, the School of Social Welfare, and the School of Business.

Thesis/Project

All Master’s students in EPR must complete a master’s thesis or project. Each student must take a minimum of six master’s thesis or project credit hours. These credit hours allow students to focus on completing their thesis or project.

The EPR Master’s Plan of Study is used by students and their adviser to track progress toward their degree and can be downloaded by clicking on highlighted link above.

Doctor of Philosophy in Educational Psychology and Research

Ph.D. in Educational Psychology and Research

The Department of Educational Psychology (EPSY) offers the Educational Psychology and Research (EPR) program leading to a Doctor of Philosophy (Ph.D.) degree. This program includes instruction within two specialized areas of emphasis referred to as "tracks:" Development & Learning (D&L) and Research, Evaluation, Measurement and Statistics (REMS).

The Development & Learning track for the Doctor of Philosophy (Ph.D.) degree program prepares students for work as research scientists in educational psychology. Graduates work in a variety of settings, but most commonly seek faculty positions in higher education. The program includes coursework in the areas of human development (with a primary focus on child or adolescent development), learning and cognition, and educational research methods, as well as completion of a data-driven dissertation. Doctoral students develop their own research agenda around a relevant development and learning topic in collaboration with faculty. Research training includes presenting research at national conferences and publishing research in scientific journals. Teaching at the University is also an integral part of our doctoral education. The PhD is typically completed in 3-4 years of full-time study beyond the Master's degree.

The Research, Evaluation, Measurement, and Statistics (REMS) track prepares students for careers in educational measurement and quantitative research methods. The Ph.D. program includes coursework in research methods, psychometrics, and statistical analysis. Students typically complete the Ph.D. in 3-4 years of full-time study.

- REMS refers to the track of study that includes Research methods, Evaluation, Measurement, and Statistics.
- D&L refers to the track of study that includes Development and Learning.

Opportunities are available each year for students to be involved in basic and applied educational research.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission

Prerequisites for Regular Admission

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores (School Psychology only)
- For Counseling Psychology - Completed bachelor’s or master’s degree in counseling, psychology, or a related area. An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 15 undergraduate credit hours in the behavioral sciences.

For Educational Psychology and Research - Completed bachelor’s or master’s degree. Educational Psychology and Research does not have a requirement for a specific undergraduate background.

For School Psychology - Completed bachelor’s or master’s degree. School Psychology does not have a requirement for a specific undergraduate background.

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://gradapply.ku.edu).

ADMISSION

In order to be eligible for admission into the Ph.D. degree program in EPR, students must first meet the admission requirements for graduate study at the University of Kansas. Admission to the degree program also requires recommendation for acceptance by the Educational Psychology and Research Program Committee.
December 15th is the application deadline for the Ph.D. program in Educational Psychology and Research. If accepted as a Ph.D. candidate, enrollment begins in the summer or fall semester following the application deadline. The Educational Psychology and Research Program Committee can review only complete applications. It is the applicant’s responsibility to ensure that her or his application is complete. Applicants are encouraged to email the department at epsy@ku.edu if they wish to check on the status of their application.

APPLICATION PROCESS OVERVIEW

Each EPSY program has an admissions committee composed of three to five faculty members who specialize in that particular program area. Completed applications are reviewed shortly after the program’s deadline date. The criteria for a complete application must be met, but are not the only conditions to assure an applicant’s admission to a departmental program. Program admission ultimately depends on committee members’ votes based on their perceptions of the applicant’s potential for successful completion of the requested degree program and the availability of faculty to advise and direct the applicant’s training.

Once the EPSY admissions committee has completed their review, a recommendation (to admit or deny) will be forwarded to the Office of Graduate Studies, where a final decision will be made. Applicants will then receive an official notification of the application decision by email.

REQUIRED ADMISSION MATERIALS

1. Graduate application (http://wwwgraduate.ku.edu/) and application fee. See Admission in the Graduate Studies (http://catalog.ku.edu/graduate-studies/) section of the online catalog.

2. 1 copy of official transcripts of all previous college work, sent directly to Graduate Studies (http://wwwgraduate.ku.edu/). The original transcript is forwarded to the School of Education to complete licensing and/or certification paperwork.

   • An undergraduate grade point average of 3.0 or higher is required for regular admission. If applicable, a graduate grade point average of 3.5 or higher is required for regular admission.

   • At the discretion of the university, an applicant may be admitted as a provisional graduate student when either the quality or kind of undergraduate preparation is deficient, i.e., the undergraduate grade-point average is below 3.0 or the student has not met the prerequisites for graduate study.

3. GRE (general test) scores: Institution code, R6871; Major Field code, 3403.

4. The letter of intent should include the following:

   • Track of interest: D&L - Development and Learning or REMS – Research, Evaluation, Measurement and Statistics.

   • Indicate whom you would like for an advisor and why.

   • Describe your career goals.

   • Describe how you see your career goals relating to this degree program; that is, describe how you see this program preparing you to meet your career objectives.

   • Describe past work or educational experiences related to this degree program.

   • Describe what skills/competencies and experiences you hope to gain in this program.

   • Describe past research experiences and accomplishments.

   • Describe one research topic/issue that you would like to pursue in this program.

   • Please provide additional information concerning your background, experience, goals, or accomplishments/awards you believe are pertinent to your application

5. Résumé.

6. 3 letters of recommendation from individuals in a position to evaluate the applicant’s qualifications for graduate study.

ADDITIONAL REQUIREMENTS FOR STUDENTS WHOSE FIRST LANGUAGE IS NOT ENGLISH

The Applied English Center (AEC) maintains a check-in process for international students and non-native speakers of English. This process serves to confirm each student’s level of English proficiency and determine whether English courses will be included as a requirement of the student’s academic program. In order to graduate, students who are required to complete AEC courses must meet KU’s English proficiency standards as demonstrated by their performance in AEC coursework and evaluations.

   • Students who demonstrate English proficiency at the waiver level or who have earned a degree from one of the specified English-speaking countries listed in the policy (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/) are not required to check in at the AEC.

   • All other international students and non-native speakers of English who gain admission to campus-based programs are required to check in at the AEC upon arrival on campus.

It takes approximately eight to twelve weeks to process requests for visa documents to enter the United States for incoming international students. These requests cannot be processed unless all documentation has been received. Please consult the KU web site for International Support Services http://www.iss.ku.edu for important information.

Ph.D. Degree Requirements

Area of Focus

Students in the Ph.D. degree program select a track—D&L or REMS—on which to focus their studies.

Program Core Course Requirements

All doctoral students must enroll in at least one course at or above the 800 level in each of the following program core areas. Examples of courses commonly chosen to meet these requirements are shown below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 807</td>
<td>Theories and Research in Human Learning</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 800</td>
<td>Development during Youth and Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 806</td>
<td>Issues in Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 812</td>
<td>Meta-Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 816</td>
<td>Evaluating School Programs</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 902</td>
<td>Research Methodology in Education</td>
<td>3</td>
</tr>
</tbody>
</table>
Specialist in Education in School Psychology

Ed.S. in School Psychology

The program leads to the Specialist in Education (Ed.S.) degree. The curriculum prepares the student to function professionally as a school psychologist and to develop the skills of a psychoeducational consultant. The program emphasizes current issues and trends in school psychology.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission

Prerequisites for Regular Admission

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores (School Psychology only)
- For Counseling Psychology - Completed bachelor’s or master’s degree in counseling, psychology, or a related area. An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 15 undergraduate credit hours in the behavioral sciences.
- For Educational Psychology and Research - Completed bachelor’s or master’s degree. Educational Psychology and Research does not have a requirement for a specific undergraduate background.

For School Psychology - Completed bachelor’s or master’s degree. School Psychology does not have a requirement for a specific undergraduate background.

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://gradapply.ku.edu).
Admission

The admission deadline is December 15 to begin course work in the following summer or fall.

Required Admission Materials

1. Graduate application (https://gradapply.ku.edu/apply/) and application fee. See Admission in the Graduate Studies (p. 2408) section of the online catalog.
2. 1 copy of official transcripts of all previous college work.
3. GRE (general test) scores: Institution code, R6871; Major Field code, 3406. The GRE should have been taken within five years of the application date, and scores should typically equal or exceed the 50th percentile.
4. Letter of intent.
5. Résumé.
6. 3 letters of recommendation from people who can assess the applicant’s prospects for completing the program.

Ed.S. Degree Requirements

The Ed.S. program prepares graduates to function effectively as school psychologists and to meet the recommendations of professional organizations and Kansas licensure requirements. The Ed.S. program is accredited by the National Association of School Psychologists (http://www.nasponline.org/), the National Council for Accreditation of Teacher Education (https://www.chea.org/national-council-accreditation-teacher-education/) through the CAEP accreditation system, and the Kansas State Department of Education (http://www.ksde.org/).

Program Requirements

The Ed.S. program consists of 2 years of full-time graduate study followed by a third year of internship. Students completing the program are qualified to function as a school psychologist in a school setting.

All students obtain competence in school psychology primarily by completing a sequence of prescribed courses and field-based experiences. However, there may be room in a student’s program for electives, depending on previous experiences and course work. The standard course sequence for students in the Ed.S. program is as follows:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>EPSY 715</td>
<td>3</td>
<td>EPSY 835</td>
<td>3</td>
<td>EPSY 705</td>
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</tr>
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<td>EPSY 725</td>
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<td>EPSY 860</td>
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<td>EPSY 965</td>
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<td>EPSY 798</td>
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Applied Behavior Analysis & Evidence Based Interventions in School Psychology

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EPSY 710</td>
<td>3</td>
<td>EPSY 704</td>
<td>3</td>
<td>EPSY 947</td>
<td>1-4</td>
</tr>
<tr>
<td>EPSY 711</td>
<td>1</td>
<td>EPSY 798</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPSY 855</td>
<td>3</td>
<td>Consultation Systems &amp; Program Evaluation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPSY 910</td>
<td>3</td>
<td>EPSY 865</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>EPSY 975</td>
<td>3</td>
<td>EPSY 911</td>
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<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 991</td>
<td>1-2</td>
<td>EPSY 991</td>
<td>1-2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 58-63

1 EPSY 710 and EPSY 711 may be waived when the student has taken an undergraduate statistics course and successfully passes a qualifying test.

2 EPSY 947 may be taken in 1-4 credit-hour segments.

3 EPSY 991 (Full-time internship requires 2 credit-hours per semester; Half-time internship requires one credit-hour per semester.)

Student Admission, Outcomes, and Other Data

Doctor of Philosophy in School Psychology

Ph.D. in School Psychology

The program leads to the Doctor of Philosophy (Ph.D.) degree. Reflecting a "scientist-practitioner" training orientation, the doctoral program in School Psychology extends the student’s knowledge and applied research and teaching skills. Knowledge in the psychological foundations contributes to the development of effective scientist-practitioner school psychologists who utilize psychological theories and scientific research to inform their practice. We also recognize that the science and practice of school psychology mutually influence each other—science informs practice and practice informs science—and that an understanding of individual, ethnic, and cultural diversity serves as a foundation to effective science and practice of school psychology. Therefore, the program offers a curriculum within which all students are expected to acquire and demonstrate a substantial understanding of and/or competence in:

1. Professional school psychology (i.e., psychodiagnostic assessment, consultation, intervention, professional practice/ethics, learning, development, statistics, psychoeducational measurement, research design, and special education);
2. Psychological foundations (i.e., biological bases of behavior, cognitive-affective bases of behavior, social bases of behavior, individual bases of behavior, and history and systems of psychology);
3. Research skills; and
4. Appreciation/sensitivity to individual, ethnic, and cultural diversity.

The program is typically a four-year program of full-time study, followed by a full-year internship in health service psychology.
The program is housed in the KU School of Education and Human Sciences, which is accredited under the National Council for Accreditation of Teacher Education (NCATE) Standards through the CAEP Accreditation System. The Ph.D. program is accredited by the American Psychological Association (APA) and is approved by the National Association of School Psychologists and Kansas Department of Education.

If you have any questions about the program’s APA accreditation status, please contact:

Office of Program Consultation and Accreditation (https://accreditation.apa.org/)
American Psychological Association
750 First Street, N.E.
Washington, DC 20002-4242
Phone: 202-336-5979
Fax: 202-336-5978
Email: apaaccred@apa.org

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Graduate Admission
Prerequisites for Regular Admission

Prerequisites include the following:

- Undergraduate grade-point average of 3.0 or higher on a 4.0 scale
- Graduate grade-point average of 3.5 or higher on a 4.0 scale
- Graduate Record Examination general test scores (School Psychology only)
- For Counseling Psychology - Completed bachelor’s or master’s degree in counseling, psychology, or a related area. An applicant who does not have an undergraduate degree in education or psychology should have a minimum of 15 undergraduate credit hours in the behavioral sciences.

For Educational Psychology and Research - Completed bachelor’s or master’s degree. Educational Psychology and Research does not have a requirement for a specific undergraduate background.

For School Psychology - Completed bachelor’s or master’s degree. School Psychology does not have a requirement for a specific undergraduate background.

At the first enrollment, a doctoral student reviews any previous graduate work with an advisor to identify any course work in which the student is deficient. Students holding master’s degrees in other areas should recognize that such course work may require up to a year to complete and, in some instances, must be taken before the actual doctoral course requirements.

See individual programs for specific admission requirements and deadlines.

Submit your graduate application online (http://gradapply.ku.edu).

Admission

The admission deadline is December 15 to begin course work in the following summer or fall.

Required Admission Materials

1. Graduate application (https://gradapply.ku.edu/) and application fee. See Admission in the Graduate Studies (p. 2408) section of the online catalog.
2. 1 copy of official transcripts of all previous college work. The original transcript is forwarded to the School of Education to complete licensing and/or certification paperwork.
3. GRE (general test) scores: Institution code, R6871; Major Field code, 3406. The GRE should have been taken within five years of the application date, and scores should typically equal or exceed the 50th percentile.
4. Letter of intent.
5. Résumé.
6. 3 letters of recommendation from people who can assess the applicant's prospects for completing the program.

The doctoral program adheres to a scientist-practitioner model of training. Doctoral study extends the student's applied, research, and teaching skills. Research skills are described under Doctor of Philosophy with a Major in Education. Completion of the program typically requires 4 years of full-time study followed by a full year of internship.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<td>EPSY 760</td>
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<td>EPSY 965</td>
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<tr>
<td>EPSY 798</td>
<td>3</td>
<td>Biological Basis of Behavior (EPSY 836, PSYC 961, or ABSC 857)</td>
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<td>EPSY 805</td>
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Graduate Certificate in Mind, Brain, and Education

Year 2

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<tr>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
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<td>History and Systems of Psychology (EPSY 882 or PSYC 805)</td>
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<td>EPSY 705</td>
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<tr>
<td>Elective (EPSY 808, PSYC 774, PSYC 775 or PSYC 777)</td>
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<td>EPSY 822</td>
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<tr>
<td>EPSY 798 (Consultation Systems &amp; Program Evaluation)</td>
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<td>EPSY 807</td>
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<td>EPSY 807</td>
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<td>Elective: Research Skills (EPSY 803, EPSY 811, EPSY 812, EPSY 816, EPSY 822, EPSY 905**, EPSY 906, EPSY 922, EPSY 926, PSYC 887, or ABSC 735)</td>
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<tr>
<td>EPSY 865</td>
<td>3</td>
<td>EPSY 855</td>
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Year 3

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<th>Hours</th>
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<th>Hours</th>
<th>Summer</th>
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<tr>
<td>EPSY 902</td>
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<td>EPSY 880</td>
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<td>Individual and Cultural Diversity (EPSY 875 or ELPS 830)</td>
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<td>Elective: 800-level course</td>
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<td>EPSY 910</td>
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<td>EPSY 911</td>
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<td>Elective: Research Skills (EPSY 803, EPSY 811, EPSY 812, EPSY 816, EPSY 822, EPSY 905**, EPSY 906, EPSY 922, EPSY 926, PSYC 887, or ABSC 735)</td>
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<tr>
<td>Total Hours</td>
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Year 4

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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EPSY 999</td>
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<td>EPSY 999</td>
<td>6</td>
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<tr>
<td>EPSY 995</td>
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Year 5

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<th>Spring</th>
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<tr>
<td>EPSY 999</td>
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<tr>
<td>Total Hours</td>
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Timing of Comprehensive Exams.

Given the timing of internship placements through the national match process, School Psychology and Counseling Psychology Ph.D. students may be allowed to take comprehensive exams with up to 6 hours of non-required coursework remaining, so long as the remaining courses are not considered part of the research skills requirement or part of the program core that will be the subject of examination. These remaining hours can count towards the required 18 post-comp hours although students are still required to enroll in dissertation hours.

Graduate Certificate in Mind, Brain, and Education

The Graduate Certificate in Mind, Brain, and Education is designed to draw on basic and applied interdisciplinary research from the disciplines of neuroscience, psychology, and cognitive science to explore human learning and development and to understand how research in these fields will generate innovative approaches to teaching, learning, and education.

Completion of the certificate in Mind, Brain, and Education represents an additional credential for graduate students from a variety of academic fields who are preparing for careers in research and teaching or professional practice. The certificate is designed for PK-16 teachers and instructors, administrators, and student support personnel, as well as organizational leaders, consultants, and policy makers seeking to explore how research from the learning sciences has the potential to
inform the field of education. The cornerstone of this certificate centers on understanding the neural mechanisms of learning and development and the role of experience in shaping (neuroplasticity) the brain through the lifespan.

The timeframe for completion is four consecutive semesters (spread over two academic years). Enrolling in individual courses requires the permission of Dr. Orosco (Mind, Brain, and Education Advisor).

Enrollment in the program is open to students admitted to a regular KU graduate program as well as students who are not currently enrolled at KU. A Bachelor’s degree is required.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

To be considered for admission, prospective students must have completed a Bachelor’s degree with a GPA greater than 3.0. Applicants with an Undergraduate GPA below 3.0 should contact an admission advisor for information about provisional admissions.

International applicants must meet English language proficiency requirements. These requirements are located here (http://graduate.ku.edu/english-proficiency-requirements/).

For more information about our admission requirements, visit the Department of Educational Psychology (https://epsy.ku.edu/admission/) website.

Course requirements for the Graduate Certificate in Mind, Brain, and Education:

Graduate level standing. The certificate will consist of four courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EPSY 705</td>
<td>Human Development through the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 807</td>
<td>Theories and Research in Human Learning</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 836</td>
<td>Behavioral &amp; Systems Neuroscience in Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 837</td>
<td>The Neuroscience of Motivation and Emotional Behaviors</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate Certificate in Social Emotional Wellness

The School of Education & Human Sciences is not currently accepting applications for this certificate.

This is a 12 credit hour Certificate, available exclusively online. Each course is conceptualized as a 3 credit online course which will include lectures, assignments, and virtual discussions.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 765</td>
<td>Mental Health in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 766</td>
<td>Positive Psychology in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 767</td>
<td>Social Emotional Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following elective courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 709</td>
<td>Foundations of Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 801</td>
<td>Planning for School Improvement</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 803</td>
<td>Differentiating Curriculum and Instruction</td>
<td>3</td>
</tr>
<tr>
<td>ELPS 750</td>
<td>Principalship</td>
<td>3</td>
</tr>
<tr>
<td>SPED 730</td>
<td>Characteristics, Methods &amp; Assessment: Intro Struggling Learners &amp; Studnts High-Incidence Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPED 756</td>
<td>Special Education Leadership</td>
<td>3</td>
</tr>
<tr>
<td>SPED 760</td>
<td>Introduction to Autism Spectrum Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPED 854</td>
<td>Family and Interprofessional Collaboration in Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 856</td>
<td>Transition Education and Services from Childhood through Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>SPED 857</td>
<td>Career Development for Youth</td>
<td>3</td>
</tr>
<tr>
<td>SPED 861</td>
<td>Blending Academics and Transition</td>
<td>3</td>
</tr>
<tr>
<td>SPED 863</td>
<td>Student Engagement in School and Community</td>
<td>3</td>
</tr>
</tbody>
</table>

Department of Health, Sport, and Exercise Sciences

Health, Sport, and Exercise Sciences

The Department of Health, Sport, and Exercise Sciences (HSES) offers undergraduate and graduate degrees preparing students to work in health, sport, and exercise-related fields. HSES graduates apply their knowledge to serve as teachers, researchers, clinicians, managers, administrators and other professionals in academic, private, and public settings.

The department of Health, Sport, and Exercise Sciences (HSES) has a proud history. James Naismith, the inventor of basketball and KU’s first basketball coach and athletic director began teaching physical education in 1898 – twelve years before the School of Education & Human Sciences (http://see.ku.edu/) came into existence.

In addition to it’s academic programs, HSES offers research opportunities for faculty and students in a variety of laboratories (https://hses.ku.edu/mission-vision/research-labs/), which include research in applied physiology, athletic performance, neuromechanics, exercise science, amateur sports, sport & exercise psychology and other areas.

The department is also active in community outreach with swim classes, the Sports Skills and Fitness School, and Hawk Fitness Academy for children.
In addition, the department offers physical activity classes (HSES 108) for KU students and fitness and recreation facilities (http://hses.ku.edu/community/recreation/) for faculty and staff.

**Undergraduate Programs**

The Department of Health, Sport, and Exercise Sciences offers the following undergraduate programs:

- **Community Health**
- **Exercise Science**
- **Physical Education Plus – grades PreKindergarten – 12**
- **Sport Management**

All undergraduate programs include a strong general education component with a focus on the biological sciences in addition to coursework in the major.

The Department of Health, Sport, and Exercise Sciences also offers the following minor:

- Sport Management

The Academic Catalog is a guideline for policies and procedures in the School of Education. However, academic program requirements change. Students are strongly encouraged to check the school’s website (https://soehs.ku.edu/) and the department for the most current information.

**Laboratories and Facilities**

HSES programs at all levels are supported by experiential education opportunities. The department maintains excellent laboratories for student and faculty research, including biomechanics, motor development/adaptive, applied physiology, sport management, and sport and exercise psychology. All students are exposed to the laboratories and clinics, which serve KU and the community. View (http://hses.soehs.ku.edu/research/) further information about HSES labs and clinics.

**Graduate Programs**

Graduate work in health, sport, and exercise sciences includes an offering of courses leading to the Master of Science in Education and Doctor of Philosophy degrees. Entrance requirements include completion of an undergraduate program and admission to graduate studies through the Graduate Division of the School of Education.

HSES provides concentrated graduate study in the following specializations: Exercise Science (M.S.E.), Exercise Physiology (Ph.D.), Health & Psychology of Physical Activity (M.S.E. and Ph.D.), Physical Education Pedagogy (M.S.E.), and Sport Management (M.S.E (online) and Ph.D.).

**Laboratories and Facilities**

HSES programs at all levels are supported by experiential education opportunities. The department maintains excellent laboratories for student and faculty research, including biomechanics, motor development/adaptive, applied physiology, sport management, and sport and exercise psychology. All students are exposed to the laboratories and clinics, which serve KU and the community. View (http://hses.soehs.ku.edu/research/) further information about HSES labs and clinics.

**Courses**

**HSES 104. Physical Activity in: _____ 0.5-1 Credits.**
An accurate description of the activity or activities will be given in the Schedule of Classes. Graded on a satisfactory/unsatisfactory basis.

**HSES 108. Basic Skill Instruction in: _____ 0.5-2 Credits.**
(An accurate description of the activity or activities will be given in the Timetable.)

**HSES 110. Intermediate Skill Instruction in: _____ 0.5-2 Credits.**
(An accurate description of the activity or activities will be given in the Timetable.)

**HSES 112. Advanced Skill Instruction in: _____ 0.5-2 Credits.**
(An accurate description of the activity or activities will be given in the Timetable.)

**HSES 200. Coaching Certification for Youth Sports. 2 Credits.**
This course will examine theories, practices, methods and techniques used to coach youth sports. Emphasis will be upon training, conditioning, sports psychology, nutrition, organization and management as prescribed by the National Federation of Interscholastic Coaches’ Education Program. Students will have opportunity to receive coaching certification. Prerequisite: Open to physical education majors, or by consent of instructor. Students must pass the National Federation of Interscholastic Coaches’ Education Program (NFICEP) examination before exiting the course.

**HSES 201. Team Sports. 2 Credits.**
This course will deal with Soccer, Touch Football, Basketball, Softball, and Volleyball. Practice in construction of lesson plans and unit plans, skill performance and peer teaching practicum are emphasized in each of the areas of team sports. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and knowledge of the activities. Open to HSES majors and minors, or by consent of instructor.

**HSES 202. Individual and Dual Sports. 2 Credits.**
Instruction and analysis in individual sports such as track and field, bowling or archery, and dual sports such as tennis, badminton or handball. Development of sport skills and rule knowledge are emphasized. Prerequisite: Basic fitness and knowledge of the activities. Prerequisite: Open to pre-HSES and HSES majors, or by consent of instructor.

**HSES 204. Gymnastics. 2 Credits.**
Instruction and analysis in the eleven gymnastics events for men and women. Skill performance, spotting and teaching techniques, lesson and unit plan construction, and teaching practicum constitute the basic focus of this course. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and gymnastics/tumbling experience. Open to HSES majors and minors, or by consent of instructor.

**HSES 210. Instruction and Analysis in Swimming. 1 Credits.**
Study of the skills to be included in the instruction of swimming and the analysis of skill performance involved. Presentation of instructional techniques and practice in construction of learning experiences are included.

**HSES 214. Physical Education Activities for Elementary School Children. 3 Credits.**
This course will introduce the student to a variety of physical education activities that are appropriate for children in grades K-6. Age appropriate activities demonstrated in this course include: individual and group games, self testing games, stunts and tumbling experiences, physical fitness, modified sports, and movement exploration. Class participation
will be expected for all students. Prerequisite: Open to pre-HPE and HPE majors.

**HSES 218. Lifeguard Training. 2 Credits.**
The course involves American Red Cross certification in lifeguarding which includes rescue techniques and safety procedures. It also includes first aid and CPR certifications. Each student will be asked to identify common hazards associated with various types of aquatic facilities and develop skills necessary to recognize a person in a distress or drowning situation and to effectively rescue that person. This course will help each student to understand the lifeguard/employer and lifeguard/patron relationship as well as provide explanations, demonstrations, practice and review of the rescue skills essential for lifeguards. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor.

**HSES 220. Officiating of: _____ 1 Credits.**
A study of the rules and techniques of officiating. Students will officiate during laboratory sessions. The activities offered in officiating are: basketball, football, gymnastics, softball, swimming, track and field, and volleyball. Prerequisite: Basic competency in the sport to be officiated, or consent of instructor.

**HSES 222. Water Safety Instruction. 2 Credits.**
This course is designed to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. Through practice teaching sessions, students will plan and organize skill development utilizing the various educational methods and approaches applicable to swimming and water safety instruction. Students will also learn the correct swimming styles taught by the Red Cross. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor.

**HSES 224. Lifeguard Training Instructor. 2 Credits.**
This course is designed as a lecture/laboratory course, meeting for one hour three days per week. Each instructor candidate (student) will have an opportunity for skill development necessary to instruct American Red Cross Lifeguard Training courses. Through practice teaching sessions, emphasis will be placed on enforcing safety precautions, identifying errors, providing effective instruction, and skills correction. After successful completion of this course, the student will be certified to instruct the following American Red Cross Aquatic courses: (1) lifeguard training, (2) waterfront lifeguarding, (3) CPR for professional rescue, and (4) community first aid. Prerequisite: HSES 218 or lifeguard training.

**HSES 236. Practicum in: _____ 1-3 Credits.**
A description of the activities offered will be provided in the Timetable. Prerequisite: Consent of instructor.

**HSES 240. The Coaching of Football. 2 Credits.**
A complete study of the theoretical aspects of the fundamentals of football. Study of defensive and offensive tactics for each position. Prerequisite: Sophomore standing.

**HSES 244. Introduction to Physical Education and Sport Studies. 3 Credits.**
The study of the history, foundational concepts, and current principles of physical education and sport programs.

**HSES 248. First Aid. 2 Credits.**
This course is designed to teach emergency treatment of injuries, wounds, hemorrhage, burns, and poisoning. Emphasis is placed on the techniques of rescue breathing, CPR, and emergency bandaging. American Red Cross certification is included.

**HSES 250. Introduction to Athletic Training. 3 Credits.**
Introduction to the health profession of Athletic Training. Course content includes: risk management, pathology, emergency management, musculoskeletal, and general medical conditions of the injured athlete. Prerequisite: Concurrent enrollment in HSES 251.

**HSES 251. Introduction to Athletic Training Practicum. 1 Credits.**
This course is designed to introduce the beginning skills to the pre-professional athletic training student. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Prerequisite: Concurrent enrollment in HSES 250 or transfer credit.

**HSES 252. The Coaching of Basketball. 2 Credits.**
Theory of basketball, including methods of teaching fundamentals; individual and team offense and defense; various styles of play and methods of coaching. Prerequisite: Sophomore standing.

**HSES 260. Personal and Community Health. 3 Credits.**
Emphasis on healthy and intelligent living and the application of the fundamental principles of health.

**HSES 262. Life Skills Training for Intercollegiate Athletics. 2 Credits.**
A study of the various components of physical fitness and the wellness and the implications for developing programs to promote good health and fitness. Lectures and laboratory sessions will be centered on practical knowledge and experiences designed to help individuals enhance their own health, as well as develop sound programs for others. The topics discussed include cardiovascular fitness, body composition, muscular strength, flexibility, evaluation of fitness components, training program design, nutrition, weight management, and facts and fallacies of nutrition and fitness.

**HSES 266. Introduction to Exercise Science. 3 Credits.**
A study of the various components of physical fitness and the wellness and the implications for developing programs to promote good health and fitness. Lectures and laboratory sessions will be centered on practical knowledge and experiences designed to help individuals enhance their own health, as well as develop sound programs for others. The topics discussed include cardiovascular fitness, body composition, muscular strength, flexibility, evaluation of fitness components, training program design, nutrition, weight management, and facts and fallacies of nutrition and fitness.

**HSES 268. Introduction to Sport Management. 3 Credits.**
This course provides an overview of the field of sport management including the principles of leadership and management and the fundamentals of personnel management, financial management, marketing, strategic planning, sport ethics, sport law, time management, stress management, facility management, and event management applied to sport settings.

**HSES 290. Safety Education. 3 Credits.**
A survey of safety problems as they exist in society today, with emphasis on preventive, corrective, and compensatory procedures.

**HSES 299. Careers in Sport Management. 3 Credits.**
In this course, students will learn about the professional world of sport management. Specifically, those enrolled will be exposed to the multitude of career paths in the sporting world. Additionally, students will learn numerous internship and job search skills such as political skill, networking, and personal branding.

**HSES 300. Study Abroad Topics in: _____. 1-5 Credits.**
A course designed to enhance international experience in topic areas related to health, sport, and exercise sciences at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad.
May be repeated for credit if the content differs. Prerequisite: Permission of the department.

**HSES 302. Practicum in Adaptive Physical Education for PK-12 Students. 2 Credits.**
Emphasis will be on instructional techniques that are used for the inclusion of all students in physical education learning experiences. Students will develop an understanding of how to deliver physical education activities that may be part of an individual education program. A practicum experience in a public school adaptive physical education setting will be required. Prerequisite: PE Plus advisor approval required.

**HSES 305. Methods of Strength Training and Conditioning. 3 Credits.**
This course will provide the students with the scientific principles and the hands-on experience to develop resistance exercise and related conditioning programs for a wide range of populations, including those focusing on general fitness, therapeutic rehabilitation and sport performance. Prerequisite: Anatomy, physiology, and admission to the Exercise Science undergraduate program, or permission of instructor.

**HSES 306. Principles of Personal Training. 3 Credits.**
Designed to prepare individuals who are interested in becoming certified personal trainers (CPT) through the National Strength and Conditioning Association, or to enhance their own training goals. Instruction is provided describing basic exercise physiology as well as the principles of developing a personal training regimen for a typical gym trainee. Course experiences will reinforce training principles and teach the basic skills necessary for certification. Prerequisite: Accepted to School of Education or instructor permission.

**HSES 307. Tactical Strength and Conditioning. 3 Credits.**
This course will provide students with methods and techniques associated with assessing, programming, and training tactical-based athletes and professionals. Tactical athletes include military, law enforcement, firefighter, protective services, rescue, and other emergency personnel. Students will apply scientific knowledge to develop training programs to improve performance outcomes, decrease injury, evaluate nutritional strategies, and implement relevant and safe strength and conditioning programs. This course will be designed to prepare students to take the Tactical Strength and Conditioning Facilitator (TSAC-F) certification examination proposed by the National Strength and Conditioning Association (NSCA).

**HSES 308. Drugs and Diseases in Society. 3 Credits.**
This course is an overview of human disease processes as well as legal and illegal use of drugs and narcotics for treatment or recreational purposes. Both communicable and degenerative diseases will be covered with regards to prevention, transmission, effects, management, and treatment. Legal drugs and illegal drugs will be discussed with regards to their treatment or abuse potential, legislative issues, and consumer education. Reflective thinking will be used to formulate improved perspectives on the roles of drugs and diseases in society. Prerequisite: Admission to Community Health Program or consent of instructor.

**HSES 310. Research and Data Analysis in Health, Sport, and Exercise Sciences. 3 Credits.**
This course provides formal instruction in the areas of test administration, general statistics, and basic research design. Emphasis will be placed upon the interpretation of statistical data, evaluation of data, and basic methodologies utilized in health, sport, and exercise sciences research. Data collection, analysis, and evaluation will be an integral part of the class.

**HSES 315. Health and Fitness Technology. 2 Credits.**
The course will prepare physical education majors to use technology effectively to enhance teaching and learning. Students will explore the use of technology appropriate for communication, organization, instruction, and assessment in health and physical education classrooms. Prerequisite: PE Plus advisor approval required.

**HSES 320. Methods of Teaching Physical Education. 3 Credits.**
This course provides a systematic approach to the development of effective teaching skills in physical education. Students receive practical and field experiences that enable them to observe and practice managerial, instructional, and interpersonal skills necessary to produce student learning in K-12 physical education classrooms. Prerequisite: PE Plus advisor approval required.

**HSES 330. Principles of Nutrition and Health. 3 Credits.**
This course will provide an introduction to the basic principles of nutrition, with an emphasis on application of these principles to improve overall health. Topics include: guidelines for a balanced diet, index of nutritional quality, energy requirements and balance, weight management and obesity, nutritional quackery, sports nutrition, nutrition for children and elderly, and eating disorders.

**HSES 331. Sport and Exercise Nutrition. 3 Credits.**
Provides a basic understanding of the influence of nutrition on sport and exercise performance. Nutrition for sport performance, including hydration, nutrient timing strategies for various athletes, and use and regulation of ergogenic aids and nutritional supplements will be covered to apply this knowledge to develop a critical understanding of the nutritional and practical dietary needs of individuals participating in sport and exercise. Prerequisite: Accepted to School of Education or instructor permission.

**HSES 335. Clinical Field Experience. 1-3 Credits.**
Clinical Field Experience is designed to allow students who plan to pursue clinical careers the opportunity to observe and assist (as appropriate) in the evaluation and/or treatment of patients by licensed clinicians in fields such as medicine, physical therapy, and cardiac rehabilitation. Only one enrollment permitted each semester. A maximum of six hours will apply towards the bachelor's degree, or a maximum of three credit hours will apply towards the bachelor's degree if the student subsequently enrolls in HSES 580 (Internship). Prerequisite: Admittance to the Community Health or Exercise Science undergraduate degree program in HSES.

**HSES 340. Instructional Strategies in Motor Development. 2 Credits.**
This course is designed to provide students with an examination of current theories of motor development throughout the life cycle. Emphasis is placed on content regarding the development of fundamental motor skills, physical growth and development, and assessment. Prerequisite: PE Plus advisor approval required.

**HSES 341. Instructional Strategies in Physical Education for Elementary Classroom Teachers. 1 Credits.**
The application of child growth and development principles to physical education. The use of materials as related to a sequential physical education curriculum in the elementary school will also be included. Prerequisite: Prior or concurrent enrollment in C&T 322 or equivalent.

**HSES 350. Care and Prevention of Athletic Injuries. 3 Credits.**
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed to cover the basic fundamentals of injury/illness recognition as well as discuss the various strategies for the prevention and care of injuries to the physically active. Prerequisite: Successful completion of Human Anatomy (BIOL 240) or equivalent course and proof of current first aid certification.
HSES 351. Foundations of Athletic Training. 1 Credit.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athlete trainer. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Open to Athletic Training majors only. Prerequisite: Human Anatomy, First Aid, concurrent enrollment in HSES 350.

HSES 352. Therapeutic Modalities. 3 Credits.
This course is the study of therapeutic modalities utilized in treatment and rehabilitation of athletic injuries. Prerequisite: HSES 250 or the transfer equivalent, Admission to the Athletic Training Program.

HSES 353. Athletic Training Practicum I. 2 Credits.
The first in a sequence of six practical/clinical experiences for the Athletic Training Student, under the direct supervision of a Preceptor. Prerequisite: Admission to Athletic Training program, HSES 250 and HSES 251.

HSES 354. Lower Extremity Evaluation. 3 Credits.
This course teaches a systematic approach to athletic injury evaluation of the lower extremity, thorax, and abdomen. Prerequisite: Admission to the Athletic Training Program, HSES 353, concurrent enrollment HSES 355.

HSES 355. Athletic Training Practicum II. 2 Credits.
This course is the second in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission to Athletic Training program and concurrent enrollment in HSES 354.

HSES 358. Creative Movement and Dance Appreciation. 3 Credits.
Students will experience the following types of dance: creative movement, ballroom dance, folk, square, and line dance. An appreciation for dance will be developed through the study of the pioneers of dance and the critique of local dance performances. Prerequisite: PE Plus advisor approval required.

HSES 365. Peer Health Education. 3 Credits.
The course is designed to train students in peer health education, as peer health educators in college settings, and as trainers, training adolescents in community health settings for grades 6-12 peer health education. Subject content and teaching methodologies will be emphasized in the ten content areas of health with special emphasis on alcohol, drugs, tobacco, stress reduction, mental health and human sexuality. Prerequisite: HSES 260 or instructor consent.

HSES 369. Kinesiology. 3 Credits.
This course is designed primarily for students in the field of exercise science who already have taken an introductory course in human anatomy and who need a more detailed exposure to concepts of functional movement anatomy. This course will provide a detailed study of the skeletal and muscular systems to include identification of the origin, insertion, and action of the major muscles of the human body. Students will become proficient in the use of directional and movement terminology used to describe movement and be able to identify the plane/axis as well as the agonist and antagonist muscles involved in a movement. Prerequisite: A course in human anatomy, admission to School of Education.

HSES 370. Health and Pathophysiology. 3 Credits.
The course is designed to assist students in the development of a basic understanding of the anatomical structures and physiological processes that are central to the development of various diseases/disorders. Students will apply this knowledge to an evidence-based model for choosing and developing appropriate lifestyle and health-related interventions (e.g. exercise, nutrition, stress management), both for health enhancement and disease prevention. Prerequisite: BIOL 240 and BIOL 246; or admittance to HSES exercise science, community health, or athletic training programs.

HSES 371. Medical Terminology for Health Professionals. 3 Credits.
A study of medical terminology. This course will include; analysis of root words, prefixes and suffixes for understanding medical language; origin, modern usage and abbreviations.

HSES 372. Exercise Physiology. 3 Credits.
A fundamental study of the physiological adjustments that occur within the body during exercise. The presentation of this material is particularly oriented toward a basic understanding of the physiological systems as they are affected by the activity of a normal coaching or teaching situation. The physiological values of exercise are also stressed. Prerequisite: Three hours of physiology.

HSES 375. Neuromuscular Exercise Physiology and Motor Control. 3 Credits.
This course explores the control of human movement from an exercise neurophysiology perspective. Emphasis will be placed on the understanding the interactions between the nervous system and muscular systems in the control of muscle force/power production and the control of movement under a variety of contexts. These contexts include responses and adaptations to exercise training, the aging process, and in a variety of neuromuscular disorders. Prerequisite: BIOL 240 and BIOL 246.

HSES 378. The Coaching of Volleyball. 2 Credits.
Theory of volleyball, including methods of teaching fundamentals, individual and team offense and defense. Various styles of play and methods of coaching. Efficient performance of the skills during game conditions will be emphasized.

HSES 379. The Coaching of Softball. 2 Credits.
Theory and fundamentals of coaching softball. Methods of coaching, as well as team offense, defense, and strategies will be stressed. Efficient performance of the skills during game conditions will be emphasized. Prerequisite: Consent of instructor.

HSES 380. Sociology of Sport. 3 Credits.
A survey of the current literature concerning the scope of sociology in sport, the interaction of people in sport, the social systems controlling sport, and the small group dynamics in sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 381. Sport Ethics. 3 Credits.
This course will help students develop their abilities to reason morally through an examination within competitive sports of ethical theories, moral values, intimidation, gamesmanship, and violence, eligibility, elimination, winning, commercialization, racial equity, performance-enhancing drugs, and technology. Students will develop a personal philosophy of sport and learn how to apply a principled decision-making process to issues in sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 382. Sport Facilities and Event Management. 3 Credits.
This course will provide students with a solid grasp of the fundamental skills in sport facility and event management and the knowledge base to apply those skills in a real world environment. Students will learn about planning, designing and financing the construction of new sport facilities,
sport facility management of regular and special events, sporting event planning and game day operations. Prerequisite: Admission in the Sport Management major or minor and completion of HSES 289.

HSES 384. Sport Law. 3 Credits.
This course is intended to introduce undergraduate students to the major legal issues in amateur and professional sports including dispute resolution, tort law, contract law, constitutional law, statutory law, labor and antitrust law and intellectual law. Students will also learn about risk management, gender equity, the Americans with Disabilities Act and agency law and sports agents. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 385. Psychological Aspects of Exercise. 3 Credits.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, and physical therapy/rehab). The course content will include a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects influencing individuals’ participation in physical activity, and an introduction to strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients. Prerequisite: Admission to the Community Health program or instructor consent.

HSES 390. The Coaching of Track and Field. 2 Credits.
Designed to acquaint the student with the fundamentals of track and field athletics.

HSES 395. Concepts in Health and Wellness. 3 Credits.
This is designed as an introductory course into the profession of School and Community Health Education. Regardless of a person’s areas of specialization in Health Education, there are commonalities shared by all of us who are charged with the responsibility of providing education about health. Course emphasis will focus on: defining health education; history of health education; roles and competencies of health educators; theoretical bases for the profession; planning, implementing, administering, and evaluating health programs; settings for health education; future issues. Prerequisite: HSES 260.

HSES 403. Health Behavior Theory. 3 Credits.
This class will be an introduction to the primary models and theories used in health behavior research and health promotion practice. These models and theories undergird the development of successful health-related programs and interventions, and will help guide educators in the development of innovative and effective programming. The course will cover individual, interpersonal, community-level, and ecological theories, and students will have the opportunity to apply these theories to health behaviors of interest.

HSES 410. Program Design in Physical Education. 3 Credits.
The study of physical education curriculum models and extraclass programs appropriate for students in grades PK-12. Students will receive practical and field experiences related to program design and implementation. They will learn techniques appropriate for program evaluation as well as the assessment of student sport skills and fitness. Prerequisite: PE Plus advisor approval required.

HSES 418. Health Aspects of Aging. 3 Credits.
This course will consist of a Holistic Health approach to the various components of the aging process. Special emphasis will be placed on the demographic aspects of aging; normal aging changes and deviations in the aging process (pathophysiology); the relationship between mental and physical health, and the implications for the promotion of risk reduction and prevention principles that can effectively improve the quality of life for older individuals. Prerequisite: A course in personal and community health.

HSES 434. Consumer Health. 3 Credits.
This course will be a comprehensive examination of the factors involved in the selection of health products and services. Topics of discussion will be: protection laws and services, fraudulent practices and products, consumerism, and traditional and alternative health care. There will also be an in-depth examination of how to assess and evaluate health based products that are available to consumers. Prerequisite: Admission to the Community Health Program or consent of instructor.

HSES 440. Applied Sport and Performance Psychology. 3 Credits.
This course will examine the psychological principles and techniques that are applied to improve sport performance and other fields of achievement (e.g., exercise and wellness, music, and academics). Special attention will be given to psychological aspects of injury and rehabilitation, psychological conditioning, psychological training methods, coaching philosophy, the social psychology of team members, and components of peak performances.

HSES 453. Communicable and Degenerative Diseases. 3 Credits.
This course is designed to introduce the student to the study of the basic concepts/principles of disease process. Special emphasis will be placed on the etiology, origin, symptoms, treatment, body defenses, primary prevention, host, agent, (microbes) and environmental factors affecting disease occurrence, prevention and control measures. Topical application of the fundamental concepts of microbiology in school/community health practice will be critically discussed. The natural history of disease and disease classification will be highlighted. Many disease topics (both communicable and chronic, degenerative diseases) will be discussed. Prerequisite: A course in personal and community health.

HSES 455. Manual Therapy Techniques and Emergency Care Instructor Training. 3 Credits.
The purpose of the course is to train students in a Manual Therapy Technique for use in the clinical setting. The course is also designed to certify students as instructors in American Red Cross First Aid, CPR and AED courses as well as instructors for the CPR/AED for the Healthcare Provider. Prerequisite: Completion of HSES 352, HSES 354, HSES 456 and HSES 459 or equivalency from an accredited Athletic Training Education Program or have current First Aid and CPR/AED for the Healthcare Provider certification.

HSES 456. Upper Extremity Evaluation. 3 Credits.
This course teaches a systematic approach to athletic injury evaluation of the upper extremity, head and spine. Prerequisite: Admission into the Athletic Training program, HSES 354, and HSES 355. Corequisite: HSES 457.

HSES 457. Athletic Training Practicum III. 2 Credits.
This course is third in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training program and concurrent enrollment in HSES 456.

HSES 458. General Medical/Pharmacology. 3 Credits.
This course will cover general medical conditions/illnesses and over the counter, prescription, and illegal pharmacologic agents commonly encountered in physically active populations. The course will cover recognition of illnesses and diseases, immediate care and medical referral, basic principles of pharmacology, pharmacological agents used in the treatment of various pathologies, and other general medical and pharmacological topics encountered by athletic trainers. Prerequisite: Admission into the Athletic Training Program, HSES 459 and HSES 460.

HSES 459. Rehabilitation. 3 Credits.
This course is the study of rehabilitation principles and techniques used to safely return a physically active individual to their sport/activity following injury. Prerequisite: Admission into the Athletic Training program, HSES 456, and HSES 457.

HSES 460. Athletic Training Practicum IV. 2 Credits.
This course is the fourth in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training program, HSES 457, and concurrent enrollment in HSES 459.

HSES 461. Organization and Administration of Athletic Training. 3 Credits.
This course examines the organizational and administrative aspects of the Athletic Training profession. Course content includes: program management, employment, budget, facility design, risk management, documentation and medical records, insurance, legal and practice regulations, prevention and health promotion, history, and organization of the profession. Prerequisite: HSES 459, HSES 460, and concurrent enrollment in HSES 462.

HSES 462. Athletic Training Practicum V. 2 Credits.
This course is the fifth in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training Program and concurrent enrollment in HSES 461.

HSES 463. Senior Capstone in Athletic Training. 2 Credits.
This course is designed to allow senior Athletic Training Students to review previous content and prepare for the BOC certification exam as well as explore areas of professional development. Prerequisite: Admission into the Athletic Training program, HSES 561, and HSES 562.

HSES 464. Athletic Training Practicum VI. 2 Credits.
This course is the final practicum/clinical experience course for the athletic training student. Prerequisite: Admission into the Athletic Training program and concurrent enrollment in HSES 463.

HSES 465. Program Assessment and Evaluation. 3 Credits.
This course will offer an introduction and hands-on application of program assessment and evaluation techniques in health education. As health educators and program planners, we are required not only to develop innovative programs and interventions to address community- and school-based health concerns, but also to give evidence that our efforts are both adequate and effective. Successful program assessment and evaluation incorporate knowledge of basic research methods as well as the theoretical understanding of health behaviors.

HSES 466. Program Planning in Health Education. 3 Credits.
This course is designed to provide the students with an in-depth knowledge of proven health planning models that can be used for program development and intervention. Students will learn how to develop attainable program goals and objectives which will allow programs and interventions to evolve into useful forms of community-based health education. Prerequisite: Students must be admitted to the School of Education and the Community Health Program.

HSES 467. Introduction to Health Education. 3 Credits.
This course will provide an overview the various health education professions. Topics emphasized in the course are: the nature of health education, an in-depth description of community health, the school health program, and identifying program and services of voluntary and official health and welfare organizations. Prerequisite: Admission to the School of Education and the Community Health Program.

HSES 468. Methods and Materials in Health Education. 3 Credits.
Emphasis is placed on the presentation and preparation of health topics along with the recommended resources and materials available. The teaching method is emphasized and student participation is stressed. Students will observe health teachers in the public schools and identify and discuss these methods as they relate to the methods present in the class. Prerequisite: Admission to HPE teacher certification program or consent of instructor.

HSES 470. Biomechanics. 3 Credits.
The course is designed to cover a basic understanding of the anatomical and mechanical principles of human movement. Areas covered will be joint and segmental movement, muscle actions, time-displacement motion description, forces causing or inhibiting motion, and stability. Special attention will be given to the application of the theoretical concepts in movement activities. Prerequisite: Anatomy, admission to the Exercise Science program, or permission of instructor.

HSES 473. Clinical Fitness Evaluation Techniques. 3 Credits.
This course will provide the student with the knowledge and skills to assess components of physical fitness in adults including cardiorespiratory fitness, body composition, strength, and flexibility. In addition, specific emphasis will be placed on the development of exercise and weight management prescriptions. Students completing the course will have the skills to take the Health Fitness Instructor Certification exam given by the American College of Sports Medicine. Prerequisite: Exercise physiology and research and data analysis in HSES or equivalents.

HSES 474. Exercise Biochemistry. 3 Credits.
This course will examine the processes that underlies the use and production of energy for exercise. Topics that will be explored include glycolysis and glycolysis in muscle, cellular oxidation of pyruvate, lipid metabolism, metabolism of proteins and amino acids, molecular biology, neural and endocrine control of metabolism, and local fatigue during exercise. Emphasis will be placed on carbohydrates, protein, and lipid metabolism and the acute and chronic effects that exercise has on these processes. Prerequisite: HSES 472.

HSES 475. Undergraduate Research in Health, Sport, and Exercise Sciences. 1-3 Credits.
The course is designed to allow students to collaborate on an active research project under the supervision of a faculty member in HSES. Only one enrollment permitted each semester. A maximum of six hours will apply towards the bachelor's degree. Prerequisite: Enrollment by Instructor permission only. Successful completion of IRB training via the CITI training program in the KU eCompliance system.

HSES 480. Physical Activity and Exercise Management Individuals with Disabilities. 3 Credits.
An in-depth study of how physical activity and exercise can be a part of the treatment plan for people who have chronic disease or a disability. A variety of physical activity and exercise intervention programs and models will be presented and discussed, as well as protocols for baseline testing and post-treatment testing. A portion of this course will focus on how physical activity and exercise can prevent motor functioning deterioration in people who have a disability or limited functional movement. Prerequisite: Admission to the School of Education Exercise Science or Athletic Training programs and a course in human anatomy and physiology, or consent of instructor.

HSES 481. Sport Fundraising and Sponsorship. 3 Credits.
In this course, students will take an in-depth look at the sport fundraising and sponsorship realms. Specifically, students will focus on revenue-generating operations within sport organizations. Example topics include major gift fundraising, naming rights and other major sponsorships, annual funds, premium inventory, and trends in these evolving fields.
Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 482. Drugs in Society. 3 Credits.
This course is designed to provide an in-depth exposure to basic drug classification, pharmacological effects, causes of drug abuse to society, common treatment modalities, and effective prevention/intervention strategies. In addition, consumer issues related to drug use, drug legislation, and drug education programs for school and community implementation will be discussed. Prerequisite: A course in personal and community health or consent of instructor.

HSES 483. Sport Finance and Economics. 3 Credits.
This course will help students gain an understanding of the critical importance of budgeting and financing sports-related industries based on sound financial principles and methods of financial control. Students will learn how economic principles shape the major national industry of sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 484. Sport in Film. 3 Credits.
In the course, students will critically engage and interpret a series of popular sport-related films. By the end of the course, students will be able to write and think critically about the role that film in general, and sport-based films in particular, play in promoting and challenging dominant perceptions of gender, sexuality, nationalism, race, social class, and ability.

HSES 485. Sport Communication. 3 Credits.
This course examines the complex and evolving field of sport communication including personal, organizational, and external perspectives of sport communication. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 486. Sport Marketing. 3 Credits.
This course is intended to provide undergraduate students with basic knowledge and competencies in definitions of marketing and sport marketing, understanding the unique aspects of sport marketing, marketing planning process, consumer demographics, and psychographics, the marketing mix, segmentation and target marketing, marketing proposal preparation, sponsorship, endorsement, merchandising, fundraising, marketing goals and objectives, sport consumer and consumer behavior, industry segmentation, special events, ticket sales and their use in promotion, the role of the media, television marketing ratings and shares and venue and event marketing. The proposed content of this course will address each of these expectations. Prerequisite: Admission to the Sport Management major or minor and completion of HSES 289.

HSES 487. Personnel Management in Sport. 3 Credits.
This course provides students with an overview of the requisite communication skills and concepts of leadership and management as they relate to sport managers. Students will learn how leadership and management practitioners, utilizing effective communication techniques, shape successful sport organizations. Additional emphasis will be placed on building and nurturing relationships with people as a key to effective management. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 488. Pre-Internship Seminar. 1 Credits.
This course will prepare students for their actual semester-long Internship experience. Students will be provided with background information on available internship sites to assist in their site-selection decision. Students will learn about different management styles they may encounter, the traits and characteristics of effective and productive employees, common rules of the workplace and internship experiences of previous HSES Interns. Prerequisite: All HSES students must be in final semester prior to Internship.

HSES 489. Health and Human Sexuality. 3 Credits.
The course is designed to encompass the various components of human sexuality as well as to demonstrate applicable teaching techniques for sex education. Included in the content of the course are: human sexual response, sexually transmitted diseases, family planning, sex roles, rape, sexual preferences, and topics such as sexuality and the handicapped, sexuality and the mass media, and sexuality and the church. Teaching techniques such as values clarification, non-verbal communications, role playing, tape recordings, and problem solving are demonstrated with appropriate topics.

HSES 490. Issues in Intercollegiate Athletics. 3 Credits.
Intercollegiate athletics is a multi-billion-dollar industry. Because of the high stakes now associated with intercollegiate college athletics, the complexity of issues within athletics have grown as well. This course provides students with an understanding of the operation and decision-making process in intercollegiate athletics. Students will explore subjects such as NCAA compliance, legal aspects of college sport, and financial implications of decisions made within athletics. Prerequisite: Admission to the major or minor in sport management.

HSES 497. Independent Study. 1-3 Credits.
Only one enrollment permitted each semester; a maximum of six hours will apply toward the bachelor's degree. This course cannot be taken as a substitute for a required course. Prerequisite: Recommendation of advisor and consent of instructor and department chairperson.

HSES 499. Internship in Sport Management. 2-16 Credits.
A full-time work experience in the sport industry (40 hours per week). This experience is actual work in a sport management setting in which management practices are applied. Student interns are directed and evaluated by a faculty member with appropriate supervision by an on-site professional. Student interns must keep an accurate accounting of hours with a performance work diary. Grades/credit for the internship are determined by a faculty member with input from the on-site supervisor. Prerequisite: Completion of all Sport Management coursework. Admission to the Sport Management Internship program.

HSES 500. Student Teaching in Physical Education. 14 Credits.
A supervised teaching experience in an approved school settings, teaching physical education for a minimum of 15 weeks at the elementary (Grades PK-5) and secondary (Grades 6-12) levels. Prerequisite: PE Plus advisor approval required.

HSES 501. Seminar in Teaching Physical Education. 2 Credits.
Student teachers will receive instruction in the completion of a teacher work sample required for teacher licensure in the state of Kansas. They will also be prepared to enter the job market through advisement on resume writing, interviewing skills and online portfolio development. Prerequisite: PE Plus advisor approval required.

HSES 502. Camp Leadership and Counseling. 2 Credits.
Involves a complete study of the organization and administration of the various types of camps. It is designed to familiarize the student with camp leadership responsibilities; the development of the camp, the program involving camp crafts, outdoor cookery, hikes and outings, singing, and simple guidance of the individual camper. Prerequisite: General psychology plus three hours in sociology.

HSES 515. Assessment of Motor Development and Motor Control of Exceptional Children. 3 Credits.
Standardized motor assessment tools appropriate for use with exceptional children with motor difficulty will be critiqued and practiced. A battery of tests to measure developmental lag or structural deviation will be selected.
and administered to determine the motor control of exceptional children and the results will be interpreted. Prerequisite: Six hours of physical education course work.

HSES 528. Techniques of Athletic Training - I Lower Extremity. 3 Credits.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity, abdomen, and thorax, as well as the study of common illnesses/diseases that affect the physically active. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic-related pathological conditions, will be discussed. Prerequisite: HSES 528 Techniques of Athletic Training - I Lower Extremity.

HSES 529. Techniques of Athletic Training - II Upper Extremity. 3 Credits.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problem as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: HSES 528 Techniques of Athletic Training - I Lower Extremity.

HSES 578. Health Internship Seminar. 2 Credits.
Students enrolled in the internship will learn how to analyze professional health environments, examine intervention programs, and understand models used to develop health-based programs. Discussions surrounding the internship experience will be facilitated by the health education faculty. Topics will relate to all phases of the internship experience. The intent of this course is to better prepare the student for entering the health profession. Discussions will be held on conflict resolution in the workplace, professional development, professional behavior, and etiquette. Prerequisite: Concurrent enrollment in HSES 580 Internship in Health.

HSES 580. Internship in: ______. 2-16 Credits.
A supervised internship experience in an approved setting. The specific type of internship experience and the credits for that particular experience will be outlined in the appropriate program of the student. Prerequisite: Admission to a HSES Internship Program.

HSES 581. Athletic Training Practicum I: Recognition and Evaluation. 4 Credits.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness recognition and evaluation during their clinical and field experience. Specific skills addressed in HSES 528 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to the Athletic Training program. Concurrent enrollment in HSES 528.

HSES 582. Athletic Training Practicum II: Management and Treatment. 4 Credits.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness evaluation, and the management and treatment of athletic injuries through a variety of therapeutic modalities during their clinical and field experience. Specific skills addressed in HSES 529 and HSES 654 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 581 and concurrent enrollment in HSES 529 and HSES 654.

HSES 583. Athletic Training Practicum III: Rehabilitation. 4 Credits.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury rehabilitation/reconditioning through a variety of therapeutic exercise techniques during their clinical and field experience. Specific skills addressed in HSES 656 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 582, concurrent enrollment in HSES 655.

HSES 584. Athletic Training Practicum IV: Senior Sport Experience. 4 Credits.
This course provides a culminating practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply administrative and management skills obtained in HSES 658. This course is intended to allow the Senior student more freedom and responsibility in decision making regarding the health care of an athletic team. Prerequisite: HSES 583, concurrent enrollment in HSES 658.

HSES 586. Special Course: ______. 1-5 Credits.
A special course of study to explore current trends and issues in health and physical education - primarily for undergraduates.

HSES 605. Administering Health Related Programs. 3 Credits.
This course will consist of an analysis of administration as it relates to both school and community health programs. The focus will be on administrative models and techniques used to establish and maintain sound health programs in school and community settings. Prerequisite: Six hours of health education or consent of instructor.

HSES 671. Applied Biomechanics. 3 Credits.
This course will examine the qualitative biomechanical analysis of human movement directed towards the goals of performance improvement and injury prevention and rehabilitation. Specifically, this course will provide students with a basis knowledge of the biomechanical foundations of human movement, the knowledge and skills necessary to complete a systematic analysis and evaluation of human motor performance, and the ability to determine and provide interventions that are likely to improve movement in athletic, clinical, educational, and work environments. Prerequisite: A course in human anatomy, admission to the HSES Teacher Certification Program or consent of instructor.

HSES 714. Motor Development During Growth. 3 Credits.
Motor development in childhood and adolescence and its relationship to physical growth. Factors influencing motor learning and development will be explored. This course provides basic understanding of the neuromuscular changes and abilities of children and adolescents. Prerequisite: A course in kinesiology and anatomy.

HSES 715. Understanding Research in HSES. 3 Credits.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course
provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional work before being fully prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. (This course fulfills the requirement of a research methods course in the first 12 hours of graduate study.) Prerequisite: Must be an admitted HSES graduate student.

HSES 730. Advanced Concepts in Nutrition. 3 Credits.
A study of the nutritional factors that affect health at all ages. Specific nutritional needs and effects of deficiency states on health will also be addressed. The course will also include the physiological and biochemical mechanisms involved in the use of nutrients for human growth and development as well as the production of energy through the metabolic process. Prerequisite: HSES 330 or equivalent experience and permission of instructor.

HSES 771. Internship in Exercise Science. 6 Credits.
A supervised internship experience in an approved exercise science setting. Students will gain experience through a hands-on approach via clinical and/or research settings. The specific type of internship experience will be agreed upon by the student and their academic advisor. Prerequisite: Successful completion of at least 24 graduate credit hours.

HSES 777. Practicum in Health Education and Wellness Promotion. 1-3 Credits.
This course is designed to provide practical community health experiences in health education and wellness promotion, including: assessment, planning, implementation, and program evaluation. With approval of the instructor, students may choose their practicum focus in any of the ten content areas of health: mental and emotional, family living, growth and development, nutrition, personal health, alcohol tobacco and other drugs, communicable and chronic diseases, injury prevention and safety, consumer health and environmental health. Prerequisite: Enrolled in graduate school and consent of the instructor.

HSES 779. Physiology of Functional Aging. 3 Credits.
The course has been designed to address issues and concepts relating to the biological aging process as a foundation for physical performance, general fitness, and health status. The biological concepts are applied to the human physiological aging process and the systems involved as well as the possible interventions that may effect that process. The several theories associated with physiological aging are also addressed as related to the physiological systems and current research that may impact the understanding of these theories. Prerequisite: A course in basic biology.

HSES 780. Internship in Teaching Physical Education: ____. 1-16 Credits.
A supervised internship experience leading to initial physical education teacher certification. The student assumes the total professional role as a teacher of physical education in an approved school setting.

HSES 795. Traditions and Principles in Health Education. 3 Credits.
This course is designed to explore the philosophy and principles which provide the foundation of health education as an academic discipline. Specific topics include: history of the profession, theories of health behavior and behavior change, principles of learning applied to health communications, health promotion practices, professional preparation, and the integration of philosophical and ethical ideals into program planning and implementation.

HSES 798. Special Course: _____. 1-5 Credits.
A special course of in-depth study exploring current trends and issues in health and physical education - primarily for undergraduates.

HSES 801. Sport Facilities. 3 Credits.
The purpose of this course is to study current developments and trends in the financing, programming, design, and construction of facilities for intercollegiate athletics and professional sports. Prerequisite: Admitted to graduate school. A course in the administration/management of sport or consent of the instructor.

HSES 803. Health Behavior Theory. 3 Credits.
Given that theories of health behavior drive research and practice in health education, the purpose of this course is to familiarize students with the major theories and planning models related to health behavior change. Particular focus will be applied to the role of theory in health promotion and critical analysis of the application of theory to guide research practices. Prerequisite: Health major or consent of the instructor.

HSES 804. Sport Psychology. 3 Credits.
This course is designed to introduce students to the current research and theoretical perspectives in the sport psychology literature. Specifically, students will gain a broad understanding of the three major areas of sport psychology: social psychology (e.g., motivation), performance enhancement (e.g., mental skills training), and psycho-physiology (e.g., impact of anxiety on performance). Prerequisite: Admission in the health program or consent of the instructor.

HSES 805. Laboratory Experiments and Analysis--Exercise Physiology. 3 Credits.
Students will learn the techniques of operating various types of laboratory equipment and will conduct small-scale lab experiments in areas such as respiration, circulation, metabolism, strength, neuromuscular function, cardiac function, and body composition. Special emphasis will be placed on laboratory techniques of assessing physical fitness. Prerequisite: A course in exercise physiology.

HSES 806. Stress Management. 3 Credits.
The long range objectives of this course are to assist students in gaining stress management knowledge; to help them to formulate improved perspectives on various stress management techniques; and consequently apply the developing constructs in their lives with a sense of purpose and self-responsibility. Prerequisite: Two courses in health education or consent of instructor.

HSES 807. Current Literature in Exercise Physiology. 2 Credits.
A wide range of topics from the exercise physiology literature will be discussed. Instructor and students will present reports to the group centered on current research findings with discussion aimed at application of these results to physical exercise and training. Prerequisite: A basic course in exercise physiology or consent of instructor.

HSES 808. Biomechanics of Human Movement. 3 Credits.
This course will examine the movements and the structure and function of human beings by means of the methods of mechanics. An emphasis will be placed on the two primary goals of biomechanics: performance improvement and injury prevention and rehabilitation. Topics to be covered include the kinematics and kinetics of human movement, muscle mechanics, bone and joint mechanics, and the biomechanics of musculoskeletal injury. Prerequisite: Courses in calculus, physics, anatomy, and biomechanics, or consent of instructor.

HSES 810. Advanced Exercise Physiology. 3 Credits.
An advanced study of the physiological and biomechanical aspects of muscular, cardiovascular, and respiratory function as the human is engaging in exercise. The topics of energy metabolism, hormones, and
nutrition as related to exercise also are presented. Prerequisite: A basic course in exercise physiology.

**HSES 812. Current Issues in Health. 3 Credits.**
This course is designed to review and discuss current issues in various health related areas. The focus will be on relevant issues and topics that are guiding and directing the health profession. The range of topics discussed will vary from popular literature to scientific research and cover such areas as health education, community health, and health over the lifespan. Students in the course will be expected to report, discuss, and interact with each other concerning the issues as they are reported. Prerequisite: A graduate course in health or consent of the instructor.

**HSES 814. Implementing Health Programs. 3 Credits.**
The purpose of this course is to explore planning models used for designing, implementing and managing health promotion programs. Students will be trained to develop objectives, assess determinants, select methods and strategies, pre-test program materials, and adopt and implement promotional plans. Problem based and community based learning experiences will be provided. Prerequisite: A health major or permission from the instructor.

**HSES 817. Practical Aspects of Aerobic and Resistance Training. 3 Credits.**
This course will be a discussion of various concepts related to aerobic and resistance training. By the end of the semester, the student should be able to demonstrate an understanding of information presented in this course by achieving satisfactory evaluations of presentations, papers, and an examination of the following topics: energy metabolism, general adaptations of aerobic and resistance training, exercise techniques for aerobic and resistance training, periodization of training, testing and evaluation of aerobic and resistance training performance, and exercise prescription for aerobic and resistance training. Prerequisite: Undergraduate course in exercise physiology or consent of instructor.

**HSES 818. Legal Aspects of Public Health Education. 3 Credits.**
This course is designed to enhance understanding of the variety of legal issues which affect health educators and their audiences. Specifically, this course will survey federal, state, and local public health laws and regulations which may prescribe health education content and the health educator's actions. Legislation will be analyzed and the practical impact of the health educator upon the legislative process will be emphasized. Prerequisite: A course in community health or consent of instructor.

**HSES 821. Behavior Modification in Health and Exercise. 3 Credits.**
This course will examine the behavioral principles that influence health and exercise practices. Theories of human behavior, reinforcement theory, and models of self-esteem will serve as the foundation for studying behavior change. Society influences will be strongly emphasized. Course topics will include exercise determinants, motivation, media representation, negative behaviors, self-efficacy, social support, and effective promotion strategies. Prerequisite: Admitted to Graduate School or consent of instructor.

**HSES 824. Epidemiology and Concepts of Disease Causation. 3 Credits.**
This course involves the study of the etiology and natural history of infectious and non-infectious diseases including vector control, host defenses and resistance, investigation of disease outbreaks, mental health and public health. The course deals with detailed analytic and descriptive epidemiology and their implications for improving our understanding of health and diseases; epidemiologic consequences of nuclear war and retrospective and prospective approaches in epidemiological research. Contemporary developmental methods for disease prevention will be critically reviewed. Prerequisite: HSES 573, or equivalent, or consent of instructor.

**HSES 825. Skeletal Muscle Physiology. 3 Credits.**
This course will provide the student with an in-depth study of the structure and development, contractile mechanics, and neuromuscular system as it relates to the skeletal musculature. Structure and Development - muscle fiber, motor neuron, neuromuscular junction, muscle receptors, muscle formation, development of muscle innervation. Putting Muscles to Work - ion channels, pumps, and binding proteins, axoplasmic transport, resting and action potentials, neuromuscular transmission, muscle contraction, motor units, exercise, muscle metabolism. The Adaptable Neuromuscular System - fatigue, loss of muscle innervation, recovery of muscle innervation, neurotrophism, disuse, muscle training, injury and repair, aging. Prerequisite: HSES 810 or equivalent.

**HSES 828. Sport Finance. 3 Credits.**
A study of the principles and applications of finance and economics in the sport industry. Strategic financial planning as a part of management responsibilities is highlighted. Prerequisite: Admitted to Graduate School.

**HSES 830. Socio-Cultural Dimensions of Sport. 3 Credits.**
Current literature concerning the impact of American social values and cultural patterns of sport and physical activity will be studied. Critiques of related research involving sport and social institutions, and socio-cultural groups in sport will be emphasized. Prerequisite: A course in Sociology of Sport or consent of instructor.

**HSES 831. Ethics in the Sport Industry. 3 Credits.**
This course is designed to help students learn to make morally reasoned decisions in various sport settings. This course will help prepare students to respond more responsibly when faced with challenging ethical dilemmas and guide them in learning to serve as role models for ethical conduct.

**HSES 832. Physical Education Instructional and Assessment Methods. 3 Credits.**
The study of research-based instructional and assessment methods appropriate for PK-12 physical education. Managerial, instructional, and supervisory skills will be developed. Traditional and alternative assessment tools will be discussed. Readings, observations (live and video), and practice teaching will prepare students to complete a practical experience and an action research project in a PK-12 school. Prerequisite: Admission to Graduate School.

**HSES 833. Public Health Aspects of Exercise. 3 Credits.**
This course describes the timeline for physiologic adaptations to long-term physical activity. It describes the effects of physical activity on chronic disease. It describes, from a population perspective, the effects of physical activity on the health of the nation. Prerequisite: 12 hours of HSES courses, or equivalent, or consent of instructor.

**HSES 836. Physical Education Curriculum Models. 3 Credits.**
An examination of the elements and processes of curriculum construction in physical education for elementary, secondary, and post-secondary institution, and the institutional and professional issues that affect these processes. A study of contemporary curricula structures in regard to planning, implementation, and evaluation of K-12 curricula and professional preparation curricula in physical education programs. Prerequisite: A course in physical education curriculum, or equivalent.

**HSES 840. Organizational Behavior in Sport. 3 Credits.**
This course utilizes a micro perspective to analyze the behavior and culture within sport organizations. Specifically, the student will study and learn how to apply management and leadership theories that have the potential to shape the work environment and will discuss how current topics in organizational behavior are particularly relevant to the sport
industry. Prerequisite: Admitted to Graduate School. Consent of the instructor.

**HSES 842. Sports Marketing. 3 Credits.**
This course helps students gain a deeper understanding of sport marketing by examining in-depth the sport marketing mix of product, price, place, and promotion as well as marketing research, marketing strategy, market segmentation, branding, sponsorships, licensing, venue and event marketing, public relations, and global sport marketing.

**HSES 850. Analysis Techniques for Health, Sport, and Exercise Sciences Laboratory and Field Data. 3 Credits.**
Techniques for analyzing data gathered in Health, Sport, and Exercise Sciences laboratories and field studies will be presented in this course. Techniques for the recording of raw data, appropriate organization of raw data, selection of test for analysis of data, use of computer software, and computer programming for analysis and reporting results of the data will also be included. Prerequisite: PRE 710, PRE 720, or PRE 725.

**HSES 866. Contemporary Trends in Elementary and Secondary Physical Education. 3 Credits.**
An in-depth study into the research and other forms of literature will be made to study and examine the latest trends in elementary and secondary school physical education. Games, activities, dances, and rhythms will be presented and discussed relative to developmental levels of students grades K-12. Prerequisite: A methods course in teaching physical education or consent of instructor.

**HSES 872. Exercise and the Cardiovascular System. 3 Credits.**
This course will be a discussion of various concepts specifically related to exercise and the cardiovascular system. By the end of the semester, the student should be able to demonstrate an understanding of the interaction of exercise and cardiovascular system by achieving satisfactory evaluations on examinations, abstracts, and classroom presentations. The following topics will be discussed as they relate specifically to exercise: homeostasis and cardiovascular transport mechanisms, basic structure and function; characteristics of cardiac cells; the heart as a pump; the peripheral vascular system; vascular control; venous return and cardiac output; regulation of arterial pressure; cardiovascular responses to stress; and cardiovascular function in pathological situations. Prerequisite: Undergraduate course in exercise physiology or consent of instructor.

**HSES 880. Internship in Sport Management. 1-10 Credits.**
This course will provide for supervised and directed experiences in selected sport management settings. The graduate advisor will schedule observations of the internship, as well as regular conferences with the student. Written summaries and evaluations of the internship will be prepared by the student, the agency supervisor, and the university graduate faculty member. Prerequisite: Admission to the Graduate Program in Sport Management.

**HSES 884. Legal Aspects of Sport. 3 Credits.**
This course is intended to introduce graduate students to the basic concepts of the American legal system and the application of them to intercollegiate and professional sports. Particular emphasis will be given to risk management and preventive law. Other topics include: governance issues in intercollegiate and professional sports, contract law, employment discrimination, labor relations and collective bargaining, agency law and athlete agents, regulation of participation in intercollegiate and high school athletics, sport facility and event issues, participant liability issues, product liability issues, premises and spectator liability, participant violence in sports, and intellectual property law. Prerequisite: Admission to graduate program in School of Education

**HSES 885. Sport Sponsorship. 3 Credits.**
The course provides a detailed examination of the relationship between sport and corporate sponsorship and strategies for selling sponsorship packages. Topics covered will include the theoretical rationale for sponsorship, creating and executing sponsorship agreements, determining the value of a sponsorship, evaluation of sponsorship activities, and techniques used to sell sponsorship packages.

**HSES 886. Sport Fundraising. 3 Credits.**
This course will serve three primary purposes. First is to provide the student with the ability to identify and explain important principles, models, guidelines, and challenges that come with managing sport fundraising projects. Next, this course will develop the skills necessary to be a successful sports fundraiser through comprehending the various methods woven throughout the book. Finally, this course will develop the ability to apply practical knowledge in an ethical and professional manner.

**HSES 889. Seminar in HSES. 3 Credits.**
This course is designed to provide a general research seminar learning experience for graduate students in HSES. In particular, students will learn about faculty research activities and interests from a variety of specialty areas both within KU and outside of KU. Through faculty and guest presentations, students will be exposed to a variety of design and methodologies used to conduct research in the specialty areas of HSES.

**HSES 892. Psychology of Physical Activity. 3 Credits.**
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, physical therapy). The course content includes a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects of individuals' participation in physical activity, and strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients/members. Prerequisite: Admission in the health program or consent of the instructor.

**HSES 897. Independent Study. 1-4 Credits.**
Prerequisite: Consent of advisor and instructor.

**HSES 898. Master's Project. 1-4 Credits.**
Graded on a satisfactory progress/limited progress/no progress basis.

**HSES 899. Master's Thesis. 1-6 Credits.**
Graded on a satisfactory progress/limited progress/no progress basis.

**HSES 905. Advanced Concepts in Health Education. 3 Credits.**
This course is designed as an in-depth study of the pedagogy of health education. It is concerned with the effects of various health education models, new materials, and innovative teaching techniques. The effectiveness of various media such as films, slides, transparencies, microcomputers, and assessment tools will be analyzed. Research concerning innovations in education will be investigated along with a study of future trends in the field. Timely issues of controversy about health education practices and the effectiveness of values clarification activities will also be discussed.

**HSES 910. Biochemistry of Exercise. 3 Credits.**
This course will include an in-depth examination of metabolic and endocrine principles as they relate to physical exercise and training. Specific topics will include: substrate utilization in exercise, metabolic controls, muscle biochemistry, body composition, nutritional aspects and hormonal influences in exercise. Both instructor and students will report on the most current literature relating to the topics. Prerequisite: Human biodynamics or a course in biochemistry.

**HSES 926. Grant and Research Proposal Writing. 3 Credits.**
This is a course for students to examine the sources and areas which provide financial support for research projects. The areas of study include types of research funding available on a local, state, and federal level, the elements and design of writing a proposal and strategies involved in securing financial support for research. A focus for the course will center upon preparing a research proposal for funding. Prerequisite: PRE 710.

HSES 940. Scientific Dimensions of Exercise and Health. 3 Credits.

This course has been designed to bring together the many scientific factors relating exercise and physical activity to health and human function. The course focuses on the interdisciplinarity nature of this relationship and reviews the physiological, sociological, psychological, and behavioral factors involved. Prerequisite: Fifteen hours of graduate level course work in health or physical education and admission to health or physical education doctoral program.

HSES 980. Advanced Topics: ______. 1-3 Credits.

A special course of study to meet current needs of education professionals -- primarily for post-master's level students.

HSES 981. Current Issues in Health and Physical Education. 3 Credits.

This course will explore the latest philosophical issues and controversies which are impacting the fields of health, physical education, and athletics. The student will explore the current and future ramifications of each issue and its potential effects on the profession. Prerequisite: Admission to the Health, Sport, and Exercise Sciences Doctoral Program.

HSES 990. Doctoral Seminar. 3 Credits.

This seminar based course will be designed to prepare the doctoral student for academic careers or careers in industry after they graduate. The topics covered will be promotion and tenure procedures and expectations, including but not limited to teaching, responsible conduct of research, professional ethics, historical ethical issues, evaluation of ethical dilemmas, and service expectations at research intensive institutions, regional comprehensive institutions and small liberal arts colleges. Industry career options will be discussed and guest speakers from various disciplines will be brought in to discuss options and expectations with this career path. Prerequisite: Doctoral student or permission of the instructor.

HSES 995. Field Experience in: ______. 1-5 Credits.

Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

HSES 996. College Teaching Experience in: ______. 3 Credits.

To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate’s committee.

HSES 997. Individual Study. 1-4 Credits.

Prerequisite: Prior graduate course work in the area of study and consent of instructor.

HSES 999. Doctoral Dissertation. 1-15 Credits.

Graded on a satisfactory progress/limited progress/no progress basis.
Bachelor of Science in Education Degree Requirements

Primary responsibility for meeting graduation requirements rests with the student.

- Complete an approved program with a minimum of 120 credit hours of course work. At least 30 hours must be taken in residence.
- A 2.75 minimum grade-point average for all academic coursework, including transfer hours.
- Minimum grades in some specific designated Physical Education Plus courses.
- Other general regulations of the School and University, including KU Core Goal requirements.
- Successful completion of student teaching and/or internship.

Requirements to begin student teaching and/or internship:

- A minimum overall grade-point average of 2.75 with no grade lower than a C in any course in professional education.
- All program requirements except student teaching and internship must be completed before student teaching and internship.
- Continued demonstration throughout the program of professional dispositions as evaluated by program faculty each semester.

Additional Graduation requirements for Community Health

- Students presenting current certification in lieu of HSES 248 must take an additional two hours of course credit. Acceptable certifications: American Red Cross courses – Standard First Aid with CPR/AED OR Aid – Responding to Emergencies with CPR/AED.

Kansas Licensure Requirements for Physical Education Plus

- Passing score on the Kansas Performance Teaching Portfolio (KPTP).
- Passing score on the Principles of Learning and Teaching Examination and Praxis content examination(s).
- Completion of Bachelor of Science in Education degree – see above.

Please note: Each state has its own licensure requirements. Being eligible for a license in Kansas does not ensure that the applicant is eligible for licensure in other states.

Physical Education Plus Teacher Licensure Program (PK–12)

Admission requirements

Students can be admitted into the PE Plus program as freshman if they are admitted to KU and declare PE Plus as their major.

Students will be considered for transfer into the PE Plus program (from another institution or academic program) if they are admitted to KU, declare PE Plus as their major, and receive advisor approval verifying that they have met the following criteria:

- A GPA of at least 2.75 from a post-secondary institution or other academic program, no test scores required or regardless of test score submitted AND

- Transfer grades of "C-" or above. See an SOEHS advisor for course substitutions

Transition points (Advisor approval required)

- Transition Point #1: Progression to Professional Block 1 requires that all Pre-Professional coursework is completed with a minimum cumulative GPA of 2.75. Must consult with an SOEHS advisor to select a Plus option before entering the Professional Blocks (final 60 credit hours).
- Transition Point #2: Progression to Professional Block 4 requires that all coursework is completed with a minimum cumulative GPA of 2.75.

GRADUATION REQUIREMENTS

- All courses must be completed for graduation (at least 120 hrs.).
- A cumulative GPA of 2.75 is required for graduation.

PRE-PROFESSIONAL COURSES (Must complete with 2.75 GPA for transition to Professional Blocks)

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>ENGL 101</td>
<td>Composition (or exemption, must be a total of 6 hours of composition) 1</td>
<td>3</td>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (must be a total of 6 hours of composition) 1</td>
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<tr>
<td>MATH 101</td>
<td>College Algebra: _____ 1</td>
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<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
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<td>MATH 105</td>
<td>Introductory Quantitative Reasoning (or a math class above MATH 105) 1</td>
<td>3</td>
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<td>COMS 130</td>
<td>Speaker-Audience Communication 1</td>
<td>3</td>
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<td>BIOL 100</td>
<td>Principles of Biology</td>
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<td>&amp; BIOL 102</td>
<td>Principles of Biology Laboratory</td>
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<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
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<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
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<td>SOC 104</td>
<td>Elements of Sociology</td>
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<td>HSES 108</td>
<td>Basic Skill Instruction in: _____ (Fitness)</td>
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<td>HSES 108</td>
<td>Basic Skill Instruction in: _____ (Fitness)</td>
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<td>HSES 201</td>
<td>Team Sports 2</td>
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<td>HSES 202</td>
<td>Individual and Dual Sports 2</td>
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<td>HSES 214</td>
<td>Physical Education Activities for Elementary School Children 2</td>
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<td>HSES 244</td>
<td>Introduction to Physical Education and Sport Studies 2</td>
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<td>HSES 248</td>
<td>First Aid (or current certification)</td>
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<td>HSES 260</td>
<td>Personal and Community Health 2</td>
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<td>Elective (as necessary)</td>
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Select one Humanities Elective to meet KU CORE Goal 3H & Teacher Licensure Non-Western Requirement

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<td>Arabic and Islamic Studies</td>
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<tr>
<td>AAAS 103</td>
<td>Introduction to Africa</td>
</tr>
<tr>
<td>AAAS 105</td>
<td>Introduction to African History</td>
</tr>
<tr>
<td>AAAS 160</td>
<td>Introduction to West African History</td>
</tr>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience</td>
</tr>
<tr>
<td>EALC 105</td>
<td>Asian Religions</td>
</tr>
<tr>
<td>HIST 104</td>
<td>Introduction to African History</td>
</tr>
<tr>
<td>HA 166</td>
<td>The Visual Arts of East Asia</td>
</tr>
<tr>
<td>HIST 122</td>
<td>Colonial Latin America, Honors</td>
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</tbody>
</table>
HIST 160  Introduction to West African History
REL 106  Asian Religions

Select one Social Science/Global Awareness Elective to meet KU CORE Goal 4.2

AAAS 102  Arabic and Islamic Studies
AMS 100  Introduction to American Studies
AMS 332  The United States in Global Context
ANTH 100  General Anthropology
ANTH 106  Introductory Linguistics
ANTH 108  Introduction to Cultural Anthropology
ANTH 160  The Varieties of Human Experience
ANTH 301  Anthropology Through Films
GEOG 100  World Regional Geography
GEOG 102  People, Place, and Society
LAC 100  Latin American Culture and Society
LAC 332  Language and Society in Latin America
LING 106  Introductory Linguistics
LING 110  Language and Mind
REES 110  Understanding Russia and Eastern Europe
POL 150  Introduction to Comparative Politics
POL 170  Introduction to International Politics
SOC 130  Comparative Societies
SOC 332  The United States in Global Context

Total Hours 52-56

1  Must have a grade of a "C" or higher.
2  Must have a grade of "B-" or higher.

Professional Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 359</td>
<td>Literacy in the Content Areas</td>
<td>1</td>
</tr>
<tr>
<td>ELPS 250</td>
<td>Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>HSES 210</td>
<td>Instruction and Analysis in Swimming</td>
<td>1</td>
</tr>
<tr>
<td>HSES 269</td>
<td>Introduction to Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>HSES 302</td>
<td>Practicum in Adaptive Physical Education for PK-12 Students</td>
<td>2</td>
</tr>
<tr>
<td>HSES 315</td>
<td>Health and Fitness Technology</td>
<td>2</td>
</tr>
<tr>
<td>HSES 320</td>
<td>Methods of Teaching Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>HSES 340</td>
<td>Instructional Strategies in Motor Development</td>
<td>2</td>
</tr>
<tr>
<td>HSES 358</td>
<td>Creative Movement and Dance Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>HSES 369</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 410</td>
<td>Program Design in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>HSES 440</td>
<td>Applied Sport and Performance Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 500</td>
<td>Student Teaching in Physical Education</td>
<td>14</td>
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<tr>
<td>HSES 501</td>
<td>Seminar in Teaching Physical Education</td>
<td>2</td>
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<tr>
<td>SPED 326</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
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Total Hours 51

PE Plus Option - Select One of the following

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<thead>
<tr>
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<tr>
<td>Health (PK-12) Option</td>
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<tr>
<td>ABSC 310</td>
<td>Building Healthy Communities</td>
<td>3</td>
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<tr>
<td>HSES 308</td>
<td>Drugs and Diseases in Society</td>
<td>3</td>
</tr>
<tr>
<td>HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>HSES 467</td>
<td>Introduction to Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HSES 468</td>
<td>Methods and Materials in Health Education</td>
<td>3</td>
</tr>
<tr>
<td>HSES 489</td>
<td>Health and Human Sexuality</td>
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<tr>
<td>Middle-level Mathematics (5-8) Option</td>
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<tr>
<td>C&amp;T 360</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 366</td>
<td>Classroom Interactions in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109</td>
<td>Mathematics for Elementary School Teachers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 110</td>
<td>Mathematics for Elementary School Teachers</td>
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</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>3</td>
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<tr>
<td>MATH 116</td>
<td>Calculus II</td>
<td>3</td>
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<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
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<table>
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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>Middle-level Science (5-8) Options</td>
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<tr>
<td>C&amp;T 360</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 366</td>
<td>Classroom Interactions in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td>5</td>
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<tr>
<td>EVRN 304</td>
<td>Environmental Conservation</td>
<td>3</td>
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<tr>
<td>or EVRN 336</td>
<td>Ethics, Ideas and Nature</td>
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<tr>
<td>GEOL 101 &amp; GEOL 103</td>
<td>The Way The Earth Works and Geology Fundamentals Laboratory</td>
<td>5</td>
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<tr>
<td>History of Science Course</td>
<td>3</td>
<td></td>
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<tr>
<td>Introductory Physics Course</td>
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<th>Hours</th>
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<tr>
<td>English (5-8 or 6-12) Option 6-8 credits can be earned through Study Abroad</td>
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<tr>
<td>C&amp;T 448</td>
<td>Reading and Writing Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 210</td>
<td>Introduction to Poetry</td>
<td></td>
</tr>
<tr>
<td>or ENGL 211</td>
<td>Introduction to the Drama</td>
<td></td>
</tr>
<tr>
<td>ENGL 312</td>
<td>Major British Writers to 1800</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 314</td>
<td>Major British Writers after 1800</td>
<td></td>
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<tr>
<td>ENGL 320</td>
<td>American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 322</td>
<td>American Literature II</td>
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<tr>
<td>ENGL 351</td>
<td>Fiction Writing I</td>
<td>3</td>
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<tr>
<td>or ENGL 352</td>
<td>Poetry Writing I</td>
<td></td>
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<tr>
<td>or ENGL 353</td>
<td>Screenwriting I</td>
<td></td>
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<tr>
<td>or ENGL 354</td>
<td>Playwriting I</td>
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<tr>
<td>or ENGL 355</td>
<td>Nonfiction Writing I</td>
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<tr>
<td>or ENGL 362</td>
<td>Foundations of Technical Writing</td>
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<tr>
<td>ENGL 359</td>
<td>English Grammar</td>
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<tr>
<td>HUM 304</td>
<td>World Literature I</td>
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</table>
or HUM 308  World Literature II
or HUM 312  World Literature III

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>COMS 210</td>
<td>Introduction to Organizational and Professional Communication</td>
<td>3</td>
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<tr>
<td>COMS 230</td>
<td>Fundamentals of Debate</td>
<td>3</td>
</tr>
<tr>
<td>COMS 320</td>
<td>Communication on the Internet</td>
<td>3</td>
</tr>
<tr>
<td>or COMS 335</td>
<td>Mass Media and Politics</td>
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<tr>
<td>COMS 330</td>
<td>Effective Business Communication</td>
<td>3</td>
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<tr>
<td>COMS 331</td>
<td>Persuasive Speaking</td>
<td>3</td>
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<tr>
<td>or other COMS elective</td>
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<tbody>
<tr>
<td>PSYC 200</td>
<td>Research Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 318</td>
<td>Cognitive Psychology</td>
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<td>PSYC 350</td>
<td>Psychological Disorders</td>
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<td>PSYC 360</td>
<td>Social Psychology</td>
<td>3</td>
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<tr>
<td>PSYC 370</td>
<td>Behavioral Neuroscience</td>
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<tr>
<td>PSYC 333</td>
<td>Child Development</td>
<td>3</td>
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<tr>
<td>or EPSY 305</td>
<td>Development and Learning of the Child</td>
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<tr>
<td>or EPSY 306</td>
<td>Development and Learning of the Adolescent</td>
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<th>Code</th>
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<tbody>
<tr>
<td>HSES 289</td>
<td>Introduction to Sport Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES 380</td>
<td>Sociology of Sport</td>
<td>3</td>
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<tr>
<td>HSES 483</td>
<td>Sport Finance and Economics</td>
<td>3</td>
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<tr>
<td>HSES 486</td>
<td>Sport Marketing</td>
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<td>HSES 487</td>
<td>Personnel Management in Sport</td>
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<td>Select any 2 of the following:</td>
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<tr>
<td>HSES 381</td>
<td>Sport Ethics</td>
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<tr>
<td>HSES 382</td>
<td>Sport Facilities and Event Management</td>
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<tr>
<td>HSES 384</td>
<td>Sport Law</td>
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<td>HSES 484</td>
<td>Sport in Film</td>
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<tr>
<td>HSES 485</td>
<td>Sport Communication</td>
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<td>HSES 598</td>
<td>Special Course: _____</td>
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<tbody>
<tr>
<td>ACCT 205</td>
<td>Survey of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
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<tr>
<td>IST 205</td>
<td>Survey of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 305</td>
<td>Survey of Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>or MGMT 310</td>
<td>Principles of Management</td>
<td></td>
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<tr>
<td>MKTG 305</td>
<td>Survey of Marketing</td>
<td>3</td>
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<tr>
<td>or MKTG 310</td>
<td>Marketing</td>
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<tr>
<td>FIN 305</td>
<td>Survey of Finance</td>
<td>3</td>
</tr>
<tr>
<td>or FIN 310</td>
<td>Finance</td>
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<tr>
<td>SCM 305</td>
<td>Survey of Decision Making in Business</td>
<td>3</td>
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<tr>
<td>or SCM 310</td>
<td>Management Science and Operations Management</td>
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PROFESSIONAL BLOCKS (All Pre-Professional courses must be completed with 2.75 GPA for transition to Professional Blocks.)

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Block 1:</td>
<td></td>
<td>Block 2:</td>
<td></td>
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<tr>
<td>HSES 269</td>
<td>3</td>
<td>C&amp;T 359</td>
<td>1</td>
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<tr>
<td>HSES 302</td>
<td>2</td>
<td>HSES 210 (or certification)</td>
<td>0-1</td>
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<tr>
<td>HSES 315</td>
<td>2</td>
<td>HSES 320</td>
<td>3</td>
</tr>
<tr>
<td>HSES 340</td>
<td>2</td>
<td>HSES 358</td>
<td>3</td>
</tr>
<tr>
<td>SPED 326</td>
<td>3</td>
<td>HSES 440</td>
<td>3</td>
</tr>
<tr>
<td>PE Plus Option</td>
<td>3</td>
<td>PE Plus Option</td>
<td>3</td>
</tr>
<tr>
<td>Block 1 Field Experience:</td>
<td></td>
<td>Block 2 Field Experience (optional): Practicum in second field</td>
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### Senior

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Block 3:</td>
<td></td>
<td>Block 4:</td>
<td></td>
</tr>
<tr>
<td>C&amp;T 235</td>
<td>3</td>
<td>Field Experience:</td>
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<tr>
<td>ELPS 250</td>
<td>3</td>
<td>HSES 500</td>
<td>14</td>
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<td>HSES 369</td>
<td>3</td>
<td>HSES 501</td>
<td>2</td>
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<td>HSES 410</td>
<td>3</td>
<td></td>
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<tr>
<td>PE Plus Option (as necessary)</td>
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<tr>
<td>Block 3 Field Experience:</td>
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<td>PE Teaching Practicum</td>
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Note: During Block 3, students are encouraged to take PLT and PE content exam (and 2nd teaching field if desired).

### Total Hours 59-60

1. A grade of "C" or higher is required.
2. 20 clock hours. Serve as a teaching aide for an adapted physical educator in a local district.
3. 10-30 clock hours. Advisor-approved.
4. 30 clock hours. Serve as a teaching aide in an elementary, middle, or junior high PE classroom.
5. Transition to Block 4 requires that all coursework is completed with a minimum cumulative GPA of 2.75. A cumulative GPA of 2.75 is required for graduation.

### Community Health Admission

**Admission Requirements:**

- Students can be admitted into the Community Health program as freshman if they are admitted to KU and declare Community Health as their major.
- Students will be considered for transfer into the Community Health program (from another institution or academic program) if they are admitted to KU, declare Community Health as their major, and receive advisor approval verifying that they have met the following criteria:
Graduation Requirements

- A GPA of at least 2.75 from a post-secondary institution or other academic program, no test scores required or regardless of test score submitted AND
- Transfer grades of "C-" or above. See an SOEHS advisor for details.

A cumulative GPA of 2.75 is required for graduation. All courses must be completed for graduation (at least 120 hours).

Program Requirements

1. Code   Title                                      Hours
   Admissions Requirements
   ENGL 101 Composition (or exemption) 3
   ENGL 102 Critical Reading and Writing 3
   MATH 101 College Algebra: 3
   OR a MATH course higher than MATH 101 (Excluding MATH 103, MATH 109 or MATH 110) 3
   COMS 130 Speaker-Audience Communication 3
   LDST 201 Introduction to Leadership 2
   PSYC 104 General Psychology 3
   or SOC 104 Elements of Sociology 3
   Any course meeting KU CORE 3: Arts & Humanities 3
   Any course meeting KU CORE 4: LO 1 (Diversity) 3
   BIOL 100 Principles of Biology 3
   BIOL 102 Principles of Biology Laboratory 1
   HSES 248 First Aid (or current certification) 2
   HSES 260 Personal and Community Health 3

   General Education Requirements can be taken prior to admission
   SOC 104 Elements of Sociology 3
   or PSYC 104 General Psychology 3
   COMS 246 Introduction to Intercultural Communication 3
   or COMS 342 Problem-Solving in Teams and Groups 3
   Social Science principal course meeting KU CORE goal 4: LO 2 (Global Awareness) 3
   BIOL 240 Fundamentals of Human Anatomy 3
   BIOL 246 Principles of Human Physiology 3
   JOUR 320 Stratcom I: Introduction to Strategic Communication 3
   PHIL 160 Introduction to Ethics 3

   Post-Admission Requirements can only be taken after admission and MUST be taken in the semester indicated in order to avoid an extended program timeline
   HSES 308 Drugs and Diseases in Society 3
   HSES 310 Research and Data Analysis in Health, Sport, and Exercise Sciences (Fall Senior) 3
   HSES 330 Principles of Nutrition and Health 3
   HSES 365 Peer Health Education (Fall Senior) 3
   HSES 385 Psychological Aspects of Exercise (Fall Junior) 3
   HSES 403 Health Behavior Theory (Fall Junior) 3
   HSES 418 Health Aspects of Aging (Fall Senior) 3
   HSES 466 Program Planning in Health Education (Spring Junior) 3

   Minor Programs 18-21
   Students are required to complete one of the following minor programs: African American Studies (18 hours); Applied Behavioral Sciences (18 hours); Environmental Studies (18-20 hours); Psychology (18 hours); Spanish (20 hours); Sociology (18 hours); Women, Gender, and Sexuality Studies (18-21 hours).
   The courses in these programs CANNOT be used to satisfy the social sciences/humanities pre-admission requirements.

   Total Hours 120-123

Bachelor of Science in Exercise Science & Sport Management

Bachelor of Science degrees are offered in two programs:

- Exercise Science
- Sport Management

The Exercise Science program at the University of Kansas prepares students for a variety of career paths after graduation, including admission to most physical therapy schools. Graduates may also work in agencies that dispense health- and fitness-related programs, such as commercial or private health and fitness centers, hospital exercise and cardiac rehabilitation programs, and corporate fitness centers or apply for graduate study in exercise physiology. It also serves as a foundation for graduate-level work in health sciences, such as nursing, chiropractic, medicine (physician assistant, medical doctor, etc.), physical/occupational therapy or dietetics. The program combines rigorous coursework in the sciences with exercise science classes such as biomechanics, exercise biochemistry and neuromuscular exercise physiology.
The Sport Management program at the University of Kansas builds on general education and introductory courses through nine core courses and an 18-semester hour minor in business, psychology, or journalism. Students complete courses in sociology of sport, sport ethics, sport facilities and event management, sport law, sport fundraising and sponsorship, sport finance and economics, sport communication, sport marketing, and personnel management. The culminating experience is a semester-long internship working in a student-selected area of sport management. This degree program prepares graduates for entry-level positions in intercollegiate athletics, professional sports, recreational programs, and the fitness industry.

Successful applicants to the HSES undergraduate programs must demonstrate academic competency through the completion of admission coursework.

An Admission Committee made up of program faculty make admission decisions based on the completion of admission courses and a minimum grade point average of 2.75.

**Application Deadlines:**

Early February for fall or mid-September for spring admission.

The number of admissions is limited in the following majors:

- Exercise Science
- Sport Management

For all programs, not all students who meet the minimum requirements are admitted. Transfer students are also subject to these enrollment policies.

**Minimum Requirements**

**Sport Management:**

Incoming freshmen will be admitted into the program upon admission to KU with sport management declared as their major if they meet the following criteria:

- Minimum score of 24 (ACT) or 1160 (SAT) AND minimum of 3.0 high school GPA - OR -
- Minimum 3.5 high school GPA - OR -
- Minimum score of 28 (ACT).

Incoming freshmen who do not meet these requirements can petition using the same process used by KU:

- A formal letter of appeal explaining extenuating circumstances that contributed to their previous academic experience, the reason the student believes they will be successful at KU and any other information that they would like the committee to know about them.
- A letter of recommendation written by someone that can address the student’s academic abilities.

Current KU and transfer students (once admitted to KU) may apply for admission to the exercise science program in Lawrence twice a year (early Feb. for fall or mid-Sept. for spring).

- Cumulative and transfer GPA of at least 2.75.

Students that do not meet the requirements above can petition using the same process used by KU:

- A formal letter of appeal explaining extenuating circumstances that contributed to their previous academic experience, why the student believes they will be successful at KU, and any other information that they would like the committee to know about them.
- A letter of recommendation written by someone that can address the student’s academic abilities.

Prospective Exercise Science and Sport Management students should consult an advisor early in the first year to ensure fulfillment of admission requirements and to plan efficient programs of study.

For information about initial admission to KU, visit the Office of Admissions (https://admissions.ku.edu/), Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Primary responsibility for meeting graduation requirements rests with the student.

- Complete an approved program with a minimum of 120 credit hours of course work. At least 30 hours must be taken in residence.
- A 2.75 minimum grade-point average for all academic coursework, including transfer hours.
- Other general regulations of the School and University, including KU Core Goal requirements.
- Successful completion of internship or approved electives.

Requirements to begin internship:

- A minimum overall grade-point average of 2.75.
- All program requirements must be completed before internship.

**B.S. in Exercise Science**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (or exemption)</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Requirements**
Program Course Requirements

HSES 305  Methods of Strength Training and Conditioning  3
HSES 310  Research and Data Analysis in Health, Sport, and Exercise Sciences  3
HSES 350  Care and Prevention of Athletic Injuries  3
HSES 369  Kinesiology  3
HSES 372  Exercise Physiology  3
HSES 375  Neuromuscular Exercise Physiology and Motor Control  3
HSES 470  Biomechanics  3
HSES 473  Clinical Fitness Evaluation Techniques  3
HSES 474  Exercise Biochemistry  3
HSES 480  Physical Activity and Exercise Management Individuals with Disabilities  3

Select one of the following:

BIOL 100  Principles of Biology  3
& BIOL 102  and Principles of Biology Laboratory  1
BIOL 150  Principles of Molecular and Cellular Biology  3
BIOL 240  Fundamentals of Human Anatomy (BIOL 241 is also required for graduation)  3
BIOL 246  Principles of Human Physiology (BIOL 247 is also required for graduation)  3
HSES 269  Introduction to Exercise Science  3
COMS 130  Speaker-Audience Communication  1  3
PHIL 160  Introduction to Ethics  3
or PHIL 676  Medical Ethics: Life and Death Issues  3

Select one of the following:

MATH 103  Trigonometry  1.6  2
BIOL 241  Human Anatomy Observation Laboratory  2
BIOL 247  Principles of Human Physiology Laboratory  2
HSES 330  Principles of Nutrition and Health  3
CHEM 130  General Chemistry I  5
CHEM 135  General Chemistry II  5
PHSX 114  College Physics I  4
PHSX 115  College Physics II  4

Select one of the following:

BIOL 200  Basic Microbiology  3
& BIOL 203  and Introductory Microbiology Laboratory  3
BIOL 400  Fundamentals of Microbiology  3
& BIOL 402  and Fundamentals of Microbiology Laboratory  3

Elective: Any course meeting KU CORE Goal 3: Arts & Humanities  3
Elective: Any course meeting KU CORE Goal 4: Learning Objective 1 (Diversity)  3
Elective: Any course meeting KU CORE Goal 4: Learning Objective 2 (Global Awareness)  3

Select 18 credit hours from the following list of electives, minors, or certificate programs

HSES 300  Study Abroad Topics in: _____ (1-3)
HSES 306  Principles of Personal Training (3)  4
HSES 307  Tactical Strength and Conditioning (3)  4
HSES 331  Sport and Exercise Nutrition (3)  4
HSES 335  Clinical Field Experience (1-6)
HSES 370  Health and Pathophysiology (3)  4
HSES 371  Medical Terminology for Health Professionals (3)  4
HSES 418  Health Aspects of Aging (3)  3
HSES 440  Applied Sport and Performance Psychology (3)  3
HSES 453  Communicable and Degenerative Diseases (3)  3
HSES 475  Undergraduate Research in Health, Sport, and Exercise Sciences (1-6)
HSES 489  Health and Human Sexuality (3)  3
HSES 497  Independent Study (1-3)
HSES 580  Internship in: _____ (Exercise Science) (15)
HSES 598  Special Course: _____ (1-5)
AAAS 203  Culture and Health  3
AAAS 204  Culture and Health, Honors  3
ABSC 160  Introduction to Child Behavior and Development (3)
GEOG 201  Culture and Health  3
GEOG 202  Culture and Health, Honors  3
GIST 210  Culture and Health  3
GIST 211  Culture and Health, Honors  3
BIOL 350  Principles of Genetics (4)
BIOL 503  Immunology (3)
BIOL 504  Immunology Laboratory (2)
BIOL 600  Introductory Biochemistry, Lectures (4)
BIOL 601  Principles of Biochemistry Laboratory (2)
BIOL 636  Biochemistry I (4)
CHEM 330  Organic Chemistry I (3)
CHEM 331  Organic Chemistry I Laboratory (2)
CHEM 335  Organic Chemistry II (3)
CHEM 336  Organic Chemistry II Laboratory (2)
CLSX 332  Medical Terminology: Greek and Latin Roots  3
HEIM 230  Medical Terminology  3
MATH 365  Elementary Statistics (3)
PSYC 333  Child Development (3)
PSYC 350  Psychological Disorders (3)
SOC 104  Elements of Sociology (3)  3
SOC 304  Principles of Sociology (3)  4
SOC 424  Sociology of Health and Medicine (3)
SPAN 326  Spanish for Health Care Workers (3)

A maximum of 6 credit hours of foreign language courses can be counted as required electives credit  7

Sport Management Minor (18 hrs.)  8

HSES 289  Introduction to Sport Management (3) (Pre- or co-requisite to completion of Sport Management minor)

Required coursework

HSES 380  Sociology of Sport (3)
HSES 483  Sport Finance and Economics (3)
HSES 486  Sport Marketing (3)
HSES 487  Personnel Management in Sport (3)
Select two of the following:
HSES 384  Sport Law (3)
or HSES 388  Sport Ethics
or HSES 389  Sport Facilities and Event Management
or HSES 488  Sport in Film
or HSES 489  Sport Communication
or HSES 591  Special Course: _____

Healthcare Management Minor (18 hrs.) 5
HEIM 415  Healthcare Delivery Systems (3)
HEIM 420  Legal Aspects of Healthcare (3)
HEIM 540  Health Information Systems (3)
HEIM 567  Quality and Performance Improvement in Healthcare (3)
HEIM 570  Introduction to Healthcare Management (3)
HEIM 585  Healthcare Reimbursement (3) 5

Business Minor (18 hrs.) 5
ACCT 205  Survey of Accounting (3)
or ACCT 200  Fundamentals of Financial Accounting
FIN 305  Survey of Finance (3)
or FIN 310  Finance
or FIN 311  Finance, Honors
IST 205  Survey of Information Systems (3)
MGMT 305  Survey of Management and Leadership (3)
or MGMT 310  Principles of Management
or MGMT 311  Principles of Management, Honors
MKTG 305  Survey of Marketing (3)
or MKTG 310  Marketing
or MKTG 311  Marketing, Honors
SCM 305  Survey of Decision Making in Business (3)
or SCM 310  Management Science and Operations Management
or SCM 311  Management Science and Operations Management, Honors

Entrepreneurship Certificate (9 hrs.)
ENTR 301  Starting Your Own Business (3)
or ENTR 701  Entrepreneurship
ENTR 302  Financing Your Own Business (3)
or ENTR 702  Financing Your Own Business
ENTR 303  Marketing Your Own Business (3)
or ENTR 703  Marketing Your Own Business

Psychology Minor (18 hrs.) 5
PSYC 104  General Psychology (3) (Required for minor)
or PSYC 101  General Psychology, Honors
Choose 2 of the following required electives: (6)
PSYC 318  Cognitive Psychology (3)
or PSYC 311  Cognitive Psychology, Honors
PSYC 333  Child Development (3)
or PSYC 334  Child Development, Honors
PSYC 350  Psychological Disorders (3)
or PSYC 351  Psychological Disorders, Honors
PSYC 360  Social Psychology (3)
or PSYC 361  Social Psychology, Honors
PSYC 370  Behavioral Neuroscience (3)
or PSYC 371  Behavior Neuroscience, Honors
PSYC 375  Cognitive Neuroscience (3)
PSYC 380  Clinical Neuroscience (3)
or PSYC 381  Clinical Neuroscience, Honors

The remaining elective courses may include any undergraduate courses offered by the Department of Psychology in addition to the following: (9)
PSYC 480  Independent Study (1-5)
PSYC 481  Research Practicum (1-5)
PSYC 483  Undergraduate Internship in Psychology (1-3)
A maximum of 3 hours of PSYC 480 or PSYC 481 or PSYC 483, or any combination of these 3 courses totaling 3 hours may count toward the minor.

Public and Population Health Minor (18 hrs.) 4,5
Required Courses:
HSCI 340  Introduction to Public Health (3)
HSCI 440  Introduction to Epidemiology (3)
HSCI 441  Population Health (3)
HSCI 445  Introduction to Environmental Health (3)
Select One Elective Course:
HEIM 415  Healthcare Delivery Systems (3)
HEIM 420  Legal Aspects of Healthcare (3)
SOC 424  Sociology of Health and Medicine (3)
SOC 425  Sociology of Global Health (3)
Select One Statistics Course:
HEIM 575  Applied Statistics and Research Methods in Healthcare (3)
BIOS 704  Principles of Statistics in Public Health (3)

Public and Population Health Certificate (12 hrs.) 4,5
HSCI 340  Introduction to Public Health (3)
HSCI 440  Introduction to Epidemiology (3)
HSCI 441  Population Health (3)
HSCI 445  Introduction to Environmental Health (3)

Nutrition Minor (18 hrs.) 4,5
Required Courses:
HSCI 320  Principles of Nutrition (3)
or HSES 330  Principles of Nutrition and Health
HSCI 420  Nutrition Through the Life Cycle (3)
HSCI 421  Public Health Nutrition (3)
HSCI 422  Nutrition Assessment (3)
Select Two Elective Courses:
HSES 331  Sport and Exercise Nutrition (3)
HSCI 425  Nutrition Education (3)
HSCI 521  Advanced Nutrition and Metabolism (3)
HSCI 522  Advanced Sports Nutrition (3)

Nutrition Certificate (12 hrs.) 4,5
HSCI 320  Principles of Nutrition (3)
or HSES 330  Principles of Nutrition and Health
HSCI 420  Nutrition Through the Life Cycle (3)
B.S. in Sport Management

Admission Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (or higher excluding MATH 103, MATH 109, MATH 110)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or SOC 104Elements of Sociology</td>
<td>3</td>
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</tbody>
</table>

Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td></td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>4</td>
</tr>
<tr>
<td>&amp; BIOL 102</td>
<td>and Principles of Biology Laboratory</td>
<td></td>
</tr>
<tr>
<td>HSES 260</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HSES 289</td>
<td>Introduction to Sport Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES 299</td>
<td>Careers in Sport Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Any course meeting KU CORE goal 3: Arts &amp; Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Any course meeting KU CORE goal 4: Learning Objective 1 (Diversity)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Requirements (can be taken prior to admission)

Select FIVE Upper Division Electives: 9

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 484</td>
<td>Sport in Film</td>
</tr>
<tr>
<td>HSES 598</td>
<td>Special Course: _____</td>
</tr>
<tr>
<td>AMS 330</td>
<td>American Society</td>
</tr>
<tr>
<td>COMS 310</td>
<td>Advanced Organizational and Professional Communication</td>
</tr>
<tr>
<td>COMS 330</td>
<td>Effective Business Communication</td>
</tr>
<tr>
<td>COMS 335</td>
<td>Mass Media and Politics</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
</tr>
<tr>
<td>HSES 330</td>
<td>Principles of Nutrition and Health</td>
</tr>
<tr>
<td>HSES 489</td>
<td>Health and Human Sexuality</td>
</tr>
<tr>
<td>JMC 540</td>
<td>Sports, Media and Society</td>
</tr>
<tr>
<td>MGMT 310</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>MGMT 470</td>
<td>Leadership in Business Organizations</td>
</tr>
</tbody>
</table>

Any course meeting KU CORE goal 1: LO 1 (Critical Thinking) 3
Any course meeting KU CORE goal 4: LO 2 (Global Awareness) 3

Post-Admission Requirements can only be taken after admission

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 380</td>
<td>Sociology of Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 381</td>
<td>Sport Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HSES 382</td>
<td>Sport Facilities and Event Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES 384</td>
<td>Sport Law</td>
<td>3</td>
</tr>
<tr>
<td>HSES 481</td>
<td>Sport Fundraising and Sponsorship</td>
<td>3</td>
</tr>
<tr>
<td>HSES 483</td>
<td>Sport Finance and Economics</td>
<td>3</td>
</tr>
<tr>
<td>HSES 485</td>
<td>Sport Communication</td>
<td>3</td>
</tr>
<tr>
<td>HSES 486</td>
<td>Sport Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HSES 487</td>
<td>Personnel Management in Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 488</td>
<td>Pre-Internship Seminar</td>
<td>1</td>
</tr>
<tr>
<td>HSES 499</td>
<td>Internship in Sport Management</td>
<td>15</td>
</tr>
</tbody>
</table>

Students must complete at least one of the three minors below (Business, Journalism, and Psychology)

Business Minor Courses can be taken prior to admission

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 205</td>
<td>Survey of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>IST 205</td>
<td>Survey of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIN 305</td>
<td>Survey of Finance</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 305</td>
<td>Survey of Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>SC 305</td>
<td>Survey of Decision Making in Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Journalism Minor Courses can be taken prior to admission

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 104</td>
<td>Words at Work: Writing Essentials</td>
<td>3</td>
</tr>
<tr>
<td>JMC 300</td>
<td>Visual Storytelling</td>
<td>2</td>
</tr>
<tr>
<td>JMC 302</td>
<td>Information Exploration</td>
<td>3</td>
</tr>
<tr>
<td>JMC 304</td>
<td>Media Writing for Audiences</td>
<td>3</td>
</tr>
<tr>
<td>JMC 408</td>
<td>Media Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>JMC Tech Tools Course (211-215)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Psychology Minor Courses can be taken prior to admission

General Psychology (3), Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 105</td>
<td>General Psychology, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

Psychology Required Electives (6), Satisfied by 2 courses chosen from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 318</td>
<td>Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 319</td>
<td>Cognitive Psychology, Honors</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 333</td>
<td>Child Development</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 334</td>
<td>Child Development, Honors</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 350</td>
<td>Psychological Disorders</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 355</td>
<td>Psychological Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>
### Courses

**HSES 104. Physical Activity in: ______. 0.5-1 Credits.**
An accurate description of the activity or activities will be given in the Schedule of Classes. Graded on a satisfactory/unsatisfactory basis.

**HSES 108. Basic Skill Instruction in: ______. 0.5-2 Credits.**
(An accurate description of the activity or activities will be given in the Timetable.)

**HSES 110. Intermediate Skill Instruction in: ______. 0.5-2 Credits.**
(An accurate description of the activity or activities will be given in the Timetable.)

**HSES 112. Advanced Skill Instruction in: ______. 0.5-2 Credits.**
(An accurate description of the activity or activities will be given in the Timetable.)

**HSES 200. Coaching Certification for Youth Sports. 2 Credits.**
This course will examine theories, practices, methods and techniques used to coach youth sports. Emphasis will be upon training, conditioning, sports psychology, nutrition, organization and management as prescribed by the National Federation of Interscholastic Coaches’ Education Program. Students will have opportunity to receive coaching certification. Prerequisite: Open to physical education majors, or by consent of instructor. Students must pass the National Federation of Interscholastic Coaches’ Education Program (NFICEP) examination before exiting the course.

**HSES 201. Team Sports. 2 Credits.**
This course will deal with Soccer, Touch Football, Basketball, Softball, and Volleyball. Practice in construction of lesson plans and unit plans, skill performance and peer teaching practicum are emphasized in each of the areas of team sports. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and knowledge of the activities. Open to HSES majors and minors, or by consent of instructor.

**HSES 202. Individual and Dual Sports. 2 Credits.**
Instruction and analysis in individual sports such as track and field, bowling or archery, and dual sports such as tennis, badminton or handball. Development of sport skills and rule knowledge are emphasized. Prerequisite: Basic fitness and knowledge of the activities. Prerequisite: Open to pre-HSES and HSES majors, or by consent of instructor.

**HSES 204. Gymnastics. 2 Credits.**
Instruction and analysis in the eleven gymnastics events for men and women. Skill performance, spotting and teaching techniques, lesson and unit plan construction, and teaching practicum constitute the basic focus of this course. Class meets three days per week with one hour being a laboratory session. Prerequisite: Basic fitness and gymnastics/tumbling experience. Open to HSES majors and minors, or by consent of instructor.

**HSES 210. Instruction and Analysis in Swimming. 1 Credits.**
Study of the skills to be included in the instruction of swimming and the analysis of skill performance involved. Presentation of instructional techniques and practice in construction of learning experiences are included.

**HSES 214. Physical Education Activities for Elementary School Children. 3 Credits.**
This course will introduce the student to a variety of physical education activities that are appropriate for children in grades K-6. Age appropriate activities demonstrated in this course include: individual and group games, self testing games, stunts and tumbling experiences, physical fitness, modified sports, and movement exploration. Class participation will be expected for all students. Prerequisite: Open to pre-HPE and HPE majors.

**HSES 218. Lifeguard Training. 2 Credits.**
The course involves American Red Cross certification in lifeguarding which includes rescue techniques and safety procedures. It also includes first aid and CPR certifications. Each student will be asked to identify common hazards associated with various types of aquatic facilities and develop skills necessary to recognize a person in a distress or drowning situation and to effectively rescue that person. This course will help each student to understand the lifeguard/employer and lifeguard/patron relationship as well as provide explanations, demonstrations, practice and review of the rescue skills essential for lifeguards. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor.

**HSES 220. Officiating of: ______. 1 Credits.**
A study of the rules and techniques of officiating. Students will officiate during laboratory sessions. The activities offered in officiating are: basketball, football, gymnastics, softball, swimming, track and field, and volleyball. Prerequisite: Basic competency in the sport to be officiated, or consent of instructor.

**HSES 222. Water Safety Instruction. 2 Credits.**
This course is designed to train instructor candidates to teach American Red Cross Swimming and Water Safety courses. Through practice teaching sessions, students will plan and organize skill development utilizing the various educational methods and approaches applicable to swimming and water safety instruction. Students will also learn the correct swimming styles taught by the Red Cross. Prerequisite: HSES 112 Advanced Skill Instruction in Swimming or consent of instructor.

**HSES 224. Lifeguard Training Instructor. 2 Credits.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 351</td>
<td>Psychological Disorders, Honors</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 360</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 361</td>
<td>Social Psychology, Honors</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 370</td>
<td>Behavioral Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 371</td>
<td>Behavior Neuroscience, Honors</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 375</td>
<td>Cognitive Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 380</td>
<td>Clinical Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 381</td>
<td>Clinical Neuroscience, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

Psychology Minor Remaining Electives (9). The remaining elective courses may include any undergraduate courses offered by the Department of Psychology including:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 480</td>
<td>Independent Study</td>
<td>1-5</td>
</tr>
<tr>
<td>PSYC 481</td>
<td>Research Practicum</td>
<td>1-5</td>
</tr>
<tr>
<td>PSYC 483</td>
<td>Undergraduate Internship in Psychology</td>
<td>1-3</td>
</tr>
</tbody>
</table>

A maximum of 3 hours of PSYC 480 or PSYC 481 or PSYC 483, or any combination of these 3 courses totaling 3 hours may count toward the minor.

1. Must have a grade of “C” or better.
2. Internships must be completed at an approved site within a 50-mile radius of Lawrence. Students who have a 3.0 or greater cumulative GPA may petition to complete the internship at an approved site beyond the 50-mile radius. All coursework must be completed before the internship is approved. A 2.75 cumulative GPA is required before one can apply for internship. Internship students are required to be present at the internship site a minimum of 40 hours per week for 15 weeks - NO EXCEPTIONS.
This course is designed as a lecture/laboratory course, meeting for one hour three days per week. Each instructor candidate (student) will have an opportunity for skill development necessary to instruct American Red Cross Lifeguard Training courses. Through practice teaching sessions, emphasis will be placed on enforcing safety precautions, identifying errors, providing effective instruction, and skills correction. After successful completion of this course, the student will be certified to instruct the following American Red Cross Aquatic courses: (1) lifeguard training, (2) waterfront lifeguarding, (3) CPR for professional rescue, and (4) community first aid. Prerequisite: HSES 218 or lifeguard training.

HSES 236. Practicum in: ______. 1-3 Credits.
A description of the activities offered will be provided in the Timetable. Prerequisite: Consent of instructor.

HSES 240. The Coaching of Football. 2 Credits.
A complete study of the theoretical aspects of the fundamentals of football. Study of defensive and offensive tactics for each position. Prerequisite: Sophomore standing.

HSES 244. Introduction to Physical Education and Sport Studies. 3 Credits.
The study of the history, foundational concepts, and current principles of physical education and sport programs.

HSES 248. First Aid. 2 Credits.
This course is designed to teach emergency treatment of injuries, wounds, hemorrhage, burns, and poisoning. Emphasis is placed on the techniques of rescue breathing, CPR, and emergency bandaging. American Red Cross certification is included.

HSES 250. Introduction to Athletic Training. 3 Credits.
Introduction to the health profession of Athletic Training. Course content includes; risk management, pathology, emergency management, musculoskeletal, and general medical conditions of the injured athlete. Prerequisite: Concurrent enrollment in HSES 251.

HSES 252. The Coaching of Basketball. 2 Credits.
Theory of basketball, including methods of teaching fundamentals; individual and team offense and defense; various styles of play and methods of coaching. Prerequisite: Sophomore standing.

HSES 256. Personal and Community Health. 3 Credits.
Emphasis on healthful and intelligent living and the application of the fundamental principles of health.

HSES 258. Life Skills Training for Intercollegiate Athletics. 2 Credits.
This course will focus on issues surrounding drug use, testing, and prevention in sports and will incorporate life skills training in the areas of career transition, stress and time management, performance enhancement, strategic learning skills, and the dynamics of communication and leadership.

HSES 264. The Coaching of Individual Sports. 2 Credits.
An analysis of coaching techniques and study of materials for the coaching of gymnastics, swimming, golf, tennis, and wrestling.

HSES 269. Introduction to Exercise Science. 3 Credits.
A study of the various components of physical fitness and the wellness and the implications for developing programs to promote good health and fitness. Lectures and laboratory sessions will be centered on practical knowledge and experiences designed to help individuals enhance their own health, as well as develop sound programs for others. The topics discussed include cardiovascular fitness, body composition, muscular strength, flexibility, evaluation of fitness components, training program design, nutrition, weight management, and facts and fallacies of nutrition and fitness.

HSES 289. Introduction to Sport Management. 3 Credits.
This course provides an overview of the field of sport management including the principles of leadership and management and the fundamentals of personnel management, financial management, marketing, strategic planning, sport ethics, sport law, time management, stress management, facility management, and event management applied to sport settings.

HSES 290. Safety Education. 3 Credits.
A survey of safety problems as they exist in society today, with emphasis on preventive, corrective, and compensatory procedures.

HSES 299. Careers in Sport Management. 3 Credits.
In this course, students will learn about the professional world of sport management. Specifically, those enrolled will be exposed to the multitude of career paths in the sporting world. Additionally, students will learn numerous internship and job search skills such as political skill, networking, and personal branding.

HSES 300. Study Abroad Topics in: ______. 1-5 Credits.
A course designed to enhance international experience in topic areas related to health, sport, and exercise sciences at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Permission of the department.

HSES 302. Practicum in Adaptive Physical Education for PK-12 Students. 2 Credits.
Emphasis will be on instructional techniques that are used for the inclusion of all students in physical education learning experiences. Students will develop an understanding of how to deliver physical education activities that may be part of an individual education program. A practicum experience in a public school adaptive physical education setting will be required. Prerequisite: PE Plus advisor approval required.

HSES 305. Methods of Strength Training and Conditioning. 3 Credits.
This course will provide the students with the scientific principles and the hands-on experience to develop resistance exercise and related conditioning programs for a wide range of populations, including those focusing on general fitness, therapeutic rehabilitation and sport performance. Prerequisite: Anatomy, physiology, and admission to the Exercise Science undergraduate program, or permission of instructor.

HSES 306. Principles of Personal Training. 3 Credits.
Designed to prepare individuals who are interested in becoming certified personal trainers (CPT) through the National Strength and Conditioning Association, or to enhance their own training goals. Instruction is provided describing basic exercise physiology as well as the principles of developing a personal training regimen for a typical gym trainee. Course experiences will reinforce training principles and teach the basic skills necessary for certification. Prerequisite: Accepted to School of Education or instructor permission.

HSES 307. Tactical Strength and Conditioning. 3 Credits.
This course will provide students with methods and techniques associated with assessing, programming, and training tactical-based athletes
and professionals. Tactical athletes include military, law enforcement, firefighter, protective services, rescue, and other emergency personnel. Students will apply scientific knowledge to develop training programs to improve performance outcomes, decrease injury, evaluate nutritional strategies, and implement relevant and safe strength and conditioning programs. This course will be designed to prepare students to take the Tactical Strength and Conditioning Facilitator (TSAC-F) certification examination proposed by the National Strength and Conditioning Association (NSCA).

HSES 308. Drugs and Diseases in Society. 3 Credits.
This course is an overview of human disease processes as well as legal and illegal use of drugs and narcotics for treatment or recreational purposes. Both communicable and degenerative diseases will be covered with regards to prevention, transmission, effects, management, and treatment. Legal drugs and illegal drugs will be discussed with regards to their treatment or abuse potential, legislative issues, and consumer education. Reflective thinking will be used to formulate improved perspectives on the roles of drugs and diseases in society. Prerequisite: Admission to Community Health Program or consent of instructor.

HSES 310. Research and Data Analysis in Health, Sport, and Exercise Sciences. 3 Credits.
This course provides formal instruction in the areas of test administration, general statistics, and basic research design. Emphasis will be placed upon the interpretation of statistical data, evaluation of data, and basic methodologies utilized in health, sport, and exercise sciences research. Data collection, analysis, and evaluation will be an integral part of the class.

HSES 315. Health and Fitness Technology. 2 Credits.
The course will prepare physical education majors to use technology effectively to enhance teaching and learning. Students will explore the use of technology appropriate for communication, organization, instruction, and assessment in health and physical education classrooms. Prerequisite: PE Plus advisor approval required.

HSES 320. Methods of Teaching Physical Education. 3 Credits.
This course provides a systematic approach to the development of effective teaching skills in physical education. Students receive practical and field experiences that enable them to observe and practice managerial, instructional, and interpersonal skills necessary to produce student learning in K-12 physical education classrooms. Prerequisite: PE Plus advisor approval required.

HSES 330. Principles of Nutrition and Health. 3 Credits.
This course will provide an introduction to the basic principles of nutrition, with an emphasis on application of these principles to improve overall health. Topics include: guidelines for a balanced diet, index of nutritional quality, energy requirements and balance, weight management and obesity, nutritional quackery, sports nutrition, nutrition for children and elderly, and eating disorders.

HSES 331. Sport and Exercise Nutrition. 3 Credits.
Provides a basic understanding of the influence of nutrition on sport and exercise performance. Nutrition for sport performance, including hydration, nutrient timing strategies for various athletes, and use and regulation of ergogenic aids and nutritional supplements will be covered to apply this knowledge to develop a critical understanding of the nutritional and practical dietary needs of individuals participating in sport and exercise. Prerequisite: Accepted to School of Education or instructor permission

HSES 335. Clinical Field Experience. 1-3 Credits.
Clinical Field Experience is designed to allow students who plan to pursue clinical careers the opportunity to observe and assist (as appropriate) in the evaluation and/or treatment of patients by licensed clinicians in fields such as medicine, physical therapy, and cardiac rehabilitation. Only one enrollment permitted each semester. A maximum of six hours will apply towards the bachelor's degree, or a maximum of three credit hours will apply towards the bachelor's degree if the student subsequently enrolls in HSES 580 (Internship). Prerequisite: Admittance to the Community Health or Exercise Science undergraduate degree program in HSES.

HSES 340. Instructional Strategies in Motor Development. 2 Credits.
This course is designed to provide students with an examination of current theories of motor development throughout the life cycle. Emphasis is placed on content regarding the development of fundamental motor skills, physical growth and development, and assessment. Prerequisite: PE Plus advisor approval required.

HSES 341. Instructional Strategies in Physical Education for Elementary Classroom Teachers. 1 Credits.
The application of child growth and development principles to physical education. The use of materials as related to a sequential physical education curriculum in the elementary school will also be included. Prerequisite: Prior or concurrent enrollment in C&T 322 or equivalent.

HSES 350. Care and Prevention of Athletic Injuries. 3 Credits.
The introductory study of the prevention, immediate care, and treatment of athletic related injuries and illnesses. This course is designed to cover the basic fundamentals of injury/illness recognition as well as discuss the various strategies for the prevention and care of injuries to the physically active. Prerequisite: Successful completion of Human Anatomy (BIOL 240) or equivalent course and proof of current first aid certification (i.e. American Red Cross) or successful completion of First Aid course (HSES 248).

HSES 351. Foundations of Athletic Training. 1 Credits.
This course is designed to introduce the practical skills and psychomotor clinical competencies of the beginning student-athlete trainer. Emphasis will be placed on basic athletic training procedures including but not limited to preventative taping, bracing, and padding techniques as well as various other procedures and techniques related to the prevention, care, and management of athletic related injuries/illnesses. Open to Athletic Training majors only. Prerequisite: Human Anatomy, First Aid, concurrent enrollment in HSES 350.

HSES 352. Therapeutic Modalities. 3 Credits.
This course is the study of therapeutic modalities utilized in treatment and rehabilitation of athletic injuries. Prerequisite: HSES 250 or the transfer equivalent. Admission to the Athletic Training Program.

HSES 353. Athletic Training Practicum I. 2 Credits.
The first in a sequence of six practical/clinical experiences for the Athletic Training Student, under the direct supervision of a Preceptor. Prerequisite: Admission to Athletic Training program, HSES 250 and HSES 251.

HSES 354. Lower Extremity Evaluation. 3 Credits.
This course teaches a systematic approach to athletic injury evaluation of the lower extremity, thorax, and abdomen. Prerequisite: Admission to the Athletic Training Program, HSES 353, concurrent enrollment HSES 355.

HSES 355. Athletic Training Practicum II. 2 Credits.
This course is the second in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission to Athletic Training program and concurrent enrollment in HSES 354.

HSES 358. Creative Movement and Dance Appreciation. 3 Credits.
Students will experience the following types of dance: creative movement, ballroom dance, folk, square, and line dance. An appreciation for dance will be developed through the study of the pioneers of dance and the critique of local dance performances. Prerequisite: PE Plus advisor approval required.

HSES 365. Peer Health Education. 3 Credits.
The course is designed to train students in peer health education, as peer health educators in college settings, and as trainers, training adolescents in community health settings for grades 6-12 peer health education. Subject content and teaching methodologies will be emphasized in the ten content areas of health with special emphasis on alcohol, drugs, tobacco, stress reduction, mental health and human sexuality. Prerequisite: HSES 260 or instructor consent.

HSES 369. Kinesiology. 3 Credits.
This course is designed primarily for students in the field of exercise science who already have taken an introductory course in human anatomy and who need a more detailed exposure to concepts of functional movement anatomy. This course will provide a detailed study of the skeletal and muscular systems to include identification of the origin, insertion, and action of the major muscles of the human body. Students will become proficient in the use of directional and movement terminology used to describe movement and be able to identify the plane/axis as well as the agonist and antagonist muscles involved in a movement. Prerequisite: A course in human anatomy, admission to School of Education.

HSES 370. Health and Pathophysiology. 3 Credits.
The course is designed to assist students in the development of a basic understanding of the anatomical structures and physiological processes that are central to the development of various diseases/disorders. Students will apply this knowledge to an evidence-based model for choosing and developing appropriate lifestyle and health-related interventions (e.g., exercise, nutrition, stress management), both for health enhancement and disease prevention. Prerequisite: BIOL 240 and BIOL 246; or admittance to HSES exercise science, community health, or athletic training programs.

HSES 371. Medical Terminology for Health Professionals. 3 Credits.
A study of medical terminology. This course will include: analysis of root words, prefixes and suffixes for understanding medical language; origin, modern usage and abbreviations.

HSES 372. Exercise Physiology. 3 Credits.
A fundamental study of the physiological adjustments that occur within the body during exercise. The presentation of this material is particularly oriented toward a basic understanding of the physiological systems as they are affected by the activity of a normal coaching or teaching situation. The physiological values of exercise are also stressed. Prerequisite: Three hours of physiology.

HSES 375. Neuromuscular Exercise Physiology and Motor Control. 3 Credits.
This course explores the control of human movement from an exercise neurophysiology perspective. Emphasis will be placed on understanding the interactions between the nervous system and muscular systems in the control of muscle force/power production and the control of movement under a variety of contexts. These contexts include responses and adaptations to exercise training, the aging process, and in a variety of neuromuscular disorders. Prerequisite: BIOL 240 and BIOL 246.

HSES 378. The Coaching of Volleyball. 2 Credits.
Theory of volleyball, including methods of teaching fundamentals, individual and team offense and defense. Various styles of play and methods of coaching. Efficient performance of the skills during game conditions will be emphasized.

HSES 379. The Coaching of Softball. 2 Credits.
Theory and fundamentals of coaching softball. Methods of coaching, as well as team offense, defense, and strategies will be stressed. Efficient performance of the skills during game conditions will be emphasized. Prerequisite: Consent of instructor.

HSES 380. Sociology of Sport. 3 Credits.
A survey of the current literature concerning the scope of sociology in sport, the interaction of people in sport, the social systems controlling sport, and the small group dynamics in sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 381. Sport Ethics. 3 Credits.
This course will help students develop their abilities to reason morally through an examination within competitive sports of ethical theories, moral values, intimidation, gamesmanship, and violence, eligibility, elimination, winning, commercialization, racial equity, performance-enhancing drugs, and technology. Students will develop a personal philosophy of sport and learn how to apply a principled decision-making process to issues in sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 382. Sport Facilities and Event Management. 3 Credits.
This course will provide students with a solid grasp of the fundamental skills in sport facility and event management and the knowledge base to apply those skills in a real world environment. Students will learn about planning, designing and financing the construction of new sport facilities, sport facility management of regular and special events, sporting event planning and game day operations. Prerequisite: Admission in the Sport Management major or minor and completion of HSES 289.

HSES 384. Sport Law. 3 Credits.
This course is intended to introduce undergraduate students to the major legal issues in amateur and professional sports including dispute resolution, tort law, contract law, constitutional law, statutory law, labor and antitrust law and intellectual law. Students will also learn about risk management, gender equity, the Americans with Disabilities Act and agency law and sports agents. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 385. Psychological Aspects of Exercise. 3 Credits.
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, and physical therapy/rehab). The course content will include a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects influencing individuals’ participation in physical activity, and an introduction to strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients. Prerequisite: Admission to the Community Health program or instructor consent.

HSES 390. The Coaching of Track and Field. 2 Credits.
Designed to acquaint the student with the fundamentals of track and field athletics.

HSES 395. Concepts in Health and Wellness. 3 Credits.
This is designed as an introductory course into the profession of School and Community Health Education. Regardless of a person’s areas of specialization in Health Education, there are commonalities shared by all of us who are charged with the responsibility of providing education about health. Course emphasis will focus on: defining health education; history of health education; roles and competencies of health educators; theoretical bases for the profession; planning, implementing,
administering, and evaluating health programs; settings for health education; future issues. Prerequisite: HSES 260.

**HSES 403. Health Behavior Theory. 3 Credits.**
This class will be an introduction to the primary models and theories used in health behavior research and health promotion practice. These models and theories undergird the development of successful health-related programs and interventions, and will help guide educators in the development of innovative and effective programming. The course will cover individual, interpersonal, community-level, and ecological theories, and students will have the opportunity to apply these theories to health behaviors of interest.

**HSES 410. Program Design in Physical Education. 3 Credits.**
The study of physical education curriculum models and extracurricular activities. Prerequisites: HSES 260, HSES 403, and concurrent enrollment in HSES 420. Corequisite: HSES 411 or HSES 412. This course will be a comprehensive examination of the factors involved in the selection of health and fitness products and services. Topics of discussion will be: protection laws and services, fraudulent practices and products, consumerism, and traditional and alternative health care. There will also be an in-depth examination of how to assess and evaluate health-based products that are available to consumers. Prerequisite: Admission to the Community Health Program or consent of instructor.

**HSES 418. Health Aspects of Aging. 3 Credits.**
This course will consist of a Holistic Health approach to the various components of the aging process. Special emphasis will be placed on the demographic aspects of aging; normal aging changes and deviations in the aging process (pathophysiology); the relationship between mental and physical health, and the implications for the promotion of risk reduction and prevention principles that can effectively improve the quality of life for older individuals. Prerequisite: A course in personal and community health.

**HSES 434. Consumer Health. 3 Credits.**
This course will be a comprehensive examination of the factors involved in the selection of health products and services. Topics of discussion will be: protection laws and services, fraudulent practices and products, consumerism, and traditional and alternative health care. There will also be an in-depth examination of how to assess and evaluate health-based products that are available to consumers. Prerequisite: Admission to the Community Health Program or consent of instructor.

**HSES 440. Applied Sport and Performance Psychology. 3 Credits.**
This course will examine the psychological principles and techniques that are applied to improve sport performance and other fields of achievement (e.g., exercise and wellness, music, and academics). Special attention will be given to psychological aspects of injury and rehabilitation, psychological conditioning, psychological training methods, coaching philosophy, the social psychology of team members, and components of peak performances.

**HSES 453. Communicable and Degenerative Diseases. 3 Credits.**
This course is designed to introduce the student to the study of the basic concepts/principles of disease process. Special emphasis will be placed on the etiology, origin, symptoms, treatment, body defenses, primary prevention, host, agent, (microbes) and environmental factors affecting disease occurrence, prevention and control measures. Topical application of the fundamental concepts of microbiology in school/community health practice will be critically discussed. The natural history of disease and disease classification will be highlighted. Many disease topics (both communicable and chronic, degenerative diseases) will be discussed. Prerequisite: A course in personal and community health.

**HSES 455. Manual Therapy Techniques and Emergency Care Instructor Training. 3 Credits.**
The purpose of the course is to train students in a Manual Therapy Technique for use in the clinical setting. The course is also designed to certify students as instructors in American Red Cross First Aid, CPR and AED courses as well as instructors for the CPR/AED for the Healthcare Provider. Prerequisite: Completion of HSES 352, HSES 354, HSES 456 and HSES 459 or equivalency from an accredited Athletic Training Education Program or have current First Aid and CPR/AED for the Healthcare Provider certification.

**HSES 456. Upper Extremity Evaluation. 3 Credits.**
This course teaches a systematic approach to athletic injury evaluation of the upper extremity, head and spine. Prerequisite: Admission into the Athletic Training program, HSES 354, and HSES 355. Corequisite: HSES 457.

**HSES 457. Athletic Training Practicum III. 2 Credits.**
This course is third in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training Program and concurrent enrollment in HSES 456.

**HSES 458. General Medical/Pharmacology. 3 Credits.**
This course will cover general medical conditions/illnesses and over the counter, prescription, and illegal pharmacologic agents commonly encountered in physically active populations. The course will cover recognition of illnesses and diseases, immediate care and medical referral, basic principles of pharmacology, pharmacological agents used in the treatment of various pathologies, and other general medical and pharmacological topics encountered by athletic trainers. Prerequisite: Admission into the Athletic Training Program, HSES 459 and HSES 460.

**HSES 459. Rehabilitation. 3 Credits.**
This course is the study of rehabilitation principles and techniques used to safely return a physically active individual to their sport/ activity following injury. Prerequisite: Admission into the Athletic Training Program, HSES 456, and HSES 457.

**HSES 460. Athletic Training Practicum IV. 2 Credits.**
This course is the fourth in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training Program, HSES 457, and concurrent enrollment in HSES 459.

**HSES 461. Organization and Administration of Athletic Training. 3 Credits.**
This course examines the organizational and administrative aspects of the Athletic Training profession. Course content includes: program management, employment, budget, facility design, risk management, documentation and medical records, insurance, legal and practice regulations, prevention and health promotion, history, and organization of the profession. Prerequisite: HSES 459, HSES 460, and concurrent enrollment in HSES 462.

**HSES 462. Athletic Training Practicum V. 2 Credits.**
This course is the fifth in a sequence of six practicum/clinical experience courses for the athletic training student. Prerequisite: Admission into the Athletic Training Program and concurrent enrollment in HSES 461.

**HSES 463. Senior Capstone in Athletic Training. 2 Credits.**
This course is designed to allow senior Athletic Training Students to review previous content and prepare for the BOC certification exam as well as explore areas of professional development. Prerequisite: Admission into the Athletic Training program, HSES 561, and HSES 562.

**HSES 464. Athletic Training Practicum VI. 2 Credits.**
This course is the final practicum/clinical experience course for the athletic training student. Prerequisite: Admission into the Athletic Training program and concurrent enrollment in HSES 463.

**HSES 465. Program Assessment and Evaluation. 3 Credits.**
This course will offer an introduction and hands-on application of program assessment and evaluation techniques in health education. As health educators and program planners, we are required not only to develop innovative programs and interventions to address community- and school-based health concerns, but also to give evidence that our efforts are both adequate and effective. Successful program assessment and evaluation incorporate knowledge of basic research methods as well as the theoretical understanding of health behaviors.

**HSES 466. Program Planning in Health Education. 3 Credits.**
This course is designed to provide the students with an in-depth knowledge of proven health planning models that can be used for program development and intervention. Students will learn how to develop attainable program goals and objectives which will allow programs and interventions to evolve into useful forms of community based health education. Prerequisite: Students must be admitted to the School of Education and the Community Health Program.

**HSES 468. Methods and Materials in Health Education. 3 Credits.**
Emphasis is placed on the presentation and preparation of health topics along with the recommended resources and materials available. The teaching method is emphasized and student participation is stressed. Students will observe health teachers in the public schools and identify and discuss these methods as they relate to the methods present in the class. Prerequisite: Admission to HPE teacher certification program or consent of instructor.

**HSES 470. Biomechanics. 3 Credits.**
The course is designed to cover a basic understanding of the anatomical and mechanical principles of human movement. Areas covered will be joint and segmental movement, muscle actions, time-displacement motion description, forces causing or inhibiting motion, and stability. Special attention will be given to the application of the theoretical concepts in movement activities. Prerequisite: Anatomy, admission to the Exercise Science program, or permission of instructor.

**HSES 473. Clinical Fitness Evaluation Techniques. 3 Credits.**
This course will provide the student with the knowledge and skills to assess components of physical fitness in adults including cardiorespiratory fitness, body composition, strength, and flexibility. In addition, specific emphasis will be placed on the development of exercise and weight management prescriptions. Students completing the course will have the skills to take the Health Fitness Instructor Certification exam given by the American College of Sports Medicine. Prerequisite: Exercise physiology and research and data analysis in HSES or equivalents.

**HSES 474. Exercise Biochemistry. 3 Credits.**
This course will examine the processes that underlies the use and production of energy for exercise. Topics that will be explored include glycolysis and glycolysis in muscle, cellular oxidation of pyruvate, lipid metabolism, metabolism of proteins and amino acids, molecular biology, neural and endocrine control of metabolism, and local fatigue during exercise. Emphasis will be placed on carbohydrates, protein, and lipid metabolism and the acute and chronic effects that exercise has on these processes. Prerequisite: HSES 472.

**HSES 477. Undergraduate Research in Health, Sport, and Exercise Sciences. 1-3 Credits.**
The course is designed to allow students to collaborate on an active research project under the supervision of a faculty member in HSES. Only one enrollment permitted each semester. A maximum of six hours will apply towards the bachelor’s degree. Prerequisite: Enrollment by Instructor permission only. Successful completion of IRB training via the CITI training program in the KU eCompliance system.

**HSES 480. Physical Activity and Exercise Management Individuals with Disabilities. 3 Credits.**
An in-depth study of how physical activity and exercise can be a part of the treatment plan for people who have chronic disease or a disability. A variety of physical activity and exercise intervention programs and models will be presented and discussed, as well as protocols for baseline testing and post-treatment testing. A portion of this course will focus on how physical activity and exercise can prevent motor functioning deterioration in people who have a disability or limited functional movement. Prerequisite: Admission to the School of Education Exercise Science or Athletic Training programs and a course in human anatomy and physiology, or consent of instructor.

**HSES 481. Sport Fundraising and Sponsorship. 3 Credits.**
In this course, students will take an in-depth look at the sport fundraising and sponsorship realms. Specifically, students will focus on revenue-generating operations within sport organizations. Example topics include major gift fundraising, naming rights and other major sponsorships, annual funds, premium inventory, and trends in these evolving fields. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

**HSES 482. Drugs in Society. 3 Credits.**
This course is designed to provide an in-depth exposure to basic drug classification, pharmacological effects, causes of drug abuse to society, common treatment modalities, and effective prevention/intervention strategies. In addition, consumer issues related to drug use, drug legislation, and drug education programs for school and community implementation will be discussed. Prerequisite: A course in personal and community health or consent of instructor.

**HSES 483. Sport Finance and Economics. 3 Credits.**
This course will help students gain an understanding of the critical importance of budgeting and financing sports-related industries based on sound financial principles and methods of financial control. Students will learn how economic principles shape the major national industry of sport. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

**HSES 484. Sport in Film. 3 Credits.**
In the course, students will critically engage and interpret a series of popular sport-related films. By the end of the course, students will be able to write and think critically about the role that film in general, and sport-based films in particular, play in promoting and challenging dominant perceptions of gender, sexuality, nationalism, race, social class, and ability.

**HSES 485. Sport Communication. 3 Credits.**
This course examines the complex and evolving field of sport communication including personal, organizational, and external perspectives of sport communication. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

**HSES 486. Sport Marketing. 3 Credits.**
This course is intended to provide undergraduate students with basic knowledge and competencies in definitions of marketing and sport marketing, understanding the unique aspects of sport
marketing, marketing planning process, consumer demographics and psychographics, the marketing mix, segmentation and target marketing, marketing proposal preparation, sponsorship, endorsement, merchandising, fundraising, marketing goals and objectives, sport consumer and consumer behavior, industry segmentation, special events, ticket sales and their use in promotion, the role of the media, television marketing ratings and shares and venue and event marketing. The proposed content of this course will address each of these expectations. Prerequisite: Admission to the Sport Management major or minor and completion of HSES 289.

HSES 477. Personnel Management in Sport. 3 Credits.
This course provides students with an overview of the requisite communication skills and concepts of leadership and management as they relate to sport managers. Students will learn how leadership and management practitioners, utilizing effective communication techniques, shape successful sport organizations. Additional emphasis will be placed on building and nurturing relationships with people as a key to effective management. Prerequisite: Admission to Sport Management major or minor and completion of HSES 289.

HSES 478. Pre-Internship Seminar. 1 Credit.
This course will prepare students for their actual semester-long Internship experience. Students will be provided with background information on available internship sites to assist in their site-selection decision. Students will learn about different management styles they may encounter, the traits and characteristics of effective and productive employees, common rules of the workplace and internship experiences of previous HSES Interns. Prerequisite: All HSES students must be in final semester prior to Internship.

HSES 489. Health and Human Sexuality. 3 Credits.
The course is designed to encompass the various components of human sexuality as well as to demonstrate applicable teaching techniques for sex education. Included in the content of the course are: human sexual response, sexually transmitted diseases, family planning, sex roles, rape, sexual preferences, and topics such as sexuality and the handicapped, sexuality and the mass media, and sexuality and the church. Teaching techniques such as values clarification, non-verbal communications, role playing, tape recordings, and problem solving are demonstrated with appropriate topics.

HSES 490. Issues in Intercollegiate Athletics. 3 Credits.
Intercollegiate athletics is a multi-billion-dollar industry. Because of the high stakes now associated with intercollegiate college athletics, the complexity of issues within athletics have grown as well. This course provides students with an understanding of the operation and decision-making process in intercollegiate athletics. Students will explore subjects such as NCAA compliance, legal aspects of college sport, and financial implications of decisions made within athletics. Prerequisite: Admission to the major or minor in sport management.

HSES 497. Independent Study. 1-3 Credits.
Only one enrollment permitted each semester; a maximum of six hours will apply toward the bachelor's degree. This course cannot be taken as a substitute for a required course. Prerequisite: Recommendation of advisor and consent of instructor and department chairperson.

HSES 499. Internship in Sport Management. 2-16 Credits.
A full-time work experience in the sport industry (40 hours per week). This experience is actual work in a sport management setting in which management practices are applied. Student interns are directed and evaluated by a faculty member with appropriate supervision by an on-site professional. Student interns must keep an accurate accounting of hours with a performance work diary. Grades/credit for the internship are determined by a faculty member with input from the on-site supervisor. Prerequisite: Completion of all Sport Management coursework. Admission to the Sport Management Internship program.

HSES 500. Student Teaching in Physical Education. 14 Credits.
A supervised teaching experience in an approved school settings, teaching physical education for a minimum of 15 weeks at the elementary (Grades PK-5) and secondary (Grades 6-12) levels. Prerequisite: PE Plus advisor approval required.

HSES 501. Seminar in Teaching Physical Education. 2 Credits.
Student teachers will receive instruction in the completion of a teacher work sample required for teacher licensure in the state of Kansas. They will also be prepared to enter the job market through advisement on resume writing, interviewing skills and online portfolio development. Prerequisite: PE Plus advisor approval required.

HSES 502. Camp Leadership and Counseling. 2 Credits.
Involves a complete study of the organization and administration of the various types of camps. It is designed to familiarize the student with camp leadership responsibilities; the development of the camp, the program involving camp crafts, outdoor cookery, hikes and outings, singing, and simple guidance of the individual camper. Prerequisite: General psychology plus three hours in sociology.

HSES 515. Assessment of Motor Development and Motor Control of Exceptional Children. 3 Credits.
Standardized motor assessment tools appropriate for use with exceptional children with motor difficulty will be critiqued and practiced. A battery of tests to measure developmental lag or structural deviation will be selected and administered to determine the motor control of exceptional children and the results will be interpreted. Prerequisite: Six hours of physical education course work.

HSES 528. Techniques of Athletic Training - I Lower Extremity. 3 Credits.
This course provides a comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the lower extremity, abdomen, and thorax, as well as the study of common illnesses/diseases that affect the physically active. Procedures for reporting and evaluating injuries/illnesses will be discussed so that appropriate injury management and referral may take place. The etiological factors common to athletic injuries, as well as specific signs and symptoms of various athletic related pathological conditions, will be discussed. Prerequisite: Human Anatomy, Human Anatomy Lab, Care and Prevention of Athletic Injuries, and admission to the Athletic Training Program.

HSES 529. Techniques of Athletic Training - II Upper Extremity. 3 Credits.
The comprehensive study of the techniques used by the Athletic Trainer in regard to the assessment and evaluation of athletic injuries/illnesses of the upper extremity, head, and spine. Procedures for evaluating and reporting injuries/illnesses will be discussed as well as etiological factors and common signs/symptoms of various related pathological conditions. The purpose of this course is to prepare students with the skills necessary to accurately recognize the signs/symptoms of injuries and conditions in order to determine the nature and severity of the problem as well as establishing a proper care plan and medical referral when appropriate. Prerequisite: HSES 528 Techniques of Athletic Training - I Lower Extremity.

HSES 578. Health Internship Seminar. 2 Credits.
Students enrolled in the internship will learn how to analyze professional health environments, examine intervention programs, and understand models used to develop health based programs. Discussions surrounding the internship experience will be facilitated by the health education faculty.
Topics will relate to all phases of the internship experience. The intent of this course is to better prepare the student for entering the health profession. Discussions will be held on conflict resolution in the work place, professional development, professional behavior and etiquette. Prerequisite: Concurrent enrollment in HSES 580 Internship in Health.

HSES 580. Internship in: ______. 2-16 Credits.
A supervised internship experience in an approved setting. The specific type of internship experience and the credits for that particular experience will be outlined in the appropriate program of the student. Prerequisite: Admission to a HSES Internship Program.

HSES 581. Athletic Training Practicum I: Recognition and Evaluation. 4 Credits.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness recognition and evaluation during their clinical and field experience. Specific skills addressed in HSES 528 will be practiced, applied, and mastered during this experience. Prerequisite: Admission to the Athletic Training program. Concurrent enrollment in HSES 528.

HSES 582. Athletic Training Practicum II: Management and Treatment. 4 Credits.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury/illness recognition, evaluation, and management and treatment of athletic injuries through a variety of therapeutic modalities during their clinical and field experience. Specific skills addressed in HSES 529 and HSES 654 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 581 and concurrent enrollment in HSES 529 and HSES 654.

HSES 583. Athletic Training Practicum III: Rehabilitation. 4 Credits.
This course provides a practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills of injury rehabilitation/reconditioning through a variety of therapeutic exercise techniques during their clinical and field experience. Specific skills addressed in HSES 656 will be practiced, applied, and mastered during this experience. Prerequisite: HSES 582, concurrent enrollment in HSES 656.

HSES 584. Athletic Training Practicum IV: Senior Sport Experience. 4 Credits.
This course provides a culminating practical experience for the student-athletic trainer. Students gain experience through a hands-on approach via clinical settings and field experiences. Practical experiences are supervised by a Certified Athletic Trainer and provide opportunities for students to apply the knowledge and skills obtained during previous coursework as well as apply administrative and management skills obtained in HSES 658. This course is intended to allow the Senior student more freedom and responsibility in decision making regarding the health care of an athletic team. Prerequisite: HSES 583, concurrent enrollment in HSES 658.

HSES 598. Special Course: ______. 1-5 Credits.
A special course of study to explore current trends and issues in health and physical education - primarily for undergraduates.

HSES 605. Administrating Health Related Programs. 3 Credits.
This course will consist of an analysis of administration as it relates to both school and community health programs. The focus will be on administrative models and techniques used to establish and maintain sound health programs in school and community settings. Prerequisite: Six hours of health education or consent of instructor.

HSES 671. Applied Biomechanics. 3 Credits.
This course will examine the qualitative biomechanical analysis of human movement directed towards the goals of performance improvement and injury prevention and rehabilitation. Specifically, this course will provide students with a basis knowledge of the biomechanical foundations of human movement, the knowledge and skills necessary to complete a systematic analysis and evaluation of human motor performance, and the ability to determine and provide interventions that are likely to improve movement in athletic, clinical, educational, and work environments. Prerequisite: A course in human anatomy, admission to the HSES Teacher Certification Program or consent of instructor.

HSES 714. Motor Development During Growth. 3 Credits.
Motor development in childhood and adolescence and its relationship to physical growth. Factors influencing motor learning and development will be explored. This course provides basic understanding of the neuromuscular changes and abilities of children and adolescents. Prerequisite: A course in kinesiology and anatomy.

HSES 715. Understanding Research in HSES. 3 Credits.
This course introduces the concepts and skills involved in understanding and analyzing research in education and related areas. The course provides an overview of basic, general knowledge of various research methodologies. Students should expect to study much of this material in greater depth through additional work before being fully prepared to conduct independent research. However, this course should enhance their ability to locate, read, comprehend, and critically analyze research articles and reports. Topics in the course include quantitative and qualitative methods and designs, historical and descriptive research, and program evaluation. (This course fulfills the requirement of a research methods course in the first 12 hours of graduate study.) Prerequisite: Must be an admitted HSES graduate student.

HSES 730. Advanced Concepts in Nutrition. 3 Credits.
A study of the nutritional factors that affect health at all ages. Specific nutritional needs and effects of deficiency states on health will also be addressed. The course will also include the physiological and biochemical mechanisms involved in the use of nutrients for human growth and development as well as the production of energy through the metabolic process. Prerequisite: HSES 330 or equivalent experience and permission of instructor.

HSES 771. Internship in Exercise Science. 6 Credits.
A supervised internship experience in an approved exercise science setting. Students will gain experience through a hands-on approach via clinical and/or research settings. The specific type of internship experience will be agreed upon by the student and their academic advisor. Prerequisite: Successful completion of at least 24 graduate credit hours.

HSES 777. Practicum in Health Education and Wellness Promotion. 1-3 Credits.
This course is designed to provide practical community health experiences in health education and wellness promotion, including: assessment, planning, implementation and program evaluation. With approval of the instructor, students may choose their practicum focus in any of the ten content areas of health: mental and emotional, family living, growth and development, nutrition, personal health, alcohol tobacco and other drugs, communicable and chronic diseases, injury prevention and
safety, consumer health and environmental health. Prerequisite: Enrolled in graduate school and consent of the instructor.

**HSES 779. Physiology of Functional Aging. 3 Credits.**
The course has been designed to address issues and concepts relating to the biological aging process as a foundation for physical performance, general fitness, and health status. The biological concepts are applied to the human physiological aging process and the systems involved as well as the possible interventions that may effect that process. The several theories associated with physiological aging are also addressed as related to the physiological systems and current research that may impact the understanding of these theories. Prerequisite: A course in basic biology.

**HSES 780. Internship in Teaching Physical Education: _____ 1-16 Credits.**
A supervised internship experience leading to initial physical education teacher certification. The student assumes the total professional role as a teacher of physical education in an approved school setting.

**HSES 795. Traditions and Principles in Health Education. 3 Credits.**
This course is designed to explore the philosophy and principles which provide the foundation of health education as an academic discipline. Specific topics include: history of the profession, theories of health behavior and behavior change, principles of learning applied to health communications, health promotion practices, professional preparation, and the integration of philosophical and ethical ideals into program planning and implementation.

**HSES 798. Special Course: _____ 1-5 Credits.**
A special course of in-depth study exploring current trends and issues in health and physical education - primarily for undergraduates.

**HSES 801. Sport Facilities. 3 Credits.**
The purpose of this course is to study current developments and trends in the financing, programming, design, and construction of facilities for intercollegiate athletics and professional sports. Prerequisite: Admitted to graduate school. A course in the administration/management of sport or consent of the instructor.

**HSES 803. Health Behavior Theory. 3 Credits.**
Given that theories of health behavior drive research and practice in health education, the purpose of this course is to familiarize students with the major theories and planning models related to health behavior change. Particular focus will be applied to the role of theory in health promotion and critical analysis of the application of theory to guide research practices. Prerequisite: Health major or consent of the instructor.

**HSES 804. Sport Psychology. 3 Credits.**
This course is designed to introduce students to the current research and theoretical perspectives in the sport psychology literature. Specifically, students will gain a broad understanding of the three major areas of sport psychology: social psychology (e.g., motivation), performance enhancement (e.g., mental skills training), and psycho-physiology (e.g., impact of anxiety on performance). Prerequisite: Admission in the health program or consent of the instructor.

**HSES 805. Laboratory Experiments and Analysis--Exercise Physiology. 3 Credits.**
Students will learn the techniques of operating various types of laboratory equipment and will conduct small-scale lab experiments in areas such as respiration, circulation, metabolism, strength, neuromuscular function, cardiac function, and body composition. Special emphasis will be placed on laboratory techniques of assessing physical fitness. Prerequisite: A course in exercise physiology.

**HSES 806. Stress Management. 3 Credits.**
The long range objectives of this course are to assist students in gaining stress management knowledge; to help them to formulate improved perspectives on various stress management techniques; and consequently apply the developing constructs in their lives with a sense of purpose and self-responsibility. Prerequisite: Two courses in health education or consent of instructor.

**HSES 807. Current Literature in Exercise Physiology. 2 Credits.**
A wide range of topics from the exercise physiology literature will be discussed. Instructor and students will present reports to the group centered on current research findings with discussion aimed at application of these results to physical exercise and training. Prerequisite: A basic course in exercise physiology or consent of instructor.

**HSES 808. Biomechanics of Human Movement. 3 Credits.**
This course will examine the movements and the structure and function of human beings by means of the methods of mechanics. An emphasis will be placed on the two primary goals of biomechanics: performance improvement and injury prevention and rehabilitation. Topics to be covered include the kinematics and kinetics of human movement, muscle mechanics, bone and joint mechanics, and the biomechanics of musculoskeletal injury. Prerequisite: Courses in calculus, physics, anatomy, and biomechanics, or consent of instructor.

**HSES 810. Advanced Exercise Physiology. 3 Credits.**
An advanced study of the physiological and biomechanical aspects of muscular, cardiovascular, and respiratory function as the human is engaging in exercise. The topics of energy metabolism, hormones, and nutrition as related to exercise also are presented. Prerequisite: A basic course in exercise physiology.

**HSES 812. Current Issues in Health. 3 Credits.**
This course is designed to review and discuss current issues in various health related areas. The focus will be on relevant issues and topics that are guiding and directing the health profession. The range of topics discussed will vary from popular literature to scientific research and cover such areas as health education, community health, and health over the lifespan. Students in the course will be expected to report, discuss, and interact with each other concerning the issues as they are reported. Prerequisite: A graduate course in health or consent of the instructor.

**HSES 814. Implementing Health Programs. 3 Credits.**
The purpose of this course is to explore planning models used for designing, implementing and managing health promotion programs. Students will be trained to develop objectives, assess determinants, select methods and strategies, pre-test program materials, and adopt and implement promotional plans. Problem based and community based learning experiences will be provided. Prerequisite: A health major or permission from the instructor.

**HSES 817. Practical Aspects of Aerobic and Resistance Training. 3 Credits.**
This course will be a discussion of various concepts related to aerobic and resistance training. By the end of the semester, the student should be able to demonstrate an understanding of information presented in this course by achieving satisfactory evaluations of presentations, papers, and an examination of the following topics: energy metabolism, general adaptations of aerobic and resistance training, exercise techniques for aerobic and resistance training, periodization of training, testing and evaluation of aerobic and resistance training performance, and exercise prescription for aerobic and resistance training. Prerequisite: Undergraduate course in exercise physiology or consent of instructor.

**HSES 818. Legal Aspects of Public Health Education. 3 Credits.**
This course is designed to enhance understanding of the variety of legal issues which affect health educators and their audiences. Specifically,
this course will survey federal, state, and local public health laws and regulations which may proscribe health education content and the health educator's actions. Legislation will be analyzed and the practical impact of the health educator upon the legislative process will be emphasized. Prerequisite: A course in community health or consent of instructor.

HSES 823. Behavior Modification in Health and Exercise. 3 Credits.

This course will examine the behavioral principles that influence health and exercise practices. Theories of human behavior, reinforcement theory, and models of self-esteem will serve as the foundation for studying behavior change. Society influences will be strongly emphasized. Course topics will include exercise determinants, motivation, media representation, negative behaviors, self-efficacy, social support, and effective promotion strategies. Prerequisite: Admitted to Graduate School or consent of instructor.

HSES 824. Epidemiology and Concepts of Disease Causation. 3 Credits.

This course involves the study of the etiology and natural history of infectious and non-infectious diseases including vector control, host defenses and resistance, investigation of disease outbreaks, mental health and public health. The course deals with detailed analytic and descriptive epidemiology and their implications for improving our understanding of health and diseases; epidemiologic consequences of nuclear war and retrospective and prospective approaches in epidemiological research. Contemporary developmental methods for disease prevention will be critically reviewed. Prerequisite: HSES 573, or equivalent, or consent of instructor.

HSES 825. Skeletal Muscle Physiology. 3 Credits.

This course will provide the student with an in-depth study of the structure and development, contractile mechanics, and neuromuscular system as it relates to the skeletal musculature. Structure and Development - muscle fiber, motor neuron, neuromuscular junction, muscle receptors, muscle formation, development of muscle innervation. Putting Muscles to Work - ion channels, pumps, and binding proteins, axoplasmic transport, resting and action potentials, neuromuscular transmission, muscle contraction, motor units, exercise, muscle metabolism. The Adaptable Neuromuscular System - fatigue, loss of muscle innervation, recovery of muscle innervation, neurotrophism, disuse, muscle training, injury and repair, aging. Prerequisite: HSES 810 or equivalent.

HSES 828. Sport Finance. 3 Credits.

A study of the principles and applications of finance and economics in the sport industry. Strategic financial planning as a part of managements responsibilities is highlighted. Prerequisite: Admitted to Graduate School.

HSES 830. Socio-Cultural Dimensions of Sport. 3 Credits.

Current literature concerning the impact of American social values and cultural patterns of sport and physical activity will be studied. Critiques of related research involving sport and social institutions, and socio-cultural groups in sport will be emphasized. Prerequisite: A course in Sociology of Sport or consent of instructor.

HSES 831. Ethics in the Sport Industry. 3 Credits.

This course is designed to help students learn to make morally reasoned decisions in various sport settings. This course will help prepare students to respond more responsibly when faced with challenging ethical dilemmas and guide them in learning to serve as role models for ethical conduct.

HSES 832. Physical Education Instructional and Assessment Methods. 3 Credits.

The study of research-based instructional and assessment methods appropriate for PK-12 physical education. Managerial, instructional, and supervisory skills will be developed. Traditional and alternative assessment tools will be discussed. Readings, observations (live and video), and practice teaching will prepare students to complete a practical experience and an action research project in a PK-12 school. Prerequisite: Admission to Graduate School.

HSES 833. Public Health Aspects of Exercise. 3 Credits.

This course describes the timeline for physiologic adaptations to long-term physical activity. It describes the effects of physical activity on chronic disease. It describes, from a population perspective, the effects of physical activity on the health of the nation. Prerequisite: 12 hours of HSES courses, or equivalent, or consent of instructor.

HSES 836. Physical Education Curriculum Models. 3 Credits.

An examination of the elements and processes of curriculum construction in physical education for elementary, secondary, and post-secondary institution, and the institutional and professional issues that affect these processes. A study of contemporary curricula structures in regard to planning, implementation, and evaluation of K-12 curricula and professional preparation curricula in physical education programs. Prerequisite: A course in physical education curriculum, or equivalent.

HSES 840. Organizational Behavior in Sport. 3 Credits.

This course utilizes a micro perspective to analyze the behavior and culture within sport organizations. Specifically, the student will study and learn how to apply management and leadership theories that have the potential to shape the work environment and will discuss how current topics in organizational behavior are particularly relevant to the sport industry. Prerequisite: Admitted to Graduate School. Consent of the instructor.

HSES 842. Sports Marketing. 3 Credits.

This course helps students gain a deeper understanding of sport marketing by examining in-depth the sport marketing mix of product, price, place, and promotion as well as marketing research, marketing strategy, market segmentation, branding, sponsorships, licensing, venue and event marketing, public relations, and global sport marketing.

HSES 850. Analysis Techniques for Health, Sport, and Exercise Sciences Laboratory and Field Data. 3 Credits.

Techniques for analyzing data gathered in Health, Sport, and Exercise Sciences laboratories and field studies will be presented in this course. Techniques for the recording of raw data, appropriate organization of raw data, selection of test for analysis of data, use of computer software, and computer programming for analysis and reporting results of the data will also be included. Prerequisite: PRE 710, PRE 720, or PRE 725.

HSES 866. Contemporary Trends in Elementary and Secondary Physical Education. 3 Credits.

An in-depth study into the research and other forms of literature will be made to study and examine the latest trends in elementary and secondary school physical education. Games, activities, dances, and rhythms will be presented and discussed relative to developmental levels of students grades K-12. Prerequisite: A methods course in teaching physical education or consent of instructor.

HSES 872. Exercise and the Cardiovascular System. 3 Credits.

This course will be a discussion of various concepts specifically related to exercise and the cardiovascular system. By the end of the semester, the student should be able to demonstrate an understanding of the interaction of exercise and cardiovascular system by achieving satisfactory evaluations on examinations, abstracts, and classroom presentations. The following topics will be discussed as they relate specifically to exercise: homeostasis and cardiovascular transport mechanisms, basic structure and function; characteristics of cardiac cells; the heart as a pump; the peripheral vascular system; vascular control; venous return and cardiac
output; regulation of arterial pressure; cardiovascular responses to stress; and cardiovascular function in pathological situations. Prerequisite: Undergraduate course in exercise physiology or consent of instructor.

**HSES 898. Internship in Sport Management. 1-10 Credits.**
This course will provide for supervised and directed experiences in selected sport management settings. The graduate advisor will schedule observations of the internship, as well as regular conferences with the student. Written summaries and evaluations of the internship will be prepared by the student, the agency supervisor, and the university graduate faculty member. Prerequisite: Admission to the Graduate Program in Sport Management.

**HSES 884. Legal Aspects of Sport. 3 Credits.**
This course is intended to introduce graduate students to the basic concepts of the American legal system and the application of them to intercollegiate and professional sports. Particular emphasis will be given to risk management and preventive law. Other topics include: governance issues in intercollegiate and professional sports, contract law, employment discrimination, labor relations and collective bargaining, agency law and athlete agents, regulation of participation in intercollegiate and high school athletics, sport facility and event issues, participant liability issues, product liability issues, premises and spectator liability, participant violence in sports, and intellectual property law. Prerequisite: Admission to graduate program in School of Education.

**HSES 885. Sport Sponsorship. 3 Credits.**
The course provides a detailed examination of the relationship between sport and corporate sponsorship and strategies for selling sponsorship packages. Topics covered will include the theoretical rationale for sponsorship, creating and executing sponsorship agreements, determining the value of a sponsorship, evaluation of sponsorship activities, and techniques used to sell sponsorship packages.

**HSES 886. Sport Fundraising. 3 Credits.**
This course will serve three primary purposes. First is to provide the student with the ability to identify and explain important principles, models, guidelines, and challenges that come with managing sport fundraising projects. Next, this course will develop the skills necessary to be a successful sports fundraiser through comprehending the various methods woven throughout the book. Finally, this course will develop the ability to apply practical knowledge in an ethical and professional manner.

**HSES 890. Seminar in HSES. 3 Credits.**
This course is designed to provide a general research seminar learning experience for graduate students in HSES. In particular, students will learn about faculty research activities and interests from a variety of specialty areas both within KU and outside of KU. Through faculty and guest presentations, students will be exposed to a variety of design and methodologies used to conduct research in the specialty areas of HSES.

**HSES 892. Psychology of Physical Activity. 3 Credits.**
This course is designed for students interested in optimizing motivation and adherence to exercise among individuals in a wide range of physical activity settings (e.g., health clubs, corporate fitness, physical therapy). The course content includes a review of the literature highlighting the psychological benefits of exercise, the theoretical advances in understanding the psychological aspects of individuals’ participation in physical activity, and strategies and techniques for professionals attempting to foster motivation and adherence to exercise among their clients/members. Prerequisite: Admission in the health program or consent of the instructor.

**HSES 897. Independent Study. 1-4 Credits.**
Prerequisite: Consent of advisor and instructor.

**HSES 898. Master’s Project. 1-4 Credits.**
Graded on a satisfactory progress/limited progress/no progress basis.

**HSES 899. Master’s Thesis. 1-6 Credits.**
Graded on a satisfactory progress/limited progress/no progress basis.

**HSES 905. Advanced Concepts in Health Education. 3 Credits.**
This course is designed as an in-depth study of the pedagogy of health education. It is concerned with the effects of various health education models, new materials, and innovative teaching techniques. The effectiveness of various media such as films, slides, transparencies, microcomputers, and assessment tools will be analyzed. Research concerning innovations in education will be investigated along with a study of future trends in the field. Timely issues of controversy about health education practices and the effectiveness of values clarification activities will also be discussed.

**HSES 910. Biochemistry of Exercise. 3 Credits.**
This course will involve an in-depth examination of metabolic and endocrine principles as they relate to physical exercise and training. Specific topics will include: substrate utilization in exercise, metabolic controls, muscle biochemistry, body composition, nutritional aspects and hormonal influences in exercise. Both instructor and students will report on the most current literature relating to the topics. Prerequisite: Human biodynamics or a course in biochemistry.

**HSES 926. Grant and Research Proposal Writing. 3 Credits.**
This is a course for students to examine the sources and areas which provide financial support for research projects. The areas of study include types of research funding available on a local, state, and federal level, the elements and design of writing a proposal and strategies involved in securing financial support for research. A focus for the course will center upon preparing a research proposal for funding. Prerequisite: PRE 710.

**HSES 940. Scientific Dimensions of Exercise and Health. 3 Credits.**
This course has been designed to bring together the many scientific factors relating exercise and physical activity to health and human function. The course focuses on the interdisciplinary nature of this relationship and views the physiological, sociological, psychological, and behavioral factors involved. Prerequisite: Fifteen hours of graduate level course work in health or physical education and admission to health or physical education doctoral program.

**HSES 980. Advanced Topics: _____ 1-3 Credits.**
A special course of study to meet current needs of education professionals -- primarily for post-master's level students.

**HSES 981. Current Issues in Health and Physical Education. 3 Credits.**
This course will explore the latest philosophical issues and controversies which are impacting the fields of health, physical education, and athletics. The student will explore the current and future ramifications of each issue and its potential effects on the profession. Prerequisite: Admission to the Health, Sport, and Exercise Sciences Doctoral Program.

**HSES 990. Doctoral Seminar. 3 Credits.**
This seminar based course will be designed to prepare the doctoral student for academic careers or careers in industry after they graduate. The topics covered will be promotion and tenure procedures and expectations, including but not limited to teaching, responsible conduct of research, professional ethics, historical ethical issues, evaluation of ethical dilemmas, and service expectations at research intensive institutions, regional comprehensive institutions and small liberal arts colleges. Industry career options will be discussed and guest speakers from various disciplines will be brought in to discuss options and
expectations with this career path. Prerequisite: Doctoral student or permission of the instructor.

HSES 995. Field Experience in: _____ 1-5 Credits.
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours.

HSES 996. College Teaching Experience in: _____ 3 Credits.
To meet the college teaching experience requirement for doctoral programs, a student shall engage in a semester long, planned, instructional activity that shall include college classroom teaching under supervision. Planning shall be done with the advisor and/or member of the faculty who will supervise the experience. The activity shall be done under the supervision of a member of the University of Kansas faculty or by an individual or individuals designated by the candidate’s committee.

HSES 997. Individual Study. 1-4 Credits.
Prerequisite: Prior graduate course work in the area of study and consent of instructor.

HSES 999. Doctoral Dissertation. 1-15 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

**Bachelor of Applied Science in Exercise Science**

The Bachelor of Applied Science in Exercise Science can be a path to professions in personal training, strength and conditioning, corporate wellness, and military/law enforcement/first responder force readiness. Students admitted to the program have the option to complete this degree entirely online. The program curriculum includes a strong core of applied science courses in anatomy, physiology, kinesiology, strength and conditioning, personal training, and exercise physiology, as well as flexible elective options from a diverse mix of disciplines. Students will learn from faculty experts who are Fellows of the National Strength and Conditioning Association and the American College of Sports Medicine and experienced in the latest evidence-based practices in the field of exercise science.

**Admissions:**

**Freshman Students:**

Students can be admitted into the B.A.S in Exercise Science program as freshman if they are admitted to KU and declare the Bachelor of Applied Science in Exercise Science as their major.

**Transfer Students:**

Students can be admitted into the B.A.S. in Exercise Science program as a transfer student if they are admitted to KU, declare the Bachelor of Applied Science in Exercise Science as their major, and meet the following criteria:

- A transfer GPA of at least 2.75 is required for admission to the program.

**Application Deadlines:**

Mid-September for spring or early February for fall admission.

**Minimum Requirements:**

All students who apply for admission to the Bachelor of Applied Science in Exercise Science program must meet the following minimum requirements:

- Cumulative and transfer GPA of at least 2.75.

Students that do not meet the requirements above can petition using the same process used by KU:

- A formal letter of appeal explaining extenuating circumstances that contributed to their previous academic experience, why the student believes they will be successful at KU, and any other information that they would like the committee to know about them.
- A letter of recommendation written by someone that can address the student’s academic abilities.

Prospective students should consult an advisor early in their first year to ensure fulfillment of the admission requirements and to plan for efficient completion of the program.

For information about initial admission to KU, visit the Office of Admissions (https://admissions.ku.edu/). Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions.

**Graduation Requirements:**

- All courses must be completed for graduation (at least 120 hrs.). At least 30 hours must be completed at KU.
- A cumulative GPA of 2.75 is required for graduation (includes transfer hours).
- Other general regulations of the School and University, including KU Core Goal requirements.
- A maximum of 64 hours from any community college count toward cumulative hours.
- Requirements to begin internship, if student elects to complete an internship:
  - A minimum overall grade-point average of 2.75 with no grade lower than a C in any of the required program courses.
  - All program requirements must be completed before the internship.
  - See School of Education and Human Sciences Student resource for field experience for additional information.
- Military-affiliated students may receive elective credit hours upon evaluation of the Joint Services Transcript. https://admissions.ku.edu/militarycredit
- Additional credit for service may be granted on a per-class basis using ‘credit by examination’. Please consult with a program advisor for specific details.

**B.A.S. in Exercise Science**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology (^1)</td>
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<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
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<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
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<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (^1)</td>
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<tr>
<td>MATH 101</td>
<td>College Algebra: _____(^1)</td>
<td>3</td>
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Minor in Sport Management

ENGL 101  Composition 1  3
ENGL 102  Critical Reading and Writing 1  3
HSES 269  Introduction to Exercise Science  3
HSES 330  Principles of Nutrition and Health  3
PSYC 104  General Psychology  3

Program Course Requirements

HSES 305  Methods of Strength Training and Conditioning 1  3
HSES 306  Principles of Personal Training 1  3
HSES 307  Tactical Strength and Conditioning 1  3
HSES 310  Research and Data Analysis in Health, Sport, and Exercise Sciences 1  3
HSES 331  Sport and Exercise Nutrition 1  3
HSES 350  Care and Prevention of Athletic Injuries 1  3
HSES 369  Kinesiology 1  3
HSES 372  Exercise Physiology 1  3
HSES 470  Biomechanics 1  3
HSES 473  Clinical Fitness Evaluation Techniques 1  3
HSES 480  Physical Activity and Exercise Management Individuals with Disabilities 1  3

KU Core Requirements

Any KU Core Goal 1 (GE11)  3
Any KU Core Goal 3 (GE3H)  3
Any KU Core Goal 4 (AE41)  3
Any KU Core Goal 4 (AE42)  3
Any KU Core Goal 5 (AE51)  3

Program Electives, Minors, and Certificates

Students must choose 42 credit hours from an extensive list of interdisciplinary electives, minors, and certificates, 18 hours of which must be HSES upper-level courses. Only 3 credit hours not on this list may be substituted to count towards the degree completion requirements.

HSES 300  Study Abroad Topics in: _____
HSES 375  Neuromuscular Exercise Physiology and Motor Control
HSES 370  Health and Pathophysiology 2
HSES 371  Medical Terminology for Health Professionals 2
or HEIM 230 Medical Terminology
HSES 380  Sociology of Sport 3
HSES 381  Sport Ethics 3
HSES 385  Psychological Aspects of Exercise 3
HSES 418  Health Aspects of Aging 3
HSES 440  Applied Sport and Performance Psychology 3
HSES 453  Communicable and Degenerative Diseases 3
HSES 474  Exercise Biochemistry
HSES 475  Undergraduate Research in Health, Sport, and Exercise Sciences
HSES 484  Sport in Film 3
HSES 485  Sport Communication 3
HSES 489  Health and Human Sexuality 3
HSES 497  Independent Study
HSES 580  Internship in: _____
HSES 598  Special Course: _____
SOC 104  Elements of Sociology 3
SOC 304  Principles of Sociology 2
SOC 424  Sociology of Health and Medicine

Sport Management Minor (18 hrs.) 4
Business Minor (18 hrs.) 4
Psychology Minor (18 hrs.)
Healthcare Management Minor (18 hrs.) 4
Entrepreneurship Certificate (9 hrs.) 4
Public and Population Health Minor (18 hrs.) 2,4
Public and Population Health Certificate (12 hrs.) 2
Nutrition Minor (18 hrs.) 2,4
Nutrition Certificate (12 hrs.) 2

1 Must have a minimum grade of "C" or better.
2 Currently, only offered on the Edwards Campus
3 Currently, only offered on the Lawrence Campus
4 Any listed minor may be declared and completed as 18 elective credit hours OR taken as individual courses toward the required 18 required elective hours.

Minor in Sport Management

The minor in Sport Management will provide students with a core set of skills in sport management, including literacy in sport marketing, sport finance, personnel management, and the sociological aspects of sport. Students will also have a wide variety of electives from which to choose, including sport facilities, sport in film, sport communication, and experiential learning in sport.

This minor is designed for students with an interest in the theory of the sporting context and/or students who will use principles of the sport field in their anticipated profession.

Eligibility Requirements:

- Pre-requisite/Co-requisite: HSES 289 (can be completed during first semester of minor).
- 2.5 cumulative grade point average
- 40 total credit hours completed

In order to graduate with the minor, a minor GPA of 2.5 is required.

Minor in Sport Management Core Courses (12 Hours)

HSES 380 Sociology of Sport (3 Hours)
HSES 483 Sport Finance and Economics (3 Hours)
HSES 486 Sport Marketing (3 Hours)
HSES 487 Personnel Management in Sport (3 Hours)

Minor in Sport Management Electives (6 Hours)

Students may choose any two (2) of the following courses

HSES 384 Sport Law
HSES 485 Sport Communication
HSES 381 Sport Ethics
HSES 382 Sport Facilities and Event Management
Undergraduate Certificate in Strength and Conditioning

The strength and conditioning certificate will offer students the opportunity to take a complimentary selection of courses to prepare for careers in strength and conditioning, including personal training and tactical strength and conditioning. Several of the courses are coupled with respective certification exam eligibility as provided by the National Strength and Conditioning Association. Strength and conditioning coaches help various types of athletes maximize performance through strength training, periodized exercise, and nutritional programs using practical and applied principles. Strength and conditioning professionals work with athletes at all levels, including individuals that may retain the desire to improve their strength, speed, agility, and endurance. The certificate program will emphasize the physiological, biomechanical, and metabolic demands of the related occupations as well as the organizational structure of facilities and management.

Students must register for the strength and conditioning certificate by emailing exscciatedws@ku.edu. Degree-seeking undergraduate students who wish to apply to a certificate program must be in good standing in their departments or programs with a minimum 2.5 GPA. An individual who is not currently a degree-seeking student at KU must be admitted to the University of Kansas, register for the strength and conditioning certificate program, and meet with the program advisor.

To complete the certificate in Strength and Conditioning, students must complete the following courses totaling 15 credit hours:

- HSES 305-Methods of Strength and Conditioning
- HSES 306-Principles of Personal Training
- HSES 307-Tactical Strength and Conditioning
- HSES 331-Sport and Exercise Nutrition
- HSES 350-Care and Prevention of Athletic Injuries

Upon completion of the five required courses, a student must apply for graduation of the certificate through the KU student portal.

Master of Science in Education in Health, Sport, and Exercise Science

Health, Sport and Exercise Science

Programs in the Department of Health, Sport, and Exercise Sciences (HSES) offer undergraduate and graduate degrees preparing students to work in health, sport, and exercise-related fields. HSES graduates apply their knowledge to serve as teachers, researchers, clinicians, managers, administrators and other professionals in academic, private, and public settings.

The Department of Health, Sport, and Exercise Science (HSES) offers the Masters of Science in Education (M.S.E.) degree with a major in Health, Sport and Exercise Science in the following specialization areas:

- Exercise Science
- Health Education and Psychology of Physical Activity
- Pedagogy
- Sport Management (Online)

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Admission Requirements for the Department of Health, Sport and Exercise Science

The following materials must be submitted for the master's degree:

- A completed online graduate application (https://gradapply.ku.edu/).
- 1 official transcript of all previous undergraduate and graduate credit.
- Personal statement
- A vita or resume.
- Graduate Record Examination (GRE) Scores are required for master's degree admission into Exercise Science and Health Education and Psychology of Physical Activity
  - 150 on the verbal section, 141 on the quantitative section, and 4.0 on the written analytical section
  - GRE scores need to be sent directly to us from the Educational Testing Center (KU Institution code 6871, Department code 3909)

Please note: Meeting minimum admission standards does not guarantee admission to the program.

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department.

Graduate applicants who are non-native speakers of English must meet English Proficiency Requirements for Admission to Graduate Study (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/). Documentation should be sent directly to the department.

International applicants must also provide some additional documentation, as described on the Graduate Admissions website (http://graduate.ku.edu/international/).
It is recommended that students applying for a M.S.E thesis option program contact a faculty member in their specialization area for an interview.

**Deadlines for Exercise Science, Health Education and Psychology of Physical Activity and Pedagogy**
- March 15 for Summer and Fall admission.
- October 1 for Spring admission.

**Deadline for Sport Management - (Online Program)**
The online Sport Management specialization admits on a rolling basis and accepts students multiple times through the year.

Questions: hsesinfo@ku.edu

The University of Kansas
HSES Graduate Admissions
1301 Sunnyside Ave., Room 161
Lawrence, KS 66045

**M.S.E. Degree Programs**
The Master of Science in Education with a major in Health, Sport, and Exercise Sciences is offered with specializations in exercise science, health education and psychology of physical activity, pedagogy, and sport management. The degree programs require 30 hours for the thesis option or 36 hours for the non-thesis option.

**Specialization - Exercise Science**

**Thesis Option (30 Hours)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 710</td>
<td>Introduction to Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>HSES 805</td>
<td>Laboratory Experiments and Analysis--Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 810</td>
<td>Advanced Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 825</td>
<td>Skeletal Muscle Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 872</td>
<td>Exercise and the Cardiovascular System</td>
<td>3</td>
</tr>
<tr>
<td>HSES 910</td>
<td>Biochemistry of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>HSES 995</td>
<td>Field Experience in: ______ (Exercise Science)</td>
<td>3</td>
</tr>
<tr>
<td>HSES 899</td>
<td>Master's Thesis</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
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<td><strong>30</strong></td>
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</table>

**Non-Thesis Option (36 Hours)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 710</td>
<td>Introduction to Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>HSES 730</td>
<td>Advanced Concepts in Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HSES 805</td>
<td>Laboratory Experiments and Analysis--Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 810</td>
<td>Advanced Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 825</td>
<td>Skeletal Muscle Physiology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 872</td>
<td>Exercise and the Cardiovascular System</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 771</td>
<td>Internship in Exercise Science (Exercise Science)</td>
<td>6</td>
</tr>
<tr>
<td>Elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

**Suggested Electives for Non-Thesis Option - 9 Credit Hours**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 804</td>
<td>Sport Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 806</td>
<td>Stress Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES 812</td>
<td>Current Issues in Health</td>
<td>3</td>
</tr>
<tr>
<td>HSES 823</td>
<td>Behavior Modification in Health and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>HSES 831</td>
<td>Ethics in the Sport Industry</td>
<td>3</td>
</tr>
<tr>
<td>HSES 840</td>
<td>Organizational Behavior in Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 842</td>
<td>Sports Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HSES 892</td>
<td>Psychology of Physical Activity</td>
<td>3</td>
</tr>
</tbody>
</table>

**Specialization – Health Education & Psychology of Physical Activity**

**Courses required for Thesis and Non-Thesis Option:**

**Required Core - 7-8 hours:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 710</td>
<td>Introduction to Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 711</td>
<td>Lab for Introduction to Statistical Analysis</td>
<td>1</td>
</tr>
<tr>
<td>Complete 1 of the following courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Complete 5 of the following courses - 15 hours:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 803</td>
<td>Health Behavior Theory</td>
<td>3</td>
</tr>
<tr>
<td>HSES 804</td>
<td>Sport Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 806</td>
<td>Stress Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES 812</td>
<td>Current Issues in Health</td>
<td>3</td>
</tr>
<tr>
<td>HSES 814</td>
<td>Implementing Health Programs</td>
<td>3</td>
</tr>
<tr>
<td>HSES 823</td>
<td>Behavior Modification in Health and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>HSES 890</td>
<td>Seminar in HSES</td>
<td>3</td>
</tr>
<tr>
<td>HSES 892</td>
<td>Psychology of Physical Activity</td>
<td>3</td>
</tr>
<tr>
<td>HSES 824</td>
<td>Epidemiology and Concepts of Disease Causation</td>
<td>3</td>
</tr>
<tr>
<td>HSES 897</td>
<td>Independent Study</td>
<td>3</td>
</tr>
</tbody>
</table>

Students completing a Master's Thesis must take courses below in addition to 22 hrs. of core requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 899</td>
<td>Master's Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td><strong>TOTAL CREDIT HOURS</strong></td>
<td></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
Students completing the Non-Thesis Option must take 14 hours of electives courses below in addition to the 22 hours of course requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 4</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 5</td>
<td></td>
<td>2-3</td>
</tr>
</tbody>
</table>

TOTAL CREDIT HOURS: 36

Electives are chosen in consultation with student’s faculty advisor and must be approved by the advisor.

Specialization - Sport Management- (On-Campus Program)

Regardless of which program track a student chooses, the program coursework and electives are in consultation with their faculty advisor.

Courses required for the Thesis and Non-Thesis option:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>HSES 828</td>
<td>Sport Finance</td>
<td>3</td>
</tr>
<tr>
<td>HSES 830</td>
<td>Socio-Cultural Dimensions of Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 831</td>
<td>Ethics in the Sport Industry</td>
<td>3</td>
</tr>
<tr>
<td>HSES 840</td>
<td>Organizational Behavior in Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 842</td>
<td>Sports Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HSES 884</td>
<td>Legal Aspects of Sport</td>
<td>3</td>
</tr>
<tr>
<td>Elective 1</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

REQUIRED COURSES: 27

Additional requirements (Thesis Track)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 899</td>
<td>Master's Thesis</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Program Hours (Thesis Track): 30

Additional requirements (Non-thesis Track)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 801</td>
<td>Sport Facilities</td>
<td>3</td>
</tr>
<tr>
<td>HSES 897</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>HSES 880</td>
<td>Internship in Sport Management</td>
<td>3</td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Hours (Non-Thesis Track): 36

Specialization - Pedagogy

Non-Thesis Option

Required Courses (30 Hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 804</td>
<td>Sport Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HSES 823</td>
<td>Behavior Modification in Health and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>HSES 830</td>
<td>Socio-Cultural Dimensions of Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 831</td>
<td>Ethics in the Sport Industry</td>
<td>3</td>
</tr>
<tr>
<td>HSES 832</td>
<td>Physical Education Instruction and Assessment Methods</td>
<td>3</td>
</tr>
<tr>
<td>HSES 836</td>
<td>Physical Education Curriculum Models</td>
<td>3</td>
</tr>
<tr>
<td>ELP 830</td>
<td>Foundations of Multicultural Education (OR)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 807</td>
<td>Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>ELP 834</td>
<td>History and Philosophy of Education (OR)</td>
<td>3</td>
</tr>
<tr>
<td>ELP 835</td>
<td>Philosophy of Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 725</td>
<td>Introduction to the Psychology and Education of Children and Youth with Disabilities</td>
<td>3</td>
</tr>
</tbody>
</table>

Suggested Electives - take 2 of the following courses (6 Hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 806</td>
<td>Stress Management</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 704</td>
<td>Advanced Educational Psychology: Learning Processes in Education</td>
<td>3</td>
</tr>
<tr>
<td>ELP 705</td>
<td>Human Development through the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>ELP 537</td>
<td>The Governance and Organization of Schools</td>
<td>3</td>
</tr>
<tr>
<td>ELP 760</td>
<td>Integration of Learning Technology</td>
<td>3</td>
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<tr>
<td>Other advisor-approved elective course:</td>
<td>3</td>
<td></td>
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</table>

Total Credit Hours - Non-thesis: 36

Thesis Option

Required Courses (27 hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 823</td>
<td>Behavior Modification in Health and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>HSES 831</td>
<td>Ethics in the Sport Industry</td>
<td>3</td>
</tr>
<tr>
<td>HSES 832</td>
<td>Physical Education Instruction and Assessment Methods</td>
<td>3</td>
</tr>
<tr>
<td>HSES 836</td>
<td>Physical Education Curriculum Models</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 725</td>
<td>Introduction to the Psychology and Education of Children and Youth with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>ELP 834</td>
<td>History and Philosophy of Education (OR)</td>
<td>3</td>
</tr>
<tr>
<td>ELP 835</td>
<td>Philosophy of Education</td>
<td>3</td>
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Suggested Electives - take 1 of the following courses (3 Hours)

<table>
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<tr>
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<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HSES 804</td>
<td>Sport Psychology</td>
<td>3</td>
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<tr>
<td>HSES 806</td>
<td>Stress Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES 830</td>
<td>Socio-Cultural Dimensions of Sport</td>
<td>3</td>
</tr>
<tr>
<td>ELP 760</td>
<td>Integration of Learning Technology (OR)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 807</td>
<td>Multicultural Education (OR)</td>
<td>3</td>
</tr>
<tr>
<td>ELP 830</td>
<td>Foundations of Multicultural Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 704</td>
<td>Advanced Educational Psychology: Learning Processes in Education</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 705</td>
<td>Human Development through the Lifespan</td>
<td>3</td>
</tr>
</tbody>
</table>
ELPS 537  The Governance and Organization of Schools  3
Total Credit Hours Thesis Option  30

Specialization - Sport Management (Online Program)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 830</td>
<td>Socio-Cultural Dimensions of Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 831</td>
<td>Ethics in the Sport Industry</td>
<td>3</td>
</tr>
<tr>
<td>HSES 828</td>
<td>Sport Finance</td>
<td>3</td>
</tr>
<tr>
<td>HSES 842</td>
<td>Sports Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HSES 884</td>
<td>Legal Aspects of Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 840</td>
<td>Organizational Behavior in Sport</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>HSES 886</td>
<td>Sport Fundraising</td>
<td>3</td>
</tr>
<tr>
<td>HSES 885</td>
<td>Sport Sponsorship</td>
<td>3</td>
</tr>
<tr>
<td>HSES 801</td>
<td>Sport Facilities</td>
<td>3</td>
</tr>
<tr>
<td>HSES 897</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>HSES 880</td>
<td>Internship in Sport Management</td>
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</tr>
</tbody>
</table>

Total Credit Hours 36

Online Master’s in Sport Management

The online Master’s in Sport Management consists of 36 credit hours of coursework, a practicum, an exam, and the production of a portfolio that reflects competencies aligned with the North American Society for Sport Management (NASSM) (https://nassm.org/).

Sport Management - Online Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 830</td>
<td>Socio-Cultural Dimensions of Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 831</td>
<td>Ethics in the Sport Industry</td>
<td>3</td>
</tr>
<tr>
<td>HSES 828</td>
<td>Sport Finance</td>
<td>3</td>
</tr>
<tr>
<td>HSES 842</td>
<td>Sports Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HSES 884</td>
<td>Legal Aspects of Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 840</td>
<td>Organizational Behavior in Sport</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>HSES 886</td>
<td>Sport Fundraising</td>
<td>3</td>
</tr>
<tr>
<td>HSES 885</td>
<td>Sport Sponsorship</td>
<td>3</td>
</tr>
<tr>
<td>HSES 801</td>
<td>Sport Facilities</td>
<td>3</td>
</tr>
<tr>
<td>HSES 897</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>HSES 880</td>
<td>Internship in Sport Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 36

Doctor of Philosophy in Health, Sport, and Exercise Science

Health, Sport, and Exercise Sciences

Programs in the Department of Health, Sport, and Exercise Sciences (HSES) offer undergraduate and graduate degrees preparing students to work in health, sport, and exercise-related fields. HSES graduates apply their knowledge to serve as teachers, researchers, clinicians, managers, administrators and other professionals in academic, private, and public settings.

Doctoral students may pursue the Ph.D. degree with a major in Heath, Sport and Exercise Science in the following specialization areas:

- Exercise Physiology
- Health Education & Psychology of Physical Activity
- Sport Management

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Admission Requirements for the Department of Health, Sport and Exercise Sciences

Admissions application requirements:

- A completed online graduate application (https://gradapply.ku.edu/).
- 1 official transcript of all previous undergraduate and graduate credit.
- Personal statement
- 3 letters of recommendation
- A vitae or resume.

Minimum Admission Requirements (Ph.D.)

- Earned masters degree
- GPA requirement for regular admission - 3.5 GPA in your masters degree.
- Contact your desired advisor regarding the GRE requirements.

Students applying for Ph.D. programs must contact a faculty member in their specialization area for a required interview.

Please note: Supporting documents to upload to your application: Meeting minimum admission standards does not guarantee admission to the program.

All application materials should be submitted online with the graduate application. If there are application materials that cannot be uploaded with the online application, they may be emailed or mailed to the department.

Graduate applicants who are non-native speakers of English must meet English Proficiency Requirements for Admission to Graduate Study (http://policy.ku.edu/graduate-studies/english-proficiency-
international-students/). Documentation should be sent directly to the department.

International applicants must also provide some additional documentation, as described on the

**International Applicants**

International applicants can visit Graduate Admissions website (http://graduate.ku.edu/international/) to learn more about the University's requirements.

- Official transcripts from an international university (must include an English translation of all documents in addition to the official transcript in the original language, or documentation that the University's mode of instruction is English.)
- English Proficiency exams score, such as TOEFL or IELTS. There will be no exceptions. Acceptable exams are TOEFL written score of 570 with all sections 57 or above; TOEFL computer score of 230 with all sections 23 or above and 40 on the essay or TOEFL internet score of 88 with all section 23 or above and 19 on essay; or IELTS with a band copy. Test scores should be sent to the Office of Graduate Studies (address above).

**Deadlines for Exercise Physiology and Health and Psychology of Physical Activity**

- March 15 for Fall admission
- October 1 for Spring admission
- March 15 for Summer admission

**Deadlines for Sport Management**

- Apply before Nov. 1 to begin the following Fall Semester (Priority Admission Deadline)
- Apply before Mar. 1 to begin the following Fall Semester (Standard Admission Deadline)
- Apply before May 1 to begin the following Fall Semester (Late Admission Deadline)
- Apply before Nov. 1 to begin the following Spring Semester

*Sport Management does not admit during the Summer Semester.

Questions: hsesinfo@ku.edu

The University of Kansas

HSES Graduate Admissions
1301 Sunnyside Ave., Room 161
Lawrence, KS 66045

Ph.D. Degree Programs

The Doctor of Philosophy degree is offered with emphases in exercise physiology, health education and psychology of physical activity, and sport management. Students must interview with a faculty advisor in the intended emphasis before admission.

Pre-aspirant status requires the prospective doctoral student to earn a grade-point average of at least 3.5 in the first 12 credit hours.

With the advisor, each student develops a plan of study consistent with the student’s needs and the faculty’s expertise. This includes:

- A minimum of 36 hours of major courses is required, excluding credits used to fulfill Research Skills and the Dissertation requirements. The HSES Core may be included as part of the major if it is consistent with the student's area of study and if doing so is supported by the student's department and doctoral committee. 50% of the student's major must be at the 800-level or above. The program must include at least 6 credit hours outside of the student's home department - not including courses required to fulfill the student's research component or the HSES Core.

- A minimum of 12 hours of research skills is required. At least 9 of the 12 credit hours must be 800-level or above. The 12 credit hours cannot include EPSY 715 or it's program equivalent. Up to 6 hours of the required 12 may be waived by research coursework completed as part of a prior master's degree. If not taken as a part of the student's master's degree, EPSY 715 must be taken during the student's first enrollment in doctoral study. This course does not count toward any doctoral requirement. Students must have completed all research skills courses before they are allowed to take the comprehensive examination.

- HSES Core Course - This requirement is met by students taking HSES 998, Doctoral Seminar.

- Responsible Conduct of Research - Student will work with their advisor to fulfill this 3 credit hour requirement.

- College Teaching Experience - Documentation of supervised college teaching experience (completed during the student's doctoral program) is required. Programs may require that a student enroll in HSES 996, but these credits may not be used to fulfill credit hour requirements in the student’s major.

- Comprehensive Exam - In HSES doctoral programs, students do an alternative comprehensive exam. In this format, the student completes a research manuscript that is suitable for a mid-tier journal in their chosen field. Additionally, they complete a dissertation length literature review of the topic of interest. An oral defense is conducted after these two documents are deemed to be of a passing quality.

- Dissertation - A minimum of 18 credit hours of dissertation is needed for the doctoral degree. These credits cannot be applied to the student’s major.

Students should obtain specific instructions and guidelines for graduate degrees from the department (http://heses.soe.ku.edu/) and also from the School of Education graduate regulations section of the catalog.

**Department of Special Education**

**Special Education Graduate Programs**

The Department of Special Education (http://specialedu.soe.ku.edu/) offers campus-based and online graduate programs for students interested in teaching, research, and professional service related to infants, toddlers, children, adolescents, and adults with developmental delays and disabilities and their families. Since the 1970s, the department’s master's and doctoral programs have received national and international recognition. The faculty is known for its leadership to the field, and commitment to high-quality, inclusive learning and development opportunities for children and youth with developmental delays and disabilities, innovative field-based research, and preparation of highly effective educators, researchers, faculty preparing educators, and policy
specialists. The annual U.S. News and World Report's graduate program survey consistently ranks KU at the top when compared to more than 200 graduate programs in this field. As one of the most comprehensive special educator preparation programs in the country, the department attracts students from many states and countries.

**Programs Offered**

<table>
<thead>
<tr>
<th>Students may pursue a Master of Science in Education (M.S.E.) in one of 5 areas:</th>
<th>Students may pursue a graduate certificate(s) in the following areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autism Spectrum Disorder (online) (<a href="https://catalog.ku.edu/education/special-education/mse/#requirementstext">link</a>)</td>
<td>Autism Spectrum Disorder (online) (<a href="https://catalog.ku.edu/education/special-education/autism-spectrum-disorders-gradcert/">link</a>)</td>
</tr>
<tr>
<td>High-Incidence Disabilities (online) (<a href="https://catalog.ku.edu/education/special-education/mse/#requirementstext">link</a>)</td>
<td>High Incidence Disabilities Endorsement KS (online) (<a href="https://next.catalog.ku.edu/education/special-education/high-incidence-disabilities-endorsement-gradcert/">link</a>)</td>
</tr>
<tr>
<td>Low-incidence Disabilities (campus) (<a href="https://catalog.ku.edu/education/special-education/mse/#requirementstext">link</a>)</td>
<td>Low Incidence Disabilities Endorsement (KS) (campus) (<a href="https://next.catalog.ku.edu/education/special-education/low-incidence-disabilities-endorsement-gradcert/">link</a>)</td>
</tr>
<tr>
<td>Secondary Transition Education and Services (online) (<a href="https://catalog.ku.edu/education/special-education/mse/#requirementstext">link</a>)</td>
<td>Graduate Certificate in Transition (online) (p. 346)</td>
</tr>
<tr>
<td><strong>Kansas Teacher Licensure and Endorsement Opportunities</strong></td>
<td><strong>Kansas endorsement add on to license for Special Education</strong>**</td>
</tr>
<tr>
<td>Early Childhood Unified MSE (birth through kindergarten) (campus-Lawrence and Edwards) (<a href="https://specialedu.ku.edu/academics/early-childhood-unified/masters-degree/overview-benefits/">link</a>)</td>
<td>High Incidence Disabilities Endorsement (online) (<a href="https://next.catalog.ku.edu/education/special-education/high-incidence-disabilities-endorsement-gradcert/">link</a>)</td>
</tr>
<tr>
<td><strong>In Kansas to become a special education teacher in high or low incidence disability, one must first obtain an initial teaching license in:</strong> Early Childhood Unified, Elementary Education, or Secondary Education</td>
<td><strong>OR</strong> Low-incidence Disabilities Endorsement (campus) (<a href="https://next.catalog.ku.edu/education/special-education/low-incidence-disabilities-endorsement-gradcert/">link</a>)</td>
</tr>
<tr>
<td>Students seeking initial licensure or an endorsement in a state other than Kansas are encouraged to review their individual state's licensure requirements with the appropriate licensing or regulatory authorities prior to enrolling.</td>
<td>Early Childhood Unified (birth through kindergarten) Licensure Endorsement (campus-Lawrence and Edwards) (<a href="https://specialedu.ku.edu/academics/early-childhood-unified/licensure-endorsement/overview-benefits/">link</a>)</td>
</tr>
<tr>
<td><strong>Students may pursue a Ph.D. in special education</strong></td>
<td><strong>You must have initial licensure in Early Childhood, Elementary or Secondary education to be eligible for the endorsement programs.</strong></td>
</tr>
<tr>
<td>The following areas of specialization are offered:</td>
<td></td>
</tr>
<tr>
<td>Disability and Diversity in Education and Society (<a href="http://specialedu.ku.edu/academics/doctorate/program-structure/specializations/DDES">link</a>)</td>
<td>Instructional Design, Technology, and Innovation (<a href="http://specialedu.ku.edu/academics/doctorate/program-structure/specializations/DDDES">link</a>)</td>
</tr>
<tr>
<td>Early Childhood Unified (Blending of Early Childhood and Early Childhood Special Education) (<a href="http://specialedu.ku.edu/academics/doctorate/program-structure/specializations/#ECU">link</a>)</td>
<td>Special Education Policy and Systems Studies (<a href="http://specialedu.ku.edu/academics/doctorate/program-structure/specializations/#SEPSS">link</a>)</td>
</tr>
<tr>
<td>The campus-based doctoral program in special education is devoted to preparing civicly-committed scholars who, through rigorous and relevant research and transformational interventions, address significant educational and social problems in ways that advance education, social policy, research, care giving and public service to enhance the quality of life of persons of all ages with (dis)abilities and their families. Program students and graduates rely on interdisciplinary theoretical knowledge and the full range of methodological approaches to engage, influence, and transform educational and social institutions and their practices to promote learning, equal opportunity, full participation, independent living, and economic self-sufficiency.</td>
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<tr>
<td>For degree- and certificate-seeking students, maintaining a minimum cumulative grade point average (GPA) of 3.0 or higher is required. A</td>
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</tbody>
</table>
minimum cumulative grade point average (GPA) of 3.0 or higher is required to remain in good academic standing and in order to graduate.

Courses

SPED 261. Families and Professional Partnerships. 3 Credits.
This course provides information on issues and practices related to working together in partnership with families of young children including those who have a young child with special needs. Emphasis will be placed on taking a family systems perspective and a family-centered approach to family support. Strategies for effective communication for the purpose of information sharing and collaborative planning with families are provided. Relevant current scientifically based evidence will be reviewed and discussed pertaining to these topics.

SPED 326. Teaching Exceptional Children and Youth in General Education. 3 Credits.
This course is designed for general education teacher trainees. It will provide them information about students with disabilities that they will have in their classrooms and the law governing special education and its implications for them as general educators. The course will address Individualized Educational Plans that are developed for students with disabilities and how general educators contribute to these plans. Students will learn about planning instruction that is differentiated to meet various learner needs, universal design principles and instructional tools, providing meaningful access to general education classrooms and curriculum for students with disabilities and designing and delivering appropriate accommodations and modifications to assist student learning. Prerequisite: Admission to the Teacher Education Program.

SPED 327. Instructional Practices for Students with Disabilities. 3 Credits.
SPED 327 focuses on effective, efficient strategies for delivering inclusive educational opportunities for students with significant support needs. Educator candidates will learn to structure, manage, teach and support social and emotional well-being for students with significant support needs. In this course, students will learn about systematic assessment and instructional procedures designed to meet students’ academic, behavioral, and social-emotional needs.

SPED 328. Using Technology to Plan and Design Instruction for All Students. 3 Credits.
This course addresses the use of technology to explore complex real world problems that impact an inclusive society. The course introduces and provides in-depth information of education frameworks including Universal Design for Learning (UDL), Multi-tiered Systems of Support (MTSS), and Positive Behavior Interventions and Supports (PBIS). Students will engage in applying UDL and other support frameworks in content-based learning environments. These experiences will integrate “problem-based learning” (PBL) to understand disciplinary knowledge, solve problems, and develop skills in instruction with technology solutions being an integral component.

SPED 362. Introduction to Early Education and Early Childhood Special Education. 3 Credits.
This course is designed to provide an overview of the field of early education including early childhood education and early childhood special education. The historical, philosophical, research-based, policy and legal foundations for the field are discussed to provide the students with the knowledge to become an advocate for early learning opportunities (birth through grade 3) for all children and their families.

SPED 401. Professional Learning Seminar I. 1 Credit.
The purpose of the professional learning seminars is to collaboratively engage KU students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that our KU students face in the schools. We will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the ethical conduct of professional teachers who make decisions each day that affect the lives of children and their families.

SPED 402. Professional Learning Seminar II. 1 Credit.
The purpose of the professional learning seminars is to collaboratively engage KU students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that our KU students face in the schools. We will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the ethical conduct of professional teachers who make decisions each day that affect the lives of children and their families.

SPED 403. Professional Learning Seminar III. 1 Credit.
The purpose of the professional learning seminars is to collaboratively engage KU students, KU faculty, and school professionals in a continuous seminar that focuses on important issues that our KU students face in the schools. We will critically examine instructional practices, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the ethical conduct of professional teachers who make decisions each day that affect the lives of children and their families.

SPED 439. Student Teaching: Unified Early Childhood. 6-9 Credits.
A supervised student teaching experience leading to initial teaching licensure in Kansas Unified Early Childhood (birth through grade 3). The student assumes the professional role as a teacher in an approved inclusive early childhood infant/toddler or preschool. Prerequisite: Admission to the Unified Early Childhood program. Approved application of intent to student teach.

SPED 440. Evid Based Prac in English/Lang Arts Literacy for Students Struggling or w/ IEPs: Beg Read & Writing. 2 Credits.
This course focuses on the development of foundational skills for planning, implementing, and assessing reading and literacy development for students with disabilities served in general education settings. Learning will focus on skills and dispositions to effectively plan with educational practitioners (general education, related services, paraprofessionals), to design curricular and instructional strategies to support and deliver high quality reading and literacy instruction to students with disabilities. The course will focus on how, as a teacher, one participates in tiered support systems and facilitates/coordinates appropriately focused and intensive literacy instruction. Prerequisite: SPED 326, SPED 327, SPED 328.

SPED 441. Evidence Based Practices in Reading and Literacy for Students w/IEPs:Vocabulary&Comprehension Devel. 2 Credits.
This course focuses on the development of foundational skills for planning, implementing, and assessing reading and literacy development for students with disabilities served in general education settings with a focus on the “reading to learn” skills of vocabulary development, and comprehension in various content domains and texts. Learning will focus on skills and dispositions to effectively plan with educational practitioners (general education, related services, paraprofessionals), to design curricular and instructional strategies to support and deliver high quality reading and literacy instruction to students with disabilities. Prerequisite: SPED 326, SPED 327, SPED 328, SPED 440.

SPED 442. Evidence Based Practices in Mathematics, Science, and Social Studies for Students with IEPs. 2 Credits.
This course focuses on the development of foundational skills for planning, implementing, and assessing math, science, and social studies knowledge and skills for students with IEPs. The course will emphasize many of the “behind-the-scenes” strategies and activities that must be completed regularly and frequently with teaching colleagues to make
progress in these three content areas possible for all elementary students. Prerequisite: SPED 326, SPED 327, SPED 328.

SPED 443. Evidence-based Strategies and Practices for Creating Positive, Productive Classrooms. 3 Credits.
This course focuses on effective, efficient strategies for setting up and monitoring classroom management practices for ALL students. In this course, students will learn about tiered systems of supports designed to meet students’ academic, behavioral, and social-emotional needs. They will learn about the importance of designing positive behavioral interventions and supports based on the values and cultures of the community, with strong involvement from diverse families and community members. Prerequisite: SPED 326, SPED 327, SPED 328.

SPED 444. Classroom Assessment and Beyond. Practices for Students with IEPs. 3 Credits.
This course focuses on the development of foundational skills for classroom assessment. It includes planning for student learning, assessing student progress, communicating with students and families to track learning over time, and planning with colleagues to address learning needs and challenges that may emerge from progress monitoring.

SPED 446. Professional Learning Seminar UEC. 1 Credits.
The primary purpose of the professional learning seminars is to collaboratively engage KU students, KU faculty, and early childhood professionals in a continuous seminar that focuses on important issues that our KU students face in the ECE (birth - grade 3) programs. We will critically examine instructional practices that support all young learners belonging and success, learning in real-world contexts, and analyze teaching and learning from multiple perspectives including the philosophical and psychological. The professional learning seminars are designed around key features of effective professional learning communities and sustained professional development for early childhood educators. Features include supportive, collaborative learning, shared personal and professional practice, and collective inquiry of teaching and learning. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Admission to the Teacher Education Program is required.

SPED 450. Dis/ability in an American Context. 3 Credits.
This course is designed to introduce undergraduate students of any major to important theoretical and practical concepts regarding special education, disability, and diversity. Successful completion of this course fulfills one requirement for the School of Education minor in Education.

SPED 494. Intrmshp-Specialized Instr in Gen Ed Elem Classrooms&Support Settings for Students w/Disabilities. 6 Credits.
A supervised field experience leading to initial teaching licensure in Elementary Education Unified (K-6). The teacher candidate assumes the total professional role as a teacher serving students with high incidence disabilities and low incidence disabilities in inclusive elementary classrooms and in support settings. Prerequisite: Admission to EEU program, completion of EEU program courses with B or better/enrollment in final semester of program, approved application of intent to complete internship.

SPED 495. Developing the ECU Teaching Portfolio. 1 Credits.
This course meets in conjunction with student teaching and includes assigned readings, participation, and writing. The seminar provides opportunities for candidates to discuss their transition from their role as an aspiring early educator to a career in early childhood education within birth to grade 3 community and public-school settings serving young children and their families. Candidates will engage instructional planning, implementation, and outcome assessment including reflection on their own successes and challenges as they move to becoming a qualified reflective early childhood educator. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Admission to the Teacher Education Program is required.

SPED 497. Independent Study. 1-2 Credits.
Only one enrollment permitted each semester, a maximum of four hours will apply toward a bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor.

SPED 501. American Sign Language I (ASL I). 3 Credits. F1
This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction.

SPED 502. American Sign Language II (ASL II). 3 Credits. F2
This is the second level course in American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 501.

SPED 503. American Sign Language III (ASL III). 3 Credits. F3
This is the third level course in American Sign Language. The primary objective of the American Sign Language III “Signing Naturally” Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 502.

SPED 504. American Sign Language IV (ASL IV). 3 Credits. F4
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV “Signing Naturally” Level 3 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 503.

SPED 506. Advanced Practices for Children with Disabilities in the Elementary General Education Classroom. 3 Credits.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of children and youth with exceptionalities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program.

SPED 507. Advanced Practices for Children with Disabilities Middle/Secondary General Education Classroom. 3 Credits.
This course is designed to enable novice teachers to master and apply the instructional and communicative skills that will facilitate appropriate and productive inclusion of middle and secondary age students with disabilities within general education classrooms and other school settings. Specific research-based strategies in curriculum content acquisition (content enhancements, learning strategies, classwide-peer tutoring), and specific research-based strategies in behavior management will be learned and applied to real teaching experiences. Novice teachers will learn about collaborative structures found in schools to support student learning in general education settings (co-teaching, collaborative consultation, teacher/student support teams) and roles and responsibilities of teachers within these structures. Prerequisite: Admission to the Teacher Education Program.

SPED 598. Special Course: ______. 1-5 Credits.
A special course of study designed to meet current needs of education students; primarily for undergraduates.

**SPED 635. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Credits.**
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extant research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent.

**SPED 641. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Credits.**
This course will provide in-depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor.

**SPED 642. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Credits.**
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 326.

**SPED 650. Constructing Early Childhood Curriculum. 3 Credits.**
Students in this course will learn to design, implement and evaluate developmentally appropriate curricula and programs for children from birth through kindergarten. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Students analyze and evaluate curriculum that focuses on the five developmental domains--a) social-emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development; and e) gross and fine motor development—and in addition the content domains of literacy, science, math, and fine art. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Prerequisite: Admission to School of Education UEC program.

**SPED 661. Supporting Children with Significant Learning and Behavioral Challenges. 3 Credits.**
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child's strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, proactive intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admission to the Teacher Education Program.

**SPED 663. Assessment Strategies in Early Education. 3 Credits.**
Examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective formal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission to the Teacher Education Program.

**SPED 664. Inclusive Strategies and Intervention for Infants and Toddlers. 3 Credits.**
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child's development across the five (social-emotional, adaptive, cognitive, physical/movement, communication) development domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admission to the Teacher Education Program.

**SPED 665. Inclusive Strategies and Intervention for Preschoolers. 3 Credits.**
Provides the opportunity for students to develop and evaluate inclusive environments for young children. This course emphasizes meeting the needs of all young children through an integrated approach to planning, implementing and assessing instruction in all areas; linking assessment information to individualized instruction; developing Individual Educational Plans (IEPs) and promoting collaboration among families, schools and communities. Service delivery systems and transitions between early childhood programs are reviewed in relation to curriculum. Curriculum development for early childhood content areas (literacy and language, numeracy, science, social studies, physical education and the arts) and domains (language, social/emotional, physical, and cognitive) will be explored. Prerequisite: Admission to the Teacher Education Program.

**SPED 667. Field Experience in Preschool. 1 Credit.**
This supervised field experience is intended to allow the pre-service teacher to apply the knowledge gained in SPED 665 Inclusive Strategies and Intervention for Preschoolers, by working with infants and toddlers in early intervention settings/programs. To be taken concurrently SPED 665. Prerequisite: Admission to the Teacher Education Program.

**SPED 672. Field Experiences with Exceptional Children and Youth: 1-3 Credits.**
A course designed to provide experiences for students to participate with exceptional children in public schools and/or residential facilities and with professional personnel associated with the lives of exceptional students including special education teachers, child care workers, therapists, etc. Students will have opportunities to participate as aides, tutors, and instructors with individual and small groups of exceptional youth in one or more placements. Through weekly meetings with the instructor students are guided to relate their experiences to the needs and services for exceptional children and youth. Prerequisite: SPED 635.

**SPED 675. Practicum with Children and Youth with Disabilities: 1-10 Credits.**
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. The course is differentiated from SPED 775 through the amount of scaffolding undergraduate students will receive when demonstrating skill application (e.g., undergraduates report and receive feedback on practicum experiences on a more frequent basis,
 reduced data collection requirements, more emphasis on cooperating teacher providing guidance, etc.). This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 675 cannot enroll in SPED 775 within in same curricular area. Prerequisite: SPED 326.

SPED 701. American Sign Language I (ASL I). 3 Credits.
This course will cover the development of American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction.

SPED 702. American Sign Language II (ASL II). 3 Credits.
This is the second level course American Sign Language and its application within the Deaf Community. It is based on the functional-notational approach to learning sign language. This approach organizes language around communicative purposes of everyday interaction. Prerequisite: SPED 701.

SPED 703. American Sign Language III (ASL III). 3 Credits.
This is the third level course in American Sign Language. The primary objective of the American Sign Language III "Signing Naturally" Level 2 curriculum is for students to continue using the two basic language skills: visual listening and signing. Prerequisite: SPED 702.

SPED 704. American Sign Language IV (ASL IV). 3 Credits.
This is the fourth level course in American Sign Language. The primary objective of the American Sign Language IV "Signing Naturally" Level 2 curriculum is for students to continue using the two basic language skills -- visual listening and signing. Prerequisite: SPED 703.

SPED 725. Introduction to the Psychology and Education of Children and Youth with Disabilities. 3 Credits.
This course provides an overview of current practices in the identification, placement, and education of students with disabilities. This course emphasizes on patterns of social, cognitive, language, and physical development. Social, political, and economic advocacy issues are also addressed. Prerequisite: One course in Child Development.

SPED 726. Exceptionality and Technology. 1 Credit.
Technology has the potential to dramatically improve the education and quality of life for people with disabilities. This course presents you with a basic foundation for understanding technology in special education, a functional model for selecting the best technology applications for students with special needs, and strategies for applying your knowledge to practical situations.

SPED 730. Characteristics, Methods & Assessment: Intro Struggling Learners & Studnts High-Incidence Disabilities. 3 Credits.
The course is designed as an introduction to the characteristics, assessment and identification process, and initial instructional and behavioral interventions needed in meeting the needs of students with high-incidence disabilities under the Kansas Adaptive Teacher Education Standards. The needs for specialized services to meet specific learning and/or behavioral needs will be presented. Frameworks for instruction and conceptualizing best practice will be introduced including the principles of Universal Design for Learning and the Multi-Tier System of Support. The role of the educator in identifying, understanding and implementing evidence-based practices is also examined. Curriculum resources and intervention strategies for students with high-incidence disabilities will be introduced with emphasis on tiered planning and implementation. The course is intended for persons working toward the Kansas teaching endorsement in the Special Education Adaptive Area. Prerequisite: Admittance into the Adaptive endorsement teacher education program in the Department of Special Education or permission of the instructor.

SPED 731. Supporting Children with Significant Learning and Behavioral Concerns. 3 Credits.
Students in this course will gain knowledge of the causes, and intervention and support approaches for young children birth through 5 years with significant support needs. These include young learners with multiple and significant disabilities including neurological impairments, physical disabilities, sensory impairments including dual sensory impairments, complex health care needs, significant developmental disabilities and challenging behavior. Emphasis is placed on environmental adaptations and direct instructional techniques to maximize independence as determined through systematic ecological inventories tailored to the individual child’s strengths and needs. Information is also provided on assistive technology designed to provide appropriate supports. Functional behavioral assessment procedures, pro-active intervention strategies, and developing collaborative support plans will be studied. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent, SPED 734 or its equivalent, and SPED 755 or its equivalent.

SPED 734. Inclusive Strategies and Intervention for Infants and Toddlers: ___. 3 Credits.
Emphasizes curriculum development and early intervention provision for infants and toddlers through the planning of appropriate learning experiences, the design of learning environments, developing Individual Family Service Plans (IFSP), promoting collaboration among families and the use of various methods of enhancing the child’s development across the five (social-emotional, adaptive, cognitive, physical, communication) developmental domains. The role of the educator/early interventionist in relation to the family and the child is examined. Curriculum resources and intervention strategies for infants and toddlers with special needs are reviewed with emphasis on interdisciplinary planning and implementation. Prerequisite: Admittance into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor.

SPED 735. Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings. 3 Credits.
This course examines current principles and inclusive practices for learners with significant disabilities. The course will focus on the extent research base concerning inclusive practices, characteristics of learners with low-incidence disabilities, and instructional strategies. Prerequisite: SPED 326 or equivalent.

SPED 736. Foundations of Early Intervention. 3 Credits.
This course explores evidence-based principles and practices of providing early intervention services, including requirements of IDEA Part C, mission and key principles of early intervention and recommended practices and standards. Students will engage in guided field observations of assessment, intervention and collaborative practices, reflective practice and teaming/coaching activities. (Same as SPLH 736.)

SPED 737. Infants and Toddler with Significant Needs. 3 Credits.
This course explores the challenges infants and toddlers with significant developmental needs face and how to best support their participation in daily activities. Challenges faced by medical, physical, communication, social-emotional, hearing, vision, and mental health issues will be discussed along with how to support these needs across disciplines and in the home and community activities. This course will provide in-depth review of the unique challenges these children and families face and how providers from various backgrounds can work together to best support children and families. Environmental adaptations and direct instructional techniques to maximize independence tailored to the infant and toddler’s
strengths and needs will be explored. Information is also provided on assistive technology designed to provide supports. Functional behavioral assessment procedures, proactive intervention strategies and psycho-educational approaches as well as the development of collaborative support plans will be studied. (Same as SPLH 737.)

SPED 739. Special Education Early Childhood Unified Practicum. 1-3 Credits.
A supervised field experience leading to initial teaching licensure in Kansas early childhood unified (birth through kindergarten). The student assumes the total professional role as a teacher in an approved inclusive early childhood program to include infant/toddler and preschool or kindergarten. Prerequisite: Admission to ECU licensure program.

SPED 741. Methods & Assessment: Literacy Interventions Struggling Learners & Students High-Incidence Disabilities. 3 Credits.
This course will provide in depth learning experiences targeting literacy; both reading and writing. Students will learn about assessment tools and assessment systems used in tiered support frameworks to determine the required intensity of literacy support and instruction needed by children/adolescents with adaptive special education needs, and will learn about evidence-based instructional approaches and curriculum developed for students with disabilities and struggling students in general. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, admittance into the Adaptive program in the Department of Special Education, or permission of the instructor.

SPED 742. Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings. 3 Credits.
This course prepares teacher candidates to assess students with disabilities using formal and informal measures, to use assessment information to develop a strengths-based inclusive Individual Education Program (IEP), to design instruction related to IEP goals and state standards, and to evaluate the effectiveness of that instruction using progress-monitoring techniques. Prerequisite: SPED 635 or 735.

SPED 743. Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management. 3 Credits.
This course provides a problem-solving approach and the framework for teaching and assessment strategies to develop pro-social behavior in students with disabilities and their typical peers in classrooms and whole school contexts. Students assess problem behavior, discover the functions of problem behavior, and learn pro-social alternatives in home, school, and community settings. Prerequisite: SPED 730 or permission of instructor.

SPED 750. Curriculum and Methods in Early Childhood. 3 Credits.
This is a curriculum and methods course that addresses how to design, implement and evaluate developmentally appropriate curricula and programs for children from birth to six years of age. Issues of curriculum design and assessment are introduced as interrelated processes that include structuring learning environments and experiences that are responsive to children's interests and abilities. Strategies for developing learning opportunities that are appropriate for young children, including children with special needs and children from diverse cultural, ethnic and linguistic backgrounds, will be explored. Students analyze and evaluate curriculum that focuses on facilitating progress in the domains of a) social emotional development; b) cognitive development; c) language and communication development; d) adaptive behavior development and e) gross and fine motor development. Students also analyze and evaluate curriculum standards and frameworks for the young child's acquisition of concepts, skills and dispositions that support the development of early competencies and interest in literacy, mathematics, the sciences, social studies, the arts and individual and group sports. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 or its equivalent (may be taken concurrently).

SPED 752. Overview of Early Childhood and Early Childhood Special Education. 3 Credits.
The course serves as an introduction to the profession including historical, philosophical, social and psychological foundations, awareness of value, ethical and legal issues, staff relations and the importance of becoming an advocate for children and families. Students will analyze/interpret trends in early education, including diversity, early childhood special education, family centered practices, legislation, public policy, and developmentally appropriate practice. The two key professional organizations, National Association for the Education of Young Children (NAEYC) and Division of Early Childhood for the Council for Exceptional Children (DEC), recommended practices serve as the foundation for understanding the roles, knowledge and competencies of the early educator. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor.

SPED 753. Assessment in Early Education. 3 Credits.
This course examines the practice of gathering information for the purpose of making individual referral and instructional decisions for infants, toddlers, and young children with and without special needs. Discusses effective informal assessment techniques and emphasizes an ecological approach to gathering information. Introduces standardized assessment and screening instruments and provides an overview of the purposes and limitations of such tests. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor.

SPED 755. Inclusive Strategies and Interventions for Preschoolers: 3 Credits.
This is a methods course that covers instructional approaches and procedures that offer developmentally appropriate, effective and inclusive early intervention for preschool and kindergarten age children who experience developmental delays, disabling conditions or who are at-risk for developmental problems and disabilities. It is directed toward: (a) "how" to teach, or the technical components of developing and delivering effective instruction that provide access to the general early childhood curriculum within recognized approaches to early childhood education for young children, and (b) the "what" to teach, or the selection of developmentally and individually appropriate child objectives as well as specific materials and specialized instructional approaches. The relationship of instructional planning to state and federal mandates will also be considered. The course is primarily intended for persons who are currently working toward certification in the ECSE program area. Prerequisite: Admission into the ECU - Birth through Kindergarten graduate initial licensure teacher education program in the Department of Special Education or permission of the instructor. SPED 752 (may be taken concurrently).

SPED 756. Special Education Leadership. 3 Credits.
This is an introductory course in special education law and policy implementation. It is designed to provide school and district administrators, and other special education stakeholders, with a basic understanding of key points in the history of special education law and policy. It focuses primarily on the Individuals with Disabilities Education Act (IDEA) and its core concepts, with particular attention to Least Restrictive Environment (LRE). This course is designed to provide a
working knowledge of IDEA’s procedural requirements, the preferred practices associated with implementing the procedures in schools, criticism of these practices and their implementation, and ideas for addressing these criticisms in ways that promote more equitable and inclusive special education practices. Prerequisite: Degree in Special Education, School Psychology, or related fields.

SPED 757. History, Context, and Critique of Special Education. 3 Credits.
This course is designed to provide school and district administrators, and other special education stakeholders, with a general understanding of the history of the treatment of individuals with disabilities and the development of special education law and policy over time. It foregrounds current issues in the post-IDEA organization of the field, highlighting the goals and challenges of democratic leadership and civic professionalism in relation to special education. The course concludes with a final paper and online presentation examining how history, disability, difference and justice inform special education leadership, both in theory and in practice. Prerequisite: Degree in Special Education, School Psychology, or related fields.

SPED 758. Appropriate Education and Least Restrictive Environment. 3 Credits.
This course is designed to give school and district administrators, and other special education stakeholders interested in special education leadership, a deep understanding of two core principles of the Individuals with Disabilities Education Act (IDEA). These are: (1) appropriate education; and (2) least restrictive environment. The course continues the same pattern established in the previous courses for this four-course program. It introduces these core IDEA concepts, features a week of criticisms of those concepts, and follows with a week on remedies to address key issues identified. The last two modules of the course focus on the Individualized Educational Plan and inclusive practices. The course concludes with a final project. Prerequisite: Degree in Special Education, School Psychology, or related fields.

This course is designed to give school and district administrators, and other special education stakeholders interested in special education leadership, a deep understanding of three of the core principles of the Individuals with Disabilities Education Act (IDEA). These are: (1) non-discriminatory evaluation; (2) parent participation; and (3) procedural due process. The course continues the same pattern established in the previous courses for this four-course program. It introduces these three core IDEA concepts, features a week of criticisms of those concepts, and follows with a week on remedies to address key issues identified. The last two modules of the course focus on the Individualized Educational Plan and inclusive practices. The course concludes with a final project. Prerequisite: Degree in Special Education, School Psychology, or related fields.

SPED 760. Introduction to Autism Spectrum Disorders. 3 Credits.
An introductory graduate-level course on autism spectrum disorder. Addresses characteristics of children and youth with autism spectrum disorder. Also surveys trends, issues, and evidence-based practices promoting academic, social, behavioral, and communicative development of learners with autism spectrum disorder.

SPED 772. Participation with Children and Youth with Disabilities: _____. 1-3 Credits.
A course designed to provide field experiences with children and youth with disabilities in settings where educational services are provided. Students work directly with professionals such as special education teachers, general education teachers, therapists and other support personnel. Students participate as aides, tutors, and instructors with individual and small groups of children and youth. Ongoing meetings with supervisors are designed to facilitate both reflection and strategic learning.

SPED 775. Practicum with Children and Youth with Disabilities: _____. 1-10 Credits.
Intensive diverse and direct teaching experiences with children and youth with disabilities in educational settings. This practicum is a requirement for provisional endorsement according to KSDE. Students who have completed SPED 775 cannot enroll in SPED 675 within the same curricular area. Prerequisite: Varies by topic.

SPED 785. Application of Assessment Information for Exceptional Children and Youth: Autism Spectrum Disorder. 3 Credits.
An analysis of information derived from assessment instruments and procedures appropriate to measuring the social and cognitive development of exceptional children and youth. Provides experiences in determining assessment data required in the development of individualized educational programs (IEP). Attention is also given to the design of informal assessment procedures, specific to the needs of exceptional children and youth. Experience is provided in the preparation and presentation of assessment data for use in instructional planning conferences. Prerequisite: SPED 760; SPED 860; SPED 785.

SPED 789. Methods for Learners with Higher-Functioning Autism Spectrum Disorder. 3 Credits.
This is a methods course, with special emphasis on learners with high-functioning autism spectrum disorder. Particular attention is given to evidence-based practices and strategies for teaching, managing and promoting social skill and social communication development and proactive social interactions. Prerequisite: SPED 760; SPED 860; SPED 785.

SPED 798. Special Course: _____. 1-5 Credits.
A special course designed to address topical issues. Graded on a satisfactory/unsatisfactory basis.

SPED 800. Teaching Language and Communication Skills to Students with Autism and Developmental Disabilities. 3 Credits.
Course covers aspects of communicative behavior of learners with autism and other developmental disabilities. Emphasis is on a verbal behavior approach and evidence-based practices for teaching communication skills including symbol exchange systems, augmentative and alternative communication strategies, and speech generating devices. Methods for evaluating intervention fidelity and effects on communicative behavior are covered along with strategies to support collaboration between speech and language pathologists and other individualized education team members. Prerequisite: Completion of SPED 760 and SPED 860 or instructor approval.

SPED 803. Mathematics Development and Intervention for Students with Learning Disabilities (K-5). 3 Credits.
Designed for teachers, specialists who manage intervention programs, and graduate students pursuing intervention research in mathematics, this course explores mathematics development, methods for designing and testing mathematics interventions, and procedures for developing mathematics programs for students. The focus of this course is on the mathematical development and intervention for students with learning disabilities at the elementary level (K-5), considerations for students learning English alongside learning mathematics, and tiered interventions in general and special education.

SPED 841. Advncd Methds&Asmnt:Lrnng Stratg&Contnt Mastery Struggling Learners&Stdnts High-Incidence Disabilt. 3 Credits.
This course is designed for graduate students enrolled in the Masters of Science Program with an emphasis in school-age populations primarily with high mild disabilities or seeking to obtain a license to teach students needing an adapted curriculum in Kansas. Course experiences focus on how to identify and implement evidenced-based practices designed to increase the success of students with mild disabilities in mathematics, social studies, science, and language arts through their participation in general and special education classrooms primarily in grades 4-12. This course emphasizes practices associated with understanding and evaluating curricular demands, monitoring student progress in content-area courses, providing tiered supports and accommodations in teaching, using assessment and grading alternatives, and incorporating the principles of explicit and strategic instruction to design instruction that will promote and enhance content-area learning. The course is intended for persons working toward the Kansas teaching license in teaching students needing an adapted curriculum. Prerequisite: SPED 730, SPED 741, admittance into the High Incidence Disabilities program in the Department of Special Education, or permission of the instructor.

SPED 842. Methods in Access and Inclusion in the Core Curriculum. 3 Credits.
This course focuses on foundational skills for setting up an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the "behind-the-scenes" strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742.

SPED 843. Advanced Methods & Assessment: Strategies for Students with Significant Behavior, Social & Emotional Need. 3 Credits.
This course is designed to introduce educators and related service professionals to prevention and intervention related to a broad range of antisocial, aggressive, and behavioral problems. Approaches focus on understanding and addressing the precipitating factors related to inappropriate behavior, short-term approaches for immediate crises, and problem-solving strategies for longer-term change. Course content will include antisocial, aggressive, and violent behavior; options for classroom interventions; school and system-oriented interventions, and ethical and legal issues involved in various prevention and intervention approaches. Class work will focus on literature, research-based intervention approaches, and case work illustrating specific approaches and programs. Prerequisite: SPED 631 or SPED 731, SPED 741, and SPED 743.

SPED 844. Advanced Methods in Access and Inclusion in the Core Curriculum. 3 Credits.
This course develops critical skills for implementing an inclusive program that meets the needs of students with low-incidence disabilities in general education settings. The course will emphasize many of the day-to-day strategies and activities that must be completed on a regular basis to make inclusive education effective and efficient for all learners. Prerequisite: SPED 635 or SPED 735 and SPED 642 or SPED 742.

SPED 851. Law and Special Education. 3 Credits.
This course focuses on laws that apply to special education, especially "Individuals with Disabilities Education Act" and "No Child Left Behind Act." The American legal system, particularly in respect to special education, the constitutional and statutory provisions of federal and state law, and judicial decisions interpreting those laws are reviewed. The course relates equal protection, procedural due process, and substantive due process doctrines to school practices affecting students with disabilities and examines the six principles of P. L. 94-142 and similar principles in state legislation. (Same as ELPS 856.)

SPED 852. Citizens with Disabilities, Public Policy, and Policy Analysis. 3 Credits.
Students analyze public policy that affects citizens with disabilities, various models of analysis are brought to bear on federal policy (e.g., education, transportation, housing, institutionalization, protection and advocacy, medical assistance, employment, vocational rehabilitation, and others). This course is not valid for core requirement in history and/or philosophy of education. Prerequisite: SPED 851 or permission of instructor.

SPED 854. Family and Interprofessional Collaboration in Special Education. 3 Credits.
This course is designed to provide knowledge and skills to implement federal and state mandates for special education and related services programs as they relate to building and maintaining relationships with families of students with disabilities, and developing effective school programs. It covers procedures for developing, implementing, and evaluating (a) instructional accountability for special education students’ participation in district and state assessment; (b) relationships between general and special education personnel and programs; (c) roles and responsibilities; (d) interdisciplinary team planning including families; (e) coordinating, educating, and supervising paraeducators; and (f) general management responsibilities associated with instruction of children and youth with disabilities. Course topics will include collaboration in schools, community systems and families, historical perspectives of family life and school involvement, effective relationships between home, school, community, communication among professionals and with families, school-based programs, home-based programs, and multicultural considerations. Prerequisite: SPED 631 or SPED 731, or SPED 632 or SPED 732, or SPED 735.

SPED 856. Transition Education and Services from Childhood through Adulthood. 3 Credits.
The purpose of this course is to provide a background in career development and transition education for persons with disabilities from middle school through adulthood. Emphasis is placed on IDEA requirements for transition services, career development and transition processes, transition services assessment, secondary special education curricular implications, career development and transition service needs, collaborative services in schools and communities to promote quality transition services, and issues and trends in transition education and services.

SPED 857. Career Development for Youth. 3 Credits.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of career development for youth with disabilities. Emphasis is placed upon theory and practice related to career development, work-based learning, and school and community vocational training models. Prerequisite: SPED 856.

SPED 858. Assessment for Transition Planning. 3 Credits.
This course is designed to provide a review of psychometric principles and their utility as a foundation for quality assessment in transition assessment and planning for youth with disabilities. Formal and informal assessments across a range of transition planning areas are reviewed and evaluated. Skills in curriculum-based assessment, rating scales, situational assessment, and functional assessment are emphasized. Prerequisite: SPED 856 or permission of instructor.

SPED 859. Interagency Services for Transition to Adulthood. 3 Credits.
The purpose of this course is to provide an overview of interagency and community services and systems for adolescents and young adults with disabilities. Emphasis is placed on theory and practice related to
interagency collaboration; systems change efforts in transition services; and state-of-art practices regarding supporting individuals with disabilities in community employment, living, socialization, community participation, and other areas of adult life. Prerequisite: SPED 856.

SPED 860. Education of Children and Youth with Disabilities: Autism Spectrum Disorder. 3 Credits.
This course is designed to prepare students to implement evidence-based strategies for individualized and group instruction. Methods for developing and implementing overall treatment/educational programs, planning or selecting curriculum/service models for programs, and developing instructional materials are emphasized. Procedures for managing classroom staff and service resources, coordinating educational programs with families, other service personnel and program support staff, and monitoring overall program effectiveness are addressed. Prerequisite: SPED 790.

SPED 861. Blending Academics and Transition. 3 Credits.
The purpose of this course is to provide graduate students with research evidence of each of the components of universal design for learning within access to the general academic curriculum: multiple means of representation, expression, and engagement. Prerequisite: SPED 856.

SPED 862. Work-Based Learning. 3 Credits.
The purpose of this course is to provide graduate students with models and strategies to develop and coordinate meaningful work experiences for youth with disabilities. Emphasis is placed on practical strategies for engaging with community businesses, developing and customizing jobs and supporting youth in the workplace. Prerequisite: SPED 856.

SPED 863. Student Engagement in School and Community. 3 Credits.
The purpose of this course is to provide graduate students in special education and related areas who are specializing in secondary school/transition programs with an overview of models and issues pertaining to school and community engagement for secondary age youth. Prerequisite: SPED 856.

SPED 871. Advanced Practicum with Exceptional Children Needing an Autism Spectrum Curriculum. 3 Credits.
This is an advanced practicum experience for the graduate student teaching children and youth with autism spectrum disorder (ASD). The practicum is designed to provide intense, diverse and direct teaching experiences with children and youth who have learning and behavioral needs in the mild through moderate range and who have been identified with ASD. Prerequisite: SPED 760; SPED 860; SPED 785; SPED 790; SPED 800; SPED 743.

SPED 875. Practicum with Children and Youth with Disabilities: 1-10 Credits.
This course is designed to provide intensive field work and direct teaching experiences with children and youth with disabilities in educational, residential, and clinical settings. Prerequisite: SPED 775.

SPED 897. Independent Study. 1-4 Credits.
Prerequisite: Consent of advisor and instructor.

SPED 898. Master’s Project. 1-4 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

SPED 899. Master’s Thesis. 1-6 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

SPED 910. Advanced Application of Behavioral Management Techniques to Exceptional Children and Youth. 3 Credits.
Theory and principles of behavioral analysis. Emphasis will be given to observation, measurement, recording, and visual display techniques. Other topics include maintenance and generalization of behavior change. Students will be provided experience in the design and carrying out of research studies related to exceptional children and youth using principles and methods of behavioral analysis. Prerequisite: SPED 425 or SPED 725 and SPED 839.

SPED 915. Advanced Curriculum Development for Children and Youth with Disabilities. 3 Credits.
This course is designed to provide principles of development, needs assessment, evaluation and dissemination applied to curriculum products. Analysis of organizational and conceptual features of major curriculum development projects for students with disabilities are addressed; participants design curriculum procedures. Prerequisite: Twelve semester hours in special education and a general curriculum course.

SPED 920. Management of Instructional Resources for Exceptional Children and Youth. 3 Credits.
Designed for individuals with responsibilities for the operation of instructional resource centers and educational programs serving exceptional children and youth. Experiences relate to: selection, acquisition, circulation, and management of special education instructional media/materials and the delivery of inservice training specific to their skills. Prerequisite: Professional preparation and/or experience in the Education of Exceptional Children and Youth and C&I 616, Introduction to Educational Communications.

SPED 930. Praxis Seminar: Scholarship and Writing. 3 Credits.
Course assists first-year doctoral students in (a) developing a scholarly identity and technical skills in the areas of teaching, scholarship, and service, (b) developing a critical understanding of the scholarship informing special education practices and policies through course readings and seminar discussions, and (c) developing the skills to complete a comprehensive, critical review of a topic in the field of special education and disability. Prerequisite: Doctoral student status in Special Education.

SPED 932. Praxis Seminar: Scholarship of Teaching. 3 Credits.
Course assists doctoral students in learning (a) what is known about effective teacher education, (b) how that knowledge is translated into practice, and (c) what methodologies can be enlisted to conduct cutting-edge teacher education research. Prerequisite: Doctoral student status in Special Education.

SPED 936. Cross-Spec I: Conceptual Issues in Special Education. 3 Credits.
The focus of the seminar is current and historically-significant disability-related special education issues and problems (e.g., inclusive education, effective instruction, race and social class bias) that both intersect and implicate the various special education doctoral specializations. Because such problems tend to be intractable, the seminar is designed to build student capacity for conceptualizing and addressing them by exploring forms of disciplinary, interdisciplinary, and specialization scholarship and inquiry applicable to (re)framing and potentially resolving them. Prerequisite: Doctoral student status in Special Education.

SPED 937. Cross-Specialization Seminar: Methodological and Conceptual Issues in Special Education. 3 Credits.
The purpose of this seminar is to enable doctoral students to develop an interdisciplinary stance in their research and teaching by building meaningful connections across three types of knowledge-metatheoretical foundations of the social science and humanities disciplines; methodological and theoretical knowledge of the social sciences/humanities and theoretically-oriented social professions; and specialized knowledge of education, special education, and related professions. The primary focus of the seminar is the methodological traditions of the social sciences/humanities and education and their application to historically-significant, intractable special education problems such as exclusion/
segregation, instructional ineffectiveness, and race and class bias, all of which intersect and implicate our various doctoral specialization areas. The secondary focus is application of the theoretical knowledge of the social science/humanities disciplines and theoretically-oriented social professions to these and related contemporary special education problems.

SPED 949. Specialist Research. 1-4 Credits.

SPED 950. Civic Professionalism. 3 Credits.

This course is concerned with the relationship between professions and society in a democracy, and specifically, with the ethics and practices associated with the professions of education, special education, and other disability-related fields. Models of professionalism are compared and advantages of civic professionalism for individuals with disabilities and their families, the professions, and society as a whole are explored. Lessons drawn from disagreements over questions such as the nature and social consequences of the professions are used to broaden understanding of what professionalism could and should be in a democracy. Prerequisite: Admission to doctoral program.

SPED 951. Supporting Early Childhood/Early Childhood Special Education Practitioners in Evidence Based Practice. 3 Credits.

This course will add to the formation of doctoral students as scholars who support practitioners as they strive to be effective consumers of research and implement evidence-based practice. The course will address history and current trends, issues/problems and associated methodologies, key leaders, and schools of thought for the fields of Early Education/Early Childhood Special Education with a focus on educator preparation. This course includes active involvement in teaching Early Childhood Unified masters degree students participating in SPED 752, Overview of Early Childhood/Early Childhood Special Education. Doctoral students will help plan and teach SPED 752 course sessions as well as mentor SPED 752 students, who are developing understandings of and writing about evidence-based practice. Prerequisite: Admission to the Special Education Doctoral program or instructor permission.

SPED 954. Disability, Justice and Democracy. 3 Credits.

This course is concerned with what justice requires for people with disabilities, and in this regard, with the institutional, political, and cultural barriers to these requirements today and historically. As such, it is an interdisciplinary treatment of the place of disability in theories of justice from Rawls's contractarian theory of justice through Nussbaum's capabilities approach, as well as a critical-theoretic analysis of injustice toward people with disabilities from the Enlightenment to contemporary society. Prerequisite: SPED 950 or permission of the instructor.

SPED 955. Intersectional Oppression in Special Education Policy and Practice. 3 Credits.

This course is designed to explore the ways in which difference is traditionally perceived and responded to in special education policy and practices in the United States. We will examine how larger systems and individual perceptions about multiple forms of difference and larger social processes, intersectionality, conspire to create particular forms of injustice. Students in the course will analyze the processes of intersectionality to understand how students at the intersections of multiple oppressions experience education within communities of practice that enact, reproduce, and resist policies through their daily activities. We will build an understanding of intersectionality as a "method and a disposition, a heuristic and an analytic tool." Furthermore, we will explore how these students need access to opportunities to dismantle systemic inequities, which will support their engagement with formal learning communities such as schools. Prerequisite: Admittance to the Special Education doctoral program or instructor permission.

SPED 956. Families, Diversity, and Special Education. 3 Credits.

This course will engage students in analyzing, evaluating, and planning for conducting research into an array of equity issues for families of students with or considered "at risk" for disabilities associated with the programs and professionals that serve them. Students will critically engage the origins and reproduction of dominant discourses regarding families from diverse backgrounds, drawing on interdisciplinary frames and research approaches for identifying systemic inequities within educational institutions for families and their children from diverse racial, ethnic, social class, and linguistic backgrounds. Prerequisite: Admission to a doctoral program.

SPED 957. Instructional Technology and Design for Individuals with Diverse Learning Needs. 3 Credits.

This course is designed to provide students with a foundational understanding and analysis of emerging critical topics and research in instructional design, technology innovation, implementation of innovation across higher education and K-12 environments as it relates to struggling learners, especially individuals with disabilities. The focus of the course is to contextualize issues in design, planning, development, implementation, and evaluation of technology as it aligns to the needs of struggling learners and their peers with identified disabilities. Topics will include Assistive Technology (AT), Instructional Technology (IT), Universal Design (UD), Universal Design for Learning (UDL), models of instructional design, usability, human-factors/performance measurement, blended and online learning (higher education K-12), adoption/abandonment, outcome measures, Technological Pedagogical Content Knowledge (TPACK) and current trending topics related to research, teacher education, and implementation of IDT in higher education and K-12 education, again, as it applies to the relevant needs of struggling learners and their peers with disabilities. Students will be required to coordinate requirements with research & teaching competencies and outcomes of the special education doctoral program specific to the IDTI specialization. Prerequisite: Admission to a doctoral program.

SPED 958. Advanced Research in Universal Design for Learning. 3 Credits.

As we understand more about the learning process, the more we recognize the importance of design. Simple modifications to the learning environment and the instructional process can shape whether learners access, process, and develop understandings within the experience. As future leaders, it is important for you to understand and continually reflect on how the design elements within your research, teaching, and service will impact learners. Universal Design for Learning (UDL) provides a basis for thinking about the use of design within the learning process. As a scientifically-based instructional framework, UDL is focused on supporting the variability that exists in all learners. UDL integrates proactive as well as iterative instructional design across goals, methods, materials, and assessments to support the development of expert learners. This course is designed to expand on the foundational knowledge of UDL to support an interdisciplinary understanding across various fields of study that engage in the framework's advancement. Learners will develop understanding surrounding the contemporary issues and topics facing UDL in research, development, and implementation. Prerequisite: Admission to a doctoral program.

SPED 959. Advanced Research and Analysis of Instructional Design and Technology for Diverse Learners. 3 Credits.

Covers four themes relative to instructional design and technology innovation research for students with disabilities and diverse learning needs: (1) understanding initial usability testing in design and development of innovations, (2) basic comprehension of research methodologies applicable to design and technology analysis, (3) expansion of usability testing and similar formats to the increasingly K-12 environments within and outside the traditional brick-and-mortar
setting, and (4) applying knowledge to initial design and implementation of research. Prerequisite: Admission to a doctoral program.

**SPED 960. Special Education Policy and Politics. 3 Credits.**
This course is concerned with political struggles associated with the formation of special education law and policy and its implementation in schools and associated institutions. Using an interdisciplinary theoretical framework that views policy development historically and institutionally, it analyzes the formation and implementation of the Individuals with Disabilities Education Act from its origins in disability-focused social movements to its implementation in largely repressive school organizations. Prerequisite: SPED 950 or permission of instructor.

**SPED 963. Self-Determination, Support Needs, and the Application of Positive Psychology to Disability. 3 Credits.**
Practices pertaining to the third wave of the disability movement and the third generation of inclusive education emphasize strengths-based models that conceptualization disability not as a deficit within the person, but in the context of the gap between personal capacity and the demands of the environment. This course will provide students with in-depth instruction and reading pertaining to 21st century understandings of disability, how strengths-based positive psychology can contribute to the education of students with extensive and pervasive support needs, and how supports-paradigms and assessments (Supports Intensity Scale for Children) can be used to identify and provide needed supports to students with more extensive support needs. Because the aforementioned changing understandings of disability and a movement to a supports paradigm emphasizes the importance of promoting the self-determination of all students, including students with extensive and pervasive support needs, the second half of the course will provide a life span survey of the self-determination construct, examining evidence-based theories of the construct and their application to the education of students with disabilities; the importance of promoting self-determination to academic and transition-related outcomes, and roles of families and others in the development of self-determination. Prerequisite: Admission to a Doctoral program.

**SPED 964. Inclusion & Access to General Education Curriculum for Secondary Students w/Extensive Support Needs. 3 Credits.**
IDEA requires that all students be involved with and progress in the general education curriculum. This course will build on the previous two courses in the specialization to overview supplementary aids and services, special education services, and related services necessary to ensure that students with extensive and pervasive support needs are provided instruction and are successful in the general education curriculum. The course will focus on the importance of inclusive education, and the role of universal design for learning in the education of students with significant cognitive disabilities. Prerequisite: Admission to a doctoral program.

**SPED 965. College and Career Readiness for Students with Extensive and Pervasive Support Needs. 3 Credits.**
School reform has emphasized college and career readiness for all students. This course will examine the application of College and Career Readiness (CCR) to students with extensive and pervasive support needs. Theory and research will be examined during this class focusing on methods, materials, and strategies to ensure a successful transition from secondary education to college or a career for students with significant cognitive disabilities. Three themes, reflecting improvement science, research and translation to practice, serve as foundations this course: (1) What is known about CCR from interdisciplinary theory and practice, (2) How do critical elements translate into successful translation for systems supporting students with significant disabilities, and (3) Is there consensus related to application of CCR theory and research for students with significant disabilities. Prerequisite: Admission to a doctoral program.

**SPED 966. Issues Related to Serving Students with Intensive Support Needs. 3 Credits.**
Course focuses broadly on current issues and trends in scientifically supported methods for identifying, assessing, and serving students with intensive support needs. Prerequisite: Admittance to the Special Education doctoral program or instructor permission.

**SPED 968. Evidence-Based Practices for Students with Intensive Academic, Behavior, and Social Support Needs. 3 Credits.**
This course will focus on preventing the development of academic, behavior, and social challenges and responding effectively when challenges do occur. Course content will include the use of behavior and academic screening tools to detect and support students with and at risk for academic, behavior, and social challenges within comprehensive, integrated, three-tiered (CI3T) models of prevention. In addition, students will learn about evidence-based strategies, practices, and programs for supporting students with and without identified disabilities for whom Tier 1 efforts are insufficient. Students will develop their abilities to analyze, synthesize, and apply research methods related to design, implementation, and evaluation of Tiers 1, 2, and 3. Students will be required to coordinate requirements with research and teaching competencies and outcomes of the special educational doctoral program. Prerequisite: Admission to a doctoral program or permission from the instructor.

**SPED 970. Problems of Exceptionality: ______. 3 Credits.**
An extensive analysis of the literature and research pertinent to issues in a given disability. Separate sections are organized for various disabilities. Students may enroll in more than one section as a part of a graduate program. Prerequisite: Three courses in special education or permission of instructor.

**SPED 971. Organization and Administration of Services for Children and Youth with Disabilities. 3 Credits.**
This course is designed to prepare administrators and prospective administrators for organizing and administering educational programs for students with disabilities. Major topics include a review of current trends in special education, state and federal guidelines and regulations, legal and financing aspects of special education, program planning, and administration of special services. (Same as ELPS 959.) Prerequisite: Nine hours of education including educational psychology and SPED 725.

**SPED 972. Issues and Trends in Special Education I. 2 Credits.**
This course is designed to assist first-year special education doctoral students organize and synthesize a conceptual and substantive map of the field of special education and introduce them to corresponding faculty research interests and resources. Emphasis is placed on the academic writing expectations and resources of the field, university, and department, and on building a cohort of students to address common issues and to provide a foundation for peer support throughout the doctoral program. Prerequisite: Admission to special education doctoral program or permission of instructor.

**SPED 973. Issues and Trends in Special Education II. 2 Credits.**
This capstone seminar is designed to assist advanced doctoral students synthesize and evaluate information on a broad range of current and historically significant special education issues and trends in preparation for comprehensive examinations and future professional roles. Substantively, its primary focus is issues and trends that affect the entire field or cut across several areas of study and practice. Its secondary focus is significant issues and trends that affect particular categorical or functional sub-areas of study and practice within the field.
Prerequisite: Completion of nine doctoral courses in special education, including 4 of 6 departmental Core courses.

SPED 974. Issues and Trends: Students with Learning Disabilities. 3 Credits.
This doctoral level course will explore current issues related to characteristics, educational methods and curricula, and questions, problems, concerns and movements connected to the education of children and youth with learning disabilities, emotional/behavioral disorders and autism spectrum disorders. Prerequisite: Doctoral program admission or permission of instructor.

SPED 975. Advanced Practicum with Children and Youth with Disabilities: ______. 1-10 Credits.
Advanced development of conceptual and practical field-based skills. Prerequisite: SPED 775.

SPED 977. Learning Disabilities/Behavior Disorders Issues II. 3 Credits.
This course is designed to provide students an opportunity to engage in an extensive analysis of the literature and research pertinent to critical issues in the field of learning and behavioral exceptionality. Prerequisite: SPED 970 LD/BD Issues I; SPED 972 Trends and Issues in Special Education I.

SPED 980. Advanced Topics: ______. 1-3 Credits.
A special course of study to meet current needs of education professionals -- primarily for post-master's level students.

SPED 981. Changing Complex Systems. 3 Credits.
This course is designed to provide students with an overview of seminal leadership and systems change literature. Prerequisite: Admission to doctoral program.

SPED 982. Preparing Future Faculty. 3 Credits.
This course is designed to give students an introduction and overview of academic life and the roles and responsibilities of an academic career. Its primary purpose is to help develop a realistic perspective of the expectations of academic life and the competencies required for a successful start in an academic career. Organized around the broad themes of understanding the academy, faculty life and work, and academic career paths, course content addresses the roles and responsibilities of faculty life in different types of institutions and the issues faculty face as they pursue their academic careers. The course offers an opportunity for students to critically review their doctoral program in the context of preparing them for a successful start in an academic career and to explore options for academic career choices. Prerequisite: Doctoral program admission.

SPED 983. Research Funding and Proposal Development. 3 Credits.
This course is designed to teach a broad array of strategies associated with the development of successful proposals that will generate funds to support programmatic work. Among the topics covered in this course are sources of funding, strategies for conceptualizing and writing proposals, collaboration strategies, proposal peer-review process, and integrating proposal development activities into other professional responsibilities. Prerequisite: Admission to doctoral program and EPSY 710.

SPED 984. School Reform and School Community Partnerships. 3 Credits.
This is an interprofessional course in public policy and school reform that is concerned with current policy and systems transformations in education and child/family services, including educational, social and health service systems and the movement toward school-linked service integration strategies and family partnerships, called the "community school" movement. Issues connected with comprehensive school reform including the role of special education and mental health in this process will be emphasized. Particular emphasis will be placed on urban, multicultural issues affecting community schools. Prerequisite: Doctoral program admission or permission of instructor.

SPED 985. Naturalistic Research. 3 Credits.
This course is designed to develop skills in naturalistic or constructivist research, while situating it theoretically within the broader framework of modern and postmodern social inquiry, and exploring its social, political and ethical implications. The course develops students' skills in using this form of interpretive qualitative research, provides a theoretical framework for selecting inquiry paradigms, compares and contrasts positivist and constructivist inquiry, and reviews social and political implications of constructivist inquiry. Prerequisite: Six hours of statistics, measurement, and/or large or small group research design.

SPED 986. Trends and Issues Associated with Online Instruction. 3 Credits.
The course examines the opportunities, challenges, cautions, and demands of web-based instruction in higher education. It explores the policy implications of web-based instruction, development of collaborative teaching skills utilizing telecommunications resources, and the design and technical aspects of online instruction. Particular attention is given to the implications of online instruction for accommodating needs presented by diverse learners through strategies such as universal designs. Prerequisite: Admission to doctoral program or permission of instructor.

SPED 990. Small Sample Empirical Research Methods. 3 Credits.
This course provides a detailed examination of research methods for advancing knowledge and validating hypothetically useful treatments in situations in which sufficient sample sizes to conduct formal experiments are lacking, the question of interest is better addressed by multiple observations of treatment effects over time, and/or the question is best addressed by taking a variety of observations of a single unit of interest. Specifically, two small sample research methods will be examined in depth with examples and practical application experience: interrupted time series design for small samples (“single case” design), and Yin's empirical case study method. Prerequisite: Doctoral program admission or permission of instructor.

SPED 991. Family Outcomes in Special Education. 3 Credits.
This course focuses on analyzing and synthesizing research literature focusing on intermediate outcomes (e.g., family-professional partnerships) and long-term outcomes (e.g., family quality of life) related to families of children, youth, and adults with disabilities. Key family theories are discussed and applied in the development and implementation of interventions that have potential to increase intermediate and long-term family outcomes. Prerequisite: Three courses in special education or permission of instructor.

SPED 992. Seminar in Early Childhood/Intervention. 3 Credits.
This seminar examines research to support evidence-based practices that currently exist in the areas of early intervention and early childhood special education. The primary objective is to learn how to read and critically analyze studies that form the evidence base for several early intervention and early childhood special education practices. Primary goals of the class include the development of skills for evaluating research studies in early intervention and early childhood special education, and increasing knowledge of evidence-based practices in the early intervention literature. Prerequisite: Three courses in special education or permission of instructor.

SPED 993. Advanced Concepts, Issues, and Trends Single Case Research for Special Education. 3 Credits.
This course covers advanced concepts, issues, and trends in single case research. Topics include theoretical frameworks for single case,
To be considered for admission students must meet the following eligibility criteria:

- A documented intellectual disability - this can be determined by:
  - IEP
  - Physician’s documentation
  - Social Security Administration documentation
  - Psychological evaluation summary
  - Vocational Rehabilitation documentation
  - Physician’s documentation
  - Student with significant support needs in both intellectual functioning and adaptive behavior
  - Aged 18-25 years old

Demonstrate skills in navigating community and school environments with a willingness to learn new modes of transportation

Demonstrated level of unsupervised independence (2-4 hours) using appropriate supports with potential to increase independence over time

Desire to gain skills and experiences in:
  - Academic and adult learning
  - Career development and employment
  - Self-determination
  - Adult roles and responsibilities

Established competence and responsibility for medications and self-care

Past experience with work-based learning (e.g., in-school, volunteering, and/or paid employment)

Desire for obtaining integrated employment upon completion of the KU-TPE program

Please visit the KU-Transition to Postsecondary Education Program admissions page (http://tpe.ku.edu/application-process-and-deadlines/) for additional information.

- Students who pursue this certificate will be classified as non-degree undergraduates.
- The certificate is a 2-year program over 4 semesters. Students will be enrolled in a minimum of 6 credit hours each semester, and will take 4 required courses, with a minimum of 4 elective courses.
- Required courses: UNIV 101, EPSY 310, a Health & Wellness course and a Communications course as well as a career internship course each semester that align with student interest and identified career pathway.
- Elective courses: Specific KU coursework will be identified for enrollment that aligns with student interest and identified career interests.
- Students will participate in career development (C&T 175) for one semester and work-based learning internships (C&T 220) for three semesters. Internships are supervised by KU TPE staff and are on the KU Lawrence campus or within the Lawrence community.

Undergraduate Certificate in KU Transition to Postsecondary Education

The mission of KU-Transition to Postsecondary Education (KU TPE) is to ensure that students with intellectual and developmental disability (ID/D) have the opportunity to participate in postsecondary education at the University of Kansas through fully inclusive academics, career development, and student life activities with fellow Jayhawks.

During the 2-year non-degree seeking program leading to the KU Transition to Postsecondary Education certificate students:

- take credit-bearing KU courses with needed accommodations and adaptations,
- participate in KU student clubs, organizations, and activities,
- have the option to live in KU Housing, and
- develop a career path including internships each semester.

To be considered for admission students must meet the following eligibility criteria:

- A documented intellectual disability - this can be determined by:
  - IEP
  - Physician’s documentation
  - Social Security Administration documentation
  - Psychological evaluation summary
  - Vocational Rehabilitation documentation
  - Physician’s documentation
  - Student with significant support needs in both intellectual functioning and adaptive behavior
  - Aged 18-25 years old

Master of Science in Education in Special Education

Master of Science in Education in Special Education

The Department of Special Education (http://specialedu.soe.ku.edu/) offers graduate online and campus based education for students interested in teaching, research, and professional service related to infants, toddlers, children, adolescents, and adults with developmental delays and disabilities and their families. Since the 1970s, the department has received national and international recognition. The faculty is known for its leadership to the field, commitment to high-quality inclusive learning and development opportunities for children and youth with developmental delays and disabilities, innovative field-based research, and preparation of highly effective educators. The annual U.S. News and World Report graduate program survey consistently ranks KU’s Department of Special Education at the top when compared to more than 200 graduate programs in this field. As one of the most comprehensive
special educator preparation programs in the country, the department attracts students from many states and countries.

Programs Offered:

Students may pursue a master's degree in one of 5 areas:

- Autism Spectrum Disorder (online)
- Early Childhood Unified (ECU, birth through kindergarten) (campus-Lawrence and Edwards)
- High-incidence Disabilities (online)
- Low-incidence Disabilities (campus-Lawrence)
- Secondary Transition Education and Services (online)

To obtain initial Kansas teaching License:


Kansas endorsement add on to license for Special Education:

High Incidence Disabilities Endorsement (online) (https://next.catalog.ku.edu/education/special-education/high-incidence-disabilities-endorsement-gradcert/)

OR

Low-incidence Disabilities Endorsement (https://specialedu.ku.edu/academics/low-incidence-disabilities/licensure-endorsement/overview-benefits/)

To obtain initial Kansas teaching License:

Early Childhood Unified (birth through kindergarten) Licensure Endorsement program (campus-Lawrence and Edwards)

*You must have initial licensure in Early Childhood, Elementary or Secondary education to be eligible for the endorsement*

In Kansas to become a special educator in high or low incidence one must first obtain an initial teaching license in: Early Childhood Unified, Elementary Education, Elementary Education Unified, or Secondary Education

Students seeking initial licensure or an endorsement in a state other than Kansas may find different eligibility requirements in their state. Therefore, students are encouraged to review their individual state licensure requirements with the appropriate licensing or regulatory authorities prior to enrolling in our various licensure/endorsement programs to ensure whether our coursework complies with individual state requirements.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Masters of Science in Education - Special Education Admission Information:

For detailed information about our master’s degree programs please visit our website (https://specialedu.ku.edu/academics_degrees/) and select the appropriate program.

Standard Application Requirements

1) Letter of Introduction
2) Professional Resume
3) Transcripts
4) Letters of Reference
5) Documentation of English Proficiency for non-native English speakers. Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/?num1.5)

Requirements may vary by program, please visit our website (https://specialedu.ku.edu/academics_degrees/) and select the appropriate program for detailed information.

M.S.E. Degree Program (campus)

Graduates are employed as general educators, special educators, or consultants in a wide range of settings. Many complete course work required for the Kansas educational license or endorsements. Some students from related fields (e.g., speech therapists, occupational therapist, social workers) pursue this degree to expand their professional knowledge and skills for working in educational settings with children and youth with disabilities. These students may choose to complete a master’s and not complete Kansas endorsement/licensure requirements.

The M.S.E. program ranges from 30 to 36 credit hours, depending on whether one pursues a thesis/project (30-hour) or nontthesis (36-hour) program option. The degree requires courses in the area of study (plus any endorsement-related courses); a research class; and completion of a project, thesis, or written examination.

For degree and certificate-seeking students, maintaining a minimum cumulative grade point average (GPA) of 3.0 or higher is required. A minimum cumulative grade point average (GPA) of 3.0 or higher is required to remain in good academic standing and in order to graduate.

Further information is available from the department (http://specialedu.soe.ku.edu/).

Early Childhood Unified (birth through Kindergarten) Curriculum (campus)

Early Childhood Unified Kansas License Requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 752</td>
<td>Overview of Early Childhood and Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 750</td>
<td>Curriculum and Methods in Early Childhood</td>
<td>3</td>
</tr>
</tbody>
</table>

Further information is available from the department (http://specialedu.soe.ku.edu/).
SPED 755  Inclusive Strategies and Interventions for Preschoolers: _____ 3
SPED 731  Supporting Children with Significant Learning and Behavioral Concerns 3
SPED 854  Family and Interprofessional Collaboration in Special Education 3
SPED 734  Inclusive Strategies and Intervention for Infants and Toddlers: _____ 3
SPED 753  Assessment in Early Education 3
SPED 739  Special Education Early Childhood Unified Practicum (Inclusive Kindergarten/Preschool) 3
SPED 739  Special Education Early Childhood Unified Practicum (Inclusive Infant/Toddler) 3

Additional Courses Needed to Complete the Master's Degree:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 898</td>
<td>Master's Project</td>
<td>3</td>
</tr>
<tr>
<td>OR</td>
<td>SPED 899  Master's Thesis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours</strong></td>
<td>33</td>
</tr>
</tbody>
</table>

High-Incidence Disabilities (campus)

The Department of Special Education (http://specialedu.soe.ku.edu) is not currently accepting applications for graduate admission to the on-campus Master’s in High Incidence Disabilities. Individuals interested in the fully online Master’s in High Incidence Disabilities offered at KU can learn more here (https://educationonline.ku.edu/online-degrees/special-education-department/high-incidence-disabilities/).

Low-Incidence Disabilities Curriculum (campus)

Low-Incidence Provisional Kansas Endorsement Requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 742</td>
<td>Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>SPED 775</td>
<td>Practicum with Children and Youth with Disabilities: 1-3 ______ (Practicum with Children and Youth with Disabilities: ___)</td>
<td>3</td>
</tr>
</tbody>
</table>

**SPED 730 or equivalent is required to be admitted to the program. If equivalency is not demonstrated, SPED 730 will be added to applicants program plan.

Low-Incidence Endorsement Requirements (In addition to the above courses):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 735</td>
<td>Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>SPED 743</td>
<td>Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>SPED 842</td>
<td>Methods in Access and Inclusion in the Core Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>SPED 844</td>
<td>Advanced Methods in Access and Inclusion in the Core Curriculum</td>
<td>3</td>
</tr>
</tbody>
</table>

SPED 856  Transition Education and Services from Childhood through Adulthood 3
SPED 746  Assessment and Supports for Students with Complex Communication Needs (Assessment and Supports for Students with Complex Communication Needs) 3
SPED 875  Practicum with Children and Youth with Disabilities: 1-3 ______ (Low-Incidence) 3

Master's Thesis or Project Option:

To complete a Master's degree in Special Education (M.S.E.), students must have a total of 30 credit hours. Within these 30 credit hours a majority of the hours must be taken in Special Education. In addition, students must also enroll in 3 credit hours of either Master's Project or Master's Thesis and 3 credit hours of EPSY 715.

One of the following courses to complete the Master's Thesis or Project Option:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 898</td>
<td>Master's Project</td>
<td>1-3</td>
</tr>
<tr>
<td>SPED 899</td>
<td>Master's Thesis</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Written Exam Option:

Students complete 36 credit hours of graduate coursework, a majority of the hours in Special Education and a written comprehensive exam. Students must be enrolled in graduate credit hours the semester they complete the exam, typically during the final semester. This option is only available with approval from your advisor.

Master's of Science in Education (M.S.E) - On-line programs

The Special Education online graduate programs, with Master's and endorsement-only options, equips students to meet the challenges of being a special educator by building skills to assist both at-risk students and those with identified disabilities.

Autism Spectrum Disorder Curriculum (online)

Courses required for the program (does not lead to licensure/endorsement):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 760</td>
<td>Introduction to Autism Spectrum Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPED 860</td>
<td>Education of Children and Youth with Disabilities: Autism Spectrum Disorder</td>
<td>3</td>
</tr>
<tr>
<td>SPED 785</td>
<td>Application of Assessment Information for Exceptional Children and Youth: Autism Spectrum Disorder</td>
<td>3</td>
</tr>
<tr>
<td>SPED 790</td>
<td>Methods for Learners with Higher-Functioning Autism Spectrum Disorder</td>
<td>3</td>
</tr>
</tbody>
</table>
Secondary Special Education and Transition Curriculum (online)

Courses required for the program (does not lead to licensure/endorsement):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 856</td>
<td>Transition Education and Services from Childhood through Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>SPED 858</td>
<td>Assessment for Transition Planning</td>
<td>3</td>
</tr>
<tr>
<td>SPED 857</td>
<td>Career Development for Youth</td>
<td>3</td>
</tr>
<tr>
<td>SPED 861</td>
<td>Blending Academics and Transition</td>
<td>3</td>
</tr>
<tr>
<td>SPED 862</td>
<td>Work-Based Learning</td>
<td>3</td>
</tr>
<tr>
<td>SPED 863</td>
<td>Student Engagement in School and Community</td>
<td>3</td>
</tr>
<tr>
<td>SPED 869</td>
<td>Interagency Services for Transition to Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 715</td>
<td>Understanding Research in Education</td>
<td>3</td>
</tr>
<tr>
<td>Elective Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPED 898</td>
<td>Master's Project</td>
<td>3</td>
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<tr>
<td>Total Credit Hours</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Doctor of Education in Special Education

Doctor of Education in Special Education

The Department of Special Education (http://specialedu.soe.ku.edu/) is not accepting students for the Ed.D. at this time.

The Department of Special Education (http://specialedu.soe.ku.edu/) is not accepting students for the Ed.D. at this time.

Ed.D. Degree Program

The doctoral degree program encourages and supports students working with faculty in cutting-edge research and development related to effective education in the field of disabilities. The Ph.D. and Ed.D. programs are similar, but serve different needs for special educators seeking advanced knowledge and leadership skills. Both degrees require intensive and rigorous study in special education foundations, disability issues, curriculum, teaching, program development, and research. The Graduate Record Examination is required for admission.

Doctor of Education

This degree is designed for master special educators who seek leadership positions in public school and other agencies related to program leadership, administration, development, and evaluation. Students complete a sequence of courses emphasizing applied research knowledge and skills. Specific core and research courses for the Ed.D. are required. In addition to the special education and research skills cores, students complete a structured, supervised field internship and designated hours in one of the doctoral program’s areas of specialization, and a dissertation.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship (http://
policy.ku.edu/graduate-studies/doctoral-research-skills-requirement/) are listed in the KU Policy Library.

Doctor of Philosophy in Special Education

Special Education Doctoral Program

The mission of the doctoral program in special education is to prepare civically-committed scholars who, through rigorous and relevant research and transformational interventions, address significant educational and social problems in ways that advance education, social policy, research, care giving, and public service to enhance the quality of life of persons of all ages with (dis)abilities and their families. Program students and graduates rely on interdisciplinary theoretical knowledge and the full range of methodological approaches to engage, influence, and transform educational and social institutions and their practices to promote learning, equal opportunity, full participation, independent living, and economic self-sufficiency.

Program graduates are highly-competent, socially-committed educational researchers, leaders, and teacher educators engaged in the design, development, and/or use of educational and social interventions that result in transformational outcomes. Graduates are scholars who steward the profession, working across disciplinary boundaries to address the educational and social challenges of the 21st century. Moreover, as civic professionals, they also engage in stewardship with their communities.

Our graduates are scholars who recognize that resolving the great social and education challenges we face requires a sense of collective social purpose among the professions, and that the professions’ greatest responsibility is to the people most affected.

The specific principles that define how students will be engaged in learning build upon the idea that doctoral education is a complex process of formation emphasizing development of scholars’ professional identity in all its dimensions, including their recognition of the role the discipline and its scholars are to play in academe and in society. Because such a professional identity requires students to play an active role in its development, the doctoral program is premised on four instructional principles: (a) problem-centered learning focusing on the formulation of significant research questions and specification of corresponding methods of inquiry; (b) apprenticeship with multiple mentors involving intentionality, collective responsibility, recognition, respect, trust, and reciprocity; (c) creating and sustaining a safe and engaging intellectual community/culture in which students feel support among themselves and in collegial relations with faculty; and (d) scholarly integration in which the teaching and research mission of the department and faculty is closely linked.

Every year the doctoral program accepts a cohort of students from throughout the world. Each cohort consists of students with diverse interests and career goals. Underlying this cohort design are weekly seminars, various research and teaching experiences, and an interrelated specialization structure. Each doctoral student chooses an area of specialization and potentially a related area of interest outside the specialization and the department as a cognate. Currently, our program has the following areas of specialization:

- Early Childhood Unified (http://specialedu.ku.edu/academics/doctorate/program-structure/specializations/#ECU) (Blending of Early Childhood and Early Childhood Special Education)
- Disability and Diversity in School and Society (http://specialedu.ku.edu/academics/doctorate/program-structure/specializations/#DDES)
- Instructional Design, Technology, and Innovation (http://specialedu.ku.edu/academics/doctorate/program-structure/specializations/#IDTI)
- Special Education Policy and Systems Studies (http://specialedu.ku.edu/academics/doctorate/program-structure/specializations/#SEPSS)
- Strengths Based, Inclusive Education: Adolescents with Extensive and Pervasive Support Needs

Please find additional information on the doctoral program on our website (http://specialedu.ku.edu/academics/doctorate/).

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Admission to Ph.D. in Special Education at KU

Individuals applying to the Ph.D. in Special Education at the University of Kansas must have relevant professional training, usually represented by undergraduate and graduate degrees in special and/or general education or a related field. Applicants are usually expected to have at least three years of professional experience teaching in public schools or related work in agencies that serve individuals with disabilities. Both formal education and experience in the field help to demonstrate the foundational knowledge necessary to develop expertise in special education.

Applicants are strongly advised to establish a dialogue with one (or more) faculty members in the preferred specialization area prior to applying for the doctoral program. The purpose of the dialogue is to understand how scholarship interests align and/or intersect with departmental faculty, and to ensure the specialization focus aligns with the student’s interests and skills. Meeting with faculty will help identify a good match between a student and the specialization advisor with whom they may wish to study. This dialogue is critical to inform students about various social, academic, and teaching aspects of the doctoral experience that will complement their development as a scholar. Communicating with specialization faculty prior to submitting the application is strongly recommended and is considered vital to the department admissions process.
Admission Process Components

Doctoral program applications are only reviewed for fall admission. After the Admission Committee has reviewed applications, selected applicants will be invited to participate in an onsite interview.

On-line Application Process: Application Packet Submission (https://specialedu.ku.edu/academics/special-education/phd/graduate-admission/)

- KU Graduate Application (https://gradapply.ku.edu/)
- Letter of Introduction
- Professional Resume
- Transcripts (Bachelor’s and Master’s degree conferral)
- Official GRE Exam Results
- Documentation of English Proficiency for non-native English speakers
- Official Statement of Financial Documentation (international applicants only)
- Letters of Reference
- Academic Writing Sample

Students are encouraged to submit application packages in advance of deadlines. Until all components of the application package (on-line application submitted and fee paid, letter of application, resume, official GRE report, all transcripts, letters of reference, professional writing sample) are received, the application will not be considered by the Special Education Department Admissions Committee. Only completed application packages received by the deadline will be considered.

Official GRE Exam Results

The GRE exam is required to be considered for admission to the Department of Special Education as a doctoral student. Request GRE scores to be submitted by Educational Testing Service as stated: for electronic submission (ETS), the Institution Code for KU is 6871 and the Department Code is 3705. Students that have an official copy of their GRE exam results, should upload a copy when applying online under "Misc documents". The Admission Committee can use unofficial copies of the exam results for reviewing applications. Official scores must be submitted if the applicant is recommended for admission.

Applied English Center Proficiency Test

Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students?num1.5). To forward exam scores electronically, the University code is 6871 and the Department code is 85. Please see the English proficiency chart for more information.

Ph.D. Degree Program

The doctoral degree program encourages and supports students to work with faculty on cutting-edge research and development related to address significant educational and social problems that advance education, social policy, and research in the field of disabilities. The degree requires intensive and rigorous study in educational foundations, disability issues, special education, organizational and individual change, curriculum, teaching, program development, and research. The Graduate Record Examination is required for admission.

Doctor of Philosophy

This is a full-time research degree. Graduates are prepared for roles as university faculty members, researchers, or policy analysts. Specific core and research skills for the Ph.D. are required. Students typically take 3 courses per fall and spring semester and 1 course in the summer in the first 3 years of the program followed by work on their dissertation. In addition to the special education and research cores, students complete course work in a specialization, a 12-hour minor in a related field (at the discretion of the specialization area or advisor), and a dissertation based on original research.

Minimum hours for the program are 72.

- Research skills require 15 credit hours of research methods courses.
- Students may select to fulfill a research minor by completing an additional 3 credit hours of research.
- Students may also complete a Cognate comprised of 12 credit hours of coursework (includes the 6 credit hours outside the Department required by the School of Education and 6 credit hours outside the Department or specialization required by each specialization).
- Responsible Conduct of Research is satisfied with EDUC 800. More information on Human Subjects can be found here (https://research.ku.edu/human-subjects-research/).
- College Teaching Experience: We require one teaching internship. Students may enroll in SPED 996 College Teaching Experience, SPED 995 Field Experience in:., or neither, depending on the student/advisor.
- Research Internship Experience: We require at least one research internship. It is at the discretion of the student and advisor to determine if students enroll in credit hours for this internship.
- Doctoral seminar. All students take 12 credit hours of doctoral seminar (2 praxis seminars, 1 cohort seminar and 1 cross specialization seminar.)
- Dissertation: 12-18 credit hours minimum. Does not count toward Major courses.

Course List: (Note: Full Course plan is best viewed in handbook)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 800</td>
<td>Education as a Field of Scholarship</td>
<td>3</td>
</tr>
<tr>
<td>SPED 950</td>
<td>Civic Professionalism</td>
<td>3</td>
</tr>
<tr>
<td>SPED 930</td>
<td>Praxis Seminar: Scholarship and Writing</td>
<td>3</td>
</tr>
<tr>
<td>SPED 932</td>
<td>Praxis Seminar: Scholarship of Teaching</td>
<td>3</td>
</tr>
<tr>
<td>SPED 937</td>
<td>Cross-Specialization Seminar: Methodological and Conceptual Issues in Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 983</td>
<td>Research Funding and Proposal Development ((Praxis Seminar))</td>
<td>3</td>
</tr>
<tr>
<td>SPED 999</td>
<td>Doctoral Dissertation</td>
<td>12-18</td>
</tr>
<tr>
<td>Specialization Courses</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Research courses</td>
<td>15-18</td>
<td></td>
</tr>
<tr>
<td>Outside courses (School requirement)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Internships (two required but enrollment optional)</td>
<td>0-6</td>
<td></td>
</tr>
<tr>
<td>Cognate courses (beyond School requirement)</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Graduate Certificate in Autism Spectrum Disorder

Autism Spectrum Disorder Graduate Certificate

The online Graduate Certificate in Autism Spectrum Disorder has a focused curriculum designed to prepare graduates to address the needs of children and youth with autism spectrum disorder. This certificate program provides critical knowledge and practical skills to help address social, behavioral, academic, and communication skills development. Students complete a four-course sequence in addition to a field observation course.

In order to be admitted to the online graduate certificate, a Bachelor's degree is required.

Completion of a graduate certificate is not a guarantee of licensure or endorsement of any kind. It is each student's responsibility to determine the licensure and endorsement requirements in his or her state and to apply for the licenses or endorsements necessary for his or her career goals.

Please find additional information on the webpage (https://educationonline.ku.edu/online-degrees/special-education-department/autism-certificate/) for the program.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/) Additional information can be found here (https://gradapply.ku.edu/english-requirements/).

For more information about our admission requirements, visit the Department of Special Education (https://specialedu.ku.edu/) website.

The 13-credit hours required for the online Autism Certificate program include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 760</td>
<td>SPED 760 Introduction to Autism Spectrum Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPED 860</td>
<td>SPED 860 Education of Children and Youth with Disabilities: Autism Spectrum Disorder</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum cumulative grade point average (GPA) of 3.0 or higher is required to remain in good academic standing and in order to graduate.

Graduate Certificate in High Incidence Disabilities Endorsement (KS)

Graduate Certificate in High Incidence Disabilities Endorsement (Kansas)

The Graduate Certificate in High Incidence Disabilities Endorsement (Kansas) program prepares teachers to assess student knowledge, identify & implement evidence-based practices to increase the success of students with high incidence disabilities, academically as well as behaviorally.

The Graduate Certificate in High Incidence Disabilities Endorsement (Kansas) prepares you to add a high-incidence disabilities endorsement to your existing Kansas license. Students are required to complete two fieldwork practica that let you apply your coursework to real-world situations, supervised by an expert faculty member.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/) Additional information can be found here (https://gradapply.ku.edu/english-requirements/).

For more information about our admission requirements, visit the Department of Special Education website (https://specialedu.ku.edu/degrees/).

The 27 credit hours required for the on-line Graduate Certificate in High-Incidence Disabilities Endorsement (KS) program include:

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<tr>
<th>Code</th>
<th>Title</th>
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<tr>
<td>SPED 785</td>
<td>Application of Assessment Information for Exceptional Children and Youth: Autism Spectrum Disorder</td>
<td>3</td>
</tr>
<tr>
<td>SPED 790</td>
<td>Methods for Learners with Higher-Functioning Autism Spectrum Disorder</td>
<td>3</td>
</tr>
<tr>
<td>SPED 772</td>
<td>Participation with Children and Youth with Disabilities: _____ (Autism Spectrum Disorder)</td>
<td>1</td>
</tr>
</tbody>
</table>
Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/?num1.5).

Course Requirements for the Graduate Certificate in Interdisciplinary Early Intervention include:

Completion of the 4 course program plan for 11 or 12 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 730</td>
<td>Characteristics, Methods &amp; Assessment: Intro Struggling Learners &amp; Students High-Incidence Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPED 741</td>
<td>Methods &amp; Assessment: Literacy Interventions Struggling Learners &amp; Students High-Incidence Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>SPED 743</td>
<td>Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>SPED 841</td>
<td>Advncd Methods &amp; Asmnt: Learnng Stratl &amp; Contrt Mastery Struggling Learners &amp; Stdnts High-Incidence Disabilit</td>
<td>3</td>
</tr>
<tr>
<td>SPED 843</td>
<td>Advanced Methods &amp; Assessment: Strategies for Students with Significant Behavior, Social &amp; Emotional Need</td>
<td>3</td>
</tr>
<tr>
<td>SPED 854</td>
<td>Family and Interprofessional Collaboration in Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 856</td>
<td>Transition Education and Services from Childhood through Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>SPED 775</td>
<td>Practicum with Children and Youth with Disabilities: _____</td>
<td>3</td>
</tr>
<tr>
<td>SPED 875</td>
<td>Practicum with Children and Youth with Disabilities: _____</td>
<td>3</td>
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</tbody>
</table>

A minimum cumulative grade point average (GPA) of 3.0 or higher is required to remain in good academic standing and in order to graduate.

**Graduate Certificate in Interdisciplinary Early Intervention**

**Graduate Certificate in Interdisciplinary Early Intervention**

The Interdisciplinary Early Intervention Certificate (IEI) program will focus on preparing practitioners (e.g., speech-language pathologists, early childhood special education) to meet the developmental and early education needs of young children (birth-3 years old) with developmental delays or disabilities and those children considered at risk for developmental delays or disabilities and their families. This is a four course, face-to-face, graduate certificate program with 2 required courses and electives selected from other related areas. As an interdisciplinary program, the focus is on interdisciplinary early intervention in natural and inclusive settings. Special attention is paid to the provision of culturally and linguistically appropriate, family-centered supports. 11-12 credit hours are required to complete the certificate. This program is open to individuals from a variety of backgrounds and experiences who are interested in the field of early intervention.

**Graduate Admission to the School of Education and Human Sciences**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.
Completion of a graduate certificate is not a guarantee of licensure or endorsement of any kind. It is each student’s responsibility to determine the licensure and endorsement requirements in his or her state and to apply for the licenses or endorsements necessary for his or her career goals.

Please find additional information on the webpage for the program.

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). Additional information can be found here (https://gradapply.ku.edu/english-requirements/).

For more information about our admission requirements, visit the Department of Special Education (https://specialedu.ku.edu/) website.

The 12 credit hours required for the on-line Leadership in Special & Inclusive Education Certificate program include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 756</td>
<td>Special Education Leadership</td>
<td>3</td>
</tr>
<tr>
<td>SPED 757</td>
<td>History, Context, and Critique of Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 758</td>
<td>Appropriate Education and Least Restrictive Environment</td>
<td>3</td>
</tr>
<tr>
<td>SPED 759</td>
<td>Non-Discriminatory Evaluation, Parent Participation, and Procedural Due Process</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses are to be taken in order.

A minimum cumulative grade point average (GPA) of 3.0 or higher is required to remain in good academic standing and in order to graduate.

Graduate Certificate in Licensure Endorsement in Early Childhood Unified (birth-k) (KS)

Graduate Certificate in Licensure Endorsement in Early Childhood Unified (birth-k) (KS)

The graduate certificate in Early Childhood Unified (ECU) - (birth through kindergarten) at the University of Kansas blends knowledge and skills in early childhood education and early childhood special education thus preparing the early childhood educator to appropriately address the learning and development of each and every child, birth through kindergarten, including those at-risk for and with developmental delays and disabilities. Graduates/completers of the full set of courses, practicum experiences, and the appropriate state PRAXIS and performance exams are eligible to apply for Kansas Early Childhood Unified (birth through kindergarten) teaching license.

In order to be admitted to the online graduate certificate, a Bachelor’s degree is required.

Please find additional information on the webpage for the program (https://specialedu.ku.edu/academics/early-childhood-unified/graduate-certificate/overview-benefits/)

Graduate Admission to the School of Education and Human Sciences

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). Additional information can be found here (https://gradapply.ku.edu/english-requirements/).

For more information about our admission requirements, visit the Department of Special Education website (https://specialedu.ku.edu/degrees/).

Course requirements for the Graduate Certificate in Licensure Endorsement in Early Childhood Unified (birth-k) (KS) include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 752</td>
<td>Overview of Early Childhood and Early Childhood Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 750</td>
<td>Curriculum and Methods in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>SPED 755</td>
<td>Inclusive Strategies and Interventions for Preschoolers: _____</td>
<td>3</td>
</tr>
<tr>
<td>SPED 734</td>
<td>Inclusive Strategies and Intervention for Infants and Toddlers: _____</td>
<td>3</td>
</tr>
<tr>
<td>SPED 731</td>
<td>Supporting Children with Significant Learning and Behavioral Concerns</td>
<td>3</td>
</tr>
<tr>
<td>SPED 753</td>
<td>Assessment in Early Education</td>
<td>3</td>
</tr>
</tbody>
</table>
A minimum cumulative grade point average (GPA) of 3.0 or higher is required to remain in good academic standing and in order to graduate.

**Graduate Certificate in Low Incidence Disabilities Endorsement (KS)**

Graduate Certificate in Low Incidence Disabilities Endorsement (KS)

The Graduate Certificate in Low Incidence Disabilities Endorsement (KS) program prepares educators to meet the educational needs of the students with a significant intellectual disability or with multiple disabilities, including cognitive, sensory & physical impairments.

The graduate certificate in low incidence disabilities at the University of Kansas provides graduate preparation focused on meeting the educational needs of students with significant intellectual disability and students with multiple disabilities, including students on the autism spectrum with concurrent cognitive, sensory, and/or physical impairments.

The program prepares students to add a low-incidence disabilities endorsement to your existing Kansas license.

**Graduate Admission to the School of Education and Human Sciences**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). Additional information can be found here (https://gradapply.ku.edu/english-requirements/).

For more information about our admission requirements, visit the Department of Special Education (https://specialedu.ku.edu/degrees/) website.

**Course requirements for the Graduate Certificate in Low Incidence Disabilities Endorsement (KS) include:**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 742</td>
<td>Assessment and Methods of Teaching Students with Low-Incidence Disabilities in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>SPED 675</td>
<td>Practicum with Children and Youth with Disabilities: _____</td>
<td>(OR)</td>
</tr>
<tr>
<td>SPED 775</td>
<td>Practicum with Children and Youth with Disabilities: _____</td>
<td></td>
</tr>
<tr>
<td>SPED 735</td>
<td>Introduction to Teaching Learners with Low-Incidence Disabilities in Inclusive Settings</td>
<td>3</td>
</tr>
<tr>
<td>SPED 743</td>
<td>Methods: Functional Behavioral Assessment, Positive Behavior Support and Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>SPED 842</td>
<td>Methods in Access and Inclusion in the Core Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>SPED 844</td>
<td>Advanced Methods in Access and Inclusion in the Core Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>SPED 856</td>
<td>Transition Education and Services from Childhood through Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>SPED 746</td>
<td>Assessment and Supports for Students with Complex Communication Needs</td>
<td></td>
</tr>
<tr>
<td>SPED 875</td>
<td>Practicum with Children and Youth with Disabilities: 1-3</td>
<td></td>
</tr>
</tbody>
</table>

**SPED 730 or equivalent is required to be admitted to the certificate program. If equivalency is not demonstrated, SPED 730 will be added to applicants program plan.**

A minimum cumulative grade point average (GPA) of 3.0 or higher is required to remain in good academic standing and in order to graduate.

**Graduate Certificate in Transition**

**Transition Graduate Certificate**

Designed to be completed in as little as one year, the online Graduate Certificate in Secondary Special Education and Transition Services provides graduates with knowledge in evidence-based practices to improve the post-secondary outcomes of youth with disabilities.

In order to be admitted to the online graduate certificate, a Bachelor’s degree is required.

Completion of a graduate certificate is not a guarantee of licensure or endorsement of any kind. It is each student’s responsibility to determine the licensure and endorsement requirements in his or her state and to apply for the licenses or endorsements necessary for his or her career goals.

Please find additional information on the webpage (https://educationonline.ku.edu/online-degrees/special-education-department/transition-certificate/) for the program.

**Graduate Admission to the School of Education and Human Sciences**

Graduate programs in education are open to students with acceptable baccalaureate and graduate degrees whose academic records indicate that they can do successful work at the graduate level. Applicants must
provide evidence of ability to work successfully at the graduate level, including experience in and commitment to the profession.

Each department in the School of Education and Human Sciences sets its own application deadlines and admission criteria. Prospective graduate students should contact the appropriate department for more information.

See Admission in the Graduate Studies (p. 2408) section of the online catalog for more information.

Applicants who are non-native speakers of English must demonstrate English proficiency in the skill areas of reading, writing, and listening. Please read the full policy and acceptable proof of proficiency options on our policy page (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). (http://graduate.ku.edu/english-proficiency-requirements/) Additional information can be found here (https://gradapply.ku.edu/english-requirements/)

For more information about our admission requirements, visit the Department of Special Education (https://specialedu.ku.edu/) website.

The 15 hours required for the Transition Certificate are listed below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 859</td>
<td>Interagency Services for Transition to Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>SPED 858</td>
<td>Assessment for Transition Planning</td>
<td>3</td>
</tr>
<tr>
<td>SPED 857</td>
<td>Career Development for Youth</td>
<td>3</td>
</tr>
<tr>
<td>SPED 856</td>
<td>Transition Education and Services from Childhood through Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>SPED 862</td>
<td>Work-Based Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses can be taken in any order. A minimum cumulative grade point average (GPA) of 3.0 or higher is required to remain in good academic standing and in order to graduate.
Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu/) for details). Other years’ catalogs (http://catalog.ku.edu/archives/)«

Aerospace Engineering (p. 395)  
Bachelor of Science in Aerospace Engineering (p. 402)  
Master of Engineering in Aerospace Engineering (p. 404)  
Master of Science in Aerospace Engineering (p. 407)  
Graduate Certificate in Computational Fluid Dynamics (p. 409)  
Doctor of Engineering in Aerospace Engineering (p. 410)  
Doctor of Philosophy in Aerospace Engineering (p. 413)  

Bioengineering (p. 416)  
Master of Engineering in Bioengineering (p. 417)  
Master of Science in Bioengineering (p. 419)  
Graduate Certificate in Biomedical Product Design (p. 421)  
Doctor of Philosophy in Bioengineering (p. 422)  

Chemical Petroleum Engineering (p. 425)  
Bachelor of Science in Chemical Engineering (p. 431)  
Bachelor of Science in Petroleum Engineering (p. 436)  
Master of Science in Chemical and Petroleum Engineering (p. 439)  
Doctor of Philosophy in Chemical and Petroleum Engineering (p. 441)  
Graduate Certificate in Petroleum Management (p. 444)  

Civil, Environmental, and Architectural Engineering (p. 444)  
Bachelor of Science in Architectural Engineering (p. 455)  
Bachelor of Science in Civil Engineering (p. 458)  
Master of Science in Architectural Engineering (p. 463)  
Master of Science in Civil Engineering (p. 464)  
Master of Science in Environmental and Water Resources Engineering (p. 465)  
Master of Science in Environmental and Water Resources Science (p. 467)  
Master of Civil Engineering (p. 468)  
Master of Construction Management (p. 469)  
Graduate Certificate in Construction Management (p. 470)  
Graduate Certificate in Structural Analysis (p. 471)  
Graduate Certificate in Structural Design (p. 471)  
Graduate Certificate in Structural Forensics (p. 471)  
Graduate Certificate in Water Resources (p. 472)  
Doctor of Philosophy in Civil Engineering (p. 472)  
Doctor of Philosophy in Environmental and Water Resources Engineering (p. 474)  
Doctor of Philosophy in Environmental and Water Resources Science (p. 475)
Introduction

From communication systems to bridges, from satellites to manufacturing, society depends on engineers. A KU engineering education helps students understand technical principles and the background behind them and prepares them for the changes ahead. Most graduates assume responsible positions in business, industry, education, or government, and our engineering programs also provide an excellent background for other careers. Many graduates are CEOs of major companies or enter fields like medicine or law.

Mission

The mission of the school is to provide students a high-quality educational experience, to generate and apply knowledge through research, development, and scholarly activity, and to serve society, the state of Kansas, and the engineering profession. In accordance with this mission and with KU’s mission, all undergraduate engineering programs and the computer science program must meet these objectives. Additional objectives are specified in program descriptions.

Facilities

Engineering faculty members and graduate students are major users of the facilities and services of many research laboratories and centers across campus and among our research partners at other universities:

- Biotechnology Innovation and Optimization Center (https://biocenter.ku.edu/)
- Center for Environmentally Beneficial Catalysis (http://cebc.ku.edu/)
- Center for Remote Sensing of Ice Sheets (https://cresis.ku.edu/)
- Energy Council (http://www.kgs.ku.edu/ERC/)
- Higuchi Biosciences Center (http://www.hbc.ku.edu/)
- Information and Telecommunication Technology Center (http://www.ittc.ku.edu/)
  - Bioinformatics and Computational Life Sciences Laboratory
  - Communications and Networking Systems Laboratory
  - Computer Systems Design Laboratory
  - e-Learning Design Laboratory
  - Intelligent Systems Laboratory
  - Radar Systems and Remote Sensing Laboratory
- Institute for Bioengineering Research (https://iberc.ku.edu/)
- Institute for Policy and Social Research (http://www.ipsr.ku.edu/)
- Tertiary Oil Recovery Project (https://torp.ku.edu/)
- Kansas Biological Survey (http://kbs.ku.edu/)
- Kansas Geological Survey (http://www.kgs.ku.edu/)

Undergraduate Programs

The school offers 11 undergraduate degree programs:

- Aerospace engineering (p. 395)
- Architectural engineering (p. 444)
- Chemical engineering (p. 425)
- Civil engineering (p. 444)
- Computer engineering (p. 476)
- Computer science (p. 476)
- Electrical engineering (p. 476)
- Engineering physics (p. 519)
- Interdisciplinary computing (p. 476)
- Mechanical engineering (p. 525)
- Petroleum engineering (p. 425)

Our Bachelor of Science degree programs in aerospace engineering, architectural engineering, chemical engineering, civil engineering, computer engineering, electrical engineering, engineering physics, mechanical engineering and petroleum engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org
The Bachelor of Science degree programs in computer science and information technology undergraduate programs are accredited by the Computing Accreditation Commission of ABET. (http://www.abet.org/).

High School Preparation
Preparation for an engineering career begins in high school with basic mathematics and science courses. Prospective engineering students should take mathematics through at least trigonometry and at least one year of both chemistry and physics. A well-rounded background in English, history, economics, and social studies, preferably with some computer operations and programming and advanced mathematics, affords flexibility in choosing a concentration. A strong college preparatory program provides a good background for the student who plans to major in engineering.

Honors Programs
The school encourages all qualified students to participate in the University Honors Program (http://www.honors.ku.edu/). Students in engineering must meet with an engineering advisor every semester and should also meet with an honors program advisor.

Some engineering departments offer an option to graduate with departmental honors. Departments set these requirements.

Bachelor of Science in Engineering Degree Requirements
The B.S. degree is offered with majors in aerospace engineering, architectural engineering, chemical engineering, civil engineering, computer engineering, electrical engineering, engineering physics, mechanical engineering, and petroleum engineering. The school also offers the B.S. degree in computer science and interdisciplinary computing.

First- and Second-Year Preparation
Undergraduates usually enroll in engineering in their first year. The first few semesters of all the curricula contain a large proportion of common courses. Through proper planning with advisors, students may delay choosing specific fields for one or two semesters. Selecting the major by the beginning of the third semester is strongly encouraged so that the recommended schedule of classes can be followed.

Each engineering degree program includes courses in 5 general areas of study:
1. KU Core (communications, humanities, social sciences, diversity, ethics, etc.),
2. Basic sciences,
3. Basic engineering sciences,
4. Specialized engineering sciences, and
5. Engineering design.

The computer science degree program has a similar structure, but computer science courses replace some engineering courses. Courses taken during the first 2 years are largely from the first 2 areas, with a few courses in the basic engineering sciences or computer science. The basic sciences include mathematics, chemistry, and physics and further course work in the earth and life sciences in some of the curricula. Appropriate laboratory experience that combines elements of theory and practice is included in each student’s program, together with extensive computer-based experience. Completion of the KU Core is required in all majors. Each department recommends certain courses be used to fulfill the KU Core within each major to allow students the greatest flexibility in degree completion.

Requirements for Graduation
In addition to completing each of the required and elective courses listed in the curriculum,

1. A student must attain a cumulative grade-point average of at least 2.0 in the courses applied toward the degree. A student must also have a KU cumulative grade-point average of 2.0 whether or not all courses are being applied to the degree.
2. A student must attain a cumulative grade-point average of at least 2.0 in all courses taken in the school, including courses not applied toward a degree.
3. A student entering with advanced standing must attain a cumulative grade-point average of at least 2.0 in the resident courses applied toward the degree and at least a 2.0 in all courses taken in the school.
4. A student must take the last 30 hours of credit toward the degree at KU and be officially enrolled in the School of Engineering during this time.

General Education Component
Students in all engineering curricula must take courses that complement the technical content. These must include courses applicable to the KU Core and course work that

- Fosters an understanding of professional and ethical responsibility.
- Promotes the ability to communicate effectively.
- Develops an understanding of the impact of engineering solutions.
- Advances the student’s knowledge of contemporary issues.

Each engineering department specifies courses that fulfill these requirements.

Credit for ROTC Courses
A few credit hours from courses in aerospace studies, military science, or naval science may be applied toward graduation in lieu of certain required or elective courses. A student normally must complete the ROTC curriculum, whether or not it leads to a commission, to receive ROTC hours toward a bachelor’s degree in engineering. The student should submit a petition for substitution of courses to the department. The ROTC policy for each engineering degree program is listed with the information on each program.

Credit for Foreign Language Courses
Some foreign language courses may be applied toward graduation in engineering programs. A foreign language that is similar to the native language is not acceptable. Information on use of foreign language courses is available in each engineering program listing.

Petitions for Exceptions
A student seeking an exception to the rules and practices of the school should first consult an advisor and then petition the school to consider the exception. All petitions are approved by the Engineering Dean's Office with the guidance of the student's advisor and department.
Minors

The School of Engineering has a minor in Biomedical Engineering (p. 393), which requires five courses and a minimum of 18 credit hours.

Additionally, engineering students may minor in many liberal arts (p. 748) areas or in the schools of Business (https://business.ku.edu/), Journalism and Mass Communications (http://www.journalism.ku.edu/), or Music (http://www.music.ku.edu). To earn a minor, a student must take at least 18 credit hours, 12 of which must be 300-level courses or above. If the department or program has additional requirements for the minor, students must meet those requirements also. Interested students should see an advisor in the department offering the minor and complete a minor declaration form as early as possible.

Dual Enrollment

KU permits dual enrollment in 2 academic divisions. The student must plan carefully with special advisors in each area. Students should expect the minimum time required for 2 degrees to be at least 1 year longer than the minimum for 1 degree. The academically well-qualified student who is seriously considering dual enrollment might consider studying for the second degree at the graduate level. If the program is properly planned, it may be possible to earn 1 B.S. and 1 M.S. degree in about the same time required for 2 undergraduate degrees.

Limitation on Enrollment in Engineering Courses

After the fifth day of classes, enrollment in a course offered by the school is permissible only with approval of the instructor and permission of the dean. The school reserves the right to deny admission to courses offered by the school to any student who is officially enrolled in another division of the university and does not meet the school’s standards for admission or readmission and/or who does not have the proper prerequisite course work completed.

Preparation for Graduate Study

Undergraduates in the School of Engineering receive excellent preparation for pursuing graduate degrees. The school offers M.S. degrees as well as professional degrees. Students may apply for admission to graduate studies during the senior year and may be co-enrolled during the final undergraduate semester. Admission to graduate studies requires a minimum 3.0 grade-point average and completion of an ABET-accredited undergraduate degree.

Graduate Programs

The Master of Science (M.S.) degree is offered in 11 areas:

- Aerospace Engineering (p. 395)
- Architectural Engineering (p. 444)
- Bioengineering (p. 416)
- Chemical Engineering (p. 425)
- Civil Engineering (p. 444)
- Computer Science (p. 476)
- Electrical and Computer Engineering (p. 476)
- Environmental Engineering or Science (p. 444)
- Information Technology (p. 476)
- Mechanical Engineering (p. 525)
- Petroleum Engineering (p. 425)

The Master of Engineering (M.E.) is offered in Aerospace Engineering (p. 395) and Bioengineering (p. 417).

The Department of Civil, Environmental, and Architectural Engineering (p. 444) offers the Master of Civil Engineering (M.C.E.) and the Master of Construction Management (M.C.M.).

The school offers the Doctor of Philosophy (Ph.D.) degree in 8 areas:

- Aerospace Engineering (p. 395)
- Bioengineering (p. 416)
- Chemical and Petroleum Engineering (p. 425)
- Civil Engineering (p. 444)
- Computer Science (p. 476)
- Electrical Engineering (p. 476)
- Environmental Engineering or Science (p. 444)
- Mechanical Engineering (p. 525)

Doctoral students interested in careers in research or teaching or both should consider the Ph.D. degree. Exceptionally qualified undergraduates may be admitted directly to a Fast-Track Ph.D. program.

For aerospace students interested in careers in engineering design or engineering project management, the school offers programs leading to the Doctor of Engineering (D.E.) degree in Aerospace Engineering. (p. 395)

Graduate Certificate Programs

The School of Engineering is excited to offer certificate programs in the following focus areas:

- Construction Management (p. 470)
- Computational Fluid Dynamics (p. 409)
- Cybersecurity (http://catalog.ku.edu/engineering/electrical-engineering-computer-science/certificate-cybersecurity/)
- Data Science (p. 514)
- Petroleum Management (p. 444)
- RF Systems Engineering (p. 515)
- Software Engineering and Management (http://catalog.ku.edu/engineering/electrical-engineering-computer-science/certificate-software-engineering-management/)
- Structural Analysis (p. 471)
- Structural Design (p. 471)
- Structural Forensics (p. 471)
- Water Resources (p. 472)

For information on graduate studies in petroleum management, contact the Department of Chemical and Petroleum Engineering (http://www.cpe.engr.ku.edu/) or the School of Business (https://business.ku.edu/).

Graduate Grade-Point Average (GPA) Requirement

In addition to completing a Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) that is formally approved by the advisory
committee and other requirements appropriate to the graduate degree, a student must:

1. Attain and maintain at least a 3.0 grade-point average in all graduate courses and
2. Attain and maintain at least a 3.0 grade-point average in all course work, including undergraduate courses taken to make up background deficiencies, except for courses taken at the Applied English Center.

Please note, once you begin enrolling in your graduate career all courses 500 level and above will count towards your graduate GPA, even if you are not counting those courses towards your degree or are taking them as pre-requisite courses. Students who obtain a GPA below 3.0 will be placed on academic probation or dismissed from the School of Engineering.

Plan of Study

All graduate students must have an approved Plan of Study on file by the end of their second semester of graduate study. Click here (https://gradplan.engr.ku.edu/accounts/login/?next=/) to create or update a plan. All students must have an up to date and approved Plan of Study on record in order to graduate.

Undergraduate Advising

Engineering students are primarily advised by engineering faculty members. Students are assigned an advisor by their engineering departments.

Each entering student is encouraged to attend KU's summer Orientation (http://firstyear.ku.edu/orientation/) during June and July. At the summer orientation program, students are advised on course selection for the fall semester and given the opportunity to enroll. Students who cannot attend the orientation program confer with their advisors and enroll a day or two before classes start.

Enrollment holds are placed on all Engineering students' accounts each semester before enrollment. Students see their advisor to plan schedules and discuss academic and career interests. Once a student has met with an advisor, the enrollment hold is released. Students are encouraged to call on their advisors any time during the school year if they wish to change their schedules or discuss other matters. Consultation with an advisor is recommended before making schedule changes.

Undecided engineering students are advised in the Engineering Student Success office, LEEP2 room 1415, 785-864-3881.

Graduate Advising

Graduate advising generally is done at the department and program level. Graduate students should contact the Director of Graduate Studies or Graduate Coordinator in their department or program if they have not yet chosen an advisor or have general questions. Students starting their graduate program should attend the New Graduate Student Orientation (http://engr.ku.edu/graduate-student-orientation/) (scheduled the week prior to the start of the fall and spring semester classes). More information is available here (https://graduate.ku.edu/information-new-students/).

Plan of Study

Graduate students should discuss their enrollment plans with their faculty advisor or Graduate Director to plan schedules and discuss academic and career interests. Once a student has met with an advisor, they should complete their Plan of Study online and submit the plan to their advisory committee for approval. Consultation with an advisor is recommended before making a Plan of Study. All graduate students, including those enrolled in courses at KU Medical Center and the Edwards campus, must have an approved Plan of Study on file by the beginning of their second semester in the graduate program. Enrollment holds are placed on students' accounts after their first year of graduate study if they do not have an up to date and approved Plan of Study on file. Click here (https://gradplan.engr.ku.edu/accounts/login/?next=/) to create or update a plan. All students must have an approved Plan of Study on record in order to graduate.

Undergraduate Scholarships and Financial Aid

The school has a scholarship program for entering freshmen students. Engineering scholarships are awarded competitively according to academic merit and without regard to financial need. Awards range from $1,000 to $4,000 per year, and scholarships are renewable for a total of four years of undergraduate study. All first-time freshmen who are admitted to the School of Engineering are considered for scholarships if they apply to the School of Engineering by the university's scholarship deadline (typically November 1). Students with financial need should fill out the FAFSA (Free Application for Federal Student Aid) by March 1.

Graduate Funding and Assistantships

A variety of scholarships, fellowships, and assistantships are available to graduate students through the School of Engineering, KU, and outside sources. Many opportunities require that students be admitted to a graduate program before students are eligible to apply. Be sure to apply early, in order to meet eligibility requirements for funding (both internal and external) by posted deadlines. Graduate students are nominated by their department or program for School of Engineering funding each fall and spring.

The KU Office of Financial Aid & Scholarships offers a helpful calculator to estimate costs and search for scholarships. Financial Aid & Scholarships (https://financialaid.ku.edu/apply-for-aid/) also administers grants, loans, and need-based financial aid. Students should contact the Graduate Director within their department or program or their advisor to inquire about research or teaching assistantships. Students must be admitted regularly or enrolling on regular status to be eligible for assistantships. Students admitted provisionally or placed on academic probation are ineligible for research or teaching assistantships. More information on graduate student funding is available here (https://graduate.ku.edu/funding/).

Undergraduate University Regulations

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

Absences

A student with excessive absences may be withdrawn from the course by the dean.
Academic Standing (Probation)

Good Academic Standing

Undergraduates must maintain both semester and cumulative grade-point averages of 2.0 or higher, and make progress toward an Engineering degree, to remain in good standing. Students' academic standings are reviewed after each semester.

Probation

If a student’s semester or cumulative grade-point average falls below 2.0, the student is placed on probation. The student will return to good standing if:

1. The following semester’s cumulative and engineering grade-point average is 2.0 or higher,
2. The cumulative grade-point average is 2.0 or higher, and
3. All other requirements described in the probation letter are met.

Students also may be placed on probation for failing to make progress toward an engineering degree or failing to be continuously enrolled in Applied English Center (https://aec.ku.edu/) or English courses until all AEC and the KU Core Written Communications requirements are met.

Dismissal

A student on probation may be dismissed if any of the following occur:

1. Any semester grade-point average is below 2.0 while the student is on probation.
2. The cumulative grade-point average is below 2.0 after two semesters on probation.
3. The student has failed to meet the other requirements stated in the probation letter.
4. The student on probation has failed to make progress toward an engineering degree or toward fulfilling all AEC and the KU Core Written Communications requirements.

Readmission

A student who has been dismissed from the School of Engineering for poor scholarship may apply for readmission by submitting a Change of School form to the Engineering Student Success office in LEEP2, room 1405. A student who has been dismissed from the University of Kansas may apply for admission or readmission to the School of Engineering by contacting the Office of Admissions and Scholarships (http://www.ku.edu/admission/). A student does not automatically become eligible to re-enroll after a certain period of time. A student who is readmitted on probation must meet stringent academic requirements to be returned to good standing.

Change of School

To change from one school to another, KU students must submit a Change of School form online (https://registrar.ku.edu/change-school/).

Admission is competitive and students are considered on a case-by-case basis. Students must have an overall college grade-point average of 2.5 or better, with grades of "C" or better in Calculus I and any courses in mathematics, science, and engineering taken. Applications are accepted on an ongoing basis.

Credit/No Credit

A Credit/No Credit option is available to degree-seeking undergraduates depending on their academic program, Where permitted, students may enroll in one course a semester under the option; specifically required courses (such as calculus or physics) may not be taken credit/no-credit. For more information, visit the KU Policy Library (http://policy.ku.edu/).

Always check with your advisor before electing C/NC, as policies vary from department to department.

In EECS majors, engineering physics, and mechanical and petroleum engineering majors, Credit/No Credit is allowed for courses used to fulfill KU Core GE 2.1 Written Communication, GE 2.2 Oral Communication, GE 3H Arts & Humanities, GE 3S Social Sciences, AE 4.1 Human Diversity, AE 4.2 Cultural & Global Awareness, and AE 5 Social Responsibility and Ethics requirements only. If an Engineering department recommends that certain course work be used to fulfill any of these requirements, those courses shall not be eligible for Credit/No Credit.

Credit/No Credit is not an option for any credits counting towards aerospace, chemical, civil, or architectural engineering degrees.

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Dean's Honor Roll

Students with grade-point averages of 3.75 who have completed at least 14 graded hours are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Enrollment Holds

An Engineering Advising Hold (EAH) is placed on all Engineering students’ accounts prior to enrollment each term. Students must meet with their assigned Engineering advisor to have the hold released.

A No Drop Hold (DRP) is placed on all Engineering students’ accounts early in the term preventing students from dropping classes without the permission of their advisor and the Engineering Dean's Office. The No Drop Hold prevents students from withdrawing from essential classes without speaking with an advisor about the possible negative ramifications of a withdrawal.

Students voluntarily leaving the School of Engineering may have their Engineering Advising Hold or No Drop Hold released by submitting an official Change of School form to leave the School of Engineering.

Graduation with Departmental Honors

For students who complete their department’s honors program, designation of honors appears on the transcript.

Graduation with Distinction and Highest Distinction

Students who fulfill the following requirements are eligible for graduation with distinction:

1. Students must rank in the upper 10 percent of the graduating class by KU grade-point average.
2. Students must have taken at least 64 hours in residence at KU.
3. Students with transfer credit must also have overall grade-point averages, including transfer credit, that fall into the upper 10 percent of the class.

The upper third of those awarded distinction graduate with highest distinction. The list is compiled each spring and includes July, December, and May graduates.

**Maximum and Minimum Semester Enrollment**

The normal course load is 15-17 hours a semester. A student may not enroll in more than 19 credit hours during any semester or more than 10 credit hours during the summer session except with approval of the major advisor and the dean.

**Prerequisites and Corequisites**

Students may be administratively dropped from courses for which they do not meet prerequisite or corequisite requirements.

**Required Work in Residence**

Students must be enrolled in the school for the last 30 hours of credit.

**Transfer of Credit**

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

The School of Engineering does not routinely accept credits from foreign institutions or from vocational-technical programs in the United States. Before such courses may be added to a student’s official KU record as transfer credits, they must be validated

1. By examination by the department or school offering the course on the KU campus,
2. By earning a grade of C or higher in a later course in the sequence of courses, or
3. By earning a grade of C or higher in a course.

Credits for English composition at a foreign institution of higher education are not accepted for the required English courses in any engineering curriculum.

Credits from courses completed at the secondary level (high school), whether from U.S. or from foreign schools, are not added to a student’s official record unless the student obtains college credits through one of three examination programs:

1. The College Entrance Examination Board’s Advanced Placement test,
2. KU’s own credit by examination program, or
3. The College Level Examination Program.

A course from another college or university may apply toward the Bachelor of Science in Engineering degree as transfer or nonresident credit only if the grade received is at least C.

Transfer credit in engineering science and engineering design from institutions accredited by the Accreditation Board for Engineering and Technology (http://www.abet.org/) and from institutions with which KU has approved articulation agreements may be applied toward the degree as appropriate in the particular engineering curriculum. Transfer credit in engineering from other institutions must be evaluated and validated on a case-by-case basis.

**Graduate University Regulations**

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

**Graduate Enrollment**

The Graduate Studies policy for graduate enrollment is that all graduate students must be continuously enrolled in the fall and spring semesters. Note that this does not include the summer semester, unless you are a Ph.D. candidate (post-comprehensive enrollment) or have a GTA/GRA appointment. This includes part-time programs, but does not include non-degree seeking students. Review the general information in the Graduate Studies (p. 2408) section of the online catalog for more information.

If you do not plan to enroll for a given semester, you will need to do one of the following:

**Request a Leave of Absence** – Use this option when you plan to return to your graduate study after one or more semesters. A leave of absence may be granted upon request to the graduate program in advance of leave. Leaves may be granted in cases of illness, emergency, to pursue family responsibilities, or to pursue full-time activities related to long-range professional goals. The time taken for a leave of absence does not count against the time limit for earning the degree. However, if the total time for the leave extends more than three semesters, you may lose your place in the program and have to re-apply for admission. To request a leave of absence, you must contact your department graduate coordinator, who will submit a Progress-to-Degree (PtD) form. You need to provide the graduate coordinator with the following information: non-ku email address, mailing address, first term of leave and the semester you plan to return, as well as a statement on the reason for the leave of absence.

**Request to Voluntarily Discontinue** – Use this option if you do not plan to return to your graduate program in the School of Engineering. This means that you voluntarily resign from a program by requesting a discontinuance. If you choose to return at a later date, you must re-apply for admission. Discontinuance is requested through your department or program via email to the department graduate director or assistant.

Please note, students who do not request a leave of absence are discontinued in the system and will be required to apply for re-admission (application fee required). To prevent having to re-apply and pay additional fees, students are strongly encouraged to request a leave of absence and contact their departmental staff when they are ready to return.

**Academic Status**

**Good Academic Standing**

Graduate students must be admitted regularly and maintain cumulative grade-point averages (GPA) of 3.0 or higher to be considered in good standing. Students admitted provisionally must complete departmental / program requirements before they are considered in good standing. Students on academic probation can regain their good standing once they have a cumulative GPA of 3.0 or higher. Students’ academic standings
are reviewed after each semester. All courses 500-level and above will count towards the graduate GPA, if enrolled in a graduate program.

Provisional Admittance / Academic Probation

Students who are admitted provisionally are given a set of requirements that must be completed, generally within the first year, before they will be moved to regular status. Students placed on academic probation due to their graduate GPA must obtain a cumulative GPA of 3.0 or higher within a given time frame, generally one semester, before they are moved to regular status. If you receive a cumulative grade point average below a 3.0 during your graduate career, you are considered ineligible for teaching and research assistantship positions or will need to petition the school and Graduate Studies office for approval.

Dismissal

Graduate students who are unable to meet their provisional or probationary requirements within the given time frame may be dismissed from the School of Engineering. When the particular circumstances are deemed to justify continuation, and upon the recommendation of the department or program, such a student may be continued on probation by the Graduate Division for one additional semester equivalent of full-time study. If a student decides to pursue another graduate degree within the School of Engineering, they are required to re-apply.

Change of Degree

A student who wants to change from one engineering degree program to another within the same department should see their department graduate coordinator to complete a progress-to-degree (PhD) form. Students who wish to change to a program outside of their home department must submit an application for admission. If a student changes or is accepted into another program and wishes to pursue only the new degree, the student should notify the department graduate coordinator, so that the old plan may be removed from the student’s record. Students are allowed to pursue multiple degrees, but should discuss these plans with both program advisors.

Credit/No Credit

Graduate students may select the Credit/No Credit option for certain courses. Students should follow the policy outlined in the University Senate Rules and Regulations (http://policy.ku.edu/governance/USRR/), Section 2, article 2.27.

Honors

Graduate student can obtain honors only at the time of the final defense or final exam (and comprehensive exam for Ph.D. students). Students enrolling in coursework only degree programs do not have the opportunity to receive honors at the graduate level. Students who complete a project, thesis or dissertation will have the opportunity to receive honors at the time of the final exam or defense. Students should discuss the requirements for graduation with their program advisor if seeking honors. Only 10-15% of graduate students receive this high distinction.

Entry and Employment in the Profession

Initial Licensing

Formal study in an accredited engineering program is the principal means of becoming licensed to practice engineering in Kansas and other states. During the junior or senior year, a student may take the national Fundamentals of Engineering examination. After 4 or more years (licensing regulations vary among states) of practice satisfactory to the board, the student may take the examination to become a registered professional engineer.

Job Search Assistance

The Engineering Career Center (http://ecc.ku.edu/) offers a comprehensive array of services to students seeking permanent employment and career-related summer or co-op employment. These include on-campus interviewing; 2 career fairs each year; individual advising and group workshops on résumés; interviewing, and job search strategies; online interviewing sign-up; online job postings from many employers not interviewing on campus; a library of employer and career literature; and an online résumé book searchable by employers.

The Engineering Career Center offers services to all engineering students. Students are encouraged to visit the Engineering Career Center early in their undergraduate or graduate studies. Many employers actively seek KU engineering and computer science students. Some prefer to hire students as early as the first-year level for internships. The Career Center is in 1410 LEEP2; additional information is available from 785-864-3891.

Aerospace Engineering Courses

AE 211. Computing for Engineers. 3 Credits.
Introduction to computing concepts. Introduction to the MATLAB computing language using a suite of simulations in science and engineering in a progression which adds new MATLAB constructs - as well as logical and mathematical constructs - with each simulation. Simulations include numerical integration, coordinate transformations and primitive reinforcement learning constructs. Prerequisite: MATH 125 or MATH 145 with a grade of C- or higher.

AE 221. Introduction to Global History of Aerospace Technologies. 1-3 Credits.
This History of Aerospace Technology starts in neolithic times with a description of a variety of flying implements being used for hunting and warfare. Their basic designs, mechanics, impact on human evolution, migration and societal development are brought forward to the development of gunpowder, ballistics and rocketry. Lighter than air flight innovations from 1783 forward show an intermingling of civil and military uses through WWI, shaping world events and the fortunes of nations. Heavier than air inhabited flight exploration begins with Cayley, includes the contributions of technologists Lilienthal, Chanute, visionaries and writers Mouillard and Verne, and concludes in a vertical exploration by region, nation and manufacturer, including: Douglas, Boeing, Lockheed, Fokker, Heinkel, Messerschmitt, Fairey, Handley Page, Piaggio, Tupelov, Mikoyan-Gurevich, Kamov, Mitsubishi, Hindustan Aeronautics, Sud Aviation and others. This course represents a very unique opportunity for students to study under one of the most important, famous and well published Aerospace Technologists and Historians ever to practice.

AE 241. Private Flight Course. 1 Credits.
One hour of academic credit is given upon the awarding of the private pilot's license by the Federal Aviation Administration. Required documentation includes a letter from the F.A.A. designated examiner giving the check ride and a copy of the private license. The Department of Aerospace Engineering provides no ground or flight instruction. Graded on a satisfactory/fail basis. Prerequisite: Aerospace Engineering students only, with consent of instructor.

AE 242. Private Flight Aeronautics. 3 Credits.
Three hours of academic credit is given for the successful completion of the F.A.A. private pilot's written examination. Required documentation
is a copy of the written score. Available only to Aerospace Engineering transfer students as a course substitute for AE 245.

**AE 245. Introduction to Aerospace Engineering. 3 Credits.**
Basic systems of an aerospace vehicle, meteorology, vehicle performance, navigation and safety. Specific examples emphasize general aviation. Open to students with less than 60 hours completed. Other students need permission of instructor. Prerequisite: Corequisite: MATH 125 or MATH 145.

**AE 290. Aerospace Colloquium. 0.25 Credits.**
This is a required course for all aerospace engineering majors each fall semester. Topics of importance and new developments are discussed by aerospace industry representatives and representatives of F.A.A., D.O.T., D.O.D., N.A.S.A., related sciences, and engineering disciplines. A forum for student activities at all levels. Open enrollment.

**AE 292. Aerospace Industrial Internship. 1 Credits.**
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelors degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of freshman year.

**AE 345. Fluid Mechanics. 3 Credits.**
Study of fundamental aspects of fluid motions and basic principles of gas dynamics with application to the design and analysis of aircraft. Prerequisite: Corequisite: AE 245, CE 260, and MATH 220; or permission of instructor.

**AE 360. Introduction to Astronautics. 3 Credits.**
Introduction to astronautical engineering. The history of astronautics, including rocketry and space flight. Fundamentals of astronautics, including space environment, astrodynamics and the analysis and design of spacecraft systems. Design, construction and launch of a prototype earth-satellite using a high-altitude balloon. Prerequisite: MATH 126 or MATH 146 with a grade of C- or higher. Corequisite: A course in computer programming.

**AE 390. Aerospace Industrial Internship. 1 Credits.**
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelors degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of Sophomore year.

**AE 400. Special Topics: _____. 1-3 Credits.**
A course in a topic related to undergraduate studies in Aerospace Engineering. Varies by topic or with consent of instructor.

**AE 421. Aerospace Computer Graphics. 3 Credits.**
Development of skills in depicting aerospace vehicles and their components and subsystems for the purpose of illustration, design, and analysis using traditional and modern (Computer Aided Design) drafting tools. Prerequisite: Corequisite: CE 310 or equivalent, or permission of instructor.

**AE 430. Aerospace Instrumentation Laboratory. 3 Credits.**
Review and hands-on laboratory experiments with basic electronic elements (resistors, capacitors, conductors, transistors, linear circuits, logic devices, and integrated circuits). Overview and hands-on laboratory experiments using various experimental techniques available to the aerospace engineers (pressure probes, thermocouples, strain gauges, hot-wire anemometer, laser Doppler velocimeter, and flow visualization techniques). Prerequisite: AE 445 with a grade of C- or higher, and EECS 316.

**AE 441. Advanced Flight Training. 1-3 Credits.**
Academic credit is given for the successful completion of advanced flight training beyond the private pilot rating. One hour is given for each of the following: commercial, instrument rating, certified flight instructor. The Aerospace Engineering Department provides no ground or flight instruction. Open enrollment. Graded on a satisfactory/fail basis. Prerequisite: AE 241.

**AE 445. Aircraft Aerodynamics and Performance. 3 Credits.**
Study of airfoil and wing aerodynamics, component drag, static and special performance, and maneuvers of aircraft. Open enrollment. Prerequisite: AE 345 and CE 260, both with grades of C- or higher.

**AE 490. Aerospace Industrial Internship. 1 Credits.**
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelors degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of junior year.

**AE 506. Aerospace Structures I, Honors. 3 Credits.**
In depth analysis and design of aerospace structures from the standpoint of preliminary design. Deflection and stress analysis of structural components, including thin-walled beams and built-up (semimonocoque) structures. Material failure of highly stressed components, including connections. Buckling of thin-walled beams and semimonocoque structures. Durability and damage tolerance strategies for aerospace structures to avoid corrosion, fatigue, and fracture. Prerequisite: CE 310 with a grade of C- or higher and permission of instructor. Must have minimum 3.25 KU GPA.

**AE 507. Aerospace Structures I. 3 Credits.**
Analysis and design of aerospace structures from the standpoint of preliminary design. Deflection and stress analysis of structural components, including thin-walled beams and built-up (semimonocoque) structures. Material failure of highly stressed components, including connections. Buckling of thin-walled beams and semimonocoque structures. Durability and damage tolerance strategies for aerospace structures to avoid corrosion, fatigue, and fracture. Prerequisite: CE 310 with a grade of C- or higher.

**AE 508. Aerospace Structures II. 3 Credits.**
Stress and deflection analysis of aerospace structures using the finite element method. Introduction to work-energy principles, including Castigliano's Theorems, for the analysis of statically indeterminate structures. Rod, beam, shaft, membrane, and plate finite elements. Prerequisite: AE 506 or AE 507, and MATH 290 with a grade of C- or higher.

**AE 509. Honors Aerospace Structures II. 3 Credits.**
Indeterminate structures, principle of virtual work, Castigliano's theorems, displacement method of finite element analysis; rod, beam, shaft, and membrane elements; analysis of aerospace structures with the finite element method. Prerequisite: AE 506 or AE 507, and MATH 290 with a grade of C- or higher, and minimum 3.25 KU GPA.

**AE 510. Aerospace Materials and Processes. 4 Credits.**
Properties and applications of aircraft materials, forming methods, and manufacturing processes. Ethics and social responsibility for engineers. Oral technical presentations. Prerequisite: AE 507 or AE 506, and a grade of C- or higher in CHEM 150 or CHEM 130 and CHEM 149.

**AE 520. Space Systems Design I. 4 Credits.**
Preliminary design techniques for a space system. Systems engineering; orbital mechanics; spacecraft subsystems including propulsion, attitude control, power, thermal command and data, communications, and structures; and ethics and social responsibility for engineers. Written technical reports. Prerequisite: AE 360 or EPHX 521, AE 421, AE 508.
Transfer functions and their application. Relationships with handling quality requirements. Fundamentals of classical control theory and applications to automatic flight controls. Implications to airplane design. Prerequisite: AE 545 or AE 546, AE 550, and a grade of C- or higher in MATH 290 or MATH 291, and minimum 3.25 KU GPA.

AE 551. Dynamics of Flight II. 4 Credits.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Mathematical modeling of airplane and control system analysis in state space. Dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. Implications to airplane design. Prerequisite: AE 545 or AE 546, AE 550, and a grade of C- or higher in MATH 290 or MATH 291.

AE 552. Honors Dynamics of Flight II. 4 Credits.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Perturbed state forces and moments, stability derivatives, dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. AE 521 and permission of instructor.

AE 553. Space Systems Design II. 4 Credits.
Preliminary design project of a space system. Technical written reports and oral presentations. Prerequisite: AE 520 and permission of instructor.

AE 554. Propulsion Systems Design I. 4 Credits.
Preliminary design project of a complete propulsion system, including the airframe. Technical written reports and oral presentations. Prerequisite: AE 521, or AE 520 and permission of instructor.

AE 555. Fundamentals of Aerodynamics. 4 Credits.
Basic gas dynamic equations, potential flow for airfoils and bodies, thin airfoil theory, finite wing, subsonic similarity rules, one and two dimensional supersonic flow, boundary layers, heat transfer, and laboratory experiments. Prerequisite: A grade of C- or higher in AE 445, ME 212, MATH 127 or MATH 147, and MATH 220 or MATH 221.

AE 556. Aerodynamics, Honors. 4 Credits.
Basic gas dynamic equations, potential flow for airfoils and bodies, thin airfoil theory, finite wing, subsonic similarity rules, one and two dimensional supersonic flow, boundary layers and viscous flow, heat transfer, and laboratory experiments. A special project in aerodynamics for AE 546 students. Prerequisite: AE 445, ME 212, MATH 220 and MATH 290.

AE 557. Dynamics of Flight III. 4 Credits.
Introduction to Tensors Algebra. Frames and coordinates in dynamics systems. General equations of motion of rigid airplanes and reduction to steady state flight situations. Steady state forces and moments. Stability derivatives. Static stability, control and trim. Trim envelope. Relationships with handling quality requirements. Engine-out flight. Effects of the control system. Implications to airplane design. Prerequisite: Grade of C- or higher in AE 211 and MATH 220 or MATH 221. Corequisite: AE 545 or AE 546, and AE 290 or MATH 291, or permission of instructor.

AE 558. Honors Dynamics of Flight III. 4 Credits.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Perturbed state forces and moments, stability derivatives, dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. AE 521 and permission of instructor.

AE 559. Aerospace Senior Seminar. 1 Credits.
Presentation and discussion of technical and professional paper reports. Methods for improving oral communication. Discussion of topics such as ethics, registration, interviewing, professional societies, personal planning. Prerequisite: Senior standing.

AE 560. Spacecraft Systems. 3 Credits.
Fundamentals of spacecraft systems and subsystems. Spacecraft systems engineering, space environment; basic astrodynamics; and the following spacecraft subsystems; attitude determination and control; electrical power; thermal; propulsion; structures and mechanisms; command, telemetry, and data handling; and communications. Prerequisite: AE 360, AE 507 or AE 506, EECS 316, and ME 212.

AE 561. Fundamentals of Airplane Reciprocating Propulsion Systems. 3 Credits.
Study of the basic principles of operation and systems of internal and external combustion engines with emphasis on airplane reciprocating engines. Cycle analysis, propeller theory, propeller selection and performance analysis. Prerequisite: AE 445 and ME 212 with grades of C- or higher.

AE 562. Wind Turbine Engineering. 3 Credits.
Fundamentals of wind energy conversion systems. Wind characteristics, wind turbine technologies, design and testing, wind farm systems, power electronics, and grid integration. Prerequisite: AE 401, AE 507 or AE 506, ME 212, and CHEM 150 or CHEM 130 and CHEM 149, or permission of instructor.
Course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence of the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 508, AE 545, and EECS 316 and EECS 318 or equivalent.

AE 690. Professional Development for Graduate Studies. 0.25 Credits.
Professional development for graduate students. Responsible conduct of research. Presentation and discussion of graduate student research. Oral communication to a range of audiences, including short presentations by students on a range of topics. One semester of enrollment required for all MS and ME candidates, and two semesters of enrollment required for all PhD and DE aspirants and candidates. Graded on a satisfactory/unsatisfactory basis.

AE 700. Special Topics: ____. 1-5 Credits.
Courses on special items of current interest in aerospace engineering, given as need arises. May be repeated for additional credit. Prerequisite: Approval of instructor.

AE 704. Dynamics and Vibrations. 3 Credits.
Problems in engineering dynamics and vibrations. Topics include applications of generalized forces and coordinates, Lagrange equations, and a study of the performance of single and multiple degree of freedom in vibrational systems. (Same as CE 704.) Prerequisite: AE 508.

AE 705. Structural Vibrations and Modal Testing. 4 Credits.

AE 709. Structural Composites. 3 Credits.
Fiber materials, tapes, cloths, resin systems; general aeolotropic theory, elastic constants, matrix formulation; computer analysis, strength, theory of failure; introduction to design with composites, preliminary design, optimization, processing variables, product design. Prerequisite: CHEM 150 or CHEM 130 and CHEM 149, AE 508 or AE 509 or CE 761, and AE 510 or ME 306 or CE 710.

AE 710. Advanced Structural Composites. 3 Credits.
The course objectives are to provide each student with a more in-depth understanding of and practical hands-on experiences with available fiber and matrix materials, manufacturing methods, and the mechanical behavior of composite materials and structures. Modern software tools and manufacturing methods are addressed, to include optimization techniques and design for manufacturability. Classical plate theory, bending, buckling, and vibration of anisotropic plates is addressed. Damage tolerance and repairability, as well as nondestructive evaluation techniques are also covered. Skills learned in previous composite courses will be utilized to design, analyze, and fabricate structures of current industrial relevance. Prerequisite: AE 508 or similar, AE 709 or similar, or consent of instructor.

AE 712. Techniques of Engineering Evaluation. 3 Credits.
The formulation of problems arising in aerodynamics, heat transfer, stress analysis, thermodynamics, and vibrations. The expression of these problems in a form amenable to quantitative evaluation by dimensional reasoning, analog techniques, relaxation methods, and classical analysis.

AE 713. Stochastic Systems, Estimation and Identification in Aerospace Engineering. 3 Credits.
Stochastic adaptive control theory is concerned with recursive estimation of unknown parameters and control for systems with uncertainties modeled as random variables or random processes. The theory is motivated by applications in such diverse areas as aerospace guidance and control, signal processing and communications, manufacturing processes, and financial economics. Mathematical theory of stochastic adaptive control for models based on stochastic difference equations such as autoregressive processes and stochastic differential equations as Markov diffusion processes have been developed and will be presented. This course focuses on filtering and system identification theory. Prerequisite: AE 430, AE 750, MATH 590 and MATH 627 or equivalent.

AE 721. Aircraft Design Laboratory I. 4 Credits.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507 or AE 506, AE 545 or AE 546, AE 551 or AE 552, AE 571 and corequisite of AE 521 or AE 520 and permission of instructor.

AE 722. Aircraft Design Laboratory II. 4 Credits.
The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 522 may be taken concurrently.

AE 724. Propulsion System Design and Integration. 3 Credits.
Theory and design of propulsion systems for both low and high speed aircraft and their integration into the overall configuration. Internal and external design and analysis of inlets and nozzles including their effect on the external aerodynamics of the aircraft. Engine/inlet compatibility and the problems of matching both steady state and dynamic characteristics to obtain peak, stable performance. Prerequisite: AE 572 or AE 573.

AE 725. Numerical Optimization and Structural Design. 3 Credits.
Classical theories of unconstrained and constrained optimization. Numerical techniques for unconstrained optimization, including the steepest descent, conjugate gradient and "Newton's" methods. Numerical techniques for constrained optimization, including sequential approximate problem techniques as well as the method of feasible directions. Computer aided solutions to practical design problems in aerospace engineering. Final design project. Prerequisite: MATH 220 and MATH 290 or junior status.

AE 727. Aircraft Antenna Systems. 3 Credits.
Aircraft antenna integration and design process. Overview of common aircraft communication, navigation, and sensing systems. CAD tools and analysis and measurement techniques for designing and assessing systems. Low-observable vehicle design concepts. Prerequisite: PHSX 212, EECS 316, MATH 127, AE 421 or other CAD experience and CE 310 or equivalent recommended; or by consent of instructor.

AE 728. Wind Turbine Engineering. 3 Credits.
Course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 507 or AE 506, AE 545 or AE 546, and EECS 316 or consent of instructor.
AE 730. Advanced Experimental Fluid Dynamics. 3 Credits.
Theory, methods and data analysis of various modern flow measurement techniques including: hotwire cluster, laser-Doppler velocimetry, particle image velocimetry, holography, pressure detection, temperature probing, vorticity measurements, Lagrange particle tracking. Specific experimental technique covers optical measurements in turbulent flow, microfluidic experiments, and spray and multiphase flow measurement. Prerequisite: AE 430, AE 545 or AE 546 or consent of instructor.

AE 731. Supersonic Aerodynamics Laboratory. 1 Credits.
Supersonic wind tunnel and shock tube operations, techniques, and instrumentation. Flow study and model testing. Prerequisite: AE 545 or AE 546.

AE 732. Introduction to Flight Test Engineering. 3 Credits.
Course presents flight test principles, instrumentation, planning, and operation of aerospace vehicle flight testing. Course is structured with lectures, laboratories, and flight experiments. Student teams plan and execute a series of flight test experiments including: familiarization with flight test measurements, static system calibration, rate-of-climb performance, and determination of vehicle flight dynamics. Prerequisite: AE 445 and AE 550 or consent of instructor.

AE 743. Compressible Aerodynamics. 3 Credits.
Compressible flow with heat and friction; shock polars, 1-D unsteady gas dynamics, shock tube, conical flows, methods of characteristics, hypersonic flow theory. Prerequisite: AE 545 or AE 546.

AE 744. Introduction to Turbulent Flow. 3 Credits.
Reynolds averaged equations for turbulent flow, basic energy relations and spectra in turbulent flow, analysis of turbulent boundary layer, turbulent pipe flow, turbulence models and simulation. Prerequisite: AE 545 or AE 546 or equivalent.

AE 745. Applied Wing and Airfoil Theory. 3 Credits.
Applications of potential flow theory to aerodynamics of airfoil sections; wings and wing-body combinations. Introduction to high angle-of-attack and transonic aerodynamics. Prerequisite: AE 545 or AE 546.

AE 746. Computational Fluid Dynamics. 3 Credits.
Applications of numerical techniques and digital computers to solving fluid flow problems. Solutions involving incompressible and compressible flows, inviscid and viscous flows. Finite difference techniques for different types of partial differential equations governing the fluid flow. Prerequisite: AE 545 or AE 546.

AE 747. Introduction to Transonic Aerodynamics. 3 Credits.

AE 748. Helicopter Aerodynamics. 3 Credits.
Helicopter components and their functioning: rotor aerodynamics, performance, stability and control, aeroelastic effects and vibrations. Prerequisite: AE 551 or AE 552.

AE 750. Applied Optimal Control. 3 Credits.
Introduction to optimal control analysis and design tools useful for the design of Multi-Input/Multi-Output controllers. Linear Quadratic Regulator problem extended by including advanced command techniques and advanced controller structures. The techniques are illustrated with aerospace applications. Prerequisite: AE 551 or AE 552 or ME 682 or consent of instructor.

AE 751. Advanced Airplane Dynamics. 2 Credits.

AE 752. Linear Multivariable Control. 3 Credits.
An introduction to the modeling and analysis of multi-input, multi-output control systems. Topics include state space representation, solutions of linear systems, stability analysis, LQR design, cooperative controller design, etc. Prerequisite: AE 551 or AE 552, or EECS 444 or equivalent; or by consent of instructor.

AE 753. Digital Flight Controls. 3 Credits.
Introduction to the analysis and design tools useful for the design of aircraft guidance and flight control systems containing continuous dynamics and a digital computer. Topics include Z-plane analysis, autopilot design using successive loop closure, guidance design models, path planning, vision-guided navigation, etc. Prerequisite: AE 551 or AE 552 or ME 682 or consent of instructor.

AE 754. Missile Dynamics. 3 Credits.

AE 755. Robust and Nonlinear Control. 3 Credits.
The robustness is one of the most critical qualities of an appropriately designed feedback control system. In this course the ability of the closed-loop system to continue performing satisfactorily despite uncertainties in estimated state variables and/or large variations in the (open-loop) plant dynamics will be investigated. This course will lay down the mathematical and theoretical background needed for the analysis and design of robust feedback control systems. Modern controller design methods (e.g. H-inf control) will be used to design controller highly nonlinear and transient dynamics. Prerequisite: AE 550, AE 551, AE 750, MATH 590 or consent of instructor.

AE 756. Rule-Based Control Systems. 3 Credits.
Introduction to rule-based systems with an emphasis on a cognitive architecture. Realistic examples of using such systems will be covered in the context of unmanned aircraft control. A brief review of programming in LISP language, on which the cognitive architecture is based. Prerequisite: EECS 316 and AE 551 or AE 552 or equivalent.

AE 757. Rule-Based UAV Control Lab. 1 Credits.
A guided experience on building an unmanned aircraft system. Uses and existing radio-controlled platform, and thus does not require an expertise in fabrication. Focuses on building the communication hardware and software that enables the use of a rule-based control system on a computer to control the aircraft remotely. Prerequisite: Corequisite: AE 756.

AE 758. Introduction to Robotics. 3 Credits.
An introduction to robotics covering spatial descriptions and transformations, manipulator kinematics, Jacobians, and dynamics and control of manipulators. The successful completion of this course will prepare students for advanced studies in robotics. Prerequisite: CE 260, AE 551 or AE 552, and MATH 290, or by consent of instructor.

AE 759. Estimation and Control of Unmanned Autonomous Systems. 3 Credits.
An introduction to the modeling, estimation, and control of unmanned autonomous systems. Topics include motion description, navigation sensors, complementary filters, Kalman filters, attitude estimation, position estimation, attitude keeping controller, etc. The successful completion
of this course will prepare students for advanced studies in robotics & controls. (Same as EECS 759.) Prerequisite: MATH 627, AE 551 or AE 552 or EECS 444, or by consent of instructor.

**AE 760. Spacecraft Systems. 3 Credits.**
Fundamentals of spacecraft systems and subsystems. Spacecraft systems engineering, space environment; basic astrodynamics; and the following spacecraft subsystems: attitude determination and control; electrical power; thermal; propulsion; structures and mechanisms; command, telemetry, and data handling; and communications. Same as AE 560 with the addition of a research paper. Not available for students that have taken AE 560. Prerequisite: AE 507, EECS 318, MATH 124, and ME 312 or equivalents.

**AE 765. Orbital Mechanics. 3 Credits.**
Motion of space vehicles under the influence of gravitational forces. Two body trajectories, orbit determination, orbit transfer, universal variables, mission planning using patched conics. Transfer orbits. Prerequisite: MATH 220, MATH 290, and CE 260 or equivalent.

**AE 766. Spacecraft Attitude Dynamics and Control. 3 Credits.**
Dynamics of rigid spacecraft, attitude control devices including momentum exchange, mass movement, gravity gradient and reactor rockets. Design of feedback control systems for linear and bang-bang control devices. Prerequisite: AE 551 or AE 552 or permission of instructor.

**AE 767. Spacecraft Environments. 3 Credits.**
Fundamentals of spacecraft environments. Description and analysis of the natural environment in which spacecraft operate post-launch. Includes optical, electromagnetic, corpuscular radiation, plasma and dust from low Earth orbit, through outer heliosphere. Prerequisite: PHSX 212 required, PHSX 313 or PHSX 351 recommended.

**AE 768. Orbit Determination. 3 Credits.**
Develops the theory of batch and sequential (Kalman filter) estimation theory related to orbit estimation, including a review of necessary concepts of probability and statistics. Course work includes a term project that allows students to apply classroom theory to an actual satellite orbit determination problem. Prerequisite: AE 360. Corequisite: AE 560 or AE 760.

**AE 771. Rocket Propulsion. 3 Credits.**
Basic elements of rocket propulsion: systems, propellants, and performance. Prerequisite: AE 545 or AE 546 or equivalent.

**AE 772. Fluid Mechanics of Turbomachinery. 3 Credits.**

**AE 781. Introduction to Adaptive Aerostuctures. 3 Credits.**
This course covers the basic material properties and modeling techniques for structures that are capable of changing some physical property in response to a command signal. The course will be useful for students from nearly every branch of engineering and includes a fabrication and testing practicum introducing basic post processing and integration techniques used with piezoelectric, shape memory alloy and magnetorheological materials. The course concludes with an overview of applications and examples of adaptive products. Prerequisite: ME 311 or equivalent.

**AE 790. Special Problems in Aerospace Engineering for Masters Students. 1-5 Credits.**
Directed studies of advanced problems in aerospace engineering. Open only to graduate students with departmental approval.

**AE 803. Aeroelasticity. 3 Credits.**
Introduction to self-excited vibrations, wing flutter, panel flutter, unsteady aerodynamics, launch vehicle structural vibrations. Prerequisite: AE 508, AE 545 or AE 546, AE 551 or AE 552, and AE 704.

**AE 821. Advanced Aircraft Design I. 3 Credits.**
Aerodynamic design optimization. Aircraft cost prediction methods: development, manufacturing, and operating. Minimization of operation costs and implications to configuration design. Design to minimize life-cycle costs. Design decision making on the basis of cost.

**AE 822. Advanced Aircraft Design II. 3 Credits.**
Design of flight control systems, fuel systems, hydraulic systems, and electrical systems. Weapon system integration problems, design for low radar cross sections. The kinematics of landing gear retraction systems.

**AE 830. Aerospace Graduate Internship. 1-12 Credits.**
One credit hour per month of approved aerospace engineering internship satisfying one of the requirements for the MS or PhD program. Graded on a satisfactory/unsatisfactory basis.

**AE 840. Aerodynamics of Viscous Fluids. 3 Credits.**
Concepts of boundary layer equations of viscous fluids. Various transformations for compressible boundary-layer equations. Approximate and exact finite-difference solutions, including effects of suction and blowing. Transitions. Concept of turbulent flow and solutions of turbulent boundary layer equations. Applications in aeronautics. Prerequisite: AE 545 or AE 546.

**AE 846. Advanced Computational Fluid Dynamics and Heat Transfer. 3 Credits.**
Present recent advances in computational fluid dynamics and heat transfer with a focus on numerical algorithms designed for unstructured grids, including grid generation, convergence acceleration techniques, high-order algorithms and parallel computing on CPU and GPU clusters. It is expected that the students will understand the basics of the finite volume method for unstructured grids, and be able to program a 2D Euler solver for arbitrary grids after taking this class. Prerequisite: AE 746. This class is not open to undergraduate students.

**AE 892. Special Problems in Aerospace Engineering for Doctoral Students. 1-8 Credits.**
Directed studies of advanced problems in aerospace engineering. Open only to graduate students with consent of instructor.

**AE 895. M.S. Thesis or Project. 1-6 Credits.**
Original research or project which satisfies the requirements for the degree of Master of Science in Aerospace Engineering. Restricted to Aerospace MS students. Graded on a satisfactory progress/limited progress/no progress basis.

**AE 941. Hypersonic Aerodynamics I. 3 Credits.**
The gasdynamics of aerospace vehicles operating in the speed range above Mach 5. Rarefied and dissociated gas flows; magnetogasdynamic and heat transfer problems. Prerequisite: Consent of instructor.

**AE 996. Ph.D. Dissertation. 1-9 Credits.**
Restricted to Aerospace Ph.D. candidates. Graded on a satisfactory progress/limited progress/no progress basis.

**AE 997. DE Project. 1-16 Credits.**
A major design problem or system study satisfying the project requirements for the Doctor of Engineering in Aerospace Engineering degree. Restricted to Aerospace DE candidates. Prerequisite: Successful completion of Comprehensive Oral Exam.
Bioengineering Courses

BIOE 800. Bioengineering Colloquium. 0.5-1 Credits.
A colloquium series featuring speakers from industry, government, other universities, research centers and research organizations of the university campus presenting talks on various topics related to bioengineering.

BIOE 801. Responsible Conduct of Research in Engineering. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in bioengineering. Topics include the nature of ethics, the roles of the scientist as a reviewer, entrepreneur, employer and teacher, research ethics in the laboratory, social responsibility and research ethics regulation. (Same as ME 801.) Prerequisite: Permission of instructor.

BIOE 802. Bioengineering Internship. 1-6 Credits.
An approved bioengineering industrial or clinical internship. The student is supervised by a preceptor at the internship site. Biweekly reports and a final report detailing work performed are filed with the course instructor. Prerequisite: Permission of instructor.

BIOE 860. Advanced Bioengineering Problems. 1-3 Credits.
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop students capability for independent research or application of engineering science and technology. Maximum credit toward any degree is three hours unless waived in writing by the academic director. Prerequisite: Consent of instructor.

BIOE 899. Independent Investigation. 1-6 Credits.
An original and independent research or design investigation involving analytical, experimental and/or modeling methodology applied to solve a bioengineering problem as a part of the degree requirements for the Master of Science. Graded on a satisfactory progress/limited progress/no progress basis.

BIOE 999. Independent Investigation. 1-12 Credits.
An original and independent research or design investigation involving analytical, experimental and/or modeling methodology applied to solve a bioengineering problem as a part of the degree requirements for the Doctor of Philosophy. Graded on a satisfactory progress/limited progress/no progress basis.

Chemical & Petroleum Engr Courses

C&PE 111. Introduction to the Chemical Engineering Profession. 1 Credits.
The career opportunities for chemical engineers are described and students are introduced to the resources available to them at KU, in the School of Engineering, and in the Chemical and Petroleum Engineering Department. The students are introduced to the curriculum requirements and emphasis options, engineering ethics, basic safety considerations, teamwork, and technical writing. The course includes fundamental calculations and laboratory experiences in material and energy balances and fluid flow. Prerequisite: Corequisite: MATH 104 or MATH 125 or MATH 145.

C&PE 112. Introduction to Chemical Engineering Profession II. 1 Credits.
Students are introduced to engineering ethics, basic safety considerations, teamwork, and technical writing. The course includes fundamental calculations and laboratory experiences in material and energy balances and fluid flow. Prerequisite: Corequisite: CHEM 130 or CHEM 170 or CHEM 190.

C&PE 117. Energy in the Modern World. 1 Credits.
A survey course on global energy supply and demand, production methods and energy economics. Course begins with the matrix of energy supply and demand focusing on fossil fuels and nuclear energy and includes transportation/distribution patterns and issues and current production technologies. We then analyze alternate energy realities and potentials such as solar energy, wind energy, biomass utilization, hydrogen, fuel cells, hydroelectric, geothermal, wave/tidal, and others based on thermodynamic principles and economics. Course is also open to non-engineering students.

C&PE 127. Introduction to Petroleum Engineering Profession. 1 Credits.
An introduction to principles of reservoir engineering and an application of economic principles will be introduced along with the use of computer spreadsheets. A mini petroleum engineering design project will be assigned to illustrate the integration of petroleum engineering principles and the use of computers. C&PE 127 is required of all Petroleum Engineering freshmen but is optional for others. Course is also open to non-engineering students.

C&PE 211. Material and Energy Balances. 4 Credits.
The application of the laws of chemistry, physics, and mathematics to the solution of material and energy balance problems occurring in the process industries. Prerequisite: MATH 125 or MATH 145; CHEM 135 or CHEM 175 or CHEM 195; or consent of department.

C&PE 217. Introduction to Petroleum Drilling Engineering. 2 Credits.
An introduction to modern rotary drilling. Topics covered include: rig systems/hardware, management practices, cost analysis, drilling fluid function formulations and testing, well control systems, cement formulation and placement, drilling bits.

C&PE 219. Drilling Fluids Laboratory. 1 Credits.
Laboratory study of formulation and properties of drilling fluids. "Mud" measurements covered include density, solids content, filtration control and viscosity. Other measurements include compressive strength of cement and cuttings transport properties. Prerequisite: Corequisite: C&PE 217.

C&PE 221. Chemical Engineering Thermodynamics. 3 Credits.
Fundamentals and applications of the First and Second Laws of Thermodynamics with strong emphasis on material, energy and entropy balances to solve engineering problems involving pure components. Topics include: Cycles (Rankine, Brayton, refrigeration, etc.), the calculus of thermodynamics, equations of state for realistic thermodynamic properties, departure functions, equilibrium and stability criteria, fugacity, and single component phase equilibrium (vaporization, melting, sublimation). Prerequisite: MATH 122 or MATH 142 or MATH 126 or MATH 146; and C&PE 211. Prerequisite or Corequisite: PHSX 210 or PHSX 211 or PHSX 213; or consent of department.

C&PE 226. Fundamentals of Biomedical and Biomolecular Engineering. 3 Credits.
Introduction to the building blocks of human and other living organisms with a focus on structure/function mechanisms that are critical for design, modeling, and analysis in living systems. Application of chemical engineering principles, including mass, energy, momentum and charge balances and molecular thermodynamics to analysis of living systems. Applies biochemistry, molecular biology and cell biology to fundamental issues in biochemical engineering, biomedical engineering and biotechnology. Prerequisite: C&PE 211, or consent of instructor. Corequisite: C&PE 221 or ME 212.

C&PE 325. Numerical Methods and Statistics for Engineers. 3 Credits.
An introduction to numerical methods and statistics and their application to engineering problems. Numerical methods topics include finding roots of a single nonlinear equation, numerical solution of ordinary differential equations, numerical integration, and solutions of ordinary differential equations. Statistical topics include regression and curve fitting, probability and probability distributions, expected value and hypothesis testing, and optimization of single and multiple-variable systems. Implementing numerical algorithms using computer programming will be emphasized, along with the fundamentals of programming, including data typing, branching, and iteration. Applications specific to chemical and petroleum engineering systems will be considered. Prerequisite: MATH 126 or MATH 146; and CHEM 135 or CHEM 175 or CHEM 195. Corequisite: MATH 220 or MATH 221 or MATH 320 or MATH 321; and MATH 290 or MATH 291; or consent of department.

C&PE 327. Reservoir Engineering. 4 Credits.
Properties of porous rocks, reservoir fluids, and fluid saturated rocks. Introduction to multiphase flow in porous media including concepts of wettability, capillary pressure and relative permeability. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195.

C&PE 511. Momentum Transfer. 3 Credits.
Solutions of continuity, momentum, and energy equations applied to fluids in confined flow or flowing past submerged objects. Laminar and turbulent flows of both incompressible and compressible fluids are considered. Engineering applications include pressure drop and network analysis of piping lines, flow measurements, fluid moving equipment including the performance of pumps. Prerequisite: C&PE 221 or ME 212; C&PE 121 or C&PE 325; and a grade of C- or higher in MATH 127 or MATH 147, and MATH 220 or MATH 221 or MATH 320 or MATH 321; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 512. Chemical Engineering Thermodynamics II. 3 Credits.
Further application of the laws of thermodynamics to multi-component mixtures and in multi-phase equilibria with focus on vapor-liquid, liquid-liquid, and solid-liquid equilibria. Mixture Fugacity expressions are developed using equations of state with mixing rules or Excess Gibbs Free Energy/activity coefficient models for data correlation or prediction. Chemical equilibrium of reactions is also discussed. Prerequisite: C&PE 121 or C&PE 325; C&PE 211; C&PE 221; and CHEM 330 or CHEM 380; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 521. Heat Transfer. 3 Credits.
An applied study of the various (conductive, convective, and radiative) heat transfer mechanisms in solid and fluid systems both transient and steady-state. Engineering applications include: conduction in solids and fluids, free and forced convection in fluids, radiation, boiling and condensing fluids, and design of heat exchangers. Prerequisite: C&PE 121 or C&PE 325; C&PE 221 or ME 312; C&PE 511 or ME 510; MATH 122 or MATH 142 or MATH 127 or MATH 147; and MATH 220 or MATH 221 or MATH 320 or MATH 321; or consent of instructor. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 522. Economic Appraisal of Chemical and Petroleum Projects. 2 Credits.
Consideration of the economic factors important in the development of the chemical or petroleum enterprise. Applications of economic evaluation methods to engineering project development. Consideration of risk and uncertainty in project development. Prerequisite: C&PE 121 or C&PE 325; and a grade of C- or higher in MATH 126 or MATH 146 and PHSX 210 or PHSX 211 or PHSX 213; or consent of department.

C&PE 524. Chemical Engineering Kinetics and Reactor Design. 3 Credits.
Development and solution of the material and energy balance equations for continuous and batch reactors. These balance equations are applied in (a) the determination of intrinsic kinetics, (b) the design of reactors and (c) the analysis of reactor behavior. Both homogeneous and heterogeneous reaction systems are considered. Prerequisite: C&PE 511; C&PE 512; and a grade of C- or higher in MATH 220 or MATH 221 or MATH 320 or MATH 321; or consent of department. Corequisite: C&PE 525. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 525. Heat and Mass Transfer. 4 Credits.
An applied study of the various heat and mass transfer mechanisms in solid and fluid systems. Heat transfer mechanisms include conduction and the concept of conductivity at the molecular level, convection, and radiation. Mass transfer fundamentals include diffusion and the concepts of diffusivity at the molecular level and shell mass balances including diffusion, convention, and consumption or generation source terms. Steady state and transient heat and mass transfer engineering applications will be considered. Prerequisite: C&PE 221 or ME 212; C&PE 325; C&PE 511 or ME 510; and a grade of C- or higher in MATH 220 and MATH 127; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 527. Reservoir Engineering II. 4 Credits.
Lectures on single phase flow and pressure distribution in reservoirs. Calculations in drawdown, buildup, multiple rate, fractured systems, gas and injection well testing. Material balance calculations for gas, gas-condensate, undersaturated, and saturated reservoirs. Prerequisite: C&PE 327; ME 212 or C&PE 221; a grade of C- or higher in MATH 220 or MATH 221 or MATH 320 or MATH 321; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the Junior year courses. Details can be found in the catalog.

C&PE 528. Well Logging. 3 Credits.
Analysis of well logs to determine properties of reservoir rocks, fluid saturations and lithology, and production logging. Prerequisite: C&PE 327 or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the Junior year courses. Details can be found in the catalog.

C&PE 601. Undergraduate Topics in Chemical and Petroleum Engineering. 1-4 Credits.
Undergraduate study in various branches of Chemical and Petroleum Engineering on topics that may vary from year to year. Prerequisite: Varies.

C&PE 611. Design of Unit Operations. 3 Credits.
Application of chemical engineering principles to design pumps, heat exchangers, and separation equipment. Staged separation processes including distillation, extraction and absorption, membrane separations, and modes of operation will be considered. Sizing of equipment, energy consumption and materials of construction will also be addressed. Prerequisite: C&PE 211; C&PE 511; C&PE 512; C&PE 521 or C&PE 525; C&PE 523 or C&PE 525; C&PE 524; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 612. Environmental Assessment of Chemical Processes. 3 Credits.
A discussion and project-based survey of environmental issues in chemical engineering, including environmentally conscious design, environmental fate and transport, green chemistry, and life cycle analysis. Focus will be on the design, implementation and management
of comprehensive environmental assessments for existing and new industrial facilities with an emphasis on the technical and economic impacts of catalytic systems on pollution control strategies.

**C&PE 613. Chemical Engineering Design I. 4 Credits.**

Synthesis, design and economic analysis of petrochemical, and chemical plants. Applications in computer aided engineering applied to these topics. Prerequisite: C&PE 611 and C&PE 615; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

**C&PE 614. Reaction Engineering for Environmentally Benign Processes. 3 Credits.**

Principles of reaction engineering and green chemistry applied to processes of the future. With a case-based introduction to the design and optimization of catalytic processes and reaction systems, focus will be on key reaction engineering concepts, including catalysis, mechanisms, reaction kinetics, heterogeneous reactions, reactor types and economic evaluation. Students will develop a multidisciplinary understanding of chemical, biological and molecular concepts and of the multiscale character of developing and designing processes from the micro level to the macro level. Prerequisite: Senior standing in engineering or the physical/biological sciences.

**C&PE 615. Introduction to Process Dynamics and Control. 3 Credits.**

The behavior of chemical processing equipment in the presence of disturbances in operating conditions is analyzed. Control systems are designed based on the criteria of system stability and optimal system performance. Prerequisite: C&PE 511; C&PE 512; C&PE 524; and C&PE 525; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

**C&PE 616. Chemical Engineering Laboratory I. 4 Credits.**

Laboratory study of chemical engineering concepts of thermodynamics, fluid flow, heat transfer, mass transfer, and reaction kinetics. Includes emphasis on technical communication skills. Prerequisite: C&PE 511; C&PE 512; C&PE 524; C&PE 525; and ENGL 102 or ENGL 105; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

**C&PE 617. Drilling and Well Completion. 3 Credits.**

Design and analysis of rotary drilling and well completion systems; casing design, cementing, and perforating. Safety and ethical considerations in drilling and fluid disposal operations. Prerequisite: C&PE 217; C&PE 219; C&PE 327; C&PE 511 or ME 510; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the senior year courses. Details can be found in the catalog.

**C&PE 618. Improved Oil Recovery. 3 Credits.**

Improved Oil Recovery processes such as primary, secondary, and tertiary oil recovery techniques will be presented. This includes miscible/immiscible displacement, chemical processes such as polymer flood, surfactant and micellar flood, and thermal recovery techniques such as steam flooding, in-situ combustion, and other EOR techniques. Design of waterfloods including preparation of a reservoir description for waterflood evaluation. Prerequisite: C&PE 527; or consent of the department. The Petroleum major has a GPA requirement for specific courses to progress to the Junior year courses. Details can be found in the catalog.

**C&PE 619. Petroleum Engineering Laboratory I. 3 Credits.**

Laboratory study of methods to determine rock and fluid properties related to petroleum engineering including phase behavior, viscosity, permeability, porosity, capillary pressure, oil recovery, water/oil displacement, fluid flow, and heat transfer coefficients. Analysis of experimental uncertainty. Oral and written presentations are required. Prerequisite: ENGL 203 (Writing for Engineers); C&PE 219; C&PE 327; C&PE 511 or ME 510; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to junior year courses. Details can be found in the catalog.

**C&PE 620. Enhanced Oil Recovery. 3 Credits.**

Enhanced Oil Recovery processes such as primary, secondary, and tertiary oil recovery techniques will be presented. This includes miscible/immiscible displacement, chemical processes such as polymerflood, surfactant and micellar flood, and thermal recovery techniques such as steam flooding, in-situ combustion, and other EOR techniques. Prerequisite: C&PE 527 and C&PE 618 or consent of instructor.

**C&PE 624. Process Safety and Sustainability. 3 Credits.**

An introductory course designed to acquaint students with the necessary global aspects and ethics of risk-based process safety and sustainability. Topics will include elements of process safety, process safety management, historical and contemporary case studies of major accidents in the chemical and petroleum industry, overview of current government regulation (e.g. OSHA, EPA, etc.), and ethics. Students will receive an introduction to sustainable (“green”) chemistry and engineering followed by more quantitative Life Cycle Analysis (LCA) to compare technologies and products. Prerequisite: C&PE 511 or ME 510; and senior standing in chemical or petroleum engineering; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

**C&PE 625. Unconventional Reservoirs. 3 Credits.**

Principles of unconventional reservoir engineering including properties and use of shale reservoirs, hydraulic fracturing, and relevant environmental and economic factors. Prerequisite: C&PE 511; C&PE 522; C&PE 527; C&PE 528; ME 211 or CE 201 and CE 310; GEOL 331 or GEOL 591; Geology for Petroleum Engineers; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the senior year courses. Details can be found in the catalog.

**C&PE 626. Chemical Engineering Laboratory II. 3 Credits.**

Laboratory study of chemical engineering concepts of thermodynamics, fluid flow, heat transfer, mass transfer, reaction kinetics, and process control. Includes emphasis on technical communication skills. Prerequisite: ENGL 102 or ENGL 105; C&PE 511; C&PE 512; C&PE 524; C&PE 525; C&PE 615; and C&PE 616; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

**C&PE 627. Petroleum Production. 3 Credits.**

Design and analysis of natural production and artificial lift systems, including beam pumping, gas lift, and submersible pumps. Vertical and horizontal two phase flow, compression, metering, acidizing, fracturing, and pipe line flow systems. Treatment of ethics considerations in production contracts and leasing arrangements. Prerequisite: C&PE 327; C&PE 511 or ME 510; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the senior year courses. Details can be found in the catalog.

**C&PE 628. Petroleum Engineering Design. 3 Credits.**

Design problems related to petroleum reservoir development such as selection of optimum well spacing for a specified reservoir, evaluation of a producing property or installation of a waterflood. Designs consider economic, uncertainty analysis, as well as conservation, environmental, and professional ethics factors. Prerequisite: C&PE 522; C&PE 527; C&PE 528; C&PE 618; C&PE 619; GEOL 535; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the senior year courses. Details can be found in the catalog.

**C&PE 640. Natural Gas Engineering. 3 Credits.**
Principles of natural gas engineering including resource distribution and evaluation, composition and properties, production, processing, transportation, storage and relevant environmental and economic aspects. Prerequisite: C&PE 625 and C&PE 627, or consent of department.

C&PE 651. Undergraduate Problems. 1-4 Credits.
Investigation of a particular problem in the field of chemical or petroleum engineering. The problem or research topic is identified jointly by the student and the faculty research supervisor. A final report is required.

C&PE 654. Biocatalysis. 3 Credits.
Introductory and advanced topics in biocatalysis with focus on enzymatic reactions. Enzymology will provide the fundamental basis for discussion of kinetics and bio-process development. Advanced topics include: enzymes in non-aqueous solvents, immobilization techniques, whole-cell transformations, bio-reactors.

C&PE 655. Introduction to Semiconductor Processing. 3 Credits.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metatization, and plasma etching of thin films. (Same as EECS 670.) Prerequisite: Senior standing in C&PE or EECS, or consent of instructor.

C&PE 656. Introduction to Biomedical Engineering. 3 Credits.
An interdisciplinary introduction to the field of biomedical engineering. This course covers a breadth of topics including biotransport, biomechanics, biomaterials, tissue engineering, drug delivery, biomedical imaging, computational biology, and biotechnology. Students are exposed to these broad topics, and go further in depth in a topic of their choice with the semester project. Prerequisite: Junior or Senior-level standing in Engineering or consent of instructor.

C&PE 657. Polymer Science and Technology. 3 Credits.
Introduction to polymer chemistry, science, technology, and processing. The course covers the principles of polymer synthesis and the structure-property relationships in the solid state and in solution, such as solubility, rheology and mechanical properties. Principles of polymer processing are introduced. Students will learn to understand from an engineering perspective how polymers are created and used. Prerequisite: Senior or graduate student standing in chemical engineering, chemistry, or consent of instructor.

C&PE 661. Undergraduate Honors Research. 1-3 Credits.
This course involves the investigation of a particular problem in the field of chemical or petroleum engineering. C&PE 661 should be taken, rather than C&PE 651, for students seeking Departmental Honors in Chemical Petroleum Engineering. C&PE 661 may also be used by students in the Honors Program to help satisfy the course requirement of this program. The design or research topic is identified jointly by the student and faculty research supervisor. Prerequisite: C&PE 121 or C&PE 325; C&PE 211; C&PE 511; C&PE 512; overall GPA >3.5; and engineering GPA >3.5; or consent of the instructor.

C&PE 671. Senior Thesis. 3 Credits.
This course involves the investigation of a particular problem in the field of chemical or petroleum engineering as a continuation for students with previous research experience, by invitation. The design or research topic is identified jointly by the student and faculty research supervisor and faculty committee. Students will present periodically and receive instruction and feedback on their presentations. A written thesis and public oral defense with committee are also required. Prerequisite: C&PE 651 or C&PE 661; and invitation and permission of instructor, open to seniors only.

C&PE 676. Principles of Biomolecular Engineering. 3 Credits.
Application of chemical engineering principles, including transport phenomena, reaction kinetics and thermodynamics, to analysis of living systems. Applies biochemistry, molecular biology and cell biology to fundamental issues in biochemical engineering, biomedical engineering and biotechnology. Prerequisite: C&PE 511, C&PE 512, or consent of instructor. Corequisite: C&PE 524, C&PE 525, or consent of instructor.

C&PE 678. Applied Optimization Methods. 3 Credits.
Study of methods for solving optimization problems encountered in engineering and the natural sciences, with specific applications illustrating analytical and numerical techniques. Topics covered include methods, penalty functions, linear programming, nonlinear and integer programming, stochastic optimization approaches, and treatment of constrained problems. A semester project is required. Prerequisite: Senior standing or consent of instructor.

C&PE 686. Bioprocess Engineering. 3 Credits.
Provides students with essential knowledge and understanding of biochemical engineering fundamentals to the design, development, operation and control of biologically based industrial processes. The course will cover unit operations key to the production of chemicals and pharmaceuticals using cultured cells, such as bioreactors, separations, centrifuges, chromatography and lyophilizers. Issues unique to biologically-based processes such as the need for aseptic conditions, clean-in-place procedures, containment, material handling, sequencing, safety and biohazard, multi-purpose plant design, and process measurement and control. Prerequisite: Senior or graduate student standing in Chemical Engineering, or consent of the instructor.

C&PE 701. Methods of Chemical and Petroleum Calculations. 3 Credits.
The utilization of advanced mathematical methods and computing techniques in the solution of problems in these fields.

C&PE 710. Subsurface Methods in Formation Evaluation. 3 Credits.
Study of subsurface methods and their applications to exploration, evaluation, and production of hydrocarbon reservoirs. Emphasis is on fundamentals of quantitative well log interpretations and the use of well log data in solving geologic and reservoir engineering problems, e.g., porosity, hydrocarbon saturation, permeable bed thickness, permeability, correlation, structural mapping, and stratigraphic and paleoenvironmental studies. Laboratory. Prerequisite: GEOL 535 or C&PE 517 or consent of instructor.

C&PE 712. Environmental Assessment of Chemical Processes. 3 Credits.
A discussion and project-based survey of environmental issues in chemical engineering, including environmental conscious design, environmental fate and transport, green chemistry, and life cycle analysis. Focus will be on the design, implementation and management of comprehensive environmental assessments for existing and new industrial facilities with in-depth analysis of the technical and economic impacts of catalytic systems on pollution control strategies. A comprehensive research paper is required as a final project.

C&PE 714. Reaction Engineering for Environmentally Benign Processes. 3 Credits.
Principles of reaction engineering and green chemistry applied to processes of the future. With a case-based introduction to the design and optimization of catalytic processes and reaction systems, focus will be on key reaction engineering concepts, including catalysis, mechanisms, reaction kinetics, heterogeneous reactions, reactor types and economic evaluation. Students will develop a multidisciplinary understanding of chemical, biological and molecular concepts, and will develop and design
Basic principles of electrochemical engineering as they are applied to energy conversion and storage devices, industrial electrolytic processes and corrosion. Areas covered range from electrochemical thermodynamics, ionic phase equilibria, electro-kinetics and ionic mass transport to mathematical modeling of electrochemical systems. Prerequisite: Graduate standing; C&PE 511, C&PE 512, C&PE 524 or equivalent; knowledge of a programming language.

C&PE 754. Biocatalysis. 3 Credits.
Introductory and advanced topics in biocatalysis with focus on enzymatic reactions. Enzymology will provide the fundamental basis for discussion of kinetics and bio-process development. Advanced topics include: enzymes in non-aqueous solvents, immobilization techniques, whole-cell transformations, bio-reactors. Knowledge of the theoretical basis for these techniques and processes will be demonstrated within a class project.

C&PE 755. Introduction to Semiconductor Processing. 3 Credits.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metallization, and plasma etching of thin films. A term paper on an approved topic of fabrication referencing current peer reviewed literature is required.

C&PE 756. Introduction to Biomedical Engineering. 3 Credits.
The graduate elective form of C&PE 656. Additional assignments commensurate with the graduate-level course designation are required for this section. Prerequisite: Graduate-level standing in Engineering, or consent of instructor.

C&PE 757. Polymer Science and Technology. 3 Credits.
The graduate elective form of C&PE 657. Additional assignments on current research directions in the field commensurate with the graduate-level course designation are required for this section. Prerequisite: Graduate-level standing in engineering, or consent of instructor.

C&PE 758. Applied Optimization Methods. 3 Credits.
Study of methods for solving optimization problems encountered in engineering and the natural sciences, with specific applications illustrating analytical and numerical techniques. Topics covered include gradient methods, penalty functions, linear programming, nonlinear and integer programming, stochastic optimization approaches, and treatment of constrained problems. Homework problems involving theoretical concepts and a theoretically-based semester project are required.

C&PE 759. Introduction to Flow in Porous Media. 3 Credits.
Generalized Darcy’s law, vector equations, solutions of partial differential equations with various boundary conditions as applied to the flow of fluids in porous media. Prerequisite: C&PE 527.

C&PE 760. Enhanced Petroleum Recovery. 3 Credits.
A study of improved oil recovery processes such as miscible displacement, microemulsion displacement, and thermal methods. Prerequisite: C&PE 618 or permission of instructor.

C&PE 761. Phase Equilibrium. 3 Credits.
A study of phase behavior and equilibrium from a molecular perspective. Focus will be on vapor-liquid, liquid-liquid and solid-liquid equilibrium.
with advanced topics in compressed and supercritical fluids, petroleum applications, ionic solutions and others.

C&PE 800. Seminar. 0.5-1 Credits.
Every fall, five to six seminar sessions will be devoted to providing incoming students information on available thesis/dissertation research projects, library resources, computing environment and topics related to the issues of responsible scholarship in the fields of Chemical and Petroleum Engineering. For the remainder of the year, the seminar will involve presentation of current research and other topics of interest to chemical and petroleum engineers. These presentations will be made by invited guests, faculty, and advanced graduate students. Student attendance is required. Graded on a satisfactory/unsatisfactory basis.

C&PE 801. Introduction to Research. 1 Credits.
One hour per week in which the staff introduces entering graduate students to research. Topics include discussion of research methods, methods of effectively tapping library resources, preparation of literature surveys, and presentation of results. Faculty members of the department will make presentations of their current research interests. Offered fall only. Prerequisite: Corequisite: C&PE 800.

C&PE 802. CEBC Colloquium. 0.5-1 Credits.
A forum in which graduate and postdoctoral students, and faculty present the results of CEBC research and literature surveys that support the mission of CEBC.

C&PE 803. Research. 1-6 Credits.
For M.S. candidates.

C&PE 804. Petroleum Management Seminar. 1 Credits.
Structure, operation, and problems of the petroleum industry from a management viewpoint. Presentations will be made by faculty, advanced students, and invited guests. Prerequisite: Permission of instructor.

C&PE 825. Graduate Problems in Chemical and Petroleum Engineering. 1-5 Credits.
Advanced laboratory problems, special research problems, or library reading problems. Three hours maximum acceptable for master’s degree.

C&PE 902. Preparation for the Ph.D. Comprehensive Examination. 3 Credits.
Preparation of a research proposal in an area assigned by the student’s advisory committee. The grade received on the Ph.D. comprehensive examination will apply to this credit.

C&PE 904. Research. 1-12 Credits.
For Ph.D. candidates.

C&PE 910. Industrial Development of Catalytic Processes. 3 Credits.
Students adopt an interdisciplinary team approach to developing strategies for the design and optimization of catalytic processes. Examples of case studies will be derived from industry or from research testbeds. Students collaborate in multiscale process development involving catalyst and reactor design, reaction system design, modeling and optimization, economic analysis and environmental assessment needed for the development of a catalytic process at either the pilot or production scale.

C&PE 911. Industrial Practicum. 1-3 Credits.
Graduate students engage in an industrial research internship experience with collaborators in industry.

C&PE 912. Teaching College Level Engineering and Science Practicum. 1 Credits.
Future university instructors learn how to critically examine course content and teaching strategies, and prepare courses that will address the learning needs of the diverse student populations of the future. Students participate in weekly in-class workshops and symposia, as well as a teaching practicum experience during this course.

C&PE 919. Advanced Topics in Process Modeling Simulation or Control: ____. 1-4 Credits.
Advanced study in process modeling, simulation or control on topics which may vary from year to year.

C&PE 929. Advanced Topics in Chemical and Petroleum Engineering: ____. 1-4 Credits.
Advanced study in various branches of chemical and petroleum engineering on topics which may vary from year to year.

C&PE 933. Heat and Mass Transport in Porous Media. 3 Credits.
A study of industrial problems involving heat and mass transport in porous media such as packed columns, catalyst beds, chemical reactors, and petroleum reservoirs. Mechanisms of interphase and intraphase transport, diffusion, and dispersion. Included are methods of solution of the describing differential equations.

C&PE 934. Heat Transport with Phase Change. 3 Credits.
A fundamental treatment of heat transfer occurring during boiling and condensation. Included are nucleate and film boiling, film and dropwise condensation, and two-phase flow.

C&PE 936. Industrial Separation Processes. 3 Credits.
Determination and treatment of vapor-liquid separations, including methods for obtaining and treating equilibrium data, procedures for calculating multi-component separations by distillation, absorption, extraction, and adsorption.

C&PE 937. Applied Rheology. 3 Credits.
Industrial applications of fluid mechanics including compressible flow, flow of non-Newtonian fluids, flow of drag reducing systems all to be considered in laminar and turbulent flow regimes, and within conduits, and porous media.

C&PE 939. Advanced Topics in the Transport Phenomena: ____. 1-4 Credits.
Advanced study in various branches of transport phenomena on topics which may vary from year to year.

C&PE 940. Data Analysis in Engineering and Natural Sciences. 3 Credits.
Statistical inference and data analysis, emphasizing interpretation of observations from areas of engineering and natural sciences where controlled experimentation is not possible. The basics of elementary statistics and matrix algebra are covered, followed by topics in time, series analysis, map analysis, including automatic contouring, and multivariate procedures such as principal components, discrimination and factor analysis. A suite of computer programs is provided. Students are encouraged to use data from their own graduate research in class projects.

Civil, Envr & Arch Engineering Courses
ARCE 101. Introduction to Architectural Engineering. 2 Credits.
An introduction to the study of and careers in architectural engineering. Topics include problem solving and study skills, the building design and construction process, design documents, and professional practice issues such as licensing requirements and ethics.

ARCE 217. Computer-Assisted Building Design. 3 Credits.
Introduction to computer-aided design (CAD) tools. The course covers 2D drafting and 3D modeling using Autodesk’s AutoCAD® and building information modeling (BIM) software Revit®. Includes architectural and structural design; mechanical, electrical, and plumbing (MEP) design; and
modeling using the Family Editor in Revit. Prerequisite: Must be eligible for MATH 125 or MATH 145, or consent of instructor.

ARCE 315. Electric Circuits and Machines. 3 Credits.
Introduction to DC and AC electrical circuit analysis techniques, AC power calculations, transformers, three-phase systems, magnetic circuits, and DC and AC machines with a focus on applications. Not open to electrical or computer engineering majors. (Same as EECS 315.) Prerequisite: A course in differential equations and eight hours of physics.

ARCE 350. Building Materials Science. 3 Credits.
An introduction to the structural, thermal, electrical, and optical properties of building materials. Manufacturing, testing, integration, and specification of materials with emphasis on commercial, institutional, and industrial buildings. Prerequisite: PHSX 212 and CHEM 150 or CHEM 149, or consent of instructor.

ARCE 351. Building Materials Science, Honors. 3 Credits.
An introduction to the structural, thermal, electrical, and optical properties of building materials. Manufacturing, testing, integration, and specification of materials with emphasis on commercial, institutional, and industrial buildings with added honors-enhancement activities. The activities include one or more of the following: extra meetings outside the classroom, written work, projects, and presentations. Prerequisite: PHSX 212 and CHEM 150 or CHEM 149, or consent of instructor.

ARCE 390. Special Problems. 1-3 Credits.
Special problems in architectural engineering. The study of a particular problem involving individual research and report. Prerequisite: Students must submit, in writing, a proposal including a statement of the problem the student wishes to pursue, the methodology the student plans to use in the program, and objectives of the special problems. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of the instructor.

ARCE 620. Architectural Acoustics. 3 Credits.
An introduction to the physics of sound. Objective and subjective evaluation and control of sound as applied to architectural spaces. Room shaping, mechanical and electrical system noise and vibration control, and electro-acoustic sound reinforcement. Prerequisite: PHSX 212, PHSX 236, and ARCE 661 or equivalent, or consent of instructor.

ARCE 621. Electro-Acoustical Systems. 3 Credits.
A study of electro-acoustic sound reinforcement and reproduction systems for buildings. Prerequisite: PHSX 212, PHSX 236, and ARCE 315 or equivalent, or consent of instructor.

ARCE 629. Problems in Architectural Acoustics. 1.5 Credits.
Capstone architectural engineering design course that includes the analysis, design, and integration of a building's acoustical system. Building codes, standards, performance, and sustainability are addressed. Prerequisite: CMGT 457, ARCE 640, and senior standing, or consent of instructor. Corequisite: CMGT 500.

ARCE 640. Power Systems Engineering I. 3 Credits.
This course introduces the design of commercial and industrial power systems. Emphasis is placed on the proper selection, specification, and installation of materials and equipment that comprise commercial and industrial power systems. This course covers the application of materials and equipment in accordance with industry standards, independent laboratory testing, and the National Electrical Code. Prerequisite: ARCE 315 or EECS 315 or consent of instructor.

ARCE 641. Power Systems Engineering II. 3 Credits.
A continuation of ARCE 640 that integrates system components into functional, safe, and reliable power distribution systems for commercial, industrial, and institutional (CII) facilities. Service entrance design, distribution system layout and reliability, emergency and standby power system design, medium-voltage distribution systems, symmetrical fault analysis, and special equipment and occupancies. (Same as EECS 441.) Prerequisite: ARCE 640 or EECS 212 and Upper-Level EECS Eligibility.

ARCE 642. Power System Protection. 3 Credits.
This course introduces techniques and methods used to analyze and predict the performance of commercial and industrial power systems and equipment under balanced and unbalanced fault conditions. Emphasis is placed on the selection, application, and coordination of protective devices to detect and clear power system faults in a safe and reliable manner. Prerequisite: ARCE 640 or EECS 212 or consent of instructor.

ARCE 644. Electric Machines and Drives. 3 Credits.
Introduction to electric machine theory, operation, and control. Electric machines covered include DC generators and motors, AC synchronous generators and motors, AC induction generators and motors, as well as fractional horsepower and special purpose motors. Motor starting and controls for both DC and AC machines are also covered including an introduction to power electronics and variable frequency drives (VFD). (Same as EECS 544.) Prerequisite: ARCE 640 or EECS 212 and Upper-Level EECS Eligibility.

ARCE 645. Electric Energy Production and Storage. 3 Credits.
An introduction to the design of utility scale and small scale (distributed generation) electric energy production and storage systems. This course addresses the technical, operational, economic, and environmental characteristics associated with both traditional and nontraditional electric energy production systems along with associated grid integration, energy delivery, and regulatory issues. Traditional energy production systems covered include fossil fuel, hydroelectric, and nuclear power plants. Non-traditional energy productions systems covered include fuel cells, photovoltaics (PV), concentrated solar power (CSP), wind, geothermal, and other emerging technologies. (Same as EECS 545.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility.

ARCE 647. Power System Analysis I. 3 Credits.
Introduction to the analysis of commercial, industrial, and utility power systems. Emphasis is placed on modeling system components which include transmission and distribution lines, transformers, induction machines, and synchronous machines and the development of a power system model for analysis from these components. System modeling will be applied to short-circuit studies and used to analyze symmetrical faults, to develop sequence networks using symmetrical components, and analyze unsymmetrical faults. (Same as EECS 547.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility.

ARCE 648. Power System Analysis II. 3 Credits.
Continuation of ARCE 647 or EECS 547 that uses power system modeling developed in ARCE 647 or EECS 547 to analyze power system load flow, operation and economic dispatch, stability, and transient response. The impact of alternative energy sources, energy storage, DC transmission and interties, and other emerging technologies on power system operation and reliability will be addressed throughout the course. (Same as EECS 548.) Prerequisite: ARCE 647 or EECS 547 or consent of instructor.

ARCE 650. Illumination Engineering. 3 Credits.
Students are introduced to lighting fundamentals, measurement, and technology and to their application in the analysis and design of architectural lighting systems. Prerequisite: PHSX 212 or consent of instructor.

ARCE 660. Building Thermal Science. 3 Credits.
The fundamentals of moist air processes, air and moisture exchange, and building heat transfer. Determination of heating and cooling loads under
steady-state and transient conditions. Prerequisite: ME 212. Corequisite: CE 330 or ME 510 or AE 345 or C&PE 511; or consent of instructor.

**ARCE 661. HVAC&R Systems Design. 3 Credits.**
Analysis and design of heating, ventilating, air-conditioning, and refrigeration equipment and systems. Prerequisite: ARCE 660 or ARCE 670 or consent of the instructor.

**ARCE 662. Water Systems Design. 3 Credits.**
The analysis and design of hydronic systems for buildings including piping, plumbing, pumping, and the water-side of heating, ventilating, and air-conditioning (HVAC). Prerequisite: ME 510, AE 345, CE 330, or C&PE 511, or consent of the instructor.

**ARCE 663. Energy Management. 3 Credits.**
Energy usage in commercial buildings and industry, energy auditing methodology, utility analysis, management measures, and economic evaluation are covered. Includes fieldwork. Prerequisite: Corequisite: ARCE 660 or ARCE 670, or consent of instructor.

**ARCE 664. Fire Protection Engineering. 3 Credits.**
An introduction to human response, fire science, combustion calculations, compartment fires, piping and sprinkler design, and smoke management. Analytical methods, experimental data, codes, case-studies, and videos are presented in this engineering design course. Prerequisite: ME 212 or C&PE 221, and ME 510, AE 345, CE 330, or C&PE 511, or consent of instructor.

**ARCE 665. Solar Energy Systems Design. 3 Credits.**
A quantitative and qualitative study of active, passive, wind, and photovoltaic energy conversion systems for buildings. Solar radiation and system performance prediction. Prerequisite: ME 212 or C&PE 221, or consent of instructor.

**ARCE 670. Building Thermal Science, Honors. 3 Credits.**
The fundamentals of moist air processes, air and moisture exchange, and building heat transfer. Determination of heating and cooling loads under steady-state and transient conditions with added honors-enhancement activities. The activities include one or more of the following: extra meetings outside the classroom, written work, projects, and presentations. Prerequisite: ME 312. Corequisite: CE 330 or ME 510 or AE 345 or C&PE 511; or consent of instructor.

**ARCE 671. HVAC&R Systems Design, Honors. 3 Credits.**
Analysis and design of heating, ventilating, air-conditioning, and refrigeration equipment and systems. The discussion section and its assignments are required. Not open for those with credit for ARCE 661. Prerequisite: ARCE 660, ARCE 670, or consent of the instructor.

**ARCE 675. Sound and Vibration Control. 3 Credits.**
An introduction to the physics and measurement of sound, wave phenomena, acoustics, and methods of noise and excessive vibration control for various applications. Prerequisite: PHSX 212 and MATH 220 or MATH 221 or MATH 320; or consent of instructor.

**ARCE 690. Special Problems. 1-3 Credits.**
The study of a particular problem in architectural engineering involving individual research and presentation. Prerequisite: Student must submit, in writing, a proposal including a statement of the problem the student wishes to pursue, the methodology the student plans to use in the program, and objectives of the special problems. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of instructor.

**ARCE 691. Honors Research. 3 Credits.**
Research a particular architectural engineering problem. Research will involve defining the problem, developing a research methodology, applying the research methodology and gathering data, analyzing and interpreting the data, and presenting the results of the research. The student must have a faculty sponsor and submit a proposal in writing stating the objective of the research, the planned research method that will be used, and the method of reporting the results. Prerequisite: Participation in the University Honors Program, consent of instructor, and approval of the chair are required.

**ARCE 698. Comprehensive Design Project. 3 Credits.**
Capstone architectural engineering design course that includes the analysis, design, and integration of a building's structural, mechanical, electrical, and lighting systems. Building codes, standards, performance, and sustainability are addressed, and BIM software utilized. Prerequisite: CMGT 457 or CMGT 500, or ARCE 640 and ARCE 650, or ARCE 660, or CE 562 or CE 563.

**ARCE 700. Directed Readings in Architectural Engineering. 1-3 Credits.**
Individual study of special topics and problems. May be repeated for credit. Prerequisite: Student must submit, in writing, a proposal including a statement of the problem the student wishes to pursue and a bibliography of the articles and books required to complete the project. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of instructor.

**ARCE 750. Daylighting. 3 Credits.**
This course will cover daylighting design concepts, solar position, daylight availability, sky luminance distribution models, daylight delivery methods, integration of daylighting and electric lighting controls, physical modeling, and computer analysis techniques. Prerequisite: PHSX 212, or ARCH 531, or consent of instructor.

**ARCE 751. Advanced Lighting Design. 3 Credits.**
Advanced analysis, design, and modeling of luminous environments. It covers impact of lighting on human perception and interaction with space, human factors in lighting, camera-aided light measurement technologies, advanced computer-aided lighting simulations, effective and efficient integration of natural and artificial lighting, modeling and analysis of light sources and spaces, simulation of lighting systems, and design of lighting control systems. Prerequisite: ARCE 217 and ARCE 650 or consent of instructor.

**ARCE 752. Lighting Measurement and Design. 3 Credits.**
This course will cover conventional lighting and solid-state lighting measurement, daylighting measurement, camera-aided lighting measurement technologies and applications, and design and development of custom luminaries in an LED workshop and innovative daylighting devices. Prerequisite: ARCE 650, or consent of instructor.

**ARCE 760. Automatic Controls for Building Mechanical Systems. 3 Credits.**
An introduction to controls for building mechanical systems. Discussions of the theory, design, and equipment used for control systems. The benefits of pneumatic, electrical, and electronic (DDC) controls will be examined. Prerequisite: ARCE 660 or ARCE 670; or consent of instructor.

**ARCE 764. Advanced Thermal Analysis of Buildings. 3 Credits.**
Manual and computational methods for determining steady-state and transient thermal loads in buildings. Advanced analysis of energy consumption given choices in building materials and mechanical systems. Prerequisite: ARCE 217 and ARCE 660 or ARCE 670; or consent of instructor.

**ARCE 895. Master's Project. 1-3 Credits.**
Directed study and reporting of a specialized topic of interest to the architectural engineering profession. Prerequisite: Consent of instructor.

**ARCE 899. Master's Thesis. 1-6 Credits.**
Directed research and reporting of a specialized topic of interest to the architectural engineering profession. Prerequisite: Consent of instructor.

Civil, Env & Arch Engineering Courses

CE 191. Introduction to Civil Engineering. 2 Credits.
A discussion of engineering logic through examination of current concepts in engineering education, practice and professional development. Not open to juniors and seniors.

CE 201. Statics. 2 Credits.
The principles of statics, with particular attention to engineering applications. Prerequisite: PHSX 210 or PHSX 211 or PHSX 201, and MATH 125 or MATH 145.

CE 240. Geometrics. 3 Credits.
This course introduces engineering applications of surveying and geographic information systems (GIS) using surveying instruments and ArcGIS. The focus of this course is on practical application of geometrics to civil engineering problems. Two lectures periods and one lab period per week. Prerequisite: MATH 125 or MATH 145, ARCE 217; or consent of instructor.

CE 250. Dynamics. 3 Credits.
The principles of kinematics and kinetics, with particular attention to engineering applications. Prerequisite: CE 201 or ME 201 or ME 211, and MATH 126 or MATH 146.

CE 260. Statics and Dynamics. 5 Credits.
A combination of statics and dynamics covered in CE 201 and CE 250. This course must be taken as a five-hour unit. Prerequisite: PHSX 210 or PHSX 211, and MATH 126 or MATH 146.

CE 310. Strength of Materials. 4 Credits.
Principles of stress and deformation in solid objects. Prerequisite: CE 201 or ME 201 or ME 211 or CE 260 or CE 301. Corequisite: MATH 220 or MATH 221; or consent of instructor.

CE 312. Strength of Materials, Honors. 4 Credits.
Principles of stress and strain in solid objects with added honors-enhancement activities. The activities include one or more of the following: extra meetings outside the classroom, written work, projects, and presentations. Prerequisite: CE 201 or ME 201 or ME 211 or CE 260 or CE 301. Corequisite: MATH 220 or MATH 221; or consent of instructor.

CE 330. Fluid Mechanics. 3 Credits.
This course covers the fundamentals of fluid mechanics and includes the topics fluid properties, hydrostatics, applications of conservation of mass, energy and momentum equations, pipe flow, dimensional analysis and open channel flow. Prerequisite: ENGL 101, ENGL 102, CE 300 or CE 301 or CE 250 or CE 260.

CE 331. Fluid Mechanics Lab. 1 Credits.
This is an experimental course that consists of several laboratory experiments intended to illustrate the concepts presented in CE 330, Fluid Mechanics. Prerequisite: ENGL 101, ENGL 102, CE 250 or CE 260 or CE 300 or CE 301. Corequisite: CE 330.

CE 412. Structural Engineering Materials. 3 Credits.
Study of the engineering properties of structural materials and their control with emphasis on timber, concrete, and steel. Two one-hour lectures and one three-hour laboratory. Prerequisite: CE 310 or CE 312 and ENGL 102 or ENGL 105. Open only to students admitted to the University Honors Program or by consent of instructor.

CE 455. Hydrology. 3 Credits.
An introduction to the fundamentals of hydrologic analysis. Subjects covered include collection and initial reduction of hydrologic data; rainfall-runoff relationships, hydrograph development; hydrologic routing, well equations and their application and hydrologic frequency analysis. Prerequisite: ENGL 101, ENGL 102 or ENGL 105, and CE 330.

CE 461. Structural Analysis. 4 Credits.
Three one-hour lectures and one two-hour laboratory. Analysis of statically determinate and indeterminate beams, frames, and trusses using classical methods and introducing computer-based methods. Prerequisite: CE 310 or CE 312.

CE 477. Introduction to Environmental Engineering and Science. 3 Credits.
Application of fundamental scientific principles to the protection of atmospheric, aquatic, and terrestrial environments through the use of pollution abatement processes, with consideration also given to economic, social, political, and legal aspects of pollution control. Prerequisite: ENGL 102 or ENGL 105, MATH 101 or MATH 104, and CHEM 135 or CHEM 175 or CHEM 195 or CHEM 149 or CHEM 150.

CE 479. Introduction to Environmental Engineering and Science, Honors. 3 Credits.
Application of fundamental scientific principles to the protection of atmospheric, aquatic, and terrestrial environments through the use of pollution abatement processes, with consideration also given to economic, social, political, and legal aspects of pollution control. Open only to students admitted to the University Honors Program or by consent of instructor. Prerequisite: ENGL 102 or ENGL 105, MATH 101 or MATH 104, and CHEM 135 or CHEM 175 or CHEM 195 or CHEM 150 or CHEM 149.

CE 480. Introduction to Transportation Engineering. 3 Credits.
Students are provided with a solid introduction to the principles of highway engineering and traffic analysis. This course will present a large number of practical problems, and in sufficient depth, such that the student will be capable of solving real highway-related problems. Prerequisite: CE 240.

CE 484. Materials for Transportation Facilities. 3 Credits.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization. Prerequisite: CE 310 or CE 312.

CE 485. Materials for Transportation Facilities, Honors. 3 Credits.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization with added honors-enhancement activities. The activities include one or more of the following: extra meetings outside the classroom, written work, projects, presentations, and lab activities. Prerequisite: CE 310 or consent of instructor.

CE 487. Soil Mechanics. 4 Credits.
Three lecture periods and one laboratory period. Fundamental theories of soil mechanics and their applications in engineering. Prerequisite: CE 310 or CE 312, corequisite or prerequisite CE 330.

CE 490. Special Problems. 1-5 Credits.
An advanced study related to a special problem in the field of civil engineering or allied fields, for upper-division undergraduate students.

CE 495. Special Topics: ______. 1-3 Credits.
A course or colloquium to present topics of special interest. Prerequisite: Varies by topic.

CE 498. Engineering Honors Seminar. 3 Credits.
CE 535. Engineering Applications of GIS. 3 Credits.
This course introduces engineering applications of geographic information system (GIS) using ArcGIS. The focus of this course is on practical application of GIS to civil engineering problems. Prerequisite: Junior or Senior standing, or consent of instructor.

CE 550. Life Cycle Assessment. 3 Credits.
Life cycle assessment (LCA) is a tool used across engineering fields to determine the life cycle, cradle-to-grave environmental impacts of a product or process. LCA practice helps develop a systems-thinking perspective and a deeper understanding of sustainability. Students will evaluate LCA methods and design appropriate LCA frameworks. Prerequisite: CE 477 or CE 479 or C&PE 211.

CE 552. Water Resources Engineering Design. 4 Credits.
Three one-hour lectures and one three-hour laboratory. Study of water resources structures and systems with design emphasis on the hydraulic features: dams, drainage, river engineering, pipelines, channels and hydraulic machinery. Prerequisite: CE 330 and CE 455.

CE 555. Open Channel Flow. 3 Credits.
Study of uniform and non-uniform steady flow of water in open channels, including backwater curves, the hydraulic jump, and the delivery of canals. Prerequisite: CE 330 or equivalent.

CE 562. Design of Steel Structures. 3 Credits.
Two one-hour lectures and one three-hour laboratory. Fundamentals of structural design with steel. Prerequisite: CE 461.

CE 563. Design of Reinforced Concrete Structures. 3 Credits.
Two one-hour lectures and one three-hour laboratory. Fundamentals of structural design with reinforced concrete. Prerequisite: CE 461; CE 412 or CE 413 or CE 484; or consent of the instructor.

CE 570. Concepts of Environmental Chemistry. 3 Credits.
The fundamentals of aquatic chemistry, with emphasis on application to water purification and wastewater treatment. Prerequisite: Undergraduate standing, CE 477 or CE 479, and MATH 115 or MATH 125 or MATH 145.

CE 571. Environmental Engineering Laboratory. 3 Credits.
A laboratory course introducing standard practices for measurement, analysis, and reporting of environmental data. Emphasis is placed on learning common analytical techniques used in environmental engineering and science. Prerequisite: Undergraduate standing, CE 477 or CE 479 or equivalent, and MATH 115 or MATH 125 or MATH 145.

CE 573. Biological Principles of Environmental Engineering. 3 Credits.
A basic study of the microorganisms of importance in environmental engineering. Emphasis is placed on the microbiology of dilute nutrient solutions. Microbial physiology, microbial ecology, and biochemistry will be discussed as they pertain to environmental engineering and science. Both biodegradation and public health aspects are included. Prerequisite: Undergraduate standing, CE 477 or CE 479 or equivalent, and MATH 115 or MATH 125 or MATH 145.

CE 574. Design of Air Pollution Control Systems. 3 Credits.
This course emphasizes understanding of air pollution problems and their solution through engineering design and science. Topics covered include: types of air pollutants; monitoring of air pollutants; transport of air pollutants in the atmosphere; and control of air pollution emissions from both stationary and mobile sources. Prerequisite: CE 330, CE 477 or CE 479, MATH 126 or MATH 146, PHSX 212; or consent of instructor.

CE 576. Municipal Water Supply and Wastewater Treatment. 4 Credits.
The principles of public water supply design, including source selection, collection, purification, and distribution; for municipal wastewater, collection, treatment, and disposal. Prerequisite: CE 330 or C&PE 511, CE 477 or CE 479.

CE 577. Industrial Water and Wastes. 3 Credits.
A review of the methods of industrial water treatment and the fundamentals of industrial water pollution control. Topics include: water budgets, cooling tower and boiler treatment, corrosion control, government regulations, wastewater characterization, waste minimization, pilot plants, pretreatment, final treatment, and site selection. Prerequisite: Undergraduate standing, and CE 477 or CE 479 or equivalent.

CE 582. Highway Engineering. 3 Credits.
A comprehensive study of the planning, design, construction, operations, and maintenance of highway systems with emphasis on the design aspects of a highway. Prerequisite: CE 455 and CE 480.

CE 588. Foundation Engineering. 3 Credits.
A study of the interaction of the characteristics of soil or rocks and structures. The estimation of settlement and bearing capacity of foundation elements. Principles governing the choice and design of footings, rafts, piers, and piles. Prerequisite: CE 487.

CE 610. Engineering Ethics. 3 Credits.
An examination of the ethical and social implications of being a professional engineer. Through the use of case studies, issues such as professional responsibility to clients, employers, and the public will be evaluated in light of professional codes of ethics. Prerequisite: Junior, Senior, or Graduate standing.

CE 625. Applied Probability and Statistics. 3 Credits.
Course topics include data description, measures of central tendency and dispersion, sampling and sampling designs, quality control, persistence, periodicity, sampling distributions, hypothesis testing, ANOVA, correlation, linear regression, multiple correlation, and multiple regression. Applications and real world problems are stressed. Prerequisite: MATH 125 or MATH 145 or MATH 115 and MATH 116.

CE 677. Graduate Fundamentals of Environmental Engineering. 3 Credits.
Application of fundamental scientific principles to the protection of atmospheric, aquatic, and terrestrial environments through the use of pollution abatement processes, with consideration also given to economic, social, political, and legal aspects of pollution control. May not be taken for credit by students with credit in CE 477. Prerequisite: ENGL 102 or ENGL 105, MATH 101 or MATH 104, and CHEM 135 or CHEM 175 or CHEM 150.

CE 684. Materials for Transportation Facilities. 3 Credits.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization. Readings. Prerequisite: CE 310 and CE 487.

CE 704. Dynamics and Vibrations. 3 Credits.
Problems in engineering dynamics and vibrations. Topics include applications of generalized forces and coordinates, Lagrange equations, and a study of the performance of single and multiple degree of freedom in vibrational systems. (Same as AE 704.) Prerequisite: AE 508.

CE 710. Structural Mechanics. 3 Credits.
Basic concepts in the analysis of stress and strain and the behavior of materials. Topics include elementary theory and problems in elasticity, theories of failure of materials including fracture mechanics and introduction to plasticity.

CE 711. Probabilistic Design and Reliability. 3 Credits.
Learn to evaluate statistical data and develop engineering design criteria for natural and man-made random phenomena. Develop and be able to use material or system fragility curves. Analyze complex systems or alternate system probabilities using Monte Carlo Simulation. Determine system reliability for statistically evaluated hazard probabilities. Techniques are applied to realistic design problems in Civil Engineering. Prerequisite: Graduate standing or permission of the instructor.

CE 712. Structural Engineering Materials. 3 Credits.
Study of the engineering properties of structural materials and their control with emphasis on timber, concrete, and steel. Two one-hour lectures and one three-hour laboratory. Not open for credit to students with credit in CE 412 or CE 413. Prerequisite: CE 310 or CE 312 or equivalent, and ENGL 102 or ENGL 105 or equivalent, or consent of instructor.

CE 713. Cold-formed Steel and Aluminum Design. 3 Credits.
Learn the principles of designing thin cold-formed and extruded materials. Focus is on cold-formed-steel with basic application to aluminum and concepts of curtainwall design. Load bearing and non-load bearing applications. Determine properties and strengths of columns and beams composed of arbitrary formed shapes. Learn to apply Direct Design. Seismic and wind design of cold formed steel structures. Prerequisite: CE 562.

CE 714. Professional Practice. 3 Credits.
This course is the business of engineering. Topics include: case studies of design and construction litigation, proposals and contracts, managing risk and liability, principles of management and leadership, developing professional relationships, developing a quality culture, project and design accounting, errors and omissions, insurance, organizational structures, globalization, total quality management, and communications. Class participation is required. Prerequisite: Graduate standing or permission of the instructor.

CE 715. Corrosion Engineering. 3 Credits.
Electrochemical basis of corrosion. Estimating probability and rate of corrosion. Identifying different conditions likely to cause specific types of corrosion. Corrosion mitigation techniques. Prerequisite: CHEM 135, CHEM 150 or equivalent.

CE 721. Experimental Stress Analysis. 3 Credits.
Introduction to experimental stress-analysis techniques. Theory and application of mechanical strain gages, electrical strain gages, photoelastic techniques, and brittle coatings.

CE 730. Intermediate Fluid Mechanics. 3 Credits.
Fall semester. Principles of steady and unsteady flows, theories of potential, viscous, and turbulent flows, and applications in water resources engineering. Prerequisite: CE 330 and MATH 320.

CE 731. Applied Groundwater Modeling. 3 Credits.
This course focuses on how to construct simple to complex computer models of groundwater systems and systems in which water flows between groundwater and surface water bodies such as springs, streams and lakes. We consider water flow, transport of solutes, and density effects (from saltwater or brines). We consider the conjunctive use of groundwater and surface water (demand-driven, supply-limited problems), and managed aquifer recharge (MAR). We consider three aspects of model development: (1) how to compare the computer models we construct to the systems modelers intend them to represent, (2) how accurate the models are likely to be and how uncertainty can be quantified, and (3) how useful the models are in practice. (Same as GEOL 758.) Prerequisite: GEOL 751 or CE 752, or approved by the professor.

CE 735. Engineering Applications of GIS. 3 Credits.
This course introduces engineering applications of geographic information system (GIS) using ArcGIS. The focus of this course is on practical application of GIS to civil engineering problems.

CE 736. Environmental Monitoring and Field Methods. 3 Credits.
A lecture-laboratory-field sampling course to familiarize students with environmental monitoring techniques and open source data availability. Dimensions of environmental monitoring will be considered for air, soil, and water measurements. The major emphasis will be on surface water monitoring techniques and their principles, utility, and limitations. Prerequisite: CE 330 or consent of instructor.

CE 749. Solid and Hazardous Wastes. 3 Credits.
Fundamental issues associated with solid and hazardous wastes are presented. Topics include government regulations, waste characteristics and quantities, the transport and attenuation of wastes in the environment, risk assessment, and handling, treatment and disposal techniques. Special emphasis is placed on hazardous waste remediation strategies in terrestrial systems. Prerequisite: Graduate standing in the Environmental Science and Engineering program, or consent of instructor.

CE 751. Physical Hydrology. 3 Credits.
In this course students will develop a land surface model based on the underlying physics and mechanisms of radiative transfer, precipitation, snow processes, evapotranspiration, infiltration and runoff generation. The course will also cover numerical and uncertainty issues associated with hydrologic modeling and its application to real world problems. Prerequisite: CE 455 or equivalent.

CE 752. Physical Hydrogeology. 3 Credits.
Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy’s law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as GEOL 751.)

CE 753. Chemical and Microbial Hydrogeology. 3 Credits.
Lecture and discussion of chemical and microbiological controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics; and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis. Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics of microbial growth will be covered. (Same as GEOL 753.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors.

CE 754. Contaminant Transport. 3 Credits.
A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as GEOL 754.) Prerequisite: Introductory Hydrogeology or consent of instructor.

CE 755. Open Channel Flow. 3 Credits.
A study of uniform and non-uniform steady flow of water in open channels, including backwater curves, the hydraulic jump, and the delivery of canals. Prerequisite: CE 330.

CE 756. Wetlands Hydrology and Introduction to Management. 3 Credits.
A study of the basic structure and functions of wetlands; the physical, chemical, and biological processes involved; and an introduction to the management of wetlands. Also a brief introduction to the legal aspects of wetlands, the Section 404 permitting processes, and mitigation requirements. Prerequisite: Senior or graduate standing in engineering or a science area, or consent of instructor.

CE 757. Pipe-Flow Systems. 3 Credits.
Hydraulic analysis and design of pipelines, pipe networks, and pumping systems. Analysis and control of hydraulic transients. Engineering of water distribution systems. Prerequisite: CE 330 or equivalent.

CE 759. Water Quality Modeling. 3 Credits.
Analytical and numerical modeling of transport and transformation processes in the aquatic environment. Mass balance principles in multi-dimensional transport phenomena including advection, turbulent diffusion, and dispersion. Prerequisite: CE 330, MATH 127 or MATH 147, and MATH 220 or MATH 221 or equivalent.

CE 760. Stochastic Hydrology. 3 Credits.
This methods-based course includes probability models, parameter estimation, ensemble forecasting and verification, time series analysis, multivariate distributions, principal component analysis along with other stochastic methods imperative to hydrologic analysis and prediction. The application of these methods will be explored through examples in hydrology related to rainfall, streamflow, groundwater and land-atmosphere interactions. Prerequisite: CE 455, MATH 290 or MATH 291 or equivalent.

CE 761. Matrix Analysis of Framed Structures. 3 Credits.
Analysis of 2-D and 3-D frame and truss structures by the direct stiffness method. Computer techniques required to implement the analysis procedure.

CE 762. Plastic Analysis and Design of Structures. 3 Credits.
Investigate the inelastic behavior of materials and cross sections. Study plastic analysis methods and identify the fundamental assumption and theorems to study structures up to collapse. Design ductile structures for extreme loads using plastic design methods. Two lectures one hour and fifteen minute lectures per week. Prerequisite: CE 562 or consent of instructor.

CE 763. Design of Prestressed Concrete Structures. 3 Credits.
The theory and design of prestressed concrete structures based on service load and strength criteria. Prerequisite: CE 563.

CE 764. Advanced Design of Reinforced Concrete Structures. 3 Credits.
The theory and design of reinforced concrete members and structures with emphasis on frames and slabs. Introduction to bridge design and earthquake design. Prerequisite: CE 563.

CE 765. Advanced Steel Design - Building Structures. 3 Credits.
The theory and design of standard steel framed structures (primarily buildings). Design philosophies, stability, composite design, structural behavior, preliminary design, and connections. Prerequisite: CE 562 or equivalent.

CE 766. Advanced Steel Design - Bridge Structures. 3 Credits.
Introduction to simple plastic design principles. Analysis and design of steel bridges including composite and noncomposite plate girders, curved girders, box girders, and other specialized bridge types. Fatigue and connection design considered. Prerequisite: CE 562 or equivalent.

CE 767. Introduction to Fracture Mechanics. 3 Credits.
Theories and modes of structural failure as related to structural design. Application of fracture mechanics to failure analysis, fracture control plans, fatigue crack growth, and stress-corrosion crack growth. Prerequisite: CE 310 or CE 312 plus a structural or mechanical design course.

CE 768. Design of Timber Structures. 3 Credits.
Provide an introduction to behavior, analysis and design of timber components and systems. Prerequisite: CE 461.

CE 769. Design of Masonry Structures. 3 Credits.
Provide an introduction to behavior, analysis and design of masonry components and systems. Prerequisite: CE 461.

CE 770. Concepts of Environmental Chemistry. 3 Credits.
The fundamentals of aquatic chemistry, with emphasis on application to water purification and wastewater treatment. May not be taken for credit by students with credit in CE 570. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and five hours of chemistry.

CE 771. Environmental Engineering Laboratory. 3 Credits.
A laboratory course introducing standard practices for measurement, analysis, and reporting of environmental data. Emphasis is placed on learning common analytical techniques used in environmental engineering and science. May not be taken for credit by students with credit in CE 571. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and five hours of chemistry.

CE 772. Physical Principles of Environmental Engineering Processes. 3 Credits.
Physical principles of suspensions, kinetics, fluid flow, filtration, and gas transfer are applied to various environmental physical processes. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and four hours of physics.

CE 773. Biological Principles of Environmental Engineering. 3 Credits.
A basic study of the microorganisms of importance in environmental engineering. Emphasis is placed on the microbiology of dilute nutrient solutions. Microbial physiology, microbial ecology, and biochemistry will be discussed as they pertain to environmental engineering and science. Both biodegradation and public health aspects are included. May not be taken for credit by students with credit in CE 573. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and five hours of chemistry.

CE 774. Chemical Principles of Environmental Engineering Processes. 3 Credits.
Chemical principles of stoichiometry, thermodynamics, and kinetics are applied to various chemical processes having application in the field of environmental engineering and science, including adsorption, ion exchange, coagulation, oxidation, and precipitation. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and credit or registration in CE 570 or CE 770.

CE 775. Stormwater Treatment Systems Design. 3 Credits.
This course will address the design of stormwater treatment systems to provide hydrological control and water quality improvement. Specific topics include common stormwater pollutants, contaminant loading during storm events, design of structural BMPs (detention basins, traps, filters, and vegetated control systems) and low impact development practices. Prerequisite: CE 477 or CE 479, either CE 455 or C&PE 511 or consent of instructor.

CE 776. Water Reuse. 3 Credits.
This course addresses past and current water reclamation and reuse practices; health and environmental concerns associated with water reuse; technologies and systems for water treatment, reclamation, and reuse; water reuse applications, including agricultural reuse, direct and indirect potable reuse, landscape irrigation, industrial uses, urban non-irrigation applications, environmental and recreational uses, and groundwater recharge; and planning and implementation of water reuse systems. Prerequisite: CE 477 or CE 479 or equivalent.

**CE 777. Industrial Water and Wastes. 3 Credits.**
A review of the methods of industrial water treatment and the fundamentals of industrial wastewater pollution control. Topics include: water budgets, cooling tower and boiler treatment, corrosion control, government regulations, wastewater characterization, waste minimization, pilot plants, pretreatment, final treatment, and site selection. May not be taken for credit by students with credit in CE 577. Prerequisite: CE 477 or CE 479 or equivalent.

**CE 778. Air Quality. 3 Credits.**
The course is intended to provide a working knowledge of pollutant sources, effects, meteorological factors, measurements, modeling approaches, legislation and controls associated with air quality problems. Students work on problems drawn from typical industrial situations, and use models to address specific air pollution scenarios. Prerequisite: CE 477 or CE 479 or equivalent, and MATH 115 or MATH 125 or MATH 145.

**CE 779. Water Quality. 3 Credits.**
Examination of water quality principles, policy, processes, practices, computer programs, laws and regulations as they relate to the integrated planning and control of point and nonpoint sources of pollution. Prerequisite: MATH 125 or MATH 145 or equivalent, CE 477 or CE 479, and CE 570 or CE 770.

**CE 780. Environmental Instrumental Analysis. 3 Credits.**
The course will provide a basis for theoretical understanding and practical experience with state-of-the-art environmental analytical methods organic and inorganic analytes in aqueous matrices. Methods to be covered include liquid, gas and ion chromatography; mass spectrometry; spectrophotometric, FID, EC, and conductivity detection; atomic absorption; spectrophotometric methods; and potentiometric analysis. Statistical methods for analytical methods development, validation and interpretation will also be covered. Prerequisite: General chemistry, and student standing. Senior level undergraduates may enroll with consent of instructor.

**CE 781. Traffic Engineering Characteristics. 3 Credits.**
A study of fundamental traits and behavior patterns of the road user and his or her vehicle in traffic. The major content involves techniques for obtaining data, analyzing data and interpreting data on traffic speed, volume, streamflow, parking and accidents. Capacity analyses using the most up to date procedures for major traffic facilities such as undivided highways, city streets, freeways, interchanges and intersections are also discussed at length. Prerequisite: CE 582 or equivalent.

**CE 783. Railroad Engineering. 3 Credits.**
A comprehensive study of the railroad industry, including the development of the railway system, an overview of the railroad industry, basic track work, right-of-way and roadway concerns, drainage, track design, railroad structures, electrification, and rail passenger service. A final design project is required. Prerequisite: CE 240; CE 582 or equivalent.

**CE 786. Highway Safety. 3 Credits.**
Several topics dealing with highway safety are presented and discussed. Typical topics are railroad/highway crossings, accident reconstruction, distractions to the drivers, speed and crashes, elderly drivers, traffic control devices, roadside design, access management, traffic calming devices, and crash rates.

**CE 787. Advanced Soil Mechanics. 3 Credits.**
A comprehensive study of soil behavior. Topics include stress-strain behavior for soils under a variety of loading conditions, critical state soil mechanics theory, consolidation prediction, modeling subsurface water flow, and other topics. Prerequisite: CE 487 or equivalent.

**CE 788. Geotechnical Engineering Testing. 3 Credits.**
Three lectures. Field testing techniques, sampling methods, and laboratory testing procedures used to determine soil properties for engineering projects. Prerequisite: CE 487.

**CE 790. Traffic Simulation Modeling and Analysis. 3 Credits.**
This course introduces popular tools for modeling, analyzing and optimizing various transportation elements. Students will learn to formulate and apply basic principles of simulation modeling; use simulation and optimization techniques for improving traffic operations of a signalized intersection, an urban street network, and a freeway facility; and apply processes for developing simulation applications. Prerequisite: CE 781 or equivalent, or consent of instructor.

**CE 797. Environmental Engineering and Science in Developing Countries. 3 Credits.**
This course begins with a focus on basic sanitation, including control of infectious diseases, water supply and treatment, and proper disposal of excreta, wastewater, and solid wastes. The course then delves into other environmental topics such as sustainability, wastewater reuse, project planning and implementation, air pollution, deforestation, hazardous waste disposal, and the roles of various governmental and non-governmental organizations in addressing environmental issues. The course topics are addressed by a combination of lectures, guest lectures, and student presentations, with each student choosing a presentation topic of personal or professional interest that is relevant to the course. Prerequisite: CE 477 or CE 479 or permission of instructor.

**CE 800. Theory of Elasticity. 3 Credits.**
The basic equations of the theory of elasticity; stress and strain transformation, strain-displacement, compatibility and stress-strain relations. Formulation of problems and exact solutions. Introduction to approximate solution methods based on energy methods and finite elements.

**CE 801. Energy Methods. 3 Credits.**
The methods of analysis by energy methods of mechanics problems. Includes variational energy principles, calculus of variations, stationary energy and complementary energy principles, and the principle of virtual work. Applications. Prerequisite: CE 310 or CE 312 and MATH 320.

**CE 804. Advanced Structural Dynamics. 3 Credits.**
Advanced topics in structural dynamics, including experimental modal analysis, digital signal processing, data acquisition and analysis, random vibration concepts, system identification, structural health monitoring and damage detection, and introduction to smart structures technology (e.g. smart sensing, estimation, and control). This course provides practical laboratory experience through state-of-the-art commercial testing equipment and software. Prerequisite: CE 704 or consent of instructor.

**CE 810. Theory of Elastic Stability. 3 Credits.**
Buckling of columns in the elastic or hyperelastic region. Lateral and torsional buckling of straight and curved members. Buckling of plates and shells.

**CE 815. Viscoelasticity of Solids. 3 Credits.**
This course provides the basics of mechanical and mathematical modeling and characterization of linear viscoelastic materials. Topics
include different viscoelastic models, experimental methods for characterization of viscoelastic materials, design methods for viscoelastic members, and introduction to temperature effects and nonlinear viscoelastic response of materials. Prerequisite: CE 310 or CE 312 or equivalent.

**CE 848. Pavement Materials Characterization. 3 Credits.**
Laboratory and field test methods for determining engineering properties of bituminous pavements. Asphalt mix design methods and the relationship between mix design and pavement structural design and performance. Prerequisite: CE 484 or consent of instructor.

**CE 850. Life Cycle Assessment. 3 Credits.**
Life cycle assessment (LCA) is a tool used across engineering fields to determine the life cycle, cradle-to-grave environmental impacts of a product or process. LCA practice helps develop a systems-thinking perspective and a deeper understanding of sustainability. Students will evaluate LCA methods and design appropriate LCA frameworks. Prerequisite: CE 477 or CE 479 or C&PE 211 or equivalent.

**CE 855. Free Surface Flow II. 3 Credits.**
The course addresses computer modeling of open channel flow using HEC-RAS (Hydraulic Engineering Center - River Analysis System). 1D, 2D and mixed 1D-2D HEC-RAS models will be developed for steady and unsteady flow conditions. ArcGIS will be used to develop HEC-RAS geometric input files and to process model results. Other 2D programs will also be introduced. Topics addressed are flood delineation, bridge hydraulics, bridge scour, sediment transport and stable channel design. Some knowledge of ArcGIS is desirable. Prerequisite: CE 330 or equivalent.

**CE 856. Wetland Design, Engineering, and Management. 3 Credits.**
Introduction of design concepts in creating and restoring wetland systems. Review of wetland hydrology and hydraulics. Interaction of wetland hydrology, soils, and vegetation providing environmental benefits. Considerations in project planning, site selection and preparation, construction and operation, and maintenance. Use of state and local legal and management tools to protect and restore wetlands. Emerging concepts of mitigation and banking. Prerequisite: CE 756 or equivalent.

**CE 857. Sediment Transport. 3 Credits.**
A study of the transport of sediment in alluvial channels. Specific topics include properties of sediment, mechanics of bed forms, particle entrainment, scour analysis, prediction of suspended load and bed load, design of stable channels and diversion works, and sedimentation of reservoirs. Prerequisite: CE 755 or consent of instructor.

**CE 858. Urban Hydrology and Stormwater Management. 3 Credits.**
Hydrology of urban watersheds; floodplain management; hydrologic modeling; storm drainage; stormwater detention; water quality improvement; geomorphology of urban streams; stream corridor management and stream restoration. Prerequisite: CE 751.

**CE 859. Erosion and Sedimentation. 3 Credits.**
A study of sediment erosion, transport, and deposition at the watershed scale with particular application to water quality degradation and reservoir infilling. Prerequisite: Graduate standing.

**CE 861. Finite Element Methods for Solid Mechanics. 3 Credits.**
Stress analysis of 2-D and 3-D solids, plates, and shells by the finite element method. Element formulations and behavior with emphasis on the isoparametric concept. Computer modeling and interpretation of results. Introduction to material and geometric nonlinear analysis of solids. Prerequisite: CE 761 or equivalent.

**CE 862. Behavior of Reinforced Concrete Members. 3 Credits.**
This mechanics course covers in detail the constitutive behavior of reinforced concrete members subjected to various types of loading and presents the basis for modeling the response of reinforced concrete structures in the nonlinear range of response. Topics covered include: stress-strain behavior of concrete under multi axial states of stress; moment-curvature analysis; advanced analysis of r/c members subjected to shear (variable angle truss models, modified compression field theory, strut-and-tie models); behavior of r/c members subjected to cyclic loading; modeling and effects of slip at the interface between reinforcing steel and concrete. Suggested prerequisite CE 764 or equivalent. Prerequisite: CE 563.

**CE 864. Seismic Performance of Structures. 3 Credits.**
This course builds on topics from structural dynamics to introduce principles of structural performance during earthquake events. Emphasis is placed on estimating the response of building structures as represented by simple and complex models. Topics covered include strong ground motion, response of simple systems to ground motion, nonlinear response of building systems, and performance-based earthquake engineering. Prerequisite: CE 704.

**CE 869. Plates and Shells. 3 Credits.**
The analysis and design of plates and shells including thin and thick plates, membrane theory of shells and bending theories of shells.

**CE 870. Life Cycle Assessment. 3 Credits.**
Life cycle assessment (LCA) is a tool used across engineering fields to determine the life cycle, cradle-to-grave environmental impacts of a product or process. LCA practice helps develop a systems-thinking perspective and a deeper understanding of sustainability. Students will evaluate LCA methods and design appropriate LCA frameworks. Not open to students with credit in CE 560. Prerequisite: CE 477 or CE 479 or C&PE 211 or equivalent.

**CE 871. Fundamentals of Bioremediation. 3 Credits.**
A study of microbial ecology and physiology as they relate to the degradation of environmental contaminants. Emphasis is placed on the interrelationship between the physiological traits or microorganisms, and the physical and chemical properties of the contaminants and the treatment environments. Case studies involving in-situ bioremediation and reactor design are discussed. Prerequisite: CE 573 or CE 773 or equivalent, and five hours of chemistry.

**CE 874. Air Pollution Control. 3 Credits.**
The design of control devices for the abatement of air pollutants, both gaseous and particulate, emitted from stationary sources. This includes the basic theory of control device operation and economic factors associated with each type of control device design. Prerequisite: CE 772 and CE 778 or equivalent.

**CE 876. Wastewater Treatment Plant Design. 3 Credits.**
Application of physical, chemical, and biological principles to the design of wastewater treatment systems for domestic and other wastewaters. Special emphasis is placed on biological treatment processes. Prerequisite: CE 576 or equivalent, or CE 573 or CE 773 or equivalent.

**CE 877. Water Treatment Plant Design. 3 Credits.**
Application of physical, chemical, and biological principles to the design of water treatment plants and processes for domestic water supply from surface and ground water sources. Prerequisite: CE 774, or concurrent enrollment.

**CE 878. Air Quality Modeling. 3 Credits.**
Fundamental physical and mathematical principles applied to air quality modeling; considered are factors that influence the choice and application of air quality models, as well as the interpretation of model output data.
Practical applications are stressed using standard models. Prerequisite: CE 778 or equivalent and MATH 125 or MATH 145 or MATH 526 or CE 625.

CE 879. Environmental Research Seminar. 1 Credits.
Discussion of current topics in environmental engineering and science and related fields by staff, students, and visiting lecturers. May be taken only once for credit.

CE 881. Traffic Engineering Operations. 3 Credits.
A study of theory and practical applications of a number of traffic operational and management tools to achieve the convenient, safe and efficient movement of people and goods in urban street networks. The major content involves signalized intersection capacity, design and operation; signalized intersection coordination; and modern roundabout design. Prerequisite: CE 582 or equivalent.

CE 882. Geometric Design of Traffic Facilities. 3 Credits.
A study of basic principles in the design of freeways, urban street systems, parking terminal and other traffic facilities with emphasis on capacity, safety, level of service, and dynamic design concept. Prerequisite: CE 781 or equivalent.

CE 884. Principles of Pavement Design. 3 Credits.
A study of the scientific principles of pavement design as applied to airfield and highway pavements, considering loading conditions, stress distribution, and the properties of the various pavement components, for both rigid and flexible pavements. Prerequisite: CE 487 or equivalent.

CE 885. Advanced Foundation Engineering. 3 Credits.
A study in the design, construction, and behavior of footings and rafts, piles and drilled shafts founded on soils and rocks. Prerequisite: CE 588 or equivalent.

CE 887. Earth Structures. 3 Credits.
Current theory and practice relating to the design of retaining walls, earth slopes, large embankments, and landslide mitigation. Application of geotextiles to the design of earth retaining structures and slope stabilization. Prerequisite: CE 588 or consent of instructor.

CE 888. Ground Improvement. 3 Credits.
Basic descriptions, classification, principles, advantages, and limitations of ground improvement techniques. Design, construction, and quality assurance/control of ground improvement techniques. Prerequisite: CE 588 or equivalent.

CE 889. Designing with Geosynthetics. 3 Credits.
Basic description and properties of geosynthetics including geotextiles, geogrids, geomembranes, geonets, geocomposites, and geosynthetic clay liners. Geosynthetic functions and mechanisms including separation, filtration, drainage, reinforcement, and containment. Design with geosynthetics for roadways, embankments/slopes, earth retaining structures, and landfills. Prerequisite: CE 588 or equivalent.

CE 890. Master's Project. 1-4 Credits.
Directed study and reporting of a specialized topic of interest in civil engineering or an allied field. Prerequisite: Consent of instructor.

CE 891. Advanced Special Problems. 1-3 Credits.
A directed study of a particular complex problem in an area of civil engineering or allied field. Prerequisite: Varies by topic, or with consent of instructor.

CE 892. Structural Engineering and Mechanics Seminar. 1 Credits.
Presentation and discussion of current research and design in structural engineering and engineering mechanics.

CE 895. Advanced Special Topics: ____. 1-3 Credits.
A graduate course or colloquium in a topic of civil engineering or an allied field. Prerequisite: Varies by topic, or with consent of instructor.

CE 899. Master's Thesis. 1-10 Credits.
Directed research and reporting of a specialize topic of interest in civil engineering or an allied field. Prerequisite: Consent of instructor.

CE 912. Theory of Plasticity. 3 Credits.

CE 961. Finite Element Methods for Nonlinear and Dynamic Systems. 3 Credits.
Advanced treatment of finite element techniques for structural analysis including material and geometric non-linearity and the solution of large scale dynamics problems. Prerequisite: CE 861 or ME 761 or equivalent.

CE 991. Research. 1-15 Credits.
An investigation of a special problem directly related to civil engineering.

CE 999. Ph.D. Dissertation. 1-15 Credits.
Restricted to Ph.D. candidates. Before candidacy, aspirants performing their research should enroll in CE 991. Prerequisite: Consent of instructor.

Civil, Envr & Arch Engineering Courses

CMGT 457. Construction Project Management. 3 Credits.
An introduction to the management of construction projects with an emphasis on engineering economics. This course addresses time value of money, cash flow and interest, financial analysis of alternatives, and taxes and depreciation. Also included are projects management fundamentals, project scheduling, and project controls. Prerequisite: MATH 126 or MATH 146 or consent of the instructor.

CMGT 500. Construction Engineering. 3 Credits.
An introduction to the construction industry, construction project management, and construction operations. Topics include project participant roles and responsibilities; project delivery systems; procurement of construction services; sustainable construction; contracts, bonds, and insurance; equipment selection and use; constructability and value engineering; estimating and bidding; planning and scheduling; operations management; safety; and project commissioning and closeout. Prerequisite: Junior or Senior standing in the School of Engineering, or consent of the instructor.

CMGT 700. Construction Project Management. 3 Credits.
An introduction to the management of construction projects. This course addresses project delivery systems, project organization, estimating and bidding, planning and scheduling, legal and safety issues, among other topics. Prerequisite: Graduate standing or consent of instructor. Not open to those with credit in CMGT 500.

CMGT 701. Construction Planning and Scheduling. 3 Credits.
An introduction to the planning and scheduling of projects, for both construction and design. Emphasis is placed on the critical path method including network development, production of time schedules, time-cost considerations, and the efficient utilization of resources. Manual and computer techniques are covered. Prerequisite: CMGT 500 or CMGT 700, and MATH 526 or CE 625 or EMGT 802, or consent of instructor.

CMGT 702. Construction Equipment and Methods. 3 Credits.
This course introduces the student to the multitude of construction equipment employed in construction. The underlying technology and engineering principles are reviewed. Principles of equipment selection, equipment utilization, and equipment economic analysis are covered.
CMGT 703. Construction Quality, Productivity, and Safety. 3 Credits.
Operations analysis for work improvement in construction using process charts, crew balancing, time-lapse photography, and planning techniques. Regulations, accident prevention, and safety management are covered. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or CE 625 or EMGT 802, and CMGT 457 or EMGT 806, or consent of instructor.

CMGT 704. Construction Estimating and Bidding. 3 Credits.
A study of the quantity survey, cost estimating, scheduling and project controls; construction operations; and methods of building construction. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or CE 625 or EMGT 802, and CMGT 457 or EMGT 806, or consent of instructor.

CMGT 705. Construction Contracts, Bonds, and Insurance. 3 Credits.
Legal doctrines relating to owners, design professionals, and contractors. Sources of law, forms of association, and agency. Contract formation, rights and duties, interpretation, performance problems, disputes, and claims. Surety bonds and insurance. Prerequisite: CMGT 500 or CMGT 700, or consent of instructor.

CMGT 706. Construction Alternative Project Delivery Methods. 3 Credits.
Learn the types of alternative project delivery methods that are increasingly used in the design and construction industry, including Design-Build (DB), Construction Manager at Risk (CMAR or CM/GC), Integrated Project Delivery (IPD), Public-Private-Partnerships (P3), and more. Within these methods, the course focuses on the industry’s expanding scope of preconstruction services and increasing integration between design and construction professionals. Prerequisite: Corequisite: CMGT 500 or CMGT 700.

CMGT 707. Engineering Risk and Decision Analysis. 3 Credits.
The course investigates the fundamental principles and techniques of risk and decision analysis. It applies these principles in project-level decisions in which risk or uncertainty play a central role. The course examines various risk and decision tools including Monte Carlo analyses, influence diagrams, and other types of multi-criteria decision analyses. In addition to teaching to the skills and techniques, the course will introduce students to new ideas and concepts regarding decision and risk analysis. Prerequisite: CMGT 500 or CMGT 700 or consent of instructor.

CMGT 708. Introduction to Sustainable Design and Construction. 3 Credits.
This course introduces students to Sustainable Design Concepts that are applicable to Civil and Architectural Engineering. Prerequisite: Senior or graduate standing in Architectural Engineering, Architecture, or Civil Engineering or consent of instructor.

CMGT 711. Construction Safety. 3 Credits.
This course’s primary purpose is to help students understand construction safety theories and practices. Methods used to improve construction safety are introduced. A class project is used to help students explore and identify opportunities to improve construction safety. Prerequisite: Graduate standing or consent of instructor.

CMGT 712. Construction Safety Solution Development. 3 Credits.
This course aims to help students develop solutions to improve construction safety. Solution development focuses on improving safety issues faced in the construction industry, including but not limited to software, hardware, processes, methods, and concepts. Prerequisite: Graduate standing or consent of instructor.

CMGT 790. Construction Seminar:. 3 Credits.
Prerequisite: Varies with topic.

CMGT 801. Directed Readings in Construction Management. 1-3 Credits.
Graduate-level directed readings on a topic in construction management mutually agreed on by the student and instructor. Intended to build on one or more of the core course topics: project management; planning and scheduling; equipment and methods; quality; productivity and safety; estimating and bidding; contracts, bonds, and insurance. CMGT 801 may be repeated for credit to a maximum of three hours in the degree program. Mutually agreed course deliverable(s) required. Prerequisite: Approval of the course topic and deliverable(s) by the instructor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, or consent of instructor.

CMGT 802. Special Problems in Construction Management. 1-3 Credits.
Graduate-level investigation requiring research of a topic in construction management mutually agreed on by the student and instructor. Intended to build on one or more of the core course topics: project management; planning and scheduling; equipment and methods; quality; productivity and safety; estimating and bidding; contracts, bonds, and insurance. CMGT 802 may be repeated for credit to a maximum of three hours in the degree program. Mutually agreed course deliverable such as a paper summarizing the results of the investigation required. Prerequisite: Approval of the course topic and deliverable by the instructor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, or consent of instructor.

CMGT 805. Construction Accounting and Finance. 3 Credits.
Project level cost control concepts and structure, time and cost integration, data collection and reporting, equipment cost, job overhead cost, and cost control. Integrating construction project level cost with construction company financial accounting and financial management. Prerequisite: CMGT 702 and CMGT 704 or consent of instructor.

CMGT 895. Construction Management Project. 1-3 Credits.
Graduate-level investigation and report on a construction management topic mutually agreed on by the student and project advisor. This is the capstone course in the Master of Construction Management (MCM) degree program. Successful completion of this project requires acceptance of the written report and oral presentation to the student’s graduate committee. Prerequisite: Approval of project topic by project advisor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and nine elective credit hours, or consent of instructor.

Electrical Engr & Computer Sci Courses
EECS 101. New Student Seminar. 1 Credits.
A seminar intended to help connect freshmen and transfer EECS students to the EECS department, their chosen profession, and each other. Topics include overviews of the various disciplines, curricula and advising, ethics and professionalism, student organizations and extracurricular activities, senior projects, and career planning. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Corequisite: MATH 104.

EECS 137. Visual Basic for Engineers. 3 Credits.
Introduction of computer-based problem solving techniques for engineering practice with emphasis on good programming practices and the integration of appropriate computational and related tools. Solutions are computed using Visual Basic, specifically VBA within Excel. Elementary numerical and statistical methods are applied to the solution of sets of linear and nonlinear algebraic equations, linear regression, and root finding. Microsoft Office is used with the computational tools to
provide integrated report generation capability. Two lectures and a weekly laboratory instruction. Prerequisite: MATH 104.

EECS 138. Introduction to Computing. 3 Credits. NM
Algorithm development, basic computer organization, syntax and semantics of a high-level programming language, including testing and debugging. Concept of structure in data and programs, arrays, top-down design, subroutines and library programs. Abstract data types. System concepts such as compilation and files. Nature and scope of computer science. Not open to electrical engineering, computer engineering, computer science, and interdisciplinary computing majors. Prerequisite: MATH 101 or MATH 104, or meeting the requirements to enroll in MATH 115 or MATH 125 or MATH 145.

EECS 140. Introduction to Digital Logic Design. 4 Credits.
An introductory course in digital logic circuits covering number representation, digital codes, Boolean Algebra, combinatorial logic design, sequential logic design, and programmable logic devices. Grade of C (not C-) required to progress. Prerequisite: Corequisite: MATH 104.

EECS 141. Introduction to Digital Logic: Honors. 4 Credits.
An introductory course in digital logic circuits covering number representation, digital codes, Boolean algebra, combinatorial logic design, sequential logic design, and programmable logic devices. This course is intended for highly motivated students and includes honors-level assignments. Grade of C (not C-) required to progress. Prerequisite: Corequisite: MATH 104, plus either acceptance into the KU Honors Program or consent of instructor.

EECS 168. Programming I. 4 Credits.
Problem solving using a high level programming language and object oriented software design. Fundamental stages of software development are discussed: problem specification, program design, implementation, testing, and documentation. Introduction to programming using an object oriented language: using classes, defining classes, and extending classes. Introduction to algorithms and data structures useful for problem solving: arrays, lists, files, searching, and sorting. Student will be responsible for designing, implementing, testing, and documenting independent programming projects. Professional ethics are defined and discussed in particular with respect to computer rights and responsibilities. Grade of C (not C-) required to progress. Prerequisite: Corequisite: MATH 104.

EECS 169. Programming I: Honors. 4 Credits.
Problem solving using a high level programming language and object oriented software design. Fundamental stages of software development are discussed: problem specification, program design, implementation, testing, and documentation. Introduction to programming using an object oriented language: using classes, defining classes, and extending classes. Introduction to algorithms and data structures useful for problem solving: arrays, lists, files, searching, and sorting. Students will be responsible for designing, implementing, testing, and documenting independent programming projects. Professional ethics are defined and discussed in particular with respect to computer rights and responsibilities. This course is intended for highly motivated students and includes honors-level assignments. Grade of C (not C-) required to progress. Prerequisite: Corequisite: MATH 104, plus either acceptance into the KU Honors Program or consent of instructor.

EECS 202. Circuits I. 4 Credits.
Analysis of linear electrical circuits: Kirchoff's laws; source, resistor, capacitor and inductor models; nodal and mesh analysis; network theorems; transient analysis; Laplace transform analysis; steady-state sinusoidal analysis. The lab provides training and practice in the use of computational tools (e.g., Matlab), computer-aided circuit analysis (e.g., Pspice), and laboratory skills. Prerequisite: Corequisite: MATH 220 and MATH 290.

EECS 210. Discrete Structures. 4 Credits.
An introduction to the mathematical foundations and techniques of computer science. Throughout, there is an emphasis on general reasoning, problem solving, and technical communication. Topics include basic proof techniques and logic, induction, recurrences, relations, number theory, basic algorithm design and analysis, and applications. Grade of C (not C-) required to progress. Prerequisite: EECS 140 or EECS 141, EECS 168 or EECS 169 (or equivalent) and MATH 122 or MATH 126 or MATH 146.

EECS 212. Circuits II. 4 Credits.
Continued study of electrical circuits: Steady-state power analysis, three-phase circuits, transformers, frequency response, and two-port network analysis. Grade of C (not C-) required to progress. Prerequisite: EECS 211 or EECS 202.

EECS 220. Electromagnetics I. 4 Credits.
Vector analysis. Electrostatic and magnetostatic fields in a vacuum and material media. Electromagnetic fields and Maxwell's equations for time-varying sources. The relationship between field and circuit theory. Simple applications of Maxwell's equations. Grade of C (not C-) required to progress. Prerequisite: MATH 220, MATH 290, PHSX 210 or PHSX 211, and EECS 202.

EECS 221. Electromagnetics I. 3 Credits.
Electrostatic and magnetostatic fields in a vacuum and material media. Electromagnetic fields and Maxwell's equations for time-varying sources. The relationship between field and circuit theory. Simple applications of Maxwell's equations. Grade of C (not C-) required to progress. Prerequisite: MATH 127, MATH 220, EECS 211 or EECS 202, and either PHSX 210 or PHSX 211.

EECS 268. Programming II. 4 Credits.
This course continues developing problem solving techniques by focusing on the imperative and object-oriented styles using Abstract Data Types. Basic data structures such as queues, stacks, trees, and graphs will be covered. Recursion. Basic notions of algorithmic efficiency and performance analysis in the context of sorting algorithms. Basic Object-Oriented techniques. An associated laboratory will develop projects reinforcing the lecture material. Three class periods and one laboratory period per week. Grade of C (not C-) required to progress. Prerequisite: EECS 168 or EECS 169.

EECS 312. Electronic Circuits I. 3 Credits.
Introduction to diodes, BJTs and MOSFETs, and their use in electronic circuits, especially digital circuits. Prerequisite: Upper-level eligibility. Corequisite: EECS 212.

EECS 315. Electric Circuits and Machines. 3 Credits.
Introduction to DC and AC electrical circuit analysis techniques, AC power calculations, transformers, three-phase systems, magnetic circuits, and DC and AC machines with a focus on applications. Not open to electrical or computer engineering majors. (Same as ARCE 315.) Prerequisite: A course in differential equations and eight hours of physics.

EECS 316. Circuits, Electronics and Instrumentation. 3 Credits.
Introduction to DC and AC electrical circuit analysis, operational amplifiers, semiconductors, digital circuits and systems, and electronic instrumentation and measurements with a focus on applications. Not open to electrical or computer engineering majors. Students may not receive credit for both EECS 316 and EECS 317. Prerequisite: A course in differential equations and eight hours of physics.

EECS 317. Electronics and Instrumentation. 2 Credits.
Introduction to operational amplifiers, semiconductors, digital circuits and systems, and electronic instrumentation and measurements with a focus on applications. Not open to electrical or computer engineering majors. Students may not receive credit for both EECS 316 and EECS 317. Prerequisite: EECS 315.

EECS 318. Circuits and Electronics Lab. 1 Credits.
Laboratory exercises intended to complement EECS 316 and EECS 317. Experiments include DC circuits, analog electronics, and digital electronics. Not open to electrical or computer engineering majors. Prerequisite: Corequisite: EECS 316 or EECS 317.

EECS 330. Data Structures and Algorithms. 4 Credits.
A first course in abstract data structures and algorithmic design making use of these structures. Topics include asymptotic analysis, trees, dictionaries, heaps, disjoint set structures; divide and conquer, greedy, and dynamic programming algorithms. Prerequisite: EECS 210, EECS 268, and upper-level EECS eligibility.

EECS 348. Software Engineering I. 4 Credits.
This course is an introduction to software development fundamentals and software engineering. It incorporates a thorough introduction to a compiled programming language. A baseline knowledge of tools and utilities is covered including the shell, common programs, version control, IDEs, editors, and build tools. Topics include: software development principles (e.g., design patterns, modularity, loose coupling), extending larger codebases, developing larger codebases, continuous integration, continuous deployment, debugging, unit testing, test-driven development, and databases. Grade of C (not C-) required to progress. Prerequisite: EECS 268.

EECS 360. Signal and System Analysis. 4 Credits.
Fourier signal analysis (series and transform); linear system analysis (continuous and discrete); Z-transforms; analog and digital filter analysis. Analysis and design of continuous and discrete time systems using MATLAB. Prerequisite: Upper level of EECS Eligibility, and EECS 212.

EECS 361. Signal and System Analysis. 3 Credits.
Fourier signal analysis (series and transform); linear system analysis (continuous and discrete); z-transforms, analog and digital filter analysis; analysis and design of continuous and discrete time systems using MATLAB. Prerequisite: EECS 212 and EECS Upper Level Eligibility.

EECS 368. Programming Language Paradigms. 3 Credits.
The course is a survey of programming languages: their attributes, uses, advantages, and disadvantages. Topics include scopes, parameter passing, storage management, control flow, exception handling, encapsulation and modularization mechanism, reusability through generality and inheritance, and type systems. In particular, several different languages will be studied which exemplify different language philosophies (e.g., procedural, functional, object-oriented, logic, scripting). Prerequisite: EECS 268 and upper-level EECS eligibility.

EECS 388. Embedded Systems. 4 Credits.
This course will address internal organization of micro-controller systems, sometimes called embedded systems, used in a wide variety of engineered systems: programming in C and assembly language; input and output systems; collecting data from sensors; and controlling external devices. This course will focus on one or two specific microprocessors, software development and organization, and building embedded systems. Prerequisite: EECS 140 or EECS 141, EECS 168 or EECS 169, and upper-level EECS eligibility.

EECS 399. Projects. 1-5 Credits.
An electrical engineering, computer engineering, or computer science project pursued under the student's initiative, culminating in a comprehensive report, with special emphasis on orderly preparation and effective composition. Prerequisite: Upper-level EECS eligibility and consent of instructor.

EECS 412. Electronic Circuits II. 4 Credits.
Discrete and integrated amplifier analysis and design. Introduction to feedback amplifier analysis and design. Introduction to feedback amplifiers. Prerequisite: EECS 312 and upper-level EECS eligibility.

EECS 420. Electromagnetics II. 4 Credits.
This course applies electromagnetic analysis to high frequency devices and systems where wave propagation effects cannot be neglected. Topics covered include transmission lines, space waves, waveguides, radiation, and antennas. Laboratory experiments include transmission line, waveguide, and antenna measurements and characterizations. 3 hours lecture, 1 hour laboratory. Prerequisite: EECS 220 and upper-level EECS eligibility.

EECS 441. Power Systems Engineering II. 3 Credits.
A continuation of ARCE 640 that integrates system components into functional, safe, and reliable power distribution systems for commercial, industrial, and institutional (CII) facilities. Service entrance design, distribution system layout and reliability, emergency and standby power system design, medium-voltage distribution systems, symmetrical fault analysis, and special equipment and occupancies. (Same as ARCE 641.) Prerequisite: ARCE 640 or EECS 212 and Upper-Level EECS Eligibility.

EECS 443. Digital Systems Design. 4 Credits.
The design of digital systems from a hardware point of view. The implementation of functional and control units using programmable logic devices. Introduction to VHDL and its use in modeling and designing digital systems. Prerequisite: EECS 388.

EECS 444. Control Systems. 3 Credits.
An introduction to the modeling, analysis, and design of linear control systems. Topics include mathematical models, feedback concepts, state-space methods, time response, system stability in the time and transform domains, design using PID control and series compensation, and digital controller implementation. Prerequisite: EECS 212 and EECS 360.

EECS 447. Introduction to Database Systems. 3 Credits.
Introduction to the concept of databases and their operations. Basic concepts, database architectures, storage structures and indexing, data structures: hierarchical, network, and relational database organizations. Database design and normalization: ER model, candidates keys, functional dependencies, normal forms, decomposition. Emphasis on relational databases, relational algebra, and SQL. Introduction to views, transactions, and database access control. Introduction to database security, big data, NoSQL, CAP theorem, key-value stores. Prerequisite: Upper-level EECS eligibility or departmental consent.

EECS 448. Software Engineering II. 4 Credits.
This course is an introduction to software engineering, and it covers the systematic development of software products. It outlines the scope of software engineering, including life-cycle models, software process, teams, tools, testing, planning, and estimating. It concentrates on requirements, analysis, design, implementation, and maintenance of software products. The laboratory covers CASE tools, configuration control tools, UML diagrams, integrated development environments, and project specific components. Prerequisite: EECS 268 and upper-level EECS eligibility.

EECS 455. Cyber Defense Practice. 1 Credits.
The course introduces cyber defense methods and skills through hands-on practice. Each section will focus on aspects of securing operating systems, securing network access, and securing file systems. To earn
three (3) credits, a student must complete three (3) sections. Prerequisite: EECS 268. Corequisite: EECS 388.

**EECS 461. Probability and Statistics. 3 Credits.**
Introduction to probability and statistics with applications. Reliability of systems. Discrete and continuous random variables. Expectations, functions of random variables, and linear regression. Sampling distributions, confidence intervals, and hypothesis testing. Joint, marginal, and conditional distribution and densities. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291, and upper-level EECS eligibility.

**EECS 465. Cyber Defense. 3 Credits.**
An introduction to critical knowledge and skills needed to administer and defend computer networks and systems. This course focuses on hands-on activities, learning cybersecurity defensive techniques, and understanding well know techniques used by adversaries. Prerequisite: EECS 268. Corequisite: EECS 388.

**EECS 468. Programming Paradigms. 3 Credits.**
This course is a survey of programming languages: their attributes, uses, advantages, and disadvantages. Topics include the evolution of programming languages; programming language processing (i.e., compilation, interpretation, and mixed approaches); imperative, functional, and declarative languages; parameter passing and evaluation order; iteration, recursion, and continuation; and the basics of cloud programming (i.e., web services, client/server, synchronous vs. asynchronous programming, building reliable systems, and programming at scale). Prerequisite: EECS 268 and upper-level EECS eligibility.

**EECS 470. Electronic Devices and Properties of Materials. 3 Credits.**
An introduction to crystal structures, and metal, insulator, and semiconductor properties. Topics covered include the thermal, electric, dielectric, and optical properties of these materials. A significant portion of this course is devoted to the properties of semiconductors and semiconductor devices. Prerequisite: PHSX 313 and upper-level EECS eligibility.

**EECS 498. Honors Research. 1-2 Credits.**
Arranged to allow students to satisfy the independent research requirement for graduation with departmental honors. Prerequisite: Consent of instructor and upper-level EECS eligibility.

**EECS 501. Senior Design Laboratory I. 3 Credits.**
A lecture/laboratory course involving the design and implementation of prototypes of electrical and computer type products and systems. The project specifications require consideration of ethics, economics, manufacturing, and safety. Intended for students graduating the following calendar year. EECS 501 should be immediately followed by EECS 502 in the following semester. Prerequisite: EECS 221, EECS 360, and EECS 412.

**EECS 502. Senior Design Laboratory II. 3 Credits.**
A lecture/laboratory course involving the design and implementation of prototypes of electrical and computer type products and systems. The project specifications require consideration of ethics, economics, health, manufacturing, and safety. Must be taken in semester immediately following completion of EECS 501. Prerequisite: EECS 501.

**EECS 510. Introduction to the Theory of Computing. 3 Credits.**
Finite state automata and regular expressions. Context-free grammars and pushdown automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation.

(3 Credits. Prerequisite: EECS 210 and upper-level EECS eligibility.

**EECS 512. Electronic Circuits III. 3 Credits.**
Feedback amplifier circuit analysis, power amplifiers, analog IC op-amp techniques and analysis, filter approximation and realization, oscillators, wave generators and shapers. Prerequisite: EECS 412.

**EECS 541. Computer Systems Design Laboratory I. 3 Credits.**
A two semester lecture/laboratory course involving the specification, design, implementation, analysis, and documentation of a significant hardware and software computer system. Laboratory work involves software, hardware, and hardware/software trade-offs. Project requirements include consideration of ethics, economics, manufacturing, safety, and health aspects of product development. Must be taken in semester immediately following completion of EECS 541. Prerequisite: EECS 443 and EECS 348.

**EECS 542. Computer Systems Design Laboratory II. 3 Credits.**
A two semester lecture/laboratory course involving the specification, design, implementation, analysis, and documentation of a significant hardware and software computer system. Laboratory work involves software, hardware, and hardware/software trade-offs. Project requirements include consideration of ethics, economics, manufacturing, safety, and health aspects of product development. Must be taken in semester immediately following completion of EECS 541. Prerequisite: EECS 443 and EECS 348.

**EECS 544. Electric Machines and Drives. 3 Credits.**
Introduction to electric machine theory, operation, and control. Electric machines covered include DC generators and motors, AC synchronous generators and motors, AC induction generators and motors, as well as fractional horsepower and special purpose motors. Motor starting and controls for both DC and AC machines are also covered including an introduction to power electronics and variable frequency drives (VFD). (Same as ARCE 644.) Prerequisite: ARCE 640 or EECS 212 and Upper-Level EECS Eligibility.

**EECS 545. Electric Energy Production and Storage. 3 Credits.**
An introduction to the design of utility scale and small scale (distributed generation) electric energy production and storage systems. This course addresses the technical, operational, economic, and environmental characteristics associated with both traditional and nontraditional electric energy production systems along with associated grid integration, energy delivery, and regulatory issues. Traditional energy production systems covered include fossil fuel, hydroelectric, and nuclear power plants. Non-traditional energy productions systems covered include fuel cells, photovoltaics (PV), concentrated solar power (CSP), wind, geothermal, and other emerging technologies. (Same as ARCE 645.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility.

**EECS 547. Power System Analysis I. 3 Credits.**
Introduction to the analysis of commercial, industrial, and utility power systems. Emphasis is placed on modeling system components which include transmission and distribution lines, transformers, induction machines, and synchronous machines and the development of a power system model for analysis from these components. System modeling will be applied to short-circuit studies and used to analyze symmetrical faults, to develop sequence networks using symmetrical components, and analyze unsymmetrical faults. (Same as ARCE 647.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility.

**EECS 548. Power System Analysis II. 3 Credits.**
Continuation of ARCE 647 or EECS 547 that uses power system modeling developed in ARCE 647 or EECS 547 to analyze power system
load flow, operation and economic dispatch, stability, and transient response. The impact of alternative energy sources, energy storage, DC transmission and interties, and other emerging technologies on power system operation and reliability will be addressed throughout the course. (Same as ARCE 648.) Prerequisite: ARCE 647 or EECS 547 or consent of instructor.

EECS 560. Data Structures. 4 Credits.
Data abstraction and abstract data types. Topics include the design and implementation of dictionary, priority queues, concatenated queue, disjoint set structures, graphs, and other advanced data structures based on balanced and unbalanced tree structures. Special emphasis will be placed on the implementations of these structures and their performance tradeoffs. Both asymptotic complexity analysis and experimental profiling techniques will be introduced. Labs will be used to provide students with hands-on experience in the implementations of various abstract data types and to perform experimental performance analysis. Prerequisite: EECS 210. Corequisite: EECS 448.

EECS 562. Introduction to Communication Systems. 4 Credits.
A first course in communications, including lectures and integrated laboratory experiments. After a review of spectral analysis and signal transmission, analog and digital communications are studied. Topics include: sampling, pulse amplitude modulation, and pulse code modulation; analog and digital amplitude, frequency, and phase modulation; frequency and time division multiplexing; and noise performance of analog modulation techniques. Prerequisite: EECS 212 and EECS 360.

EECS 563. Introduction to Communication Networks. 3 Credits.
An introduction to the principles used in communication networks is given in this course. Topics include a discussion of the uses of communications networks, network traffic, network impairments, standards, layered reference models for organizing network functions. Local Area Network technology and protocols are discussed. Link, network, transport layer protocols, and security are introduced. TCP/IP networks are stressed. VoIP is used as an example throughout the course. Basic concepts of network performance evaluation are studied, both analytical and simulation techniques are considered. Prerequisite: EECS 168 and MATH 526 or EECS 461.

EECS 565. Introduction to Information and Computer Security. 3 Credits.
An introduction to the fundamentals of cryptography and information and computer security. Introduces the basic concepts, theories, and protocols in computer security. Discusses how to apply such knowledge to analyze, design and manage secure systems in the real world. Topic covered: the basics of cryptography, software security, operating system security, database security, network security, privacy and anonymity, social engineering, digital forensics, etc. Corequisite: EECS 678 and Prerequisite: Upper-Level EECS Eligibility.

EECS 569. Computer Forensics. 3 Credits.
This course covers both the theoretical and practical aspects of computer forensics. The course introduces the basic concepts, methodologies, and techniques to recover, preserve, and examine digital evidence on or transmitted by digital devices. Topics include: crime investigation and digital evidence, file system forensics, application analysis, network evidence acquisition and analysis, mobile device forensics, etc. Prerequisite: EECS 565.

EECS 581. Software Engineering II. 3 Credits.
This lecture/laboratory course covers the systematic development of software products. Topics include: scope of software engineering, life-cycle models, software process, teams, ethics, tools, testing, planning, and estimating. It concentrates on requirements, analysis, design, implementation, and maintenance of software products. Prerequisite: EECS 348, EECS 330, EECS 468, and upper-level EECS eligibility. Corequisite: EECS 565.

EECS 582. Computer Science and Interdisciplinary Computing Capstone. 3 Credits.
Team-orientated lecture/laboratory course involving the specification, design, implementation, testing, and documentation of a significant software project over the full course of the semester. The course includes the consideration of project management, economics, and technical writing. Prerequisite: EECS 581 and upper-level EECS eligibility.

EECS 611. Electromagnetic Compatibility. 3 Credits.
A study of unwanted generation and reception of radio-frequency radiation from analog and digital electronic systems and how these emissions/receptions can be reduced. Topics covered include sources of radiation, grounding, shielding, crosstalk, electrostatic discharge, and practical design and layout schemes for reducing unwanted radiation and reception. Also covered are the major governmental electromagnetic compatibility (EMC) regulations and standards that apply to commercial electronic devices and systems. Prerequisite: EECS 220 and EECS 312.

EECS 622. Microwave and Radio Transmission Systems. 3 Credits.
Introduction to radio transmission systems. Topics include radio transmitter and receiver design, radiowave propagation phenomenology, antenna performance and basic design, and signal detection in the presence of noise. Students will design radio systems to meet specified performance measure. Prerequisite: Corequisite: EECS 420 and MATH 526 or EECS 461.

EECS 628. Fiber Optic Communication Systems. 3 Credits.
Description and analysis of the key components in optical communication systems. Topics covered include quantum sources, fiber cable propagation and dispersion characteristics, receiver characteristics, and system gain considerations. Prerequisite: EECS 220 and PHSX 313 or equivalent and upper-level EECS eligibility.

EECS 630. Advanced Data Structures and Algorithms. 3 Credits.
A second course in abstract data structures and algorithmic design making use of these structures. Emphasis will be on understanding the high-level theoretical intuitions and principles, as well as a concrete understanding of implementation and applications. Topics include advanced treatment of trees, heaps, disjoint set structures, network flow, greedy algorithms, divide and conquer, dynamic programming, and complexity theory. Prerequisite: Upper-level EECS eligibility, EECS 330 and either EECS 461 or MATH 526.

EECS 638. Fundamentals of Expert Systems. 3 Credits.
Basic information about expert systems: architecture of an expert system, building expert systems, uncertainty in expert systems, taxonomy of expert systems. Knowledge representation: first order logic, production systems, semantic nets, frames. Uncertainty in expert systems, one-valued approaches: probability theory, systems using Bayes’ rule, and systems using certainty theory; two-valued approaches: systems using Dempster-Shafer theory and system INFERNO; set-valued approaches: probability theory, systems using Bayes’ rule, and systems using certainty theory. Prerequisite: EECS 560 or consent of instructor.

EECS 639. Introduction to Scientific Computing. 3 Credits.
A basic introduction to scientific computing and numerical analysis. Topics include linear equation solving, least squares, nonlinear equation-solving, optimization, interpolation, numerical integration and differentiation, ordinary differential equations, and the fast Fourier transform (FFT). Vectorization, efficiency, reliability, and stability of numerical algorithms will be stressed. Applications of algorithms to real-world problems, such
as image processing, medicine, electronic circuits, flight trajectories, and molecular modeling, will be emphasized. Students cannot receive credit for both EECS 639 and EECS 781 or MATH 781. Prerequisite: MATH 127, MATH 290, and EECS 168 or equivalent.

EECS 643. Computer Architecture. 3 Credits.
The structure and design of computing systems. Examination and analysis of computing systems. Examination and analysis of instruction set architectures, pipelined control and arithmetic units, vector processors, memory hierarchies, and performance evaluation. Prerequisite: EECS 443.

EECS 644. Introduction to Digital Signal Processing. 3 Credits.
Discrete time signal and systems theory, sampling theorem, z-transforms, digital filter design, discrete Fourier transform, FFT, and hardware considerations. Prerequisite: EECS 360.

EECS 645. Computer Architecture. 3 Credits.
The structure, design, analysis, and evaluation of computer processors and systems. The design of instruction sets. Principles and techniques of parallelism at the data transfer (memory hierarchy), data processing (pipelines), and concurrent instruction execution. Prerequisite: EECS 388.

EECS 647. Introduction to Database Systems. 3 Credits.
Introduction to the concept of databases and their operations. Basic concepts, database architectures, storage structures and indexing, data structures: hierarchical, network, and relational database organizations. Emphasis on relational databases and retrieval languages SQL, QBE, and ones based on relational algebra and relational calculus; brief description of predicate calculus. Theory of databases, normal forms, normalization, candidates keys, decomposition, functional dependencies, multi-valued dependencies. Introduction to the design of a simple database structure and a data retrieval language. Student cannot receive credit for both EECS 647 and EECS 746. Prerequisite: EECS 448.

EECS 649. Introduction to Artificial Intelligence. 3 Credits.
General concepts, search procedures, two-person games, predicate calculus and automated theorem proving, nonmonotonic logic, probabilistic reasoning, rule based systems, semantic networks, frames, dynamic memory, planning, machine learning, natural language understanding, neural networks. Prerequisite: Corequisite: EECS 368.

EECS 658. Introduction to Machine Learning. 3 Credits.
This course provides an introduction to the basic methods of machine learning and how to apply them to solve software engineering problems. Topics covered are: supervised learning, unsupervised learning, and reinforcement learning methods; feature selection techniques; structuring machine learning solutions; and evaluation metrics. Prerequisite: EECS 348 and upper-level EECS eligibility.

EECS 660. Fundamentals of Computer Algorithms. 3 Credits.
Basic concepts and techniques in the design and analysis of computer algorithms. Models of computations. Simple lower bound theory and optimality of algorithms. Computationally hard problems and the theory of NP-Completeness. Introduction to parallel algorithms. Prerequisite: EECS 560 and either EECS 461 or MATH 526.

EECS 662. Programming Languages. 3 Credits.
Formal definition of programming languages including specification of syntax and semantics. Simple statements including precedence, infix, prefix, and postfix notation. Global properties of algorithmic languages including scope of declaration, storage allocation, grouping of statements, binding time of constituents, subroutines, coroutines, and tasks. Run-time representation of program and data structures. Prerequisite: EECS 368 and EECS 560.

EECS 664. Introduction to Digital Communication Systems. 3 Credits.
An introduction to building digital communication systems in discrete time, including lectures and integrated laboratory exercises. Topics covered include signal spaces, base-band modulation, bandpass modulation, phase-locked loops, carrier phase recovery, symbol timing recovery, and basic performance analysis. Prerequisite: EECS 360 and EECS 461 or MATH 526.

EECS 665. Compiler Construction. 4 Credits.
Compilation of programming language constructs. Organization of a compiler including symbol tables, lexical analysis, syntax analysis, intermediate and object code generation, error diagnostics, code optimization techniques and run-time structures in a block-structured language such as C or Rust. Programming assignments include construction of various modules of a compiler. Prerequisite: EECS 348, EECS 468, EECS 510, and upper-level eligibility.

EECS 667. Introduction to Semiconductor Processing. 3 Credits.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metallization, and plasma etching of thin films. (Same as C&PE 655.) Prerequisite: Senior standing in C&PE or EECS, or consent of instructor.

EECS 670. Introduction to Computer Graphics. 3 Credits.
Foundations of 2D and 3D computer graphics. Structured graphics application programming. Basic 2D and 3D graphics algorithms (modeling and viewing transformations, clipping, projects, visible line/surface determination, basic empirical lighting, and shading models), and aliasing. Prerequisite: EECS 348 and upper-level EECS eligibility.

EECS 675. Multicore and GPU Programming. 3 Credits.
This course covers concepts of single-machine multi-threaded programming; multicore programming across a network of machines; and general-purpose computing on GPUs. Typically, more than half of the course focuses on GPUs, including relevant architectural aspects required in order to achieve optimal performance on GPUs. Projects use C++ thread-related tools, OpenMPI, CUDA, and OpenCL. Prerequisite: EECS 348 and upper-level EECS eligibility.

EECS 678. Introduction to Operating Systems. 4 Credits.
The objective of this course is to provide the students with the concepts necessary to enable them to: a) identify the abstract services common to all operating system, b) define the basic system components that support the operating system's machine independent abstractions on particular target architectures, c) consider how the design and implementation of different systems components interact and constrain one another, not merely how one or two important parts work in isolation, and d) understand the means by which fundamental problems in operating systems can be analyzed and addressed. Programming assignments address topics including process creation, inter-process communication, system call implementation, process scheduling and virtual memory. Laboratory exercises primarily focus on use of tools and concepts required for the programming assignments but include a small number of independent topics. Prerequisite: EECS 388, EECS 348, and upper-level EECS eligibility.

EECS 690. Special Topics: ______. 1-3 Credits.
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Varies by topic, plus Upper-level EECS eligibility and consent of instructor.

EECS 692. Directed Reading. 1-3 Credits.
Reading under the supervision of an instructor on a topic chosen by the student with the advice of the instructor. May be repeated for additional credit. Consent of the department required for enrollment. Prerequisite: Upper-level EECS eligibility and consent of instructor.

EECS 700. Special Topics: ______. 1-5 Credits.
Courses on special topics of current interest in electrical engineering, computer engineering, or computer science, given as the need arises. May be repeated for additional credit. Prerequisite: Varies by topic.

EECS 711. Security Management and Audit. 3 Credits.
Administration and management of security of information systems and networks, intrusion detection systems, vulnerability analysis, anomaly detection, computer forensics, auditing and data management, risk management, contingency planning and incident handling, security planning, e-business and commerce security, privacy, traceability and cyber-evidence, human factors and usability issues, policy, legal issues in computer security. (Same as IT 711.) Prerequisite: Graduate standing in EECS, or permission of the instructor.

EECS 713. High-Speed Digital Circuit Design. 3 Credits.
Basic concepts and techniques in the design and analysis of high-frequency digital and analog circuits. Topics include: transmission lines, ground and power planes, layer stacking, substrate materials, terminations, via's, component issues, clock distribution, cross-talk, filtering and decoupling, shielding, signal launching. Prerequisite: EECS 312 and senior or graduate standing. EECS 420 recommended.

EECS 717. Graph Algorithms. 3 Credits.
This course introduces students to computational graph theory and various graph algorithms and their complexities. Algorithms and applications covered will include those related to graph searching, connectivity and distance in graphs, graph isomorphism, spanning trees, shortest paths, matching, flows in network, independent and dominating sets, coloring and covering, and Traveling Salesman and Postman problems. Prerequisite: EECS 330 or graduate standing with consent of instructor.

EECS 721. Antennas. 3 Credits.
Gain, Pattern, and Impedance concepts for antennas. Linear, loop, helical, and aperture antennas (arrays, reflectors, and lenses). Cylindrical and biconical antenna theory. Prerequisite: EECS 360 and EECS 420, or EECS 720, or permission of the instructor.

EECS 723. Microwave Engineering. 3 Credits.
Survey of microwave systems, techniques, and hardware. Guided-wave theory, microwave network theory, active and passive microwave components. Prerequisite: EECS 420.

EECS 725. Introduction to Radar Systems. 3 Credits.
Basic radar principles and applications. Radar range equation. Pulsed and CW modes of operation for detection, ranging, and extracting Doppler information. Prerequisite: EECS 360, EECS 420, EECS 461 or MATH 526. EECS 622 recommended.

EECS 727. Photonics. 3 Credits.
The course presents the theory and the design principles of photonic systems. Topics include: Light propagation, interference, and diffraction, permittivity models and effective media, electromagnetic propagation in complex media, dispersion engineering, and fundamentals of nonlinear optics. Prerequisite: EECS 420 or equivalent.

EECS 728. Fiber-optic Measurement and Sensors. 3 Credits.
The course will focus on fundamental theory and various methods and applications of fiber-optic measurements and sensors. Topics include: optical power and loss measurements, optical spectrum analysis, wavelength measurements, polarization measurements, dispersion measurements, PMD measurements, optical amplifier characterization, OTDR, optical components characterization and industrial applications of fiber-optic sensors. Prerequisite: EECS 628 or equivalent.

EECS 730. Introduction to Bioinformatics. 3 Credits.
This course provides an introduction to bioinformatics. It covers computational tools and databases widely used in bioinformatics. The underlying algorithms of existing tools will be discussed. Topics include: molecular biology databases, sequence alignment, gene expression data analysis, protein structure and function, protein analysis, and proteomics. Prerequisite: Data Structures class equivalent to EECS 330, and Introduction to Biology equivalent to BIOL 150, or consent of instructor.

EECS 731. Introduction to Data Science. 3 Credits.
This course covers topics in data collection, data transmission, and data analysis, in support of discoveries and innovations based on massive amounts of data. EECS 731 surveys current topics in data science. It provides a comprehensive review of theory, algorithms, and tools that are used in data science and prepares students to take in-depth following up courses in EECS. EECS 731 is a project-oriented course. It offers hands-on experience for students to integrate knowledge from a wide-range of topics in data science without dwelling on any particular subfield of data science. Prerequisite: EECS 268 or experience with object oriented programming and large programs. MATH 290 or experience with linear algebra. EECS 461 or MATH 526 or experience with probability and statistics. Or consent from the instructor.

EECS 738. Machine Learning. 3 Credits.
"Machine learning is the study of computer algorithms that improve automatically through experience" (Tom Mitchell). This course introduces basic concepts and algorithms in machine learning. A variety of topics such as Bayesian decision theory, dimensionality reduction, clustering, neural networks, hidden Markov models, combining multiple learners, reinforcement learning, Bayesian learning etc. will be covered. Prerequisite: Graduate standing in CS or CoE or consent of instructor.

EECS 739. Parallel Scientific Computing. 3 Credits.
This course is concerned with the application of parallel processing to real-world problems in engineering and the sciences. State-of-the-art serial and parallel numerical computing algorithms are studied along with contemporary applications. The course takes an algorithmic design, analysis, and implementation approach and covers an introduction to scientific and parallel computing, parallel computing platforms, design principles of parallel algorithms, analytical modeling of parallel algorithms, MPI programming, direct and iterative linear solvers, numerical PDEs and meshes, numerical optimization, GPU computing, and applications of parallel scientific computing. Prerequisite: MATH 126, MATH 290, experience programming in C, C++, or Fortran; EECS 639 (or equivalent.) Highly recommended: MATH 127.

EECS 740. Digital Image Processing. 3 Credits.
This course gives a hands-on introduction to the fundamentals and applications of digital image processing. Topics include: image formation and camera calibration, image transforms, image filtering in spatial and frequency domains, image enhancement, image restoration and reconstruction, image segmentation, feature detection, segmentation, and the latest developments and applications in image processing. Prerequisite: MATH 290 and MATH 526, or consent from the instructor.

EECS 741. Computer Vision. 3 Credits.
This course gives a hands-on introduction to the fundamentals and applications of computer vision. Topics include: Image processing fundamentals, feature detection and matching, projective geometry and transformation, camera geometry and calibration, two-view geometry and stereo vision, structure from motion, parameter estimation and optimization, and the latest developments and applications in computer
This course presents an introduction to techniques for statically analyzing programs. Converge includes theoretical analysis, definition and implementation of data flow analysis, control flow analysis, abstract interpretation, and type and effects systems. The course presents both the underlying definitions and pragmatic implementation of these systems. Prerequisite: EECS 665 or EECS 662 or equivalent.

EECS 743. Advanced Computer Architecture. 3 Credits.
Topics of this course will be divided into three main categories: (a) theory of parallelism, (b) hardware technologies, and (c) parallel and scalable architectures. For example, principles of performance and scalability, processors and memory hierarchy, linear/nonlinear pipelining and superscalar techniques, and scalable multiprocessors and dataflow architectures will be among the topics to be covered. The course will also focus on emerging and heterogeneous architectures and their performance potential and programming models. For example, reconfigurable computing (RC), quantum computing (QC), and neuromorphic computing (NC) will be covered in some details. This would be achieved through practical experiments, and homework projects using realistic workloads on some state-of-the-art high-performance reconfigurable and quantum computers. Finally, students will select published related research work for discussions and oral presentations. Prerequisite: EECS 643 or EECS 645, or equivalent. A good understanding of C/C++ and having basic Unix/Linux skills is required.

EECS 744. Communications and Radar Digital Signal Processing. 3 Credits.
The application of DSP techniques to specialized communications and radar signal processing subsystems. Topics include A-D converters, specialized digital filters, software receiver systems, adaptive subsystems and timing. Prerequisite: An undergraduate course in DSP such as EECS 644.

EECS 745. Implementation of Networks. 3 Credits.
EECS 745 is a laboratory-focused implementation of networks. Topics include direct link networks (encoding, framing, error detection, reliable transmission, SONET, FDDI, network adapters, Ethernet, 802.11 wireless networks); packet and cell switching (ATM, switching hardware, bridges and extended LANs); internetworking (Internet concepts, IPv6, multicast, naming/DNS); end-to-end protocols (UDP, TCP, APIs and sockets, RPCs, performance); end-to-end data (presentation formatting, data compression, security); congestion control (queuing disciplines, TCP congestion control and congestion avoidance); high-speed networking (issues, services, experiences); voice over IP (peer-to-peer calling, call managers, call signalling, PBX and call attendant functionality). Prerequisite: EECS 563 or EECS 780.

EECS 750. Advanced Operating Systems. 3 Credits.
In this course, we will study advanced topics in operating systems for modern hardware platforms. The topics include: multithread CPU scheduling, cache and DRAM management, flash-based storage systems and I/O management, power/energy management, and cloud systems. We will discuss classical and recent papers in each of these topics. We will also study advanced resource management capabilities in recent Linux kernels. The course will consist of lectures, student presentations, and a term project. Prerequisite: EECS 678.

EECS 753. Embedded and Real Time Computer Systems. 3 Credits.
This course will cover emerging and proposed techniques and issues in embedded and real time computer systems. Topics will include new paradigms, enabling technologies, and challenges resulting from emerging application domains. Prerequisite: EECS 645 and EECS 678.

EECS 755. Software Modeling and Analysis. 3 Credits.
Modern techniques for modeling and analyzing software systems. Course coverage concentrates on pragmatic, formal modeling techniques that support predictive analysis. Topics include formal modeling, static analysis, and formal analysis using model checking and theorem proving systems. Prerequisite: EECS 368 or equivalent.

EECS 759. Estimation and Control of Unmanned Autonomous Systems. 3 Credits.
An introduction to the modeling, estimation, and control of unmanned autonomous systems. Topics include motion description, navigation sensors, complementary filters, Kalman filters, attitude estimation, position estimation, attitude keeping controller, etc. The successful completion of this course will prepare students for advanced studies in robotics & controls. (Same as AE 759.) Prerequisite: MATH 627, AE 551 or AE 552 or EECS 444, or by consent of instructor.

EECS 762. Programming Language Foundation I. 3 Credits.
This course presents a basic introduction to the semantics of programming languages. The presentation begins with basic lambda calculus and mechanisms for evaluating lambda calculus terms. Types are introduced in the form of simply typed lambda calculus and techniques for type inference and defining type systems are presented. Finally, techniques for using lambda calculus to define, evaluate and type check common programming language constructs are presented. Prerequisite: EECS 662 or equivalent.

EECS 764. Analysis of Algorithms. 3 Credits.
Models of computations and performance measures; asymptotic analysis of algorithms; basic design paradigms including divide-and-conquer, dynamic programming, backtracking, branch-and-bound, greedy method and heuristics; design and analysis of approximation algorithms; lower bound theory; polynomial transformation and the theory of NP-Completeness; additional topics may be selected from arithmetic complexity, graph algorithms, string matching, and other combinatorial problems. Prerequisite: EECS 630 or equivalent.

EECS 765. Introduction to Cryptography and Computer Security. 3 Credits.
Comprehensive coverage to the fundamentals of cryptography and computer and communication security. This course serves as the first graduate level security course, which introduces the core concepts, theories, algorithms and protocols in computer and communication security, and also prepares students for advanced security courses. This course first covers the mathematical foundation of cryptography and its applications in computer security. The course also covers a wide range of topics: information and database security, software and computer systems security, network security, Internet and web security. Prerequisite: EECS 678 and EECS 563 or EECS 780, or the instructor’s approval.

EECS 767. Information Retrieval. 3 Credits.
This class introduces algorithms and applications for retrieving information from large document repositories, including the Web. Topics span from classic information retrieval methods for text documents and databases, to recent developments in Web search, including: text algorithms, indexing, probabilistic modeling, performance evaluation, web structures, link analysis, multimedia information retrieval, social network analysis. Prerequisite: EECS 447 or permission of instructor.

EECS 768. Virtual Machines. 3 Credits.
Understand the fundamental principles and advanced implementation aspects of key virtual machine concepts. Topics include principles
of virtualization, binary translation, process and system level virtual machines, JIT compilation and optimizations in managed environments, garbage collection, virtual machine implementation issues, and virtual machine security. Includes in-depth coverage of the latest developments and research issues in the field of virtual machines. Prerequisite: EECS 665 and either EECS 643 or EECS 645 or consent of instructor.

**EECS 769. Information Theory. 3 Credits.**
Information theory is the science of operations on data such as compression, storage, and communication. It is one of the few scientific fields fortunate enough to have an identifiable beginning - Claude Shannon's 1948 paper. The main topics of mutual information, entropy, and relative entropy are essential for students, researchers, and practitioners in such diverse fields as communications, data compression, statistical signal processing, neuroscience, and machine learning. The topics covered in this course include mathematical definitions and properties of information, mutual information, source coding theorem, lossless compression of data, optimal lossless coding, noisy communication channels, channel coding theorem, the source channel separation theorem, multiple access channels, broadcast channels, Gaussian noise, time-varying channels, and network information theory. Prerequisite: EECS 461 or MATH 526 or an equivalent undergraduate probability course.

**EECS 773. Advanced Graphics. 3 Credits.**
Advanced topics in graphics and graphics systems. Topics at the state of the art are typically selected from: photorealistic rendering; physically-based lighting models; ray tracing; radiosity; physically-based modeling and rendering; animation; general texture mapping techniques; point-based graphics; collaborative techniques; and others. Prerequisite: EECS 672 or permission of instructor.

**EECS 774. Geometric Modeling. 3 Credits.**
Introduction to the representation, manipulation, and analysis of geometric models of objects. Implicit and parametric representations of curves and surfaces with an emphasis on parametric freeform curves and surfaces such as Bézier and Nonuniform Rational B-Splines (NURBS). Curve and surface design and rendering techniques. Introduction to solid modeling: representations and base algorithms. Projects in C/C++ using OpenGL. Prerequisite: EECS 672 or permission of instructor.

**EECS 775. Visualization. 3 Credits.**
Data representations, algorithms, and rendering techniques typically used in Visualization applications. The emphasis is on Scientific Visualization and generally includes topics such as contouring and volumetric rendering for scalar fields, glyph and stream (integral methods) for vector fields, and time animations. Multidimensional, multivariate (MDMV) visualization techniques; scattered data interpolation; perceptual issues. Prerequisite: General knowledge of 3D graphics programming or instructor’s permission.

**EECS 776. Functional Programming and Domain Specific Languages. 3 Credits.**
An introduction to functional programming. Topics include learning how to program in Haskell; IO and purity in software engineering; functional data structures and algorithms; monads and applicative functors; parsing combinators; Domain Specific Languages (DSLs) and DSL construction; advanced type systems; making assurance arguments; testing and debugging. Prerequisite: EECS 368 or equivalent or consent of instructor.

**EECS 780. Communication Networks. 3 Credits.**
Comprehensive in-depth coverage to communication networks with emphasis on the Internet and the PSTN (wired and wireless, and IoT-Internet of Things). Extensive coverage of protocols and algorithms will be presented at all levels, including: social networking, overlay networks, client/server and peer-to-peer applications; session control; transport protocols, the end-to-end arguments and end-to-end congestion control; network architecture, forwarding, routing, signaling, addressing, and traffic management, programmable and software-defined networks (SDN); quality of service, queuing and multimedia applications; LAN architecture, link protocols, access networks and MAC algorithms; physical media characteristics and coding; network security and information assurance; network management. (Same as IT 780.) Prerequisite: EECS 563 or equivalent or permission of instructor.

**EECS 781. Numerical Analysis I. 3 Credits.**
Finite and divided differences. Interpolation, numerical differentiation, and integration. Gaussian quadrature. Numerical integration of ordinary differential equations. Curve fitting. (Same as MATH 781.) Prerequisite: MATH 320 and knowledge of a programming language.

**EECS 782. Numerical Analysis II. 3 Credits.**
Direct and interactive methods for solving systems of linear equations. Numerical solution of partial differential equations. Numerical determination of eigenvectors and eigenvalues. Solution of nonlinear equations. (Same as MATH 782.) Prerequisite: EECS 781 or MATH 781.

**EECS 784. Science of Communication Networks. 3 Credits.**
Comprehensive introduction to the fundamental science that is the basis for the architecture, design, engineering, and analysis of computer networks. Topics covered will include foundations on: Structure of networks: graph theory, complex systems analysis, centrality, spectral analysis, network flows, and network topology; Identification of network entities: naming, addressing, indirection, translation, and location; Operation of protocols and information transfer: automata, control theory, Petri nets, layering and cross-layering, protocol data units; Policy and tussle: game theory, decision theory; Resilience: dependability (reliability, availability, and maintainability), performance, fault tolerance, and survivability. Open-source tools will be used for network modelling and analysis. Prerequisite: EECS upper-level eligibility, graduate standing, or permission of the instructor.

**EECS 786. Digital Very-Large-Scale-Integration. 3 Credits.**
This course covers the basic concepts of Integrated Circuit (IC) design, various methods of designing VLSI circuits, and techniques to analyze and optimize performance metrics, such as: speed, area, power and signal integrity. Clocking, interconnect and scaling issues of IC will also be discussed. The topic will cover device, interconnect and circuit level implementation issues of both logic and memory circuits. It will also briefly introduce the high performance issues, fabrication technologies and system level implementation approaches of IC to establish bridges to the advanced courses. Prerequisite: EECS 312.

**EECS 788. Analog Integrated Circuit Design. 3 Credits.**
This course covers the analysis and design of analog and mixed signal integrated circuits, with an emphasis on design principles for realizing state-of-the-art analog circuits. Modern circuit design is a "mixed signal" endeavor thanks to the availability of sophisticated process technologies that allow bipolar and CMOS (Complementary Metal Oxide Semiconductor), power and signal, passive and active components on the same die. It is then up to the circuit designer's creativity and inclination to assemble these components into the analog and/or logic building blocks. The course will provide the critical concepts by giving physical and intuitive explanations in addition to the quantitative analysis of important analog building block circuits. First-order hand calculations and extensive computer simulations are utilized for performance evaluation and circuit design. Prerequisite: EECS 412.

**EECS 800. Special Topics: _____ 1-5 Credits.**
Advanced courses on special topics of current interest in electrical engineering, computer engineering, or computer science, given as the
need arises. May be repeated for additional credit. Prerequisite: Varies by topic.

EECS 801. Directed Graduate Readings. 1-3 Credits.
Graduate level directed readings on a topic in electrical engineering, computer engineering, or computer science, mutually agreed-on by the student and instructor. May be repeated for credit on another topic. Prerequisite: Consent of instructor.

EECS 802. Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues. 1 Credits.
A colloquium/seminar series in which presentation are provided on a broad variety of scholarly and professional topics. Topics related to the issues of responsible scholarship in the fields of computing and electrical engineering will be discussed. Student are also required to attend a series of colloquia and submit written reports. Course will be graded Satisfactory/Fail and is required for all EECS graduate students. Prerequisite: Graduate standing in the EECS Department.

EECS 812. Software Requirements Engineering. 3 Credits.
Objectives, processes, and activities of requirements engineering and requirements management; characteristics of good requirements; types of requirements; managing changing requirements; languages, notations, and methodologies; formal and semi-formal methods of presenting and validating the requirements; requirements standards; traceability issues. Prerequisite: EECS 810.

EECS 820. Advanced Electromagnetics. 3 Credits.
A theorem-based approach to solving Maxwell's equations for modeling electromagnetic problems encountered in microwave systems, antennas, scattering. Topics include waves, source modeling, Schelkunoff equivalence principle, scattered filed formulations, electromagnetic induction, reciprocity principles, Babinet's principle, and construction of solutions in various coordinate systems. Prerequisite: EECS 420.

EECS 823. Microwave Remote Sensing. 3 Credits.
Description and analysis of basic microwave remote sensing systems including radars and radiometers as well as the scattering and emission properties of natural targets. Topics covered include plane wave propagation, antennas, radiometers, atmospheric effects, radars, calibrated systems, and remote sensing applications. Prerequisite: EECS 420 and EECS 622.

EECS 828. Advanced Fiber-Optic Communications. 3 Credits.
An advanced course in fiber-optic communications. The course will focus on various important aspects and applications of modern fiber-optic communications, ranging from photonic devices to systems and networks. Topics include: advanced semiconductor laser devices, external optical modulators, optical amplifiers, optical fiber nonlinearities and their impact in WDM and TDM optical systems, polarization effect in fiber-optic systems, optical receivers and high-speed optical system performance evaluation, optical solution systems, lightwave analog video transmission, SONET & ATM optical networking, and advanced multi-access lightwave networks. Prerequisite: EECS 628 or equivalent.

EECS 830. Advanced Artificial Intelligence. 3 Credits.
A detailed examination of computer programs and techniques that manifest intelligent behavior, with examples drawn from current literature. The nature of intelligence and intelligent behavior. Development of, improvement to, extension of, and generalization from artificially intelligent systems, such as theorem-provers, pattern recognizers, language analyzers, problem-solvers, question answerers, decision-makers, planners, and learners. Prerequisite: Graduate standing in the EECS department or Cognitive Science or permission of the instructor.

EECS 831. Introduction to Systems Biology. 3 Credits.
This course provides an introduction to systems biology. It covers computational analysis of biological systems with a focus on computational tools and databases. Topics include: basic cell biology, cancer gene annotation, micro RNA identification, Single Nucleotide Polymorphism (SNP) analysis, genetic marker identification, protein-DNA interaction, computational Neurology, vaccine design, cancer drug development, and computational development biology. Prerequisite: Introduction to Bioinformatics equivalent to EECS 730, or consent of instructor.

EECS 837. Data Mining. 3 Credits.
Extracting data from data bases to data warehouses. Preprocessing of data: handling incomplete, uncertain, and vague data sets. Discretization methods. Methodology of learning from examples: rules of generalization, control strategies. Typical learning systems: ID3, AQ, C4.5, and LERS. Validation of knowledge. Visualization of knowledge bases. Data mining under uncertainty, using approaches based on probability theory, fuzzy set theory, and rough set theory. Prerequisite: Graduate standing in CS or CoE or consent of instructor.

EECS 838. Applications of Machine Learning in Bioinformatics. 3 Credits.
This course is introduction to the application of machine learning methods in bioinformatics. Major subjects include: biological sequence analysis, microarray interpretation, protein interaction analysis, and biological network analysis. Common biological and biomedical data types and related databases will also be introduced. Students will be asked to present some selected research papers. Prerequisite: EECS 730 and EECS 738.

EECS 839. Mining Special Data. 3 Credits.
Problems associated with mining incomplete and numerical data. The MLEM2 algorithm for rule induction directly from incomplete and numerical data. Association analysis and the Apriori algorithm. KNN and other statistical methods. Mining financial data sets. Problems associated with imbalanced data sets and temporal data. Mining medical and biological data sets. Induction of rule generations. Validation of data mining: sensitivity, specificity, and ROC analysis. Prerequisite: Graduate standing in CS or CoE or consent of instructor.

EECS 843. Programming Language Foundation II. 3 Credits.
This course presents advanced topics in programming language semantics. Fixed point types are presented followed by classes of polymorphism and their semantics. System F and type variables are presented along with universal and existential types. The lambda cube is introduced along with advanced forms of polymorphism. Several interpreters are developed implementing various type systems and associated type inference algorithms. Prerequisite: EECS 762.

EECS 844. Adaptive Signal Processing. 3 Credits.
This course presents the theory and application of adaptive signal processing. Topics include adaptive filtering, mathematics for advanced signal processing, cost function modeling and optimization, signal processing algorithms for optimum filtering, array processing, linear prediction, interference cancellation, power spectrum estimation, steepest descent, and iterative algorithms. Prerequisite: Background in fundamental signal processing (such as EECS 644.) Corequisite: EECS 861.

EECS 861. Random Signals and Noise. 3 Credits.
Fundamental concepts in random variables, random process models, power spectral density. Application of random process models in the analysis and design of signal processing systems, communication systems and networks. Emphasis on signal detection, estimation, and analysis of queues. This course is a prerequisite for most of the graduate level courses in radar signal processing, communication systems and
networks. Prerequisite: An undergraduate course in probability and statistics, and signal processing.

**EECS 862. Principles of Digital Communication Systems. 3 Credits.**

A study of communication systems using noisy channels. Principal topics are: information and channel capacity, baseband data transmission, digital carrier modulation, error control coding, and digital transmission of analog signals. The course includes a laboratory/computer aided design component integrated into the study of digital communication systems. Prerequisite: EECS 562. Corequisite: EECS 861.

**EECS 863. Network Analysis, Simulation, and Measurements. 3 Credits.**

Prediction of communication network performance using analysis, simulation, and measurement. Topics include: an introduction to queueing theory, application of theory to prediction of communication network and protocol performance, and analysis of scheduling mechanisms. Modeling communication networks using analytic and simulation approaches, model verification and validation through analysis and measurement, and deriving statistically significant results. Analysis, simulation, and measurement tools will be discussed. Prerequisite: EECS 461 or MATH 526, and EECS 563 or EECS 780.

**EECS 865. Wireless Communication Systems. 3 Credits.**

The theory and practice of the engineering of wireless telecommunication systems. Topics include cellular principles, mobile radio propagation (including indoor and outdoor channels), radio link calculations, fading (including Rayleigh, Rician, and other models), packet radio, equalization, diversity, error correction coding, spread spectrum, multiple access techniques (including time, frequency, and code), and wireless networking. Current topics of interest will be covered. Prerequisite: Corequisite: EECS 861.

**EECS 866. Network Security. 3 Credits.**

This course provides in-depth coverage on the concepts, principles, and mechanisms in network security and secure distributed systems. The topics that will be covered include: network security primitives, risks and vulnerabilities, authentication, key management, network attacks and defense, secure communication protocols, intrusion detection, exploit defenses, traffic monitoring and analysis, and privacy mechanisms. Prerequisite: EECS 765 and EECS 563 or EECS 780, or the instructor's approval.

**EECS 868. Mathematical Optimization with Applications. 3 Credits.**

A mathematical study of the minimization of functions. The course provides an introduction to the mathematical theory, implementation, and application of a variety of optimization techniques, with an emphasis on real-world applications. Optimization problem formulation. Unconstrained and constrained minimization, including conditions for optimality. Specific techniques for solving linear and nonlinear programming problems. Convergence of algorithms. Prerequisite: MATH 590 or EECS 639, or the consent of the instructor.

**EECS 869. Error Control Coding. 3 Credits.**

A study of communication channels and the coding problem. An introduction to finite fields and linear block codes such as cyclic, Hamming, Golay, BCH, and Reed-Solomon. Convolutional codes and the Viterbi algorithm are also covered. Other topics include trellis coded modulation, iterative (turbo) codes, LDPC codes. Prerequisite: EECS: 562 or equivalent.

**EECS 881. High-Performance Networking. 3 Credits.**

Comprehensive coverage of the discipline of high-bandwidth low-latency networks and communication, including high bandwidth-delay products, with an emphasis on principles, architecture, protocols, and system design. Topics include high-performance network architecture, control, and signaling; high-speed wired, optical, and wireless links; fast packet, IP, and optical switching; IP lookup, classification, and scheduling; network processors, end system design and protocol optimization, network interfaces; storage networks; data-center networks, end-to-end protocols, mechanisms, and optimizations; high-bandwidth low-latency applications and cloud computing. Principles will be illustrated with many leading-edge and emerging protocols and architectures. Prerequisite: EECS 563 or EECS 780, or permission of the instructor.

**EECS 882. Mobile Wireless Networking. 3 Credits.**

Comprehensive coverage of the disciplines of mobile and wireless networking, with an emphasis on architecture and protocols. Topics include cellular telephony, MAC algorithms, wireless PANs, LANs, MANs, and WANs; wireless and mobile Internet; mobile ad hoc networking; mobility management, sensor networks; satellite networks; and ubiquitous computing. Prerequisite: EECS 563 or EECS 780, or permission of the instructor.

**EECS 888. Internet Routing Architectures. 3 Credits.**

A detailed study of routing in IP networks. Topics include evolution of the Internet architecture, IP services and network characteristics, an overview of routing protocols, the details of common interior routing protocols and interdomain routing protocols, and the relationship between routing protocols and the implementation of policy. Issues will be illustrated through laboratories based on common routing platforms. Prerequisite: EECS 745.

**EECS 891. Graduate Problems. 1-5 Credits.**

Directed studies of advanced phases of electrical engineering, computer engineering, computer science or information technology not covered in regular graduate courses, including advanced laboratory work, special research, or library reading. Prerequisite: Consent of instructor.

**EECS 899. Master’s Thesis or Report. 1-6 Credits.**

**EECS 900. Seminar. 0.5-3 Credits.**

Group discussions of selected topics and reports on the progress of original investigations. Prerequisite: Consent of instructor.

**EECS 940. Theoretic Foundation of Data Science. 3 Credits.**

A review of statistical and mathematical principles that are utilized in data mining and machine learning research. Covered topics include asymptotic analysis of parameter estimation, sufficient statistics, model selection, information geometry, function approximation and Hilbert spaces. Prerequisite: EECS 738. EECS 837. EECS 844 or equivalent.

**EECS 965. Detection and Estimation Theory. 3 Credits.**

Detection of signals in the presence of noise and estimation of signal parameters. Narrowband signals, multiple observations, signal detectability and sequential detection. Theoretical structure and performance of the receiver. Prerequisite: EECS 861.

**EECS 983. Resilient and Survivable Networking. 3 Credits.**

Graduate research seminar that provides an overview of the emerging field of resilient, survivable, disruption-tolerant, and challenged networks. These networks aim to remain operational and provide an acceptable level of service in the face of a number of challenges including: natural faults of network components; failures due to misconfiguration or operational errors; attacks against the network hardware, software, or protocol infrastructure; large-scale natural disasters; unpredictably long delay paths either due to length (e.g. satellite and interplanetary) or as a result of episodic connectivity; weak and episodic connectivity and asymmetry of wireless channels; high-mobility of nodes and subnetworks; unusual traffic load (e.g. flash crowds). Multi-level solutions that span all protocol layers, planes, and parts of the network will be systemically and
systematically covered. In addition to lectures, students read and present summaries of research papers and execute a project. Prerequisite: EPCS 780; previous experience in simulation desirable.

**EECS 998. Post-Master’s Research.** 1-6 Credits.

**EECS 999. Doctoral Dissertation.** 1-12 Credits.

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**Electrical Engr & Computer Sci Courses**

**IT 711. Security Management and Audit.** 3 Credits.

Administration and management of security of information systems and networks, intrusion detection systems, vulnerability analysis, anomaly detection, computer forensics, auditing and data management, risk management, contingency planning and incident handling, security planning, e-business and commerce security, privacy, traceability and cyber-evidence, human factors and usability issues, policy, legal issues in computer security. (Same as EEECS 711.) Prerequisite: Graduate standing in EEECS, or permission of the instructor.

**IT 780. Communication Networks.** 3 Credits.

Comprehensive in-depth coverage to communication networks with emphasis on the Internet and the PSTN (wired and wireless, and IoT-Internet of Things). Extensive coverage of protocols and algorithms will be presented at all levels, including: social networking, overlay networks, client/server and peer-to-peer applications; session control; transport protocols, the end-to-end arguments and end-to-end congestion control; network architecture, forwarding, routing, signaling, addressing, and traffic management, programmable and software-defined networks (SDN); quality of service, queuing and multimedia applications; LAN architecture, link protocols, access networks and MAC algorithms; physical media characteristics and coding; network security and information assurance; network management. (Same as EEECS 780.) Prerequisite: EEECS 563 or equivalent or permission of instructor.

**Engineering Physics Courses**

**EPHX 210. General Physics I for Engineers.** 3 Credits. NP N

This course is an introduction to classical mechanics and thermodynamics designed for students in the School of Engineering who have completed MATH 125 or MATH 145 with a grade of C or better. Students not admitted to the School of Engineering must receive permission from instructor. EPPX 210 and PHSX 211 cannot both be taken for credit. Prerequisite: MATH 125 or MATH 145 with a grade of C or better. Corequisite: MATH 126 or MATH 146; courses in high school physics and/or chemistry recommended.

**EPHX 211. General Physics I.** 4 Credits. NP N

Introduction to classical mechanics and thermodynamics. Designed for students in engineering and physical science majors. Prerequisite: MATH 116 or MATH 125 or MATH 145; corequisite MATH 126 or MATH 146; courses in high school physics and/or chemistry are recommended.

**EPHX 212. General Physics II.** 3 Credits. NP N

Study of electricity, magnetism, waves, and optics. Prerequisite: PHSX 210, PHSX 210, PHSX 211 or PHSX 213; MATH 126 or MATH 146. Co-enrollment in MATH 127 or MATH 147 is strongly encouraged.

**EPHX 400. Topics in Engineering Physics: _____**. 1-3 Credits.

A course on special topics in engineering physics, given as the need arises. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor.

**EPHX 501. Honors Research.** 1-4 Credits. N

This course is for students seeking Departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required four hours of total enrollment, a written and oral report of the research is required. (Same as ASTR 501 and PHSX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

**EPHX 503. Undergraduate Research.** 1-4 Credits. N

This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and PHSX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

**EPHX 518. Mathematical Physics.** 3 Credits. N

Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electromodynamics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. (Same as PHSX 518.) Prerequisite: PHSX 313; MATH 220 or MATH 221 or MATH 320; or permission of instructor.

**EPHX 521. Mechanics I.** 3 Credits. N

Newton’s laws of motion. Motion of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as PHSX 521.) Prerequisite: PHSX 213 or PHSX 211 and PHSX 216; MATH 127 or MATH 147; MATH 290 or MATH 291; and MATH 220, MATH 221 or MATH 320.

**EPHX 531. Electricity and Magnetism.** 3 Credits. N

This course will explore the properties of electric and magnetic fields, including electrostatics, Gauss’ Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles, and of dielectric and magnetic materials. (Same as PHSX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236, or PHSX 202; PHSX 521 or EPPX 521 or special permission; MATH 127 or MATH 147; MATH 290 or MATH 291; and MATH 220, MATH 221, or MATH 320.

**EPHX 536. Electronic Circuit Measurement and Design.** 4 Credits. N LFE

A laboratory course that explores the theory and experimental techniques of analog and digital electronic circuit design and measurement. Topics include transient response, transmission lines, transistors, operational amplifiers, and digital logic. (Same as PHSX 536.) Prerequisite: PHSX 214 or PHSX 212 and PHSX 236; MATH 127 or MATH 147; and MATH 290 or MATH 291. PHSX 313 and 316 recommended.

**EPHX 600. Special Topics in Physics and Astrophysics: _____**. 3 Credits. N

Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as PHSX 600.) Prerequisite: Permission of instructor.

**EPHX 601. Design of Physical and Electronic Systems.** 4 Credits. N LFE

A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers
This course introduces thermodynamics from statistical considerations and presents the associated techniques for calculating the thermodynamic properties of systems. Highlighted applications of these techniques include the elementary kinetic theory of transport processes and statistical descriptions of both Fermi-Dirac and Bose-Einstein systems. (Same as PHSX 671.) Prerequisite: PHSX 611 or EPHX 611.

EPHX 681. Concepts in Solids. 3 Credits. N Properties of common types of crystals and amorphous solids. Lattice vibrations and thermal properties of solids. Electrons and holes in energy bands of metals, semiconductors, superconductors, and insulators. (Same as PHSX 681.) Prerequisite: PHSX 313 and PHSX 511.

EPHX 691. Astrophysics I. 3 Credits. N An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as ASTR 691 and PHSX 691.) Prerequisite: PHSX 313 or consent of instructor.

EPHX 693. Gravitation and Cosmology. 3 Credits. N An overview of topics relevant to gravitation and modern cosmology: special relativity, tensor notation, the equivalence principle, the Schwarzschild solution, black holes, and Friedmann models. Cosmic black body radiation, dark matter, and the formation of large-scale structure. The idea of quantum gravity and an introduction to the current literature in cosmology. (Same as PHSX 693.) Prerequisite: PHSX 313 and MATH 320.

*Engineering Courses*

ENGR 101. Engineering Academic Success Seminar. 0 Credits. This course will provide an introduction to the University and School of Engineering community and the value and role of higher education in our society, strategies for successful transition to and participation in that community, exploration of the University and School commitment to diversity and multiculturalism, and information about University and School resources and procedures. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Eligible students must have fewer than thirty credit hours from the University of Kansas.

ENGR 102. Engineering Academic Recovery Program. 0 Credits. The Engineering Academic Recovery Program is a mandatory course for freshman engineering students who are placed on academic probation (<2.0 GPA) after their first semester at KU. The course may also be recommended for other engineering students who are deemed to be at risk. ENGR 102 will provide guidance to students who need to improve their academic study habits. Particular attention will be given to the discussion of study skills such as test taking, learning strategies, and time management, and students will also become acquainted with the various resources available to them both through the School of Engineering and university at large. In addition, students will meet individually with an ENGR 102 advisor to both establish a plan for academic improvement and later to evaluate academic progress midway through the semester. The course will offer for zero (0) credit hours but will be a graded course (A-F).

ENGR 108. Introduction to Engineering. 2 Credits. An introductory level course with emphasis on engineering problem definition, methods simulation, and solution, including approaches to engineering design; engineering units and terminology; engineering disciplines and career areas, and engineering code of ethics.

ENGR 111. Freshman Self Seminar. 0-1 Credits. This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student's skills in leadership, business, entrepreneurship, management, communication,
Engineering and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow.

**ENGR 112. Sophomore Self Seminar. 0-1 Credits.**
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student’s skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow.

**ENGR 113. Junior Self Seminar. 0-1 Credits.**
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student’s skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow.

**ENGR 114. Senior Self Seminar. 0-1 Credits.**
This course will serve as an introduction to the Self Engineering Leadership Fellows Program and will focus on building student’s skills in leadership, business, entrepreneurship, management, communication, engineering, and interpersonal skills. Prerequisite: Students must have applied, interviewed, and been accepted as a Self Engineering Leadership Fellow.

**ENGR 177. First Year Seminar: ______. 3 Credits.**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in mechanical engineering. May not contribute to major requirements for School of Engineering students. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**ENGR 300. Cooperative Engineering Education Experience. 1 Credits.**
Engineering work experience with a recognized engineering organization. The work must be professional in nature and not merely routine. A final summary report must be submitted to the student's major department at the conclusion of each continuous period of employment and may cover more than one sequential semester or summer session. Credit for this course cannot be used toward graduation requirements. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of major department.

**ENGR 360. Special Topics: ______. 1-5 Credits.**
Courses on special topics of current interest to engineers, such as ethics, engineering economics, engineering practice, communications, teamwork, and professional and career development. Prerequisite: Approval of the instructor.

**ENGR 390. Engineering Internship or Research. 0-1 Credits.**
Course combines job-related activities of an internship/research position with a goal setting (pre-experience) and reflection (post-experience) requirement. Internships for credit will have expanded requirements and must be approved by the coordinator prior to the internship/research experience. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Approval of instructor.

**ENGR 490. Engineering Internship. 1-6 Credits.**
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for a bachelor's degree in any School of Engineering major, but will appear on the transcript. Credit assigned after review of report on internship experience.

**ENGR 504. Technical Writing for Engineers. 1-3 Credits.**
The process of planning, organizing, initiating, drafting, and editing engineering documents is covered through writing assignments and discussion. Writing, editing, and publishing the Kansas Engineer magazine. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ENGL 102.

**ENGR 515. Verbal Communications in Engineering. 1 Credits.**
Meets one hour per week. Planning, preparing, and presenting speeches on a variety of topics throughout the semester. Includes preparing speeches, spontaneous speeches and the evaluation of speeches by other students. Prerequisite: Two English courses and at least junior or senior standing in engineering or consent of instructor.

**ENGR 600. Engineering Applications in India: Technical, Business, and Implementation Issues. 3 Credits.**
Business principles play a crucial role in shaping engineering solutions. This course will communicate key differences between the United States and India in how engineering challenges and opportunities are shaped by these principles and by culture. Students will travel to India to attend lectures from schools, visit companies, engage in class discussion/debate, and attend cultural excursions. Prerequisite: Major in Engineering.

**ENGR 835. Project (ME). 3-6 Credits.**
A design problem or system study satisfying the project requirement for the Master of Engineering degree.

**ENGR 940. Project (DE). 1-16 Credits.**
A major design problem or system study satisfying the project requirement for the Doctor of Engineering degree.

### Mechanical Engineering Courses

**ME 101. Mechanical Engineering Freshman Seminar. 0-1 Credits.**
This seminar is intended to provide the student with an overview of the mechanical engineering profession. Seminar topics will include an overview of the engineering profession, career opportunities within mechanical engineering, an introduction to the mechanical engineering department (faculty, research and student groups), and strategies to be successful at the university. Prerequisite: Fewer than 30 credit hours from the University of Kansas.

**ME 201. Statics. 2 Credits.**
The principles of statics, with particular attention to engineering applications. Prerequisite: PHYS 210 or PHYS 211.

**ME 208. Introduction to Digital Computational Methods in Mechanical Engineering. 3 Credits.**
Digital computing methods for solving mechanical engineering problems utilizing current programming languages and commercial software. Topics from the course are applied through open-ended team projects throughout the semester which also give students an introduction to mechanical engineering. One lecture and lab meets with ME 228, therefore ME 208 cannot be taken concurrently with ME 228, but should be taken in back-to-back semesters. Prerequisite: Corequisite: MATH 116 or MATH 125 or MATH 145.

**ME 210. Introduction to Mechanics. 1 Credits.**
An introduction to mechanics of materials including stress, strain, and axial loading. Prerequisite: ME 201 or CE 201.

**ME 211. Statics and Introduction to Mechanics. 3 Credits.**
The principles of statics, with particular attention to engineering applications and an introduction to mechanics of materials. This course is a combination of material covered in ME 201 and ME 210. Prerequisite: PHYS 210 or PHYS 211 or PHYS 213 or PHYS 215.

**ME 212. Basic Engineering Thermodynamics. 3 Credits.**
An introduction to the concepts of heat, work, the first and second laws of thermodynamics and equations of state. These concepts are applied to flow and nonflow systems including power and refrigeration cycles. Prerequisite: PHSX 210 or PHSX 211 or PHSX 201 and MATH 126 or MATH 146, with a grade of C- or higher.

ME 228. Computer Graphics. 3 Credits.
An introduction to solid modeling computer graphics used in mechanical design. Visualization skills and drawing practices are developed. Topics from the course are applied through open-ended team projects throughout the semester which also give students an introduction to mechanical engineering. One lecture and lab meets with ME 208, therefore ME 228 cannot be taken concurrently with ME 208, but should be taken in back-to-back semesters.

ME 306. Science of Materials. 3 Credits.
An introductory course on materials. Emphasis is placed on structure and the relation of structure to the behavior and properties of engineering materials. Prerequisite: CHEM 150 or CHEM 130 or CHEM 135 or CHEM 170 or CHEM 175 or CHEM 190 or CHEM 184 or CHEM 185 or consent of instructor.

ME 307. Engineering Materials Laboratory. 2 Credits.
Laboratory to supplement lecture on engineering materials properties and selection, manufacturing processes, and design for manufacturing. Prerequisite: CHEM 150 or CHEM 130 or CHEM 170 and ME 228. Corequisite: ME 306 and ME 311.

ME 309. Introduction to Mechanical Design. 1 Credit.
An introduction to mechanical design after completing a course in mechanics of materials. Topics include theories of failure and energy methods. ME 201, CE 310, and ME 309 together are equivalent to ME 211 and ME 311. Prerequisite: Permission of instructor.

ME 311. Mechanics of Materials. 3 Credits.
The principles of mechanics of materials with particular emphasis on mechanical systems including theories of failure. Prerequisite: ME 211 or ME 210 with a grade of C- or higher, and MATH 126 or MATH 146, with a grade of C- or higher.

ME 320. Dynamics. 3 Credits.
Kinematics and kinetics of particles and of rigid bodies as applied to mechanical engineering problems. Prerequisite: ME 201 or ME 211 or CE 201 or ME 210, with a grade of C- or higher, and MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291.

ME 321. Dynamics Simulations. 1 Credit.
Introduction to dynamics simulations on the computer. Prerequisite: Corequisite: ME 320.

ME 360. Mechanical Engineering Problems. 1-3 Credits.
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop student capability for independent research or application of engineering science and technology. After completion of the project, a report is required. Maximum credit is three hours. Not open to students who have taken ME 361. Prerequisite: Approval of an outline of the proposed project by the instructor and department chair.

ME 361. Undergraduate Honors Research. 1-3 Credits.
Investigation of a particular mechanical engineering problem. Research will involve defining the problem, developing a research methodology, applying the research methodology and gathering data, analyzing and interpreting the data, and presenting the results of the research. The student must have a faculty sponsor and submit a proposal in writing stating the objective of the research, the planned research method that will be used, and the method of reporting the results. Maximum credit is three hours. Not open to students who have taken ME 360. Prerequisite: Participation in the University Honors Program, consent of instructor, and approval of the chair required.

ME 390. Special Topics: ____. 1-5 Credits.
Courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

ME 412. Thermal Systems. 3 Credits.
Application of the principles of thermodynamics to the analysis and design of thermal systems. Prerequisite: ME 212 or ME 312.

ME 420. Mechanisms. 3 Credits.
Design and analysis of mechanisms composed of linkages, cams, and gears. Mechanical vibration. Prerequisite: PHSX 211 and MATH 220.

ME 455. Mechanical Engineering Measurements and Experimentation. 4 Credits.
Lectures and laboratories on the basics of measurement, instrumentation, data acquisition, analysis, design and execution of experiments, and written and oral reports. Topics selected from heat transfer, fluid mechanics, thermodynamics, mechanics, strength of materials, and dynamics. Prerequisite: ME 208 or CPE 121 or EECS 138 or AE 211, ME 307, ME 320, and MATH 365 or MATH 526. Corequisite: EECS 318 and ME 612.

ME 501. Mechanical Engineering Design Process. 2 Credits.
The design process of a mechanical or thermal system. Establishment of specifications and consideration of realistic constraints such as safety, codes, economic factors, reliability, oral and written communications, and other factors as they impact the design process. Prerequisite: ME 228 and ME 311.

ME 508. Numerical Analysis of Mechanical Engineering Problems. 3 Credits.
Introduction to numerical methods for solution of mechanical engineering problems by use of digital computers. Prerequisite: ME 208 or equivalent, MATH 220 and MATH 290.

ME 510. Fluid Mechanics. 3 Credits.
An introduction to the mechanics of fluid flow. The principles of conservation of mass, momentum, and energy are developed in differential and integral form. Laws of dimensional analysis and similitude are presented as the basis for empirical correlations. Engineering applications include: calculation of hydrostatic forces on submerged objects, analysis of flow and pressure loss in piping systems, estimation of aerodynamic lift and drag, and performance characteristics of pumps and fans. Prerequisite: ME 211, ME 201, CE 301 or CE 201 or CE 260 with a grade of C- or higher, and MATH 127 or MATH 147 and ME 212 or ME 312, with a grade of C- or higher.

ME 590. Special Topics: ____. 1-5 Credits.
Courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

ME 612. Heat Transfer. 3 Credits.
An applied study of conductive, convective, and radiative heat transfer mechanisms in solid and fluid systems. Engineering applications include solid conduction, free and forced convection in fluids, thermal radiation and heat exchangers, evaporators, and furnaces. Prerequisite: MATH 220 and ME 510 or CPE 511.

ME 617. Research for Design Project Option B. 1 Credits.
Basic research in one targeted area of vehicle design, and competition rules, based on the student's plan for ME 627 and ME 642. Prerequisite: ME 501 and permission of instructor.

ME 627. Automotive Design. 3 Credits.
Basic concepts of automotive design and manufacture. Primary focus of course on vehicle design and performance. Design is subdivided into vehicle components of frame, suspension, front and rear axle, steering, power train, front and rear wheel drive, and braking. Integration of these ideas into a vehicle design project with analysis of its performance culminates the course. Prerequisite: ME 617 and permission of instructor.

ME 628. Mechanical Design. 3 Credits.
Design of mechanical components and systems. Prerequisite: ME 311.

ME 633. Basic Biomechanics. 3 Credits.
Provides an overview of musculoskeletal anatomy. Biodynamics includes linear and angular dynamics of human movement, energy expenditure and power required to perform a given activity. Students will learn to determine joint forces and torques (in 2-D) from kinematic data for body segments and force plate data. The tissue mechanics section builds on mechanics of materials. Students will learn about tissue properties, appropriate constitutive models and determination of stresses and strains in tissues and structures under normal loading conditions. Prerequisite: ME 311 and ME 320 or equivalent.

ME 636. Internal Combustion Engines. 3 Credits.
Study and analysis of internal combustion engine physical phenomena: dynamic function, components, and system design. Emphasis on spark ignition and compression ignition engine analysis. Performance, current technology, thermodynamics, fluid-mechanics, combustion products and pollution, fuels and lubrication, and mechanical design. Prerequisite: ME 412.

ME 637. Steam Power Plants. 3 Credits.
A study of steam power plant equipment including thermodynamic analysis, design and performance of modern steam generators, prime movers, and auxiliaries. Prerequisite: ME 412 or permission of instructor.

ME 639. Alternative Energy Systems. 3 Credits.
This course is a survey of energy resources and the available technology for meeting current energy needs with alternative energy systems. An overview of the U.S. energy system and world-wide energy consumption is included to provide context. The primary course objective is to develop the students' ability to apply engineering fundamentals to the design and operation of alternative energy systems. The students will be introduced to databases and modeling methods used to represent alternative energy resources. Assignments will include: engineering problem analysis, group design projects, individual research papers, oral and written presentations. Prerequisite: ME 510, AE 345, or C&PE 511 and (ME 412 or ME 612 or C&PE 521).

ME 640. Design Project. 2 Credits.
Planning for a capstone design project. Development of a formal project proposal is required. Must be used with two credit hours of ME 641 or ME 643 in the subsequent semester to complete the capstone design requirements. Prerequisite: ME 501 and ME 628.

ME 641. Design Project Option A. 2 Credits.
Design and development of a mechanical or thermal/fluid system. An individual or group report that includes designs, analysis/testing, drawings, and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 640. Corequisite: ME 455.

ME 642. Design Project Option B. 3 Credits.
Manufacturing and testing of a mechanical system designed and developed in ME 627 - Vehicle Design. A group report with individual assignments which details the manufacturing procedures and testing procedures and results is required. A completed, working project with a design file documenting all aspects of the project development must be submitted. Prerequisite: ME 627, ME 501 and ME 628. Corequisite: ME 455.

ME 643. Design Project Option C. 2 Credits.
Design and development of a mechanical system related to biomechanics that has been investigated in ME 633 - Basic Tissue Mechanics and Biodynamics. A report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, ergonomics, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 633 and ME 640. Corequisite: ME 455.

ME 644. Design Project Option D. 2-3 Credits.
Design and development of a thermal or fluid system. A group report that includes designs, analysis/testing, drawings, and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 412, ME 455, and ME 501. Corequisite: ME 628.

ME 645. Design Project Option E. 2-3 Credits.
Design and development of a mechanical, electrical or thermal/fluid system related to a sustainable approach to automobiles and energy infrastructure. This may include, but is not limited to alternative fuels, biomass, batteries and advanced vehicle powertrains along with solar/wind energy at various scales. An individual or group report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics and reliability are required. Prerequisite: ME 501, ME 510, and ME 628. Corequisite: ME 412 and ME 455.

ME 661. The Finite Element Method. 3 Credits.
An introduction to the underlying theory of the finite element (FE) method and its application to linear solid and structural mechanics. FE formulations are derived for bars, beams, 2D formulations such as: plane stress, plane strain, and 3D solids. Basic issues are treated such as assembly and generation of FE equations, computation, post-processing, and interpretation of FE solutions (e.g. stresses and strains analysis). Prerequisite: ME 311 or ME 309, MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291.

ME 662. System Dynamics and Control Systems. 3 Credits.
An introduction to the modeling and analysis of analog linear systems and the design of control systems. Topics include mathematical models of mechanical, electrical, fluid and thermal systems, feedback concepts, transient response, frequency response and vibration, system stability, and design of feedback control systems including PID. Prerequisite: ME 320.

ME 696. Design for Manufacturability. 3 Credits.
Tools to incorporate manufacturing and life-cycle concerns into the design of products. Prerequisite: ME 501 or equivalent.

ME 702. Mechanical Engineering Analysis. 3 Credits.
A study of advanced methods for engineering analysis of practical problems utilizing fundamental principles from engineering disciplines. The emphasis is on the solution of these problems and the interpretation and generalization of the results. Prerequisite: A course in differential equations.

ME 708. Microcomputer Applications in Mechanical Engineering. 3 Credits.
Design and implementation of interfaces of microcomputers to mechanical equipment. Includes laboratory experiments presenting selected industrial applications. Emphasis on human factors, functional design parameters and microprocessor interfaces. Includes instruction concerning
ME 711. Bearings and Bearing Lubrication. 3 Credits.
Theoretical aspects of lubrication, determination of pressure distribution in bearings from viscous flow theory, application of hydrodynamic and hydrostatic bearing theories to the design of bearings, high speed bearing design problems, properties of lubricants, methods of testing. Prerequisite: ME 510 and a course in differential equations.

ME 712. Advanced Engineering Thermodynamics. 3 Credits.
An advanced course in thermodynamics, mathematical in nature, with emphasis on a critical re-evaluation of the laws of thermodynamics, thermodynamics of one-dimensional gas flow, development of the classical thermodynamic relations and their application to engineering problems. Prerequisite: ME 508 and ME 412.

ME 716. Introduction to Surface and Interface Science. 3 Credits.
Surface and Interface Science plays a crucial role in various industrial, environmental, and biomedical areas, as well as in emerging technologies. These include wetting, water purification, enhanced oil recovery and other petrochemical processes. Surface and Interface Science also provides an intriguing arena for the integration of fundamental concepts, theoretical methods, and experimental techniques from a variety of scientific disciplines including engineering, physics, chemistry, biology, and medicine. This course presents fundamental and applied aspects of this rapidly developing field. The first segment of the course is devoted to understanding interfacial phenomena by examining the roles of surface composition and surface texture. The second segment covers how this fundamental understanding can be used to design bio-inspired surfaces for various applications that involve self-cleaning mechanisms, anti-reflective coating, fog harvesting and de-icing. Prerequisite: ME 312 or physical chemistry or equivalent.

ME 718. Fundamentals of Fuel Cells. 3 Credits.
The principles of fuel cells, with focus on low temperature fuel cells using polymer electrolytes. Prerequisite: A course in engineering thermodynamics (e.g., ME 412), heat transfer (e.g., ME 612), and fluid Mechanics (e.g., ME 510.)

ME 720. Advanced Dynamics of Machinery. 3 Credits.
Dynamics of particles and of rigid bodies with advanced engineering applications; generalized coordinates; Hamilton's principles; Lagrange's equations; Hamilton-Jacobi theory. Prerequisite: ME 320 or equivalent.

ME 722. Modeling Dynamics of Mechanical Systems. 3 Credits.
Modeling, analysis and simulation of dynamic mechanical systems. Emphasis on the analysis of kinematics and dynamics of rigid mechanical multibody systems undergoing large overall motion using interactive computer simulation programs. Applications to the design and control of dynamic systems such as robots, machine tools, and artificial limbs. Prerequisite: ME 320 or CE 300.

ME 733. Gas Dynamics. 3 Credits.
A study of the thermodynamics and fluid dynamics of gaseous media. Emphasis is placed on the rigorous application of conservation laws to represent physical processes. Classical and statistical models for the thermodynamic and transport properties are examined. Applications include determination of gas properties, wave propagation, and high-speed flow. Prerequisite: ME 412 and ME 510 or equivalents.

ME 736. Catalytic Exhaust Aftertreatment Modeling. 3 Credits.
Fundamental concepts behind catalytic exhaust aftertreatment devices for automobiles including both monolithic catalysts and particulate filters. Studies of other catalytic devices intended for applications in the mechanical and chemical engineering fields. Topics covered are the development of governing equations based on conservation laws and their numerical solutions using finite difference methods. Studies will include a monolithic catalyst. Project assignments will be included. Prerequisite: ME 412 and ME 510 or permission of instructor.

ME 750. Biomechanics of Human Motion. 3 Credits.
Fundamental concepts of anatomy and physiology are introduced but the focus is on the biomechanics of human motion. Human body segment kinematics and joint kinematics are analyzed. An introduction to muscle mechanics is provided. Applications in balance and gait are covered. Prerequisite: Corequisite: ME 320 or equivalent.

ME 751. Experimental Methods in Biomechanics. 3 Credits.
This course will focus on methods of experimental measurement and computational modeling used in biomechanics. Instrumentation used to measure three-dimensional motion, ground reaction forces, center of pressure and EMG measures are considered. Methods used for inverse dynamics, direct dynamics and simulation are introduced. Prerequisite: ME 320 or equivalent.

ME 752. Acoustics. 3 Credits.
This course will teach the production, propagation, and effects of sound waves. Detailed topics include plane wave, spherical wave, and cylindrical wave propagation in free space and waveguides, wave reflection and transmission on an interface, piston radiation, wave scattering and diffraction. Prerequisite: ME 320 or permission of instructor.

ME 753. Bone Biomechanics. 3 Credits.
Provides an in-depth knowledge of bone as a living mechanical system. Topics include the microstructure, biology, mechanical properties, mechanical modeling, adaptation of bone to the mechanical environment, and its simulation. Students assignments include homework, a poster presentation, basic finite element analysis laboratory, and bone remodeling simulations. Prerequisite: ME 311 or equivalent.

ME 754. Biomedical Optics. 3 Credits.
This course will cover the fundamentals of photon transport in biological tissues, including explanations of Rayleigh and Mie scattering, Monte Carlo simulations, the radiative transport equations and more. Also, the basic physics and engineering of various optical imaging techniques for biological tissues, including ballistic or quasi-ballistic imaging (such as confocal microscopy, and optical coherence tomography), diffuse imaging, photoacoustic imaging, will be introduced. Prerequisite: ME 508 or permission of instructor.

ME 755. Computer Simulation in Biomechanics. 3 Credits.
Provides an in-depth knowledge of 1) the process of developing a research question to be addressed with computer simulation, 2) various techniques for medical imaging to obtain model geometries (including hands-on experience with low-field MR imaging), 3) image segmentation techniques, 4) issues affecting geometric accuracy in model building, 5) the determination and specification of loading and/or kinematic boundary conditions, 6) the interpretation of model results in the context of the model limitations and the medical application. Knowledge and/or experience with finite elements is desirable, but not required. Prerequisite: ME 311 and ME 320 or equivalent.

ME 756. Biofluid Dynamics. 3 Credits.
An introduction to the fundamentals of biofluid dynamics, and the application of these principles to a variety of biological flows. Fluid flows in physiology, drug delivery, and biotechnology are investigated at a variety of scales, ranging from subcellular to organ groups. Topics include non-Newtonian constitutive equations, solution techniques, and principles of modeling and simulating. Prerequisite: ME 208 and ME 510 or equivalents.

ME 757. Biomechanical Systems. 3 Credits.
A course on the dynamics and motor control of human and animal motion. The course will focus on applying mechanical principles of dynamics, lumped parameter systems, and control theory to problems in biomechanics. Topics include muscle mechanics and dynamics, reflex and voluntary control, proprioception, anatomy of the muscular and nervous systems, and system dynamics in locomotion and other movements. Prerequisite: ME 682 or permission of instructor.

**ME 758. Physiological System Dynamics. 3 Credits.**
This course covers the use of engineering systems modeling approaches to understand the function of physiological systems. Systems covered include the cardiovascular system, the respiratory system, the renal system, the gastrointestinal system, and the musculoskeletal system. Prerequisite: ME 510, ME 320, Physics 212 or permission of instructor.

**ME 760. Biomedical Product Development. 3 Credits.**
Introduction to methods of taking medical product inventions from conception to initial stage production. Students work in cross-functional teams to investigate development potential of inventions. Topics include product development processes, regulatory issues with the FDA, quality system requirements, SBIR/STTR funding pathways, biomaterial and biomechanics issues in medical product design, and ethical considerations. Prerequisite: Senior or graduate student standing in engineering, business, industrial design, or an applicable life science field and permission of instructor.

**ME 765. Biomaterials. 3 Credits.**
An introductory course on biomaterials science and consideration of biomaterials in the design of biomedical implants. Topics including ethical considerations in biomaterials research and the role of the FDA in medical device design are also presented. Prerequisite: ME 306.

**ME 767. Molecular Biomimetics. 3 Credits.**
The lessons learned from biological materials are discussed toward developing novel biomimetic materials and systems using environmentally benign processing. Upon completing this course, students will be able to understand the essential features of biological sciences combined with nano- and molecular technologies for next generation bioinspired, biomimetic and bio-enabled materials and systems. Prerequisite: CHEM 130, CHEM 150 or equivalent; introductory course in Material Science (e.g., ME 306.)

**ME 770. Conductive Heat Transfer. 3 Credits.**
The formulation of steady- and unsteady-state conduction heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent.

**ME 774. Radiative Heat Transfer. 3 Credits.**
The formulation of steady and unsteady radiation heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent.

**ME 788. Optimal Estimation. 3 Credits.**
Covers the principles of optimal estimation theory, with particular focus on Kalman filtering and its engineering applications. Prerequisite: A course in elementary linear algebra (e.g., MATH 290), statistics (e.g., MATH 365, MATH 526, or DSCI 202), and system dynamics and control systems (e.g., ME 682.)

**ME 789. Energy Storage Systems and Control. 3 Credits.**
This course offers an introduction to the mechanisms, modeling, monitoring and control of energy storage systems with a primary focus on batteries but includes coverage of fuel cells and ultra-capacitors. A major theme is to offer students state-of-the-art knowledge of energy storage systems and aid them in developing the ability to apply estimation and control theory in order to address the problems arising in energy storage management. After completion of the course, a student is expected to: 1) understand the respective work mechanisms, advantages and disadvantages of batteries, fuel cells and ultra-capacitors, 2) understand the mathematical modeling methodologies for batteries, 3) understand the key estimation/control methods and tools, and 4) build effective solutions for energy storage management problems leveraged with estimation/control theory. Prerequisite: ME 682 or equivalent.

**ME 790. Special Topics: _____. 1-5 Credits.**
Advanced courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

**ME 797. Materials for Energy Applications. 3 Credits.**
Focus on fundamentals of materials for energy applications. The main topics covered will be: 1) introduction to material science & engineering and electrochemical technologies, 2) microscopic view of solid materials, 3) mass transfer by migration and diffusion, 4) energy related materials and devices, 5) electrochemical engineering fundamentals, etc. Prerequisite: Basic Engineering Thermodynamics (e.g., ME 312) or equivalent.

**ME 798. Manufacturing for Energy Applications. 3 Credits.**
The focus of the course is on fundamentals of materials for energy applications. The main topics covered include: 1) introduction and overview of manufacturing, 2) material properties and engineering materials, 3) traditional and nontraditional manufacturing processes, 4) surface engineering and processing, and 5) energy-related materials and device fabrication. Prerequisite: ME 508 or equivalent and ME 797.

**ME 801. Responsible Conduct of Research in Engineering. 1 Credits.**
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in bioengineering. Topics include the nature of ethics, the roles of the scientist as a reviewer, entrepreneur, employer and teacher, research ethics in the laboratory, social responsibility and research ethics regulation. (Same as BIOE 801.) Prerequisite: Permission of instructor.

**ME 808. Advanced Microprocessor Applications. 3 Credits.**
Advanced design and development of microprocessor based mechanical systems. Individual and team projects involving the development and integration of hardware and software into a “smart” system which includes the sensing, processing, and controlling functions are accomplished. Emphasis is on the use of the latest sensors and development tools. Prerequisite: Permission of instructor.

**ME 810. Advanced Fluid Mechanics. 3 Credits.**
Topics include kinematic and dynamic behavior of fluids, derivation of Navier-Stokes equations, flow classification, solutions of viscous and inviscid flows for simple geometries, potential flow theory and laminar and turbulent boundary layer theory. Prerequisite: ME 510 or equivalent.

**ME 831. Convective Heat and Momentum Transfer. 3 Credits.**
The formulation and solution of steady and unsteady convective heat, mass, and momentum transfer problems. Topics include boundary layers, duct flows, natural convection with and without phase change, development of analogies, transport properties, numerical methods. Prerequisite: ME 612 or equivalent.

**ME 832. Computational Fluid Dynamics and Heat Transfer. 3 Credits.**
The fundamentals of the finite-difference method are presented and applied to the formulation of numerical models for heat and momentum transfer. The accuracy, stability, and computational efficiency of different algorithms are analyzed. Computer programs are developed for classical benchmark problems. Prerequisite: ME 508, ME 510, and ME 612 or equivalents.
ME 833. Radiative Heat Transfer. 3 Credits.
The formulation of steady and unsteady radiation heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent.

ME 836. Hybrid and Electric Vehicles. 3 Credits.
Topics covered include history of electrified vehicles, vehicle modeling, battery chemistry, and electric motors. Review of fundamental electrical engineering concepts provided. Application of real world driving profiles through homework assignments. Laboratories will explore battery and motor fundamentals. Homework assignments will be included along with a semester project involving the design, construction, and testing of a scale electric vehicle. Prerequisite: ME 636 or permission of instructor.

ME 840. Continuum Mechanics I. 3 Credits.
Principles of Continuum Mechanics for solids, fluids, and gases. Frames of references, measures of motion, deformation, strains, stresses, their rates, objectivity and invariance. Conservation laws, constitutive equations, equations of state and thermodynamic principles for developing mathematical models of continuum matter. Theoretical solutions of model problems. Prerequisite: Background in Calculus and Differential Equations is recommended.

ME 841. Continuum Mechanics II. 3 Credits.
Fundamental principles of Continuum Plasticity, measures of plastic strains, stresses and constitutive equations for flow theory of plasticity. Internal variable theory of thermo-mechanical behaviors and endochronic theory of plasticity and viscoplasticity. Anisotropic plasticity and advanced topics. Continuum mechanics principles for viscoelastic solids with emphasis on constitutive equations. Development of complete mathematical models and solutions of selected model problems. Prerequisite: ME 840.

ME 854. Continuum Mechanics for Soft Tissues. 3 Credits.
An introductory course in the analysis of the mechanical behavior of materials modeled on the continuum assumption. The course will provide background on soft tissue properties and will focus on the tools necessary to model soft tissues, including the essential mathematics, stress principles, kinematics of deformation and motion, and viscoelasticity. Prerequisite: ME 311 or equivalent.

ME 860. Advanced Mechanical Engineering Problems. 1-3 Credits.
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop students capability for independent research or application of engineering science and technology. Maximum credit toward any degree is three hours unless waived in writing by the departmental chairperson. Prerequisite: Approval of instructor.

ME 861. Theory of the Finite Element Method. 3 Credits.
Finite element method for solid mechanics, heat transfer, fluid mechanics, and dynamics. Modeling techniques, software implementation, and solution of problems. Prerequisite: Background in Calculus and Differential Equations is recommended.

ME 862. Finite Element Method for Transient Analysis. 3 Credits.
Advanced treatment of dynamic and transient response for linear and nonlinear problems in solid mechanics. Formulation and solution of time dependent linear and nonlinear field problems using finite element techniques. Prerequisite: ME 861.

ME 864. Mesh Generation and Adaptivity for Finite Element Simulations in Engineering. 3 Credits.
The generation of Finite Element meshes in the analysis and simulation of engineering systems. Important topics are treated such as initial mesh generation and refinements (i.e. geometric modeling and mesh adaptivity or grading), choice of type of element, and assessment of solution accuracy (i.e. error estimation). Assignments include solving problems using FE software. Prerequisite: ME 661, ME 861, or equivalent.

ME 882. Advanced Control Systems. 3 Credits.
Advanced methods in the modeling, analysis and design of linear and nonlinear control systems. Topics include but not limited to digital controls methods, energy-based modeling, and state-space methods. Prerequisite: ME 682.

ME 890. Special Topics: _____ 1-5 Credits.
Advanced courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

ME 899. Independent Investigation. 1-6 Credits.
An analytical or experimental investigation of an engineering problem requiring independent research. If the thesis option is selected six credit hours are required for the degree. If the project option is selected three credit hours are required for the degree. (See requirements for the Master of Science degree for additional details.) Graded on a satisfactory progress/limited progress/no progress basis.

ME 961. Finite Element Method for Nonlinear Problems in Solid Mechanics. 3 Credits.
Advanced treatment of finite element techniques for structural analysis including material and geometric non-linearity as well as large strain deformation. Prerequisite: ME 861 or equivalent.

ME 962. p-Approximation, Error Estimation, and Other Advanced Topics in the Finite Element Method. 3 Credits.
Advanced treatment of p-Approximation, error estimation, and other advanced topics in the finite element method. Prerequisite: ME 861 or equivalent.

ME 963. Mathematical Modeling and Computational Method in Multi-Scale Processes. 3 Credits.
An overview of classical averaging and homogenization methods, as well as current multi-scale modeling techniques for the analysis of micro- and nano-mechanics of materials. Models and numerical techniques are introduced based on continuum as well as particle descriptions. Assignments include the simulation of micro- and nano-mechanics problems by using existing finite element software and molecular dynamics packages. Prerequisite: ME 861 and ME 840.

ME 990. Special Topics: _____ 1-5 Credits.
Advanced courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

ME 999. Independent Investigation. 1-16 Credits.
An analytical or experimental investigation of an engineering problem requiring independent research. Twenty four hours as a minimum are awarded for the Ph.D. dissertation. An original contribution suitable for publication in a refereed journal is required of Ph.D. candidates. Graded on a satisfactory progress/limited progress/no progress basis.

School of Engineering Minor in Biomedical Engineering

The purpose of the Biomedical Engineering (BME) minor is to more strongly attract and serve engineering undergraduate students who are seriously interested in biomedical engineering careers. The minor will provide substantial exposure to biomedical engineering concepts and applications, and provide a stronger credential for students seeking jobs in the biomedical field. It will also better prepare students to be more
effective in careers in the field, and will help better prepare students who are seeking graduate studies in biomedical engineering.

The general goals and objectives for the BME Minor are:

1. Provide students with exposure and experiences with the application of engineering principles, physics, chemistry, physiology, and modern biology to BME applications;
2. Train students to apply basic sciences and engineering principles to biological problems;
3. Train students to apply research/design to relevant BME problems.

In order to declare a minor in Biomedical Engineering, students must have been admitted to the School of Engineering and to the major of their choice. Students must declare the BME minor by completing a declaration form and are strongly encouraged to do so as early as possible. This will allow the best opportunity for advising to minimize the number of courses/credits required beyond the major degree requirements.

The BME minor requires a minimum of 18 credit hours. Students must complete the courses required with a cumulative GPA of 2.0 or better. All Biomedical Engineering minor courses must be taken for a letter grade; neither S/U nor credit/no credit is permitted. Students who complete the BME minor are not eligible for the Bioengineering Undergraduate Certificate.

**BME core course:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 656</td>
<td>Introduction to Biomedical Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

**BME technical elective courses:** Two (2) courses are required from the following list (min 6 cr).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BINF 701</td>
<td>Computational Biology I (cannot count with EEC 730)</td>
<td>5</td>
</tr>
<tr>
<td>CE 573</td>
<td>Biological Principles of Environmental Engineering or CE 773</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 676</td>
<td>Principles of Biomolecular Engineering</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 686</td>
<td>Bioprocess Engineering</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 687</td>
<td>Polymer Science and Technology</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 715</td>
<td>Topics in Chemical and Petroleum Engineering:_____ (Drug Delivery)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 751</td>
<td>Basic Rheology</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 752</td>
<td>Tissue Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ME 633</td>
<td>Basic Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>ME 750</td>
<td>Biomechanics of Human Motion</td>
<td>3</td>
</tr>
<tr>
<td>ME 751</td>
<td>Experimental Methods in Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>ME 753</td>
<td>Bone Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>ME 754</td>
<td>Biomedical Optics</td>
<td>3</td>
</tr>
<tr>
<td>ME 755</td>
<td>Computer Simulation in Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>ME 757</td>
<td>Biomechanical Systems</td>
<td>3</td>
</tr>
<tr>
<td>ME 758</td>
<td>Physiological System Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ME 760</td>
<td>Biomedical Product Development</td>
<td>3</td>
</tr>
<tr>
<td>ME 765</td>
<td>Biomaterials</td>
<td>3</td>
</tr>
<tr>
<td>ME 767</td>
<td>Molecular Biomimetics</td>
<td>3</td>
</tr>
<tr>
<td>ME 790</td>
<td>Special Topics:_____ (Bioadditive Manufacturing and/or Biomedical Microdevices)</td>
<td>3</td>
</tr>
</tbody>
</table>

EECS 730 | Introduction to Bioinformatics (cannot count with BINF 701) | 3     |

**BME research/design experience:** Choose from the following list (min 3 cr).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 592</td>
<td>Special Projects in Aerospace Engineering for Undergraduate Students (Biomedical Project) or ARCE 690 or ARCE 691</td>
<td>3</td>
</tr>
<tr>
<td>CE 490</td>
<td>Special Problems (Biomedical Project)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 651</td>
<td>Undergraduate Problems (Biomedical Project)</td>
<td>3</td>
</tr>
<tr>
<td>or C&amp;PE 661</td>
<td>Undergraduate Honors Research</td>
<td>3</td>
</tr>
<tr>
<td>EECS 399</td>
<td>Projects (Biomedical Project)</td>
<td>3</td>
</tr>
<tr>
<td>or EECS 498</td>
<td>Honors Research</td>
<td>3</td>
</tr>
<tr>
<td>EECS 502</td>
<td>Senior Design Laboratory II (Biomedical Project)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 542</td>
<td>Computer Systems Design Laboratory II (Biomedical Project)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 582</td>
<td>Computer Science and Interdisciplinary Computing Capstone (Biomedical Project)</td>
<td>3</td>
</tr>
<tr>
<td>EPHX 501</td>
<td>Honors Research (Biomedical Project)</td>
<td>3</td>
</tr>
<tr>
<td>or EPHX 503</td>
<td>Undergraduate Research</td>
<td>3</td>
</tr>
<tr>
<td>ME 640 &amp; ME 643</td>
<td>Design Project and Design Project Option C (Biomedical Project)</td>
<td>4</td>
</tr>
</tbody>
</table>

Biomedical Projects all require review and approval for biomedical content/emphasis, except for ME 640 & ME 643.

**Biomedical Sciences Core:** One of the following courses (3 cr).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
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</tbody>
</table>

**Biomedical Sciences Elective:** Either Biomedical Sciences Core course above not used to fulfill the Biomedical Sciences Core or one of the following courses (min 3 cr).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology or BIOL 151</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 401</td>
<td>Fundamentals of Microbiology, Honors</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 435</td>
<td>Introduction to Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 503</td>
<td>Immunology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 506</td>
<td>Bacterial Infectious Diseases</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 512</td>
<td>General Virology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 546</td>
<td>Mammalian Physiology</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE/PHCH 725</td>
<td>Cellular and Molecular Pharmaceutics</td>
<td>3</td>
</tr>
</tbody>
</table>
Undergraduate Certificate in Bioengineering

The Bioengineering certificate introduces engineering and computer science students to Bioengineering. This undergraduate certificate grounds students in fundamentals of biological sciences, allows the students to take both survey and depth courses in Bioengineering, and has a capstone research or design experience.

The goals are:

1. To train students to apply basic sciences and engineering principles to biological and biomedical problems, and
2. To train students to do bioengineering research and solve problems related to the design and development of technologies that improve human health.

Bioengineering students are often involved in measurements, analysis, modeling, computations, design, and development. This certificate will provide skills useful for careers in the medical device and pharmaceutical industries as well as graduate programs in Bioengineering and Biomedical Engineering.

Please contact Bioengineering program (bioe@ku.edu) for more information.

This undergraduate certificate is open to those majoring in engineering disciplines (Mechanical, Electrical, Chemical, Aerospace, Petroleum, Computer, Architectural, or Civil Engineering or Engineering Physics), or Computer Science. To complete this certificate a student will also need to complete their degree in one of these disciplines. To be admitted, a student would need to have completed:

- 30 credit hours, majoring in an engineering discipline with a minimum 2.0 GPA, and
- Math 127 Calculus III (or Math 122 or equivalent)

Bioengineering Core, 1 course from the following:

C&PE 656 Introduction of Biomedical Engineering
ME 633 Introduction to Biomechanics
EECS 730 Introduction to Bioinformatics

Bioengineering Electives, 3 courses from the following:

Biological Sciences: At least one course from:
BIOL 150 Prin. Molecular & Cellular Biology
BIOL 240 Fundamentals of Human Anatomy
BIOL 246 Principles of Human Physiology
BIOL 546 Mammalian Physiology

Advanced Electives: At least one course from:
Chem 330 Organic Chemistry I or Chem 380 Organic Chemistry I, honors
BIOL 600 Introduction to Biochemistry
C&PE 752 Tissue Engineering
C&PE 657 Polymer Science and Technology
ME 750 Biomechanics of Human Motion
ME 751 Experimental Methods in Biomechanics
ME 753 Bone Biomechanics
ME 754 Biomedical Optics
ME 755 Computer Simulation in Biomechanics
ME 756 Biofluid Dynamics
ME 757 Biomechanical Systems

ME 758 Physiological System Dynamics
ME 767 Molecular Biomimetics
ME 760 Biomedical Product Development
ME 765 Biomaterials
ME 767 Molecular Biomimetics
EECS 644 Digital Signal Processing
EECS 730 Introduction to Bioinformatics
EECS 740 Digital Image Processing
CE 573 Biological Principles of Environmental Engineering
ME 640 Mechanical Engineering – Design Project (if taken with ME 643)

Research or Design, 1 course/experience from the following (These should be approved by the bioengineering program prior to taking them):

Capstone Design in Bioengineering/Biomechanics:
ME 643 Mechanical Engineering – Design Project Option C
Other approved senior level, capstone design course with a bioengineering-focused project

Approved Undergraduate Research in Bioengineering:
C&PE 651/661, C&PE 671, ME 360/361, EECS 399/498, AE 592, CE490, ARCE 690/691, or EPSX 501/503

Approved external research experience such as a summer REU program in Bioengineering

Department of Aerospace Engineering

Aerospace Engineering

The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

VISION

KU Aerospace Engineering (KUAE) is a world-class community of choice for outstanding students, educators, and researchers shaping the next generation of aerospace systems.

MISSION STATEMENT

KUAE fosters a world-class community of choice for students, educators, researchers and industry partners by strategically aligning our teaching, research and service missions to prepare students for successful professional careers by providing them with foundational knowledge in and experience with aerospace engineering disciplines and interdisciplinary systems integration, while advancing the state-of-the-art

- We are an international leader in undergraduate, graduate and continuing aerospace education, balancing theory and practice to best prepare our graduates for professional practice and for higher education
- We provide world class graduate and undergraduate research experiences focused on designing, simulating, building, testing and flying aerospace vehicles and systems, including practical experience in applying aerospace fundamentals to interdisciplinary research and advancing knowledge.
- We invest in research infrastructure and select and develop outstanding and diverse students, faculty and staff to maintain an intellectually stimulating and collegial atmosphere in which to conduct globally significant basic and applied research
• We support the aerospace profession by educating the public through outreach, educating working professionals through the KU Aerospace Short Course program and advising policy-makers in government, industry and professional organizations.

• We partner with the aerospace industry through directed research, internships and professional mentoring to ensure that our graduates are recognized and hired as those best prepared for professional success.

KUAЕ STRATEGIC GOALS
To support our teaching mission:

• Attract, develop and retain the highest quality students representing broad demographics
• Provide immersive, experiential learning opportunities integrated across the curriculum
• Expand the number and frequency of higher level graduate course offerings
• Attract, advance, and retain an outstanding and diverse technical staff to support cutting edge, holistic, education and research
• Achieve and maintain a state-of-the-art distance education capability to expand educational outreach to remote learners and increase access to remote expertise for local learners
• Develop and modernize facilities appropriate to providing intellectually stimulating curricular experiences

To increase the quality and volume of funded research:

• Attract, advance, and retain a diverse and continuously growing number of world-class faculty and research staff
• Attract and develop the highest quality graduate students representing broad demographics, with a particular emphasis on increasing the number of doctoral students
• Develop high quality, state-of-the-art research facilities appropriate to enabling globally significant basic and applied research
• Attract, advance, and retain an outstanding and diverse technical staff to support cutting edge, holistic, education and research
• Strategically target and transition technologies of national importance to enhance interdisciplinary, collaborative research
• Expand partnerships with industry leaders in directed research

To provide service:

• Be leaders in preparing our graduates for successful professional careers
• Be leaders in national and international technical and academic societies and editorial boards
• Expand the internationally renowned KU Aerospace Short Course and distance learning programs

Graduate Programs

The Department of Aerospace Engineering offers traditional Master of Science (MSAE) and Doctor of Philosophy (PhDAE) programs which emphasize original analytical and experimental research. In addition, two unique programs are offered: the Master of Engineering (MEAE) and the Doctor of Engineering (DEAE), which emphasize system design and management. Each of these programs provide excellent preparation for employment in industry or in private and government laboratories. The doctoral programs also prepare for an academic career in teaching and research.

Graduate course work is available in the following areas of aerospace engineering:

• aerodynamics
• computational fluid dynamics
• propulsion
• structures
• flight dynamics and control
• aircraft design
• spacecraft design
• orbital mechanics

Graduate courses are taught by faculty with a strong background in graduate education and in industry and government laboratory experience. All faculty are currently active in funded or unfunded research in their areas of expertise. Department research programs are typically funded by: NASA, DOD, DOE, NSF, FAA, and the Aerospace industry.

Courses

AE 211. Computing for Engineers. 3 Credits. 
Introduction to computing concepts. Introduction to the MATLAB computing language using a suite of simulations in science and engineering in a progression which adds new MATLAB constructs - as well as logical and mathematical constructs - with each simulation. Simulations include numerical integration, coordinate transformations and primitive reinforcement learning constructs. Prerequisite: MATH 125 or MATH 145 with a grade of C- or higher.

AE 221. Introduction to Global History of Aerospace Technologies. 1-3 Credits. 
This History of Aerospace Technology starts in neolithic times with a description of a variety of flying implements being used for hunting and warfare. Their basic designs, mechanics, impact on human evolution, migration and societal development are brought forward to the development of gunpowder, ballistics and rocketry. Lighter than air flight innovations from 1783 forward show an intermingling of civil and military uses through WWI, shaping world events and the fortunes of nations. Heavier than air inhabited flight exploration begins with Cayley, includes the contributions of technologists Lilienthal, Chanute, visionaries and writers Mouillard and Verne, and concludes in a vertical exploration by region, nation and manufacturer, including: Douglas, Boeing, Lockheed, Fokker, Heinkel, Messerschmitt, Fairey, Handley Page, Piaggio, Tupelov, Mikoyan-Gurevich, Kamov, Mitsubishi, Hindustan Aeronautics, Sud Aviation and others. This course represents a very unique opportunity for students to study under one of the most important, famous and well published Aerospace Technologists and Historians ever to practice.

AE 241. Private Flight Course. 1 Credits. 
One hour of academic credit is given upon the awarding of the private pilot's license by the Federal Aviation Administration. Required
Review and hands-on laboratory experiments with basic electronic elements (resistors, capacitors, conductors, transistors, linear circuits, logic devices, and integrated circuits). Overview and hands-on laboratory experiments using various experimental techniques available to the aerospace engineers (pressure probes, thermocouples, strain gauges, hot-wire anemometer, laser Doppler velocimeter, and flow visualization techniques). Prerequisite: AE 445 with a grade of C- or higher, and EECS 316.

AE 441. Advanced Flight Training. 1-3 Credits.
Academic credit is given for the successful completion of advanced flight training beyond the private pilot rating. One hour is given for each of the following: commercial, instrument rating, certified flight instructor. The Aerospace Engineering Department provides no ground or flight instruction. Open enrollment. Graded on a satisfactory/fail basis. Prerequisite: AE 241.

AE 445. Aircraft Aerodynamics and Performance. 3 Credits.
Study of airfoil and wing aerodynamics, component drag, static and special performance, and maneuvers of aircraft. Open enrollment. Prerequisite: AE 345 and CE 260, both with grades of C- or higher.

AE 490. Aerospace Industrial Internship. 1 Credits.
Engineering internship in an approved company. Internship hours do not satisfy any course requirements for the bachelors degree in Aerospace Engineering but will appear on the official transcript. Credit assigned after review of report on internship experience. Graded on a satisfactory/fail basis. Prerequisite: Completion of junior year.

AE 506. Aerospace Structures I, Honors. 3 Credits.
In depth analysis and design of aerospace structures from the standpoint of preliminary design. Deflection and stress analysis of structural components, including thin-walled beams and built-up (semimonocoque) structures. Material failure of highly stressed components, including connections. Buckling of thin-walled beams and semimonocoque structures. Durability and damage tolerance strategies for aerospace structures to avoid corrosion, fatigue, and fracture. Prerequisite: CE 310 with a grade of C- or higher and permission of instructor. Must have minimum 3.25 KU GPA.

AE 507. Aerospace Structures II. 3 Credits.
Analysis and design of aerospace structures from the standpoint of preliminary design. Deflection and stress analysis of structural components, including thin-walled beams and built-up (semimonocoque) structures. Material failure of highly stressed components, including connections. Buckling of thin-walled beams and semimonocoque structures. Durability and damage tolerance strategies for aerospace structures to avoid corrosion, fatigue, and fracture. Prerequisite: CE 310 with a grade of C- or higher.

AE 508. Aerospace Structures II. 3 Credits.
Stress and deflection analysis of aerospace structures using the finite element method. Introduction to work-energy principles, including Castigliano’s Theorems, for the analysis of statically indeterminate structures. Rod, beam, shaft, membrane, and plate finite elements. Prerequisite: AE 506 or AE 507, and MATH 290 with a grade of C- or higher.

AE 509. Honors Aerospace Structures II. 3 Credits.
Indeterminate structures, principle of virtual work, Castigliano’s theorems, displacement method of finite element analysis; rod, beam, shaft, and membrane elements; analysis of aerospace structures with the finite element method. Prerequisite: AE 506 or AE 507, and MATH 290 with a grade of C- or higher, and minimum 3.25 KU GPA.

AE 510. Aerospace Materials and Processes. 4 Credits.
Properties and applications of aircraft materials, forming methods, and manufacturing processes. Ethics and social responsibility for engineers. Oral technical presentations. Prerequisite: AE 507 or AE 506, and a grade of C- or higher in CHEM 150 or CHEM 130 and CHEM 149.

AE 520. Space Systems Design I. 4 Credits.
Preferential design techniques for a space system. Systems engineering; orbital mechanics; spacecraft subsystems including propulsion, attitude control, power, thermal command and data, communications, and structures; and ethics and social responsibility for engineers. Written technical reports. Prerequisite: AE 360 or EPHX 521, AE 421, AE 508 or AE 509, EECS 316, ME 212, and CHEM 150 or CHEM 130 and CHEM 149, or permission of instructor.

AE 521. Aerospace Systems Design I. 4 Credits.
Preferential design techniques for an aerospace system. Aerodynamic design, drag prediction, stability and control criteria, civil and military specifications. Weight and balance, Configuration integration, design and safety, design and ethics, and social responsibility for engineers. Written technical reports. Prerequisite: AE 421, AE 508 or AE 509, AE 551, AE 572 or AE 573, and CHEM 150 or CHEM 130 and CHEM 149 or permission of instructor.

AE 522. Aerospace Systems Design II. 4 Credits.
Preferential design project of a complete aircraft system. Technical written reports and oral presentations. Prerequisite: AE 521 or AE 520 and permission of instructor.

AE 523. Space Systems Design II. 4 Credits.
Preferential design project of a complete space system. Technical written reports and oral presentations. Prerequisite: AE 520 or AE 521 and permission of instructor.

AE 524. Propulsion Systems Design I. 4 Credits.
Preferential design project of a complete propulsion system, including the airframe. Technical written reports and oral presentations. Prerequisite: AE 521, or AE 520 and permission of instructor.

AE 545. Fundamentals of Aerodynamics. 4 Credits.
Basic gas dynamic equations, potential flow for airfoils and bodies, thin airfoil theory, finite wing, subsonic similarity rules, one and two dimensional supersonic flow, boundary layers, heat transfer, and laboratory experiments. Prerequisite: A grade of C- or higher in AE 445, ME 212, MATH 127 or MATH 147, and MATH 220 or MATH 221.

AE 546. Aerodynamics, Honors. 4 Credits.
Basic gas dynamic equations, potential flow for airfoils and bodies, thin airfoil theory, finite wing, subsonic similarity rules, one and two dimensional supersonic flow, boundary layers and viscous flow, heat transfer, and laboratory experiments. A special project in aerodynamics for AE 546 students. Prerequisite: AE 445, ME 212, MATH 220 and MATH 290.

AE 550. Dynamics of Flight I. 4 Credits.
Introduction to Tensor Algebra. Frames and coordinates in dynamics systems. General equations of motion of rigid airplanes and reduction to steady state flight situations. Steady state forces and moments. Stability derivatives. Static stability, control and trim. Trim envelope. Relationships with handling quality requirements. Engine-out flight. Effects of the control system. Implications to airplane design. Prerequisite: Grade of C- or higher in AE 211 and MATH 220 or MATH 221. Corequisite: AE 545 or AE 546 and MATH 290 or MATH 291, or permission of instructor.

AE 551. Dynamics of Flight II. 4 Credits.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Mathematical modeling of airplane and control system analysis in state space. Dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. Relationships with handling quality requirements. Fundamentals of classical control theory and applications to automatic flight controls. Implications to airplane design. Prerequisite: AE 545 or AE 546, AE 550, and a grade of C- or higher in MATH 290 or MATH 291.

AE 552. Honors Dynamics of Flight II. 4 Credits.
General equations of motion of rigid airplanes and reduction to perturbed state flight situations. Perturbed state forces and moments, stability derivatives, dynamic stability, phugoid, short period, dutch roll, roll, spiral, and other important modes. Transfer functions and their application. Relationships with handling quality requirements. Fundamentals of classical control theory and applications to automatic flight controls. Implications to airplane design. Prerequisite: AE 545 or AE 546, AE 550, and a grade of C- or higher in MATH 290 or MATH 291, and minimum 3.25 KU GPA.

AE 560. Spacecraft Systems. 3 Credits.
Fundamentals of spacecraft systems and subsystems. Spacecraft systems engineering, space environment; basic astrodynamics; and the following spacecraft subsystems; attitude determination and control; electrical power; thermal; propulsion; structures and mechanisms; command, telemetry, and data handling; and communications. Prerequisite: AE 360, AE 507 or AE 506, EECS 316, and ME 212.

AE 571. Fundamentals of Airplane Reciprocating Propulsion Systems. 3 Credits.
Study of the basic principles of operation and systems of internal and external combustion engines with emphasis on airplane reciprocating engines. Cycle analysis, propeller theory, propeller selection and performance analysis. Prerequisite: AE 445 and ME 212 with grades of C- or higher.

AE 572. Fundamentals of Jet Propulsion. 3 Credits.
Lecture and laboratory, study of basic principles of propulsion systems with emphasis on jets and fan systems. Study of inlets, compressors, burners, fuels, turbines, jets, methods of analysis, testing, performance; environmental considerations. Prerequisite: AE 545 or AE 546, AE 571, and a grade of C- or higher in CHEM 150 or CHEM 130 and CHEM 149.

AE 573. Honors Propulsion. 3 Credits.
Lecture and laboratory, study of basic principles of propulsion systems with emphasis on jets and fan systems. Study of inlets, compressors, burners, fuels, turbines, jets, methods of analysis, testing, performance; environmental considerations. Prerequisite: AE 545 or AE 546, AE 571, and a grade of C- or higher in CHEM 150 or CHEM 130 and CHEM 149, and minimum 3.25 KU GPA.

AE 590. Aerospace Senior Seminar. 1-3 Credits.
Presentation and discussion of technical and professional paper reports. Methods for improving oral communication. Discussion of topics such as ethics, registration, interviewing, professional societies, personal planning. Prerequisite: Senior standing.

AE 592. Special Projects in Aerospace Engineering for Undergraduate Students. 1-5 Credits.
Directed design and research projects in aerospace engineering. Prerequisite: Consent of instructor.

AE 593. Honors Research. 1-5 Credits.
Directed design and research projects in aerospace engineering. Prerequisite: Consent of instructor.

AE 600. Special Topics: ___. 1-3 Credits.
A graduate course or colloquium in a topic related to graduate studies in Aerospace Engineering. This course does not count towards hours
needed for completion of degree program. Prerequisite: Varies by topic or with consent of instructor.

**AE 621. Advanced Aircraft Design Techniques I. 3 Credits.**

The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through design work. This design work will involve detailed design of efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545, AE 551, and AE 571. AE 521 may be taken concurrently.

**AE 628. Wind Turbine Engineering. 3 Credits.**

Course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence of the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 508, AE 545, and EECS 316 and EECS 318 or equivalent.

**AE 690. Professional Development for Graduate Studies. 0.25 Credits.**

Professional development for graduate students. Responsible conduct of research. Presentation and discussion of graduate student research. Oral communication to a range of audiences, including short presentations by students on a range of topics. One semester of enrollment required for all MS and ME candidates, and two semesters of enrollment required for all PhD and DE aspirants and candidates. Graded on a satisfactory/unsatisfactory basis.

**AE 700. Special Topics: ______. 1-5 Credits.**

Courses on special items of current interest in aerospace engineering, given as need arises. May be repeated for additional credit. Prerequisite: Approval of instructor.

**AE 704. Dynamics and Vibrations. 3 Credits.**

Problems in engineering dynamics and vibrations. Topics include applications of generalized forces and coordinates, Lagrange equations, and a study of the performance of single and multiple degree of freedom in vibrational systems. (Same as CE 704.) Prerequisite: AE 508.

**AE 705. Structural Vibrations and Modal Testing. 4 Credits.**


**AE 709. Structural Composites. 3 Credits.**

Fiber materials, tapes, cloths, resin systems; general aeolotropic theory, elastic constants, matrix formulation; computer analysis, strength, theory of failure; introduction to design with composites, preliminary design, optimization, processing variables, product design. Prerequisite: CHEM 150 or CHEM 130 and CHEM 149, AE 508 or AE 509 or CE 761, and AE 510 or ME 306 or CE 710.

**AE 710. Advanced Structural Composites. 3 Credits.**

The course objectives are to provide each student with a more in-depth understanding of and practical hands-on experiences with available fiber and matrix materials, manufacturing methods, and the mechanical behavior of composite materials and structures. Modern software tools and manufacturing methods are addressed, to include optimization techniques and design for manufacturability. Classical plate theory, bending, buckling, and vibration of anisotropic plates is addressed. Damage tolerance and repairability, as well as nondestructive evaluation techniques are also covered. Skills learned in previous composite courses will be utilized to design, analyze, and fabricate structures of current industrial relevance. Prerequisite: AE 508 or similar, AE 709 or similar, or consent of instructor.

**AE 712. Techniques of Engineering Evaluation. 3 Credits.**

The formulation of problems arising in aerodynamics, heat transfer, stress analysis, thermodynamics, and vibrations. The expression of these problems in a form amenable to quantitative evaluation by dimensional reasoning, analog techniques, relaxation methods, and classical analysis.

**AE 713. Stochastic Systems, Estimation and Identification in Aerospace Engineering. 3 Credits.**

Stochastic adaptive control theory is concerned with recursive estimation of unknown parameters and control for systems with uncertainties modeled as random variables or random processes. The theory is motivated by applications in such diverse areas as aerospace guidance and control, signal processing and communications, manufacturing processes, and financial economics. Mathematical theory of stochastic adaptive control for models based on stochastic difference equations such as autoregressive processes and stochastic differential equations as Markov diffusion processes have been developed and will be presented. This course focuses on filtering and system identification theory. Prerequisite: AE 430, AE 750, MATH 590 and MATH 627 or equivalent.

**AE 721. Aircraft Design Laboratory I. 4 Credits.**

The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507 or AE 506, AE 545 or AE 546, AE 551 or AE 552, AE 571 and corequisite of AE 521 or AE 520 and permission of instructor.

**AE 722. Aircraft Design Laboratory II. 4 Credits.**

The purpose of this course is to provide aerospace engineering students with an opportunity to gain more in-depth airplane design education through team design work. This team design work will involve detailed design efforts in such areas as: landing gear design, systems design, propulsion system integration, structures design, and aerodynamic design. Prerequisite: AE 507, AE 521, AE 545 , AE 551, and AE 571. AE 522 may be taken concurrently.

**AE 724. Propulsion System Design and Integration. 3 Credits.**

Theory and design of propulsion systems for both low and high speed aircraft and their integration into the overall configuration. Internal and external design and analysis of inlets and nozzles including their effect on the external aerodynamics of the aircraft. Engine/inlet compatibility and the problems of matching both steady state and dynamic characteristics to obtain peak, stable performance. Prerequisite: AE 572 or AE 573.

**AE 725. Numerical Optimization and Structural Design. 3 Credits.**

Classical theories of unconstrained and constrained optimization. Numerical techniques for unconstrained optimization, including the steepest descent, conjugate gradient and "Newton’s" methods. Numerical techniques for constrained optimization, including sequential approximate problem techniques as well as the method of feasible directions. Computer aided solutions to practical design problems in aerospace engineering. Final design project. Prerequisite: MATH 220 and MATH 290 or junior status.

**AE 727. Aircraft Antenna Systems. 3 Credits.**

Aircraft antenna integration and design process. Overview of common aircraft communication, navigation, and sensing systems. CAD tools and analysis and measurement techniques for designing and assessing systems. Low-observable vehicle design concepts. Prerequisite:
PHSX 212, EECS 316, MATH 127, AE 421 or other CAD experience and CE 310 or equivalent recommended; or by consent of instructor.

AE 728. Wind Turbine Engineering. 3 Credits.
Course will cover the fundamentals of engineering wind-powered electric generators. Topics will include turbine configuration design, drive train engineering, composite rotor blade aerodynamic and structural design, characterizing the influence the wind conditions on the operation, loads, and performance of a wind turbine, wind turbine controls systems engineering, and power electronic conversion. Prerequisite: AE 507 or AE 506, AE 545 or AE 546, and EECS 316 or consent of instructor.

AE 730. Advanced Experimental Fluid Dynamics. 3 Credits.
Theory, methods and data analysis of various modern flow measurement techniques including: hotwire cluster, laser-Doppler velocimetry, particle image velocimetry, holography, pressure detection, temperature probing, vorticity measurements, Lagrange particle tracking. Specific experimental technique covers optical measurements in turbulent flow, microfluidic experiments, and spray and multiphase flow measurement. Prerequisite: AE 430, AE 545 or AE 546 or consent of instructor.

AE 731. Supersonic Aerodynamics Laboratory. 1 Credits.
Supersonic wind tunnel and shock tube operations, techniques, and instrumentation. Flow study and model testing. Prerequisite: AE 545 or AE 546.

AE 732. Introduction to Flight Test Engineering. 3 Credits.
Course presents flight test principles, instrumentation, planning, and operation of aerospace vehicle flight testing. Course is structured with lectures, laboratories, and flight experiments. Student teams plan and execute a series of flight test experiments including: familiarization with flight test measurements, static system calibration, rate-of-climb performance, and determination of vehicle flight dynamics. Prerequisite: AE 445 and AE 550 or consent of instructor.

AE 743. Compressible Aerodynamics. 3 Credits.
Compressible flow with heat and friction; shock polars, 1-D unsteady gas dynamics, shock tube, conical flows, methods of characteristics, hypersonic flow theory. Prerequisite: AE 545 or AE 546.

AE 744. Introduction to Turbulent Flow. 3 Credits.
Reynolds averaged equations for turbulent flow, basic energy relations and spectra in turbulent flow, analysis of turbulent boundary layer, turbulent pipe flow, turbulence models and simulation. Prerequisite: AE 545 or AE 546 or equivalent.

AE 745. Applied Wing and Airfoil Theory. 3 Credits.
Applications of potential flow theory to aerodynamics of airfoil sections; wings and wing-body combinations. Introduction to high angle-of-attack and transonic aerodynamics. Prerequisite: AE 545 or AE 546.

AE 746. Computational Fluid Dynamics. 3 Credits.
Applications of numerical techniques and digital computers to solving fluid flow problems. Solutions involving incompressible and compressible flows, inviscid and viscous flows. Finite difference techniques for different types of partial differential equations governing the fluid flow. Prerequisite: AE 545 or AE 546.

AE 747. Introduction to Transonic Aerodynamics. 3 Credits.

AE 748. Helicopter Aerodynamics. 3 Credits.
Helicopter components and their functioning: rotor aerodynamics, performance, stability and control, aeroelastic effects and vibrations. Prerequisite: AE 551 or AE 552.

AE 750. Applied Optimal Control. 3 Credits.
Introduction to optimal control analysis and design tools useful for the design of Multi-Input/Multi-Output controllers. Linear Quadratic Regulator problem extended by including advanced command techniques and advanced controller structures. The techniques are illustrated with aerospace applications. Prerequisite: AE 551 or AE 552 or ME 682 or consent of instructor.

AE 751. Advanced Airplane Dynamics. 2 Credits.

AE 752. Linear Multivariable Control. 3 Credits.
An introduction to the modeling and analysis of multi-input, multi-output control systems. Topics include state space representation, solutions of linear systems, stability analysis, LQR design, cooperative controller design, etc. Prerequisite: AE 551 or AE 552, or EECS 444 or equivalent; or by consent of instructor.

AE 753. Digital Flight Controls. 3 Credits.
Introduction to the analysis and design tools useful for the design of aircraft guidance and flight control systems containing continuous dynamics and a digital computer. Topics include Z-plane analysis, autopilot design using successive loop closure, guidance design models, path planning, vision-guided navigation, etc. Prerequisite: AE 551 or AE 552 or ME 682 or consent of instructor.

AE 754. Missile Dynamics. 3 Credits.

AE 755. Robust and Nonlinear Control. 3 Credits.
The robustness is one of the most critical qualities of an appropriately designed feedback control system. In this course the ability of the closed-loop system to continue performing satisfactorily despite uncertainties in estimated state variables and/or large variations in the (open-loop) plant dynamics will be investigated. This course will lay down the mathematical and theoretical background needed for the analysis and design of robust feedback control systems. Modern controller design methods (e.g. H-inf control) will be used to design controller highly nonlinear and transient dynamics. Prerequisite: AE 550, AE 551, AE 750, MATH 590 or consent of instructor.

AE 756. Rule-Based Control Systems. 3 Credits.
Introduction to rule-based systems with an emphasis on a cognitive architecture. Realistic examples of using such systems will be covered in the context of unmanned aircraft control. A brief review of programming in LISP language, on which the cognitive architecture is based. Prerequisite: EECS 316 and AE 551 or AE 552 or equivalent.

AE 757. Rule-Based UAV Control Lab. 1 Credits.
A guided experience on building an unmanned aircraft system. Uses and existing radio-controlled platform, and thus does not require an expertise in fabrication. Focuses on building the communication hardware and software that enables the use of a rule-based control system on a computer to control the aircraft remotely. Prerequisite: Corequisite: AE 756.

AE 758. Introduction to Robotics. 3 Credits.
An introduction to robotics covering spatial descriptions and transformations, manipulator kinematics, Jacobians, and dynamics and control of manipulators. The successful completion of this course will prepare students for advanced studies in robotics. Prerequisite: CE 260, AE 551 or AE 552, and MATH 290, or by consent of instructor.

AE 759. Estimation and Control of Unmanned Autonomous Systems. 3 Credits.

An introduction to the modeling, estimation, and control of unmanned autonomous systems. Topics include motion description, navigation sensors, complementary filters, Kalman filters, attitude estimation, position estimation, attitude keeping controller, etc. The successful completion of this course will prepare students for advanced studies in robotics & controls. (Same as EECS 759.) Prerequisite: MATH 627, AE 551 or AE 552 or EECS 444, or by consent of instructor.

AE 760. Spacecraft Systems. 3 Credits.

Fundamentals of spacecraft systems and subsystems. Spacecraft systems engineering, space environment; basic astrodynamics; and the following spacecraft subsystems; attitude determination and control; electrical power; thermal; propulsion; structures and mechanisms; command, telemetry, and data handling; and communications. Same as AE 560 with the addition of a research paper. Not available for students that have taken AE 560. Prerequisite: AE 507, EECS 318, MATH 124, and ME 312 or equivalents.

AE 765. Orbital Mechanics. 3 Credits.

Motion of space vehicles under the influence of gravitational forces. Two body trajectories, orbit determination, orbit transfer, universal variables, mission planning using patched conics. Transfer orbits. Prerequisite: MATH 220, MATH 290, and CE 260 or equivalent.

AE 766. Spacecraft Attitude Dynamics and Control. 3 Credits.

Dynamics of rigid spacecraft, attitude control devices including momentum exchange, mass movement, gravity gradient and reactor rockets. Design of feedback control systems for linear and bang-bang control devices. Prerequisite: AE 551 or AE 552 or permission of instructor.

AE 767. Spacecraft Environments. 3 Credits.

Fundamentals of spacecraft environments. Description and analysis of the natural environment in which spacecraft operate post-launch. Includes optical, electromagnetic, corpuscular radiation, plasma and dust from low Earth orbit, through outer heliosphere. Prerequisite: PHSX 212 required, PHSX 313 or PHSX 351 recommended.

AE 768. Orbit Determination. 3 Credits.

Develops the theory of batch and sequential (Kalman filter) estimation theory related to orbit estimation, including a review of necessary concepts of probability and statistics. Course work includes a term project that allows students to apply classroom theory to an actual satellite orbit determination problem. Prerequisite: AE 360. Corequisite: AE 560 or AE 760.

AE 771. Rocket Propulsion. 3 Credits.

Basic elements of rocket propulsion; systems, propellants, and performance. Prerequisite: AE 545 or AE 546 or equivalent.

AE 772. Fluid Mechanics of Turbomachinery. 3 Credits.


AE 781. Introduction to Adaptive Aerostuctures. 3 Credits.

This course covers the basic material properties and modeling techniques for structures that are capable of changing some physical property in response to a command signal. The course will be useful for students from nearly every branch of engineering and includes a fabrication and testing practicum introducing basic post processing and integration techniques used with piezoelectric, shape memory alloy and magnetorheological materials. The course concludes with an overview of applications and examples of adaptive products. Prerequisite: ME 311 or equivalent.

AE 790. Special Problems in Aerospace Engineering for Masters Students. 1-5 Credits.

Directed studies of advanced problems in aerospace engineering. Open only to graduate students with departmental approval.

AE 803. Aeroelasticity. 3 Credits.

Introduction to self-excited vibrations, wing flutter, panel flutter, unsteady aerodynamics, launch vehicle structural vibrations. Prerequisite: AE 508, AE 545 or AE 546, AE 551 or AE 552, and AE 704.

AE 821. Advanced Aircraft Design I. 3 Credits.

Aerodynamic design optimization. Aircraft cost prediction methods: development, manufacturing, and operating. Minimization of operation costs and implications to configuration design. Design to minimize life-cycle costs. Design decision making on the basis of cost.

AE 822. Advanced Aircraft Design II. 3 Credits.

Design of flight control systems, fuel systems, hydraulic systems, and electrical systems. Weapon system integration problems, design for low radar cross sections. The kinematics of landing gear retraction systems.

AE 830. Aerospace Graduate Internship. 1-12 Credits.

One credit hour per month of approved aerospace engineering internship satisfying one of the requirements for the MS or PhD program. Graded on a satisfactory/unsatisfactory basis.

AE 840. Aerodynamics of Viscous Fluids. 3 Credits.

Concepts of boundary layer equations of viscous fluids. Various transformations for compressible boundary-layer equations. Approximate and exact finite-difference solutions, including effects of suction and blowing. Transitions. Concept of turbulent flow and solutions of turbulent boundary layer equations. Applications in aeronautics. Prerequisite: AE 545 or AE 546.

AE 846. Advanced Computational Fluid Dynamics and Heat Transfer. 3 Credits.

Present recent advances in computational fluid dynamics and heat transfer with a focus on numerical algorithms designed for unstructured grids, including grid generation, convergence acceleration techniques, high-order algorithms and parallel computing on CPU and GPU clusters. It is expected that the students will understand the basics of the finite volume method for unstructured grids, and be able to program a 2D Euler solver for arbitrary grids after taking this class. Prerequisite: AE 746. This class is not open to undergraduate students.

AE 892. Special Problems in Aerospace Engineering for Doctoral Students. 1-8 Credits.

Directed studies of advanced problems in aerospace engineering. Open only to graduate students with consent of instructor.

AE 895. M.S. Thesis or Project. 1-6 Credits.

Original research or project which satisfies the requirements for the degree of Master of Science in Aerospace Engineering. Restricted to Aerospace MS students. Graded on a satisfactory progress/limited progress/no progress basis.

AE 941. Hypersonic Aerodynamics I. 3 Credits.
The gasdynamics of aerospace vehicles operating in the speed range above Mach 5. Rarified and dissociated gas flows; magnetogasdynamic and heat transfer problems. Prerequisite: Consent of instructor.

**AE 996. Ph.D. Dissertation. 1-9 Credits.**
Restricted to Aerospace Ph.D. candidates. Graded on a satisfactory progress/limited progress/no progress basis.

**AE 997. DE Project. 1-16 Credits.**
A major design problem or system study satisfying the project requirements for the Doctor of Engineering in Aerospace Engineering degree. Restricted to Aerospace DE candidates. Prerequisite: Successful completion of Comprehensive Oral Exam.

## Bachelor of Science in Aerospace Engineering

### Careers

**Professional Opportunities**

Aerospace engineers design, develop, and test aircraft, spacecraft, and missiles and supervise manufacture of these products. They explore advances in air flight and space exploration. Aerospace engineers typically work for aircraft, guided missile and space vehicle industries, national research laboratories, commercial airlines, and federal government agencies.

### Undergraduate Admission to the School of Engineering

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

### Minimum Academic Standards for Admission to the School of Engineering

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 22+ (or math SAT score of 540+), or
  - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

#### Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned course in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

#### Exploring Engineering

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

#### Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of “C” or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).

#### Already Applied to KU, But Not Engineering?

Don’t worry. It’s not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.
To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

**Application Deadlines For New Freshman and Transfer Applicants**

**September 15**
Priority deadline for current KU students to apply for spring admission to Engineering.

**November 1**
Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.

**December 1**
Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen.

**February 1**
Final deadline for scholarship consideration for transfer students planning to enter in fall or summer semesters. Applications available for the Engineering Learning Community.

**February 15**
Priority deadline for current KU students to apply for summer or fall admission to Engineering.

**May 1**
Enrollment Deposit due.

**Four Year Degree Completion Plan**

The following are recommended enrollments:

**Freshman**

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
<td>AE 245</td>
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<td>CHEM 150***</td>
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<td>Written Communication (KU Core GE 2.1)</td>
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| Total | 15.25 | 17.25 |

**Sophomore**

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<td></td>
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</tbody>
</table>

| Total | 18.25 | 17.25 |

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 290</td>
<td>0.25 AE 290</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>AE 507H</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AE 550</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AE 545H</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>AE 571</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 290H</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| Total | 16.25 | 16.25 |

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 290</td>
<td>0.25 AE 290</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>AE 510</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AE 521 or 520</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>AE 590</td>
<td>1 Technical Elective**</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Technical Elective**</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core (GE3H, ECON, AE4.1, or AE4.2)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total | 15.25 | 13.25 |

**Total Hours 129**

**Requirements for Enrollment in Junior-Level Aerospace Courses**

Enrollment in junior-level aerospace courses is limited to students who have received grades of C- or higher in all first- and second-year courses in mathematics, physics, ME 212, CE 260, CE 310, AE 211, AE 245, AE 345, and AE 445.

**Curriculum Notes**

*Students must ensure the electives they choose fulfill all remaining KU Core requirements.

**Technical electives are selected from upper-level aerospace courses, approved courses from other engineering departments, or approved math courses.

***Students with credit in CHEM 130 may add CHEM 149 to meet the CHEM 150 requirement.

H Honors equivalent course is available.

**Bachelor of Science in Aerospace Engineering Degree Requirements**
The typical number of credit hours required for a Bachelor's of Science in Aerospace Engineering is 129 hours:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 245</td>
<td>Introduction to Aerospace Engineering</td>
<td>3</td>
</tr>
<tr>
<td>AE 290</td>
<td>Aerospace Colloquium</td>
<td>2</td>
</tr>
<tr>
<td>AE 345</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>AE 360</td>
<td>Introduction to Astronautics</td>
<td>3</td>
</tr>
<tr>
<td>AE 421</td>
<td>Aerospace Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>AE 430</td>
<td>Aerospace Instrumentation Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>AE 445</td>
<td>Aircraft Aerodynamics and Performance</td>
<td>3</td>
</tr>
<tr>
<td>AE 507</td>
<td>Aerospace Structures I</td>
<td>3</td>
</tr>
<tr>
<td>AE 508</td>
<td>Aerospace Structures II</td>
<td>3</td>
</tr>
<tr>
<td>AE 510</td>
<td>Aerospace Materials and Processes</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following Design I options: 4
- AE 520  Space Systems Design I
- AE 521  Aerospace Systems Design I

Select one of the following Design II options: 4
- AE 522  Aerospace Systems Design II
- AE 523  Space Systems Design II
- AE 524  Propulsion Systems Design I
- AE 545  Fundamentals of Aerodynamics
- AE 550  Dynamics of Flight I
- AE 551  Dynamics of Flight II
- AE 571  Fundamentals of Airplane Reciprocating Propulsion Systems
- AE 572  Fundamentals of Jet Propulsion
- AE 590  Aerospace Senior Seminar

Engineering Science Courses
- AE 211  Computing for Engineers
- CE 260  Statics and Dynamics
- CE 310  Strength of Materials
- ME 212  Basic Engineering Thermodynamics
- EECS 316  Circuits, Electronics and Instrumentation

Science Courses
- CHEM 150  Chemistry for Engineers
- PHSX 210  General Physics I for Engineers
- PHSX 216  General Physics I Laboratory
- PHSX 212  General Physics II
- PHSX 236  General Physics II Laboratory

Mathematics Courses
- MATH 125  Calculus I
- MATH 126  Calculus II
- MATH 127  Calculus III
- MATH 220  Applied Differential Equations
- MATH 290  Elementary Linear Algebra

KU Core
- KU Core GE 2.1 Written Communication*
- KU Core GE 3H Humanities
- KU Core AE 4.1 Human Diversity
- KU Core AE 4.2 Global Awareness*
- ECON 104  Introductory Economics

or ECON 142  Principles of Microeconomics
or ECON 144  Principles of Macroeconomics

Technical Electives
Technical Electives are selected from upper level aerospace courses, approved courses from other engineering departments, or approved math courses.

Total Hours 129

Credit for ROTC Courses: A student enrolled in one of the ROTC programs can receive 3 hours of technical electives if the ROTC program is completed.

*The Written Communication and Global Awareness goals can be satisfied in ways other than standard coursework. See http://kucore.ku.edu/ for your options.

Departmental Honors
To complete the departmental honors program, an aerospace engineering undergraduate student must

- Graduate with a KU grade-point average of 3.5.
- Take at least 2 departmental honors courses and earn a grade of B or better in each. At least one course of which must include an independent research component
- An AE 700-level technical elective can be used for one of these courses
- The departmental honors courses are

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE 506</td>
<td>Aerospace Structures I, Honors</td>
<td>3</td>
</tr>
<tr>
<td>AE 509</td>
<td>Honors Aerospace Structures II</td>
<td>3</td>
</tr>
<tr>
<td>AE 546</td>
<td>Aerodynamics, Honors</td>
<td>4</td>
</tr>
<tr>
<td>AE 552</td>
<td>Honors Dynamics of Flight II</td>
<td>4</td>
</tr>
<tr>
<td>AE 573</td>
<td>Honors Propulsion</td>
<td>3</td>
</tr>
<tr>
<td>AE 593</td>
<td>Honors Research</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Students require permission of instructor to enroll in honors courses. The Application for Departmental Honors (https://deptsec.ku.edu/~engr/forms/form/50/) form must be completed by April 1 during the year of graduation in order to be recognized.

Master of Engineering in Aerospace Engineering

Aerospace Engineering
The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

Mission
KU Aerospace Engineering is an international leader in aerospace education and is committed to developing a global community for students, educators, and researchers by strategically aligning teaching, research, and service missions. A world-class graduate and undergraduate education focused on designing, simulating, building, testing, and flying aerospace vehicles is provided. The department invests in research infrastructure and chooses outstanding students who will
work with faculty and staff to conduct basic and applied research of relevance to aerospace vehicles and systems. The department supports the aerospace profession by educating the public, by maintaining the KU aerospace short-course program, and by advising policy-makers in government, industry, and disciplinary professional organizations.

Educational Objectives
The Aerospace Engineering graduate program objective is that our graduates contribute to the aerospace profession, related fields, and other disciplines through skilled professional practice in industry, government, and/or academia. Within a few years after graduation, we expect that:

1. Graduates are meaningfully employed or continuing graduate study in aerospace or other high technology fields, with the majority retained in aerospace or closely related engineering
2. Graduates have a positive professional career path including promotions, leadership, and/or continued education
3. Graduates recognize the value of their educational preparation for their current and future professional endeavors

Educational Outcomes
The Master of Engineering program in Aerospace Engineering (MEAE) is a program that emphasizes systems design and management skills and procedures. Our program is designed to achieve our objectives by establishing measurable learning outcomes which graduates of the program must demonstrate:

1. The ability to effectively communicate advanced aerospace engineering and management concepts in writing and orally at a professional level.
2. The ability to acquire new information to learn new concepts, build new skills, and engage in lifelong learning.

Graduate Admission to the Department of Aerospace Engineering

Application Requirements
In order for applications to be considered complete, the following materials must be submitted online with the application by the posted deadline:

1. Transcripts from all degree-granting institutions: for processing purposes, you may attach scanned versions of official transcripts to your application, as well as a copy of your degree certificate and/or diploma if the degree has been earned outside the US. A printout from a student portal is NOT considered an official copy.
   a. Transcripts that are in a language other than English must be accompanied with English translations.
   b. NOTE: Documents uploaded with your application are not considered official. KU does not consider transcripts that come from applicants or that have been in the applicant’s possession as official.
2. Three letters of recommendation. Letters must be on letterhead. Recommenders will receive instructions on submission at the time the application is submitted.
3. Resume or CV
4. Official GRE score report
5. Statement of Objectives
6. Official TOEFL, IELTS, or PTE score report (International students only)
7. Statement of Financial Resources (International students only)

* Please note: All application materials must be received before any kind of decision is made. Documentation sent in addition to that requested above is not required and may be destroyed. Do not send paper documents unless requested.

Admissions Deadline
Our department priority deadlines for admission are:

Fall Admission: December 1 (all applicants)
Spring & Summer Admission: September 15 (all applicants)

For full consideration for fellowships, scholarships and research/teaching assistantships, applications should be received by December 1 (for fall admissions). Application materials should indicate the interest in financial assistance or research/teaching assistantships.

Application Fees
Domestic: $65
International: $85

Document Specifications

Letters of Recommendation
The letter of recommendation form should be completed and sent with a signed document from your chosen references. Recommenders will receive instructions on submission at the time the application is submitted.

Statement of Financial Resources
As a part of the application process, all international students must submit credible evidence of financial support for the first year of study (http://iss.ku.edu/cost-sheets/). Financial documents must be less than 6 months old, indicating the type and amount of currency in US dollars. If the bank account is not in the applicant’s name, please attach a statement signed by the account holder indicating the relationship to the student for whom the support will be provided. There is no form for the Statement of Financial Resources, please send only the form(s) of documentation listed below.

Acceptable evidence includes:
- Bank statement from checking, savings, stock holdings and/or certificate of deposit.
- Bank letter on letterhead indicating date account opened, average balance and current balance.
- Scholarship or sponsorship letter verifying amount, source and dates of award.

Admissions Standards
Students who wish to apply for admission to the Aerospace Engineering graduate program must have, as a minimum, a BSAE degree or a BS degree in a closely-related field from a university or college with a program equivalent to the KU BSAE program. Students applying with either a BS degree from an engineering program that is not equivalent to the KU BSAE program, or a BS degree from a non-aerospace engineering program may have to make-up certain undergraduate AE courses at the discretion of the department graduate advisor. Such students will
be admitted provisionally until a plan of study for make-up courses is completed.

Regular Admission
Master's program regular admission requires an undergraduate GPA of at least a 3.0.

Doctoral program regular admission requires an undergraduate GPA of at least 3.0 and a GPA of at least 3.5 for courses taken as part of a master's program.

In exceptional cases, applicants with a GPA between 2.75-2.99 may be granted admission. Such students would be admitted as Aerospace Engineering Masters of Engineering students. If approved by the student's graduate advisor and the departmental graduate advisor, the student may change to an alternate Aerospace Engineering degree program after successful completion of the first semester and receiving a minimum 3.0 GPA.

GRE Requirements
Applicants must have a minimum of 50% on the Verbal and Analytical sections of the GRE and 85% on the Quantitative section. Applicants with lower scores, but otherwise exceptional record, will be considered for provisional admission.

English Proficiency Requirement
International students and students who indicated English as a second language, are required to show proof of English proficiency for admission purposes and must check-in at the Applied English Center (https://aec.ku.edu/) (AEC) upon arrival on campus for orientation. This process serves to confirm each student's level of English proficiency and determine whether English courses will be included as a requirement of the student’s academic program.

Refer to link (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/) for university policy.

Funding
Scholarships/Fellowships - The Aerospace Engineering department nominates applicants for University and School of Engineering scholarships and fellowships based on academic merit and other selection criteria.

Graduate Teaching Assistantships (GTAs) - Teaching Assistantships are available and are awarded competitively based on academic qualifications through the department or school.

Graduate Research Assistantships (GRAs) - Students work with their potential academic advisor/mentor to obtain a funded position on a research project.

*Important note: acceptance into the graduate program DOES NOT guarantee financial aid. To be considered for financial aid, applications must be received by the priority deadline.

A variety of scholarships, fellowships, and assistantships are available to graduate students through the School of Engineering and KU. Learn more at https://engr.ku.edu/graduate-scholarships (https://engr.ku.edu/graduate-scholarships/)

Visit Us
The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in mid-October and mid-March. Eligible admitted students are invited to participate in Campus Visit Days in late February (prior to the fall semester of your intended matriculation). These organized campus visit opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information
Please contact the AE Graduate Program Coordinator at aerohawk@ku.edu or (785) 864-2960, to schedule a visit or with questions about the application process.

The University of Kansas
AE Graduate Program
2120 Learned Hall
1530 W. 15th Street
Lawrence, Kansas, 66045

The Master of Engineering (ME) program in Aerospace Engineering (MEAE) is a program which emphasizes systems design and management skills and procedures. The MEAE program requires a total of 30 credit hours of graduate course work.

M.E. Degree Requirements
The Master of Engineering program in Aerospace Engineering (MEAE) is a program that emphasizes systems design and management skills and procedures. The MEAE program requires a total of 30 credit hours of graduate course work.

General Description
The minimum course requirements for the M.E. degree are:

- At least 30 credit hours of graduate-level technical electives; which shall include either 3 or more credit hours in aerospace design or at least 3 and up to 6 semester hours of approved management courses.
- Students must take at least one semester of AE 690, Professional Development for Graduate Students.
- No more than two courses below the 700 level may be used to satisfy degree requirements, in addition to the required AE 690 course. All AE courses other than AE 690 must be 700 level and above.

Master of Engineering in Aerospace Engineering
Plan of Study
Before the end of the first semester of graduate study, the student must complete an online Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/). The Plan of Study includes the proposed sequence of courses through the semester of graduation as well as the intended graduation semester.

The Plan of Study shall indicate for each course which requirement is being satisfied. Unique situations can be accommodated with the combined approval of the AE department graduate advisor and the student’s major advisor.

If a student enters the ME program without an equivalent B.S. in Aerospace Engineering the department graduate advisor may require the student to make up certain undergraduate courses in AE to achieve B.S. equivalence. Such make-up courses will appear on the transcript and included in the GPA, but do not count toward hours needed to complete the ME degree.

Completion of MEAE
The MEAE degree does not require a full committee, only a graduate advisor. All plan of study changes are approved by the student’s graduate advisor and the department graduate advisor.

Upon completion of all coursework, the student’s plan of study must meet final approval and the student must complete the ME Completion Form and submit it to the AE graduate program manager.

Master of Science in Aerospace Engineering

Aerospace Engineering

The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

Mission
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- Graduates have a positive professional career path including promotions, leadership, and/or continued education
- Graduates recognize the value of their educational preparation for their current and future professional endeavors

Educational Outcomes
The Master of Science program in Aerospace Engineering (MSAE) is a program in which students conduct original work related to Aerospace Engineering. Our program is designed to achieve our objectives by establishing measurable learning outcomes which graduates of the program must demonstrate:

1. The ability to apply fundamental physics, mathematics, AE principles, and underlying technologies to solve realistic problems
2. The ability to effectively communicate advanced AE concepts in writing and orally at a professional level
3. The ability to effectively communicate advanced aerospace engineering and management concepts in writing and orally at a professional level
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The University of Kansas
AE Graduate Program
2120 Learned Hall
1530 W. 15th Street
Lawrence, Kansas, 66045

M.S. Degree Requirements
The Master of Science (M.S.) program in Aerospace Engineering (AE) has 2 options.

- The Thesis Option requires a minimum of 30 credit hours of graduate work. The course work includes 3 hours of math and 6 hours earned in the satisfactory completion of a thesis.
- The Project Option requires a minimum of 30 hours of graduate work. The course work includes 3 hours of math, 24 hours of other courses, and at least 3 hours in the satisfactory completion of a project (AE 895, M.S. Thesis or Project).

Graduate mathematics courses are considered those taken at the 600 level and higher. Master’s students may choose any 1 mathematics course (up to 3 hours) at level 500 and higher. AE 712, Techniques of Engineering Evaluation, is the only mathematics-intensive engineering course that will help fulfill the graduate mathematics requirement.

Students must take at least one semester of AE 690, Professional Development for Graduate Students.

No more than two courses below the 700 level may be used to satisfy degree requirements, in addition to the required AE 690 course. All AE courses other than AE 690 must be 700 level and above.

The candidate must pass a final oral examination in which the thesis or research project (results of the independent investigation) is defended and the candidate demonstrates a working knowledge in aerospace engineering.

Thesis or Project Committee
As part of the Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) a student is required to form a thesis or project committee with a minimum of three Graduate Faculty, a minimum of two must be AE faculty members. Additional committee members may be selected by the student from either AE or other School of Engineering faculty members. The chairman of the committee must be an AE faculty member.

Plan of Study
Before the end of the first semester of graduate study the student must complete an online Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) which includes the following information:

1. Three committee members. As a general rule, these committee members will be drawn from the AE faculty but exceptions may be approved.
2. Proposed area of research
3. Proposed sequence of courses through the semester of graduation.
4. Proposed semester of graduation.

The Plan of Study shall indicate for each course which requirement is being satisfied. Unique situations can be accommodated with the combined approval of the AE department graduate advisor and the student’s major advisor.

Graduate Certificate in Computational Fluid Dynamics
This certificate will provide knowledge and education in the area of computational fluid dynamics (CFD). Completing this certificate will enable the student to use CFD tools effectively in the design process. The certificate requires 12 credits of coursework, and some of the courses may be available online. Courses offered online will consist of recorded lectures delivered using streaming media technology as well as teacher-student interaction via chat room, e-mail, and phone conversations.

The program will be most appropriate for those individuals with a bachelor's degree in a scientific and engineering discipline, who are pursuing a professional career, and who already have a strong base of engineering skill, including an understanding of fluid mechanics or aerodynamics. Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University's policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

In addition, applicants must have earned a previous degree in Aerospace Engineering or a closely related field and must demonstrate a GPA of at least a 3.0 (on a 4.0 scale). Candidates may be considered for admission by the Computational Fluid Dynamics supervisory committee if they do not meet all of these requirements, but otherwise show clear potential. However, all students must meet the university’s minimum requirements for admission to graduate study.

Admission into the certificate program will not guarantee admission into the master’s or doctoral programs. If a student who earns a certificate wishes to obtain admission into the master’s or doctoral programs, the student will need to apply for admission and gain acceptance by meeting the admission requirements as established by KUAE and the University admissions policies.

Application Requirements
In order for applications to be considered complete, the following materials must be submitted online with the application by the posted deadline:
Aerospace Engineering

Doctor of Engineering in Aerospace Engineering

1. One copy of an official transcript from each post-secondary institution should be uploaded with the application. (If admitted an official transcript will be required)
2. Resume or CV
3. Official scores from an English proficiency standardized test (e.g. TOEFL, IELTS, or PTE), sent by the testing agency to the University of Kansas. Official scores must be less than two years old. (Only for non-native English speakers)
4. Statement of Financial Resources may be required for International students

* Please note: All application materials must be received before any decision is made. Do not send paper documents unless requested.

Admission into the certificate program will not guarantee admission into the masters or doctoral programs. If a student who receives a certificate wishes to obtain admission into the masters or doctoral programs, the student will need to apply for admission and gain acceptance by meeting the admission requirements of KUAEE and KU graduate programs.

Certificate Requirements
To earn the certificate, students must complete one mandatory course and three elective courses.

One Mandatory Course (3 credits)
AE 746 - Computational Fluid Dynamics and Heat Transfer (Offered every Fall)

Three Elective Courses (9 credits) from:
AE 743 - Compressible Aerodynamics (Offered every Spring)
AE 744 - Introduction to Turbulent Flow (Offered every other Spring in even years)
AE 846 - Advanced Computational Fluid Dynamics (Offered every other Spring in odd years)
EECS 639 - Introduction to Scientific Computing (Offered every Fall)
EECS 739 - Parallel Scientific Computing (Offered every Spring)

Courses offered online will be assessed in the same way as regular graduate courses. Home work, exams, and projects will be used as assessing tools. The completion requirements of the graduate certificate in Computational Fluid Dynamics include:

a. Students must have a GPA of 3.0 or better in the required courses
b. Grades of C- and below do not count toward fulfilling requirements and cannot be counted toward certificate completion
c. No credits may be transferred from another institution for this certificate

Mission
KU Aerospace Engineering is an international leader in aerospace education and is committed to developing a global community of choice for students, educators, and researchers by strategically aligning teaching, research, and service missions. A world-class graduate and undergraduate education focused on designing, simulating, building, testing, and flying aerospace vehicles is provided. The department invests in research infrastructure and chooses outstanding students, faculty, and staff to conduct basic and applied research of relevance to aerospace vehicles and systems. The department supports the aerospace profession by educating the public, by maintaining the KU aerospace short-course program, and by advising policy-makers in government, industry, and disciplinary professional organizations.

Educational Objectives
The Aerospace Engineering graduate program objective is that our graduates contribute to the aerospace profession, related fields, and other disciplines through skilled professional practice in industry, government, and/or academia. Within a few years after graduation, we expect that:

- Graduates are meaningfully employed or continuing graduate study in aerospace or other high technology fields, with the majority retained in aerospace or closely related engineering
- Graduates have a positive professional career path including promotions, leadership, and/or continued education
- Graduates recognize the value of their educational preparation for their current and future professional endeavors

Educational Outcomes
The Doctor of Engineering program in Aerospace Engineering (DEAE) emphasizes system design and management skills. The program also requires students to successfully demonstrate their abilities in a broad spectrum of aerospace technology, mathematics, and original research.

Our program is designed to achieve our objectives by establishing measurable learning outcomes which graduates of the program must demonstrate:

1. The ability to effectively communicate advanced aerospace engineering and management concepts in writing and orally at a professional level
2. The ability to acquire new information, learn new concepts, build new skills, and engage in lifelong learning

Graduate Admission to the Department of Aerospace Engineering

Application Requirements
In order for applications to be considered complete, the following materials must be submitted online with the application by the posted deadline:

1. Transcripts from all degree-granting institutions: for processing purposes, you may attach scanned versions of official transcripts to your application, as well as a copy of your degree certificate and/or diploma if the degree has been earned outside the US. A printout from a student portal is NOT considered an official copy.
a. Transcripts that are in a language other than English must be accompanied with English translations.

b. **NOTE:** Documents uploaded with your application are not considered official. KU does not consider transcripts that come from applicants or that have been in the applicant's possession as official.

2. Three letters of recommendation. Letters must be on letterhead. Recommenders will receive instructions on submission at the time the application is submitted.

3. Resume or CV

4. Official GRE score report

5. Statement of Objectives

6. Official TOEFL, IELTS, or PTE score report (International students only)

7. Statement of Financial Resources (International students only)

* Please note: All application materials must be received before any kind of decision is made. Documentation sent in addition to that requested above is not required and may be destroyed. Do not send paper documents unless requested.

### Admissions Deadline

Our department priority deadlines for admission are:

- **Fall Admission:** December 1 (all applicants)
- **Spring & Summer Admission:** September 15 (all applicants)

For full consideration for fellowships, scholarships and research/teaching assistantships, applications should be received by December 1 (for fall admissions). Application materials should indicate the interest in financial assistance or research/teaching assistantships.

### Application Fees

Domestic: $65
International: $85

### Document Specifications

#### Letters of Recommendation

The letter of recommendation form should be completed and sent with a signed document from your chosen references. Recommenders will receive instructions on submission at the time the application is submitted.

#### Statement of Financial Resources

As a part of the application process, all international students must submit credible evidence of financial support for the first year of study (http://iss.ku.edu/cost-sheets/). Financial documents must be less than 6 months old, indicating the type and amount of currency in US dollars. If the bank account is not in the applicant's name, please attach a statement signed by the account holder indicating the relationship to the student for whom the support will be provided. There is no form for the Statement of Financial Resources, please send only the form(s) of documentation listed below.

**Acceptable evidence includes:**

- Bank statement from checking, savings, stock holdings and/or certificate of deposit.
- Bank letter on letterhead indicating date account opened, average balance and current balance.

- Scholarship or sponsorship letter verifying amount, source and dates of award.

### Admissions Standards

Students who wish to apply for admission to the Aerospace Engineering graduate program must have, as a minimum, a BSAE degree or a BS degree in a closely-related field from a university or college with a program equivalent to the KU BSAE program. Students applying with either a BS degree from an engineering program that is not equivalent to the KU BSAE program, or a BS degree from a non-aerospace engineering program may have to make-up certain undergraduate AE courses at the discretion of the department graduate advisor. Such students will be admitted provisionally until a plan of study for make-up courses is completed.

#### Regular Admission

Master's program regular admission requires an undergraduate GPA of at least a 3.0.

Doctoral program regular admission requires an undergraduate GPA of at least 3.0 and a GPA of at least 3.5 for courses taken as part of a master's program.

In exceptional cases, applicants with a GPA between 2.75-2.99 may be granted admission. Such students would be admitted as Aerospace Engineering Masters of Engineering students. If approved by the student's graduate advisor and the departmental graduate advisor, the student may change to an alternate Aerospace Engineering degree program after successful completion of the first semester and receiving a minimum 3.0 GPA.

### GRE Requirements

Applicants must have a minimum of 50% on the Verbal and Analytical sections of the GRE and 85% on the Quantitative section. Applicants with lower scores, but otherwise exceptional record, will be considered for provisional admission.

### English Proficiency Requirement

International students and students who indicated English as a second language, are required to show proof of English proficiency for admission purposes and must check-in at the Applied English Center (https://aec.ku.edu/) (AEC) upon arrival on campus for orientation. This process serves to confirm each student's level of English proficiency and determine whether English courses will be included as a requirement of the student's academic program.

Refer to link (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/) for university policy.

### Funding

Scholarships/Fellowships - The Aerospace Engineering department nominates applicants for University and School of Engineering scholarships and fellowships based on academic merit and other selection criteria.

Graduate Teaching Assistantships (GTAs) - Teaching Assistantships are available and are awarded competitively based on academic qualifications through the department or school.
Graduate Research Assistantships (GRAs) - Students work with their potential academic advisor/mentor to obtain a funded position on a research project.

*Important note: acceptance into the graduate program DOES NOT guarantee financial aid. To be considered for financial aid, applications must be received by the priority deadline.*

A variety of scholarships, fellowships, and assistantships are available to graduate students through the School of Engineering and KU. Learn more at https://engr.ku.edu/graduate-scholarships (https://engr.ku.edu/graduate-scholarships/)

Visit Us

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in mid-October and mid-March. Eligible admitted students are invited to participate in Campus Visit Days in late February (prior to the fall semester of your intended matriculation). These organized campus visit opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

Please contact the AE Graduate Program Coordinator at aerohawk@ku.edu or (785) 864-2960, to schedule a visit or with questions about the application process.

The University of Kansas
AE Graduate Program
2120 Learned Hall
1530 W. 15th Street
Lawrence, Kansas, 66045

Doctor of Engineering in Aerospace Engineering

The Doctor of Engineering emphasizes systems design and management skills, often in applied rather than theoretical research and requires 66 credit hours beyond the B.S degree. These 66 hours must be distributed as follows:

- Core courses of at least 9 credit hours of graduate mathematics beyond the B.S. are required. The 9 credit hours must include a minimum of 6 credit hours of graduate-level courses from the Mathematics Department.
- Graduate mathematics courses are those taken that are 600 level and higher, plus MATH 590, Linear Algebra.
- Only AE 712, Techniques of Engineering Evaluation, is a mathematics-intensive engineering course and the only non-MATH course that meets the Core requirement.
- Depth and breadth technical courses comprising at least 21 credit hours of technical courses (beyond 600 level) which must be distributed in the areas of:
  - structures and materials
  - aerodynamics
  - design
  - dynamics and controls
  - propulsion
  - astronautics
- Depth management courses of at least 12 credit hours (beyond 600 level) must be taken in Engineering Management courses
- At least 24 credit hours of DE Project

Students must also take at least .5 hours of AE 690, Professional Development for Graduate Students.

No more than two courses below the 700 level may be used to satisfy degree requirements, in addition to the required AE 690 course. All AE courses other than AE 690 must be 700 level and above.

Credit hours earned completing a master’s degree can satisfy a portion of these requirements when appropriate. Unique situations can be accommodated with the approval of the graduate advisor and the major professor.

It is required that the doctoral qualifying exam (DQE) be taken within the first year for students with a master’s degree, and within the second year for students without a master’s degree. In order to be eligible for the DQE, students must have a minimum KU cumulative GPA of 3.5. If the student fails to meet the 3.5 GPA requirement, they will work with their major advisor to develop an alternate plan of study.

The DQE tests the breadth of knowledge and determines the student’s ability to formulate mathematical representations of real physical situations. The examination covers mathematics and 2 of these 5 areas:

- Aerodynamics
- Astronautics
- Dynamics and controls
- Propulsion
- Structures and materials

A student is allowed only 2 attempts to pass this examination. If a student has completed AE 712 with a grade of B or higher, the mathematics section of the qualifying exam is waived.

The aspirant forms a project committee and completes a Plan of Study after the first semester and before the end of the second semester. The project committee must have at least 5 members, including 3 tenured or tenure-track faculty from aerospace engineering and at least 1 member from engineering management. The committee approves the aspirant’s program and administers the comprehensive examination and the formal oral defense and project.

When the aspirant has completed most of the course work and satisfied the research skills, responsible scholarship and residency requirements, they must take the comprehensive examination. The comprehensive
Aerospace Engineering

The aerospace engineering discipline involves the design, production, operation, and support of aircraft and spacecraft. Aerospace engineers solve problems, design aircraft and spacecraft, conduct research, and improve processes for the aerospace industry.

Doctor of Philosophy in Aerospace Engineering

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Mission

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Educational Objectives

The Aerospace Engineering graduate program objective is that our graduates contribute to the aerospace profession, related fields, and other disciplines through skilled professional practice in industry, government, and/or academia. Within a few years after graduation, we expect that:

- Graduates are meaningfully employed or continuing graduate study in aerospace or other high technology fields, with the majority retained in aerospace or closely related engineering
- Graduates have a positive professional career path including promotions, leadership, and/or continued education
- Graduates recognize the value of their educational preparation for their current and future professional endeavors

Educational Outcomes

The Doctor of Philosophy program in Aerospace Engineering (PhDAE) is a traditional program that requires students to conduct independent, publishable, and impactful research that makes a significant contribution to the field of Aerospace Engineering. Our program is designed to achieve our objectives by establishing measurable learning outcomes which graduates of the program must demonstrate:

1. A broad knowledge in the field of Aerospace Engineering
2. In-depth knowledge in (at least) one area of expertise in Aerospace Engineering.
3. Document and communicate a compelling, focused, and logical technical argument in writing and orally at a professional level

Application Requirements

In order for applications to be considered complete, the following materials must be submitted online with the application by the posted deadline:

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Regular Admission

Master’s program regular admission requires an undergraduate GPA of at least 3.0.

Doctoral program regular admission requires an undergraduate GPA of at least 3.0 and a GPA of at least 3.5 for courses taken as part of a master's program.

In exceptional cases, applicants with a GPA between 2.75-2.99 may be granted admission. Such students would be admitted as Aerospace Engineering Masters of Engineering students. If approved by the student's graduate advisor and the departmental graduate advisor, the student may change to an alternate Aerospace Engineering degree program after successful completion of the first semester and receiving a minimum 3.0 GPA.

GRE Requirements

Applicants must have a minimum of 50% on the Verbal and Analytical sections of the GRE and 85% on the Quantitative section. Applicants with lower scores, but otherwise exceptional record, will be considered for provisional admission.

English Proficiency Requirement

International students and students who indicated English as a second language, are required to show proof of English proficiency for admission purposes and must check-in at the Applied English Center (https://aec.ku.edu/) (AEC) upon arrival on campus for orientation. This process serves to confirm each student's level of English proficiency and determine whether English courses will be included as a requirement of the student's academic program.

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Application Fees

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International: $85

Document Specifications

Letters of Recommendation

The letter of recommendation form should be completed and sent with a signed document from your chosen references. Recommenders will receive instructions on submission at the time the application is submitted.

Statement of Financial Resources

As a part of the application process, all international students must submit credible evidence of financial support for the first year of study (http://iss.ku.edu/cost-sheets/). Financial documents must be less than 6 months old, indicating the type and amount of currency in US dollars. If the bank account is not in the applicant's name, please attach a statement signed by the account holder indicating the relationship to the student for whom the support will be provided. There is no form for the Statement of Financial Resources, please send only the form(s) of documentation listed below.

Acceptable evidence includes:

- Bank statement from checking, savings, stock holdings and/or certificate of deposit.
- Bank letter on letterhead indicating date account opened, average balance and current balance.
- Scholarship or sponsorship letter verifying amount, source and dates of award.

Students need to complete financial resources for international students which includes:

- Bank statement from checking, savings, stock holdings, and/or certificate of deposit.
- Bank letter on letterhead indicating date account opened, average balance and current balance.
- Scholarship or sponsorship letter verifying amount, source and dates of award.

Financial Resources, please send only the form(s) of documentation listed whom the support will be provided. There is no form for the Statement of Financial Resources
A variety of scholarships, fellowships, and assistantships are available to graduate students through the School of Engineering and KU. Learn more at https://engr.ku.edu/graduate-scholarships (/https://engr.ku.edu/graduate-scholarships/)

**Visit Us**

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in mid-October and mid-March. Eligible admitted students are invited to participate in Campus Visit Days in late February (prior to the fall semester of your intended matriculation). These organized campus visit opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

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**Contact Information**

Please contact the AE Graduate Program Coordinator at aerohawk@ku.edu or (785) 864-2960, to schedule a visit or with questions about the application process.

The University of Kansas
AE Graduate Program
2120 Learned Hall
1530 W. 15th Street
Lawrence, Kansas, 66045

The Doctor of Philosophy program in Aerospace Engineering (PhDAE) is a traditional program that requires students to successfully demonstrate their abilities in a broad spectrum of aerospace technology, mathematics and original research. To earn the PhD degree students must:

- Complete PhD course requirements in accordance with an approved plan of study
- Pass the Doctoral Qualifying Exam (DQE)
- Complete the Research Skills and Responsible Scholarship (RS$^2$) requirement
- Satisfy the residency requirements
- Pass a comprehensive oral examination
- Prepare and defend a PhD dissertation which must contain an original contribution to the field by the candidate.

**Ph.D. Degree Requirements**

The Ph.D. program requires 60 credit hours beyond the B.S. These 60 credit hours consist of 36 credit hours of course work and at least 24 credit hours of dissertation.

- Core courses of at least 9 credit hours of graduate mathematics beyond the B.S. are required. The 9 credit hours must include a minimum of 6 credit hours of graduate-level courses from the Mathematics Department.
  - Graduate mathematics courses are MATH 590 or any other math course 600-level or above.
  - Only AE 712, Techniques of Engineering Evaluation, is considered a mathematics-intensive engineering course that meets the Core requirement.
- Breadth courses consist of 12 credit hours distributed outside the area of specialization in aerodynamics, structures and materials, dynamics and controls, design, propulsion, and astronautics.
- Depth courses consist of 15 credit hours of technical courses (600-level and above) in the area of specialization.

Credit hours earned in completing a master's degree can be used to satisfy a portion of these requirements when appropriate. Unique situations can be accommodated with the approval of the graduate advisor and the candidate’s major professor.

It is required that the doctoral qualifying exam (DQE) be taken within the first year for students with a master's degree, and within the second year for students without a master's degree. In order to be eligible for the DQE, students must have a minimum KU cumulative GPA of 3.5. If the student fails to meet the 3.5 GPA requirement, they will work with their major advisor to develop an alternate plan of study.

The DQE tests the breadth of knowledge and determines the student's ability to formulate mathematical representations of real physical situations. The examination covers mathematics and 2 of these 5 areas:

- Aerodynamics
- Astronautics
- Dynamics and controls
- Propulsion
- Structures and materials

A student is allowed only 2 attempts to pass this examination. If a student has completed AE 712 with a grade of B or higher, the mathematics section of the qualifying exam is waived.

The aspirant forms a dissertation committee and completes a Plan of Study after the first semester and before the end of the second semester. The dissertation committee must have 5 members, including 3 tenured or tenure-track faculty from aerospace engineering and at least 1 member from a department other than aerospace engineering. The committee approves the aspirant’s program and administers the comprehensive examination and the formal oral defense and dissertation.

When the aspirant has completed most of the course work and satisfied the research skills, responsible scholarship and residency requirements, they must take the comprehensive examination. The comprehensive exam cannot be taken until research skills, responsible scholarship, and residency requirements have been met.

- The research skill requirement provides the aspirant with a research skill distinct from, but strongly supportive of, the dissertation research.
Bioengineering Graduate Program

Bioengineering

The bioengineering program prepares students to become leading researchers, educators, and entrepreneurs. The program provides knowledge breadth in engineering and the biological sciences and knowledge depth in the student's area of research interest. The program offers the Master of Science and Doctor of Philosophy degrees in bioengineering and the M.D./Ph.D. combined degree in conjunction with the KU School of Medicine (http://medicine.kumc.edu/). Students have access to innovative research and educational facilities on KU's Lawrence and KU Medical Center campuses. The student selects from 6 tracks:

1. Bioimaging
2. Computational bioengineering
3. Biomaterials and tissue engineering
4. Biomechanics and neural engineering
5. Biomedical product design and development
6. Biomolecular engineering

The student, in consultation with his or her advisor and advisory committee, develops a Plan of Study and a research program to satisfy degree requirements.

The program's goals are:

1. To give students an in-depth understanding of mathematics, engineering principles, physics, chemistry, physiology, and modern biology.
2. To train students to apply basic sciences to biological problems using engineering principles.
3. To train students to do bioengineering research and solve problems related to the design and development of diagnostic and therapeutic technologies that improve human health.
4. To train students to apply bioengineering research to commercially viable technologies.

Bioengineering research projects typically focus on 1 of 2 broad categories:

1. The development of fundamental scientific knowledge.
2. The development and application of materials, devices, and systems with the goal of improving biological processes, systems, and health care.

Bioengineering students are often involved in measurements, analysis, modeling, computations, design, and development. The program prepares students for careers in industry, academia, health care settings, or government.

Financial Aid

Once admitted, students become eligible for financial aid. Graduate students in the bioengineering program are often supported through research assistantships, teaching assistantships, or fellowships (e.g., the Madison and Lila Self Fellowship). Research assistantships are arranged by the student and faculty advisor with assistance from the Bioengineering Director if needed. Teaching assistantships are assigned by the Bioengineering Director. Highly qualified applicants are considered for additional support and fellowships. For more information about external
and other KU funding options, please visit https://graduate.ku.edu/funding (https://graduate.ku.edu/funding/).

Courses

BIOE 800. Bioengineering Colloquium. 0.5-1 Credits.
A colloquium series featuring speakers from industry, government, other universities, research centers and research organizations of the university campus presenting talks on various topics related to bioengineering.

BIOE 801. Responsible Conduct of Research in Engineering. 1 Credit.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in bioengineering. Topics include the nature of ethics, the roles of the scientist as a reviewer, entrepreneur, employer and teacher, research ethics in the laboratory, social responsibility and research ethics regulation. (Same as ME 801.) Prerequisite: Permission of instructor.

BIOE 802. Bioengineering Internship. 1-6 Credits.
An approved bioengineering industrial or clinical internship. The student is supervised by a preceptor at the internship site. Biweekly reports and a final report detailing work performed are filed with the course instructor. Prerequisite: Permission of instructor.

BIOE 860. Advanced Bioengineering Problems. 1-3 Credits.
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop students capability for independent research or application of engineering science and technology. Maximum credit toward any degree is three hours unless waived in writing by the academic director. Prerequisite: Consent of instructor.

BIOE 899. Independent Investigation. 1-6 Credits.
An original and independent research or design investigation involving analytical, experimental and/or modeling methodology applied to solve a bioengineering problem as a part of the degree requirements for the Master of Science. Graded on a satisfactory progress/limited progress/no progress basis.

BIOE 999. Independent Investigation. 1-12 Credits.
An original and independent research or design investigation involving analytical, experimental and/or modeling methodology applied to solve a bioengineering problem as a part of the degree requirements for the Doctor of Philosophy. Graded on a satisfactory progress/limited progress/no progress basis.

Master of Engineering in Bioengineering

Bioengineering

The University of Kansas (KU) Master of Engineering in Bioengineering degree program is a coursework only master’s degree. It is very similar to the Master of Science in Bioengineering degree at the University of Kansas. The primary difference is the elimination of research, the thesis and the thesis defense. The thesis credit hours are replaced with the same credit hours of coursework.

This degree will prepare students to be more effective in their careers in medicine, private commercial firms, and with entrepreneurship in a start-up company. The coursework-only Master of Engineering in Bioengineering degree is an efficient way for baccalaureate graduates to get more in-depth background and credentials in bioengineering prior to seeking employment. The program is rigorous, and places high demands on the student who must demonstrate that they understand interdisciplinary concepts. The Master of Engineering in Bioengineering degree program provides knowledge breadth in engineering and the biological sciences, and knowledge depth in a particular focused area of coursework.

Applicants for the Master of Engineering in Bioengineering will have a baccalaureate degree in engineering, biological science, or a related field. Successful applicants will have strong academic credentials and demonstrated potential for advanced study by performance at the baccalaureate level. The completed Master of Engineering in Bioengineering is evidence of an ability to work as an engineer who is capable of advanced analysis and design. The holder of this degree will have completed significant course work to advance their knowledge and abilities in the area of bioengineering.

Master of Engineering students will choose an area of focus from the Bioengineering track list to determine their coursework requirements.

1. Bioimaging
2. Computational bioengineering
3. Biomaterials and tissue engineering
4. Biomechanics and neural engineering
5. Biomedical product design and development
6. Biomolecular engineering

The individual track requirements can be found on the Bioengineering website (http://bio.engr.ku.edu/). The student, in consultation with their academic advisor, develops a Plan of Study to satisfy the degree requirements.

Financial Aid

Once admitted, students become eligible for financial aid and are encouraged to file the FAFSA. Students pursuing the Master of Engineering in Bioengineering will not be considered for Graduate Assistantships within the Bioengineering Program and should plan to fund the ME degree through their own efforts or external funding.

Admission to the Bioengineering Graduate Program

All applicants are expected to have an undergraduate grade point average of 3.0 or higher on a 4.0 scale. The appropriate academic preparation includes both general and track prerequisites. General prerequisites include calculus I and II, differential equations, linear algebra, general physics I and II, chemistry, and biology. Track prerequisites depend on the student’s track of study. More complete details about academic preparation can be found on the program’s website (http://bio.engr.ku.edu/).

Applicants normally have a baccalaureate degree in an engineering discipline, physical sciences, the life sciences, or a closely related field. Depending on their preparation, students may be required to take additional courses that may or may not count toward the graduate degree. A student may be admitted to the Bioengineering Program without meeting all the prerequisites if approved by the Admissions Committee.

This student must plan to complete the prerequisites in addition to the graduate degree requirements and consultation with the program is required to determine which courses satisfy these requirements. Course credits from prerequisites generally do not apply toward the graduate degree and must be completed with a grade of B or higher.
Submit your graduate application online (https://graduate.ku.edu/ku-graduate-application/).

**Application Information & Deadlines**

A complete application package should be submitted by the following deadlines:

**Domestic Applicants:**
- Fall: July 1
- Spring: December 1
- Summer: April 15

**International Applicants:**
- Fall: May 15
- Spring: October 15
- Summer: March 1

**Application Materials Include:**

1. **Official Transcripts**

One official transcript from each degree granting institution that the student has attended is REQUIRED for admission. If courses from another university or junior college appear on the degree granting institution’s transcript, we do not need transcripts from the other university or junior college. A scanned copy of the official transcript IS acceptable but it MUST be an official copy. Printouts from student portals or websites will NOT be accepted. A final degree conferred transcript sent directly from the degree granting university will be required before the second semester of enrollment should the applicant be admitted and enroll in a program at KU.

2. **Letters of Recommendation**

Request 3 letters of recommendation from individuals who can speak to your academic preparedness. Include the correct e-mail addresses of your recommenders on your online application. An e-mail request with instructions on how to complete the required Recommendation Form and upload their letter to your application will be sent to these recommenders.

3. **A Statement of Your Academic Objectives**

Your statement is a very important part of your application. Please write a 1-2 page essay describing your academic and career objectives as they relate to bioengineering. It should indicate how and why you have decided to pursue graduate studies in your chosen field. **Please discuss the particular areas of focus within the track(s) you wish to study and why you feel KU specifically is a good fit for your particular interests and goals.** You may also include relevant information about your academic background, research experience, leadership skills, related work and/or volunteer experiences that you feel have prepared you for graduate study. This statement of objectives will be read and used by faculty in the track to evaluate your academic and leadership potential. Please make sure that it is of high quality and demonstrates your readiness for graduate level study and research at KU.

4. **Your Curriculum Vitae (CV) or Resume**

5. **English Proficiency Scores (if English is NOT your native language)**

TOEFL, iBT (or IELTS) Scores (sent to us directly from the testing agency).

- The institution code for the University of Kansas is 6871.
- The program/department code is 1603.
- The department code is 69 for iBT.

**NOTES:**

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2. Admission will NOT be granted if you do not meet the above standard of English Proficiency. Due to a change in policy, we are no longer able to issue an I-20 for these instances.

For more information regarding English Proficiency Requirements (http://graduate.ku.edu/english-proficiency-requirements/), see the graduate studies website.

6. **Proof of Financial Support (International Applicants ONLY)**

Obtain the proper Financial Documentation. Scan the document and save it as a pdf file. **KEEP THE PAPER COPIES. Be prepared to send the paper copies to the program office at the address below if requested!** Although the financial statement is not required for making admission decisions, the U.S. Department of State mandates that evidence of financial resources, such as an official bank statement, be provided in order to issue an I-20 and student visa. It should have the name of the student on the account, not the parent’s name or any other name. See the International Support Services (https://iss.ku.edu/newly-admitted-apply/#prooffinances) website for more information.

**Contact Information**

Please contact Graduate Program Coordinator at bioe@ku.edu or (785) 864-5258 with questions about the Bioengineering application process.

The Master’s aspirant works with an advisor familiar with their selected track area to develop a formal plan of study. The tracks are focused in major research and educational themes within the Bioengineering Graduate Program; each track has a track director and affiliated faculty. The student selects from among track courses to construct a comprehensive educational program that takes (a) advantage of the student’s background, (b) builds and demonstrates academic skills, and (c) capitalizes on the strengths of the affiliated faculty. This approach follows a structure common to many of the top Bioengineering/Biomedical Engineering graduate programs nationally (Table 1).

Students select one of the tracks for their primary exposure to bioengineering concepts. All the tracks have the same required core courses (total 6 credit hours): C&PE 756 Introduction to Biomedical Engineering (3 credit hours), BIOE 800 Colloquium (2 credit hours total), and BIOE 801 Responsible Conduct of Research in Engineering (1 credit hour). The course C&PE 756 Introduction to Biomedical Engineering, permits them to delve into the subject area of their track, but also allows the student to sample the breadth of bioengineering topics across all of the tracks. BIOE 800 Colloquium provides some professional development as well as additional exposure to the breadth of applications in bioengineering. While BIOE 801 Responsible Conduct of Research
Bioengineering research projects typically focus on 1 of 2 broad categories:

1. The development of fundamental scientific knowledge.
2. The development and application of materials, devices, and systems with the goal of improving biological processes, systems, and health care.

Bioengineering students are often involved in measurements, analysis, modeling, computations, design, and development. The program prepares students for careers in industry, academia, health care settings, or government.

**Financial Aid**

Once admitted, students become eligible for financial aid. Graduate students in the bioengineering program are often supported through research assistantships, teaching assistantships, or fellowships (e.g., the Madison and Lila Self Fellowship). Research assistantships are arranged by the student and faculty advisor with assistance from the Bioengineering Director if needed. Teaching assistantships are assigned by the Bioengineering Director. Highly qualified applicants are considered for additional support and fellowships. For more information about external and other KU funding options, please visit [https://graduate.ku.edu/funding](https://graduate.ku.edu/funding).

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All applicants are expected to have an undergraduate grade point average of 3.0 or higher on a 4.0 scale. The appropriate academic preparation includes both general and track prerequisites. General prerequisites include calculus I and II, differential equations, linear algebra, general physics I and II, chemistry, and biology. Track prerequisites depend on the student’s track of study. More complete details about academic preparation can be found on the program’s website [http://bio.engr.ku.edu/](http://bio.engr.ku.edu/).

Applicants normally have a B.S. and/or an M.S. degree in an engineering discipline, physical sciences, the life sciences, or a closely related field. Depending on their preparation, students may be required to take additional courses that may or may not count toward the graduate degree.

A student may be admitted to the Bioengineering Program without meeting all the prerequisites if approved by the Admissions Committee. This student must plan to complete the prerequisites in addition to the graduate degree requirements and consultation with the program is required to determine which courses satisfy these requirements. Course credits from prerequisites generally do not apply toward the graduate degree and must be completed with a grade of B or higher.

A highly qualified applicant may apply for admission directly into the Ph.D. program after completing the B.S. degree. Generally, a student who does not have an undergraduate degree in an engineering discipline must complete the M.S. before entering the Ph.D. program. A strong applicant should have outstanding academic credentials, some formal research experience, research interests that fit one of the tracks of study, and a strong potential for advanced study.

Submit your graduate application online [https://graduate.ku.edu/ku-graduate-application/](https://graduate.ku.edu/ku-graduate-application/).

**Application Information & Deadlines**

In order to receive full consideration, a complete application package should be submitted by the following deadlines:

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NOTE: The School of Engineering uses standardized test scores as an additional evaluation tool, but no specific minimum score is required for consideration of an application for admission. We review the entire application package to determine the overall academic preparation and whether the applicant’s interests, background and preparation are a good fit for our program.

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Funding

Scholarships/Fellowships - The Bioengineering graduate admissions committee nominates applicants for University and School of Engineering scholarships and fellowships based on academic merit and other selection criteria, as specified by the fellowship selection committees.

Graduate Teaching Assistantships (GTAs) - Teaching Assistantships are available and are awarded competitively based on academic qualifications. You do not need a separate application to be considered.

Graduate Research Assistantships (GRAs) - Students work with their potential academic advisor/mentor to obtain a funded position on a research project at the time of matriculation or within the first year. It is NOT required for prospective students to have KU faculty pledge a GRA position prior to your admission.

Visit Us

The graduate program staff are happy to work with all prospective students in determining the fit between the student and the program. We feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open
within 7 years from initial enrollment in the program, but typically finish

Studies Director. Students are required to complete their masters degree

needed, with approval of the advisor, committee members, and Graduate

approve the Plan of Study. The Plan of Study can be modified later, if

The advisor, committee members, and graduate studies director must

completed online

Students should work with their research advisors to identify an

student should have identified a research advisor and thesis committee.

the second semester of graduate study. To complete a Plan of Study, a

Track Courses (18 hours) Students must complete the depth, breadth,

• Core Courses (6 hours)

Mathematics through differential equations and linear algebra (MATH

• Overall undergraduate Bachelor's Degree with a GPA: greater than

• Applicants for the Certificate in Biomedical Product Design should

requirements below for admission. All applicants must meet the

University of Kansas Graduate School and the additional requirements

requirements for the Biomedical Product Design & Development Track,

Certificate in Biomedical Product Design may also serve part-

The purpose of the certificate is to attract and serve regional professionals

because KU does not currently offer an undergraduate Bioengineering/

careers in private commercial firms or with entrepreneurship in a start-up

Certificate in Biomedical Product Design program are similar to the Bioengineering MS degree entrance

requirements for the Biomedical Product Design program are similar to the Bioengineering MS degree entrance

The application will include a resume and transcripts. The applications

will undergo administrative review to ensure the applicant meets the

The application will include a resume and transcripts. The applications

requirements, or

For applicants with degrees from non-USA institutions:

TOEFL – Scores commensurate with Graduate School

IELTS – Scores commensurate with Graduate School

Thesis and Final Examination

The M.S. student is expected to conduct original research, prepare a

written thesis detailing the results, and defend the thesis in a final oral

examination. The research generally is expected to be of sufficient

quality to permit publication in reputable scientific journals. The final oral

examination is scheduled when the advisory committee agrees that the

research is complete.

Graduate Certificate in Biomedical Product Design

The purpose of the certificate is to attract and serve regional professionals

whose focus is on working in industry and who are seeking additional

training in design and development of biomedical products. Also,

requirements below for admission.  Students who do not meet

requirements for admission. Students who do not meet

• General Coursework:

• Mathematics through differential equations and linear algebra (MATH

220 and MATH 290; or equivalents)

• One year of physics (through PHSX 212, or the equivalent)

• One course in general chemistry (CHEM 150 or 130, or the equivalent)

Contact Information

Please contact Graduate Program Coordinator at bioe@ku.edu or (785) 864-5258 to schedule a visit or with questions about the Bioengineering application process.

M.S. Degree Requirements

In addition to general rules and regulations, the student must meet the

program’s M.S. requirements. Requirements for the M.S. include course

work, a thesis, and a final oral examination.

In the first semester, the student selects a track of study, an advisor, and

an advisory committee. The advisory committee guides the student’s
development through the Plan of Study (https://gradplan. engr. ku. edu/
accounts/login/?next=/) in the chosen track, helps the student select a

topic for research leading to the thesis, and participates in the final

oral examination. Should the student's interests change, the advisory

committee membership may be changed accordingly, with the approval of

the program’s Graduate Studies Director.

The student’s advisory committee consists of a minimum of 3 graduate

faculty members and is chaired by the student’s advisor. A more detailed
description is available on the program's website (http://bio. engr. ku. edu/).

Course Requirements

The M.S. program requires a minimum of 30 credit hours* beyond the

B.S. to meet degree requirements.

• Core Courses (6 hours)

• Track Courses (18 hours) Students must complete the depth, breadth,

and elective courses required in the chosen track (see the program’s

website (http://bio. engr. ku. edu/) for track requirements).

• Research (6 hours)

*No more than 9 credits may be taken at the 500-600 level for this degree.

Plan of Study

Students are expected to complete a Plan of Study before beginning

the second semester of graduate study. To complete a Plan of Study, a

student should have identified a research advisor and thesis committee.

Students should work with their research advisors to identify an

appropriate list of courses that fulfill degree requirements and support the

student’s educational and research objectives. A Plan of Study can be

completed online (https://gradplan. engr. ku. edu/accounts/login/?next=/).

The advisor, committee members, and graduate studies director must

approve the Plan of Study. The Plan of Study can be modified later, if

needed, with approval of the advisor, committee members, and Graduate

Studies Director. Students are required to complete their masters degree

within 7 years from initial enrollment in the program, but typically finish

within 2-3 years. A timeline is available here (https://bioengr. ku. edu/
sites/bioengr/files/documents/Docs/forms%20and%20docs/Masters
%20Timeline.pdf).

overall undergraduate Bachelor's Degree with a GPA: greater than

3.00 (out of 4.0) from a post-secondary institution

Applicants for the Certificate in Biomedical Product Design should

have a baccalaureate degree in engineering, the biological sciences,

physical sciences, or a related field.

For applicants with degrees from non-USA institutions:

• TOEFL – Scores commensurate with Graduate School

requirements, or

• IELTS – Scores commensurate with Graduate School

requirements

In addition, the student must meet the general coursework

requirements below for admission. Students who do not meet

Biomedical Product Design & Development preparation requirements

at the time of application may be admitted with deficiencies.

• General Coursework:

• Mathematics through differential equations and linear algebra (MATH

220 and MATH 290; or equivalents)

• One year of physics (through PHSX 212, or the equivalent)

• One course in general chemistry (CHEM 150 or 130, or the equivalent)
• One course in molecular/cell/human biology (BIOL 100 or BIOL 150, or the equivalent)

• Biomedical Product Design & Development preparation courses:
  
  • Science of Materials: ME 306 (or equivalent) (3);
    or ME 765 Biomaterials (can be as part of the certificate program) (3).
  
  • Computer Programming: ME 208/EECS 138/CPE 121 (or equivalent) (3).
  
  • Engineering Design: ME 501, CPE 613, EECS 501 (or equivalent) (3).
  
  • One of the following three options:
    
    • Statics, Dynamics and Mechanics of Materials: ME 211, CE 201, ME 320, ME 311, CE 310 (or equiv.) or ME 633 (as part of grad program)
    
    • Circuits/Electronics Lab: EECS 316, EECS 318 or equiv. (3).
    
    • Fluids: ME 510, CPE 511, or equiv. (3) OR ME 756 (as part of grad program)

To receive the graduate Certificate in Biomedical Product Design, students must complete a minimum of 12 credit hours of coursework with the following requirements:

Required Course (3 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 760</td>
<td>Biomedical Product Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Core Course (3 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 696</td>
<td>Design for Manufacturability</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 560</td>
<td>Topics in Design: _____ (must be an approved biomedical project)</td>
<td>3</td>
</tr>
<tr>
<td>ADS 710</td>
<td>Advanced Human Factors in Interaction Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses (6 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any course not used to fulfill the core requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOE 802</td>
<td>Bioengineering Internship</td>
<td>3</td>
</tr>
<tr>
<td>ME 765</td>
<td>Biomaterials</td>
<td>3</td>
</tr>
<tr>
<td>ME 767</td>
<td>Molecular Biomimetics</td>
<td>3</td>
</tr>
<tr>
<td>ME 790</td>
<td>Special Topics: _____ (Bioadditive Manufacturing and/or Biomedical Microdevices)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 715</td>
<td>Topics in Chemical and Petroleum Engineering: _____ (Drug Delivery and/or Polymer Science)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 752</td>
<td>Tissue Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EECS 644</td>
<td>Introduction to Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 721</td>
<td>Antennas</td>
<td>3</td>
</tr>
<tr>
<td>EECS 728</td>
<td>Fiber-optic Measurement and Sensors</td>
<td>3</td>
</tr>
<tr>
<td>EECS 738</td>
<td>Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>EECS 741</td>
<td>Computer Vision</td>
<td>3</td>
</tr>
</tbody>
</table>

or other Design course(s) as approved by the Bioengineering Program Director

Doctor of Philosophy in Bioengineering

Bioengineering Program

The bioengineering program prepares students to become leading researchers, educators, and entrepreneurs. The program provides knowledge breadth in engineering and the biological sciences and knowledge depth in the student’s area of research interest. The program offers the Master of Science and Doctor of Philosophy degrees in bioengineering and the M.D./Ph.D. combined degree in conjunction with the KU School of Medicine (http://medicine.kumc.edu). Students have access to innovative research and educational facilities on KU’s Lawrence and KU Medical Center campuses. The student selects from 6 tracks:

1. Bioimaging
2. Computational Bioengineering
3. Biomaterials & Tissue Engineering
4. Biomechanics & Neural Engineering
5. Biomedical Product Design & Development
6. Biomolecular Engineering

The student, in consultation with his or her advisor and advisory committee, develops a Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) and a research program to satisfy degree requirements.

The program’s goals are:

1. To give students an in-depth understanding of mathematics, engineering principles, physics, chemistry, physiology, and modern biology;
2. To train students to apply basic sciences to biological problems using engineering principles;
3. To train students to do bioengineering research and solve problems related to the design and development of diagnostic and therapeutic technologies that improve human health; and
4. To train students to apply bioengineering research to commercially viable technologies.

Bioengineering research projects typically focus on 1 of 2 broad categories:

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2. The development and application of materials, devices, and systems with the goal of improving biological processes, systems, and health care.

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Scholarships/Fellowships - The Bioengineering graduate admissions committee nominates applicants for University and School of Engineering scholarships and fellowships based on academic merit and other selection criteria, as specified by the fellowship selection committees.

Graduate Teaching Assistantships (GTAs) - Teaching Assistantships are available and are awarded competitively based on academic qualifications. You do not need a separate application to be considered.

Graduate Research Assistantships (GRAs) - Students work with their potential academic advisor/mentor to obtain a funded position on a research project at the time of matriculation or within the first year. It is NOT required for prospective students to have KU faculty pledge a GRA position prior to your admission.

Visit Us

The graduate program staff are happy to work with all prospective students in determining the fit between the student and the program. We feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in October or mid-March. Eligible admitted students may be invited to participate in Campus Visit Days in February (prior to the fall semester of your intended matriculation). These organized campus visit opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

Please contact the Graduate Program Coordinator at bioe@ku.edu or (785) 864-5258 to schedule a visit or with questions about the bioengineering application process.

Ph.D. Degree Requirements

In addition to general rules and regulations, the student must meet the program’s Ph.D. requirements. Requirements for the Ph.D. include coursework, a doctoral qualifying examination, research skills and residence requirement, a comprehensive examination, a dissertation, and a final oral examination.

In the first semester, the student selects a track of study, an advisor, and an advisory committee. The advisory committee guides the student’s development through the Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) in the chosen track, participates in the comprehensive and final examination, and helps the student select a topic for research leading to the dissertation. Should the student’s interests change, the advisory committee membership may be changed accordingly, with the approval of the program’s Graduate Studies Director. The student’s advisory committee consists of a minimum of 5 graduate faculty members and is chaired by the student’s advisor. A more detailed description is available on the program’s website (http://bio.engr.ku.edu/).

Course Requirements

The Ph.D. program requires a minimum of 60 credit hours* beyond the B.S. to meet degree requirements.

- Core Courses (6 hours)
- Track Courses (30-36 hours) Students must complete the number of hours, including the depth and breadth courses, required in the chosen track (see the program’s website (http://bio.engr.ku.edu/) for track requirements).
- Research (18-24 hours)

*No more than 9 credits may be taken at the 500-600 level.

Plan of Study

Students are expected to complete a Plan of Study before beginning the second semester of graduate study. To complete a Plan of Study, a student should have identified a research advisor and dissertation committee. Students should work with their research advisors to identify an appropriate list of courses that fulfill degree requirements and support the student’s educational and research objectives. A Plan of Study can be completed online (https://gradplan.engr.ku.edu/accounts/login/?next=/). The advisor, committee members, and graduate studies director must approve the Plan of Study. The Plan of Study can be modified later, if needed, with approval of the advisor, committee members, and Graduate Studies Director. Students are required to complete their Ph.D. degree within 8 years from initial enrollment in the program, but typically finish within 4-5 years. A timeline is available here (https://bioengr.ku.edu/sites/bioengr/files/documents/Docs/forms%20and%20docs/PhD%20Timeline.pdf).

Qualifying Examination

Each doctoral student must pass the doctoral qualifying examination, normally taken at the end of the first year of graduate study. The written
and oral examination measures the student’s ability to comprehend and communicate technical literature in the chosen track of study. The qualifying examination may be taken twice in a student's graduate career. A more detailed description of the examination is available on the program’s website (http://bio.engr.ku.edu/).

Research Skills and Responsible Scholarship

In addition to passing the qualifying examination, the doctoral student is required to demonstrate proficiency in research skills and responsible scholarship. The research skill requirement is fulfilled through successful completion of BIOE 800, Bioengineering Colloquium. The responsible scholarship requirement is fulfilled through successful completion of BIOE 801, Responsible Conduct of Research in Engineering.

Residence Requirement

Doctoral students must spend a minimum of 2 semesters, which may include the summer session, involved in full-time academic or professional pursuits beyond the baccalaureate degree in graduate study at KU. This may include an appointment for teaching or research and requires that the student be enrolled in a minimum of 6 credit hours a semester. More information can be found in the general doctoral degree requirements of the graduate catalog.

Comprehensive Examination

The comprehensive exam should be taken no later than the end of the Fall semester of the third year for graduate students. The exam consists of a written and oral component that is a grant-style proposal of work to be conducted towards the student’s dissertation research. The exam evaluates the student’s ability to write an original research proposal, design experiments, and interpret results in a sound and critical manner.

The final outcome is intended to establish the scope of the student’s dissertation research. The examining committee consists of the student’s Doctoral Dissertation Committee which is chaired or co-chaired by their research advisor. A more detailed description can be found on the program’s website (http://bio.engr.ku.edu/forms-documents/). Passing the examination advances the student to doctoral candidacy.

Dissertation and Final Examination

The doctoral candidate is expected to conduct original research, prepare a written dissertation detailing the results, and defend the dissertation in a final oral examination. The research is expected to be of sufficient quality to permit publication in reputable scientific journals. The final oral examination is scheduled when the advisory committee agrees that the research is complete.

M.D./Ph.D. Combined Degree Requirements

The Bioengineering Graduate Program offers the combined M.D./Ph.D. (http://www.kumc.edu/md-phd-program.html) degrees, in conjunction with the School of Medicine (http://www.kumc.edu/school-of-medicine.html), for the student who wishes to combine a focus on medicine with interests in bioengineering research. The requirements for the Ph.D. component of the M.D./Ph.D. program are the same as for the Ph.D. program. The student applies to the M.D/Ph.D through the KU Medical Center and not to the Bioengineering program directly. Completion of the M.D./Ph.D. degrees is expected to take approximately 7 years. The M.D./Ph.D. student is encouraged to defend the dissertation before clinical rotations. Scholarships are available for both the M.D. and Ph.D. components of the program.

Department of Chemical & Petroleum Engineering

Chemical and Petroleum Engineering

Chemical engineering has grown out of a combination of chemistry and engineering associated with industrial processes. Today, it comprises knowledge used in processes that change the physical state or composition of materials. Chemical engineers hold key roles in the design, development, production, and purification of materials that are considered essential to human life and well-being, such as food products, fuels and lubricants, pharmaceuticals, fertilizers, synthetic fibers, microelectronic components, and plastics. Chemical engineers are involved in reducing the use of energy to make these products in safe and sustainable ways. They are responsible for minimizing environmental effects of chemical production on the environment.

Petroleum engineering is concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. Petroleum engineers use knowledge of fluid and rock properties in subsurface environments with methods of producing oil and gas safely and economically. At the University of Kansas, the focus is on reservoir engineering to improve production from oil and gas reservoirs. Reservoir engineers use geological detection with computerized mathematical analysis to produce these valuable raw materials. Through such techniques, petroleum engineers continue to extract oil and gas from reservoirs that were considered uneconomical only a few years ago. Petroleum engineering is uniquely challenging in that the raw product must be recovered far from observation.

Undergraduate Programs

The Department of Chemical and Petroleum Engineering offers a Bachelor of Science degree in chemical engineering and a Bachelor of Science degree in petroleum engineering and is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/).

The B.S. program in chemical engineering offers a General Program, a Biomedical emphasis, an Environmental emphasis, a Materials Science emphasis, a Petroleum emphasis, and a Premedical emphasis.

Graduate Programs

C&PE graduate programs provide an in-depth academic understanding of chemical engineering and petroleum engineering for students who plan careers in academia, research, or development. The department offers the Master of Science (M.S.) degree in chemical engineering or petroleum engineering and the Doctor of Philosophy (Ph.D.) degree in chemical and petroleum engineering. See the Graduate Studies (p. 2408) section of the online catalog for general university requirements for admission and degrees.

In the master’s program, the primary emphasis is on formal course work in engineering and related subjects. Students take a sequence of core courses in heat, mass and momentum transport, thermodynamics, reaction kinetics, applied mathematics, reservoir engineering, and petroleum recovery.

In the doctoral program, the student completes an independent and novel research project in a significant engineering area. Specific Ph.D. course work depends on the research area and the specific education needed.
by the student for the project. The general research area reflects the research interests of the faculty. In addition to specialized courses in the department, advanced courses in mathematics and computer science, life sciences, physical sciences, and other branches of engineering may be used to prepare the Ph.D. student for the research project.

These guidelines include departmental requirements and are intended to assist the student and advisory committee in preparing a Plan of Study for the graduate degree.

Courses

C&PE 111. Introduction to the Chemical Engineering Profession. 1 Credit.
The career opportunities for chemical engineers are described and students are introduced to the resources available to them at KU, in the School of Engineering, and in the Chemical and Petroleum Engineering Department. The students are introduced to the curriculum requirements and emphasis options, engineering ethics, basic safety considerations, teamwork, and technical writing. The course includes fundamental calculations and laboratory experiences in material and energy balances and fluid flow. Prerequisite: Corequisite: MATH 104 or MATH 125 or MATH 145.

C&PE 112. Introduction to Chemical Engineering Profession II. 1 Credit.
Students are introduced to engineering ethics, basic safety considerations, teamwork, and technical writing. The course includes fundamental calculations and laboratory experiences in material and energy balances and fluid flow. Prerequisite: Corequisite: CHEM 130 or CHEM 170 or CHEM 190.

C&PE 117. Energy in the Modern World. 1 Credit.
A survey course on global energy supply and demand, production methods and energy economics. Course begins with the matrix of energy supply and demand focusing on fossil fuels and nuclear energy and includes transportation/distribution patterns and issues and current production technologies. We then analyze alternate energy realities and potentials such as solar energy, wind energy, biomass utilization, hydrogen, fuel cells, hydroelectric, geothermal, wave/tidal, and others based on thermodynamic principles and economics. Course is also open to non-engineering students.

C&PE 127. Introduction to Petroleum Engineering Profession. 1 Credit.
An introduction to principles of reservoir engineering and an application of economic principles will be introduced along with the use of computer spreadsheets. A mini petroleum engineering design project will be assigned to illustrate the integration of petroleum engineering principles and the use of computers. C&PE 127 is required of all Petroleum Engineering freshmen but is optional for others. Course is also open to non-engineering students.

C&PE 211. Material and Energy Balances. 4 Credits.
The application of the laws of chemistry, physics, and mathematics to the solution of material and energy balance problems occurring in the process industries. Prerequisite: MATH 125 or MATH 145; CHEM 135 or CHEM 175 or CHEM 195; or consent of department.

C&PE 217. Introduction to Petroleum Drilling Engineering. 2 Credits.
An introduction to modern rotary drilling. Topics covered include: rig systems/hardware, management practices, cost analysis, drilling fluid function formulations and testing, well control systems, cement formulation and placement, drilling bits.

C&PE 219. Drilling Fluids Laboratory. 1 Credit.
Laboratory study of formulation and properties of drilling fluids. "Mud" measurements covered include density, solids content, filtration control and viscosity. Other measurements include compressive strength of cement and cuttings transport properties. Prerequisite: Corequisite: C&PE 217.

C&PE 221. Chemical Engineering Thermodynamics. 3 Credits.
Fundamentals and applications of the First and Second Laws of Thermodynamics with strong emphasis on material, energy and entropy balances to solve engineering problems involving pure components. Topics include: Cycles (Rankine, Brayton, refrigeration, etc.), the calculus of thermodynamics, equations of state for realistic thermodynamic properties, departure functions, equilibrium and stability criteria, fugacity, and single component phase equilibrium (vaporization, melting, sublimation). Prerequisite: MATH 122 or MATH 142 or MATH 126 or MATH 146; and C&PE 211. Prerequisite or Corequisite: PHSX 210 or PHSX 211 or PHSX 213; or consent of department.

C&PE 226. Fundamentals of Biomedical and Biomolecular Engineering. 3 Credits.
Introduction to the building blocks of human and other living organisms with a focus on structure/function mechanisms that are critical for design, modeling, and analysis in living systems. Application of chemical engineering principles, including mass, energy, momentum and charge balances and molecular thermodynamics to analysis of living systems. Applies biochemistry, molecular biology and cell biology to fundamental issues in biochemical engineering, biomedical engineering and biotechnology. Prerequisite: C&PE 211, or consent of instructor. Corequisite: C&PE 221 or ME 212.

C&PE 325. Numerical Methods and Statistics for Engineers. 3 Credits.
An introduction to numerical methods and statistics and their application to engineering problems. Numerical methods topics include finding roots of a single nonlinear equation, numerical solution of ordinary differential equations, numerical integration, and solutions of ordinary differential equations. Statistical topics include regression and curve fitting, probability and probability distributions, expected value and hypothesis testing, and optimization of single and multiple-variable systems. Implementing numerical algorithms using computer programming will be emphasized, along with the fundamentals of programming, including data typing, branching, and iteration. Applications specific to chemical and petroleum engineering systems will be considered. Prerequisite: MATH 126 or MATH 146; and CHEM 135 or CHEM 175 or CHEM 195. Corequisite: MATH 220 or MATH 221 or MATH 320 or MATH 321; and MATH 290 or MATH 291; or consent of department.

C&PE 327. Reservoir Engineering. 4 Credits.
Properties of porous rocks, reservoir fluids, and fluid saturated rocks. Introduction to multiphase flow in porous media including concepts of wettability, capillary pressure and relative permeability. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195.

C&PE 511. Momentum Transfer. 3 Credits.
Solutions of continuity, momentum, and energy equations applied to fluids in confined flow or flowing past submerged objects. Laminar and turbulent flows of both incompressible and compressible fluids are considered. Engineering applications include pressure drop and network analysis of piping lines, flow measurements, fluid moving equipment including the performance of pumps. Prerequisite: C&PE 221 or ME 212; C&PE 121 or C&PE 325; and a grade of C- or higher in MATH 127 or MATH 147, and MATH 220 or MATH 221 or MATH 320 or MATH 321; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.
C&PE 512. Chemical Engineering Thermodynamics II. 3 Credits.
Further application of the laws of thermodynamics to multi-component mixtures and in multi-phase equilibria with focus on vapor-liquid, liquid-liquid, and solid-liquid equilibria. Mixture Fugacity expressions are developed using equations of state with mixing rules or Excess Gibbs Free Energy/activity coefficient models for data correlation or prediction. Chemical equilibrium of reactions is also discussed. Prerequisite: C&PE 121 or C&PE 325; C&PE 211; C&PE 221; and CHEM 330 or CHEM 380; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 521. Heat Transfer. 3 Credits.
An applied study of the various (conductive, convective, and radiative) heat transfer mechanisms in solid and fluid systems both transient and steady-state. Engineering applications include: conduction in solids and fluids, free and forced convection in fluids, radiation, boiling and condensing fluids, and design of heat exchangers. Prerequisite: C&PE 121 or C&PE 325; C&PE 221 or ME 312; C&PE 511 or ME 510; MATH 122 or MATH 142 or MATH 127 or MATH 147; and MATH 220 or MATH 221 or MATH 320 or MATH 321; or consent of instructor. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 522. Economic Appraisal of Chemical and Petroleum Projects. 2 Credits.
Consideration of the economic factors important in the development of the chemical or petroleum enterprise. Applications of economic evaluation methods to engineering project development. Consideration of risk and uncertainty in project development. Prerequisite: C&PE 121 or C&PE 325; and a grade of C- or higher in MATH 126 or MATH 146 and PHSX 210 or PHSX 211; or consent of department.

C&PE 524. Chemical Engineering Kinetics and Reactor Design. 3 Credits.
Development and solution of the material and energy balance equations for continuous and batch reactors. These balance equations are applied in (a) the determination of intrinsic kinetics, (b) the design of reactors and (c) the analysis of reactor behavior. Both homogeneous and heterogeneous reaction systems are considered. Prerequisite: C&PE 511; C&PE 512; and a grade of C- or higher in MATH 220 or MATH 221 or MATH 320 or MATH 321; or consent of department. Corequisite: C&PE 525. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 525. Heat and Mass Transfer. 4 Credits.
An applied study of the various heat and mass transfer mechanisms in solid and fluid systems. Heat transfer mechanisms include conduction and the concept of conductivity at the molecular level, convection, and radiation. Mass transfer fundamentals include diffusion and the concepts of diffusivity at the molecular level and shell mass balances including diffusion, convention, and consumption or generation source terms. Steady state and transient heat and mass transfer engineering applications will be considered. Prerequisite: C&PE 221 or ME 212; C&PE 325; C&PE 511 or ME 510; and a grade of C- or higher in MATH 220 and MATH 127; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 527. Reservoir Engineering II. 4 Credits.
Lectures on single phase flow and pressure distribution in reservoirs. Calculations in drawdown, buildup, multiple rate, fractured systems, gas and injection well testing. Material balance calculations for gas, gas-condensate, undersaturated, and saturated reservoirs. Prerequisite: C&PE 327; ME 212 or C&PE 221; a grade of C- or higher in MATH 220 or MATH 221 or MATH 320 or MATH 321; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to junior year courses. Details can be found in the catalog.

C&PE 528. Well Logging. 3 Credits.
Analysis of well logs to determine properties of reservoir rocks, fluid saturations and lithology, and production logging. Prerequisite: C&PE 327 or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the Junior year courses. Details can be found in the catalog.

C&PE 601. Undergraduate Topics in Chemical and Petroleum Engineering. 1-4 Credits.
Undergraduate study in various branches of Chemical and Petroleum Engineering on topics that may vary from year to year. Prerequisite: Varies.

C&PE 611. Design of Unit Operations. 3 Credits.
Application of chemical engineering principles to design pumps, heat exchangers, and separation equipment. Staged separation processes including distillation, extraction and absorption, membrane separations, and modes of operation will be considered. Sizing of equipment, energy consumption and materials of construction will also be addressed. Prerequisite: C&PE 211; C&PE 511; C&PE 521; C&PE 525; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 612. Environmental Assessment of Chemical Processes. 3 Credits.
A discussion and project-based survey of environmental issues in chemical engineering, including environmentally conscious design, environmental fate and transport, green chemistry, and life cycle analysis. Focus will be on the design, implementation and management of comprehensive environmental assessments for existing and new industrial facilities with an emphasis on the technical and economic impacts of catalytic systems on pollution control strategies.

C&PE 613. Chemical Engineering Design I. 4 Credits.
Synthesis, design and economic analysis of petrochemical, and chemical plants. Applications in computer aided engineering applied to these topics. Prerequisite: C&PE 611 and C&PE 615; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 614. Reaction Engineering for Environmentally Benign Processes. 3 Credits.
Principles of reaction engineering and green chemistry applied to processes of the future. With a case-based introduction to the design and optimization of catalytic processes and reaction systems, focus will be on key reaction engineering concepts, including catalysis, mechanisms, reaction kinetics, heterogeneous reactions, reactor types and economic evaluation. Students will develop a multidisciplinary understanding of chemical, biological and molecular concepts and of the multiscale character of developing and designing processes from the micro level to the macro level. Prerequisite: Senior standing in engineering or the physical/biological sciences.

C&PE 615. Introduction to Process Dynamics and Control. 3 Credits.
The behavior of chemical processing equipment in the presence of disturbances in operating conditions is analyzed. Control systems are designed based on the criteria of system stability and optimal system performance. Prerequisite: C&PE 511; C&PE 512; C&PE 524; and C&PE 525; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 616. Chemical Engineering Laboratory I. 4 Credits.
Laboratory study of chemical engineering concepts of thermodynamics, fluid flow, heat transfer, mass transfer, and reaction kinetics. Includes emphasis on technical communication skills. Prerequisite: C&PE 511; C&PE 512; C&PE 524; C&PE 525; and ENGL 102 or ENGL 105; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 617. Drilling and Well Completion. 3 Credits.
Design and analysis of rotary drilling and well completion systems; casing design, cementing, and perforating. Safety and ethical considerations in drilling and fluid disposal operations. Prerequisite: C&PE 217; C&PE 219; C&PE 327; C&PE 511 or ME 510; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the senior year courses. Details can be found in the catalog.

C&PE 618. Improved Oil Recovery. 3 Credits.
Improved Oil Recovery processes such as primary, secondary, and tertiary oil recovery techniques will be presented. This includes miscible/immiscible displacement, chemical processes such as polymer flood, surfactant and micellar flood, and thermal recovery techniques such as steam flooding, in-situ combustion, and other EOR techniques. Design of waterfloods including preparation of a reservoir description for waterflood evaluation. Prerequisite: C&PE 527; or consent of the department. The Petroleum major has a GPA requirement for specific courses to progress to the Junior year courses. Details can be found in the catalog.

C&PE 619. Petroleum Engineering Laboratory I. 3 Credits.
Laboratory study of methods to determine rock and fluid properties related to petroleum engineering including phase behavior, viscosity, permeability, porosity, capillary pressure, oil recovery, water/oil displacement, fluid flow, and heat transfer coefficients. Analysis of experimental uncertainty. Oral and written presentations are required. Prerequisite: ENGL 203 (Writing for Engineers); C&PE 219; C&PE 327; C&PE 511 or ME 510; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to junior year courses. Details can be found in the catalog.

C&PE 620. Enhanced Oil Recovery. 3 Credits.
Enhanced Oil Recovery processes such as primary, secondary, and tertiary oil recovery techniques will be presented. This includes miscible/immiscible displacement, chemical processes such as polymerflood, surfactant and micellar flood, and thermal recovery techniques such as steam flooding, in-situ combustion, and other EOR techniques. Prerequisite: C&PE 527 and C&PE 618 or consent of instructor.

C&PE 624. Process Safety and Sustainability. 3 Credits.
An introductory course designed to acquaint students with the necessary global aspects and ethics of risk-based process safety and sustainability. Topics will include elements of process safety, process safety management, historical and contemporary case studies of major accidents in the chemical and petroleum industry, overview of current government regulation (e.g. OSHA, EPA, etc.), and ethics. Students will receive an introduction to sustainable ("green") chemistry and engineering followed by more quantitative Life Cycle Analysis (LCA) to compare technologies and products. Prerequisite: C&PE 511 or ME 510; and senior standing in chemical or petroleum engineering; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 625. Unconventional Reservoirs. 3 Credits.
Principles of unconventional reservoir engineering including properties and use of shale reservoirs, hydraulic fracturing, and relevant environmental and economic factors. Prerequisite: C&PE 511; C&PE 522; C&PE 527; C&PE 528; ME 211 or CE 201 and CE 310; GEOL 331 or GEOL 591: Geology for Petroleum Engineers; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the senior year courses. Details can be found in the catalog.

C&PE 626. Chemical Engineering Laboratory II. 3 Credits.
Laboratory study of chemical engineering concepts of thermodynamics, fluid flow, heat transfer, mass transfer, reaction kinetics, and process control. Includes emphasis on technical communication skills. Prerequisite: ENGL 102 or ENGL 105; C&PE 511; C&PE 512; C&PE 524; C&PE 525; C&PE 615; and C&PE 616; or consent of department. The Department has a GPA requirement for progression in the program. Details can be found in the catalog.

C&PE 627. Petroleum Production. 3 Credits.
Design and analysis of natural production and artificial lift systems, including beam pumping, gas lift, and submersible pumps. Vertical and horizontal two phase flow, compression, metering, acidizing, fracturing, and pipe line flow systems. Treatment of ethics considerations in production contracts and leasing arrangements. Prerequisite: C&PE 327; C&PE 511 or ME 510; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the senior year courses. Details can be found in the catalog.

C&PE 628. Petroleum Engineering Design. 3 Credits.
Design problems related to petroleum reservoir development such as selection of optimum well spacing for a specified reservoir, evaluation of a producing property or installation of a waterflood. Designs consider economic, uncertainty analysis, as well as conservation, environmental, and professional ethics factors. Prerequisite: C&PE 522; C&PE 527; C&PE 528; C&PE 618; C&PE 619; GEOL 535; or consent of department. The Petroleum major has a GPA requirement for specific courses to progress to the senior year courses. Details can be found in the catalog.

C&PE 640. Natural Gas Engineering. 3 Credits.
Principles of natural gas engineering including resource distribution and evaluation, composition and properties, production, processing, transportation, storage and relevant environmental and economic aspects. Prerequisite: C&PE 625 and C&PE 627, or consent of department.

C&PE 651. Undergraduate Problems. 1-4 Credits.
Investigation of a particular problem in the field of chemical or petroleum engineering. The problem or research topic is identified jointly by the student and the faculty research supervisor. A final report is required.

C&PE 654. Biocatalysis. 3 Credits.
Introductory and advanced topics in biocatalysis with focus on enzymatic reactions. Enzymology will provide the fundamental basis for discussion of kinetics and bio-process development. Advanced topics include: enzymes in non-aqueous solvents, immobilization techniques, whole-cell transformations, bio-reactors.

C&PE 655. Introduction to Semiconductor Processing. 3 Credits.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metallization, and plasma etching of thin films. (Same as EECS 670.) Prerequisite: Senior standing in C&PE or EECS, or consent of instructor.

C&PE 656. Introduction to Biomedical Engineering. 3 Credits.
An interdisciplinary introduction to the field of biomedical engineering. This course covers a breadth of topics including biotransport, biomechanics, biomaterials, tissue engineering, drug delivery, biomedical imaging, computational biology, and biotechnology. Students are exposed to these broad topics, and go further in depth in a topic of their choice with the semester project. Prerequisite: Junior or Senior-level standing in Engineering or consent of instructor.
C&PE 657. Polymer Science and Technology. 3 Credits.
Introduction to polymer chemistry, science, technology, and processing. The course covers the principles of polymer synthesis and the structure-property relationships in the solid state and in solution, such as solubility, rheology and mechanical properties. Principles of polymer processing are introduced. Students will learn to understand from an engineering perspective how polymers are created and used. Prerequisite: Senior or graduate student standing in chemical engineering, chemistry, or consent of instructor.

C&PE 661. Undergraduate Honors Research. 1-3 Credits.
This course involves the investigation of a particular problem in the field of chemical or petroleum engineering, C&PE 661 should be taken, rather than C&PE 651, for students seeking Departmental Honors in Chemical Petroleum Engineering. C&PE 661 may also be used by students in the Honors Program to help satisfy the course requirement of this program. The design or research topic is identified jointly by the student and faculty research supervisor and faculty committee. Students will present periodically and receive instruction and feedback on their presentations. A written thesis and public oral defense with committee are also required. Prerequisite: C&PE 651 or C&PE 661; and invitation and permission of instructor, open to seniors only.

C&PE 671. Senior Thesis. 3 Credits.
This course involves the investigation of a particular problem in the field of chemical or petroleum engineering as a continuation for students with previous research experience, by invitation. The design or research topic is identified jointly by the student and faculty research supervisor and faculty committee. Students will present periodically and receive instruction and feedback on their presentations. A written thesis and public oral defense with committee are also required. Prerequisite: C&PE 651 or C&PE 661; and invitation and permission of instructor, open to seniors only.

C&PE 676. Principles of Biomolecular Engineering. 3 Credits.
Application of chemical engineering principles, including transport phenomena, reaction kinetics and thermodynamics, to analysis of living systems. Applies biochemistry, molecular biology and cell biology to fundamental issues in biochemical engineering, biomedical engineering and biotechnology. Prerequisite: C&PE 121 or C&PE 325; C&PE 211; C&PE 511; C&PE 512; overall GPA >3.5; and engineering GPA >3.5; or consent of the instructor.

C&PE 677. Senior Thesis. 3 Credits.
The utilization of advanced mathematical methods and computing techniques in the solution of problems in these fields.

C&PE 710. Subsurface Methods in Formation Evaluation. 3 Credits.
Study of subsurface methods and their applications to exploration, evaluation, and production of hydrocarbon reservoirs. Emphasis is on fundamentals of quantitative well log interpretations and the use of well log data in solving geologic and reservoir engineering problems, e.g., porosity, hydrocarbon saturation, permeable bed thickness, permeability, correlation, structural mapping, and stratigraphic and paleoenvironmental studies. Laboratory. Prerequisite: GEOL 535 or C&PE 517 or consent of instructor.

C&PE 712. Environmental Assessment of Chemical Processes. 3 Credits.
A discussion and project-based survey of environmental issues in chemical engineering, including environmental conscious design, environmental fate and transport, green chemistry, and life cycle analysis. Focus will be on the design, implementation and management of comprehensive environmental assessments for existing and new industrial facilities with in-depth analysis of the technical and economic impacts of catalytic systems on pollution control strategies. A comprehensive research paper is required as a final project.

C&PE 714. Reaction Engineering for Environmentally Benign Processes. 3 Credits.
Principles of reaction engineering and green chemistry applied to processes of the future. With a case-based introduction to the design and optimization of catalytic processes and reaction systems, focus will be on key reaction engineering concepts, including catalysis, mechanisms, reaction kinetics, heterogeneous reactions, reactor types and economic evaluation. Students will develop a multidisciplinary understanding of chemical, biological and molecular concepts, and will develop and design processes from the micro level to the macro level. A final research paper is required.

C&PE 715. Topics in Chemical and Petroleum Engineering: 1-4 Credits.
Study in various branches of Chemical and Petroleum Engineering on topics that may vary from year to year.

C&PE 721. Chemical Engineering Thermodynamics. 3 Credits.
Chemical engineering applications of advanced thermodynamics and physical chemistry. Prerequisite: C&PE 512.

C&PE 722. Kinetics and Catalysis. 3 Credits.
Modeling and analysis of chemical reactors with emphasis on heterogenous catalytic reaction systems. Prerequisite: C&PE 524.

C&PE 725. Cellular and Molecular Pharmaceutics. 3 Credits.
The pharmaceutical relevance of fundamental and advanced concepts in cell biology and the molecular interactions responsible for cell and tissue functions, homeostasis in health and disease will be presented. Current analytical methods for examining cells and tissues, and molecular components important in understanding drug and protein biodistribution and metabolism will be discussed. Discussion topics will include the chemical and physical properties of small molecules, proteins, nucleic acids and lipids and their impact on cellular and subcellular structures and ultimately of either adverse or therapeutic benefit. (Same as PHCH 725.) Prerequisite: Graduate standing or consent of instructor.

C&PE 731. Convective Heat and Momentum Transfer. 3 Credits.
The formulation and solution of steady- and unsteady-state convective heat and momentum transfer problems. Applications of boundary layer equations to free and forced convection with study of similarity and integral methods of solution for laminar and turbulent flow; development
of analogies; transport properties from kinetic theory of gases viewpoint; introduction to numerical methods. Prerequisite: ME 610/C&PE 511 and ME 612/C&PE 521 or equivalent. A concurrent course in partial differential equations is helpful.

C&PE 732. Advanced Transport Phenomena II. 3 Credits.
The formulation and solution of steady- and unsteady-state mass transfer problems (including those complicated by momentum and heat transfer). This course is the sequel to C&PE 731 and relies upon much of the material treated there. The mathematical approach predominates and the methods available for determining suitable mass transfer coefficients are covered.

C&PE 751. Basic Rheology. 3 Credits.
Basic rheology including classification of classical bodies based on their stress and strain tensors, rheological equation of state, material functions, generalized Newtonian and general linear viscoelastic fluids, mechanical models such as those of Jeffreys and Maxwell. Prerequisite: C&PE 511 or an equivalent course in fluid mechanics.

C&PE 752. Tissue Engineering. 3 Credits.
An introduction to the rapidly growing and continuously evolving field of tissue engineering. Tissue engineering applies principles and methods of engineering and life sciences toward understanding and development of biological substitutes to restore, maintain and improve tissues and functions. In this course, students study the basic science, engineering and medicine required for tissue engineering, learn state-of-the-art technology and practice, and create a literature-based proposal for a tissue engineered medical product. Prerequisite: Senior or graduate standing in engineering; or consent of instructor.

C&PE 753. Introduction to Electrochemical Engineering. 3 Credits.
Basic principles of electrochemical engineering as they are applied to energy conversion and storage devices, industrial electrolytic processes and corrosion. Areas covered range from electrochemical thermodynamics, ionic phase equilibria, electro-kinetics and ionic mass transport to mathematical modeling of electrochemical systems. Prerequisite: Graduate standing; C&PE 511, C&PE 512, C&PE 524 or equivalent; knowledge of a programming language.

C&PE 754. Biocatalysis. 3 Credits.
Introductory and advanced topics in biocatalysis with focus on enzymatic reactions. Enzymology will provide the fundamental basis for discussion of kinetics and bio-process development. Advanced topics include: enzymes in non-aqueous solvents, immobilization techniques, whole-cell transformations, bio-reactors. Knowledge of the theoretical basis for these techniques and processes will be demonstrated within a class project.

C&PE 755. Introduction to Semiconductor Processing. 3 Credits.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metallization, and plasma etching of thin films. A term paper on an approved topic of fabrication referencing current peer reviewed literature is required.

C&PE 756. Introduction to Biomedical Engineering. 3 Credits.
The graduate elective form of C&CE 656. Additional assignments commensurate with the graduate-level course designation are required for this section. Prerequisite: Graduate-level standing in Engineering, or consent of instructor.

C&PE 757. Polymer Science and Technology. 3 Credits.
The graduate elective form of C&PE 657. Additional assignments on current research directions in the field commensurate with the graduate-level course designation are required for this section. Prerequisite: Graduate-level standing in Engineering, or consent of instructor.

C&PE 765. Corrosion Engineering. 3 Credits.
Electrochemical basis of corrosion. Types of corrosion and corrosive atmospheres. Corrosion control measures and industrial problems. Prerequisite: ME 306 or CHEM 135 or CHEM 175 or CHEM 195.

C&PE 771. Advanced Reservoir Engineering. 3 Credits.
Physical principles of petroleum production; gas drive performance; partial water drive performance; pressure maintenance through gas and water injection. Prerequisite: C&PE 527.

C&PE 778. Applied Optimization Methods. 3 Credits.
Study of methods for solving optimization problems encountered in engineering and the natural sciences, with specific applications illustrating analytical and numerical techniques. Topics covered include gradient methods, penalty functions, linear programming, nonlinear and integer programming, stochastic optimization approaches, and treatment of constrained problems. Homework problems involving theoretical concepts and a theoretically-based semester project are required.

C&PE 790. Introduction to Flow in Porous Media. 3 Credits.
Generalized Darcy's law, vector equations, solutions of partial differential equations with various boundary conditions as applied to the flow of fluids in porous media. Prerequisite: C&PE 527.

C&PE 795. Enhanced Petroleum Recovery. 3 Credits.
A study of improved oil recovery processes such as miscible displacement, microemulsion displacement, and thermal methods. Prerequisite: C&PE 618 or permission of instructor.

C&PE 798. Phase Equilibrium. 3 Credits.
A study of phase behavior and equilibrium from a molecular perspective. Focus will be on vapor-liquid, liquid-liquid and solid-liquid equilibrium with advanced topics in compressed and supercritical fluids, petroleum applications, ionic solutions and others.

C&PE 800. Seminar. 0.5-1 Credits.
Every fall, five to six seminar sessions will be devoted to providing incoming students information on available thesis/dissertation research projects, library resources, computing environment and topics related to the issues of responsible scholarship in the fields of Chemical and Petroleum Engineering. For the remainder of the year, the seminar will involve presentation of current research and other topics of interest to chemical and petroleum engineers. These presentations will be made by invited guests, faculty, and advanced graduate students. Student attendance is required. Graded on a satisfactory/unsatisfactory basis.

C&PE 801. Introduction to Research. 1 Credits.
One hour per week in which the staff introduces entering graduate students to research. Topics include discussion of research methods, methods of effectively tapping library resources, preparation of literature surveys, and presentation of results. Faculty members of the department will make presentations of their current research interests. Offered fall only. Prerequisite: Corequisite: C&CE 800.

C&CE 802. CEBC Colloquium. 0.5-1 Credits.
A forum in which graduate and postdoctoral students, and faculty present the results of CEBC research and literature surveys that support the mission of CEBC.

C&CE 803. Research. 1-6 Credits.
For M.S. candidates.

C&CE 804. Petroleum Management Seminar. 1 Credits.
Structure, operation, and problems of the petroleum industry from a management viewpoint. Presentations will be made by faculty, advanced students, and invited guests. Prerequisite: Permission of instructor.

C&PE 825. Graduate Problems in Chemical and Petroleum Engineering. 1-5 Credits.
Advanced laboratory problems, special research problems, or library reading problems. Three hours maximum acceptable for master's degree.

C&PE 902. Preparation for the Ph.D. Comprehensive Examination. 3 Credits.
Preparation of a research proposal in an area assigned by the student's advisory committee. The grade received on the Ph.D. comprehensive examination will apply to this credit.

C&PE 904. Research. 1-12 Credits.
For Ph.D. candidates.

C&PE 910. Industrial Development of Catalytic Processes. 3 Credits.
Students adopt an interdisciplinary team approach to developing strategies for the design and optimization of catalytic processes. Examples of case studies will be derived from industry or from research testbeds. Students collaborate in multiscale process development involving catalyst and reactor design, reaction system design, modeling and optimization, economic analysis and environmental assessment needed for the development of a catalytic process at either the pilot or production scale.

C&PE 911. Industrial Practicum. 1-3 Credits.
Graduate students engage in an industrial research internship experience with collaborators in industry.

C&PE 912. Teaching College Level Engineering and Science Practicum. 1 Credit.
Future university instructors learn how to critically examine course content and teaching strategies, and prepare courses that will address the learning needs of the diverse student populations of the future. Students participate in weekly in-class workshops and symposia, as well as a teaching practicum experience during this course.

C&PE 919. Advanced Topics in Process Modeling Simulation or Control: ____. 1-4 Credits.
Advanced study in process modeling, simulation or control on topics which may vary from year to year.

C&PE 929. Advanced Topics in Chemical and Petroleum Engineering: ____. 1-4 Credits.
Advanced study in various branches of chemical and petroleum engineering on topics which may vary from year to year.

C&PE 933. Heat and Mass Transport in Porous Media. 3 Credits.
A study of industrial problems involving heat and mass transport in porous media such as packed columns, catalyst beds, chemical reactors, and petroleum reservoirs. Mechanisms of interphase and intraphase transport, diffusion, and dispersion. Included are methods of solution of the describing differential equations.

C&PE 934. Heat Transport with Phase Change. 3 Credits.
A fundamental treatment of heat transfer occurring during boiling and condensation. Included are nucleate and film boiling, film and dropwise condensation, and two-phase flow.

C&PE 936. Industrial Separation Processes. 3 Credits.
Determination and treatment of vapor-liquid separations, including methods for obtaining and treating equilibrium data, procedures for calculating multi-component separations by distillation, absorption, extraction, and adsorption.

C&PE 937. Applied Rheology. 3 Credits.
Industrial applications of fluid mechanics including compressible flow, flow of non-Newtonian fluids, flow of drag reducing systems all to be considered in laminar and turbulent flow regimes, and within conduits, and porous media.

C&PE 939. Advanced Topics in the Transport Phenomena: ____. 1-4 Credits.
Advanced study in various branches of transport phenomena on topics which may vary from year to year.

C&PE 940. Data Analysis in Engineering and Natural Sciences. 3 Credits.
Statistical inference and data analysis, emphasizing interpretation of observations from areas of engineering and natural sciences where controlled experimentation is not possible. The basics of elementary statistics and matrix algebra are covered, followed by topics in time series analysis, map analysis, including automatic contouring, and multivariate procedures such as principal components, discrimination and factor analysis. A suite of computer programs is provided. Students are encouraged to use data from their own graduate research in class projects.

Bachelor of Science in Chemical Engineering

B.S. in Chemical Engineering Program

Chemical engineering has grown out of a combination of chemistry and engineering associated with industrial processes. Today, it possesses a body of knowledge used in the synthesis, design testing, scale-up, operation, control, and optimization of processes that change the physical state or composition of materials. Chemical engineers have played central roles in the industrial development of materials that have had major social influence, such as the production of fuels and lubricants, fertilizer, synthetic fibers, and plastics. They will be centrally involved in reducing the polluting effects of certain byproducts and cleaning up unwanted residues from previous processes.

The first part of the program offers courses on the fundamental principles underlying the conversion of raw materials into a desired product by chemical and physical processes. Development of the concepts of engineering design begins with the application of fundamental principles to solve engineering problems in these courses and culminates in a series of senior-level design courses that require comprehensive integration of technical knowledge as well as consideration of economic, environmental, safety, and societal concerns. This experience is essential in preparing graduates for entry-level positions.

Educational Objective

The objective of the program is to prepare graduates for professional practice in industry, government, or post-undergraduate training in chemical engineering, medicine, and other related disciplines.

Professional Opportunities

Chemical engineers are concerned with the chemical processes that turn raw materials into valuable products. They serve industrial and other activities where processes occur in which materials undergo a chemical or physical change. Chemical engineers build a bridge between science and manufacturing, applying the principles of chemistry, biology and engineering to solve problems involving the production or use of chemicals. Chemical engineers typically work for manufacturing
companies, environmental companies, health care and pharmaceuticals, petroleum industry, biotechnology, or consulting firms.

**Undergraduate Admission to the School of Engineering**

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

**Minimum Academic Standards for Admission to the School of Engineering**

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 22+ (or math SAT score of 540+), or
  - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

**Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen**

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned course in accordance with KU placement credit requirements; or
- Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

Students who are not admissible to their desired major are admitted to the School of Engineering as undecided engineering undergraduate students.

**Exploring Engineering**

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

**Transfer Admission Standards**

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU and have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of "C" or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).

**Already Applied to KU, But Not Engineering?**

Don't worry. It's not too late to change your mind if you've already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

**Application Deadlines For New Freshman and Transfer Applicants**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
</tr>
<tr>
<td>November 1</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
</tr>
</tbody>
</table>
### General Education Requirements

The KU Core is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal are one or more learning outcomes:

- **GE 1.1, Goal 1, Outcome 1, Critical Thinking;**
- **GE 1.2, Goal 1, Outcome 2, Quantitative Literacy;**
- **GE 2.1, Goal 2, Outcome 1, Written Communication;**
- **GE 2.2, Goal 2, Outcome 2, Oral Communication;**
- **GE 3H, Goal 3, Outcome 1, Arts & Humanities;**
- **GE 3S Goal 3, Outcome 2, Natural Sciences;**
- **GE 3S Goal 3, Outcome 3, Social Sciences;**
- **AE 4.1, Goal 4, Outcome 1, Diversity;**
- **AE 4.2 Goal 4, Outcome 2 Culture;**
- **AE 5.1, Goal 5, Outcome 1, Social Responsibility & Ethics (course);**
- **AE 5.2, Goal 5, Outcome 2, Social Responsibility & Ethics (practice);**
- **AE 6.1, Goal 6, Outcome 1 and 2, Integration & Creativity.**

Details of the KU Core can be found at kucore.ku.edu (http://kucore.ku.edu/). Some required courses in the Chemical Engineering curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specially satisfy KU Core goals (Goals GE 3H, GE 3S, AE 4.1, and AE 4.2) students must choose from a list of several courses to satisfy the required goals.

### Bachelor of Science in Chemical Engineering Degree Requirements

Following are descriptions of the Chemical Engineering Program, the Biomedical concentration, the Environmental concentration, the Materials Science concentration, the Petroleum concentration, and the Premedical concentration.

1. In order to progress to a junior year course (any C&PE course labeled 500 and above), a student must have earned a C# or better in the following courses: MATH 125, MATH 126, MATH 127, MATH 220, MATH 290; CHEM 170, CHEM 175 (CHEM 130/135 acceptable alternatives); PHSX 210 (PHSX 211 acceptable alternative), and PHSX 212. Honors versions of the listed courses would also be subject to the rule.

2. Chemical Engineering students must earn a cumulative 2.0 GPA in C&PE 211, C&PE 221, and C&PE 325 in order to progress to C&PE 511, C&PE 512, C&PE 524, or C&PE 525. The cumulative GPA is calculated using the highest grade earned in each course.

3. Chemical Engineering students must earn a cumulative 2.0 GPA in C&PE 511, C&PE 512, C&PE 522, C&PE 524, and C&PE 525 in order to progress to C&PE 611, C&PE 613, C&PE 615, C&PE 616, C&PE 624, or C&PE 626. The cumulative GPA is calculated using the highest grade earned in each course.

4. Chemical Engineering students must attain a cumulative GPA of at least 2.0 in C&PE courses taken at KU for graduation with a B.S. degree in Chemical Engineering.

### Program Requirements

A total of 127 hours are required for the B.S. degree in Chemical Engineering. Students that are exempt from ENGL 101 based on ACT or SAT test score do not have to make up the 3 credit hours with another course. This exemption results in the total hours required for the B.S. degree in Chemical Engineering to be 124.
Bachelor of Science in Chemical Engineering

**Chemical Engineering Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 111</td>
<td>Introduction to the Chemical Engineering Profession</td>
<td>1</td>
</tr>
<tr>
<td>C&amp;PE 112</td>
<td>Introduction to Chemical Engineering Profession II</td>
<td>1</td>
</tr>
<tr>
<td>C&amp;PE 211</td>
<td>Material and Energy Balances</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 221</td>
<td>Chemical Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 325</td>
<td>Numerical Methods and Statistics for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 511</td>
<td>Momentum Transfer</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 512</td>
<td>Chemical Engineering Thermodynamics II</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 522</td>
<td>Economic Appraisal of Chemical and Petroleum Projects (KU Core Goal 5)</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;PE 524</td>
<td>Chemical Engineering Kinetics and Reactor Design</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 525</td>
<td>Heat and Mass Transfer</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 611</td>
<td>Design of Unit Operations</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 613</td>
<td>Chemical Engineering Design I (KU Core Goal 2.2, Goal 6)</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 615</td>
<td>Introduction to Process Dynamics and Control</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 616</td>
<td>Chemical Engineering Laboratory I</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 624</td>
<td>Process Safety and Sustainability (KU Core Goal 5)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 626</td>
<td>Chemical Engineering Laboratory II (KU Core Goal 2.2)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Engineering Electives**

A minimum of 3 engineering elective hours must be taken within the C&PE department. A maximum of 6 hours may be taken in engineering research. You can consult with your advisor to find out commonly selected electives.

**Basic Sciences**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I Laboratory (KU Core AE 5)</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

**Advanced Chemistry**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 525</td>
<td>Physical Chemistry for Engineers</td>
<td>4</td>
</tr>
</tbody>
</table>

**Advanced Science Electives**

See approved list of Advanced Science Electives

**Mathematics**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
</tbody>
</table>

**General Education Component**

Students with an initial term of Fall 2014 or later must meet the minimum requirements of the KU Core. Learn more about KU Core requirements at http://kucore.ku.edu

**Environmental Concentration**

Students completing a concentration are required to satisfy all the requirements for the Bachelor of Science degree in Chemical Engineering. The following engineering elective courses must be completed as part of the engineering electives required for the Environmental concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology (Counts towards Advanced Science elective)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures (Counts towards Advanced Science elective)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 546</td>
<td>Mammalian Physiology</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 656</td>
<td>Introduction to Biomedical Engineering (Counts towards Engineering Elective)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Biomedical Concentration**

Students completing a concentration are required to satisfy all the requirements for the Bachelor of Science degree in Chemical Engineering. The following advanced science and engineering elective courses must be completed as part of the advanced science and engineering electives required for the Biomedical concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (KU Core GE 2.1 - Students that are exempt from ENGL 101 based on ACT or SAT test score do not have to make up the credit hours with another course.)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (KU Core GE 2.2)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3H</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3S</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core AE 4.1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core AE 4.2 - Students that satisfy AE 4.2 with an experience or by being an international student must make up the three credit hours with math, science, engineering, humanities, or social science credit.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Environmental Concentration**

Students completing a concentration are required to satisfy all the requirements for the Bachelor of Science degree in Chemical Engineering. The following engineering elective courses must be completed as part of the engineering electives required for the Environmental concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 477</td>
<td>Introduction to Environmental Engineering and Science (required)</td>
<td>3</td>
</tr>
</tbody>
</table>

9 hours of Environmental Engineering electives at 500 level or above. Typical classes include but are not limited to: CE 570, CE 571, CE 573, CE 772, or CE 774. Generally, Environmental Engineering electives will require CE 477 as a prerequisite. Please talk to your academic advisor to make sure that the engineering elective counts towards the environmental emphasis.
Material Science Concentration

Students completing a concentration are required to satisfy all the requirements for the Bachelor of Science degree in Chemical Engineering. The following engineering elective courses must be completed as part of the engineering electives required for the Material Science concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 211</td>
<td>Statics and Introduction to Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>ARCE 350</td>
<td>Building Materials Science</td>
<td>3</td>
</tr>
<tr>
<td>AE 507</td>
<td>Aerospace Structures I</td>
<td>3</td>
</tr>
<tr>
<td>AE 510</td>
<td>Aerospace Materials and Processes</td>
<td>4</td>
</tr>
<tr>
<td>CE 310</td>
<td>Strength of Materials</td>
<td>4</td>
</tr>
<tr>
<td>CE 412</td>
<td>Structural Engineering Materials</td>
<td>3</td>
</tr>
<tr>
<td>CE 461</td>
<td>Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 655</td>
<td>Introduction to Semiconductor Processing</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 657</td>
<td>Polymer Science and Technology</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 751</td>
<td>Basic Rheology</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 752</td>
<td>Tissue Engineering</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 765</td>
<td>Corrosion Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ME 306</td>
<td>Science of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ME 311</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ME 767</td>
<td>Molecular Biomimetics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 680/GEOL 103</td>
<td>Topics in Chemistry: _____ (Introduction to Nanotechnology)</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 715/PHSX 600/EPHX 420/BIOL 420</td>
<td>Undergraduate Problems ((By petition))</td>
<td>1-4</td>
</tr>
<tr>
<td>C&amp;PE 651</td>
<td>Undergraduate Honors Research ((By petition))</td>
<td>3</td>
</tr>
</tbody>
</table>

The following courses can be used to satisfy the 6 hours of Advanced Science Electives but are not required:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 401</td>
<td>Analytical Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 635</td>
<td>Instrumental Methods of Analysis</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 636</td>
<td>Instrumental Methods of Analysis Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 660</td>
<td>Systematic Inorganic Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

Petroleum Concentration

The Petroleum concentration in chemical engineering is distinct from the Bachelor of Science degree in Chemical Engineering. The following advanced science and engineering elective courses must be completed as part of the advanced science and engineering electives required for the Petroleum concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101 &amp; GEOL 103</td>
<td>The Way The Earth Works and Geology Fundamentals Laboratory (counts towards Advanced Science requirement of Chemical Engineering BS)</td>
<td>5</td>
</tr>
<tr>
<td>C&amp;PE 127</td>
<td>Introduction to Petroleum Engineering Profession (Recommended instead of C&amp;PE 111)</td>
<td>1</td>
</tr>
<tr>
<td>C&amp;PE 327</td>
<td>Reservoir Engineering (1 hour counts towards Advance Science Elective requirement, 3 hours counts towards Engineering Elective requirement)</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 527</td>
<td>Reservoir Engineering II (counts towards Engineering Elective requirement)</td>
<td>4</td>
</tr>
<tr>
<td>Petroleum engineering elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Premedical Concentration

Students completing a concentration are required to satisfy all the requirements for the Bachelor of Science degree in Chemical Engineering. The following advanced science courses must be completed as part of the advanced science electives required for the Premedical concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td>3</td>
</tr>
</tbody>
</table>

The following courses may be required for admission into specific medical schools or be recommended for the MCAT. These classes are recommended but not required:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors ((recommended, not required))</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology (KU Core GE 3S) (recommended, not required)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology (KU Core AE 4.1) (recommended, not required)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics (recommended, not required)</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function (recommended, not required)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 546</td>
<td>Mammalian Physiology (recommended, not required)</td>
<td>3</td>
</tr>
</tbody>
</table>

Credit for ROTC Courses

Only ROTC courses qualifying as engineering electives and humanities/social sciences may be used.

Departmental Honors

Students wishing to receive Departmental Honors in Chemical and Petroleum Engineering must apply to the Department in writing by September 1st for a December graduation or February 1st for a May graduation. The criteria for Departmental Honors are:

1. A cumulative 3.5 GPA in courses taken at KU
2. A cumulative 3.5 GPA in engineering courses taken at KU
3. Completion of an experience or an achievement that is deemed worthy of Departmental Honors. Examples of achievements include (not limited to):
   a. Completion of 3 hours of C&PE 661 (Honors research) or equivalent with an A or B
   b. Completion of Senior Thesis
   c. Co-author on a publication – may require research advisor verification
   d. Presentation at a National Conference – may require research advisor verification
   e. Receiving an award for scholarly work – may require research advisor verification

The application must include:
   • Completed application form
   • Approximately 200-500 word statement of the achievement or experience that is worthy of Departmental Honors.

A departmental committee will review all applications and make the final decision on the awarding of Departmental Honors. Some applications may require verification from the research advisor. Students awarded Departmental Honors will be recognized at the end of the year banquet.

**Bachelor of Science in Petroleum Engineering**

**B.S. in Petroleum Engineering Program**

Petroleum engineering is the branch of engineering concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. It includes knowledge of the properties of fluids and rocks in surface and subsurface environments as well as methods of exploiting the economic production of oil and gas from petroleum reservoirs. A major subdivision at KU is reservoir engineering, or the development of processes to improve production from oil and gas reservoirs. Reservoir engineers use sophisticated mathematical techniques and computer technology to obtain optimum production. Through such techniques, petroleum engineers continue to extract oil and gas from reservoirs that only a few years ago would have been considered uneconomical. This branch of engineering is somewhat different from the other in that production is far removed from physical observation.

The curriculum develops fundamental concepts that describe the properties of fluids and rocks in surface and subsurface environments. These are integrated with courses covering fluid flow in reservoirs along with drilling and production equipment to develop a broad understanding of how fundamental concepts are used to solve technical problems. The development of engineering design concepts begins with the application of fundamental principles and concepts to solve engineering problems in these courses and culminates in a series of senior-level design courses that require comprehensive integration of technical knowledge as well as consideration of economic, environmental, safety, and societal concerns. This experience is essential in the preparation of graduates for entry-level positions.

**Educational Objective**

The objective of the program is to prepare graduates for professional practice in industry, government, or post-undergraduate training in petroleum engineering and other related disciplines.

**Professional Opportunities**

Petroleum engineers search the world for reservoirs containing oil and natural gas. Once these resources are discovered, petroleum engineers work to understand the geologic formation and properties of the rock containing the reservoir, determine the drilling methods to be used, and monitor drilling and production operations. They design equipment and processes to achieve the maximum profitable recovery of oil and gas. Petroleum engineers typically work for major oil companies, independent oil exploration, and production and service companies.

**Undergraduate Admission to the School of Engineering**

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

**Minimum Academic Standards for Admission to the School of Engineering**

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 22+ (or math SAT score of 540+), or
  - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

**Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen**

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
• Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
• Achieving a ‘C’ or better in a high school calculus course; or
• Earning credit via IB or AP credit for the above-mentioned course in accordance with KU placement credit requirements; or
• Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

Students who are not admissible to their desired major are admitted to the School of Engineering as undecided engineering undergraduate students.

Exploring Engineering

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of “C” or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).

Already Applied to KU, But Not Engineering?

Don’t worry. It’s not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

Application Deadlines For New Freshman and Transfer Applicants

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
</tr>
<tr>
<td>November 1</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
</tr>
<tr>
<td>December 1</td>
<td>Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen.</td>
</tr>
<tr>
<td>February 1</td>
<td>Final deadline for scholarship consideration for transfer students planning to enter in fall or summer semesters. Applications available for the Engineering Learning Community.</td>
</tr>
<tr>
<td>February 15</td>
<td>Priority deadline for current KU students to apply for summer or fall admission to Engineering.</td>
</tr>
<tr>
<td>May 1</td>
<td>Enrollment Deposit due.</td>
</tr>
</tbody>
</table>

General Education Requirements

The KU Core is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal are one or more learning outcomes:

• GE 1.1, Goal 1, Outcome 1, Critical Thinking;
• GE 1.2, Goal 1, Outcome 2, Quantitative Literacy;
• GE 2.1, Goal 2, Outcome 1, Written Communication;
• GE 2.2, Goal 2, Outcome 2, Oral Communication;
• GE 3H, Goal 3, Outcome 1, Arts & Humanities;
• GE 3N Goal 3, Outcome 2, Natural Sciences;
• GE 3S Goal 3, Outcome 3, Social Sciences;
• AE 4.1, Goal 4, Outcome 1, Diversity;
• AE 4.2 Goal 4, Outcome 2 Culture;
• AE 5.1, Goal 5, Outcome 1, Social Responsibility & Ethics (course);
• AE 5.2, Goal 5, Outcome 2, Social Responsibility & Ethics (practice);
• AE 6.1, Goal 6, Outcome 1 and 2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu (http://kucore.ku.edu/). Some required courses in the Petroleum Engineering curriculum satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specially satisfy KU Core goals (GE 2.2, GE 3H, GE 3S, AE 4.1, AE 4.2, AE 5) students must choose from a list of several courses to satisfy each of the required goals.
Plan of Study

Recommended enrollments are as follows, but may vary according to existing credits:

**Freshman**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 127</td>
<td></td>
<td>1 CHEM 135 or 175 (KU Core GE 3N)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>CHEM 130 or 170 (KU Core GE 3N)</td>
<td></td>
<td>5 MATH 126</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>MATH 125</td>
<td></td>
<td>4 ENGL 102 (KU Core GE 2.1)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (KU Core GE 2.1)</td>
<td></td>
<td>3 GEOL 101</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE3S,AE4.1,AE4.2</td>
<td></td>
<td>3 GEOL 103</td>
<td></td>
<td>2</td>
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</table>

**Sophomore**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 211</td>
<td></td>
<td>4 C&amp;PE 221</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 220</td>
<td></td>
<td>3 C&amp;PE 325</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td></td>
<td>2 C&amp;PE 327</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PHSX 210 (KU Core GE1.1)</td>
<td></td>
<td>3 MATH 127</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PHSX 216</td>
<td></td>
<td>1 PHSX 212</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Basic Science or Engineering elective</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
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</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 511</td>
<td></td>
<td>3 C&amp;PE 522</td>
<td></td>
<td>2</td>
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<tr>
<td>C&amp;PE 527</td>
<td></td>
<td>4 C&amp;PE 618</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 528</td>
<td></td>
<td>3 C&amp;PE 619</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ME 211</td>
<td></td>
<td>3 Engineering Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGL 203 (Writing for Engineers KU Core GE 3H )</td>
<td></td>
<td>3 GEOL 332</td>
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<td>4</td>
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<tr>
<td>PHSX 236</td>
<td></td>
<td>1 C&amp;PE 219</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 625</td>
<td></td>
<td>3 C&amp;PE 617</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 627</td>
<td></td>
<td>3 C&amp;PE 624</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEOL 535</td>
<td></td>
<td>4 C&amp;PE 628 (KU Core AE 6)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE3S,AE 4.1,AE4.2</td>
<td></td>
<td>3 KU Core GE3S,AE 4.1,AE 4.2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>KU Core GE 2.2</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 126**

Bachelor of Science in Petroleum Engineering Degree Requirements

1. In order to progress to a junior year course (any C&PE course labeled 500 and above), a student must have earned a C# or better in the following courses: MATH 125, MATH 126, MATH 127, MATH 220, MATH 290; CHEM 130, CHEM 135 (CHEM 170/175 acceptable alternatives); PHSX 210 (PHSX 211 acceptable alternative), and PHSX 212. Honors versions of the listed courses would also be subject to the rule.

2. A student in Petroleum Engineering must complete and earn a cumulative 2.0 grade-point average in C&PE 211, C&PE 221, C&PE 325, and C&PE 327 to progress to C&PE 511, C&PE 527, C&PE 528, C&PE 618, or C&PE 619.

3. A student in Petroleum Engineering must complete and earn a cumulative 2.0 grade-point average in C&PE 511, C&PE 522, C&PE 527, C&PE 528, and C&PE 618 to progress to C&PE 625, C&PE 627, C&PE 617, or C&PE 628.

4. A student must attain a cumulative grade-point average of at least 2.0 in C&PE courses taken at KU for graduation with a B.S. degree in petroleum engineering.

A total of 127 hours is required, as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;PE 127</td>
<td>Introduction to Petroleum Engineering Profession</td>
<td>1</td>
</tr>
<tr>
<td>C&amp;PE 211</td>
<td>Material and Energy Balances</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 219</td>
<td>Drilling Fluids Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>C&amp;PE 221</td>
<td>Chemical Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 325</td>
<td>Numerical Methods and Statistics for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 327</td>
<td>Reservoir Engineering</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 511</td>
<td>Momentum Transfer</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 527</td>
<td>Reservoir Engineering II</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 522</td>
<td>Economic Appraisal of Chemical and Petroleum Projects</td>
<td>2</td>
</tr>
<tr>
<td>C&amp;PE 528</td>
<td>Well Logging</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 617</td>
<td>Drilling and Well Completion</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 618</td>
<td>Improved Oil Recovery</td>
<td>4</td>
</tr>
<tr>
<td>C&amp;PE 619</td>
<td>Petroleum Engineering Laboratory I</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 624</td>
<td>Process Safety and Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 625</td>
<td>Unconventional Reservoirs</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 627</td>
<td>Petroleum Production</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;PE 628</td>
<td>Petroleum Engineering Design (KU Core AE 6)</td>
<td>3</td>
</tr>
<tr>
<td>ME 211</td>
<td>Statics and Introduction to Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>Basic Science or Engineering Elective</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I (KU Core GE3N)</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>3</td>
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<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
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<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td>5</td>
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<tr>
<td>&amp; GEOL 103</td>
<td>and Geology Fundamentals Laboratory</td>
<td></td>
</tr>
<tr>
<td>GEOL 332</td>
<td>Sedimentology for Petroleum Engineers</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 535</td>
<td>Petroleum and Subsurface Geology</td>
<td>4</td>
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</table>

Mathematics Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>
Master of Science in Chemical and Petroleum Engineering

Chemical and Petroleum Engineering

Chemical engineering has grown out of a combination of chemistry and engineering associated with industrial processes. Today, it comprises knowledge used in processes that change the physical state or composition of materials. Chemical engineers hold key roles in the design, development, production, and purification of materials considered essential to human life and well-being, such as food products, fuels and lubricants, pharmaceuticals, fertilizers, synthetic fibers, microelectronic components, and plastics. Chemical engineers are involved in reducing the use of energy to make products in a safe and sustainable way and minimizing environmental impacts. Areas of study in the Chemical Engineering Department include (but are not limited to):


Petroleum engineering is concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. Petroleum engineers use knowledge of fluid and rock properties in subsurface environments to produce oil and gas safely and economically. At the University of Kansas, the focus is on reservoir engineering and improving production from oil and gas reservoirs. Reservoir engineers use geological detection with computerized mathematical analysis to produce raw materials. Through such techniques, petroleum engineers continue to extract oil and gas from reservoirs considered uneconomical only a few years ago. Petroleum engineering is uniquely challenging in that the raw material must be recovered far from direct observation. Areas of study in the Petroleum Engineering Department include (but are not limited to):

- Hydraulic fracturing and acidizing of unconventional reservoirs, Characterization and simulation of tight oil and gas reservoirs, Oilfield nanoparticles, CO₂ enhanced oil recovery and CO₂ storage, Phase behavior of reservoir fluids, Shale gas reservoir development, Anti-scaling and anti-waxing in oilfield, Kinetics of crude oil combustion, Polymer flooding, and Polymer Gels.

Graduate Admission

To qualify for study in any of the graduate programs in the Department of Chemical & Petroleum Engineering a student generally must have earned an accredited bachelor's degree in chemical or petroleum engineering. However, a student with good preparation in another engineering discipline or a related field, such as chemistry, physics, geology, or other engineering disciplines may qualify by taking the appropriate prerequisite undergraduate courses. These courses are determined on a case-by-case basis by the Department's Graduate Admissions Committee/Director.

Application Deadlines

- Fall Priority Deadline: January 5; final deadline March 1
- Spring Deadline: October 1

All application materials must be submitted before the final deadlines, March 1 for Fall semester and October 1 for Spring semester, to be considered for admission. All admitted students are considered for any
funding opportunities for which they qualify. See our Graduate Admissions (http://cpe.engr.ku.edu/graduate-admissions/) page or the Graduate Studies website (http://www.graduate.ku.edu/) for the application procedure and fees. Additional resources for international applicants can be found on the International Support Services Website (https://isu.ku.edu/).

Application Materials

- Application (https://gradapply.ku.edu/apply/) (online only)
- Statement of Purpose
- Resume or Curriculum Vitae
- Official transcript (http://graduate.ku.edu/transcripts/)
- Three letters of recommendation
- TOEFL, PTE, or IELTS scores (international students)

The following documents are required only after a student has been admitted:

- Financial Statement (International students only if no department funding offered)
- One (1) Official Transcript sent directly from the applicant’s university to the University of Kansas

*TOEFL Scores

- Institution Code – 6871
- Program Code – 64

IELTS Scores

- Email the electronic version to cpegrad@ku.edu.

* As of October 2020, GRE scores are no longer required.

Students admitted with baccalaureate degrees in chemical or petroleum engineering enroll in the graduate core courses listed in our Graduate Program Manual (https://cpe.ku.edu/enrollment-resources-and-course-listings/). Up to 9 credit hours from an outside institution may be transferred into upon approval of both department and university offices. Learn more about the degree requirements on the CPE Graduate Degree webpage (https://cpe.ku.edu/degrees/).

All graduate applications must be submitted online (https://gradapply.ku.edu/apply/).

Regular Status

For admission to regular status, the student must have an undergraduate grade point average of at least B (3.0 on a 4.0 scale). For students whose undergraduate GPA is below 3.0, admission on provisional status will be considered on a case-by-case basis. Graduate Record Examination scores are required.

Non-native English Speakers

For up-to-date details about the University's English Proficiency Requirements, visit the Graduate Studies Website (https://gradapply.ku.edu/english-requirements/).

Visit Us

Graduate program staff can assist prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is an important step. If you would like to schedule a visit, there are two main options:

The first, and most preferred, entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in mid-October or mid-March. Eligible admitted students are invited to participate in Campus Visit Days in February (prior to the fall semester of your intended matriculation). These organized visits opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible.

Contact Information

Please contact the CPE Graduate Program Coordinator, cpegrad@ku.edu (cpe@ku.edu) or (785) 864-2900, if you would like to schedule a campus visit, or have questions about the program or the application process.

The University of Kansas
CPE Graduate Program
4132 Learned Hall
1530 W. 15th Street
Lawrence, KS 66045

M.S. Degree Requirements

M.S. in Chemical Engineering

Two degree options, Option A or Option B, are available for the M.S. degree in chemical engineering.

Option A requires a thesis, and students in Option A are considered for departmental research assistantships, teaching assistantships, and fellowships.

Option B does not require a thesis, but does require a written report on a 3-hour special project. Students in Option B are not eligible for departmental research assistantships and fellowships, but may be considered for teaching assistantships, although priority is given to students in Option A.

Once admitted, students may change from one option to the other only with the Graduate Standards Committee approval.

For an M.S. in chemical engineering, the undergraduate prerequisite courses are C&PE 511, C&PE 512, C&PE 524, and C&PE 525. Depending on a student’s academic background and proposed Plan of Study, additional undergraduate prerequisite courses may be required. Up to 3 credit hours of the undergraduate prerequisite courses (numbered 500 or above) may be counted toward the M.S. degree as elective hours.

The following tables represent typical plans of study that might be established by a student and their advisor. Rarely are exceptions in C&PE course work allowed.
### M.S. in Chemical Engineering: Option A

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;E 701</td>
<td>Methods of Chemical and Petroleum Calculations</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 721</td>
<td>Chemical Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 722</td>
<td>Kinetics and Catalysis</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 731</td>
<td>Convective Heat and Momentum Transfer</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 732</td>
<td>Advanced Transport Phenomena II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives** 6

It is recommended that part of the elective hours be from other departments.

**Research**

- C&E 800 Seminar (or 1.5 credits C&E 800 and 1.5 credit for another seminar series if mandatory for fellowship or academic center involvement, etc.) 3
- C&E 803 Research 6

Only the first 6 hours of enrollment in C&E 803 meet degree requirements.

Includes the thesis and final oral defense or examination

**Total Hours** 30

### M.S. in Petroleum Engineering: Option A

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>C&amp;E 701</td>
<td>Methods of Chemical and Petroleum Calculations</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 771</td>
<td>Advanced Reservoir Engineering</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 790</td>
<td>Introduction to Flow in Porous Media</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 795</td>
<td>Enhanced Petroleum Recovery</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives** 9

It is recommended that part of the electives be from other departments.

**Research**

- C&E 800 Seminar (or 1.5 credits C&E 800 and 1.5 credit for another seminar series if mandatory for fellowship or academic center involvement, etc.) 3
- C&E 803 Research 6

Includes the thesis and final oral defense or examination

**Total Hours** 30

### M.S. in Chemical Engineering: Option B

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>C&amp;E 701</td>
<td>Methods of Chemical and Petroleum Calculations</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 721</td>
<td>Chemical Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 722</td>
<td>Kinetics and Catalysis</td>
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</tr>
<tr>
<td>C&amp;E 731</td>
<td>Convective Heat and Momentum Transfer</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;E 732</td>
<td>Advanced Transport Phenomena II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives** 15

No more than 2 elective courses numbered below 700.

No more than 3 elective courses in Engineering Management or Business or both.

**Research**

- C&E 825 Graduate Problems in Chemical and Petroleum Engineering 3

**Total Hours** 33

### M.S. in Petroleum Engineering: Option B

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>C&amp;E 795</td>
<td>Enhanced Petroleum Recovery</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives** 15

**Engineering Project**

Includes project oral defense or examination

- C&E 825 Graduate Problems in Chemical and Petroleum Engineering 6

**Total Hours** 33

### Doctor of Philosophy in Chemical and Petroleum Engineering

**Chemical and Petroleum Engineering**

Chemical engineering has grown out of a combination of chemistry and engineering associated with industrial processes. Today, it comprises knowledge used in processes that change the physical state or composition of materials. Chemical engineers hold key roles in the design, development, production, and purification of materials considered essential to human life and well-being, such as food products, fuels and lubricants, pharmaceuticals, fertilizers, synthetic fibers, microelectronic...
components, and plastics. Chemical engineers are involved in reducing the use of energy to make products in a safe and sustainable way and minimizing environmental impacts. Areas of study in the Chemical Engineering Department include (but are not limited to):

**Catalysis (hetero and homogeneous), Reaction Kinetics, Fuel Cells & Energy Storage, Biofuels, Interfacial Phenomena, Biomedical, Drug Delivery, Electrocatlysis, and Photoelectrocatlysis.**

Petroleum engineering is concerned with the drilling, recovery, production, and distribution of petroleum and natural gas. Petroleum engineers use knowledge of fluid and rock properties in subsurface environments to produce oil and gas safely and economically. At the University of Kansas, the focus is on reservoir engineering and improving production from oil and gas reservoirs. Reservoir engineers use geological detection with computerized mathematical analysis to produce raw materials. New areas of research are focused on unconventional reservoirs and Net Carbon Zero geoeenergy using AI and data mining for intelligent and sustainable petroleum engineering. Areas of study in the Petroleum Engineering Department include (but are not limited to):

**Data Mining and Artificial Intelligence Supported Reservoir Engineering, Hydraulic fracturing and acidizing of unconventional reservoirs, Characterization and simulation of tight oil and gas reservoirs, Oilfield nanoparticles, CO₂ enhanced oil recovery and CO₂ storage, and Phase behavior of reservoir fluids.**

### Ph.D. Admission Requirements

To qualify for study in any of the graduate programs in the Department of Chemical & Petroleum Engineering, a student generally must have earned an accredited bachelor’s degree and/or master’s degree in chemical or petroleum engineering. However, a student with good preparation in another engineering discipline or a related field, such as chemistry, physics, geology, or other engineering disciplines may qualify by taking the appropriate prerequisite undergraduate courses. These courses are determined on a case-by-case basis by the Department's Graduate Admissions Committee/Director.

**Application Deadlines**

- Fall Priority Deadline: January 5; final deadline March 1
- Spring Priority Deadline: October 1

All application materials must be submitted by the final deadlines, March 1 (Fall semester admission) and October 1 (Spring semester admission). All admitted students are considered for any funding opportunities for which they qualify. See our Graduate Admissions (https://cpe.ku.edu/graduate-admissions/) page or the Graduate Studies website (http://www.graduate.ku.edu/) for the application procedure and fees.

**Application Materials**

- Application (https://gradapply.ku.edu/apply/) (online only)
- Statement of Purpose
- Resume or Curriculum Vitae
- Official transcript (http://graduate.ku.edu/transcripts/)
- Three letters of recommendation
- TOEFL, PTE, or IELTS-Academic scores (non-native English speakers only)

The following documents are required only after a student has been admitted:

- Financial Statement (international students only if no department funding offer)
- One (1) Official Transcript sent directly from the applicant’s university to the University of Kansas

**TOEFL Scores**

- Institution Code – 6871
- Program Code – 64

**IELTS Scores**

- Email an electronic copy to cpegrad@ku.edu.

*As of October 2020, GRE scores are no longer required as part of the application process.

Students admitted with baccalaureate degrees in chemical or petroleum engineering enroll in the graduate core courses listed in our Graduate Program Manual (https://cpe.ku.edu/degrees/). Students with degrees in other branches of engineering or in mathematics, chemistry, physics, or other sciences must take undergraduate courses to provide the necessary background for the graduate level courses and are admitted provisionally. See undergraduate prerequisite courses listed in the M.S. Degree Requirements section. Students who have already completed a M.S. degree will have the total number of hours reduced on a case-by-case basis, with the approval of the Graduate Standards Committee, and based on individual background and course history. No credits will transfer in at the Doctoral level; however, the 60 total credit hour requirement can be reduced to as low as 45 credit hours.

All graduate applications must be submitted online (http://www.graduate.ku.edu/).

**Regular Status**

For admission to regular status, the student must have an undergraduate grade point average of at least B (3.0 on a 4.0 scale). For students whose undergraduate GPA is below 3.0, admission on probational status will be considered on a case-by-case basis. Graduate Record Examination (GRE) scores are required.

**Foreign Student English Proficiency**

To find the most up-to-date information about the University's English Proficiency Requirements, visit the Graduate Studies Webpage (https://gradapply.ku.edu/english-requirements/).

**Visit Us**

Graduate program staff can assist prospective students in determining the fit between the student and the program. Staff can facilitate a campus visit. If you would like to schedule a visit, there are two main options:

The first, and most preferred, entails simply applying for admission to the program. All prospective students are welcome to attend our Open House in mid-October or mid March. Eligible admitted students may be invited to participate in Campus Visit Days in February or March (prior to the fall semester of your intended matriculation). These organized visitation
opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible.

Contact Information
Please contact the CPE Graduate Program Coordinator, cepgrad@ku.edu (cpe@ku.edu) or (785) 864-2900, if you would like to schedule a campus visit, or have questions about the program or the application process.

The University of Kansas
CPE Graduate Program
4132 Learned Hall
1530 W. 15th Street
Lawrence, KS 66045

Ph.D. Degree Requirements
One of the goals of the department is to develop quality Ph.D. researchers who are well prepared for vocational and personal success. This policy sets forth a balanced program to develop and evaluate students in an efficient and fair manner. Equal consideration is given to the academic and the research ability, as both areas are required for success in industry or academia.

The Ph.D. graduate program typically consists of the completion of 60 credit hours beyond the B.S. degree or 45 credit hours beyond the M.S. degree. For more details about the courses and general timeline, see our Graduate Program Manual (http://cpe.engr.ku.edu/sites/cpe.engr.ku.edu/files/docs/CPE%20Graduate%20Program%20Manual.pdf).

An advisory committee of 5 or more members is formed for each Ph.D. aspirant: at least 3 tenure / tenure track faculty from the department and 1 member from outside the department at KU are required. The student’s research advisor normally serves as the committee chair. See the Graduate Catalog for doctoral committee composition requirements. The committee works with the aspirant to develop a plan of study and monitors the progress of the student throughout the remainder of the Ph.D. program.

A plan of study must be approved by the student’s advisor, the examining advisory committee, and the departmental Graduate Studies director by the end of the first semester. Before scheduling the comprehensive examination, the aspirant must satisfy residency, basic research skills, and the responsible scholarship requirements.

The research skill requirement provides the aspirant with a research skill distinct from, but strongly supportive of, the dissertation research. Work done to fulfill this requirement should involve study in an area complementary to the dissertation research and should enhance the student’s ability to carry out the research.

Preliminary Examination of Research - B.S. to Ph.D.
The Preliminary Examination of Research is administered to students requesting admission to the Ph.D. program without earning the M.S. degree. Successful completion of the preliminary examination admits the student into the Ph.D. program with aspirant status. Students taking this examination must have completed the graduate core courses at KU with the required GPA. The examination determines the student’s aptitudes for: (a) Independent, original, critical thinking; (b) Planning and organizing a research program; (c) Use of previous work and background literature to demonstrate understanding of the planned research within the scope of the larger project and ability to conduct that research; (d) Application of fundamental theory (e.g., equations) to the proposed work and; (e) Effective communication of technical work. The preliminary examination consists of a written report (5 pages maximum), oral presentation (15 minutes maximum), and questions by the examining committee (25 minutes maximum). The written and oral portions are prepared by the student only, with no review or editing by the research advisor or any other person. The written report is submitted to the committee one week before the oral examination. Questions are directed toward determining the 5 aptitudes listed above. A rubric for the oral and written portions will be provided to the student beforehand.

Comprehensive Examination
The Ph.D. aspirant takes the comprehensive examination after the completion of a majority of the course work for the Ph.D. and all department, school, and general requirements prerequisite to this examination, including residency, research skills, and responsible scholarship requirements. To prepare the aspirant for the comprehensive examination, the advisory committee may require enrollment in C&PE 902, Preparation for the Ph.D. Comprehensive Examination. The examination consists of 2 parts: a written proposal for research and an oral examination based on, but not limited to, the research proposal.

For the research proposal, the student is assigned a topic of current interest to the chemical and/or petroleum engineering profession. This assignment is made by an examining committee of at least 5 persons, at least 3 must be tenure / tenure track faculty from within the department including the advisor and at least 1 person from outside the department at KU. The aspirant identifies a research problem in the assigned topic area and prepares a written proposal for research on this problem. Normally, the written proposal must be prepared over a specified time period of 30 consecutive days. Except in unusual circumstances, the problem must be distinctly different from the dissertation problem.

The examining committee evaluates the research proposal upon completion. If the committee judges it satisfactory, the oral examination part of the comprehensive examination is held. The oral examination is based on the research proposal but may also cover areas peripheral to the proposal.

A student must pass both parts of the examination. Failure of either part constitutes an unsatisfactory grade on the entire examination. An aspirant who receives a grade of unsatisfactory may repeat the examination upon the recommendation of the examining committee, but the exam may not be taken more than twice. The examination may not be repeated until at least 90 days have elapsed since the unsuccessful attempt. On receipt of a grade of Honors or Satisfactory on the comprehensive examination, the aspirant is admitted to candidacy for the degree of Doctor of Philosophy.

Ph.D. Dissertation and Final Oral Examination
The doctoral dissertation, based on independent research conducted by the candidate, constitutes the final phase of the doctoral work and must be completed within the prescribed time constraints. Upon acceptance of the dissertation by the advisory committee, the candidate defends the dissertation in a final oral examination. The examining committee consists of at least 5 persons, including the advisory committee members and at least 1 person from outside the department.
MS to PhD Program

If a student obtains their MS degree in Chemical or Petroleum Engineering from the University of Kansas and plans to continue on into the doctoral program, then the GPA from the core courses will be used as the basis for entering the PhD program. If the student obtained their MS degree in Chemical or Petroleum Engineering (or very closely related fields) from another university, then the student's MS course work is evaluated by:

The Graduate Standards Committee (GSC) will determine if 1 to 5 (4 PE) of their MS core courses will count toward the requirements to become a PhD aspirant. A minimum of 45 credits must be completed at KU for Ph.D. degree completion.

Course Requirements:

Core Courses: Minimum of 12 credit hours for Petroleum Engineering and 15 credit hours for Chemical Engineering (or equivalent as approved by GSC)

Elective Courses (15 hours): 3 CPE Courses; 2 courses from outside CPE (7XX or greater)

Graduate Seminar: Every semester while in residence

Research: 30-34 hours

- PhD Aspirants: Average GPA of 3.2 (5 course core) or 3.25 (4 course core) in core courses. A student below the required GPA will need to decide with the Advisor to 1) retake courses until GPA is obtained; 2) be dismissed from graduate program.
- 3.25 Overall GPA
- Only one C may be obtained. If more than one C is obtained, the student will be placed on departmental probation
- Preliminary Examination: See Policy and Rubric on departmental website.

BS to PhD Program (Fast track PhD)

Course Requirements: Minimum of 60 total credit hours

Core Courses: See list of Graduate Core Courses in the MS Degree section

Elective Courses (15 hours): 3 CPE Courses; 2 from outside CPE (7XX or greater)

Graduate Seminar: C&PE 800 Every semester while in residence

Research: 30-34 hours

- PhD Aspirants: average GPA of 3.2 (5 course core) or 3.25 (4 course core) in core courses from KU MS degree. A student below the required GPA will need to decide with Advisor to 1) retake courses until GPA is obtained; 2) obtain the MS degree while pursuing the PhD program.
- 3.25 Overall GPA
- Only one C may be permitted
- Preliminary Examination: See Policy and Rubric on departmental website.

Graduate Certificate in Petroleum Management

The engineering petroleum management certificate program is offered to concurrently enrolled graduate students in the School of Business MBA Petroleum Management Program. Completion of the program awards a certificate for academic accomplishment in the Petroleum Management area.

Applicants must have been admitted to the School of Business MBA Petroleum Management Program before they are considered for admission to the Engineering Petroleum Certificate program. Enrollment is concurrent.

Certificate Requirements

Total Engineering Required Credit Hours: (15)

Courses:

C&PE 511 – Momentum Transfer (fall semester) (3)
C&PE 522 – Economic Appraisal of Chemical and Petroleum Projects (2)
C&PE 624 – Plant and Environmental Safety
EMGT 850 or Engineering Elective
C&PE 765 – Corrosion Engineering (3)
C&PE 804/BUS 825 – Petroleum Management Seminar (1)
with Summer Industry Tour
C&PE 825 Final Thesis (3)

Department of Civil, Environmental, and Architectural Engineering

Civil, Environmental, and Architectural Engineering

Civil engineering (CE) is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society. Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering (ARCE) combines studies in architecture with engineering science and design courses in structures, illumination, power, mechanical, energy, and construction to prepare students for building design projects of all kinds. KU's B.S. degree program in architectural engineering was established in 1912. The first female graduate of the School of Engineering was an architectural engineering major.
Architectural engineering merged with civil and environmental engineering in 2001 to form the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission

CEAE’s mission is to provide students with an outstanding engineering education and be a leader in research and service. This mission is supported by the following three goals:

1. Prepare students for productive engineering careers
2. Maintain and grow strong research programs
3. Serve the profession

Undergraduate Programs

Civil, environmental, and architectural engineering offers undergraduate degree programs in both civil engineering and architectural engineering. The Bachelor of Science programs in civil engineering and architectural engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org). The B.S. in civil engineering is a 4-year, 132-hour degree. The B.S. in architectural engineering is a 4-year, 132-hour program.

Students in civil engineering can identify either civil or environmental engineering as their concentration. Students in architectural engineering can specialize in one of four areas of emphasis: mechanical/energy systems, lighting/electrical systems, building structures, or construction, or a hybrid such as pre-architecture, sustainable buildings, acoustics, or fire protection.

Both degree programs require a student to take the Fundamentals of Engineering (FE) examination, which is part of the process toward registration as a Professional Engineer (P.E.), to graduate. To help students complete their degrees efficiently and to aid with professional development, all undergraduates in CEAE have individual faculty members as their academic advisors.

Graduate Programs

The department offers graduate programs leading to the following degrees and certificates:

- Master of Science in Architectural Engineering
- Master of Science in Civil Engineering
- Master of Science in Environmental & Water Resources Engineering
- Master of Science in Environmental & Water Resources Science
- Master of Civil Engineering
- Master of Construction Management
- Doctor of Philosophy in Civil Engineering
- Doctor of Philosophy in Environmental & Water Resources Engineering
- Doctor of Philosophy in Environmental & Water Resources Science
- Graduate Certificate in Construction Management
- Graduate Certificate in Structural Analysis
- Graduate Certificate in Structural Design
- Graduate Certificate in Structural Forensics
- Graduate Certificate in Water Resources

An ABET-accredited baccalaureate degree in engineering, or the equivalent from abroad, is required for admission to the graduate degree programs in civil, environmental and architectural engineering. The graduate degree programs in environmental & water resources science and construction management are intended primarily for students with baccalaureate degrees in fields other than engineering.

Graduate students in the civil engineering degree programs can specialize in structural engineering, environmental engineering, water resources engineering, geotechnical engineering, transportation engineering, construction, or engineering mechanics. Students may be co-enrolled in a degree and certificate seeking program, and courses taken as a certificate seeking student may be counted towards a graduate degree.

Students in the Master of Science (M.S.) degree in architectural engineering program can specialize in mechanical/energy systems, lighting/electrical systems, building structures, or construction, or a hybrid such as sustainable buildings, acoustics, or fire protection. M.S. ARCE students often have bachelor degrees from other engineering disciplines.

The M.S. degree programs in civil and architectural engineering include a Design Option, which can be completed in 2 semesters of full-time study. Students in the Design Option take 4 regular academic courses each semester and work together as a consulting group on the design of a major engineering project. The Design Option is open to students in all areas of interest. Students in the Design Option must start in the fall semester and complete 15 credit hours, including the design project, in the fall and spring semesters.

The Master of Civil Engineering degree provides a coursework-only option for working professionals who do not need the research component of the M.S. degrees. The M.C.E. degree may be completed by taking courses offered during evening hours.

The interdisciplinary Master of Science degree in environmental & water resources science is intended primarily for students with baccalaureate degrees in fields other than engineering.

The Master of Construction Management is a professional non-thesis degree for part-time or full-time students. Graduate courses in construction management (CMGT) are taught in the evening.

The department’s doctoral degrees are the Doctor of Philosophy degrees in civil engineering, environmental & water resources engineering, and environmental & water resources science. Most doctoral students hold M.S. degrees, but direct admission to a doctoral program is possible for especially well-qualified engineering B.S. holders.

Courses

ARCE 101. Introduction to Architectural Engineering. 2 Credits.
An introduction to the study of and careers in architectural engineering. Topics include problem solving and study skills, the building design and construction process, design documents, and professional practice issues such as licensing requirements and ethics.

ARCE 217. Computer-Assisted Building Design. 3 Credits.
Introduction to computer-aided design (CAD) tools. The course covers 2D drafting and 3D modeling using Autodesk’s AutoCAD® and building information modeling (BIM) software Revit®. Includes architectural and structural design; mechanical, electrical, and plumbing (MEP) design; and modeling using the Family Editor in Revit. Prerequisite: Must be eligible for MATH 125 or MATH 145, or consent of instructor.

ARCE 315. Electric Circuits and Machines. 3 Credits.
Introduction to DC and AC electrical circuit analysis techniques, AC power calculations, transformers, three-phase systems, magnetic circuits, and DC and AC machines with a focus on applications. Not open to electrical
or computer engineering majors. (Same as EECS 315.) Prerequisite: A course in differential equations and eight hours of physics.

ARCE 350. Building Materials Science. 3 Credits.
An introduction to the structural, thermal, electrical, and optical properties of building materials. Manufacturing, testing, integration, and specification of materials with emphasis on commercial, institutional, and industrial buildings. Prerequisite: PHSX 212 and CHEM 150 or CHEM 149, or consent of instructor.

ARCE 351. Building Materials Science, Honors. 3 Credits.
An introduction to the structural, thermal, electrical, and optical properties of building materials. Manufacturing, testing, integration, and specification of materials with emphasis on commercial, institutional, and industrial buildings with added honors-enhancement activities. The activities include one or more of the following: extra meetings outside the classroom, written work, projects, and presentations. Prerequisite: PHSX 212 and CHEM 150 or CHEM 149, or consent of instructor.

ARCE 390. Special Problems. 1-3 Credits.
Special problems in architectural engineering. The study of a particular problem involving individual research and report. Prerequisite: Students must submit, in writing, a proposal including a statement of the problem the student wishes to pursue, the methodology the student plans to use in the program, and objectives of the special problems. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of the instructor.

ARCE 620. Architectural Acoustics. 3 Credits.
An introduction to the physics of sound. Objective and subjective evaluation and control of sound as applied to architectural spaces. Room shaping, mechanical and electrical system noise and vibration control, and, and electro-acoustic sound reinforcement. Prerequisite: PHSX 212, PHSX 236, and ARCE 661 or equivalent, or consent of instructor.

ARCE 621. Electro-Acoustical Systems. 3 Credits.
A study of electro-acoustic sound reinforcement and reproduction systems for buildings. Prerequisite: PHSX 212, PHSX 236, and ARCE 315 or equivalent, or consent of instructor.

ARCE 629. Problems in Architectural Acoustics. 1.5 Credits.
Capstone architectural engineering design course that includes the analysis, design, and integration of a building's acoustical system. Building codes, standards, performance, and sustainability are addressed. Prerequisite: CMGT 457, ARCE 640, and senior standing, or consent of instructor. Corequisite: CMGT 500.

ARCE 640. Power Systems Engineering I. 3 Credits.
This course introduces the design of commercial and industrial power systems. Emphasis is placed on the proper selection, specification, and installation of materials and equipment that comprise commercial and industrial power systems. This course covers the application of materials and equipment in accordance with industry standards, independent laboratory testing, and the National Electrical Code. Prerequisite: ARCE 315 or EECS 315 or consent of instructor.

ARCE 641. Power Systems Engineering II. 3 Credits.
A continuation of ARCE 640 that integrates system components into functional, safe, and reliable power distribution systems for commercial, industrial, and institutional (CII) facilities. Service entrance design, distribution system layout and reliability, emergency and standby power system design, medium-voltage distribution systems, symmetrical fault analysis, and special equipment and occupancies. (Same as EECS 441.) Prerequisite: ARCE 640 or EECS 212 and Upper-Level EECS Eligibility.

ARCE 642. Power System Protection. 3 Credits.
This course introduces techniques and methods used to analyze and predict the performance of commercial and industrial power systems and equipment under balanced and unbalanced fault conditions. Emphasis is placed on the selection, application, and coordination of protective devices to detect and clear power system faults in a safe and reliable manner. Prerequisite: ARCE 640 or EECS 212 or consent of instructor.

ARCE 644. Electric Machines and Drives. 3 Credits.
An introduction to the physics of sound. Objective and subjective evaluation and control of sound as applied to architectural spaces. Room shaping, mechanical and electrical system noise and vibration control, and, and electro-acoustic sound reinforcement. Prerequisite: PHSX 212, PHSX 236, and ARCE 661 or equivalent, or consent of instructor.

ARCE 645. Electric Energy Production and Storage. 3 Credits.
This course introduces techniques and methods used to analyze and predict the performance of commercial and industrial power systems and equipment under balanced and unbalanced fault conditions. Emphasis is placed on the selection, application, and coordination of protective devices to detect and clear power system faults in a safe and reliable manner. Prerequisite: ARCE 640 or EECS 212 and Upper-Level EECS Eligibility.

ARCE 646. Electric Energy Production and Storage. 3 Credits.
This course introduces techniques and methods used to analyze and predict the performance of commercial and industrial power systems and equipment under balanced and unbalanced fault conditions. Emphasis is placed on the selection, application, and coordination of protective devices to detect and clear power system faults in a safe and reliable manner. Prerequisite: ARCE 640 or EECS 212 and Upper-Level EECS Eligibility.

ARCE 647. Power System Analysis I. 3 Credits.
Continuation of ARCE 647 or EECS 547 that uses power system modeling developed in ARCE 647 or EECS 547 to analyze power system operation and reliability will be addressed throughout the course. (Same as EECS 548.) Prerequisite: ARCE 640 or EECS 547 or consent of instructor.

ARCE 650. Illumination Engineering. 3 Credits.
Students are introduced to lighting fundamentals, measurement, and technology and to their application in the analysis and design of architectural lighting systems. Prerequisite: PHSX 212 or consent of instructor.

ARCE 660. Building Thermal Science. 3 Credits.
The fundamentals of moist air processes, air and moisture exchange, and building heat transfer. Determination of heating and cooling loads under steady-state and transient conditions. Prerequisite: ME 212. Corequisite: CE 330 or ME 510 or AE 345 or C&PE 511; or consent of instructor.
Analysis and design of heating, ventilating, air-conditioning, and refrigeration equipment and systems. Prerequisite: ARCE 660 or ARCE 670 or consent of the instructor.

ARCE 662. Water Systems Design. 3 Credits.
The analysis and design of hydronic systems for buildings including piping, plumbing, pumping, and the water-side of heating, ventilating, and air-conditioning (HVAC). Prerequisite: ME 510, AE 345, CE 330, or C&PE 511, or consent of the instructor.

ARCE 663. Energy Management. 3 Credits.
Energy usage in commercial buildings and industry, energy auditing methodology, utility analysis, management measures, and economic evaluation are covered. Includes fieldwork. Prerequisite: Corequisite: ARCE 660 or ARCE 670, or consent of instructor.

ARCE 664. Fire Protection Engineering. 3 Credits.
An introduction to human response, fire science, combustion calculations, compartment fires, piping and sprinkler design, and smoke management. Analytical methods, experimental data, codes, case-studies, and videos are presented in this engineering design course. Prerequisite: ME 212 or C&PE 221, and ME 510, AE 345, CE 330, or C&PE 511, or consent of instructor.

ARCE 665. Solar Energy Systems Design. 3 Credits.
A quantitative and qualitative study of active, passive, wind, and photovoltaic energy conversion systems for buildings. Solar radiation and system performance prediction. Prerequisite: ME 212 or C&PE 221, or consent of instructor.

ARCE 670. Building Thermal Science, Honors. 3 Credits.
The fundamentals of moist air processes, air and moisture exchange, and building heat transfer. Determination of heating and cooling loads under steady-state and transient conditions with added honors-enhancement activities. The activities include one or more of the following: extra meetings outside the classroom, written work, projects, and presentations. Prerequisite: ME 312. Corequisite: CE 330 or ME 510 or AE 345 or C&PE 511; or consent of instructor.

ARCE 671. HVAC&R Systems Design, Honors. 3 Credits.
Analysis and design of heating, ventilating, air-conditioning, and refrigeration equipment and systems. The discussion section and its assignments are required. Not open for those with credit for ARCE 661. Prerequisite: ARCE 660, ARCE 670, or consent of the instructor.

ARCE 675. Sound and Vibration Control. 3 Credits.
An introduction to the physics and measurement of sound, wave phenomena, acoustics, and methods of noise and excessive vibration control for various applications. Prerequisite: PHSX 212 and MATH 220 or MATH 221 or MATH 320; or consent of instructor.

ARCE 690. Special Problems. 1-3 Credits.
The study of a particular problem in architectural engineering involving individual research and presentation. Prerequisite: Student must submit, in writing, a proposal including a statement of the problem the student wishes to pursue, the methodology the student plans to use in the program, and objectives of the special problems. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of instructor.

ARCE 691. Honors Research. 3 Credits.
Research a particular architectural engineering problem. Research will involve defining the problem, developing a research methodology, applying the research methodology and gathering data, analyzing and interpreting the data, and presenting the results of the research. The student must have a faculty sponsor and submit a proposal in writing stating the objective of the research, the planned research method that will be used, and the method of reporting the results. Prerequisite: Participation in the University Honors Program, consent of instructor, and approval of the chair are required.

ARCE 698. Directed Readings in Architectural Engineering. 1-3 Credits.
Directed study of special topics and problems. May be repeated for credit. Prerequisite: Student must submit, in writing, a proposal including a statement of the problem the student wishes to pursue and a bibliography of the articles and books required to complete the project. The student must also have a signed agreement with the faculty member proposed as instructor for the course. Consent of instructor.

ARCE 699. Master’s Thesis. 1-6 Credits.
Directed research and reporting of a specialized topic of interest to the architectural engineering profession. Prerequisite: Consent of instructor.
Courses

CE 191. Introduction to Civil Engineering. 2 Credits.
A discussion of engineering logic through examination of current concepts in engineering education, practice and professional development. Not open to juniors and seniors.

CE 201. Statics. 2 Credits.
The principles of statics, with particular attention to engineering applications. Prerequisite: PHSX 210 or PHSX 211 or PHSX 201, and MATH 125 or MATH 145.

CE 240. Geometrics. 3 Credits.
This course introduces engineering applications of surveying and geographic information systems (GIS) using surveying instruments and ArcGIS. The focus of this course is on practical application of geometrics to civil engineering problems. Two lecture periods and one lab period per week. Prerequisite: MATH 125 or MATH 145, ARCE 217; or consent of instructor.

CE 250. Dynamics. 3 Credits.
The principles of kinematics and kinetics, with particular attention to engineering applications. Prerequisite: CE 201 or ME 201 or ME 211, and MATH 126 or MATH 146.

CE 260. Statics and Dynamics. 5 Credits.
A combination of statics and dynamics covered in CE 201 and CE 250. This course must be taken as a five-hour unit. Prerequisite: PHSX 210 or PHSX 211, and MATH 126 or MATH 146.

CE 310. Strength of Materials. 4 Credits.
Principles of stress and deformation in solid objects. Prerequisite: CE 201 or ME 201 or ME 211 or CE 260 or CE 301. Corequisite: MATH 220 or MATH 221; or consent of instructor.

CE 312. Strength of Materials, Honors. 4 Credits.
Principles of stress and strain in solid objects with added honors-enhancement activities. The activities include one or more of the following: extra meetings outside the classroom, written work, projects, and presentations. Prerequisite: CE 201 or ME 201 or ME 211 or CE 260 or CE 301. Corequisite: MATH 220 or MATH 221; or consent of instructor.

CE 330. Fluid Mechanics. 3 Credits.
This course covers the fundamentals of fluid mechanics and includes the topics fluid properties, hydrostatics, applications of conservation of mass, energy and momentum equations, pipe flow, dimensional analysis and open channel flow. Prerequisite: ENGL 101, ENGL 102, CE 300 or CE 301 or CE 250 or CE 260.

CE 331. Fluid Mechanics Lab. 1 Credits.
This is an experimental course that consists of several laboratory experiments intended to illustrate the concepts presented in CE 330, Fluid Mechanics. Prerequisite: ENGL 101, ENGL 102, CE 250 or CE 260 or CE 300 or CE 301. Corequisite: CE 330.

CE 412. Structural Engineering Materials. 3 Credits.
Study of the engineering properties of structural materials and their control with emphasis on timber, concrete, and steel. Two one-hour lectures and one three-hour laboratory. Prerequisite: CE 310 or CE 312 and ENGL 102 or ENGL 105; or consent of instructor.

CE 413. Structural Engineering Materials, Honors. 3 Credits.
Study of the engineering properties of structural materials and their control with emphasis on timber, concrete, and steel. Two one-hour lectures and one three-hour laboratory. Prerequisite: CE 310 or CE 312 and ENGL 102 or ENGL 105. Open only to students admitted to the University Honors Program or by consent of instructor.

CE 455. Hydrology. 3 Credits.
An introduction to the fundamentals of hydrologic analysis. Subjects covered include collection and initial reduction of hydrologic data; rainfall-runoff relationships, hydrograph development; hydrologic routing, well equations and their application and hydrologic frequency analysis. Prerequisite: ENGL 101, ENGL 102 or ENGL 105, and CE 330.

CE 461. Structural Analysis. 4 Credits.
Three one-hour lectures and one two-hour laboratory. Analysis of statically determinate and indeterminate beams, frames, and trusses using classical methods and introducing computer-based methods. Prerequisite: CE 310 or CE 312.

CE 477. Introduction to Environmental Engineering and Science. 3 Credits.
Application of fundamental scientific principles to the protection of atmospheric, aquatic, and terrestrial environments through the use of pollution abatement processes, with consideration also given to economic, social, political, and legal aspects of pollution control. Prerequisite: ENGL 102 or ENGL 105, MATH 101 or MATH 104, and CHEM 135 or CHEM 175 or CHEM 195 or CHEM 149 or CHEM 150.

CE 479. Introduction to Environmental Engineering and Science, Honors. 3 Credits.
Application of fundamental scientific principles to the protection of atmospheric, aquatic, and terrestrial environments through the use of pollution abatement processes, with consideration also given to economic, social, political, and legal aspects of pollution control. Open only to students admitted to the University Honors Program or by consent of instructor. Prerequisite: ENGL 102 or ENGL 105, MATH 101 or MATH 104, and CHEM 135 or CHEM 175 or CHEM 195 or CHEM 150.

CE 480. Introduction to Transportation Engineering. 3 Credits.
Students are provided with a solid introduction to the principles of highway engineering and traffic analysis. This course will present a large number of practical problems, and in sufficient depth, such that the student will be capable of solving real highway-related problems. Prerequisite: CE 240.

CE 484. Materials for Transportation Facilities. 3 Credits.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization. Prerequisite: CE 310 or CE 312.

CE 485. Materials for Transportation Facilities, Honors. 3 Credits.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization with added honors-enhancement activities. The activities include one or more of the following: extra meetings outside the classroom, written work, projects, presentations, and lab activities. Prerequisite: CE 310 or consent of instructor.

CE 487. Soil Mechanics. 4 Credits.
Three lecture periods and one laboratory period. Fundamental theories of soil mechanics and their applications in engineering. Prerequisite: CE 310 or CE 312, corequisite or prerequisite CE 330.

CE 490. Special Problems. 1-5 Credits.
An advanced study related to a special problem in the field of civil engineering or allied fields, for upper-division undergraduate students.

CE 495. Special Topics: ____. 1-3 Credits.
A course or colloquium to present topics of special interest. Prerequisite: Varies by topic.

CE 498. Engineering Honors Seminar. 3 Credits.
Prerequisite: Participation in or eligibility for the University Honors Program. Sophomore or higher standing.

CE 535. Engineering Applications of GIS. 3 Credits.
This course introduces engineering applications of geographic information system (GIS) using ArcGIS. The focus of this course is on practical application of GIS to civil engineering problems. Prerequisite: Junior or Senior standing, or consent of instructor.

CE 550. Life Cycle Assessment. 3 Credits.
Life cycle assessment (LCA) is a tool used across engineering fields to determine the life cycle, cradle-to-grave environmental impacts of a product or process. LCA practice helps develop a systems-thinking perspective and a deeper understanding of sustainability. Students will evaluate LCA methods and design appropriate LCA frameworks. Prerequisite: CE 477 or CE 479 or C&PE 211.

CE 552. Water Resources Engineering Design. 4 Credits.
Three one-hour lectures and one three-hour laboratory. Study of water resources structures and systems with design emphasis on the hydraulic features: dams, drainage, river engineering, pipelines, channels and hydraulic machinery. Prerequisite: CE 330 and CE 455.

CE 555. Open Channel Flow. 3 Credits.
Study of uniform and non-uniform steady flow of water in open channels, including backwater curves, the hydraulic jump, and the delivery of canals. Prerequisite: CE 330 or equivalent.

CE 562. Design of Steel Structures. 3 Credits.
Two one-hour lectures and one three-hour laboratory. Fundamentals of structural design with steel. Prerequisite: CE 461.

CE 563. Design of Reinforced Concrete Structures. 3 Credits.
Two one-hour lectures and one three-hour laboratory. Fundamentals of structural design with reinforced concrete. Prerequisite: CE 461; CE 412 or CE 413 or CE 484; or consent of the instructor.

CE 570. Concepts of Environmental Chemistry. 3 Credits.
The fundamentals of aquatic chemistry, with emphasis on application to water purification and wastewater treatment. Prerequisite: Undergraduate standing, CE 477 or CE 479, and MATH 115 or MATH 125 or MATH 145.

CE 571. Environmental Engineering Laboratory. 3 Credits.
A laboratory course introducing standard practices for measurement, analysis, and reporting of environmental data. Emphasis is placed on learning common analytical techniques used in environmental engineering and science. Prerequisite: Undergraduate standing, CE 477 or CE 479 or equivalent, and MATH 115 or MATH 125 or MATH 145.

CE 573. Biological Principles of Environmental Engineering. 3 Credits.
A basic study of the microorganisms of importance in environmental engineering. Emphasis is placed on the microbiology of dilute nutrient solutions. Microbial physiology, microbial ecology, and biochemistry will be discussed as they pertain to environmental engineering and science. Both biodegradation and public health aspects are included. Prerequisite: Undergraduate standing, CE 477 or CE 479 or equivalent, and MATH 115 or MATH 125 or MATH 145.

CE 574. Design of Air Pollution Control Systems. 3 Credits.
This course emphasizes understanding of air pollution problems and their solution through engineering design and science. Topics covered include: types of air pollutants; monitoring of air pollutants; transport of air pollutants in the atmosphere; and control of air pollution emissions from both stationary and mobile sources. Prerequisite: CE 330, CE 477 or CE 479, MATH 126 or MATH 146, PHSX 212; or consent of instructor.

CE 576. Municipal Water Supply and Wastewater Treatment. 4 Credits.
The principles of public water supply design, including source selection, collection, purification, and distribution; for municipal wastewater, collection, treatment, and disposal. Prerequisite: CE 330 or C&PE 511, CE 477 or CE 479.

CE 577. Industrial Water and Wastes. 3 Credits.
A review of the methods of industrial water treatment and the fundamentals of industrial water pollution control. Topics include: water budgets, cooling tower and boiler treatment, corrosion control, government regulations, wastewater characterization, waste minimization, pilot plants, pretreatment, final treatment, and site selection. Prerequisite: Undergraduate standing, and CE 477 or CE 479 or equivalent.

CE 582. Highway Engineering. 3 Credits.
A comprehensive study of the planning, design, construction, operations, and maintenance of highway systems with emphasis on the design aspects of a highway. Prerequisite: CE 455 and CE 480.

CE 588. Foundation Engineering. 3 Credits.
A study of the interaction of the characteristics of soil or rocks and structures. The estimation of settlement and bearing capacity of foundation elements. Principles governing the choice and design of footings, rafts, piers, and piles. Prerequisite: CE 487.

CE 610. Engineering Ethics. 3 Credits.
An examination of the ethical and social implications of being a professional engineer. Through the use of case studies, issues such as professional responsibility to clients, employers, and the public will be evaluated in light of professional codes of ethics. Prerequisite: Junior, Senior, or Graduate standing.

CE 625. Applied Probability and Statistics. 3 Credits.
Course topics include data description, measures of central tendency and dispersion, sampling and sampling designs, quality control, persistence, periodicity, sampling distributions, hypothesis testing, ANOVA, correlation, linear regression, multiple correlation, and multiple regression. Applications and real world problems are stressed. Prerequisite: MATH 125 or MATH 145 or MATH 115 and MATH 116.

CE 677. Graduate Fundamentals of Environmental Engineering. 3 Credits.
Application of fundamental scientific principles to the protection of atmospheric, aquatic, and terrestrial environments through the use of pollution abatement processes, with consideration also given to economic, social, political, and legal aspects of pollution control. May not be taken for credit by students with credit in CE 477. Prerequisite: ENGL 102 or ENGL 105, MATH 101 or MATH 104, and CHEM 135 or CHEM 175 or CHEM 150.

CE 684. Materials for Transportation Facilities. 3 Credits.
Principles involved in the testing, behavior, and selection of materials for use in the transportation field. Emphasis is on bituminous materials, aggregate, and soil stabilization. Readings. Prerequisite: CE 310 and CE 487.

CE 704. Dynamics and Vibrations. 3 Credits.
Problems in engineering dynamics and vibrations. Topics include applications of generalized forces and coordinates, Lagrange equations, and a study of the performance of single and multiple degree of freedom in vibrational systems. (Same as AE 704.) Prerequisite: AE 508.

CE 710. Structural Mechanics. 3 Credits.
Basic concepts in the analysis of stress and strain and the behavior of materials. Topics include elementary theory and problems in elasticity, theories of failure of materials including fracture mechanics and introduction to plasticity.

CE 711. Probabilistic Design and Reliability. 3 Credits.
Learn to evaluate statistical data and develop engineering design criteria for natural and man-made random phenomena. Develop and
be able to use material or system fragility curves. Analyze complex systems or alternate system probabilities using Monte Carlo Simulation. Determine system reliability for statistically evaluated hazard probabilities. Techniques are applied to realistic design problems in Civil Engineering. Prerequisite: Graduate standing or permission of the instructor.

CE 712. Structural Engineering Materials. 3 Credits.
Study of the engineering properties of structural materials and their control with emphasis on timber, concrete, and steel. Two one-hour lectures and one three-hour laboratory. Not open for credit to students with credit in CE 412 or CE 413. Prerequisite: CE 310 or CE 312 or equivalent, and ENGL 102 or ENGL 105 or equivalent, or consent of instructor.

CE 713. Cold-formed Steel and Aluminum Design. 3 Credits.
Learn the principles of designing thin cold-formed and extruded materials. Focus is on cold-formed-steel with basic application to aluminum and concepts of curtainwall design. Load bearing and non-load bearing applications. Determine properties and strengths of columns and beams composed of arbitrary formed shapes. Learn to apply Direct Design. Seismic and wind design of cold formed steel structures. Prerequisite: CE 562.

CE 714. Professional Practice. 3 Credits.
This course is the business of engineering. Topics include: case studies of design and construction litigation, proposals and contracts, managing risk and liability, principles of management and leadership, developing professional relationships, developing a quality culture, project and design accounting, errors and omissions, insurance, organizational structures, globalization, total quality management, and communications. Class participation is required. Prerequisite: Graduate standing or permission of the instructor.

CE 715. Corrosion Engineering. 3 Credits.
Electrochemical basis of corrosion. Estimating probability and rate of corrosion. Identifying different conditions likely to cause specific types of corrosion. Corrosion mitigation techniques. Prerequisite: CHEM 135, CHEM 150 or equivalent.

CE 721. Experimental Stress Analysis. 3 Credits.
Introduction to experimental stress-analysis techniques. Theory and application of mechanical strain gages, electrical strain gages, photoelastic techniques, and brittle coatings.

CE 730. Intermediate Fluid Mechanics. 3 Credits.
Fall semester. Principles of steady and unsteady flows, theories of potential, viscous, and turbulent flows, and applications in water resources engineering. Prerequisite: CE 330 and MATH 320.

CE 731. Applied Groundwater Modeling. 3 Credits.
This course focuses on how to construct simple to complex computer models of groundwater systems and systems in which water flows between groundwater and surface water bodies such as springs, streams and lakes. We consider water flow, transport of solutes, and density effects (from saltwater or brines). We consider the conjunctive use of groundwater and surface water (demand-driven, supply-limited problems), and managed aquifer recharge (MAR). We consider three aspects of model development: (1) how to compare the computer models we construct to the systems modelers intend them to represent, (2) how accurate the models are likely to be and how uncertainty can be quantified, and (3) how useful the models are in practice. (Same as GEOL 758.) Prerequisite: GEOL 751 or CE 752, or approved by the professor.

CE 735. Engineering Applications of GIS. 3 Credits.
This course introduces engineering applications of geographic information system (GIS) using ArcGIS. The focus of this course is on practical application of GIS to civil engineering problems.

CE 736. Environmental Monitoring and Field Methods. 3 Credits.
A lecture-laboratory-field sampling course to familiarize students with environmental monitoring techniques and open source data availability. Dimensions of environmental monitoring will be considered for air, soil, and water measurements. The major emphasis will be on surface water monitoring techniques and their principles, utility, and limitations. Prerequisite: CE 330 or consent of instructor.

CE 749. Solid and Hazardous Wastes. 3 Credits.
Fundamental issues associated with solid and hazardous wastes are presented. Topics include government regulations, waste characteristics and quantities, the transport and attenuation of wastes in the environment, risk assessment, and handling, treatment and disposal techniques. Special emphasis is placed on hazardous waste remediation strategies in terrestrial systems. Prerequisite: Graduate standing in the Environmental Science and Engineering program, or consent of instructor.

CE 751. Physical Hydrology. 3 Credits.
In this course students will develop a land surface model based on the underlying physics and mechanisms of radiative transfer, precipitation, snow processes, evapotranspiration, infiltration and runoff generation. The course will also cover numerical and uncertainty issues associated with hydrologic modeling and its application to real world problems. Prerequisite: CE 455 or equivalent.

CE 752. Physical Hydrogeology. 3 Credits.
Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy's law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as GEOL 753.)

CE 753. Chemical and Microbial Hydrogeology. 3 Credits.
Lecture and discussion of chemical and microbial controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics, and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis. Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics of microbial growth will be covered. (Same as GEOL 753.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors.

CE 754. Contaminant Transport. 3 Credits.
A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as GEOL 754.) Prerequisite: Introductory Hydrogeology or consent of instructor.

CE 755. Open Channel Flow. 3 Credits.
A study of uniform and non-uniform steady flow of water in open channels, including backwater curves, the hydraulic jump, and the delivery of canals. Prerequisite: CE 330.

CE 756. Wetlands Hydrology and Introduction to Management. 3 Credits.
A study of the basic structure and functions of wetlands; the physical, chemical, and biological processes involved; and an introduction to the management of wetlands. Also a brief introduction to the legal aspects of wetlands, the Section 404 permitting processes, and mitigation requirements. Prerequisite: Senior or graduate standing in engineering or a science area, or consent of instructor.

CE 757. Pipe-Flow Systems. 3 Credits.
Hydraulic analysis and design of pipelines, pipe networks, and pumping systems. Analysis and control of hydraulic transients. Engineering of water distribution systems. Prerequisite: CE 330 or equivalent.

CE 759. Water Quality Modeling. 3 Credits.
Analytical and numerical modeling of transport and transformation processes in the aquatic environment. Mass balance principles in multi-dimensional transport phenomena including advection, turbulent diffusion, and dispersion. Prerequisite: CE 330, MATH 127 or MATH 147, and MATH 220 or MATH 221 or equivalent.

CE 760. Stochastic Hydrology. 3 Credits.
This methods-based course includes probability models, parameter estimation, ensemble forecasting and verification, time series analysis, multivariate distributions, principal component analysis along with other stochastic methods imperative to hydrologic analysis and prediction. The application of these methods will be explored through examples in hydrology related to rainfall, streamflow, groundwater and land-atmosphere interactions. Prerequisite: CE 455, MATH 290 or MATH 291 or equivalent.

CE 761. Matrix Analysis of Framed Structures. 3 Credits.
Analysis of 2-D and 3-D frame and truss structures by the direct stiffness method. Computer techniques required to implement the analysis procedure.

CE 762. Plastic Analysis and Design of Structures. 3 Credits.
Investigate the inelastic behavior of materials and cross sections. Study plastic analysis methods and identify the fundamental assumption and theorems to study structures up to collapse. Design ductile structures for extreme loads using plastic design methods. Two lectures one hour and fifteen minute lectures per week. Prerequisite: CE 562 or consent of instructor.

CE 763. Design of Prestressed Concrete Structures. 3 Credits.
The theory and design of prestressed concrete structures based on service load and strength criteria. Prerequisite: CE 563.

CE 764. Advanced Design of Reinforced Concrete Structures. 3 Credits.
The theory and design of reinforced concrete members and structures with emphasis on frames and slabs. Introduction to bridge design and earthquake design. Prerequisite: CE 563.

CE 765. Advanced Steel Design - Building Structures. 3 Credits.
The theory and design of standard steel framed structures (primarily buildings). Design philosophies, stability, composite design, structural behavior, preliminary design, and connections. Prerequisite: CE 562 or equivalent.

CE 766. Advanced Steel Design - Bridge Structures. 3 Credits.
Introduction to simple plastic design principles. Analysis and design of steel bridges including composite and noncomposite plate girders, curved girders, box girders, and other specialized bridge types. Fatigue and connection design considered. Prerequisite: CE 562 or equivalent.

CE 767. Introduction to Fracture Mechanics. 3 Credits.
Theories and modes of structural failure as related to structural design. Application of fracture mechanics to failure analysis, fracture control plans, fatigue crack growth, and stress-corrosion crack growth. Prerequisite: CE 310 or CE 312 plus a structural or mechanical design course.

CE 768. Design of Timber Structures. 3 Credits.
Provide an introduction to behavior, analysis and design of timber components and systems. Prerequisite: CE 461.

CE 769. Design of Masonry Structures. 3 Credits.
Provide an introduction to behavior, analysis and design of masonry components and systems. Prerequisite: CE 461.

CE 770. Concepts of Environmental Chemistry. 3 Credits.
The fundamentals of aquatic chemistry, with emphasis on application to water purification and wastewater treatment. May not be taken for credit by students with credit in CE 570. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and five hours of chemistry.

CE 771. Environmental Engineering Laboratory. 3 Credits.
A laboratory course introducing standard practices for measurement, analysis, and reporting of environmental data. Emphasis is placed on learning common analytical techniques used in environmental engineering and science. May not be taken for credit by students with credit in CE 571. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and five hours of chemistry.

CE 772. Physical Principles of Environmental Engineering Processes. 3 Credits.
Physical principles of suspensions, kinetics, fluid flow, filtration, and gas transfer are applied to various environmental physical processes. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and four hours of physics.

CE 773. Biological Principles of Environmental Engineering. 3 Credits.
A basic study of the microorganisms of importance in environmental engineering. Emphasis is placed on the microbiology of dilute nutrient solutions. Microbial physiology, microbial ecology, and biochemistry will be discussed as they pertain to environmental engineering and science. Both biodegradation and public health aspects are included. May not be taken for credit by students with credit in CE 573. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and five hours of chemistry.

CE 774. Chemical Principles of Environmental Engineering Processes. 3 Credits.
Chemical principles of stoichiometry, thermodynamics, and kinetics are applied to various chemical processes having application in the field of environmental engineering and science, including adsorption, ion exchange, coagulation, oxidation, and precipitation. Prerequisite: CE 477 or CE 479 or equivalent, calculus, and credit or registration in CE 570 or CE 770.

CE 775. Stormwater Treatment Systems Design. 3 Credits.
This course will address the design of stormwater treatment systems to provide hydrological control and water quality improvement. Specific topics include common stormwater pollutants, contaminant loading during storm events, design of structural BMPs (detention basins, traps, filters, and vegetated control systems) and low impact development practices. Prerequisite: CE 477 or CE 479, either CE 455 or C&PE 511 or consent of instructor.

CE 776. Water Reuse. 3 Credits.
This course addresses past and current water reclamation and reuse practices; health and environmental concerns associated with water reuse; technologies and systems for water treatment, reclamation, and reuse; water reuse applications, including agricultural reuse, direct and indirect potable reuse, landscape irrigation, industrial uses, urban non-irrigation applications, environmental and recreational uses, and groundwater recharge; and planning and implementation of water reuse systems. Prerequisite: CE 477 or CE 479 or equivalent.

CE 777. Industrial Water and Wastes. 3 Credits.
A review of the methods of industrial water treatment and the fundamentals of industrial wastewater pollution control. Topics include: water budgets, cooling tower and boiler treatment, corrosion control, government regulations, wastewater characterization, waste minimization, pilot plants, pretreatment, final treatment, and site selection. May not be taken for credit by students with credit in CE 577. Prerequisite: CE 477 or CE 479 or equivalent.

CE 778. Air Quality. 3 Credits.
The course is intended to provide a working knowledge of pollutant sources, effects, meteorological factors, measurements, modeling approaches, legislation and controls associated with air quality problems. Students work on problems drawn from typical industrial situations, and use models to address specific air pollution scenarios. Prerequisite: CE 477 or CE 479 or equivalent, and MATH 115 or MATH 125 or MATH 145.

CE 779. Water Quality. 3 Credits.
Examination of water quality principles, policy, processes, practices, computer programs, laws and regulations as they relate to the integrated planning and control of point and nonpoint sources of pollution. Prerequisite: MATH 125 or MATH 145 or equivalent, CE 477 or CE 479, and CE 570 or CE 770.

CE 780. Environmental Instrumental Analysis. 3 Credits.
The course will provide a basis for theoretical understanding and practical experience with state-of-the-art environmental analytical methods organic and inorganic analytes in aqueous matrices. Methods to be covered include liquid, gas and ion chromatography; mass spectrometry; spectrophotometric, FID, EC, and conductivity detection; atomic absorption; spectrophotometric methods; and potentiometric analysis. Statistical methods for analytical methods development, validation and interpretation will also be covered. Prerequisite: General chemistry, and graduate standing. Senior level undergraduates may enroll with consent of instructor.

CE 781. Traffic Engineering Characteristics. 3 Credits.
A study of fundamental traits and behavior patterns of the road user and his or her vehicle in traffic. The major content involves techniques for obtaining data, analyzing and interpreting data on traffic speed, volume, streamflow, parking and accidents. Capacity analyses using the most up to date procedures for major traffic facilities such as undivided highways, city streets, freeways, interchanges and intersections are also discussed at length. Prerequisite: CE 582 or equivalent.

CE 783. Railroad Engineering. 3 Credits.
A comprehensive study of the railroad industry, including the development of the railroad system, an overview of the railroad industry, basic track work, right-of-way and roadway concerns, drainage, track design, railroad structures, electrification, and rail passenger service. A final design project is required. Prerequisite: CE 240; CE 582 or equivalent.

CE 786. Highway Safety. 3 Credits.
Several topics dealing with highway safety are presented and discussed. Typical topics are railroad/highway crossings, accident reconstruction, distractions to the drivers, speed and crashes, elderly drivers, traffic control devices, roadside design, access management, traffic calming devices, and crash rates.

CE 787. Advanced Soil Mechanics. 3 Credits.
A comprehensive study of soil behavior. Topics include stress-strain behavior for soils under a variety of loading conditions, critical state soil mechanics theory, consolidation prediction, modeling subsurface water flow, and other topics. Prerequisite: CE 487 or equivalent.

CE 788. Geotechnical Engineering Testing. 3 Credits.
Three lectures. Field testing techniques, sampling methods, and laboratory testing procedures used to determine soil properties for engineering projects. Prerequisite: CE 487.

CE 790. Traffic Simulation Modeling and Analysis. 3 Credits.
This course introduces popular tools for modeling, analyzing and optimizing various transportation elements. Students will learn to formulate and apply basic principles of simulation modeling; use simulation and optimization techniques for improving traffic operations of a signalized intersection, an urban street network, and a freeway facility; and apply processes for developing simulation applications. Prerequisite: CE 781 or equivalent, or consent of instructor.

CE 797. Environmental Engineering and Science in Developing Countries. 3 Credits.
This course begins with a focus on basic sanitation, including control of infectious diseases, water supply and treatment, and proper disposal of excreta, wastewater, and solid wastes. The course then delves into other environmental topics such as sustainability, wastewater reuse, project planning and implementation, air pollution, deforestation, hazardous waste disposal, and the roles of various governmental and non-governmental organizations in addressing environmental issues. The course topics are addressed by a combination of lectures, guest lectures, and student presentations, with each student choosing a presentation topic of personal or professional interest that is relevant to the course. Prerequisite: CE 477 or CE 479 or permission of instructor.

CE 800. Theory of Elasticity. 3 Credits.
The basic equations of the theory of elasticity; stress and strain transformation, strain-displacement, compatibility and stress-strain relations. Formulation of problems and exact solutions. Introduction to approximate solution methods based on energy methods and finite elements.

CE 801. Energy Methods. 3 Credits.
The methods of analysis by energy methods of mechanics problems. Includes variational energy principles, calculus of variations, stationary energy and complementary energy principles, and the principle of virtual work. Applications. Prerequisite: CE 310 or CE 312 and MATH 320.

CE 804. Advanced Structural Dynamics. 3 Credits.
Advanced topics in structural dynamics, including experimental modal analysis, digital signal processing, data acquisition and analysis, random vibration concepts, system identification, structural health monitoring and damage detection, and introduction to smart structures technology (e.g. smart sensing, estimation, and control). This course provides practical laboratory experience through state-of-the-art commercial testing equipment and software. Prerequisite: CE 704 or consent of instructor.

CE 810. Theory of Elastic Stability. 3 Credits.
Buckling of columns in the elastic or hyperelastic region. Lateral and torsional buckling of straight and curved members. Buckling of plates and shells.

CE 815. Viscoelasticity of Solids. 3 Credits.
This course provides the basics of mechanical and mathematical modeling and characterization of linear viscoelastic materials. Topics
include different viscoelastic models, experimental methods for characterization of viscoelastic materials, design methods for viscoelastic members, and introduction to temperature effects and nonlinear viscoelastic response of materials. Prerequisite: CE 310 or CE 312 or equivalent.

CE 848. Pavement Materials Characterization. 3 Credits. Laboratory and field test methods for determining engineering properties of bituminous pavements. Asphalt mix design methods and the relationship between mix design and pavement structural design and performance. Prerequisite: CE 484 or consent of instructor.

CE 850. Life Cycle Assessment. 3 Credits. Life cycle assessment (LCA) is a tool used across engineering fields to determine the life cycle, cradle-to-grave environmental impacts of a product or process. LCA practice helps develop a systems-thinking perspective and a deeper understanding of sustainability. Students will evaluate LCA methods and design appropriate LCA frameworks. Prerequisite: CE 477 or CE 479 or C&PE 211 or equivalent.

CE 855. Free Surface Flow II. 3 Credits. The course addresses computer modeling of open channel flow using HEC-RAS (Hydraulic Engineering Center - River Analysis System). 1D, 2D and mixed 1D-2D HEC-RAS models will be developed for steady and unsteady flow conditions. ArcGIS will be used to develop HEC-RAS geometric input files and to process model results. Other 2D programs will also be introduced. Topics addressed are flood delineation, bridge hydraulics, bridge scour, sediment transport and stable channel design. Some knowledge of ArcGIS is desirable. Prerequisite: CE 330 or equivalent.

CE 856. Wetland Design, Engineering, and Management. 3 Credits. Introduction of design concepts in creating and restoring wetland systems. Review of wetland hydrology and hydraulics. Interaction of wetland hydrology, soils, and vegetation providing environmental benefits. Considerations in project planning, site selection and preparation, construction and operation, and maintenance. Use of state and local legal and management tools to protect and restore wetlands. Emerging concepts of mitigation and banking. Prerequisite: CE 756 or equivalent.

CE 857. Sediment Transport. 3 Credits. A study of the transport of sediment in alluvial channels. Specific topics include properties of sediment, mechanics of bed forms, particle entrainment, scour analysis, prediction of suspended load and bed load, design of stable channels and diversion works, and sedimentation of reservoirs. Prerequisite: CE 755 or consent of instructor.

CE 858. Urban Hydrology and Stormwater Management. 3 Credits. Hydrology of urban watersheds; floodplain management; hydrologic modeling; storm drainage; stormwater detention; water quality improvement; geomorphology of urban streams; stream corridor management and stream restoration. Prerequisite: CE 751.

CE 859. Erosion and Sedimentation. 3 Credits. A study of sediment erosion, transport, and deposition at the watershed scale with particular application to water quality degradation and reservoir inflowing. Prerequisite: Graduate standing.

CE 861. Finite Element Methods for Solid Mechanics. 3 Credits. Stress analysis of 2-D and 3-D solids, plates, and shells by the finite element method. Element formulations and behavior with emphasis on the isoparametric concept. Computer modeling and interpretation of results. Introduction to material and geometric nonlinear analysis of solids. Prerequisite: CE 761 or equivalent.

CE 862. Behavior of Reinforced Concrete Members. 3 Credits. This mechanics course covers in detail the constitutive behavior of reinforced concrete members subjected to various types of loading and presents the basis for modeling the response of reinforced concrete structures in the nonlinear range of response. Topics covered include: stress-strain behavior of concrete under multiaxial states of stress; moment-curvature analysis; advanced analysis of r/c members subjected to shear (variable angle truss models, modified compression field theory, strut-and-tie models); behavior of r/c members subjected to cyclic loading; modeling and effects of slip at the interface between reinforcing steel and concrete. Suggested prerequisite CE 764 or equivalent. Prerequisite: CE 563.

CE 864. Seismic Performance of Structures. 3 Credits. This course builds on topics from structural dynamics to introduce principles of structural performance during earthquake events. Emphasis is placed on estimating the response of building structures as represented by simple and complex models. Topics covered include strong ground motion, response of simple systems to ground motion, nonlinear response of building systems, and performance-based earthquake engineering. Prerequisite: CE 704.

CE 869. Plates and Shells. 3 Credits. The analysis and design of plates and shells including thin and thick plates, membrane theory of shells and bending theories of shells.

CE 870. Life Cycle Assessment. 3 Credits. Life cycle assessment (LCA) is a tool used across engineering fields to determine the life cycle, cradle-to-grave environmental impacts of a product or process. LCA practice helps develop a systems-thinking perspective and a deeper understanding of sustainability. Students will evaluate LCA methods and design appropriate LCA frameworks. Not open to students with credit in CE 560. Prerequisite: CE 477 or CE 479 or C&PE 211 or equivalent.

CE 871. Fundamentals of Bioremediation. 3 Credits. A study of microbial ecology and physiology as they relate to the degradation of environmental contaminants. Emphasis is placed on the interrelationship between the physiological traits or microorganisms, and the physical and chemical properties of the contaminants and the treatment environments. Case studies involving in-situ bioremediation and reactor design are discussed. Prerequisite: CE 573 or CE 773 or equivalent, and five hours of chemistry.

CE 874. Air Pollution Control. 3 Credits. The design of control devices for the abatement of air pollutants, both gaseous and particulate, emitted from stationary sources. This includes the basic theory of control device operation and economic factors associated with each type of control device design. Prerequisite: CE 772 and CE 778 or equivalent.

CE 876. Wastewater Treatment Plant Design. 3 Credits. Application of physical, chemical, and biological principles to the design of wastewater treatment systems for domestic and other wastewaters. Special emphasis is placed on biological treatment processes. Prerequisite: CE 576 or equivalent, or CE 573 or CE 773 or equivalent.

CE 877. Water Treatment Plant Design. 3 Credits. Application of physical, chemical, and biological principles to the design of water treatment plants and processes for domestic water supply from surface and ground water sources. Prerequisite: CE 774, or concurrent enrollment.

CE 878. Air Quality Modeling. 3 Credits. Fundamental physical and mathematical principles applied to air quality modeling; considered are factors that influence the choice and application of air quality models, as well as the interpretation of model output data.
Practical applications are stressed using standard models. Prerequisite: CE 778 or equivalent and MATH 125 or MATH 145 or MATH 526 or CE 625.

**CE 879. Environmental Research Seminar. 1 Credits.**
Discussion of current topics in environmental engineering and science and related fields by staff, students, and visiting lecturers. May be taken only once for credit.

**CE 881. Traffic Engineering Operations. 3 Credits.**
A study of theory and practical applications of a number of traffic operational and management tools to achieve the convenient, safe and efficient movement of people and goods in urban street networks. The major content involves signalized intersection capacity, design and operation; signalized intersection coordination; and modern roundabout design. Prerequisite: CE 582 or equivalent.

**CE 882. Geometric Design of Traffic Facilities. 3 Credits.**
A study of basic principles in the design of freeways, urban street systems, parking terminal and other traffic facilities with emphasis on capacity, safety, level of service, and dynamic design concept. Prerequisite: CE 781 or equivalent.

**CE 884. Principles of Pavement Design. 3 Credits.**
A study of the scientific principles of pavement design as applied to airfield and highway pavements, considering loading conditions, stress distribution, and the properties of the various pavement components, for both rigid and flexible pavements. Prerequisite: CE 487 or equivalent.

**CE 885. Advanced Foundation Engineering. 3 Credits.**
A study in the design, construction, and behavior of footings and rafts, piles and drilled shafts founded on soils and rocks. Prerequisite: CE 588 or equivalent.

**CE 887. Earth Structures. 3 Credits.**
Current theory and practice relating to the design of retaining walls, earth slopes, large embankments, and landslide mitigation. Application of geotextiles to the design of earth retaining structures and slope stabilization. Prerequisite: CE 588 or consent of instructor.

**CE 888. Ground Improvement. 3 Credits.**
Basic descriptions, classification, principles, advantages, and limitations of ground improvement techniques. Design, construction, and quality assurance/control of ground improvement techniques. Prerequisite: CE 588 or equivalent.

**CE 889. Designing with Geosynthetics. 3 Credits.**
Basic description and properties of geosynthetics including geotextiles, geogrids, geomembranes, geonets, geocomposites, and geosynthetic clay liners. Geosynthetic functions and mechanisms including separation, filtration, drainage, reinforcement, and containment. Design with geosynthetics for roadways, embankments/slopes, earth retaining structures, and landfills. Prerequisite: CE 588 or equivalent.

**CE 890. Master’s Project. 1-4 Credits.**
Directed study and reporting of a specialized topic of interest in civil engineering or an allied field. Prerequisite: Consent of instructor.

**CE 891. Advanced Special Problems. 1-3 Credits.**
A directed study of a particular complex problem in an area of civil engineering or allied field. Prerequisite: Varies by topic, or with consent of instructor.

**CE 892. Structural Engineering and Mechanics Seminar. 1 Credits.**
Presentation and discussion of current research and design in structural engineering and engineering mechanics.

**CE 895. Advanced Special Topics: ____. 1-3 Credits.**
A graduate course or colloquium in a topic of civil engineering or an allied field. Prerequisite: Varies by topic, or with consent of instructor.

**CE 899. Ph.D. Dissertation. 1-15 Credits.**
Restricted to Ph.D. candidates. Before candidacy, aspirants performing their research should enroll in CE 991. Prerequisite: Consent of instructor.

### Courses

**CMGT 457. Construction Project Management. 3 Credits.**
An introduction to the management of construction projects with an emphasis on engineering economics. This course addresses time value of money, cash flow and interest, financial analysis of alternatives, and taxes and depreciation. Also included are projects management fundamentals, project scheduling, and project controls. Prerequisite: MATH 126 or MATH 146 or consent of the instructor.

**CMGT 500. Construction Engineering. 3 Credits.**
An introduction to the construction industry, construction project management, and construction operations. Topics include project participant roles and responsibilities; project delivery systems; procurement of construction services; sustainable construction; contracts, bonds, and insurance; equipment selection and use; constructability and value engineering; estimating and bidding; planning and scheduling; operations management; safety; and project commissioning and closeout. Prerequisite: Junior or Senior standing in the School of Engineering, or consent of the instructor.

**CMGT 700. Construction Project Management. 3 Credits.**
An introduction to the management of construction projects. This course addresses project delivery systems, project organization, estimating and bidding, planning and scheduling, legal and safety issues, among other topics. Prerequisite: Graduate standing or consent of instructor. Not open to those with credit in CMGT 500.

**CMGT 701. Construction Planning and Scheduling. 3 Credits.**
An introduction to the planning and scheduling of projects, for both construction and design. Emphasis is placed on the critical path method including network development, production of time schedules, time-cost considerations, and the efficient utilization of resources. Manual and computer techniques are covered. Prerequisite: CMGT 500 or CMGT 700, and MATH 526 or CE 625 or EMGT 802, or consent of instructor.

**CMGT 702. Construction Equipment and Methods. 3 Credits.**
This course introduces the student to the multitude of construction equipment employed in construction. The underlying technology and engineering principles are reviewed. Principles of equipment selection, equipment utilization, and equipment economic analysis are covered.
Prerequisite: CMGT 500 or CMGT 700, MATH 526 or CE 625 or EMGT 802, and CMGT 457 or EMGT 806, or consent of instructor.

CMGT 703. Construction Quality, Productivity, and Safety. 3 Credits.
Operations analysis for work improvement in construction using process charts, crew balancing, time-lapse photography, and planning techniques. Regulations, accident prevention, and safety management are covered. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or CE 625 or EMGT 802, and CMGT 457 or EMGT 806, or consent of instructor.

CMGT 704. Construction Estimating and Bidding. 3 Credits.
A study of the quantity survey, cost estimating, scheduling and project controls; construction operations; and methods of building construction. Prerequisite: CMGT 500 or CMGT 700, MATH 526 or CE 625 or EMGT 802, and CMGT 457 or EMGT 806, or consent of instructor.

CMGT 705. Construction Contracts, Bonds, and Insurance. 3 Credits.
Legal doctrines relating to owners, design professionals, and contractors. Sources of law, forms of association, and agency. Contract formation, rights and duties, interpretation, performance problems, disputes, and claims. Surety bonds and insurance. Prerequisite: CMGT 500 or CMGT 700, or consent of instructor.

CMGT 706. Construction Alternative Project Delivery Methods. 3 Credits.
Learn the types of alternative project delivery methods that are increasingly used in the design and construction industry, including Design-Build (DB), Construction Manager at Risk (CMAR or CM/GC), Integrated Project Delivery (IPD), Public-Private-Partnerships (P3), and more. Within these methods, the course focuses on the industry's expanding scope of preconstruction services and increasing integration between design and construction professionals. Prerequisite: Corequisite: CMGT 500 or CMGT 700.

CMGT 707. Engineering Risk and Decision Analysis. 3 Credits.
The course investigates the fundamental principles and techniques of risk and decision analysis. It applies these principles in project-level decisions in which risk or uncertainty play a central role. The course examines various risk and decision tools including Monte Carlo analyses, influence diagrams, and other types of multi-criteria decision analyses. In addition to teaching to the skills and techniques, the course will introduce students to new ideas and concepts regarding decision and risk analysis. Prerequisite: CMGT 500 or CMGT 700, or consent of instructor.

CMGT 708. Introduction to Sustainable Design and Construction. 3 Credits.
This course introduces students to Sustainable Design Concepts that are applicable to Civil and Architectural Engineering. Prerequisite: Senior or graduate standing in Architectural Engineering, Architecture, or Civil Engineering or consent of instructor.

CMGT 711. Construction Safety. 3 Credits.
This course's primary purpose is to help students understand construction safety theories and practices. Methods used to improve construction safety are introduced. A class project is used to help students explore and identify opportunities to improve construction safety. Prerequisite: Graduate standing or consent of instructor.

CMGT 712. Construction Safety Solution Development. 3 Credits.
This course aims to help students develop solutions to improve construction safety. Solution development focuses on improving safety issues faced in the construction industry, including but not limited to software, hardware, processes, methods, and concepts. Prerequisite: Graduate standing or consent of instructor.

CMGT 790. Construction Seminar. 3 Credits.
Prerequisite: Varies with topic.

CMGT 801. Directed Readings in Construction Management. 1-3 Credits.
Graduate-level directed readings on a topic in construction management mutually agreed on by the student and instructor. Intended to build on one or more of the core course topics: project management; planning and scheduling; equipment and methods; quality; productivity and safety; estimating and bidding; contracts, bonds, and insurance. CMGT 801 may be repeated for credit to a maximum of three hours in the degree program. Mutually agreed course deliverable(s) required. Prerequisite: Approval of the course topic and deliverable(s) by the instructor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, or consent of instructor.

CMGT 802. Special Problems in Construction Management. 1-3 Credits.
Graduate-level investigation requiring research of a topic in construction management mutually agreed on by the student and instructor. Intended to build on one or more of the core course topics: project management; planning and scheduling; equipment and methods; quality; productivity and safety; estimating and bidding; contracts, bonds, and insurance. CMGT 802 may be repeated for credit to a maximum of three hours in the degree program. Mutually agreed course deliverable such as a paper summarizing the results of the investigation required. Prerequisite: Approval of the course topic and deliverable by the instructor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, or consent of instructor.

CMGT 805. Construction Accounting and Finance. 3 Credits.
Project level cost control concepts and structure, time and cost integration, data collection and reporting, equipment cost, job overhead cost, and cost control. Integrating construction project level cost with construction company financial accounting and financial management. Prerequisite: CMGT 702 and CMGT 704 or consent of instructor.

CMGT 895. Construction Management Project. 1-3 Credits.
Graduate-level investigation and report on a construction management topic mutually agreed on by the student and project advisor. This is the capstone course in the Master of Construction Management (MCM) degree program. Successful completion of this project requires acceptance of the written report and oral presentation to the student's graduate committee. Prerequisite: Approval of project topic by project advisor, CMGT 500 or CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705, and nine elective credit hours, or consent of instructor.

Bachelor of Science in Architectural Engineering

B.S. in Architectural Engineering Program

Students in the B.S. in architectural engineering (ARCE) program are admitted by and must fulfill the graduation requirements of the School of Engineering. The program is administered by the School of Engineering’s Department of Civil, Environmental, and Architectural Engineering (CEAE).

In KU's ARCE program students learn to analyze and design the engineered systems that make buildings perform their intended functions. At KU the ARCE areas of emphasis are
1. Structural design and analysis,
2. Building mechanical and energy systems,
3. Illumination and power systems,
4. Construction management, and
5. A hybrid such as sustainability, acoustics, or fire protection.

To use this knowledge, the graduate must have a good foundation in engineering science and design as these relate to building engineered systems and construction, as well as an appreciation for architectural design and history.

**B.S. ARCE Mission Statement**

Graduates who pursue a career in Architectural Engineering will be successfully engaged in professional engineering practice or graduate study in the analysis, design, construction, and operation of building engineered systems.

**Accreditation**

The Bachelor of Science in Architectural Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

**Careers**

**Professional Registration and Licensing**

Architectural engineers are involved in building projects that directly affect the production, comfort, health and safety of the public. Graduates are strongly encouraged to become registered professional engineers as soon as possible after graduation. In Kansas, and many other states with similar registration laws, this involves completing an ABET-accredited B.S. degree in architectural engineering, passing the Fundamentals of Engineering (FE) and Professional Engineering (PE) examinations, and obtaining four years of satisfactory engineering experience under the supervision of a professional engineer. Students in architectural engineering must take the FE examination before graduation. Architectural engineering graduates can also practice as architects after completing an NAAB-accredited professional undergraduate or graduate architecture degree program and becoming registered architects. Students with this interest should consider the available tracks leading to a Master of Architecture degree in addition to their B.S. in architectural engineering.

**Professional Opportunities**

Architectural engineering focuses on building engineered systems analysis and design, including structural, mechanical and energy systems, illumination, power, and construction methods applied to buildings. Increasingly, architectural engineers are interested in specializations such as energy efficient buildings, acoustics, and fire protection. Architectural engineers center their attention on the performance, safety, sustainability, cost-effectiveness, and construction of these systems. They typically work for engineering consulting firms, construction companies, or government agencies.

**Undergraduate Admission to the School of Engineering**

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

**Minimum Academic Standards for Admission to the School of Engineering**

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 22+ (or math SAT score of 540+), or
  - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

**Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen**

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned course in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

Students who are not admissible to their desired major are admitted to the School of Engineering as undecided engineering undergraduate students.

**Exploring Engineering**

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later
re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

**Transfer Admission Standards**

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of “C” or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).

**Already Applied to KU, But Not Engineering?**

Don’t worry. It’s not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

**Application Deadlines For New Freshman and Transfer Applicants**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>September 15</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
</tr>
<tr>
<td>November 1</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
</tr>
<tr>
<td>December 1</td>
<td>Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen</td>
</tr>
<tr>
<td>February 1</td>
<td>Final deadline for scholarship consideration for transfer students planning to enter in fall or summer semesters. Applications available for the Engineering Learning Community</td>
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**Architectural Engineering 4-Year Graduation Plan**

The following are recommended enrollments:

<table>
<thead>
<tr>
<th>Term</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Freshman</td>
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Bachelor of Science in Architectural Engineering Degree Requirements

A total of 128 credit hours is required for the degree. Substitutions may be made only by submitting a petition to the academic advisor for the department's and school's consideration. The student's design experience is developed throughout all four years of the undergraduate curriculum, beginning with the introductory course and continuing with required architectural, structural, illumination, power, HVAC, and construction management courses. Each student also takes an elective course in his or her selected emphasis; a list of elective courses is available on the CEAE website (http://www.ceae.engr.ku.edu). In the fourth year, an ARCE capstone design course is required; it integrates the overall design experience for the student.

Students who want to earn a professional Master of Architecture degree in addition to the B.S. in architectural engineering should apply for the "Track III Professional" program via the School of Architecture and Design and discuss it each year with their ARCE advisor so that electives can be chosen carefully.

KU graduates have successful records in professional practice, research positions. Most faculty members are licensed professional engineers. Facilities in the major areas of civil engineering and prepare students for entry-level professional design courses. These simulate the design processes used are integrated into the curriculum, culminating in a series of senior-level resources systems, foundations, and surface transportation systems.

Courses that address the behavior and design of steel and reinforced concrete structures, environmental pollution control systems, water resources systems, foundations, and surface transportation systems are integrated into the curriculum, culminating in a series of senior-level professional design courses. These simulate the design processes used in the major areas of civil engineering and prepare students for entry-level positions. Most faculty members are licensed professional engineers.

KU graduates have successful records in professional practice, research

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Basic Sciences

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<td>General Physics I Laboratory</td>
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English

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Architecture History/Humanities/Social Science/KU Core

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<td>ARCH 541</td>
<td>Global History of Architecture II: From Industrial Revolution to Present (1700 CE-Present) (AE 4.2)</td>
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<td>GE 3S</td>
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<td>AE 4.1</td>
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Engineering Science

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<td>ARCE 217</td>
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<td>ARCE 315</td>
<td>Electric Circuits and Machines</td>
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<tr>
<td>ARCE 350</td>
<td>Building Materials Science</td>
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<td>ARCE 660</td>
<td>Building Thermal Science</td>
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<tr>
<td>CE 260</td>
<td>Statics and Dynamics</td>
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<td>CE 310</td>
<td>Strength of Materials</td>
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<tr>
<td>CE 330</td>
<td>Fluid Mechanics</td>
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or ME 510 Fluid Mechanics

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<td>Construction Project Management</td>
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<tr>
<td>ME 212</td>
<td>Basic Engineering Thermodynamics</td>
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Engineering Design

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<tr>
<td>ARCE 101</td>
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<td>ARCE 640</td>
<td>Power Systems Engineering I</td>
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<td>ARCE 650</td>
<td>Illumination Engineering</td>
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<td>ARCE 661</td>
<td>HVAC&amp;R Systems Design</td>
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<td>Comprehensive Design Project</td>
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<td>CE 563</td>
<td>Design of Reinforced Concrete Structures</td>
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Engineering Science or Engineering Design

Architectural Design/Architectural Technology

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<td>ARCH 626</td>
<td>Building Technology I: Construction Systems and Assemblies</td>
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Total Hours  128

Credit for ROTC Courses. KU ROTC courses that have been approved as KU core courses may count toward the degree.

Bachelor of Science in Civil Engineering

B.S. in Civil Engineering Program

Civil engineering (CE), the oldest and broadest of the divisions of engineering, implements a range of public and private projects for improving society’s physical infrastructure and the environment. The civil engineer integrates scientific principles with engineering experience to plan, design, and construct networks of highways and railroads, airports, bridges and dams, environmental pollution control systems, industrial structures, water purification and distribution systems, and urban transportation systems that maintain, protect, and enhance the quality of life. Civil engineers are trained to consider the social effects as well as the physical and environmental factors that constrain the planning, design, construction, and operation of their projects. Environmental engineering, a technical specialization with its origins in civil engineering, is a growing discipline dedicated to the protection of the environment.

The undergraduate program gives students the theoretical background, instruction in engineering application of scientific principles, and professional attitude to serve the public. It typically leads to entry-level positions or to graduate work in technical specialties (e.g., environmental, geotechnical, structural, and transportation), business administration, or other professions.

Courses that address the behavior and design of steel and reinforced concrete structures, environmental pollution control systems, water resources systems, foundations, and surface transportation systems are integrated into the curriculum, culminating in a series of senior-level professional design courses. These simulate the design processes used in the major areas of civil engineering and prepare students for entry-level positions. Most faculty members are licensed professional engineers.

KU graduates have successful records in professional practice, research
in academic institutions, government and private laboratories, and in managing firms and corporations of all sizes.

**B.S. CE Mission Statement**

Graduates who pursue a career in Civil Engineering will be successfully engaged in professional engineering practice or graduate study in the analysis, design, construction, and operation of public and private infrastructure systems.

**Accreditation**

The Bachelor of Science in Civil Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

**Combined Civil Engineering and Business Program**

A student who wants to combine engineering with business may enroll in a program leading to a B.S. degree in both fields. Full-time enrollment enables the student to earn the two degrees in 5 years. During the first 2 years, the student enrolls in the School of Engineering. After that, the student enroll simultaneously in the schools of Engineering (http://www.engr.ku.edu/) and Business (https://business.ku.edu/).

**Careers**

**Professional Registration and Licensing**

Engineers are involved in projects that directly affect the health and safety of the public. Graduates are strongly encouraged to become registered Professional Engineers. This involves completing a B.S. degree in civil engineering, passing the Fundamentals of Engineering (FE) and Professional Engineering (PE) examinations, and obtaining four years of satisfactory engineering experience under the supervision of a professional engineer. Students in civil engineering must take the FE examination before graduation.

**Professional Opportunities**

Civil engineers plan, design, construct, and oversee public and private infrastructure systems as well as maintain essential structures such as bridges, buildings, tunnels, roads, and water supply and sewage systems. Civil engineers typically work for major industrial and commercial centers, construction industry, state departments of transportation, manufacturing companies, oil or electrical companies, aerospace industries, or consulting firms.

**Undergraduate Admission to the School of Engineering**

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

Minimum Academic Standards for Admission to the School of Engineering

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 22+ (or math SAT score of 540+), or
  - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned course in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

Students who are not admissible to their desired major are admitted to the School of Engineering as undecided engineering undergraduate students.

**Exploring Engineering**

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.
Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of "C" or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).

Already Applied to KU, But Not Engineering?

Don't worry. It's not too late to change your mind if you've already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

Application Deadlines For New Freshman and Transfer Applicants

| September 15 | Priority deadline for current KU students to apply for spring admission to Engineering. |
| November 1   | Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters. |
| December 1   | Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen |
| February 1   | Final deadline for scholarship consideration for transfer students planning to enter in fall or summer semesters. Applications available for the Engineering Learning Community |

Civil Engineering (general emphasis) 4-Year Graduation Plan

The following are recommended enrollments:

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<td>CE 412 or 477</td>
<td>3 CE 480</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE 461</td>
<td>4 CE 487</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 526 or CE 625</td>
<td>3 ECON 104 (or ECON 142 or ECON 144)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Engineering Science Elective</td>
<td>3</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 562 or 563 (KU Core AE 61)</td>
<td>3 CE 563 or 562 (KU Core AE 6.1)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMGT 457</td>
<td>3 CE 610 (or KU Core AE 5.1)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering Design Elective</td>
<td>4 Civil Engineering Design Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering Design Elective</td>
<td>3 Elective KU Core GE 3A&amp;H, AE 4.1, AE 4.2, or AE 5.1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective KU Core GE 3A&amp;H, AE 4.1, AE 4.2, or AE 5.1</td>
<td>3 General Electives (not required for Environmental emphasis when student takes ECON 104)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science in Civil Engineering Degree Requirements

Students take required courses and select electives that best fulfill their personal goals from the following general areas of study. A total of 128 credit hours is required for graduation.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I (KU Core GE 1.2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>or CE 625</td>
<td>Applied Probability and Statistics</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 150</td>
<td>Chemistry for Engineers (KU Core GE 3N)</td>
<td>5</td>
</tr>
<tr>
<td>General Civil Engineering students select from:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td></td>
</tr>
<tr>
<td>GEOL 105</td>
<td>History of the Earth</td>
<td></td>
</tr>
<tr>
<td>GEOL 351</td>
<td>Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>Approved physics or chemistry elective:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Engineering students select from:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATMO 105</td>
<td>Introductory Meteorology</td>
<td></td>
</tr>
<tr>
<td>ATMO 521</td>
<td>Microclimatology</td>
<td></td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 414</td>
<td>Principles of Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 661</td>
<td>Ecology of Rivers and Lakes</td>
<td></td>
</tr>
<tr>
<td>CHEM 530</td>
<td>Physical Chemistry I</td>
<td></td>
</tr>
<tr>
<td>EVRN 148</td>
<td>Scientific Principles of Environmental Studies</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 358</td>
<td>Introduction to Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td>GEOG 521</td>
<td>Microclimatology</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td></td>
</tr>
<tr>
<td>GEOL 302</td>
<td>Oceanography</td>
<td></td>
</tr>
<tr>
<td>GEOL 351</td>
<td>Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>KU Core Component</td>
<td>Written Communication (KU Core GE 2.1)</td>
<td>6</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (or any other</td>
<td>3</td>
</tr>
<tr>
<td>Economics electives, Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 104</td>
<td>Introductory Economics (KU Core GE 3S)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics (KU Core GE 3S)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics (KU Core GE 3S)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3H Arts &amp; Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core AE 4.1 Human Diversity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core AE 4.2 Global Awareness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core AE 5 Ethics &amp; Social Responsibility</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Basic Engineering Sciences

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 201</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>&amp; CE 250</td>
<td>and Dynamics</td>
<td></td>
</tr>
<tr>
<td>CE 260</td>
<td>Statics and Dynamics</td>
<td>5</td>
</tr>
<tr>
<td>CE 310</td>
<td>Strength of Materials</td>
<td>4</td>
</tr>
<tr>
<td>CE 330</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CE 331</td>
<td>Fluid Mechanics Lab</td>
<td>1</td>
</tr>
<tr>
<td>CMGT 457</td>
<td>Construction Project Management</td>
<td>3</td>
</tr>
<tr>
<td>ARCE 217</td>
<td>Computer-Assisted Building Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Computer Programming Elective

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 138</td>
<td>Introduction to Computing: _____ (C++, Fortran, or Matlab)</td>
<td>3</td>
</tr>
<tr>
<td>or EECS 137</td>
<td>Visual Basic for Engineers</td>
<td></td>
</tr>
</tbody>
</table>

Engineering Science (select one of the following)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCE 315</td>
<td>Electric Circuits and Machines</td>
<td>3</td>
</tr>
<tr>
<td>or EECS 316</td>
<td>Circuits, Electronics and Instrumentation</td>
<td></td>
</tr>
<tr>
<td>ME 212</td>
<td>Basic Engineering Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>ARCE 350</td>
<td>Building Materials Science</td>
<td>3</td>
</tr>
<tr>
<td>or ME 306</td>
<td>Science of Materials</td>
<td></td>
</tr>
<tr>
<td>CE 571</td>
<td>Environmental Engineering Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

*EECS 137 is preferred; EECS 138 Web option is not allowed.

Undergraduate Concentrations

Students may identify broad concentrations in either general civil engineering or environmental engineering. Within these, students may choose elective courses to permit additional exposure to selected areas of civil or environmental engineering such as transportation, structural, geotechnical, environmental, and water resources engineering. In environmental engineering, electives may be selected to focus on water quality and treatment, bioremediation, solid and hazardous wastes, air quality, and air pollution control.

Civil and Environmental Engineering Sciences and Introduction to Design

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Civil Engineering Option</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE 240</td>
<td>Geomastics</td>
<td>3</td>
</tr>
<tr>
<td>CE 455</td>
<td>Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CE 461</td>
<td>Structural Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CE 477</td>
<td>Introduction to Environmental Engineering and Science</td>
<td>3</td>
</tr>
<tr>
<td>CE 487</td>
<td>Soil Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>CE 480</td>
<td>Introduction to Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CE 484/684</td>
<td>Materials for Transportation Facilities</td>
<td>3</td>
</tr>
<tr>
<td>or CE 412</td>
<td>Structural Engineering Materials</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science in Civil Engineering

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 240</td>
<td>Geomatics</td>
<td>3</td>
</tr>
<tr>
<td>CE 455</td>
<td>Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CE 461</td>
<td>Structural Analysis</td>
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<tr>
<td>CE 477</td>
<td>Introduction to Environmental Engineering and Science</td>
<td>3</td>
</tr>
<tr>
<td>CE 487</td>
<td>Soil Mechanics</td>
<td></td>
</tr>
<tr>
<td>CE 484/684</td>
<td>Materials for Transportation Facilities</td>
<td>3</td>
</tr>
<tr>
<td>or CE 412</td>
<td>Structural Engineering Materials</td>
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</tbody>
</table>

**Environmental Engineering Option**

**General Civil Engineering Concentration (16 hours)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 562</td>
<td>Design of Steel Structures (KU Core AE 6)</td>
<td>3</td>
</tr>
<tr>
<td>CE 563</td>
<td>Design of Reinforced Concrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CE 576</td>
<td>Municipal Water Supply and Wastewater Treatment (KU Core AE 6)</td>
<td>4</td>
</tr>
<tr>
<td>CE 552</td>
<td>Water Resources Engineering Design</td>
<td></td>
</tr>
</tbody>
</table>

**Elective Courses**

Select two of the following: 6

- CMGT 500 Construction Engineering
- CE 582 Highway Engineering
- CE 588 Foundation Engineering
- CE 576 Municipal Water Supply and Wastewater Treatment (if not taken as Water Resources and Environmental Elective)
- CE 552 Water Resources Engineering Design (if not taken as Water Resources and Environmental Elective)

**Environmental Engineering Concentration (20 hours)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 552</td>
<td>Water Resources Engineering Design</td>
<td>4</td>
</tr>
<tr>
<td>CE 576</td>
<td>Municipal Water Supply and Wastewater Treatment</td>
<td>4</td>
</tr>
</tbody>
</table>

**Structural Design Elective**

Select one of the following: 3

- CE 562 Design of Steel Structures (KU Core AE 6)
- or CE 563 Design of Reinforced Concrete Structures

**Civil Engineering Design Elective**

Select one of the following: 3

- CMGT 500 Construction Engineering
- CE 582 Highway Engineering
- CE 588 Foundation Engineering

**Environmental Engineering Principles Elective**

Select one of the following: 3

- CE 570 Concepts of Environmental Chemistry
- CE 573 Biological Principles of Environmental Engineering

**Environmental Design Elective**

Select one of the following: 3

- CE 550 Life Cycle Assessment

**Suggested Electives**

- CE 191 Introduction to Civil Engineering 2
- ENGL 362 Foundations of Technical Writing 3

**Introductory Courses**

CE 191 Introduction to Civil Engineering, ENGR 108 Introduction to Engineering, or an introduction to engineering course from another engineering department will count as an elective course. Credit hours from only one introduction-to-the-profession course may be applied toward graduation.

**Mathematics and Basic Sciences**

Students may take elective courses designated as natural sciences and mathematics (N). Elective courses in mathematics must require MATH 126 as a prerequisite. Physics courses numbered below 211 and chemistry courses numbered below 130 are not accepted as general electives.

**General Education Courses**

Students may take elective courses designated as humanities (H) and social sciences (S). The humanities and social sciences courses are identified in the online timetable and in the Undergraduate Catalog with the letters H for humanities and S for social science courses. Western Civilization courses count as general electives. English courses taken as general electives must have ENGL 102 as a prerequisite. Any communication studies course (COMS) may be taken as a general elective.

**Architectural Engineering Courses**

Any course number above 300 is acceptable.

**Architecture Courses**

Up to five credit-hours of building technology and site planning courses numbered 250 or above may be used.

**Business Courses**

Any course offered by the KU School of Business is acceptable. Business courses offered at other colleges or universities will be accepted only if the courses are substantially equivalent to business courses taught at KU.
Urban Planning Courses

Any course offered by the KU Department of Urban Planning is acceptable.

Graduate Courses in Civil and Environmental Engineering

A student who wishes to study a particular civil engineering area in greater depth can take courses at the 600 or 700 level. The 700-level courses are primarily for graduate students but are open to seniors who have completed the prerequisites. The 700-level courses are not recommended for students with low grade point averages. A student not wishing to specialize can attain a broader background in civil engineering design by taking additional courses beyond the minimum requirements in area IV.

Engineering Courses

Any course offered by the various departments of the School of Engineering is acceptable except AE 241 Private Flight Course and AE 242 Private Flight Aeronautics

Honors Courses

Courses with the honors program designation (HNRS) will be accepted as general electives.

ROTC Courses

Students completing the ROTC program may count a maximum of 6 hours of ROTC courses as general electives. A maximum of six hours of ROTC courses in social sciences or humanities may be counted in excess of the 24 hrs required in the general education area. Up to six hours of ROTC courses may be counted as general electives if related to the physical sciences or engineering, and up to 3 credit hours may be used as electives in engineering technology and design.

Master of Science in Architectural Engineering

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society.

Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and structures to prepare students for building design projects of all kinds. Architectural engineering dates to 1913 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission

CEAE’s mission is to provide students with an outstanding engineering education and be a leader in research and service. This mission is supported by the following 3 goals:

1. Prepare students for productive engineering careers.
2. Maintain and grow strong research programs.
3. Serve the profession.

Graduate Admission

The department admits for all semesters. Students may pursue degrees full or part time. An ABET-accredited baccalaureate degree in engineering is required for admission to the Ph.D. degree programs in civil engineering and environmental & water resources engineering; a baccalaureate degree in a closely related field is required for admission to the Ph.D. program in environmental & water resources science. Applicants are expected to have undergraduate grade-point averages of 3.0 or higher on a 4.0 scale for admission.

Graduate Record Examination (GRE) scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://wwwgraduate.ku.edu/).

APPLICATION DEADLINES

Fall Admission: January 5 (priority deadline). Applications received past the priority deadline are considered on the basis of rolling review, until two business days before the start of classes.

Spring Admission: October 1 (priority deadline). Applications received past the priority deadline are considered on the basis of rolling review, until two business days before the start of classes.

Summer Admission: May 15

The priority deadlines are for full consideration for fellowships, scholarships and research/teaching assistantships. Applications submitted after these deadlines will be considered for funding on a case-by-case basis.

MINIMUM ENGLISH PROFICIENCY REQUIREMENTS

Visit the full English Proficiency Requirements for Admission to Graduate study at: http://policy.ku.edu/graduate-studies/english-proficiency-international-students (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

International students and students who indicated English as a second language are required to show proof of English proficiency for admission purposes and must check-in at the Applied English Center (https://aec.ku.edu/) (AEC) upon arrival on campus for orientation. This process serves to confirm each student’s level of English proficiency and determine whether English courses will be included as a requirement of the student’s academic program. Note: Students who demonstrate English proficiency at the waiver level are not required to check in at the
AEC (see eligibility requirements on the Graduate Studies website (https://graduate.ku.edu/english-proficiency-requirements)).

APPLICATION FEES
Domestic: $65
International: $85

VISITING US
The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. We feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Graduate Open House in mid-October or mid-March. Eligible admitted students may be invited to participate in Campus Visit Days in February (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

CONTACT INFORMATION
Please contact the CEAE Graduate Program Coordinator at gradceae@ku.edu or (785) 864-3826, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Civil, Environmental, and Architectural Engineering
Graduate Administrative Assistant
Learned Hall
1530 W. 15th St., Room 2150
Lawrence, KS 66045

Architectural Engineering
Candidates for the Master of Science degrees have 2 options. **Option A** requires 30 credit hours including a thesis of 6 hours (6 to 10 hours for the environmental degrees) and a final oral examination including defense of the thesis. **Option B** requires 30 hours including a 3- or 4-hour special problem investigation in the specialization and a final oral examination. It does not require a thesis.

The M.S. degree in architectural engineering is intentionally flexible in its course requirements because graduate study in architectural engineering requires specialization in one of many areas of professional practice. Each student works with his or her committee to select appropriate graduate courses that support the research project and the student's career goals. Students can pursue specializations in, for example, building mechanical, energy, electrical, lighting, or structural systems, or construction engineering. Emerging or hybrid specializations such as sustainability, acoustics, or fire protection are also encouraged.

Courses for any of the M.S. degrees must be listed on a Plan of Study and approved by the student's major professor, examining committee, and the departmental graduate advisor. All graduate students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) by the beginning of their second semester of study. No more than 9 hours of courses from other departments or more than 6 hours of courses numbered below 700 (of which only 3 hours may be within the department) may be applied toward any of the M.S. degrees without approval of the departmental graduate studies committee. No more than 4 hours of special-problem credit may be applied toward any of the master's degrees without approval of the department's graduate advisor.

Master of Science in Civil Engineering

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society.

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Graduate Record Examination (GRE) scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required
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International students and students who indicated English as a second language are required to show proof of English proficiency for admission purposes and must check-in at the Applied English Center (https://aec.ku.edu/) (AEC) upon arrival on campus for orientation. This process serves to confirm each student's level of English proficiency and determine whether English courses will be included as a requirement of the student's academic program. Note: Students who demonstrate English proficiency at the waiver level are not required to check in at the AEC (see eligibility requirements on the Graduate Studies website (https://graduate.ku.edu/english-proficiency-requirements/)).

APPLICATION FEES

Domestic: $65
International: $85

VISITING US

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. We feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Graduate Open House in mid-October or mid-March. Eligible admitted students may be invited to participate in Campus Visit Days in February (prior to the fall semester of your intended matriculation). These organized visitation opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

CONTACT INFORMATION

Please contact the CEAE Graduate Program Coordinator at gradceae@ku.edu or (785) 864-3826, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Civil, Environmental, and Architectural Engineering
Graduate Administrative Assistant
Learned Hall
1530 W. 15th St., Room 2150
Lawrence, KS 66045

M.S. Degree Requirements

Civil Engineering

Candidates for the Master of Science degrees have 2 options. Option A requires 30 credit hours including a thesis of 6 hours (6 to 10 hours for the environmental degrees) and a final oral examination including defense of the thesis. Option B requires 30 hours including a 3- or 4-hour special problem investigation in the specialization and a final oral examination. It does not require a thesis.

The M.S. degree in civil engineering requires a minimum of 9 hours of graduate-level courses in one of the following seven areas: structural engineering, environmental engineering, water resources engineering, geotechnical engineering, transportation engineering, construction engineering/management, and engineering mechanics.

In addition, a minimum of 6 hours of graduate-level work is required in any of the other above departmental areas.

Courses for any of the M.S. degrees must be listed on a Plan of Study approved by the student's major professor, examining committee, and the departmental graduate advisor. All graduate students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) by the beginning of their second semester of study. No more than 9 hours of courses from other departments or more than 6 hours of courses numbered below 700 (of which only 3 hours may be within the department) may be applied toward any of the M.S. degrees without approval of the departmental graduate studies committee. No more than 4 hours of special-problem credit may be applied toward any of the master's degrees without approval of the department's graduate advisor.

Master of Science in Environmental & Water Resources Engineering

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society.

Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning
the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and structures to prepare students for building design projects of all kinds. Architectural engineering dates to 1913 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission

CEAE’s mission is to provide students with an outstanding engineering education and be a leader in research and service. This mission is supported by the following 3 goals:

1. Prepare students for productive engineering careers.
2. Maintain and grow strong research programs.
3. Serve the profession.

Graduate Admission

The department admits for all semesters. Students may pursue degrees full-time or part-time. An ABET-accredited baccalaureate degree in engineering is required for admission to the M.S. degree programs in civil engineering, environmental & water resources engineering, and architectural engineering; a baccalaureate degree in a closely related field is required for admission to the M.S. program in environmental & water resources science. Applicants are expected to have undergraduate grade-point average of 3.0 or higher on a 4.0 scale for admission to a master’s program.

Graduate Record Examination (GRE) scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://www.graduate.ku.edu/).

APPLICATION DEADLINES

Fall Admission: January 5 (priority deadline). Applications received past the priority deadline are considered on the basis of rolling review, until two business days before the start of classes.

Spring Admission: October 1 (priority deadline). Applications received past the priority deadline are considered on the basis of rolling review, until two business days before the start of classes.

Summer Admission: May 15

The priority deadlines are for full consideration for fellowships, scholarships and research/teaching assistantships. Applications submitted after these deadlines will be considered for funding on a case-by-case basis.

MINIMUM ENGLISH PROFICIENCY REQUIREMENTS

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APPLICATION FEES

Domestic: $65

International: $85

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Department of Civil, Environmental, and Architectural Engineering
Graduate Administrative Assistant
Learned Hall
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Lawrence, KS 66045

Environmental & Water Resources Engineering

Candidates for the Master of Science degrees have 2 options. Option A requires 30 credit hours including a thesis of 6 to 10 hours and a final oral examination including defense of the thesis. Option B requires 30 hours including a 3- or 4-hour special problem investigation in the specialization and a final oral examination. Option B does not require a thesis.

All graduate students must have an approved Plan of Study (https://gradplan. engr.ku.edu/accounts/login/?next=/) on file by the beginning of
their second semester of study that indicates the degree program track they intend to complete. Suggested program tracks are available from the program faculty. At the end of the second semester, students will submit a plan of study that needs to be approved by a graduate committee. Any exemptions or substitutions to this plan of study must be approved by the student’s advisor and the Associate Chair for Graduate Programs. Students may not take individual courses for credit if they have completed an equivalent course previously at the undergraduate level. Graduate courses offered by the CEAE department are identified by the prefixes CE, ARCE, and CMGT and are numbered 700 and above. No more than 9 hours of courses from other departments or more than 6 hours of courses numbered at the 500 or 600 level (of which only 3 hours may be within the department) may be applied toward the degree without approval of the Associate Chair for Graduate Programs. No more than 4 hours of special-problem credit may be applied toward the degree without approval of the Associate Chair for Graduate Programs.

Master of Science in Environmental & Water Resources Science

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society.

Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and structures to prepare students for building design projects of all kinds. Architectural engineering dates to 1913 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission

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1. Prepare students for productive engineering careers.
2. Maintain and grow strong research programs.
3. Serve the profession.

Graduate Admission

The department admits for all semesters. Students may pursue degrees full-time or part-time. An ABET-accredited baccalaureate degree in engineering is required for admission to the M.S. degree programs in civil engineering, environmental & water resources engineering, and architectural engineering; a baccalaureate degree in a closely related field is required for admission to the M.S. program in environmental & water resources science. Applicants are expected to have undergraduate grade-point average of 3.0 or higher on a 4.0 scale for admission to a master’s program.

Graduate Record Examination (GRE) scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://www.graduate.ku.edu/).

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Summer Admission: May 15

The priority deadlines are for full consideration for fellowships, scholarships and research/teaching assistantships. Applications submitted after these deadlines will be considered for funding on a case-by-case basis.

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APPLICATION FEES

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International: $85

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The University of Kansas  
Department of Civil, Environmental, and Architectural Engineering  
Graduate Administrative Assistant  
Learned Hall  
1530 W. 15th St., Room 2150  
Lawrence, KS 66045

**Environmental & Water Resources Science**

Candidates for the Master of Science degrees have 2 options. **Option A** requires 30 credit hours including a thesis of 6 to 10 hours and a final oral examination including defense of the thesis. **Option B** requires 30 hours including a 3- or 4-hour special problem investigation in the specialization and a final oral examination. Option B does not require a thesis.

All graduate students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) on file by the beginning of their second semester of study that indicates the degree program track they intend to complete. Suggested program tracks are available from the program faculty. At the end of the second semester, students will submit a plan of study that needs to be approved by a graduate committee. Any exemptions or substitutions to this plan of study must be approved by the student’s advisor and the Associate Chair for Graduate Programs. Students may not take individual courses for credit if they have completed an equivalent course previously at the undergraduate level. Graduate courses offered by the CEAE department are identified by the prefixes CE, ARCE, and CMGT and are numbered 700 and above. No more than 3 hours of credit may be applied towards the degree from CEAE courses numbered at the 500 or 600 level. Additional courses numbered at the 500 or 600 level that are not included in their track’s breadth options may not be applied toward the degree without approval of the Associate Chair for Graduate Programs. No more than 4 hours of special-problem credit may be applied toward the degree without approval of the Associate Chair for Graduate Programs.

**Master of Civil Engineering**

**Civil, Environmental, and Architectural Engineering**

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Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and structures to prepare students for building design projects of all kinds. Architectural engineering dates to 1913 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the Department of Civil, Environmental, and Architectural Engineering (CEAE).

**Mission**

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1. Prepare students for productive engineering careers.
2. Maintain and grow strong research programs.
3. Serve the profession.

**Graduate Admission**

The department admits for all semesters. Students may pursue degrees full or part time. An ABET-accredited baccalaureate degree in engineering is required. Applicants are expected to have undergraduate grade-point averages of 3.0 or higher on a 4.0 scale for admission.

For full-time graduate study, Graduate Record Examination (GRE) scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://www.graduate.ku.edu/).

**APPLICATION DEADLINES**

**Fall Admission**: Applications received are considered on the basis of rolling review, until two business days before the start of classes.

**Spring Admission**: Applications received are considered on the basis of rolling review, until two business days before the start of classes.

**Summer Admission**: Applications received are considered on the basis of rolling review, until two business days before the start of classes.

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**APPLICATION FEES**

Domestic: $65

International: $85

**VISITING US**

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Graduate Administrative Assistant
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Lawrence, KS 66045

**M.C.E. Degree Requirements**

The Master of Civil Engineering degree requires 30 semester hours of graduate courses, with a minimum of 9 hours of graduate-level courses in one of the following areas:

* Construction engineering and management
* Engineering mechanics
* Environmental engineering
* Geotechnical engineering
* Structural engineering
* Transportation engineering
* Water resources engineering

In addition, a minimum of 6 hours of graduate-level work is required in any of the other above departmental areas. Graduate courses offered by the CEAE Department are identified by the prefixes ARCE, CE, and CMGT and are numbered 700 and above. No more than 9 hours of courses from other departments and no more than 6 hours of courses numbered below 700 (of which only 3 hours may be within the department) may be applied toward the M.C.E. degree without approval of the departmental graduate studies committee. No more than 4 hours of special problem credit may be applied toward the M.C.E. degree without approval of the department's graduate advisor.

Courses to be applied toward the M.C.E. degree must be listed on a Plan of Study form approved by the student's graduate advisor, the student's graduate committee, and departmental graduate advisor. All graduate students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) on file by the beginning of their second semester of study.

**Master of Construction Management**

**Civil, Environmental, and Architectural Engineering**

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society.

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2. Maintain and grow strong research programs.
3. Serve the profession.

**Graduate Admission**

The department admits for all semesters. Students may pursue degrees full or part time. Applicants with baccalaureate degrees in engineering are expected to have undergraduate grade-point average of 3.0 or higher on a 4.0 scale for regular admission to a master’s program. An undergraduate grade-point average of 3.3 or higher is expected for applicants with baccalaureate degrees in other fields.

For full-time graduate study, Graduate Record Examination (GRE) scores are required and are used in the evaluation process, but minimum scores
for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://www.graduate.ku.edu/).

APPLICATION DEADLINES
Fall Admission: Applications received are considered on the basis of rolling review, until two business days before the start of classes.

Spring Admission: Applications received are considered on the basis of rolling review, until two business days before the start of classes.

Summer Admission: Applications received are considered on the basis of rolling review, until two business days before the start of classes.

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M.C.M. Degree Requirements
The Master of Construction Management degree requires 30 credit hours, consisting of 18 hours of core courses, and 12 hours of electives. Core courses are CMGT 700, CMGT 701, CMGT 702, CMGT 703, CMGT 704, and CMGT 705. No More than 9 hours of courses from other departments and no more than 6 hours of courses numbered below 700 (of which only 3 hours may be within the department) may be applied toward the M.C.M. degree without approval of the departmental graduate studies committee.

No more than 3 hours of special-problem credit may be applied toward the M.C.M. degree without approval of the department’s graduate advisor.

Graduate courses offered by the CEAE Department are identified by the prefixes ARCE, CE, and CMGT and are numbered 700 and above.

Courses for the M.C.M. degree must be listed on a Plan of Study approved by the student’s graduate advisor, the student’s graduate committee, and the departmental graduate advisor. All graduate students must have an approved Plan of Study (https://gradplan. engr.ku.edu/accounts/login/?next=/) by the beginning of their second semester of study.

Graduate Certificate in Construction Management
The objective of the certificate program is to allow students to broaden and deepen their knowledge in the area of Construction Engineering and Management, while learning the most up-to-date theory and techniques used in practice.

The certificate program offers an opportunity for engineering and science practitioners to enhance their skills in Construction Engineering and Management without having to apply for and complete a Master’s degree.

The program consists of four courses (12 credit hours).

A bachelor’s degree in engineering with a GPA of 3.0 or better is required for admission to this graduate certificate program.

Four (4) courses from the selected list are required to complete the certificate.

Courses Satisfying Certificate Requirements:
1. CMGT 700 Construction Project Management
2. CMGT 701 Construction Planning and Scheduling
3. CMGT 702 Construction Equipment and Methods
4. CMGT 703 Construction Quality, Productivity, and Safety
5. CMGT 704 Construction Estimating and Bidding
6. CMGT 705 Construction Contracts, Bonds, and Insurance
7. CMGT 707 Engineering Risk and Decision Analysis
8. CE 895 Advanced Special Topics: Alternative Project Delivery Methods

The completion requirements of the graduate certificate in Construction Engineering and Management include: (a) the minimum grade for any course to be applied toward the certificate is a grade of B; and (b) no credits may be transferred from another institution for this certificate.

Graduate Certificate in Structural Analysis

The objective of the Structural Analysis certificate program is to allow students to focus on the analytical evaluation of structural systems and components. This provides students with the opportunity to both broaden and deepen knowledge in this area of structural engineering by learning the most up-to-date theory and techniques used in practice. The Structural Analysis Graduate Certificate has a basis in computational structural analysis techniques, with optional courses in a variety of advanced analysis areas. It offers an opportunity for industrial practitioners to enhance their structural analysis skills without necessarily having to apply for and complete a Master’s degree. The program consists of four courses (12 credit hours).

A bachelor’s degree in engineering with a GPA of 3.0 or better is required for admission to this graduate certificate program.

Graduate courses taken for this certificate may be eligible to transfer for credit towards a graduate degree program.

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University’s policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

Four (4) courses are required to complete the certificate, two of which are mandatory. Students select the remaining two courses from the list of additional accepted courses.

Mandatory Courses:
1. CE 761 Matrix Analysis of Framed Structures
2. CE 861 Finite Element Methods for Solid Mechanics

Additional Courses Satisfying Certificate Requirements:
1. CE 704 Dynamics and Vibrations
2. CE 710 Structural Mechanics
3. CE 800 Theory of Elasticity
4. CE 801 Energy Methods
5. CE 810 Theory of Elastic Stability
6. CE 864 Seismic Performance of Structures
7. CE 869 Plates and Shells

The completion requirements of the graduate certificate in Structural Analysis include: (a) the minimum grade for any course to be applied toward the certificate is a grade of B; and (b) no credits may be transferred from another institution for this certificate.

Graduate Certificate in Structural Design

The objective of the Structural Design certificate program is to allow students to focus on the design of structural components and systems. This provides students with the opportunity to both broaden and deepen knowledge in this area of structural engineering by learning the most up-to-code-based theory and design practices. The Structural Design Graduate Certificate has a basis in steel and concrete building design, with optional courses applying to various materials, structures, and applications. It offers an opportunity for industrial practitioners to enhance their structural design skills without necessarily having to apply for and complete a Master’s degree. The program consists of four courses (12 credit hours).

A bachelor’s degree in engineering with a GPA of 3.0 or better is required for admission to this graduate certificate program.

Graduate courses taken for this certificate may be eligible to transfer for credit towards a graduate degree program.

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University’s policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

Four (4) courses are required to complete the certificate, two of which are mandatory. Students select the remaining two courses from the list of additional accepted courses.

Mandatory Courses:
1. CE 764 Advanced Design of Reinforced Concrete Structures
2. CE 765 Advanced Steel Design- Building Structures

Additional Courses Satisfying Certificate Requirements:
1. CE 763 Design of Prestressed Concrete Structures
2. CE 766 Advanced Steel Design- Bridge Structures
3. CE 768 Design of Timber Structures
4. CE 769 Design of Masonry Structures
5. CE 865 Structural Design for Dynamic Loads

The completion requirements of the graduate certificate in Structural Design include: (a) the minimum grade for any course to be applied toward the certificate is a grade of B; and (b) no credits may be transferred from another institution for this certificate.

Graduate Certificate in Structural Forensics

The objective of the certificate program is to allow students to focus on the forensic analysis of structural components and systems. This provides students with the opportunity to both broaden and deepen knowledge in this area of structural engineering by learning to identify, mitigate, and prevent common shortcomings and degradation that can threaten the integrity and serviceability of structures. The Structural Forensics Graduate Certificate has a basis in materials analysis with optional courses applying to experimental analysis and structural health monitoring.
The certificate program offers an opportunity for engineers to enhance their ability to identify and correct engineering failures without necessarily having to apply for and complete a Master’s degree. The program consists of four courses (12 credit hours).

A bachelor’s degree in engineering with a GPA of 3.0 or better is required for admission to this graduate certificate program.

Graduate courses taken for this certificate may be eligible to transfer for credit towards a graduate degree program.

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University’s policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

Four courses are required to complete the certificate (see Section Completion Requirements below). The following courses count towards the Structural Forensics Graduate Certificate:

1. CE 712 Structural Engineering Materials
2. CE 715 Corrosion Engineering
3. CE 721 Experimental Stress Analysis
4. CE 767 Introduction to Fracture Mechanics
5. CE 895 Experimental Structural Dynamics

Proposed course offering

CE 712, 715, 767, and CE 895 are offered every year. CE 721 is offered on a rotating basis. In any one year period a minimum of four courses are offered to satisfy the requirements of the certificate.

The completion requirements of the graduate certificate in Structural Forensics include: 1) the minimum grade for any course to be applied toward the certificate is a grade of B; and 2) no credits may be transferred from another institution for this certificate.

Graduate Certificate in Water Resources

The objective of the certificate program is to allow students to broaden and deepen their knowledge in this area of Water Resources, while learning the most up-to-date theory and techniques used in practice. The certificate program offers an opportunity for engineering and science practitioners to enhance their skills in Water Resources without having to apply for and complete a Master’s degree. The program consists of four courses (12 credit hours).

A bachelor’s degree in engineering with a GPA of 3.0 or better is required for admission to this graduate certificate program.

Graduate courses taken for this certificate may be eligible to transfer for credit towards a graduate degree program.

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University’s policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

Four (4) courses from the selected list are required to complete the certificate.

Courses Satisfying Certificate Requirements:

1. CE 751 Physical Hydrology
2. CE 752 Physical Hydrogeology
3. CE 753 Chemical and Microbial Hydrogeology
4. CE 754 Contaminant Transport
5. CE 755 Free Surface Flow I
6. CE 756 Wetlands Hydrology and Introduction to Management
7. CE 757 Pipe-Flow Systems
8. CE 760 Stochastic Hydrology
9. CE 775 Stormwater Treatment Systems Design
10. CE 776 Water Reuse
11. CE 855 Free Surface Flow II
12. CE 857 Sediment Transport

The completion requirements of the graduate certificate in Water Resources include: 1) the minimum grade for any course to be applied toward the certificate is a grade of B; and 2) no credits may be transferred from another institution for this certificate.

Doctor of Philosophy in Civil Engineering

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society.

Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and environmental engineering.

Graduate Admission

The department admits for all semesters. Students may pursue degrees full or part time. An ABET-accredited baccalaureate degree in engineering is required for admission to the Ph.D. degree programs in civil engineering and environmental & water resources engineering; a baccalaureate degree in a closely related field is required for admission to the Ph.D.
program in environmental & water resources science. Applicants are expected to have undergraduate grade-point averages of 3.0 or higher on a 4.0 scale for admission.

Graduate Record Examination (GRE) scores are required and are used in the evaluation process, but minimum scores for admission have not been established. The GRE engineering and other subject examinations are not required. The Test of English as a Foreign Language is required for international applicants. Applicants should take the GRE and TOEFL examinations as early as possible to expedite the admission process.

Graduate applications should be submitted online (http://www.graduate.ku.edu/).

APPLICATION DEADLINES

Fall Admission: January 5 (priority deadline). Applications received past the priority deadline are considered on the basis of rolling review, until two business days before the start of classes.

Spring Admission: October 1 (priority deadline). Applications received past the priority deadline are considered on the basis of rolling review, until two business days before the start of classes.

Summer Admission: May 15

The priority deadlines are for full consideration for fellowships, scholarships and research/teaching assistantships. Applications submitted after these deadlines will be considered for funding on a case-by-case basis.

MINIMUM ENGLISH PROFICIENCY REQUIREMENTS

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APPLICATION FEES

Domestic: $65
International: $85

VISITING US

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The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

CONTACT INFORMATION

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The University of Kansas
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Graduate Administrative Assistant
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Ph.D. Degree Requirements

Candidates for the Ph.D.degree must satisfy the University’s general requirements for the degree. A Plan of Study must be approved by the student’s major professor, examining committee, and departmental graduate studies committee.

An aspirant for the Ph.D. degree must pass a qualifying examination. The department normally gives this examination upon completion of the aspirant’s M.S. work or at a comparable level for non-M.S. students.

Before being admitted to the comprehensive examination, the aspirant must satisfy the research skill, residency, and responsible scholarship requirements for the degree. The research skill requirement provides the aspirant with a research skill distinct from, but strongly supportive of, the dissertation research. One research skill is required. Possible research skills include foreign language, computer science, mathematics, statistics, specific laboratory skills, and specific skills in the physical or biological sciences. The foreign language skill can be obtained by taking a 2-course sequence in the selected language or demonstrated by passing an examination. The selected research skill must be listed on the Plan of Study form. A separate statement attached to the Plan of Study must list the work to be completed to obtain the research skill. The responsible scholarship requirement serves to ensure that students are trained in responsible research practices and is fulfilled by attending a Responsible Scholarship Training Seminar offered each fall semester.

All graduate students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) on file by the beginning of their second semester of study.
Doctor of Philosophy in Environmental & Water Resources Engineering

Civil, Environmental, and Architectural Engineering

Civil engineering is the oldest engineering program at KU. The first graduating class in 1873 included a civil engineer. Civil engineers design roads, water systems, bridges, dams, and other structures, providing nearly all the infrastructure needed by modern society.

Civil engineers were the first engineers to address environmental issues and are the lead engineering discipline in treating water supplies to protect public health. In recognition of the significant issues concerning the environment, the department name was changed in 1992 to civil and environmental engineering.

Architectural engineering combines study in architecture with engineering science and design courses in electrical, mechanical, construction, and structures to prepare students for building design projects of all kinds.

Architectural engineering dates to 1913 at KU, and the first female graduate of the School of Engineering was an architectural engineering major. Architectural engineering merged with civil and environmental engineering in 2001 to form the the Department of Civil, Environmental, and Architectural Engineering (CEAE).

Mission

CEAE’s mission is to provide students with an outstanding engineering education and be a leader in research and service. This mission is supported by the following 3 goals:

1. Prepare students for productive engineering careers.
2. Maintain and grow strong research programs.
3. Serve the profession.

Graduate Admission

The department admits for all semesters. Students may pursue degrees full or part time. An ABET-accredited baccalaureate degree in engineering is required for admission to the Ph.D. degree programs in civil engineering and environmental & water resources engineering; a baccalaureate degree in a closely related field is required for admission to the Ph.D. program in environmental & water resources science. Applicants are expected to have undergraduate grade-point averages of 3.0 or higher on a 4.0 scale for admission.

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Department of Electrical Engineering and Computer Science

Electrical Engineering and Computer Science

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

Vision and Mission
The vision of the EECS department is to provide a stimulating and challenging intellectual environment.

- To have classes populated by outstanding students.
- To be world class in an increasing number of selected areas of research.
- To have faculty members with high visibility among their peers.

The mission of the EECS department is

- To educate the next generation of electrical engineers, computer engineers, and computer scientists.
- To discover, apply, and disseminate knowledge.
- To be an asset to the community and to society.

Undergraduate Programs
The department offers 4 Bachelor of Science (B.S.) degrees:

- Electrical Engineering.
- Computer Engineering.
- Computer Science, and
- Interdisciplinary Computing

Each features a firm grounding in mathematics, basic science, computer and engineering science, and advanced studies in the theory and design of various systems as well as hands-on experience. Degree programs in electrical engineering, computer engineering and computer science are
accredited. The Bachelor of Science degree program is accredited by the Computing Accreditation Commission of ABET, http://www.abet.org.

Our Bachelor of Science degree programs in computer engineering and electrical engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/).

Graduate Programs
The department offers Ph.D. degrees in electrical engineering and computer science; and M.S. degrees in electrical engineering, computer engineering, computer science, and information technology. The M.S. degree in information technology can be completed at the KU Edwards Campus (http://edwardscampus.ku.edu/) in the Kansas City area. The department also offers graduate certificates in cybersecurity, data science, RF systems engineering, and software engineering and management. Students who complete courses as a certificate seeking student may be able to transfer those credits towards a graduate degree program in engineering.

The department has graduate focus areas in applied electromagnetics, communications systems, computer systems design, computing in the biosciences, information assurance and management, intelligent informatics, internet engineering and management, languages and semantics, network engineering, network systems, radar systems and remote sensing, RF systems engineering, security and assurance, signal processing, software engineering and management and theory of computing. Class lists and teaching schedules are available in the graduate office or on the department's website (http://www.eecs.ku.edu/). Other areas of study can be constructed, in conjunction with a faculty advisor, to fit individual student needs.

Courses
EECS 101. New Student Seminar. 1 Credits.
A seminar intended to help connect freshmen and transfer EECS students to the EECS department, their chosen profession, and each other. Topics include overviews of the various disciplines, curricula and advising, ethics and professionalism, student organizations and extracurricular activities, senior projects, and career planning. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Corequisite: MATH 104.

EECS 137. Visual Basic for Engineers. 3 Credits.
Introduction of computer-based problem solving techniques for engineering practice with emphasis on good programming practices and the integration of appropriate computational and related tools. Solutions are computed using Visual Basic, specifically VBA within Excel. Elementary numerical and statistical methods are applied to the solution of sets of linear and nonlinear algebraic equations, linear regression, and root finding. Microsoft Office is used with the computational tools to provide integrated report generation capability. Two lectures and a weekly laboratory instruction. Prerequisite: MATH 104.

EECS 138. Introduction to Computing: ______. 3 Credits. NM
Algorithm development, basic computer organization, syntax and semantics of a high-level programming language, including testing and debugging. Concept of structure in data and programs, arrays, top-down design, subroutines and library programs. Abstract data types. System concepts such as compilation and files. Nature and scope of computer science. Not open to electrical engineering, computer engineering, computer science, and interdisciplinary computing majors. Prerequisite: MATH 101 or MATH 104, or meeting the requirements to enroll in MATH 115 or MATH 125 or MATH 145.

EECS 140. Introduction to Digital Logic Design. 4 Credits.
An introductory course in digital logic circuits covering number representation, digital codes, Boolean Algebra, combinatorial logic design, sequential logic design, and programmable logic devices. Grade of C (not C-) required to progress. Prerequisite: Corequisite: MATH 104.

EECS 141. Introduction to Digital Logic: Honors. 4 Credits.
An introductory course in digital logic circuits covering number representation, digital codes, Boolean algebra, combinatorial logic design, sequential logic design, and programmable logic devices. This course is intended for highly motivated students and includes honors-level assignments. Grade of C (not C-) required to progress. Prerequisite: Corequisite: MATH 104, plus either acceptance into the KU Honors Program or consent of instructor.

EECS 168. Programming I. 4 Credits.
Problem solving using a high level programming language and object oriented software design. Fundamental stages of software development are discussed: problem specification, program design, implementation, testing, and documentation. Introduction to programming using an object oriented language: using classes, defining classes, and extending classes. Introduction to algorithms and data structures useful for problem solving: arrays, lists, files, searching, and sorting. Student will be responsible for designing, implementing, testing, and documenting independent programming projects. Professional ethics are defined and discussed in particular with respect to computer rights and responsibilities. Grade of C (not C-) required to progress. Prerequisite: Corequisite: MATH 104.

EECS 169. Programming I: Honors. 4 Credits.
Problem solving using a high level programming language and object oriented software design. Fundamental stages of software development are discussed: problem specification, program design, implementation, testing, and documentation. Introduction to programming using an object oriented language: using classes, defining classes, and extending classes. Introduction to algorithms and data structures useful for problem solving: arrays, lists, files, searching, and sorting. Students will be responsible for designing, implementing, testing, and documenting independent programming projects. Professional ethics are defined and discussed in particular with respect to computer rights and responsibilities. This course is intended for highly motivated students and includes honors-level assignments. Grade of C (not C-) required to progress. Prerequisite: Corequisite: MATH 104, plus either acceptance into the KU Honors Program or consent of instructor.

EECS 202. Circuits I. 4 Credits.
Analysis of linear electrical circuits: Kirchoff's laws; source, resistor, capacitor and inductor models; nodal and mesh analysis; network theorems; transient analysis; Laplace transform analysis; steady-state sinusoidal analysis. The lab provides training and practice in the use of computational tools (e.g., Matlab), computer-aided circuit analysis (e.g., Pspice), and laboratory skills. Prerequisite: Corequisite: MATH 220 and MATH 290.

EECS 210. Discrete Structures. 4 Credits.
An introduction to the mathematical foundations and techniques of computer science. Throughout, there is an emphasis on general reasoning, problem solving, and technical communication. Topics include basic proof techniques and logic, induction, recurrences, relations, number theory, basic algorithm design and analysis, and applications. Grade of C (not C-) required to progress. Prerequisite: EECS 140 or EECS 141, EECS 168 or EECS 169 (or equivalent) and MATH 122 or MATH 126 or MATH 146.

EECS 212. Circuits II. 4 Credits.
Continued study of electrical circuits: Steady-state power analysis, three-phase circuits, transformers, frequency response, and two-port network
analysis. Grade of C (not C-) required to progress. Prerequisite: EECS 211 or EECS 202.

**EECS 220. Electromagnetics I. 4 Credits.**
Vector analysis. Electrostatic and magnetostatic fields in a vacuum and material media. Electromagnetic fields and Maxwell’s equations for time-varying sources. The relationship between field and circuit theory. Simple applications of Maxwell’s equations. Grade of C (not C-) required to progress. Prerequisite: MATH 220, MATH 290, PHSX 210 or PHSX 211, and EECS 202.

**EECS 221. Electromagnetics II. 3 Credits.**
Electrostatic and magnetostatic fields in a vacuum and material media. Electromagnetic fields and Maxwell’s equations for time-varying sources. The relationship between field and circuit theory. Simple applications of Maxwell’s equations. Grade of C (not C-) required to progress. Prerequisite: MATH 127, MATH 220, EECS 211 or EECS 202, and either PHSX 210 or PHSX 211.

**EECS 268. Programming II. 4 Credits.**
This course continues developing problem solving techniques by focusing on the imperative and object-oriented styles using Abstract Data Types. Basic data structures such as queues, stacks, trees, and graphs will be covered. recursion. Basic notions of algorithmic efficiency and performance analysis in the context of sorting algorithms. Basic Object-Oriented techniques. An associated laboratory will develop projects reinforcing the lecture material. Three class periods and one laboratory period per week. Grade of C (not C-) required to progress. Prerequisite: EECS 168 or EECS 169.

**EECS 312. Electronic Circuits I. 3 Credits.**
Introduction to diodes, BJTs and MOSFETs, and their use in electronic circuits, especially digital circuits. Prerequisite: Upper-level eligibility. Corequisite: EECS 212.

**EECS 315. Electric Circuits and Machines. 3 Credits.**
Introduction to DC and AC electrical circuit analysis techniques, AC power calculations, transformers, three-phase systems, magnetic circuits, and DC and AC machines with a focus on applications. Not open to electrical or computer engineering majors. (Same as ARCE 315.) Prerequisite: A course in differential equations and eight hours of physics.

**EECS 316. Circuits, Electronics and Instrumentation. 3 Credits.**
Introduction to DC and AC electrical circuit analysis, operational amplifiers, semiconductors, digital circuits and systems, and electronic instrumentation and measurements with a focus on applications. Not open to electrical or computer engineering majors. Students may not receive credit for both EECS 316 and EECS 317. Prerequisite: A course in differential equations and eight hours of physics.

**EECS 317. Electronics and Instrumentation. 2 Credits.**
Introduction to operational amplifiers, semiconductors, digital circuits and systems, and electronic instrumentation and measurements with a focus on applications. Not open to electrical or computer engineering majors. Students may not receive credit for both EECS 316 and EECS 317. Prerequisite: EECS 315.

**EECS 318. Circuits and Electronics Lab. 1 Credits.**
Laboratory exercises intended to complement EECS 316 and EECS 317. Experiments include DC circuits, analog electronics, and digital electronics. Not open to electrical or computer engineering majors. Prerequisite: Corequisite: EECS 316 or EECS 317.

**EECS 330. Data Structures and Algorithms. 4 Credits.**
A first course in abstract data structures and algorithmic design making use of these structures. Topics include asymptotic analysis, trees, dictionaries, heaps, disjoint set structures; divide and conquer, greedy, and dynamic programming algorithms. Prerequisite: EECS 210, EECS 268, and upper-level EECS eligibility.

**EECS 348. Software Engineering I. 4 Credits.**
This course is an introduction to software development fundamentals and software engineering. It incorporates a thorough introduction to a compiled programming language. A baseline knowledge of tools and utilities is covered including the shell, common programs, version control, IDEs, editors, and build tools. Topics include: software development principles (e.g., design patterns, modularity, loose coupling), extending larger codebases, developing larger codebases, continuous integration, continuous deployment, debugging, unit testing, test-driven development, and databases. Grade of C (not C-) required to progress. Prerequisite: EECS 268.

**EECS 360. Signal and System Analysis. 4 Credits.**
Fourier signal analysis (series and transform); linear system analysis (continuous and discrete); Z-transforms; analog and digital filter analysis. Analysis and design of continuous and discrete time systems using MATLAB. Prerequisite: Upper level of EECS Eligibility, and EECS 212.

**EECS 361. Signal and System Analysis. 3 Credits.**
Fourier signal analysis (series and transform); linear system analysis (continuous and discrete); z-transforms, analog and digital filter analysis; analysis and design of continuous and discrete time system using MATLAB. Prerequisite: EECS 212 and EECS Upper Level Eligibility.

**EECS 368. Programming Language Paradigms. 3 Credits.**
The course is a survey of programming languages: their attributes, uses, advantages, and disadvantages. Topics include scopes, parameter passing, storage management, control flow, exception handling, encapsulation and modularization mechanism, reusability through genercity and inheritance, and type systems. In particular, several different languages will be studied which exemplify different language philosophies (e.g., procedural, functional, object-oriented, logic, scripting). Prerequisite: EECS 268 and upper-level EECS eligibility.

**EECS 388. Embedded Systems. 4 Credits.**
This course will address internal organization of micro-controller systems, sometimes called embedded systems, used in a wide variety of engineered systems: programming in C and assembly language; input and output systems; collecting data from sensors; and controlling external devices. This course will focus on one or two specific microprocessors, software development and organization, and building embedded systems. Prerequisite: EECS 140 or EECS 141, EECS 168 or EECS 169, and upper-level EECS eligibility.

**EECS 399. Projects. 1-5 Credits.**
An electrical engineering, computer engineering, or computer science project pursued under the student’s initiative, culminating in a comprehensive report, with special emphasis on orderly preparation and effective composition. Prerequisite: Upper-level EECS eligibility and consent of instructor.

**EECS 412. Electronic Circuits II. 4 Credits.**
Discrete and integrated amplifier analysis and design. Introduction to feedback amplifier analysis and design. Introduction to feedback amplifiers. Prerequisite: EECS 312 and upper-level EECS eligibility.

**EECS 420. Electromagnetics II. 4 Credits.**
This course applies electromagnetic analysis to high frequency devices and systems where wave propagation effects cannot be neglected. Topics covered include transmission lines, space waves, waveguides, radiation, and antennas. Laboratory experiments include transmission line, waveguide, and antenna measurements and characterizations. 3
hands-on activities, learning cybersecurity defensive techniques, and defend computer networks and systems. This course focuses on practical application and understanding well-known techniques used by adversaries. Prerequisite: EECS 268. Corequisite: EECS 388.

EECS 468. Programming Paradigms. 3 Credits.
This course is a survey of programming languages: their attributes, uses, advantages, and disadvantages. Topics include the evolution of programming languages; programming language processing (i.e., compilation, interpretation, and mixed approaches); imperative, functional, and declarative languages; parameter passing and evaluation order; iteration, recursion, and continuation; and the basics of cloud programming (i.e., web services, client/server, synchronous vs. asynchronous programming, building reliable systems, and programming at scale). Prerequisite: EECS 268 and upper-level EECS eligibility.

EECS 470. Electronic Devices and Properties of Materials. 3 Credits.
An introduction to crystal structures, and metal, insulator, and semiconductor properties. Topics covered include the thermal, electric, dielectric, and optical properties of these materials. A significant portion of this course is devoted to the properties of semiconductors and semiconductor devices. Prerequisite: PHSX 313 and upper-level EECS eligibility.

EECS 478. Software Engineering I. 4 Credits.
This course is an introduction to software engineering, and it covers the systematic development of software products. It outlines the scope of software engineering, including life-cycle models, software process, teams, tools, testing, planning, and estimating. It concentrates on requirements, analysis, design, implementation, and maintenance of software products. The laboratory covers CASE tools, configuration control tools, UML diagrams, integrated development environments, and project-specific components. Prerequisite: EECS 268 and upper-level EECS eligibility.

EECS 484. Control Systems. 3 Credits.
An introduction to the modeling, analysis, and design of linear control systems. Topics include mathematical models, feedback concepts, state-space methods, time response, system stability in the time and transform domains, design using PID control and series compensation, and digital controller implementation. Prerequisite: EECS 212 and EECS 360.

EECS 487. Introduction to Database Systems. 3 Credits.
Introduction to the concept of databases and their operations. Topics include mathematical models, database conceptual design, relational database design, and SQL. Emphasis is on relational databases, relational algebra, and SQL. Introduction to views, transactions, and database access control. Introduction to database security, big data, NoSQL, CAP theorem, key-value stores. Prerequisite: Upper-level EECS eligibility or departmental consent.

EECS 498. Honors Research. 1-2 Credits.
Arranged to allow students to satisfy the independent research requirement for graduation with departmental honors. Prerequisite: Consent of instructor and upper-level EECS eligibility.

EECS 501. Senior Design Laboratory I. 3 Credits.
A lecture/laboratory course involving the design and implementation of prototypes of electrical and computer type products and systems. The project specifications require consideration of ethics, economics, manufacturing, and safety. Must be taken in semester immediately following completion of EECS 501. Prerequisite: EECS 221, EECS 360, and EECS 441.

EECS 502. Senior Design Laboratory II. 3 Credits.
A lecture/laboratory course involving the design and implementation of prototypes of electrical and computer type products and systems. The project specifications require consideration of ethics, economics, health, manufacturing, and safety. Must be taken in semester immediately following completion of EECS 501. Prerequisite: EECS 501.

EECS 510. Introduction to the Theory of Computing. 3 Credits. N
Finite state automata and regular expressions. Context-free grammars and pushdown automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation. (Same as MATH 510.) Prerequisite: EECS 468.

EECS 512. Electronic Circuits III. 3 Credits.
Feedback amplifier circuit analysis, power amplifiers, analog IC op-amp techniques and analysis, filter approximation and realization, oscillators, wave generators and shapers. Prerequisite: EECS 412.

EECS 541. Computer Systems Design Laboratory I. 3 Credits.
A two-semester lecture/laboratory course involving the specification, design, implementation, analysis, and documentation of a significant hardware and software computer system. Laboratory work involves software, hardware, and hardware/software trade-offs. Project requirements include consideration of ethics, economics, manufacturing, safety, and health aspects of product development. Intended for students graduating the following calendar year. EECS 541 should be immediately
followed by EECS 542 in the following semester. Prerequisite: EECS 443 and EECS 348.

**EECS 542. Computer Systems Design Laboratory II. 3 Credits.**
A two semester lecture/laboratory course involving the specification, design, implementation, analysis, and documentation of a significant hardware and software computer system. Laboratory work involves software, hardware, and hardware/software trade-offs. Project requirements include consideration of ethics, economics, manufacturing, safety, and health aspects of product development. Must be taken in semester immediately following completion of EECS 541. Prerequisite: EECS 541.

**EECS 544. Electric Machines and Drives. 3 Credits.**
Introduction to electric machine theory, operation, and control. Electric machines covered include DC generators and motors, AC synchronous generators and motors, AC induction generators and motors, as well as fractional horsepower and special purpose motors. Motor starting and controls for both DC and AC machines are also covered including an introduction to power electronics and variable frequency drives (VFD).
(Same as ARCE 644.) Prerequisite: ARCE 640 or EECS 212 and Upper-Level EECS Eligibility.

**EECS 545. Electric Energy Production and Storage. 3 Credits.**
An introduction to the design of utility scale and small scale (distributed generation) electric energy production and storage systems. This course addresses the technical, operational, economic, and environmental characteristics associated with both traditional and nontraditional electric energy production systems along with associated grid integration, energy delivery, and regulatory issues. Traditional energy production systems covered include fossil fuel, hydroelectric, and nuclear power plants. Non-traditional energy productions systems covered include fuel cells, photovoltaics (PV), concentrated solar power (CSP), wind, geothermal, and other emerging technologies. (Same as ARCE 645.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility.

**EECS 547. Power System Analysis I. 3 Credits.**
Introduction to the analysis of commercial, industrial, and utility power systems. Emphasis is placed on modeling system components which include transmission and distribution lines, transformers, induction machines, and synchronous machines and the development of a power system model for analysis from these components. System modeling will be applied to short-circuit studies and used to analyze symmetrical faults, to develop sequence networks using symmetrical components, and analyze unsymmetrical faults. (Same as ARCE 647.) Prerequisite: ARCE 640, or EECS 212 and Upper-Level EECS Eligibility.

**EECS 548. Power System Analysis II. 3 Credits.**
Continuation of ARCE 647 or EECS 547 that uses power system modeling developed in ARCE 647 or EECS 547 to analyze power system load flow, operation and economic dispatch, stability, and transient response. The impact of alternative energy sources, energy storage, DC transmission and interties, and other emerging technologies on power system operation and reliability will be addressed throughout the course. (Same as ARCE 648.) Prerequisite: ARCE 647 or EECS 547 or consent of instructor.

**EECS 560. Data Structures. 4 Credits.**
Data abstraction and abstract data types. Topics include the design and implementation of dictionary, priority queues, concatenated queue, disjoint set structures, graphs, and other advanced data structures based on balanced and unbalanced tree structures. Special emphasis will be placed on the implementations of these structures and their performance tradeoffs. Both asymptotic complexity analysis and experimental profiling techniques will be introduced. Labs will be used to provide students with hands-on experience in the implementations of various abstract data types and to perform experimental performance analysis. Prerequisite: EECS 210. Corequisite: EECS 448.

**EECS 562. Introduction to Communication Systems. 4 Credits.**
A first course in communications, including lectures and integrated laboratory experiments. After a review of spectral analysis and signal transmission, analog and digital communications are studied. Topics include: sampling, pulse amplitude modulation, and pulse code modulation; analog and digital amplitude, frequency, and phase modulation; frequency and time division multiplexing; and noise performance of analog modulation techniques. Prerequisite: EECS 212 and EECS 360.

**EECS 563. Introduction to Communication Networks. 3 Credits.**
An introduction to the principles used in communication networks is given in this course. Topics include a discussion of the uses of communications networks, network traffic, network impairments, standards, layered reference models for organizing network functions. Local Area Network technology and protocols are discussed. Link, network, transport layer protocols, and security are introduced. TCP/IP networks are stressed. VoIP is used as an example throughout the course. Basic concepts of network performance evaluation are studied, both analytical and simulation techniques are considered. Prerequisite: EECS 168 and MATH 526 or EECS 461.

**EECS 565. Introduction to Information and Computer Security. 3 Credits.**
An introduction to the fundamentals of cryptography and information and computer security. Introduces the basic concepts, theories, and protocols in computer security. Discusses how to apply such knowledge to analyze, design and manage secure systems in the real world. Topics covered: the basics of cryptography, software security, operating system security, database security, network security, privacy and anonymity, social engineering, digital forensics, etc. Corequisite: EECS 678 and EECS 542.

**EECS 566. Computer Forensics. 3 Credits.**
This course covers both the theoretical and practical aspects of computer forensics. The course introduces the basic concepts, methodologies, and techniques to recover, preserve, and examine digital evidence on or transmitted by digital devices. Topics include: crime investigation and digital evidence, file system forensics, application analysis, network evidence acquisition and analysis, mobile device forensics, etc. Prerequisite: EECS 565.

**EECS 568. Software Engineering II. 3 Credits.**
This lecture/laboratory course covers the systematic development of software products. Topics include: scope of software engineering, lifecycle models, software process, teams, ethics, tools, testing, planning, and estimating. It concentrates on requirements, analysis, design, implementation, and maintenance of software products. Prerequisite: EECS 348, EECS 330, EECS 468, and upper-level EECS eligibility. Corequisite: EECS 565.

**EECS 582. Computer Science and Interdisciplinary Computing Capstone. 3 Credits.**
Team-oriented lecture/laboratory course involving the specification, design, implementation, testing, and documentation of a significant software project over the full course of the semester. The course includes the consideration of project management, economics, and technical writing. Prerequisite: EECS 581 and upper-level EECS eligibility.

**EECS 611. Electromagnetic Compatibility. 3 Credits.**
A study of unwanted generation and reception of radio-frequency radiation from analog and digital electronic systems and how these emissions/receptions can be reduced. Topics covered include sources
of radiation, grounding, shielding, crosstalk, electrostatic discharge, and practical design and layout schemes for reducing unwanted radiation and reception. Also covered are the major governmental electromagnetic compatibility (EMC) regulations and standards that apply to commercial electronic devices and systems. Prerequisite: EECS 220 and EECS 312.

EECS 622. Microwave and Radio Transmission Systems. 3 Credits.

Introduction to radio transmission systems. Topics include radio transmitter and receiver design, radiowave propagation phenomenology, antenna performance and basic design, and signal detection in the presence of noise. Students will design radio systems to meet specified performance measure. Prerequisite: Corequisite: EECS 420 and MATH 526 or EECS 461.

EECS 628. Fiber Optic Communication Systems. 3 Credits.

Description and analysis of the key components in optical communication systems. Topics covered include quantum sources, fiber cable propagation and dispersion characteristics, receiver characteristics, and system gain considerations. Prerequisite: EECS 220 and PHSX 313 or equivalent and upper-level EECS eligibility.

EECS 630. Advanced Data Structures and Algorithms. 3 Credits.

A second course in abstract data structures and algorithmic design making use of these structures. Emphasis will be on understanding the high-level theoretical intuitions and principles, as well as a concrete understanding of implementation and applications. Topics include advanced treatment of trees, heaps, disjoint set structures, network flow, greedy algorithms, divide and conquer, dynamic programming, and complexity theory. Prerequisite: Upper-level EECS eligibility, EECS 330 and either EECS 461 or MATH 526.

EECS 638. Fundamentals of Expert Systems. 3 Credits.

Basic information about expert systems: architecture of an expert system, building expert systems, uncertainty in expert systems, taxonomy of expert systems. Knowledge representation: first order logic, production systems, semantic nets, frames. Uncertainty in expert systems, one-valued approaches: probability theory, systems using Bayes' rule, and systems using certainty theory; two-valued approaches: systems using Dempster-Shafer theory and system INFERNO; set-valued approaches: systems using fuzzy set theory and systems using rough set theory. Prerequisite: EECS 560 or consent of instructor.

EECS 639. Introduction to Scientific Computing. 3 Credits.

A basic introduction to scientific computing and numerical analysis. Topics include linear equation solving, least squares, nonlinear equation-solving, optimization, interpolation, numerical integration and differentiation, ordinary differential equations, and the fast Fourier transform (FFT). Vectorization, efficiency, reliability, and stability of numerical algorithms will be stressed. Applications of algorithms to real-world problems, such as image processing, medicine, electronic circuits, flight trajectories, and molecular modeling, will be emphasized. Students cannot receive credit for both EECS 639 and EECS 781 or MATH 781. Prerequisite: MATH 127, MATH 290, and EECS 168 or equivalent.

EECS 643. Computer Architecture. 3 Credits.

The structure and design of computing systems. Examination and analysis of instruction set architectures, pipelined control and arithmetic units, vector processors, memory hierarchies, and performance evaluation. Prerequisite: EECS 443.

EECS 644. Introduction to Digital Signal Processing. 3 Credits.

Discrete time signal and systems theory, sampling theorem, z-transforms, digital filter design, discrete Fourier transform, FFT, and hardware considerations. Prerequisite: EECS 360.

EECS 645. Computer Architecture. 3 Credits.

The structure, design, analysis, and evaluation of computer processors and systems. The design of instruction sets. Principles and techniques of parallelism at the data transfer (memory hierarchy), data processing (pipelines), and concurrent instruction execution. Prerequisite: EECS 388.

EECS 647. Introduction to Database Systems. 3 Credits.

Introduction to the concept of databases and their operations. Basic concepts, database architectures, storage structures and indexing, data structures: hierarchical, network, and relational database organizations. Emphasis on relational databases and retrieval languages SQL, QBE, and ones based on relational algebra and relational calculus; brief description of predicate calculus. Theory of databases, normal forms, normalization, candidates keys, decomposition, functional dependencies, multi-valued dependencies. Introduction to the design of a simple database structure and a data retrieval language. Student cannot receive credit for both EECS 647 and EECS 746. Prerequisite: EECS 448.

EECS 649. Introduction to Artificial Intelligence. 3 Credits.

General concepts, search procedures, two-person games, predicate calculus and automated theorem proving, nonmonotonic logic, probabilistic reasoning, rule based systems, semantic networks, frames, dynamic memory, planning, machine learning, natural language understanding, neural networks. Prerequisite: Corequisite: EECS 368.

EECS 658. Introduction to Machine Learning. 3 Credits.

This course provides an introduction to the basic methods of machine learning and how to apply them to solve software engineering problems. Topics covered are: supervised learning, unsupervised learning, and reinforcement learning methods; feature selection techniques; structuring machine learning solutions; and evaluation metrics. Prerequisite: EECS 348 and upper-level EECS eligibility.

EECS 660. Fundamentals of Computer Algorithms. 3 Credits.

Basic concepts and techniques in the design and analysis of computer algorithms. Models of computations. Simple lower bound theory and optimality of algorithms. Computationally hard problems and the theory of NP-Completeness. Introduction to parallel algorithms. Prerequisite: EECS 560 and either EECS 461 or MATH 526.

EECS 662. Programming Languages. 3 Credits.

Formal definition of programming languages including specification of syntax and semantics. Simple statements including precedence, infix, prefix, and postfix notation. Global properties of algorithmic languages including scope of declaration, storage allocation, grouping of statements, binding time of constituents, subroutines, coroutines, and tasks. Run-time representation of program and data structures. Prerequisite: EECS 368 and EECS 560.

EECS 664. Introduction to Digital Communication Systems. 3 Credits.

An introduction to building digital communication systems in discrete time, including lectures and integrated laboratory exercises. Topics covered include signal spaces, base-band modulation, bandpass modulation, phase-locked loops, carrier phase recovery, symbol timing recovery, and basic performance analysis. Prerequisite: EECS 360 and EECS 461 or MATH 526.

EECS 665. Compiler Construction. 4 Credits.

Compilation of programming language constructs. Organization of a compiler including symbol tables, lexical analysis, syntax analysis, intermediate and object code generation, error diagnostics, code optimization techniques and run-time structures in a block-structured language such as C or Rust. Programming assignments include construction of various modules of a compiler. Prerequisite: EECS 348, EECS 468, EECS 510, and upper-level eligibility.
EECS 670. Introduction to Semiconductor Processing. 3 Credits.
An overview of various processes to fabricate semiconductor devices and integrated circuits. Topics covered include crystal growth, oxidation, solid-state diffusion, ion implantation, photolithography, chemical vapor deposition, epitaxial growth, metalization, and plasma etching of thin films. (Same as C&PE 655.) Prerequisite: Senior standing in C&PE or EECS, or consent of instructor.

EECS 672. Introduction to Computer Graphics. 3 Credits.
Foundations of 2D and 3D computer graphics. Structured graphics application programming, Basic 2D and 3D graphics algorithms (modeling and viewing transformations, clipping, projects, visible line/surface determination, basic empirical lighting, and shading models), and aliasing. Prerequisite: EECS 348 and upper-level EECS eligibility.

EECS 675. Multicore and GPU Programming. 3 Credits.
This course covers concepts of single-machine multi-threaded programming; multicore programming across a network of machines; and general-purpose computing on GPUs. Typically, more than half of the course focuses on GPUs, including relevant architectural aspects required in order to achieve optimal performance on GPUs. Projects use C++ thread-related tools, OpenMPI, CUDA, and OpenCL. Prerequisite: EECS 348 and upper-level EECS eligibility.

EECS 678. Introduction to Operating Systems. 4 Credits.
The objective of this course is to provide the students with the concepts necessary to enable them to: a) identify the abstract services common to all operating system, b) define the basic system components that support the operating system’s machine independent abstractions on particular target architectures, c) consider how the design and implementation of different systems components interact and constrain one another, not merely how one or two important parts work in isolation, and d) understand the means by which fundamental problems in operating systems can be analyzed and addressed. Programming assignments address topics including process creation, inter-process communication, system call implementation, process scheduling and virtual memory. Laboratory exercises primarily focus on use of tools and concepts required for the programming assignments but include a small number of independent topics. Prerequisite: EECS 388, EECS 348, and upper-level EECS eligibility.

EECS 690. Special Topics: ______. 1-3 Credits.
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Varies by topic, plus Upper-level EECS eligibility and consent of instructor.

EECS 692. Directed Reading. 1-3 Credits.
Reading under the supervision of an instructor on a topic chosen by the student with the advice of the instructor. May be repeated for additional credit. Consent of the department required for enrollment. Prerequisite: Upper-level EECS eligibility and consent of instructor.

EECS 700. Special Topics: ______. 1-5 Credits.
Courses on special topics of current interest in electrical engineering, computer engineering, or computer science, given as the need arises. May be repeated for additional credit. Prerequisite: Varies by topic.

EECS 711. Security Management and Audit. 3 Credits.
Administration and management of security of information systems and networks, intrusion detection systems, vulnerability analysis, anomaly detection, computer forensics, auditing and data management, risk management, contingency planning and incident handling, security planning, e-business and commerce security, privacy, traceability and cyber-evidence, human factors and usability issues, policy, legal issues in computer security. (Same as IT 711.) Prerequisite: Graduate standing in EECS, or permission of the instructor.

EECS 713. High-Speed Digital Circuit Design. 3 Credits.
Basic concepts and techniques in the design and analysis of high-frequency digital and analog circuits. Topics include: transmission lines, ground and power planes, layer stacking, substrate materials, terminations, vias, component issues, clock distribution, cross-talk, filtering and decoupling, shielding, signal launching. Prerequisite: EECS 312 and senior or graduate standing. EECS 420 recommended.

EECS 718. Graph Algorithms. 3 Credits.
This course introduces students to computational graph theory and various graph algorithms and their complexities. Algorithms and applications covered will include those related to graph searching, connectivity and distance in graphs, graph isomorphism, spanning trees, shortest paths, matching, flows in network, independent and dominating sets, coloring and covering, and Traveling Salesman and Postman problems. Prerequisite: EECS 330 or graduate standing with consent of instructor.

EECS 721. Antennas. 3 Credits.
Gain, Pattern, and Impedance concepts for antennas. Linear, loop, helical, and aperture antennas (arrays, reflectors, and lenses). Cylindrical and biconical antenna theory. Prerequisite: EECS 360 and EECS 420, or EECS 720, or permission of the instructor.

EECS 723. Microwave Engineering. 3 Credits.
Survey of microwave systems, techniques, and hardware. Guided-wave theory, microwave network theory, active and passive microwave components. Prerequisite: EECS 420.

EECS 725. Introduction to Radar Systems. 3 Credits.
Basic radar principles and applications. Radar range equation. Pulsed and CW modes of operation for detection, ranging, and extracting Doppler information. Prerequisite: EECS 360, EECS 420, EECS 461 or MATH 526. EECS 622 recommended.

EECS 727. Photonics. 3 Credits.
The course presents the theory and the design principles of photonic systems. Topics include: Light propagation, interference, and diffraction, permittivity models and effective media, electromagnetic propagation in complex media, dispersion engineering, and fundamentals of nonlinear optics. Prerequisite: EECS 420 or equivalent.

EECS 728. Fiber-optic Measurement and Sensors. 3 Credits.
The course will focus on fundamental theory and various methods and applications of fiber-optic measurements and sensors. Topics include: optical power and loss measurements, optical spectrum analysis, wavelength measurements, polarization measurements, dispersion measurements, PMD measurements, optical amplifier characterization, OTDR, optical components characterization and industrial applications of fiber-optic sensors. Prerequisite: EECS 628 or equivalent.

EECS 730. Introduction to Bioinformatics. 3 Credits.
This course provides an introduction to bioinformatics. It covers computational tools and databases widely used in bioinformatics. The underlying algorithms of existing tools will be discussed. Topics include: molecular biology databases, sequence alignment, gene expression data analysis, protein structure and function, protein analysis, and proteomics. Prerequisite: Data Structures class equivalent to EECS 330, and Introduction to Biology equivalent to BIOL 150, or consent of instructor.

EECS 731. Introduction to Data Science. 3 Credits.
This course covers topics in data collection, data transmission, and data analysis, in support of discoveries and innovations based on massive amounts of data. EECS 731 surveys current topics in data science. It provides a comprehensive review of theory, algorithms, and tools that are used in data science and prepares students to take in-depth following up courses in EECS. EECS 731 is a project-oriented course. It offers hands-
on experience for students to integrate knowledge from a wide-range of topics in data science without dwelling on any particular subfield of data science. Prerequisite: EECS 268 or experience with object oriented programming and large programs. MATH 290 or experience with linear algebra. EECS 461 or MATH 526 or experience with probability and statistics. Or consent from the instructor.

EECS 738. Machine Learning. 3 Credits.
“Machine learning is the study of computer algorithms that improve automatically through experience” (Tom Mitchell). This course introduces basic concepts and algorithms in machine learning. A variety of topics such as Bayesian decision theory, dimensionality reduction, clustering, neural networks, hidden Markov models, combining multiple learners, reinforcement learning. Bayesian learning etc. will be covered. Prerequisite: Graduate standing in CS or CoE or consent of instructor.

EECS 739. Parallel Scientific Computing. 3 Credits.
This course is concerned with the application of parallel processing to real-world problems in engineering and the sciences. State-of-the-art serial and parallel numerical computing algorithms are studied along with contemporary applications. The course takes an algorithmic design, analysis, and implementation approach and covers an introduction to scientific and parallel computing, parallel computing platforms, design principles of parallel algorithms, analytical modeling of parallel algorithms, MPI programming, direct and iterative linear solvers, numerical PDEs and meshes, numerical optimization, GPU computing, and applications of parallel scientific computing. Prerequisite: MATH 126, MATH 290, experience programming in C, C++, or Fortran; EECS 639 (or equivalent.) Highly recommended: MATH 127.

EECS 740. Digital Image Processing. 3 Credits.
This course gives a hands-on introduction to the fundamentals and applications of digital image processing. Topics include: image formation and camera calibration, image transforms, image filtering in spatial and frequency domains, image enhancement, image restoration and reconstruction, image segmentation, feature detection, segmentation, and the latest developments and applications in image processing. Prerequisite: MATH 290 and MATH 526, or consent from the instructor.

EECS 741. Computer Vision. 3 Credits.
This course gives a hands-on introduction to the fundamentals and applications of computer vision. Topics include: Image processing fundamentals, feature detection and matching, projective geometry and transformation, camera geometry and calibration, two-view geometry and stereo vision, structure from motion, parameter estimation and optimization, and the latest developments and applications in computer vision. Prerequisite: MATH 290 and MATH 526, or consent from the instructor.

EECS 742. Static Analysis. 3 Credits.
This course presents an introduction to techniques for statically analyzing programs. Converge includes theoretical analysis, definition and implementation of data flow analysis, control flow analysis, abstract interpretation, and type and effects systems. The course presents both the underlying definitions and pragmatic implementation of these systems. Prerequisite: EECS 665 or EECS 662 or equivalent.

EECS 743. Advanced Computer Architecture. 3 Credits.
Topics of this course will be divided into three main categories: (a) theory of parallelism, (b) hardware technologies, and (c) parallel and scalable architectures. For example, principles of performance and scalability, processors and memory hierarchy, linear/nonlinear pipelining and superscalar techniques, and scalable multiprocessors and dataflow architectures will be among the topics to be covered. The course will also focus on emerging and heterogeneous architectures and their performance potential and programming models. For example, reconfigurable computing (RC), quantum computing (QC), and neuromorphic computing (NC) will be covered in some details. This would be achieved through practical experiments, and homework projects using realistic workloads on some state-of-the-art high-performance reconfigurable and quantum computers. Finally, students will select published related research work for discussions and oral presentations. Prerequisite: EECS 643 or EECS 645, or equivalent. A good understanding of C/C++ and having basic Unix/Linux skills is required.

EECS 744. Communications and Radar Digital Signal Processing. 3 Credits.
The application of DSP techniques to specialized communications and radar signal processing subsystems. Topics include A-D converters, specialized digital filters, software receiver systems, adaptive subsystems and timing. Prerequisite: An undergraduate course in DSP such as EECS 644.

EECS 745. Implementation of Networks. 3 Credits.
EECS 745 is a laboratory-focused implementation of networks. Topics include direct link networks (encoding, framing, error detection, reliable transmission, SONET, FDDI, network adapters, Ethernet, 802.11 wireless networks); packet and cell switching (ATM, switching hardware, bridges and extended LANs); internetworking (Internet concepts, IPv6, multicast, naming/DNS); end-to-end protocols (UDP, TCP, APIs and sockets, RPCs, performance); end-to-end data (presentation formatting, data compression, security); congestion control (queueing disciplines, TCP congestion control and congestion avoidance); high-speed networking (issues, services, experiences); voice over IP (peer-to-peer calling, call managers, call signalling, PBX and call attendant functionality). Prerequisite: EECS 563 or EECS 780.

EECS 750. Advanced Operating Systems. 3 Credits.
In this course, we will study advanced topics in operating systems for modern hardware platforms. The topics include: multicore CPU scheduling, cache and DRAM management, flash-based storage systems and I/O management, power/energy management, and cloud systems. We will discuss classical and recent papers in each of these topics. We will also study advanced resource management capabilities in recent Linux kernels. The course will consist of lectures, student presentations, and a term project. Prerequisite: EECS 678.

EECS 753. Embedded and Real Time Computer Systems. 3 Credits.
This course will cover emerging and proposed techniques and issues in embedded and real time computer systems. Topics will include new paradigms, enabling technologies, and challenges resulting from emerging application domains. Prerequisite: EECS 645 and EECS 678.

EECS 755. Software Modeling and Analysis. 3 Credits.
Modern techniques for modeling and analyzing software systems. Course coverage concentrates on pragmatic, formal modeling techniques that support predictive analysis. Topics include formal modeling, static analysis, and formal analysis using model checking and theorem proving systems. Prerequisite: EECS 368 or equivalent.

EECS 759. Estimation and Control of Unmanned Autonomous Systems. 3 Credits.
An introduction to the modeling, estimation, and control of unmanned autonomous systems. Topics include motion description, navigation sensors, complementary filters, Kalman filters, attitude estimation, position estimation, attitude keeping controller, etc. The successful completion of this course will prepare students for advanced studies in robotics & controls. (Same as AE 759.) Prerequisite: MATH 627, AE 551 or AE 552 or EECS 444, or by consent of instructor.
EECS 762. Programming Language Foundation I. 3 Credits.
This course presents a basic introduction to the semantics of programming languages. The presentation begins with basic lambda calculus and mechanisms for evaluating lambda calculus terms. Types are introduced in the form of simply typed lambda calculus and techniques for type inference and defining type systems are presented. Finally, techniques for using lambda calculus to define, evaluate and type check common programming language constructs are presented. Prerequisite: EECS 662 or equivalent.

EECS 764. Analysis of Algorithms. 3 Credits.
Models of computations and performance measures; asymptotic analysis of algorithms; basic design paradigms including divide-and-conquer, dynamic programming, backtracking, branch-and-bound, greedy method and heuristics; design and analysis of approximation algorithms; lower bound theory; polynomial transformation and the theory of NP-Completeness; additional topics may be selected from arithmetic complexity, graph algorithms, string matching, and other combinatorial problems. Prerequisite: EECS 630 or equivalent.

EECS 765. Introduction to Cryptography and Computer Security. 3 Credits.
Comprehensive coverage to the fundamentals of cryptography and computer and communication security. This course serves as the first graduate level security course, which introduces the core concepts, theories, algorithms and protocols in computer and communication security, and also prepares students for advanced security courses. This course first covers the mathematical foundation of cryptography and its applications in computer security. The course also covers a wide range of topics: information and database security, software and computer systems security, network security, Internet and web security. Prerequisite: EECS 678 and EECS 563 or EECS 780, or the instructor’s approval.

EECS 767. Information Retrieval. 3 Credits.
This class introduces algorithms and applications for retrieving information from large document repositories, including the Web. Topics span from classic information retrieval methods for text documents and databases, to recent developments in Web search, including: text algorithms, indexing, probabilistic modeling, performance evaluation, web structures, link analysis, multimedia information retrieval, social network analysis. Prerequisite: EECS 447 or permission of instructor.

EECS 768. Virtual Machines. 3 Credits.
Understand the fundamental principles and advanced implementation aspects of key virtual machine concepts. Topics include principles of virtualization, binary translation, process and system level virtual machines, JIT compilation and optimizations in managed environments, garbage collection, virtual machine implementation issues, and virtual machine security. Includes in-depth coverage of the latest developments and research issues in the field of virtual machines. Prerequisite: EECS 665 and either EECS 643 or EECS 645 or consent of instructor.

EECS 769. Information Theory. 3 Credits.
Information theory is the science of operations on data such as compression, storage, and communication. It is one of the few scientific fields fortunate enough to have an identifiable beginning - Claude Shannon’s 1948 paper. The main topics of mutual information, entropy, and relative entropy are essential for students, researchers, and practitioners in such diverse fields as communications, data compression, statistical signal processing, neuroscience, and machine learning. The topics covered in this course include mathematical definitions and properties of information, mutual information, source coding theorem, lossless compression of data, optimal lossless coding, noisy communication channels, channel coding theorem, the source channel separation theorem, multiple access channels, broadcast channels, Gaussian noise, time-varying channels, and network information theory. Prerequisite: EECS 461 or MATH 526 or an equivalent undergraduate probability course.

EECS 773. Advanced Graphics. 3 Credits.
Advanced topics in graphics and graphics systems. Topics at the state of the art are typically selected from: photorealistic rendering; physically-based lighting models; ray tracing; radiosity; physically-based modeling and rendering; animation; general texture mapping techniques; point-based graphics; collaborative techniques; and others. Prerequisite: EECS 672 or permission of instructor.

EECS 774. Geometric Modeling. 3 Credits.
Introduction to the representation, manipulation, and analysis of geometric models of objects. Implicit and parametric representations of curves and surfaces with an emphasis on parametric freeform curves and surfaces such as Bezier and Nonuniform Rational B-Splines (NURBS). Curve and surface design and rendering techniques. Introduction to solid modeling: representations and base algorithms. Projects in C/C++ using OpenGL. Prerequisite: EECS 672 or permission of instructor.

EECS 775. Visualization. 3 Credits.
Data representations, algorithms, and rendering techniques typically used in Visualization applications. The emphasis is on Scientific Visualization and generally includes topics such as contouring and volumetric rendering for scalar fields, glyph and stream (integral methods) for vector fields, and time animations. Multidimensional, multivariate (MDMV) visualization techniques; scattered data interpolation; perceptual issues. Prerequisite: General knowledge of 3D graphics programming or instructor’s permission.

EECS 776. Functional Programming and Domain Specific Languages. 3 Credits.
An introduction to functional programming. Topics include learning how to program in Haskell; IO and purity in software engineering; functional data structures and algorithms; monads and applicative functors; parsing combinators; Domain Specific Languages (DSLs) and DSL construction; advanced type systems; making assurance arguments; testing and debugging. Prerequisite: EECS 368 or equivalent or consent of instructor.

EECS 780. Communication Networks. 3 Credits.
Comprehensive in-depth coverage to communication networks with emphasis on the Internet and the PSTN (wired and wireless, and IoT-Internet of Things). Extensive coverage of protocols and algorithms will be presented at all levels, including: social networking, overlay networks, client/server and peer-to-peer applications; session control; transport protocols, the end-to-end arguments and end-to-end congestion control; network architecture, forwarding, routing, signaling, addressing, and traffic management, programmable and software-defined networks (SDN); quality of service, queuing and multimedia applications; LAN architecture, link protocols, access networks and MAC algorithms; physical media characteristics and coding; network security and information assurance; network management. (Same as IT 780.) Prerequisite: EECS 563 or equivalent or permission of instructor.

EECS 781. Numerical Analysis I. 3 Credits.
Finite and divided differences. Interpolation, numerical differentiation, and integration. Gaussian quadrature. Numerical integration of ordinary differential equations. Curve fitting. (Same as MATH 781.) Prerequisite: MATH 320 and knowledge of a programming language.

EECS 782. Numerical Analysis II. 3 Credits.
determination of eigenvectors and eigenvalues. Solution of nonlinear equations. (Same as MATH 782.) Prerequisite: EECS 781 or MATH 781.

EECS 784. Science of Communication Networks. 3 Credits.
Comprehensive introduction to the fundamental science that is the basis for the architecture, design, engineering, and analysis of computer networks. Topics covered will include foundations on: Structure of networks: graph theory, complex systems analysis, centrality, spectral analysis, network flows, and network topology; Identification of network entities: naming, addressing, indirectness, translation, and location; Operation of protocols and information transfer: automata, control theory, Petri nets, layering and cross-layering, protocol data units; Policy and tussle: game theory, decision theory; Resilience: dependability (reliability, availability, and maintainability), performability, fault tolerance, and survivability. Open-source tools will be used for network modelling and analysis. Prerequisite: EECS upper-level eligibility, graduate standing, or permission of the instructor.

EECS 786. Digital Very-Large-Scale-Integration. 3 Credits.
This course covers the basic concepts of Integrated Circuit (IC) design, various methods of designing VLSI circuits, and techniques to analyze and optimize performance metrics, such as: speed, area, power and signal integrity. Clocking, interconnect and scaling issues of IC will also be discussed. The topic will cover device, interconnect and circuit level implementation issues of both logic and memory circuits. It will also briefly introduce the high performance issues, fabrication technologies and system level implementation approaches of IC to establish bridges to the advanced courses. Prerequisite: EECS 312.

EECS 788. Analog Integrated Circuit Design. 3 Credits.
This course covers the analysis and design of analog and mixed signal integrated circuits, with an emphasis on design principles for realizing state-of-the-art analog circuits. Modern circuit design is a "mixed signal" endeavor thanks to the availability of sophisticated process technologies that allow bipolar and CMOS (Complementary Metal Oxide Semiconductor), power and signal, passive and active components on the same die. It is then up to the circuit designer's creativity and inclination to assemble these components into the analog and/or logic building blocks. The course will provide the critical concepts by giving physical and intuitive explanations in addition to the quantitative analysis of important analog building block circuits. First-order hand calculations and extensive computer simulations are utilized for performance evaluation and circuit design. Prerequisite: EECS 412.

EECS 800. Special Topics: _____. 1-5 Credits.
Advanced courses on special topics of current interest in electrical engineering, computer engineering, or computer science, given as the need arises. May be repeated for additional credit. Prerequisite: Varies by topic.

EECS 801. Directed Graduate Readings. 1-3 Credits.
Graduate level directed readings on a topic in electrical engineering, computer engineering, or computer science, mutually agreed-upon by the student and instructor. May be repeated for credit on another topic. Prerequisite: Consent of instructor.

EECS 802. Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues. 1 Credits.
A colloquium/seminar series in which presentation are provided on a broad variety of scholarly and professional topics. Topics related to the issues of responsible scholarship in the fields of computing and electrical engineering will be discussed. Student are also required to attend a series of colloquia and submit written reports. Course will be graded Satisfactory/Fail and is required for all EECS graduate students. Prerequisite: Graduate standing in the EECS Department.

EECS 812. Software Requirements Engineering. 3 Credits.
Objectives, processes, and activities of requirements engineering and requirements management; characteristics of good requirements; types of requirements; managing changing requirements; languages, notations, and methodologies; formal and semi-formal methods of presenting and validating the requirements; requirements standards; traceability issues. Prerequisite: EECS 810.

EECS 820. Advanced Electromagnetics. 3 Credits.
A theorem-based approach to solving Maxwell's equations for modeling electromagnetic problems encountered in microwave systems, antennas, scattering. Topics include waves, source modeling, Schelkunoff equivalence principle, scattered filed formulations, electromagnetic induction, reciprocity principles, Babinet's principle, and construction of solutions in various coordinate systems. Prerequisite: EECS 420.

EECS 823. Microwave Remote Sensing. 3 Credits.
Description and analysis of basic microwave remote sensing systems including radars and radiometers as well as the scattering and emission properties of natural targets. Topics covered include plane wave propagation, antennas, radiometers, atmospheric effects, radars, calibrated systems, and remote sensing applications. Prerequisite: EECS 420 and EECS 622.

EECS 828. Advanced Fiber-Optic Communications. 3 Credits.
An advanced course in fiber-optic communications. The course will focus on various important aspects and applications of modern fiber-optic communications, ranging from photonic devices to systems and networks. Topics include: advanced semiconductor laser devices, external optical modulators, optical fiber nonlinearities and their impact in WDM and TDM optical systems, polarization effect in fiber-optic systems, optical receivers and high-speed optical system performance evaluation, optical solution systems, SONET & ATM optical networking, and advanced multi-access lightwave networks. Prerequisite: EECS 628 or equivalent.

EECS 830. Advanced Artificial Intelligence. 3 Credits.
A detailed examination of computer programs and techniques that manifest intelligent behavior, with examples drawn from current literature. The nature of intelligence and intelligent behavior. Development of, improvement to, extension of, and generalization from artificially intelligent systems, such as theorem-provers, pattern recognizers, language analyzers, problem-solvers, question answerers, decision-makers, planners, and learners. Prerequisite: Graduate standing in the EECS department or Cognitive Science or permission of the instructor.

EECS 831. Introduction to Systems Biology. 3 Credits.
This course provides an introduction to systems biology. It covers computational analysis of biological systems with a focus on computational tools and databases. Topics include: basic cell biology, cancer gene annotation, micro RNA identification, Single Nucleotide Polymorphism (SNP) analysis, genetic marker identification, protein-DNA interaction, computational Neurology, vaccine design, cancer drug development, and computational development biology. Prerequisite: Introduction to Bioinformatics equivalent to EECS 730, or consent of instructor.

EECS 837. Data Mining. 3 Credits.
set theory, and rough set theory. Prerequisite: Graduate standing in CS or CoE or consent of instructor.

EECS 838. Applications of Machine Learning in Bioinformatics. 3 Credits.

This course is introduction to the application of machine learning methods in bioinformatics. Major subjects include: biological sequence analysis, microarray interpretation, protein interaction analysis, and biological network analysis. Common biological and biomedical data types and related databases will also be introduced. Students will be asked to present some selected research papers. Prerequisite: EECS 730 and EECS 738.

EECS 839. Mining Special Data. 3 Credits.

Problems associated with mining incomplete and numerical data. The MLEM2 algorithm for rule induction directly from incomplete and numerical data. Association analysis and the Apriori algorithm. KNN and other statistical methods. Mining financial data sets. Problems associated with imbalanced data sets and temporal data. Mining medical and biological data sets. Induction of rule generations. Validation of data mining: sensitivity, specificity, and ROC analysis. Prerequisite: Graduate standing in CS or CoE or consent of instructor.

EECS 843. Programming Language Foundation II. 3 Credits.

This course presents advanced topics in programming language semantics. Fixed point types are presented followed by classes of polymorphism and their semantics. System F and type variables are presented along with universal and existential types. The lambda cube is introduced along with advanced forms of polymorphism. Several interpreters are developed implementing various type systems and associated type inference algorithms. Prerequisite: EECS 762.

EECS 844. Adaptive Signal Processing. 3 Credits.

This course presents the theory and application of adaptive signal processing. Topics include adaptive filtering, mathematics for advanced signal processing, cost function modeling and optimization, signal processing algorithms for optimum filtering, array processing, linear prediction, interference cancellation, power spectrum estimation, steepest descent, and iterative algorithms. Prerequisite: Background in fundamental signal processing (such as EECS 644.) Corequisite: EECS 861.

EECS 861. Random Signals and Noise. 3 Credits.

Fundamental concepts in random variables, random process models, power spectral density. Application of random process models in the analysis and design of signal processing systems, communication systems and networks. Emphasis on signal detection, estimation, and analysis of queues. This course is a prerequisite for most of the graduate level courses in radar signal processing, communication systems and networks. Prerequisite: An undergraduate course in probability and statistics, and signal processing.

EECS 862. Principles of Digital Communication Systems. 3 Credits.

A study of communication systems using noisy channels. Principal topics are: information and channel capacity, baseband data transmission, digital carrier modulation, error control coding, and digital transmission of analog signals. The course includes a laboratory/computer aided design component integrated into the study of digital communication systems. Prerequisite: EECS 562. Corequisite: EECS 861.

EECS 863. Network Analysis, Simulation, and Measurements. 3 Credits.

Prediction of communication network performance using analysis, simulation, and measurement. Topics include: an introduction to queuing theory, application of theory to prediction of communication network and protocol performance, and analysis of scheduling mechanisms. Modeling communication networks using analytic and simulation approaches, model verification and validation through analysis and measurement, and deriving statistically significant results. Analysis, simulation, and measurement tools will be discussed. Prerequisite: EECS 461 or MATH 526, and EECS 563 or EECS 780.

EECS 865. Wireless Communication Systems. 3 Credits.

This course provides an in-depth coverage of the concepts, principles, and mechanisms in network security and secure distributed systems. The topics that will be covered include: network security primitives, risks and vulnerabilities, authentication, key management, network attacks and defense, secure communication protocols, intrusion detection, exploit defenses, traffic monitoring and analysis, and privacy mechanisms. Prerequisite: EECS 765 and EECS 563 or EECS 780, or the instructor’s approval.

EECS 866. Network Security. 3 Credits.

A mathematical study of the minimization of functions. The course provides an introduction to the mathematical theory, implementation, and application of a variety of optimization techniques, with an emphasis on real-world applications. Optimization problem formulation. Unconstrained and constrained minimization, including conditions for optimality. Specific techniques for solving linear and nonlinear programming problems. Convergence of algorithms. Prerequisite: MATH 590 or EECS 639, or the consent of the instructor.

EECS 869. Mathematical Optimization with Applications. 3 Credits.

Comprehensive coverage of the discipline of high-bandwidth low-latency networks and communication, including high bandwidth×delay products, with an emphasis on principles, architecture, protocols, and system design. Topics include high-performance network architecture, control, and signaling; high-speed wired, optical, and wireless links; fast packet, IP, and optical switching; IP lookup, classification, and scheduling; network processors, end system design and protocol optimization, network interfaces; storage networks; data-center networks, end-to-end protocols, mechanisms, and optimizations; high-bandwidth low-latency applications and cloud computing. Principles will be illustrated with many leading-edge and emerging protocols and architectures. Prerequisite: EECS 563 or EECS 780, or permission of the instructor.

EECS 881. High-Performance Networking. 3 Credits.

A study of communication channels and the coding problem. An introduction to finite fields and linear block codes such as cyclic, Hamming, Golay, BCH, and Reed-Solomon. Convolutional codes and the Viberba algorithm are also covered. Other topics include trellis coded modulation, iterative (turbo) codes, LDPC codes. Prerequisite: EECS: 562 or equivalent.

EECS 882. Mobile Wireless Networking. 3 Credits.

Comprehensive coverage of the disciplines of mobile and wireless networking, with an emphasis on architecture and protocols. Topics include cellular telephony, MAC algorithms, wireless PANs, LANs, MANs, and WANs; wireless and mobile Internet; mobile ad hoc networking; mobility management, sensor networks; satellite networks; and ubiquitous
computer security. (Same as EECS 711.) Prerequisite: Graduate standing in EECS, or permission of the instructor.

**IT 780. Communication Networks.** 3 Credits. Comprehensive in-depth coverage to communication networks with emphasis on the Internet and the PSTN (wired and wireless, and IoT-Internet of Things). Extensive coverage of protocols and algorithms will be presented at all levels, including: social networking, overlay networks, client/server and peer-to-peer applications; session control; transport protocols, the end-to-end arguments and end-to-end congestion control; network architecture, forwarding, routing, signaling, addressing, and traffic management, programmable and software-defined networks (SDN); quality of service, queuing and multimedia applications; LAN architecture, link protocols, access networks and MAC algorithms; physical media characteristics and coding; network security and information assurance; network management. (Same as EECS 780.) Prerequisite: EECS 563 or equivalent or permission of instructor.

**Bachelor of Science in Electrical Engineering**

**B.S. in Electrical Engineering Program**

**Educational Objectives**

Graduates who have earned the bachelor’s degree in electrical engineering, within a few years following graduation, will have demonstrated technical proficiency, collaborative activities, and professional development.

**Technical Proficiency**

Graduates will have achieved success and visibility in their chosen careers as shown by technical accomplishments in industry, government, entrepreneurial activities, or academia.

**Collaborative Activities**

Graduates will have exercised shared responsibilities through activities such as contributions to multiperson or multidisciplinary technical projects, participation in professional society/organization functions, or performing collaborative research. In all such cases, graduates will have contributed to documentation of the collaborative activities.

**Professional Development**

Graduates will have demonstrated continual updating to extend their expertise and adapt to a changing environment through graduate studies; short courses, conferences, and seminars; or professional self-study. In addition, graduates will have demonstrated evidence of increasing technical and/or managerial impact.

**Careers**

**Professional Opportunities**

Electrical engineers may work in circuit design, electronic devices, electrical and optical communications, control and automation, electromagnetics, instrumentation, energy and power, or signal processing. Electrical engineers may work in telecommunications, consumer electronics, or public utility companies; government agencies; and defense-related or consulting firms.
Undergraduate Admission to the School of Engineering

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

Minimum Academic Standards for Admission to the School of Engineering

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 22+ (or math SAT score of 540+), or
  - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned course in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

Students who are not admissible to their desired major are admitted to the School of Engineering as undecided engineering undergraduate students.

Exploring Engineering

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided Student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of “C” or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/is/?form=OUR%20Change%20of%20School%20Form).

Already Applied to KU, But Not Engineering?

Don’t worry. It’s not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

Application Deadlines For New Freshman and Transfer Applicants

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
</tr>
<tr>
<td>November 1</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
</tr>
<tr>
<td>December 1</td>
<td>Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen</td>
</tr>
</tbody>
</table>
Bachelor of Science in Electrical Engineering Degree Requirements

The KU Core

This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal is one or more learning outcomes:

- GE 1.1, Goal 1/Outcome 1, Critical Thinking;
- GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2/Outcome 1, Written Communication (2 units);
- GE 2.2, Goal 2/Outcome 2, Oral Communication;
- GE 3H, Goal 3/Outcome 1, Arts & Humanities;
- GE 3N Goal 3/Outcome 2, Natural Sciences;
- GE 3S Goal 3/Outcome 3, Social Sciences;
- AE 4.1, Goal 4/Outcome 1, Diversity;
- AE 4.2 Goal 4/Outcome 2, Culture;
- AE 5.1/5.2, Goal 5/Outcome 1/2, Social Responsibility & Ethics (course and/or practice);
- AE 6.1/6.2, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu (http://kucore.ku.edu/). Some required courses in the EECS curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A total of 128 credit hours\(^1\) is required for the B.S. degree in electrical engineering, as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101</td>
<td>New Student Seminar (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 140</td>
<td>Introduction to Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 202</td>
<td>Circuits I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 212</td>
<td>Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 312</td>
<td>Electronic Circuits I</td>
<td>3</td>
</tr>
<tr>
<td>EECS 361</td>
<td>Signal and System Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Code: EECS 388, Embedded Systems 4
Code: EECS 412, Electronic Circuits II 4
Code: EECS 420, Electromagnetics II 4
Code: EECS 443, Digital Systems Design 4
Code: EECS 444, Control Systems 3
Code: EECS 470, Electronic Devices and Properties of Materials 3
Code: EECS 501, Senior Design Laboratory I (Part of KU Core AE 5.1) 3
Code: EECS 502, Senior Design Laboratory II (KU Core AE 6.1) 3
Code: EECS 562, Introduction to Communication Systems 4

Senior electives (Any EECS course numbered 400 or above excluding EECS 498 and EECS 692. Only one of EECS 643 and EECS 645 may be used to satisfy EE degree requirements. Under unusual circumstances other courses can be considered but only with an accompanying petition.)

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125, Calculus I (KU Core GE 1.2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126, Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127, Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 220, Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290, Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>EECS 461, Probability and Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Basic Science

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 150</td>
<td>Chemistry for Engineers</td>
<td></td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 220</td>
<td>Electromagnetics I</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 313</td>
<td>General Physics III (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 316</td>
<td>Intermediate Physics Laboratory I</td>
<td>1</td>
</tr>
</tbody>
</table>

Professional Electives

2 courses from the following list of approved technical, scientific, and professional courses:

- EECS: Any course except EECS 137, EECS 138, EECS 315, EECS 316, EECS 317, EECS 318, EECS 498 and 692. Only 1 of EECS 643 or EECS 645 may be used.
- Engineering: IT 320, IT 330, IT 416, IT 430, IT 450 and any course from any other engineering department numbered 200 or above, except AE 211, ENGR 300, ENGR 490, ENGR 504, ME 208, and ME 228.
- Natural science: Any course designated GE3N, except PHSX 111, PHSX 112, PHSX 114, PHSX 115, PHSX 212, PHSX 236, and CHEM 110.
- Mathematics: Any MATH course numbered 500 or above, except MATH 526 and MATH 701.
- Business: Any course 200 and above from the School of Business that applies towards a Business major, minor, or certificate, except for Statistics and Computing courses.
- ROTC Courses: Up to 6 hours of ROTC may be petitioned to count toward the professional elective requirement.
- Foreign Language: Any foreign language course may be petitioned to count as a Professional Elective or additional Humanities or Science hours.

Communications
Bachelor of Science in Electrical Engineering

Arts/Humanities/Social Science

Economics elective: 3

Select one of the following:

- ECON 142 Principles of Microeconomics (KU Core GE 3S, preferred)
- ECON 144 Principles of Macroeconomics (KU Core GE 3S)

Satisfy KU Core GE 3H Arts & Humanities 1 3

Satisfy KU Core AE 4.1 and AE 4.2 1 6

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu (http://kucore.ku.edu/)). Hours listed are assuming the goals are satisfied with course work.

Course Prerequisites and Corequisites

Students must pass (at the appropriate grade level) all prerequisite courses for a given course before taking the subsequent course. If Course A is a Corequisite for Course B, Course A must be taken in the same semester as Course B or be completed prior to taking Course B.

Upper Level Eligibility

In addition to prerequisites and co-requisites, EECS undergraduates are required to earn Upper Level Course Eligibility by attaining grades of C or better (C- does not qualify) in each of the following 15 courses:

- GE 21 (both)
- PHSX 210 & 216
- MATH 125, 126, 127, 220, 290
- EECS 101, 140, 168, 202, 212, 221
- CHEM 130 or 150

If students earn less than a C in any of the above listed courses, they must repeat the course at the next available opportunity and must not take a course for which that course is a prerequisite. It is the students' responsibility to contact their advisors before beginning the new semester regarding any required repetitions and the associated enrollment adjustments (drops and adds).

To enroll in any upper level EECS course beyond the ULE list, students must have fulfilled the Upper Level Eligibility Requirements detailed above. Exceptions: EECS 312, EECS 330, EECS 361, and EECS 388 may be taken in the same semester as students are completing their upper level eligibility. Students may also petition for a Partial Waiver of Upper Level Eligibility Requirements by completing the appropriate petition, found in the EECS office or at www.eecs.ku.edu (http://www.eecs.ku.edu).

Double Major

If students wish to double-major (earn two degrees), they must fulfill all the requirements for the degrees in question. They must also consult the Engineering Dean's office and the department and/or school of the second major to find out if there are any additional requirements. If they wish to obtain two degrees offered by the EECS department, the following rules apply: a course that is required for one EECS degree program may not be used to satisfy a Senior Elective or General Elective requirement of another EECS degree program.

Electrical Engineering 4-Year Graduation Plan

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1 EECS 168</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EECS 140</td>
<td>4 KU Core GE 2.1 (second)</td>
<td>3</td>
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</tr>
<tr>
<td>KU Core GE 2.1 (first)</td>
<td>3 MATH 126</td>
<td>4</td>
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<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4 PHSX 210 (KU Core GE 1.1)</td>
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<td></td>
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<tr>
<td>ECON 142 or 144 (KU Core GE 3S)</td>
<td>3 PHSX 216 (Part of KU Core GE 3S)</td>
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Total Hours 15

**Sophomore**

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<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 202</td>
<td>4 EECS 212</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 127</td>
<td>4 EECS 220</td>
<td>4</td>
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<tr>
<td>MATH 220</td>
<td>3 KU Core GE 3H</td>
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</tr>
<tr>
<td>MATH 290</td>
<td>2 CHEM 130</td>
<td>5</td>
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<tr>
<td>KU Core GE 2.2</td>
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<td></td>
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</table>

Total Hours 16

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tr>
<td>EECS 312</td>
<td>3 EECS 412</td>
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<td></td>
</tr>
<tr>
<td>EECS 361</td>
<td>3 EECS 444</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSX 313 &amp; PHSX 316 (KU Core GE 3N)</td>
<td>4 EECS 461</td>
<td>3</td>
<td></td>
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<tr>
<td>KU Core AE 4.1</td>
<td>3 EECS 562</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EECS 388</td>
<td>4 Professional elective 1</td>
<td>3</td>
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</tr>
</tbody>
</table>

Total Hours 17

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 420</td>
<td>4 EECS 443</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EECS 470</td>
<td>3 EECS 502 (KU Core AE 6.1)</td>
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<tr>
<td>EECS 501 (Part of KU Core AE 5.1)</td>
<td>3 Senior elective 2</td>
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<tr>
<td>Senior elective 1</td>
<td>3 Senior elective 3</td>
<td>3</td>
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</tr>
<tr>
<td>Professional elective 2</td>
<td>3 KU Core AE 4.2</td>
<td>3</td>
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</tbody>
</table>

Total Hours 16

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu (http://kucore.ku.edu/)). Hours listed are assuming the goals are satisfied with course work.

Departmental Honors

An undergraduate student may graduate with departmental honors in electrical engineering, computer engineering, computer science, or interdisciplinary computing by graduating with a minimum grade-point
Bachelor of Science in Computer Engineering

B.S. in Computer Engineering Program

Educational Objectives

Graduates who have earned the bachelor’s degree in computer engineering, within a few years following graduation, will have demonstrated technical proficiency, collaborative activities, and professional development.

Technical Proficiency

Graduates will have achieved success and visibility in their chosen careers as shown by technical accomplishments in industry, government, entrepreneurial activities, or academia.

Collaborative Activities

Graduates will have exercised shared responsibilities through activities such as contributions to multiperson or multidisciplinary technical projects, participation in professional society/organization functions, or performing collaborative research. In all such cases, graduates will have contributed to documentation of the collaborative activities.

Professional Development

Graduates will have demonstrated continual updating to extend their expertise and adapt to a changing environment through graduate studies; short courses, conferences, and seminars; or professional self-study. In addition, graduates will have demonstrated evidence of increasing technical and/or managerial impact.

Careers

Professional Opportunities

Computer engineers may work in computer elements and architectures, very large-scale integrated circuits for data processing and storage, embedded and real-time computer systems, or computer networking. Computer engineers may work in the computer industry, telecommunications, government and defense, software companies or consulting firms.

Undergraduate Admission to the School of Engineering

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

Minimum Academic Standards for Admission to the School of Engineering

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Achieving at minimum a qualifying score for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:
    - Be admissible (https://admissions.ku.edu/major-specific-requirements) to the University of Kansas by assured admissions or individual review, AND
    - Have a 3.0+ high school GPA, AND
    - Demonstrate mathematics preparedness by:
      - Achieving a ‘C’ or better in ‘college algebra’ or a more advanced mathematics course, or
      - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
      - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
      - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Achieving at minimum a qualifying score for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:
    - Be admissible (https://admissions.ku.edu/major-specific-requirements) to the University of Kansas by assured admissions or individual review, AND
    - Have a 3.0+ high school GPA, AND
    - Demonstrate mathematics preparedness by:
      - Achieving a ‘C’ or better in ‘college algebra’ or a more advanced mathematics course, or
      - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
      - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
      - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

Undergraduate Admission to the School of Engineering

Exploring Engineering

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.
Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of "C" or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).

Already Applied to KU, But Not Engineering?

Don't worry. It's not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

Application Deadlines For New Freshman and Transfer Applicants

<table>
<thead>
<tr>
<th>Month</th>
<th>Deadline Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen.</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>Final deadline for scholarship consideration for transfer students planning to enter in fall or summer semesters. Applications available for the Engineering Learning Community.</td>
<td></td>
</tr>
</tbody>
</table>

Bachelor of Science in Computer Engineering Degree Requirements

The KU Core

This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal is one or more learning outcomes:

- GE 1.1, Goal 1/Outcome 1, Critical Thinking;
- GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2/Outcome 1, Written Communication (2 units);
- GE 2.2, Goal 2/Outcome 2, Oral Communication;
- GE 3H, Goal 3/Outcome 1, Arts & Humanities;
- GE 3N Goal 3/Outcome 2, Natural Sciences;
- GE 3S Goal 3 /Outcome 3, Social Sciences;
- AE 4.1, Goal 4/Outcome 1, Diversity;
- AE 4.2 Goal 4/Outcome 2, Culture;
- AE 5.1/5.2, Goal 5/Outcome 1/2, Social Responsibility & Ethics (course and/or practice);
- AE 6.1/6.2, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu (http://kucore.ku.edu/). Some required courses in the EECS curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A total of 127 credit hours1 is required for the B.S. degree in computer engineering, as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101</td>
<td>New Student Seminar (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 140</td>
<td>Introduction to Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 202</td>
<td>Circuits I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 212</td>
<td>Circuits II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 268</td>
<td>Programming II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 312</td>
<td>Electronic Circuits I</td>
<td>3</td>
</tr>
<tr>
<td>EECS 348</td>
<td>Software Engineering I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 361</td>
<td>Signal and System Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EECS 388</td>
<td>Embedded Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECS 443</td>
<td>Digital Systems Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 468</td>
<td>Programming Paradigms</td>
<td>3</td>
</tr>
<tr>
<td>EECS 541</td>
<td>Computer Systems Design Laboratory I (Part of KU Core AE 5.1)</td>
<td>3</td>
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</table>

1. The total is based on a credit hours requirement of 127, including the KU Core.
Economics elective. Select one of the following:

- Arts/Humanities/Social Science
- Communications

Satisfy KU Core GE 2.1
Satisfy KU Core GE 2.2

Basic Science

- PHSX 210 General Physics I for Engineers (KU Core GE 1.1)
- PHSX 216 General Physics I Laboratory (Part of AE51)
- EEC5 220 Electromagnetics I
- PHSX 313 General Physics III (KU Core GE 3N)
- PHSX 316 Intermediate Physics Laboratory I

Professional Elective

To be taken from the following list of approved technical, scientific, and professional courses:


Engineering: IT 320, IT 330, IT 416, IT 430, IT 450 and any course from any other engineering department numbered 200 or above, except AE 211, ENGR 300, ENGR 490, ENGR 504, ME 208, ME 228, and any computing courses.

Natural science: Any course designated GE3N, except PHSX 111, PHSX 112, PHSX 114, PHSX 115, PHSX 212, PHSX 236, and CHEM 110 if CHEM 130 or CHEM 150 has already been taken or will be taken.

Mathematics: Any MATH course numbered 200 or above except MATH 125, 126, 127, 290.

Business: Any course 200 and above from the School of Business that applies towards a Business major, minor, or certificate, except for Statistics and Computing courses.

Technical Writing: ENGR 504 or ENGL 362.

ROTC Courses: Up to 6 hours of ROTC may be petitioned to count toward the professional elective requirement.

Foreign language: Any foreign language course may be petitioned to count towards a Professional Elective or additional Humanities or Social Science hours.

Communications

- Satisfy KU Core GE 2.1
- Satisfy KU Core GE 2.2

Arts/Humanities/Social Science

Economics elective. Select one of the following:

- ECON 142 Principles of Microeconomics (KU Core GE 3S, preferred)
- ECON 144 Principles of Macroeconomics (KU Core GE 3S)

Satisfy KU Core GE 3H
Satisfy KU Core AE 4.1 and AE 4.2

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

Course Prerequisites and Corequisites

Students must pass (at the appropriate grade level) all prerequisite courses for a given course before taking the subsequent course. If Course A is a Corequisite for Course B, Course A must be taken in the same semester as Course B or be completed prior to taking Course B.

Upper Level Eligibility

In addition to prerequisites and co-requisites, EEC5 undergraduates are required to earn Upper Level Course Eligibility by attaining grades of C or better (C- does not qualify) in each of the following 16 courses:

KU Core GE 2.1 (both)
PHSX 210 & 216
MATH 125, 126, 127, 220, 290
EECS 101, 140, 168, 210, 202, 212, 220, 268

If students earn less than a C in any of the above listed courses, they must repeat the course at the next available opportunity and must not take a course for which that course is a prerequisite. It is the students’ responsibility to contact their advisors before beginning the new semester regarding any required repetitions and the associated enrollment adjustments (drops and adds).

To enroll in any upper level EEC5 course beyond the ULE list, students must have fulfilled the Upper Level Eligibility Requirements detailed above. Exceptions: EEC5 312, EEC5 330, EEC5 361, and EEC5 388 may be taken in the same semester as students are completing their upper level eligibility. Students may also petition for a Partial Waiver of Upper Level Eligibility Requirements by completing the appropriate petition, found in the EEC5 office or at www.eecs.ku.edu.

Double Major

If students wish to double-major (earn two degrees), they must fulfill all the requirements for the degrees in question. They must also consult the Engineering Dean’s office and the department and/or school of the second major to find out if there are any additional requirements. If they wish to obtain two degrees offered by the EEC5 department, the following rule applies: a course that is required for one EEC5 degree program may not be used to satisfy a Senior Elective or General Elective requirement of another EEC5 degree program.

Computer Engineering 4-Year Graduation Plan

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEC5 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>KU Core GE 2.1 (second)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 2.1 (first)</td>
<td>3</td>
<td>MATH 126</td>
<td>4</td>
</tr>
</tbody>
</table>
Bachelor of Science in Computer Science

B.S. in Computer Science Program

Educational Objectives

Graduates who have earned the bachelor's degree in computer science, within a few years following graduation, will have demonstrated technical proficiency, collaborative activities, and professional development.

Technical Proficiency

Graduates will have achieved success and visibility in their chosen careers as shown by technical accomplishments in industry, government, entrepreneurial activities, or academia.

Collaborative Activities

Graduates will have exercised shared responsibilities through activities such as contributions to multiperson or multidisciplinary technical projects, participation in professional society/organization functions, or performing collaborative research. In all such cases, graduates will have contributed to documentation of the collaborative activities.

Professional Development

Graduates will have demonstrated continual updating to extend their expertise and adapt to a changing environment through graduate studies; short courses, conferences, and seminars; or professional self-study. In addition, graduates will have demonstrated evidence of increasing technical and/or managerial impact.

Careers

Professional Opportunities

Computer scientists may pursue the design, analysis, and implementation of computer algorithms; study the theory of programming methods and languages; or design and develop software systems. They also may work in artificial intelligence, database systems, parallel and distributed computation, human-computer interaction, computer graphics, operating systems, or computer systems analysis and administration. Computer scientists may work for software companies, government and defense, telecommunications, or consulting firms.

Undergraduate Admission to the School of Engineering

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

Minimum Academic Standards for Admission to the School of Engineering

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

Departmental Honors

An undergraduate student may graduate with departmental honors in electrical engineering, computer engineering, computer science, or interdisciplinary computing by graduating with a minimum grade-point average requirement while maintaining full-time status. In addition, students must enroll in EECS 498 Honors Research for their last 2 semesters and must complete an independent research project paper and oral presentation to a panel of 3 judges. See the EECS Undergraduate Handbook for full details.
Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

Exploring Engineering

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of "C" or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).

Already Applied to KU, But Not Engineering?

Don’t worry. It’s not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

Application Deadlines For New Freshman and Transfer Applicants

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
</tr>
<tr>
<td>November 1</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
</tr>
<tr>
<td>December 1</td>
<td>Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen.</td>
</tr>
<tr>
<td>February 1</td>
<td>Final deadline for scholarship consideration for transfer students planning to enter in fall or summer semesters. Applications available for the Engineering Learning Community</td>
</tr>
<tr>
<td>February 15</td>
<td>Priority deadline for current KU students to apply for summer or fall admission to Engineering.</td>
</tr>
<tr>
<td>May 1</td>
<td>Enrollment Deposit due.</td>
</tr>
</tbody>
</table>
Bachelor of Science in Computer Science Degree Requirements

The KU Core

This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal are one or more learning outcomes:

- **GE 1.1, Goal 1/Outcome 1, Critical Thinking;**
- **GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;**
- **GE 2.1, Goal 2/Outcome 1, Written Communication (2 units);**
- **GE 2.2, Goal 2/Outcome 2, Oral Communication;**
- **GE 3H, Goal 3/Outcome 1, Arts & Humanities;**
- **GE 3N Goal 3/Outcome 2, Natural Sciences;**
- **GE 3S Goal 3/Outcome 3, Social Sciences;**
- **AE 4.1, Goal 4/Outcome 1, Diversity;**
- **AE 4.2 Goal 4/Outcome 2, Culture;**
- **AE 5.1/5.2, Goal 5/Outcome 1/2, Social Responsibility & Ethics (course and/or practice);**
- **AE 6.1/6.2, Goal 6/Outcome 1/2, Integration & Creativity.**

Details of the KU Core can be found at kucore.ku.edu. Some required courses in the EECS curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A total of 126 credit hours is required for the B.S. degree in computer science (CS), as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101</td>
<td>New Student Seminar (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 140</td>
<td>Introduction to Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 268</td>
<td>Programming II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 330</td>
<td>Data Structures and Algorithms</td>
<td>4</td>
</tr>
<tr>
<td>EECS 348</td>
<td>Software Engineering I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 388</td>
<td>Embedded Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECS 468</td>
<td>Programming Paradigms</td>
<td>3</td>
</tr>
<tr>
<td>EECS 510</td>
<td>Introduction to the Theory of Computing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 563</td>
<td>Introduction to Communication Networks</td>
<td>3</td>
</tr>
<tr>
<td>EECS 565</td>
<td>Introduction to Information and Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>EECS 581</td>
<td>Software Engineering II (Part of KU Core AE 5.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 582</td>
<td>Computer Science and Interdisciplinary Computing Capstone (KU Core AE 6.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 645</td>
<td>Computer Systems Architecture</td>
<td>3</td>
</tr>
<tr>
<td>EECS 678</td>
<td>Introduction to Operating Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

For CS majors, 7 CS electives must be chosen from the following courses. Under unusual circumstances, other courses can be considered but only with an accompanying petition.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 455</td>
<td>Cyber Defense Practice</td>
</tr>
</tbody>
</table>

2 or more CS electives must be from the list:

- EECS 465 Cyber Defense
- EECS 630 Advanced Data Structures and Algorithms
- EECS 658 Introduction to Machine Learning
- EECS 665 Compiler Construction
- 2 or more CS electives must be from the list:
  - EECS 443 Digital Systems Design
  - EECS 447 Introduction to Database Systems
  - EECS 569 Computer Forensics
  - EECS 649 Introduction to Artificial Intelligence
  - EECS 662 Programming Languages

Additional CS elective options:

- EECS 638 Fundamentals of Expert Systems
- EECS 639 Introduction to Scientific Computing
- EECS 672 Introduction to Computer Graphics
- EECS 675 Multicore and GPU Programming
- EECS 690 Special Topics: _____

Additionally, any EECS 700 or above course may be taken as a CS elective.

Mathematics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I (KU Core GE 1.2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>EECS 210</td>
<td>Discrete Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>EECS 461</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Basic Science

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
</tbody>
</table>

Natural Science Elective

Any course designated GE3N except Basic Science requirements and any Physics course 210 and below

Professional Elective

To be taken from the following list of approved technical, scientific, and professional courses:

- EECS: Any course except EECS 137, EECS 138, EECS 315, EECS 316, EECS 317, EECS 318, EECS 498, EECS 643, and EECS 692.
- Engineering: IT 320, IT 330, IT 416, IT 430, IT 450 and any course from any other engineering department numbered 200 or above, except AE 211, ENGR 300, ENGR 490, ENGR 504, ME 208, ME 228, and any computing courses.
- Natural science: Any course designated GE3N, except PHSX 111, PHSX 112, PHSX 114, PHSX 115, and CHEM 110 if CHEM 130 or CHEM 150 has already been taken or will be taken.

Mathematics: Any MATH course numbered 500 or above, except MATH 701.

Business: Any course from the School of Business that applies toward a business major, minor, or certificate except for statistics and computing.

Technical Writing: ENGR 504 or ENGL 362.

ROTC Courses: Up to 6 hours of ROTC may be petitioned to count toward the professional elective requirement.
not be used to satisfy a Senior Elective or General Elective requirement of another EECS degree program.

### Computer Science 4-Year Graduation Plan

#### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>KU Core GE 2.1 (second)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 168</td>
<td>4</td>
<td>EECS 140</td>
<td>4</td>
</tr>
<tr>
<td>KU Core GE 2.1 (first)</td>
<td>3</td>
<td>EECS 268</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4</td>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>KU Core GE 2.2</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
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</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 127</td>
<td>4</td>
<td>EECS 388</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>3</td>
<td>Natural science course</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>1</td>
<td>KU Core AE4.1</td>
<td>3</td>
</tr>
<tr>
<td>EECS 348</td>
<td>4</td>
<td>MATH 290</td>
<td>2</td>
</tr>
<tr>
<td>EECS 210</td>
<td>4</td>
<td>EECS 330</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>16</strong></td>
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</tr>
</tbody>
</table>

#### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 510</td>
<td>3</td>
<td>KU Core GE3H</td>
<td>3</td>
</tr>
<tr>
<td>EECS 461</td>
<td>3</td>
<td>EECS 563</td>
<td>3</td>
</tr>
<tr>
<td>EECS 468</td>
<td>3</td>
<td>EECS 565</td>
<td>3</td>
</tr>
<tr>
<td>EECS 678</td>
<td>4</td>
<td>EECS 645</td>
<td>3</td>
</tr>
<tr>
<td>CS Elective</td>
<td>3</td>
<td>CS Elective</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>18</strong></td>
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</tr>
</tbody>
</table>

#### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 581 (Part of KU Core AE 5.1)</td>
<td>3</td>
<td>EECS 582(KU Core AE 6.1)</td>
<td>3</td>
</tr>
<tr>
<td>CS Elective</td>
<td>3</td>
<td>CS Elective</td>
<td>3</td>
</tr>
<tr>
<td>CS Elective</td>
<td>3</td>
<td>CS Elective</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3S</td>
<td>3</td>
<td>Professional Elective</td>
<td>3</td>
</tr>
<tr>
<td>Professional Elective</td>
<td>3</td>
<td>KU Core AE 4.2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### Total Hours 126

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

### Departmental Honors

An undergraduate student may graduate with departmental honors in electrical engineering, computer engineering, computer science, or interdisciplinary computing by graduating with a minimum grade-point average requirement while maintaining full-time status. In addition, students must enroll in EECS 498 Honors Research for their last 2 semesters and must complete an independent research project paper and
oral presentation to a panel of 3 judges. See the EECS Undergraduate Handbook for full details.

**Bachelor of Science in Interdisciplinary Computing**

**B.S. in Interdisciplinary Computing Program**

**Educational Objectives**

Graduates who have earned the bachelor's degree in interdisciplinary computing, within a few years following graduation, will have demonstrated technical proficiency, collaborative activities, and professional development.

**Technical Proficiency**

Graduates will have achieved success and visibility in their chosen careers as shown by technical accomplishments in industry, government, entrepreneurial activities, or academia.

**Collaborative Activities**

Graduates will have exercised shared responsibilities through activities such as contributions to multiperson or multidisciplinary technical projects, participation in professional society/organization functions, or performing collaborative research. In all such cases, graduates will have contributed to documentation of the collaborative activities.

**Professional Development**

Graduates will have demonstrated continual updating to extend their expertise and adapt to a changing environment through graduate studies; short courses, conferences, and seminars; or professional self-study. In addition, graduates will have demonstrated evidence of increasing technical and/or managerial impact.

**Undergraduate Admission to the School of Engineering**

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

**Minimum Academic Standards for Admission to the School of Engineering**

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned courses in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

**Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen**

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in a high school calculus course; or
  - Earning credit via IB or AP credit for the above-mentioned course in accordance with KU placement credit requirements; or
  - Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

**Exploring Engineering**

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

**Transfer Admission Standards**

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of “C” or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).
Already Applied to KU, But Not Engineering?

Don’t worry. It’s not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

Application Deadlines For New Freshman and Transfer Applicants

<table>
<thead>
<tr>
<th>Date</th>
<th>Deadline Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
</tr>
<tr>
<td>November 1</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
</tr>
<tr>
<td>December 1</td>
<td>Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen</td>
</tr>
<tr>
<td>February 1</td>
<td>Final deadline for scholarship consideration for transfer students planning to enter in fall or summer semesters. Applications available for the Engineering Learning Community</td>
</tr>
<tr>
<td>February 15</td>
<td>Priority deadline for current KU students to apply for summer admission to Engineering.</td>
</tr>
<tr>
<td>May 1</td>
<td>Enrollment Deposit due.</td>
</tr>
</tbody>
</table>

Bachelor of Science in Interdisciplinary Computing Degree Requirements

Through the recently approved interdisciplinary computing major, students receive an enriched computer science experience, with a focus in one of 6 fields:

1. Astronomy
2. Biology
3. Chemistry
4. Economics
5. Geography
6. Journalism, or
7. Physics

The KU Core

This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal is one or more learning outcomes:

- GE 1.1, Goal 1/Outcome 1, Critical Thinking;
- GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;
- GE 2.1, Goal 2/Outcome 1, Written Communication (2 units);
- GE 2.2, Goal 2/Outcome 2, Oral Communication;
- GE 3H, Goal 3/Outcome 1, Arts & Humanities;
- GE 3N Goal 3/Outcome 2, Natural Sciences;
- GE 3S Goal 3/Outcome 3, Social Sciences;
- AE 4.1, Goal 4/Outcome 1, Diversity;
- AE 4.2 Goal 4/Outcome 2, Culture;
- AE 5.1/5.2, Goal 5/Outcome 1/2, Social Responsibility & Ethics (course and/or practice);
- AE 6.1/6.2, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu (http://kucore.ku.edu/). Some required courses in the EECS curricula satisfy a KU Core goal and/or outcome. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A minimum of 122 to 130 credit hours\\(^1\) is required for the B.S. degree in interdisciplinary computing, as follows:

### Core Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101</td>
<td>New Student Seminar (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 140</td>
<td>Introduction to Digital Logic Design</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 268</td>
<td>Programming II</td>
<td>4</td>
</tr>
<tr>
<td>EECS 330</td>
<td>Data Structures and Algorithms</td>
<td>4</td>
</tr>
<tr>
<td>EECS 348</td>
<td>Software Engineering I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 388</td>
<td>Embedded Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECS 468</td>
<td>Programming Paradigms</td>
<td>3</td>
</tr>
<tr>
<td>EECS 565</td>
<td>Introduction to Information and Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>EECS 581</td>
<td>Software Engineering II (Part of KU Core AE 5.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 582</td>
<td>Computer Science and Interdisciplinary Computing Capstone (KU Core AE 6.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 678</td>
<td>Introduction to Operating Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

For IC majors, CS electives must be chosen from the following courses. Under unusual circumstances, other courses can be considered but only with an accompanying petition.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 447</td>
<td>Introduction to Database Systems</td>
</tr>
<tr>
<td>EECS 465</td>
<td>Cyber Defense</td>
</tr>
</tbody>
</table>

\(^1\): Required courses in the EECS curricula satisfy a KU Core goal and/or outcome. Some required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4). Students must choose from a list of several means to satisfy the required goals.
Astronomy Concentration

In addition to the core courses above, students in the astronomy concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
<td>3</td>
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<tr>
<td>PHSX 316</td>
<td>Intermediate Physics Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ASTR 391</td>
<td>Physical Astronomy, Honors</td>
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</tr>
<tr>
<td>ASTR 503</td>
<td>Undergraduate Research</td>
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<tr>
<td>ASTR 591</td>
<td>Stellar Astronomy</td>
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<td>ASTR 592</td>
<td>Galactic and Extragalactic Astronomy</td>
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</tr>
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<td>ASTR 596</td>
<td>Observational Astrophysics</td>
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</tr>
<tr>
<td>ASTR courses numbered 500 and above</td>
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</tr>
<tr>
<td>MATH 581</td>
<td>Numerical Methods</td>
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<td>MATH 611</td>
<td>Time Series Analysis</td>
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<tr>
<td>PHSX 615</td>
<td>Numerical and Computational Methods in Physics</td>
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Biology Concentration

In addition to the core courses above, students in the biology concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 412</td>
<td>Evolutionary Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td></td>
</tr>
<tr>
<td>BIOL 413</td>
<td>History and Diversity of Organisms</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 414</td>
<td>Principles of Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 428</td>
<td>Introduction to Systematics</td>
<td></td>
</tr>
<tr>
<td>BIOL 544</td>
<td>Comparative Animal Physiology</td>
<td></td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 300</td>
<td>General Chemistry III</td>
<td></td>
</tr>
<tr>
<td>CHEM 498</td>
<td>Undergraduate Research</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 530</td>
<td>Physical Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 535</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 537</td>
<td>Physical Chemistry Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>

Chemistry Concentration

In addition to the core courses above, students in the chemistry concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>Laboratory Safety in the Chemical Sciences</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 498</td>
<td>Undergraduate Research</td>
<td>2</td>
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<tr>
<td>CHEM 530</td>
<td>Physical Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 535</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 537</td>
<td>Physical Chemistry Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>
Economics Concentration

In addition to the core courses above, students in the economics concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics (KU Core GE 3S)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 520</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 522</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 526</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
</tbody>
</table>

Satisfy Economics 500 and above elective requirement: 6

Satisfy Economics 600 and above elective requirement: 6

Satisfy KU Core GE 1.1: 3

Satisfy KU Core GE 3N: 3

Satisfy KU Core AE 5.1: 3

Geography Concentration

In addition to the core courses above, students in the geography concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Science and Other Disciplines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
</tbody>
</table>

Geography basics (300 level and above courses in categories defined in the Undergraduate Study in Geography and Atmospheric Science Handbook as: Physical Studies, Geographic Information Science, Human Studies, Regional Studies, and Atmospheric Science.): 6

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 311</td>
<td>Introductory Cartography and Geovisualization (KU Core GE 3N)</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 358</td>
<td>Introduction to Geographic Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 526</td>
<td>Remote Sensing of Environment I</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 558</td>
<td>Spatial Data Analysis</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 6 credits of the following Geography electives: 6

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 512</td>
<td>Advanced Cartography and Geovisualization</td>
<td></td>
</tr>
<tr>
<td>GEOG 528</td>
<td>Spatial Databases</td>
<td></td>
</tr>
<tr>
<td>GEOG 560</td>
<td>GIS Application Programming</td>
<td></td>
</tr>
<tr>
<td>GEOG 648</td>
<td>Location Modeling</td>
<td></td>
</tr>
<tr>
<td>GEOG 658</td>
<td>Topics in Geospatial Technologies: _____</td>
<td></td>
</tr>
<tr>
<td>GEOG 726</td>
<td>Remote Sensing of Environment II</td>
<td></td>
</tr>
<tr>
<td>GEOG 758</td>
<td>Geographic Information Science</td>
<td></td>
</tr>
</tbody>
</table>

Journalism Concentration

In addition to the core courses above, students in the journalism concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 104</td>
<td>Words at Work: Writing Essentials</td>
<td>3</td>
</tr>
<tr>
<td>JMC 300</td>
<td>Visual Storytelling</td>
<td>2</td>
</tr>
</tbody>
</table>

Select one of the following Tech Tool courses: JMC 211, JMC 212, JMC 213, JMC 214, JMC 215

JMC 302 | Information Exploration                                  | 3     |

Journalism Concentration-Emphasis 1: News/Information (12)

In addition to the core courses and journalism basics courses above, students in the news/information emphasis of the journalism concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 415</td>
<td>Multimedia Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JMC 419</td>
<td>Multimedia Editing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following Journalism electives:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 410</td>
<td>Media Photography</td>
<td>3</td>
</tr>
<tr>
<td>JMC 503</td>
<td>History of Journalism and Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>JMC 540</td>
<td>Sports, Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 551</td>
<td>Advanced Multimedia Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JMC 552</td>
<td>Broadcast Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JMC 553</td>
<td>Advanced Editing and Production</td>
<td>3</td>
</tr>
<tr>
<td>JMC 621</td>
<td>Data Reporting and Visualization-Advanced Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Journalism Concentration-Emphasis 2: Strategic Communication (12)

In addition to the core courses and journalism basics courses above, students in the strategic communication emphasis of the journalism concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 320</td>
<td>Stratcom I: Introduction to Strategic Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three of the following Journalism electives:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 420</td>
<td>Stratcom II: Principles of Advertising and Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>JMC 460</td>
<td>Research Methods in Strategic Communication</td>
<td>3</td>
</tr>
<tr>
<td>JMC 560</td>
<td>Message Development</td>
<td>3</td>
</tr>
<tr>
<td>JMC 611</td>
<td>Sales Strategies</td>
<td>3</td>
</tr>
<tr>
<td>JMC 613</td>
<td>International Strategic Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 616</td>
<td>Financial Basics for Communicators</td>
<td>3</td>
</tr>
</tbody>
</table>

Physics Concentration

In addition to the core courses above, students in the physics concentration take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 210</td>
<td>General Physics I for Engineers (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 212</td>
<td>General Physics II (KU Core GE 3N)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
<td>3</td>
</tr>
</tbody>
</table>
PHSX 316  Intermediate Physics Laboratory I  1
PHSX 503  Undergraduate Research  2
PHSX 521  Mechanics I  3
PHSX 531  Electricity and Magnetism  3
PHSX 611  Introductory Quantum Mechanics  3
Physics electives (chosen from PHSX 516 and PHSX 536 and PHSX courses numbered 600 and above)  6

Total Hours  32

Course Prerequisites and Corequisites

Students must pass (at the appropriate grade level) all prerequisite courses for a given course before taking the subsequent course. If Course A is a Corequisite for Course B, Course A must be taken in the same semester as Course B or be completed prior to taking Course B.

Upper Level Eligibility

In addition to prerequisites and co-requisites, EECS undergraduates are required to earn Upper Level Course Eligibility by attaining grades of C or better (C- does not qualify) in each of the following courses:

IC ASTR: (16 courses) GE 2.1 (both); PHSX 210, & 216, 212 & 236; MATH 125, 126, 127, 220, 290; EECS 101, 140, 168, 210, 268, 348

IC BIOL: (16 courses) GE 2.1 (both); MATH 125, 126, 127, 290; EECS 101, 140, 168, 210, 268, 348; CHEM 130, 135; BIOL 150, 152, and 154

IC CHEM: (18 courses) GE 2.1 (both); PHSX 210 & 216, 212 & 236; MATH 125, 126, 127, 220, 290; EECS 101, 140, 168, 210, 268, 348; CHEM 130, 135

IC ECON: (13 courses) GE2.1 (both); Math 125, 126, 127, 290; EECS 101, 140, 168, 210, 268, 348; ECON 142 and 144

IC GEOG: (13 courses) GE 2.1 (both); PHSX 210 & 216; MATH 125, 126, 127, 290; EECS 101, 140, 168, 210, 268, 348

IC JOUR: (11 courses) GE 2.1, JMC 150, MATH 125, 126, 127, 290; EECS 101, 140, 168, 210, 268, 348

IC PHSX: (16 courses) GE 2.1 (both); PHSX 210 & 216, 212 & 236; MATH 125, 126, 127, 220, 290; EECS 101, 140, 168, 210, 268, 348

If students earn less than a C in any of the above listed courses, they must repeat the course at the next available opportunity and must not take a course for which that course is a prerequisite. It is the students’ responsibility to contact their advisors before beginning the new semester regarding any required repetitions and the associated enrollment adjustments (drops and adds).

To enroll in any upper level EECS course beyond the ULE list, students must have fulfilled the Upper Level Eligibility Requirements detailed above. Exceptions: EECS 312, EECS 330, EECS 361, and EECS 388 may be taken in the same semester as students are completing their upper level eligibility. Students may also petition for a Partial Waiver of Upper Level Eligibility Requirements by completing the appropriate petition, found in the EECS office or at www.eecs.ku.edu (http://www.eecs.ku.edu).

Double Major

If students wish to double-major (earn two degrees), they must fulfill all the requirements for the degrees in question. They must also consult the Engineering Dean’s office and the department and/or school of the second major to find out if there are any additional requirements. If they wish to obtain two degrees offered by the EECS department, the following rule applies: a course that is required for one EECS degree program may not be used to satisfy a Senior Elective or General Elective requirement of another EECS degree program.

Interdisciplinary Computing with Astronomy 4-Year Graduation Plan

Students Entering in Fall of Odd Years

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>KU Core GE 2.1 (second)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 168</td>
<td></td>
<td>4</td>
<td>EEC 140</td>
</tr>
<tr>
<td>KU Core GE 2.1 (first)</td>
<td>3</td>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4</td>
<td>PHSX 210</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3H</td>
<td></td>
<td>3</td>
<td>PHSX 216</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>15</td>
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</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 127</td>
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<td>EEC 210</td>
<td>4</td>
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<tr>
<td>MATH 220</td>
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<td>EEC 388</td>
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<td>MATH 290</td>
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<td>EEC 468</td>
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<td>PHSX 212</td>
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<td>PHSX 236</td>
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<td>4</td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>17</td>
<td>17</td>
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</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 348</td>
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<td>EEC 330</td>
<td>4</td>
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<td>EECS 461</td>
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<td>EEC 678</td>
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<tr>
<td>ASTR 591</td>
<td>3</td>
<td>PHSX 313</td>
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<td>ASTR 596</td>
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<td>KU Core GE 2.2</td>
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<td>ASTR 592</td>
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</tr>
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<td></td>
<td>16</td>
<td>15</td>
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</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 581 (Part of KU Core AE 5.1)</td>
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<td>EEC 582 (KU Core AE 6.1)</td>
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<tr>
<td>EECS 565</td>
<td>3</td>
<td>CS elective 2</td>
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</tr>
<tr>
<td>CS elective 1</td>
<td>3</td>
<td>CS elective 3</td>
<td>3</td>
</tr>
<tr>
<td>ASTR elective 1</td>
<td>3</td>
<td>ASTR elective 2</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 503</td>
<td>2</td>
<td>KU Core AE 4.2</td>
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</tr>
<tr>
<td>KU Core AE4.1</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 127**

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu (http://kucore.ku.edu/)). Hours listed are assuming the goals are satisfied with course work.
### Interdisciplinary Computing with Biology Concentration 4-Year Graduation Plan

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>EECS 140</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>4</td>
<td>KU Core GE 2.1 (second)</td>
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</tr>
<tr>
<td>KU Core GE 2.1 (first)</td>
<td>3</td>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4</td>
<td>PHSX 210 (KU Core GE 1.1)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3H</td>
<td>3</td>
<td>PHSX 216 (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
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</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 140</td>
<td>4</td>
<td>KU Core GE 2.1 (second)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 126</td>
<td>4</td>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td>2</td>
<td>EECS 268</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>5</td>
<td>CHEM 130</td>
<td>5</td>
</tr>
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</table>

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 268</td>
<td>4</td>
<td>EECS 210</td>
<td>4</td>
</tr>
<tr>
<td>EECS 210</td>
<td>4</td>
<td>EECS 388</td>
<td>4</td>
</tr>
<tr>
<td>MATH 330</td>
<td>3</td>
<td>CHEM 135</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 212 (KU Core GE 3N)</td>
<td>3</td>
<td>PHSX 216 (Part of KU Core AE 5.1)</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 565</td>
<td>3</td>
<td>EECS 582 (KU Core AE 6.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 581 (Part of KU Core AE 5.1)</td>
<td>3</td>
<td>CS elective 2</td>
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</tr>
<tr>
<td>EECS 582</td>
<td>3</td>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 316</td>
<td>1</td>
<td>CHEM 135</td>
<td>5</td>
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<tr>
<td>PHSX 313</td>
<td>3</td>
<td>CHEM 130</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Hours 127

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.
Bachelor of Science in Interdisciplinary Computing

Math 290 2 Math 220 3
PhysX 210 (KU Core GE 1.1) 3 PhysX 212 (KU Core GE 3N) 3
PhysX 216 (Part of KU Core AE 5.1) 1 PhysX 236 1
Chem 330 3

17 15

Junior

Fall Hours Spring Hours
EECS 330 4 EECS 348 4
EECS 468 3 EECS 461 3
KU Core GE 2.2 3 Chem 535 3
KU Core GE 3H 3 Chem 537 3
Chem 201 1 KU Core GE3S 1
Chem 530 4

18 16

Senior

Fall Hours Spring Hours
EECS 565 3 EECS 582 (KU Core AE 6.1) 3
EECS 581 (Part of KU Core AE 5.1) 3 CS elective 2 3
EECS 678 4 CS elective 3 3
CS elective 1 3 KU Core GE 4.1 1
Chem 698 2 KU Core GE 4.2 1

15 15

Total Hours 129

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu (http://kucore.ku.edu/)). Hours listed are assuming the goals are satisfied with course work.

Interdisciplinary Computing with Economics Concentration 4-Year Graduation Plan

Freshman

Fall Hours Spring Hours
EECS 101 (Part of KU Core AE 5.1) 1 KU Core GE 2.1 (second) 3
EECS 168 4 EECS 140 4
KU Core GE 2.1 (first) 3 Math 126 4
Math 125 (KU Core GE 1.2) 4 Econ 144 3
Econ 142 3 KU Core GE 3N 1

15 17

Sophomore

Fall Hours Spring Hours
EECS 268 4 EECS 210 4
Math 127 4 EECS 388 4
Math 290 2 EECS 468 3
KU Core GE 3S 3 KU Core GE 4.1 1
Geog Basics I 3 Geog Basics II 3

16 17

Junior

Fall Hours Spring Hours
EECS 348 4 EECS 678 4
EECS 461 3 EECS 330 4
KU Core AE 4.1 3 Econ 526 3
KU Core AE 5.1 3 Econ elective A 3
Econ elective A 3 KU Core AE 4.2 1

16 17

Senior

Fall Hours Spring Hours
EECS 565 3 EECS 582 (KU Core AE 6.1) 3

Total Hours 128
### Interdisciplinary Computing with Journalism Concentration 4-Year Graduation Plan - Strategic Communication Emphasis

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101</td>
<td>1</td>
<td>MATH 126</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>4</td>
<td>EECS 140</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4</td>
<td>KU Core GE 3N</td>
<td>3</td>
</tr>
<tr>
<td>JMC 104 (KU Core GE 21-1)</td>
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<td>JMC 101 (KU Core GE 3S)</td>
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<tr>
<td>KU Core GE 3H</td>
<td>3</td>
<td>3 KU Core GE2.2</td>
<td>3</td>
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<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>17</strong></td>
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**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 268</td>
<td>4</td>
<td>EECS 210</td>
<td>4</td>
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<tr>
<td>MATH 127</td>
<td>4</td>
<td>EECS 388</td>
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<td>MATH 290</td>
<td>2</td>
<td>EECS 468</td>
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<tr>
<td>JMC 300</td>
<td>2</td>
<td>JMC 304 (KU Core GE 21-2)</td>
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<tr>
<td>JMC 302 (KU Core GE 1.1)</td>
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<td>JMC 211-215 (Choose one)</td>
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<td><strong>15</strong></td>
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</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 348</td>
<td>4</td>
<td>EECS 678</td>
<td>4</td>
</tr>
<tr>
<td>EECS 461</td>
<td>3</td>
<td>EECS 330</td>
<td>4</td>
</tr>
<tr>
<td>JMC 309</td>
<td>3</td>
<td>JMC 408 (KU Core AE 5.1)</td>
<td>3</td>
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<tr>
<td>JMC 408 (KU Core GE 5.1)</td>
<td>3</td>
<td>JMC 419</td>
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<td>KU Core AE4.1</td>
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</tr>
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<td><strong>Total Hours</strong></td>
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<td><strong>14</strong></td>
<td></td>
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</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 565</td>
<td>3</td>
<td>EECS 582 (KU Core AE 6.1)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 581</td>
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<td>CS Elective 2</td>
<td>3</td>
</tr>
<tr>
<td>CS Elective 1</td>
<td>3</td>
<td>CS Elective 3</td>
<td>3</td>
</tr>
<tr>
<td>JMC elective 2</td>
<td>3</td>
<td>KU Core AE 4.2</td>
<td>3</td>
</tr>
<tr>
<td>JMC elective 3</td>
<td>3</td>
<td>Additional A/H/SS</td>
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<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 122**

1. Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). Hours listed are assuming the goals are satisfied with course work.

### Interdisciplinary Computing with Physics Concentration 4-Year Graduation Plan

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 101 (Part of KU Core AE 5.1)</td>
<td>1</td>
<td>KU Core GE 2.1 (second)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 168</td>
<td>4</td>
<td>EECS 140</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Hours 122**

1. Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu). (JOUR 101 may be used to satisfy GE3S for the Journalism concentration.) Hours listed are assuming the goals are satisfied with course work.
KU Core GE 2.1 (first)\(^1\) 3 MATH 126 4
MATH 125 (KU Core GE 1.2) 4 PHSX 210 (KU Core GE 1.1) 3
KU Core GE 3H\(^1\) 3 PHSX 216 (Part of KU Core AE 5.1) 1

15 15

Sophomore
Fall Hours Spring Hours
EECS 268 4 EECS 210 4
MATH 127 4 EECS 388 4
MATH 220 3 EECS 468 3
MATH 290 2 KU Core GE 3S\(^1\) 3
PHSX 212 (KU Core GE 3N) 3 PHSX 313 3
PHSX 236 1

17 17

Junior
Fall Hours Spring Hours
EECS 348 4 EECS 330 4
EECS 461 3 EECS 678 4
KU Core AE 4.1\(^1\) 3 KU Core GE 2.1\(^1\) 3
PHSX 503 2 PHSX 316 1
PHSX 521 3 PHSX 611 3

15 15

Senior
Fall Hours Spring Hours
EECS 565 3 EECS 582 (KU Core AE 6.1) 3
EECS 581 (Part of KU Core AE 5.1) 3 CS elective 2 3
CS elective 1 3 CS elective 3 3
PHSX 531 3 KU Core AE 4.2\(^1\) 3
PHSX elective 1 3 PHSX elective 2 3

15 15

Total Hours 124

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu (http://kucore.ku.edu/)). Hours listed are assuming the goals are satisfied with course work.

Departmental Honors
An undergraduate student may graduate with departmental honors in electrical engineering, computer engineering, computer science, or interdisciplinary computing by graduating with a minimum grade-point average requirement while maintaining full-time status. In addition, students must enroll in EECS 498 Honors Research for their last 2 semesters and must complete an independent research project paper and oral presentation to a panel of 3 judges. See the EECS Undergraduate Handbook for full details.

Undergraduate Certificate in Cybersecurity
The Undergraduate Certificate in Cybersecurity is a 12-credit undergraduate-level certificate designed to provide fundamental knowledge of information security concepts, cryptography, information and network security and computer systems security, as well as real-world practice with hand-on experiences in cyber defense. The purpose of this undergraduate certificate is to offer a credential that covers both the theoretical and practical aspects of cybersecurity to students who are currently pursuing baccalaureate work in KU EECS department.

The entrance requirements for students entering the undergraduate certificate of cybersecurity program include:

- Upper-level eligibility in KU EECS AND
- Overall GPA of 2.8 or better AND
- Three letters of reference.

The proposed Undergraduate Certificate in Cybersecurity requires the completion of three core courses\(^1\) and one elective course\(^2\) at a total of 12 credit hours\(^3\).

Core Courses/Theory (2 courses, 6 credit hours required)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 563</td>
<td>Introduction to Communication Networks</td>
<td>3</td>
</tr>
<tr>
<td>EECS 565</td>
<td>Introduction to Information and Computer Security</td>
<td>3</td>
</tr>
</tbody>
</table>

Core Courses/Practice (1 course, 3 credit hours required)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 465</td>
<td>Cyber Defense</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses (1 course, 3 credit hours required)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 569</td>
<td>Computer Forensics</td>
<td>3</td>
</tr>
<tr>
<td>EECS 665</td>
<td>Compiler Construction</td>
<td>4</td>
</tr>
<tr>
<td>EECS 700</td>
<td>Special Topics: _____ (Mobile Security)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 700</td>
<td>Special Topics: _____ (IoT Security)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 711</td>
<td>Security Management and Audit</td>
<td>3</td>
</tr>
<tr>
<td>EECS 738</td>
<td>Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>EECS 742</td>
<td>Static Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EECS 755</td>
<td>Software Modeling and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EECS 765</td>
<td>Introduction to Cryptography and Computer Security</td>
<td>3</td>
</tr>
</tbody>
</table>

The completion requirements of the cybersecurity certificate include:

- Students must have a GPA of 3.0 or better in all certificate courses AND
- The minimum grade for any course to be applied toward the certificate is a grade of C

Note 1: Prerequisite and corequisite of three core courses include:
EECS 140, EECS 168 EECS 268, EECS 388, EECS 448, EECS 461, and EECS 678.

Note 2: Under unusual circumstances other EECS 690 or EECS 700 security-related courses may be petitioned to satisfy elective requirement, subject to approval.

Note 3: For students who have been enrolled in the BSEE/CoE/CS/IC programs, all the credits obtained in the certification program will count toward the degree. For students who have enrolled in the BSEE/CoE/CS/IC programs, all the credits obtained before applying to the certificate will count toward the certificate.
Master of Engineering in Electrical Engineering and Computer Science

Electrical Engineering and Computer Science

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

Vision and Mission

The vision of the EECS department is to provide a stimulating and challenging intellectual environment.

- To have classes populated by outstanding students.
- To be world class in an increasing number of selected areas of research.
- To have faculty members with high visibility among their peers.

The mission of the EECS department is

- To educate the next generation of electrical engineers, computer engineers, and computer scientists.
- To discover, apply, and disseminate knowledge.
- To be an asset to the community and to society.

Graduate Admission to the Department of Electrical Engineering and Computer Science

Applicants for the Master's of Engineering in EECS (M.Eng. in EECS) degree program typically possess a degree in computer science, computer engineering, or electrical engineering. However, a student with good preparation in a related field may qualify by taking appropriate additional undergraduate courses. Such courses normally do not count toward the graduate degree. A list of specific prerequisite courses (https://eecs.ku.edu/deficiency-courses/) for the M.Eng. in EECS degree is available in the graduate office or on the department's website.

Applicants must demonstrate evidence of aptitude for graduate work, as shown by suitable performance in undergraduate and any graduate course work, by aptitude test scores on the Graduate Record Examination, and by academic letters of reference.

Unless the applicant's native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the department's standard for the Test of English as a Foreign Language (TOEFL), which is higher than the general KU requirement. Applicants for graduate teaching assistantships must earn satisfactory scores on the Test of Spoken English.

Application Information & Deadlines

Fall Priority Deadline: December 15
Spring Priority Deadline: September 30

Applications accepted after the priority deadlines listed above may not be considered for fellowships and assistantships. All application materials must be submitted by March 1 (Fall semester admission) and October 1 (Spring semester admission). Visit the Graduate Studies website (http://www.graduated.ku.edu/) for the application procedure and fees.

International students and students who indicated English as a second language, are required to show proof of English proficiency for admission purposes and may need to check-in at the Applied English Center (https://aec.ku.edu/) (AEC) upon arrival on campus for orientation. This process serves to confirm each student's level of English proficiency and determine whether English courses will be included as a requirement of the student's academic program. Note: Students who demonstrate English proficiency at the waiver level or who have earned a degree from one of the specified English-speaking countries listed in the policy (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/) are not required to check in at the AEC (see eligibility requirements on the Graduate Studies website (https://graduate.ku.edu/english-proficiency-requirements/)).

Application Materials

- Online Application (https://graduate.ku.edu/ku-graduate-application/)
- GRE scores (school code 6871)
- Statement of objectives and resume
- Official transcript
- Letters of recommendation
- TOEFL scores (international students)
- Financial statement (international students only)

Submit all supporting documents and your graduate application online (http://www.graduated.ku.edu/).

Visiting Us

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. In order to determine this, we feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Graduate Open House in mid-October or mid-March. Eligible admitted students may be invited to participate in Campus Visit Days in February (prior to the fall semester of your intended matriculation). These organized campus visit opportunities will allow you to gather a great deal of first-hand information which we hope will help you in making a final decision about whether to attend KU.

The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

The degree requirements for the new M.Eng. in EECS program will mirror those for our existing M.S. degree programs with the exception that the
thesis/project credit requirement will be replaced with an equal number of coursework credits.

Some more specifics of the degree requirement include:

(a) Every student can select or is assigned a faculty advisor in their first semester. The student will work with their faculty advisor to develop a formal plan of study that includes courses that are consistent with the student’s academic background and identified degree and goals.

(b) Every plan of study will consist of 30 coursework credits and 1 credit of EECS 802.

(c) M.Eng. plans of study that follow the "predefined course lists" (similar to those used by our current M.S. degree programs) will be automatically approved by the EECS graduate committee. A predefined plan of study includes: (i) 4 courses from the “Foundational” course list, (ii) 5 courses from the “Elective” course list, (iii) one open elective course related to the student’s professional goals, (iv) at least one semester of EECS Colloquium (EECS 802), (v) a maximum of 2 courses numbered between 500-699 may be counted toward the hours required for the degree.

The predefined course list for each focus area (Computer Science, Computer Engineering, or Electrical Engineering). The predefined course lists for each focus areas are listed below.

(d) M.Eng. plans of study not following a predefined course list will be required to have the EECS graduate committee assess the submitted plan of study, goals, and justification.

(e) Every M.Eng. in EECS plan of study must adhere to the following rules: (i) a total of 30 hours of coursework, (ii) minimum of 7 EECS courses numbered 700 or higher, (iii) maximum of 9 hours outside the department, (iv) include at least one semester of EECS Colloquium (EECS 802), (v) a maximum of 2 courses numbered between 500-699 may be counted toward the hours required for the degree.

The predefined course list for M.Eng. students with a “Computer Engineering (CoE)” focus is:

The predefined course list for M.Eng. students with a “Computer Science (CS)” focus is:

Predefined course lists:

The predefined course list for each focus area (Computer Science, Computer Engineering, or Electrical Engineering) are divided into the foundational and elective set of classes. The predefined course list for M.Eng. students with a “Computer Science (CS)” focus is:

The predefined course list for M.Eng. students with a “Computer Engineering (CoE)” focus is:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 639</td>
<td>Introduction to Scientific Computing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 730</td>
<td>Introduction to Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>EECS 731</td>
<td>Introduction to Data Science</td>
<td>3</td>
</tr>
<tr>
<td>EECS 738</td>
<td>Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>EECS 743</td>
<td>Advanced Computer Architecture</td>
<td>3</td>
</tr>
<tr>
<td>EECS 750</td>
<td>Advanced Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>EECS 762</td>
<td>Programming Language Foundation I</td>
<td>3</td>
</tr>
<tr>
<td>EECS 765</td>
<td>Introduction to Cryptography and Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>EECS 780</td>
<td>Communication Networks</td>
<td>3</td>
</tr>
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</table>

Elective course list for CS focus (15 credit hours):

<table>
<thead>
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<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>EECS 649</td>
<td>Introduction to Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>EECS 660</td>
<td>Fundamentals of Computer Algorithms</td>
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</tr>
<tr>
<td>EECS 690</td>
<td>Special Topics: ____</td>
<td>1-3</td>
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</table>

Elective course list for CoE focus (15 credit hours):

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<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 644</td>
<td>Introduction to Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 660</td>
<td>Fundamentals of Computer Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>EECS 665</td>
<td>Compiler Construction</td>
<td>4</td>
</tr>
<tr>
<td>EECS 739</td>
<td>Parallel Scientific Computing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 743</td>
<td>Advanced Computer Architecture</td>
<td>3</td>
</tr>
<tr>
<td>EECS 750</td>
<td>Advanced Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>EECS 762</td>
<td>Programming Language Foundation I</td>
<td>3</td>
</tr>
<tr>
<td>EECS 780</td>
<td>Communication Networks</td>
<td>3</td>
</tr>
<tr>
<td>EECS 786</td>
<td>Digital Very-Large-Scale-Integration</td>
<td>3</td>
</tr>
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</table>

The predefined course list for M.Eng. students with a “Computer Engineering (CoE)” focus is:

Elective course list for CoE focus (15 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 611</td>
<td>Electromagnetic Compatibility</td>
<td>3</td>
</tr>
<tr>
<td>EECS 628</td>
<td>Fiber Optic Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>EECS 638</td>
<td>Fundamentals of Expert Systems</td>
<td>3</td>
</tr>
<tr>
<td>EECS 649</td>
<td>Introduction to Artificial Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>EECS 664</td>
<td>Introduction to Digital Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>EECS 690</td>
<td>Special Topics: ____</td>
<td>1-3</td>
</tr>
<tr>
<td>EECS 700</td>
<td>Special Topics: ____</td>
<td>1-5</td>
</tr>
<tr>
<td>EECS 718</td>
<td>Graph Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>EECS 730</td>
<td>Introduction to Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>EECS 731</td>
<td>Introduction to Data Science</td>
<td>3</td>
</tr>
<tr>
<td>EECS 738</td>
<td>Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>EECS 739</td>
<td>Parallel Scientific Computing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 740</td>
<td>Digital Image Processing</td>
<td>3</td>
</tr>
</tbody>
</table>
EECS 742  Static Analysis  3
EECS 744  Communications and Radar Digital Signal Processing  3
EECS 746  Database Systems  3
EECS 753  Embedded and Real Time Computer Systems  3
EECS 759  Estimation and Control of Unmanned Autonomous Systems  3
EECS 764  Analysis of Algorithms  3
EECS 765  Introduction to Cryptography and Computer Security  3
EECS 767  Information Retrieval  3
EECS 768  Virtual Machines  3
EECS 769  Information Theory  3
EECS 776  Functional Programming and Domain Specific Languages  3
EECS 781  Numerical Analysis I  3
EECS 782  Numerical Analysis II  3
EECS 788  Analog Integrated Circuit Design  3

The predefined course list for M.Eng. students with a "Electrical Engineering (EE)" focus is:

EECS 744  Static Analysis  3
EECS 746  Database Systems  3
EECS 753  Embedded and Real Time Computer Systems  3
EECS 759  Estimation and Control of Unmanned Autonomous Systems  3
EECS 764  Analysis of Algorithms  3
EECS 765  Introduction to Cryptography and Computer Security  3
EECS 767  Information Retrieval  3
EECS 768  Virtual Machines  3
EECS 769  Information Theory  3
EECS 776  Functional Programming and Domain Specific Languages  3
EECS 781  Numerical Analysis I  3
EECS 782  Numerical Analysis II  3
EECS 788  Analog Integrated Circuit Design  3

Elective course list for EE focus (15 credit hours):

EECS 725  Introduction to Radar Systems  3
EECS 743  Advanced Computer Architecture  3
EECS 745  Implementation of Networks  3
EECS 769  Information Theory  3

EECS 780  Communication Networks  3
EECS 781  Numerical Analysis I  3
EECS 782  Numerical Analysis II  3
EECS 784  Science of Communication Networks  3
EECS 788  Analog Integrated Circuit Design  3
EECS 823  Microwave Remote Sensing  3
EECS 828  Advanced Fiber-Optic Communications  3
EECS 844  Adaptive Signal Processing  3
EECS 865  Wireless Communication Systems  3
EECS 868  Mathematical Optimization with Applications  3
EECS 869  Error Control Coding  3
EECS 881  High-Performance Networking  3
EECS 882  Mobile Wireless Networking  3
EECS 888  Internet Routing Architectures  3
EECS 965  Detection and Estimation Theory  3

Master of Science in Electrical Engineering

Electrical Engineering and Computer Science

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Graduate Admission to the Department of Electrical Engineering and Computer Science

Applicants for the Master of Science degree in Electrical Engineering (M.S.E.E.) typically possess a degree in electrical engineering, computer engineering, or a related field. However, a student with good preparation in a related field may qualify by taking appropriate additional undergraduate
courses. Such courses normally do not count toward the graduate degree. A list of specific prerequisite courses for the M.S. in Electrical Engineering degree is available in the graduate office or on the department's website.

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Application Materials

• Online Application (https://graduate.ku.edu/ku-graduate-application/)
• GRE scores (school code 6871)
• Statement of objectives and resume
• Official transcript
• Letters of recommendation
• TOEFL scores (international students)
• Financial statement (international students only)

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The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

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The University of Kansas
Department of Electrical Engineering and Computer Science
Graduate Office
Eaton Hall
1520 W. 15th Street, Suite 2001E
Lawrence, KS 66045

M.S. Degree Requirements

The master’s program in Electrical Engineering offers a thesis and nonthesis option. The thesis option requires a minimum of 8 approved graduate courses, 6 hours of EECS 899 Master’s Thesis, EECS 802 and an oral defense of the thesis in the final semester. A master’s thesis should address an open problem in EECS. After evaluating current literature related to the problem of interest, students must design, build, and evaluate hardware or software systems or system models to prove or disprove their research hypothesis. Completing a thesis typically takes 2 semesters and produces results that could be published as a paper in conference proceedings or a professional journal. The nonthesis option requires a minimum of 9 approved graduate courses, 3 hours of EECS 891Graduate Problems, EECS 802, and an oral defense of the project report in the final semester.

Electrical engineering students are encouraged to choose a project or thesis topic early in their graduate career, and identify a faculty advisor who is interested in supervising their work.

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- Online Application (https://graduate.ku.edu/ku-graduate-application/)
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Graduate Certificate in Data Science

The Graduate Certificate in Data Science (DS) requires 4 graduate-level courses and is designed to offer the state-of-the-art Data Science training to a wide range of students who are currently pursuing graduate training in a discipline that is outside EECS or those that are seeking post-baccalaureate training to enhance their skill in Data Science, examples include Masters and Ph.D. students working on computational physics, computational chemistry, quantitative genetics, geoinformatics, or environmental modeling.

Requirements for EECS students entering the program are courses in (a) EECS 268: programming II or experience with object oriented programming and large programs, and (b) MATH 290: linear algebra or equivalent, and (c) MATH 526 or EECS 461: applied mathematical statistics or equivalent; or consent from the instructor.

The target students of this graduate certificate, outside the EECS students, are Lawrence campus graduate students doing research directly
related to data science. Examples include Masters and Ph.D. students working on computational physics, computational chemistry, quantitative genetics, geoinformatics, or environmental modeling. The program highly considers those who have strong quantitative training (math and statistics), have some programming experience and prior exposure of large programs through research.

Applicants must complete an application to Graduate Studies (http://graduate.ku.edu/ku-graduate-application/) for admission into the certificate program and submit an application fee along with the following materials:

- Copy of Official Transcripts
- Statement of Purpose
- Resume
- Three Letters of Recommendation

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The Graduate Certificate in Data Science requires the completion of one core course and three elective courses (from the specified list) at a total for four courses with a minimum of 11 credit hours. All students must take EECS 731 in their first semester in the program.

Core Courses (1 course, 3 credit hours required)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EECS 731</td>
<td>Introduction to Data Science</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses (3 courses, minimum of 8 credit hours required)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 738</td>
<td>Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>IT 746</td>
<td>Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>or EECS 767</td>
<td>Information Retrieval</td>
<td></td>
</tr>
<tr>
<td>EECS 775</td>
<td>Visualization</td>
<td>3</td>
</tr>
<tr>
<td>or DSCI 714</td>
<td>Data Visualization</td>
<td></td>
</tr>
<tr>
<td>EECS 837</td>
<td>Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>STAT 830</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 871</td>
<td>Mathematical Statistics</td>
<td></td>
</tr>
<tr>
<td>or MATH 728</td>
<td>Statistical Theory</td>
<td></td>
</tr>
</tbody>
</table>

The completion requirements of the graduate certificate in data science include: (a) students must have a GPA of 3.0 or better on the required courses; (b) The minimum grade for any course to be applied toward the certificate is a grade of C; and (c) no credits may be transferred from another institution for this certificate.

Graduate Certificate in RF Systems Engineering

The objective of the RF Systems Engineering graduate certificate program will be for students to understand the applications of signal processing for filtering, estimating, and detecting signals in a high-interference environment; the design and operation of microwave systems, including receiver and transmitter architecture, as well as antenna performance and function; the theory and application of transmitting digital information via electromagnetic propagation; understand the function of microwave components and transmission line theory; understand the propagation of both bounded and unbounded electromagnetic waves. The certificate program offers an opportunity for industrial practitioners to enhance RF Systems Engineering skills without having to apply for and complete a Master’s of Electrical Engineering degree.

Admission requirements:

- BS degree in electrical engineering from an ABET accredited program with a GPA of 3.0 or higher.
- Three letters of reference.

Applicants must complete an application to Graduate Studies (http://graduate.ku.edu/ku-graduate-application/) for admission into the certificate program and submit an application fee along with the following materials:

- Copy of Official Transcripts;
- Statement of Purpose;
- Resume;
- Three Letters of Recommendation.

*Unless the applicant’s native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the department’s standard for the Test of English as a Foreign Language (TOEFL).

To complete the program and obtain the certificate, four (4) of the following courses should be completed:

**Required**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EECS 622</td>
<td>Microwave and Radio Transmission Systems (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 721</td>
<td>Antennas (Spring)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 723</td>
<td>Microwave Engineering (Spring)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective (choose one)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>EECS 713</td>
<td>High-Speed Digital Circuit Design (Fall)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 725</td>
<td>Introduction to Radar Systems</td>
<td>3</td>
</tr>
<tr>
<td>EECS 823</td>
<td>Microwave Remote Sensing</td>
<td>3</td>
</tr>
</tbody>
</table>

The completion requirements of the graduate certificate in RF systems engineering include: (a) students must have a GPA of 3.0 or better on the required courses; (b) the minimum grade for any course to be applied toward the certificate is a grade of C; and (c) no credits may be transferred from another institution for this certificate.

Note: The completion of the graduate certificate program does not lead to automatic admission to the MSEEE program. However, for students who are able to gain admission to the MSEEE program within five years of earning the certificate, all certificate course work completed with a grade
B or higher will be recognized through a combination of the following methods. For students admitted to the MSEE program before completion of the certificate, all certificate course work may also be applied to the degree-granting program. For students admitted to the MSEE program after completing the certificate, departments will use a combination of transfer credit and degree requirement waivers to recognize the 12 hours earned through the certificate program. At the discretion of the degree-granting program and the Graduate Division, up to nine (9) credit hours may be transferred to the degree program. For the purposes of the MSEE program, completion of the graduate certificate in RF Systems Engineering within five years, with a grade of B or better, shall also be recognized as exceptional preparation which warrants the waiver of course work completed during the certificate program and not transferred. Please see the M.A. & M.S. Degrees and Graduate Credit policies for more information.

**Doctor of Philosophy in Computer Science**

**Electrical Engineering and Computer Science**

The technological advances that have made our society what it is today are considerably credited to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

**Vision and Mission**

The vision of the EECS department is to provide a stimulating and challenging intellectual environment, including:

- To have classes populated by outstanding students;
- To be world class in an increasing number of selected areas of research; and
- To have faculty members with high visibility among their peers.

The mission of the EECS department is:

- To educate the next generation of electrical engineers, computer engineers, and computer scientists;
- To discover, apply, and disseminate knowledge; and
- To be an asset to the community and to society.

**Graduate Admission**

Admission is open to college and university graduates whose previous records indicate an ability to succeed with graduate work in the chosen discipline. Applicants with strong academic credentials may be admitted directly into the Ph.D. computer science program without an M.S. in the requisite field.

Applicants must demonstrate evidence of aptitude for graduate work, as shown by suitable performance in undergraduate and any graduate course work, by aptitude test scores on the Graduate Record Examination (GRE), and by academic letters of reference.

Unless the applicant's native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the department's standard for the Test of English as a Foreign Language (TOEFL), which is higher than the general KU requirement. Applicants for graduate teaching assistantships must earn satisfactory scores on the Test of Spoken English.

**Application Information & Deadlines**

Fall Priority Deadline: December 15

Spring Priority Deadline: September 30

Applications will be accepted after the priority deadlines listed above, but those applicants may not be considered for fellowships and assistantships. All application materials must be submitted by March 1 (Fall semester admission) and October 1 (Spring semester admission). See the Graduate Studies website (http://www.graduate.ku.edu/) for the application procedure and fees.

International students and students who indicated English as a second language, are required to show proof of English proficiency for admission purposes and must check-in at the Applied English Center (https://aec.ku.edu/) (AEC) upon arrival on campus for orientation. This process serves to confirm each student's level of English proficiency and determine whether English courses will be included as a requirement of the student's academic program. Note: Students who demonstrate English proficiency at the waiver level or who have earned a degree from one of the specified English-speaking countries listed in the policy (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/) are not required to check in at the AEC (see eligibility requirements on the Graduate Studies website (https://graduate.ku.edu/english-proficiency-requirements/)).

**Application Materials**

- Online Application (https://graduate.ku.edu/ku-graduate-application/)
- GRE scores (school code 6871).
- Statement of Objectives and resume
- Official transcript
- Letters of recommendation
- TOEFL scores (international students)
- Financial statement (international students only)

All application materials should be submitted online (http://www.graduate.ku.edu/).

**Visiting Us**

The graduate program staff is happy to work with all prospective students in determining the fit between the student and the program. We feel that visiting our campus in Lawrence is a very important step. In order to facilitate your visit to KU, there are two main options:

The first, and most preferred, option entails simply applying for admission to the program. All prospective students are welcome to attend our Graduate Open House in mid-October or mid-March. Eligible admitted students may be invited to participate in Campus Visit Days in late February (prior to the fall semester of your intended matriculation). These organized campus visit opportunities will allow you to gather a
Ph.D. Degree Requirements

Requirements for the doctoral degree programs include a doctoral qualifying examination, course work, a research skills requirement, a responsible scholarship requirement, a comprehensive oral examination, a dissertation, and a final oral examination. Doctoral students also must take at least one semester of EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

In the first semester, the student must select a major advisor and a committee. The student’s committee consists of a minimum of 5 graduate faculty members and is chaired by the major advisor. The advisor and at least 2 other members of the committee must be tenured or tenure-track members of the graduate faculty in EECS, and 1 committee member must be the Graduate Studies Representative, a regular KU graduate faculty member outside of the EECS department. The role of this member as the Graduate Studies representative is designed to assure the appropriate standard of fairness, professionalism, judgment, and skill are applied throughout the examination process for the benefit of the institution and in the best interest of the student. As an independent participant observer, this member should have no personal or professional duality/conflict of interest with other members of the committee or the student that would prevent him or her from the unbiased fulfillment of these responsibilities (for more information, see the policy here (https://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees/)). This committee guides the student’s selection of courses, participates in the comprehensive and final examinations, and helps the student select a topic for research leading to the dissertation. Should the student’s interests change, the committee membership may be changed accordingly, with the approval of the department’s graduate studies committee.

All doctoral students must have an approved Plan of Study (https://gradplan.engr.ku.edu/accounts/login/?next=/) on file by the beginning of their second semester of study.

Each doctoral student must pass a doctoral qualifying examination, which also meets the research skills requirement. This is an assessment of the students ability to conduct PhD-level scholarship based on classroom performance, written research and an oral examination to be given by a committee of tenured/tenure track graduate faculty members.

Programs leading to the Ph.D. in computer science require a minimum of 18 semester credit hours of course work beyond the requirements for the M.S. degree and a minimum of 18 credit hours of dissertation research. A minimum of 15 of these 18 hours must be EECS classes numbered 700 and above, excluding EECS 801 Directed Graduate Readings and EECS 891 Graduate Problems.

Students admitted to a doctoral program without an M.S. in the intended field also must meet the 24-hour course work requirement for the M.S. thesis option, for a total of 42 credit hours of course work. In this case, 30 of the 42 hours must be EECS classes numbered 700 and above, excluding EECS 801 Directed Graduate Readings and EECS 891 Graduate Problems and EECS 899. Waiver of required hours on the basis of graduate work done elsewhere may be allowed by petition to the graduate studies committee. Each aspirant to the Ph.D. degree must complete a responsible scholarship requirement, which is met by completing and passing EECS 802 Electrical Engineering and Computer Science Colloquium and Seminar on Professional Issues.

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Following completion of the Ph.D. dissertation, the candidate must defend the dissertation in an oral final examination. The examining committee is once again constituted as in the comprehensive oral examination.

Doctor of Philosophy in Electrical Engineering

Electrical Engineering and Computer Science

The technological advances that have made our society what it is today considerably credited largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

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• Financial statement (international students only)

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The second option is making arrangements to visit us on your own, outside of organized events. With early notification, we will do our best to work with you to provide information and schedule appointments with faculty when possible. Please contact us if you feel that this is the best option for you.

Contact Information

Please contact the EECS Graduate Program Coordinator at eecs_graduate@ku.edu or (785) 864-4487, to schedule a visit or with questions about the application process.

The University of Kansas
Department of Electrical Engineering and Computer Science
Graduate Office
Eaton Hall
1520 W. 15th Street, Suite 2001E
Lawrence, KS 66045

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## Engineering Physics Undergraduate Program

### Engineering Physics Undergraduate Program

The engineering physics program is designed for undergraduates with an interest in both science and engineering. The program is focused on those students who wish to work in areas of rapid technological change, where a good background in the underlying science is an important ingredient to a successful career. The curriculum includes classical and modern physics, mathematics, and their applications to one or more areas of engineering, thus allowing students to learn the physical science and engineering principles underlying modern technology. Four design concentrations are offered:

- Aerospace Systems: Aircraft track OR Spacecraft track
- Chemical Systems
- Digital Electronic Systems
- Electromechanical Control Systems

Each option incorporates a significant design component and provides a strong base in one or more engineering disciplines. The Bachelor of Science degree in Engineering Physics is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

For programs in physics, see Physics and Astronomy (p. 1669) in the College of Liberal Arts and Sciences section of the online catalog.

### Educational Objectives

Engineering physics graduates will be capable of:

- Completing or successfully progressing toward completion of an advanced degree in graduate or professional school,
- Using their analytical, problem-solving, and communications skills to conduct research or contribute to technology development projects, individually or as a team member,
- Using their background knowledge in physics and engineering fundamentals as a foundation for developing new knowledge and experience in their chosen disciplines.

### Careers

#### Professional Opportunities

The broad training and technical breadth of the engineering physics degree program provide students a unique flexibility in their future careers. They have the science background to pursue pure research opportunities, the engineering and design experience to solve practical problems in industry or a variety of other settings, and the understanding to act as a communication link between highly diversified divisions of an organization. Engineering physics graduates typically work in aerospace and avionic industries, electronics industries, research and development laboratories, telecommunications, design and consulting firms, and government agencies, such as defense contractors. The degree program...
also prepares students to attend graduate or professional school in physics, engineering or related disciplines.

Courses

EPHX 210. General Physics I for Engineers. 3 Credits. NP N
This course is an introduction to classical mechanics and thermodynamics designed for students in the School of Engineering who have completed MATH 125 or MATH 145 with a grade of C or better. Students not admitted to the School of Engineering must receive permission from instructor. EPHX 210 and PHSX 211 cannot both be taken for credit. Prerequisite: MATH 125 or MATH 145 with a grade of C or better. Corequisite: MATH 126 or MATH 146; courses in high school physics and/or chemistry recommended.

EPHX 211. General Physics I. 4 Credits. NP N
Introduction to classical mechanics and thermodynamics. Designed for students in engineering and physical science majors. Prerequisite: MATH 116 or MATH 125 or MATH 145; corequisite MATH 126 or MATH 146; courses in high school physics and/or chemistry are recommended.

EPHX 212. General Physics II. 3 Credits. NP N
Study of electricity, magnetism, waves, and optics. Prerequisite: PHSX 201, PHSX 210, PHSX 211 or PHSX 213; MATH 126 or MATH 146. Co-enrollment in MATH 127 or MATH 147 is strongly encouraged.

EPHX 400. Topics in Engineering Physics: _____ 1-3 Credits.
A course on special topics in engineering physics, given as the need arises. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor.

EPHX 501. Honors Research. 1-4 Credits. N
This course is for students seeking Departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required four hours of total enrollment, a written and oral report of the research is required. (Same as ASTR 501 and PHSX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

EPHX 503. Undergraduate Research. 1-4 Credits. N
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and PHSX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

EPHX 518. Mathematical Physics. 3 Credits. N
Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electrodynamics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. (Same as PHSX 518.) Prerequisite: PHSX 313; MATH 220 or MATH 221 or MATH 320; or permission of instructor.

EPHX 521. Mechanics I. 3 Credits. N
Newton's laws of motion. Motion of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as PHSX 521.) Prerequisite: PHSX 213 or PHSX 211 and PHSX 216; MATH 127 or MATH 147; MATH 290 or MATH 291; and MATH 220, MATH 221 or MATH 320.

EPHX 531. Electricity and Magnetism. 3 Credits. N
This course will explore the properties of electric and magnetic fields, including electrostatics, Gauss' Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles, and of dielectric and magnetic materials. (Same as PHSX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236, or PHSX 202; PHSX 521 or EPHX 521 or special permission; MATH 127 or MATH 147; MATH 290 or MATH 291; and MATH 220, MATH 221, or MATH 320.

EPHX 536. Electronic Circuit Measurement and Design. 4 Credits. N LFE
A laboratory course that explores the theory and experimental techniques of analog and digital electronic circuit design and measurement. Topics include transient response, transmission lines, transistors, operational amplifiers, and digital logic. (Same as PHSX 536.) Prerequisite: PHSX 214 or PHSX 212 and PHSX 236; MATH 127 or MATH 147; and MATH 290 or MATH 291. PHSX 313 and 316 recommended.

EPHX 600. Special Topics in Physics and Astrophysics: _____. 3 Credits. N
Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as PHSX 600.) Prerequisite: Permission of instructor.

EPHX 601. Design of Physical and Electronic Systems. 4 Credits. N LFE
A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers with measurement devices, and use of approximations and/or computer simulation to optimize design parameters, linear control systems, and noise. (Same as PHSX 601.) Prerequisite: Twelve hours of junior-senior credit in physics or engineering, including one laboratory course.

EPHX 611. Introductory Quantum Mechanics. 3 Credits. N
An introduction to quantum mechanics, emphasizing a physical overview. Topics include the formalism of nonrelativistic quantum mechanics with emphasis on linear algebra, the 3-dimensional Schroedinger equation with applications to the hydrogen atom; harmonic oscillator; and time-independent perturbation theory. (Same as PHSX 511.) Prerequisite: PHSX 313, PHSX 521 or EPHX 521, and MATH 290 or MATH 291.

EPHX 615. Numerical and Computational Methods in Physics. 3 Credits. N
An introduction to the use of numerical methods in the solution of problems in physics for which simplifications allowing closed-form solutions are not applicable. Examples are drawn from mechanics, electricity, magnetism, thermodynamics, and optics. (Same as PHSX 615.) Prerequisite: PHSX 313, MATH 320 or equivalent, and EECS 138 or equivalent.

EPHX 616. Physical Measurements. 4 Credits. N LFE
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. Students will also practice ethical decision making using case studies appropriate for the discipline. (Same as PHSX 616.) Prerequisite: PHSX 313, PHSX 316 or EPHX 316, and PHSX 521 or EPHX 521. (PHSX 521 or EPHX 521 may be taken concurrently.)

EPHX 621. Mechanics II. 3 Credits. N
Continuation of PHSX 521. Lagrange's equations and generalized coordinates. Mechanics of continuous media. Tensor algebra and rotation of a rigid body. Special relativity and relativistic dynamics. (Same as PHSX 621.) Prerequisite: EPHX 521 or PHSX 521.

EPHX 631. Electromagnetic Theory. 3 Credits. N
Maxwell's equations, wave propagation, optics and waveguides, radiation, relativistic transformations of fields and sources, use of covariance and invariance in relativity. Normally a continuation of PHSX 531. (Same as PHSX 631.) Prerequisite: EPHX 531 or PHSX 531.

EPHX 641. Introduction to Nuclear Physics. 3 Credits. N
Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. (Same as PHSX 641.) Prerequisite: PHSX 313 and PHSX 511.

EPHX 655. Optics. 3 Credits. N
Geometric optics. Wave properties of light: interference, diffraction, coherence. Propagation of light through matter. Selected topics in modern optics, e.g., lasers, fibers. (Same as PHSX 655.) Prerequisite: PHSX 531 or EPHX 531 or PHSX 212 or PHSX 214 and special permission from instructor.

EPHX 661. Introduction to Elementary Particle Physics. 3 Credits. N
Properties and interactions of quarks, leptons, and other elementary particles; symmetry principles and conservation laws; broken symmetry; gauge bosons; the fundamental interactions, grand unified theories of strong, electromagnetic, and weak interactions; the cosmological implications of elementary particle physics. (Same as PHSX 661.) Prerequisite: PHSX 511 and MATH 320.

EPHX 671. Thermal Physics. 3 Credits. N
This course introduces thermodynamics from statistical considerations and presents the associated techniques for calculating the thermodynamic properties of systems. Highlighted applications of these techniques include the elementary kinetic theory of transport processes and statistical descriptions of both Fermi-Dirac and Bose-Einstein systems. (Same as PHSX 671.) Prerequisite: EPHX 611 or EPHX 611.

EPHX 681. Concepts in Solids. 3 Credits. N
Properties of common types of crystals and amorphous solids. Lattice vibrations and thermal properties of solids. Electrons and holes in energy bands of metals, semiconductors, superconductors, and insulators. (Same as PHSX 681.) Prerequisite: PHSX 313 and PHSX 511.

EPHX 691. Astrophysics I. 3 Credits. N
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as ASTR 691 and PHSX 691.) Prerequisite: PHSX 313 or consent of instructor.

EPHX 693. Gravitation and Cosmology. 3 Credits. N
An overview of topics relevant to gravitation and modern cosmology: special relativity, tensor notation, the equivalence principle, the Schwarzschild solution, black holes, and Friedmann models. Cosmic black body radiation, dark matter, and the formation of large-scale structure. The idea of quantum gravity and an introduction to the current literature in cosmology. (Same as PHSX 693.) Prerequisite: PHSX 313 and MATH 320.

Bachelor of Science in Engineering Physics

Engineering Physics Undergraduate Program

The engineering physics program is designed for undergraduates with an interest in both science and engineering. The program is focused on those students who wish to work in areas of rapid technological change, where a good background in the underlying science is an important ingredient to a successful career. The curriculum includes classical and modern physics, mathematics, and their applications to one or more areas of engineering, thus allowing students to learn the physical science and engineering principles underlying modern technology. Four design concentrations are offered:

- Aerospace Systems: Aircraft track OR Spacecraft track
- Chemical Systems
- Digital Electronic Systems
- Electromechanical Control Systems

Each option incorporates a significant design component and provides a strong base in one or more engineering disciplines. The degree is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

For programs in physics, see Physics and Astronomy (p. 1669) in the College of Liberal Arts and Sciences section of the online catalog.

Educational Objectives

The program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation. Engineering physics graduates will be capable of:

- Completing or successfully progressing toward completion of an advanced degree in graduate or professional school,
- Using their analytical, problem-solving, and communications skills to conduct research or contribute to technology development projects, individually or as a team member,
- Using their background knowledge in physics and engineering fundamentals as a foundation for developing new knowledge and experience in their chosen disciplines.

Careers

Professional Opportunities

The broad training and technical breadth of the engineering physics degree program provide students a unique flexibility in their future careers. They have the science background to pursue pure research opportunities, the engineering and design experience to solve practical problems in industry or a variety of other settings, and the understanding to act as a communication link between highly diversified divisions of an organization. Engineering physics graduates typically work in aerospace and avionic industries, electronics industries, research and development laboratories, telecommunications, design and consulting firms, and government agencies, such as defense contractors. The degree program also prepares students to attend graduate or professional school in physics, engineering or related disciplines.
The Bachelor of Science in Engineering Physics is a collaborative program between the Department of Physics and Astronomy (http://physics.ku.edu/) and the School of Engineering. As such, there are no specific additional requirements for admission beyond those listed below for the entire School of Engineering.

Undergraduate Admission to the School of Engineering

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://enr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

Minimum Academic Standards for Admission to the School of Engineering

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 22+ (or math SAT score of 540+), or
  - Achieving a ‘B’ or better in ‘college algebra’ or a more advanced mathematics course, or
  - Achieving a ‘C’ or better in a high school calculus course; or
- Earning credit via IB or AP credit for the above-mentioned course in accordance with KU placement credit requirements; or
- Achieving at minimum a qualifying score for MATH 125 on the ALEKS mathematics placement exam.

Minimum Academic Standards for Direct Admission into Degree Program for incoming freshmen

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in a high school calculus course; or

Students who are not admissible to their desired major are admitted to the School of Engineering as undecided engineering undergraduate students.

Exploring Engineering

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of “C” or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagewforms/is/?form=OUR%20Change%20of%20School%20Form). For more information, please visit the Undergraduate Admissions website (http://admissions.ku.edu/apply/requirements/ustransfer/) for new freshsman and transfer applicants.

Already Applied to KU, But Not Engineering?

Don’t worry. It’s not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

Application Deadlines For New Freshman and Transfer Applicants

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
</tr>
<tr>
<td>November 1</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
</tr>
</tbody>
</table>
First- and Second-Year Preparation

Recommended enrollments for the first 2 years vary with the design concentration selected (see below). Consult a departmental advisor as early as possible. Courses common to all concentrations are

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Fall</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 150</td>
<td>0.5</td>
</tr>
<tr>
<td>MATH 125</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 130, 170, or 190</td>
<td>5 Elective / KU Core / Concentration Requirement</td>
</tr>
<tr>
<td>Elective / KU Core / Concentration Requirement</td>
<td>6</td>
</tr>
<tr>
<td>Sophomore Fall</td>
<td>16-19</td>
</tr>
<tr>
<td>PHSX 214 or 212 and 236</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127, 220, or 290</td>
<td>4</td>
</tr>
<tr>
<td>Concentration Requirement</td>
<td>8-11 MATH 127, 220, or 290</td>
</tr>
<tr>
<td>Elective / KU Core / Concentration Requirement</td>
<td>8-9</td>
</tr>
<tr>
<td>Total Hours</td>
<td>62.5-68.5</td>
</tr>
</tbody>
</table>

Bachelor of Science in Engineering Physics Degree Requirements

Each student takes a common core of courses and selects 1 of 4 design concentrations.

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td>PHSX 150</td>
<td>Seminar in Physics, Astronomy and Engineering Physics</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MATH 125</td>
<td>Calculus I</td>
</tr>
<tr>
<td></td>
<td>MATH 126</td>
<td>Calculus II</td>
</tr>
<tr>
<td></td>
<td>MATH 127</td>
<td>Calculus III</td>
</tr>
<tr>
<td></td>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
</tr>
<tr>
<td></td>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
</tr>
<tr>
<td>KU Core Curriculum Goals</td>
<td>1, 2, 3H, 3S, 4.1, &amp; 4.2</td>
<td>21</td>
</tr>
</tbody>
</table>

Design Concentrations

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra, Honors</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations, Honors</td>
</tr>
<tr>
<td>AE 211</td>
<td>Computing for Engineers</td>
</tr>
<tr>
<td>AE 245</td>
<td>Introduction to Aerospace Engineering</td>
</tr>
<tr>
<td>AE 345</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>AE 345</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>AE 421</td>
<td>Aerospace Computer Graphics</td>
</tr>
<tr>
<td>AE 445</td>
<td>Aircraft Aerodynamics and Performance</td>
</tr>
<tr>
<td>AE 507</td>
<td>Aerospace Structures I</td>
</tr>
<tr>
<td>AE 506</td>
<td>Aerospace Structures I, Honors</td>
</tr>
</tbody>
</table>

Full PDF 2022-23
Bachelor of Science in Engineering Physics

Select one of the following tracks:

For the spacecraft track
- or AE 521 Aerospace Systems Design I (4)
- or AE 520 Space Systems Design I
- or AE 523 Space Systems Design II (4)

For the aircraft track
- or AE 508 Aerospace Structures II (3)
- or AE 509 Honors Aerospace Structures II
- AE 521 Aerospace Systems Design I (4)

Code | Title | Hours
--- | --- | ---
CHEM 170 | Chemistry for the Chemical Sciences I | 5
CHEM 175 | Chemistry for the Chemical Sciences II | 5
CHEM 135 | General Chemistry II | 3
CHEM 195 | Foundations of Chemistry II, Honors | 3
CHEM 330 | Organic Chemistry I | 3
CHEM 525 | Physical Chemistry for Engineers | 4
CHEM 530 | Physical Chemistry I | 3
C&PE 221 | Chemical Engineering Thermodynamics | 3
C&PE 325 | Numerical Methods and Statistics for Engineers | 3
C&PE 511 | Momentum Transfer | 3
C&PE 512 | Chemical Engineering Thermodynamics II | 3
C&PE 522 | Economic Appraisal of Chemical and Petroleum Projects | 2
C&PE 524 | Chemical Engineering Kinetics and Reactor Design | 3
C&PE 525 | Heat and Mass Transfer | 4
C&PE 611 | Design of Unit Operations | 3
C&PE 613 | Chemical Engineering Design I | 4
C&PE 615 | Introduction to Process Dynamics and Control | 3
C&PE 616 | Chemical Engineering Laboratory I | 4
C&PE 626 | Chemical Engineering Laboratory II | 3
EPHX 536 | Electronic Circuit Measurement and Design | 4
EPHX 611 | Introductory Quantum Mechanics | 3
or PHSX 536 | Electronic Circuit Measurement and Design | 4
or EECS 316 | Circuits, Electronics and Instrumentation | 4
& EECS 318 | and Circuits and Electronics Lab | 4
or CHEM 170 | Chemistry for the Chemical Sciences I | 5
or CHEM 190 | Foundations of Chemistry I, Honors | 4
& CHEM 191 | and Foundations of Chemistry I Laboratory, Honors | 4
or CHEM 150 | Chemistry for Engineers | 4
or CHEM 196 | Foundations of Chemistry II Laboratory, Honors | 4
or CHEM 191 | and Foundations of Chemistry I Laboratory, Honors | 4
or MATH 626 | Mathematical Theory of Statistics | 3
or MATH 628 | Applied Mathematical Statistics I (We also accept MATH 628, but MATH 626 is offered only in the spring and requires MATH 627 as a prerequisite) | 3
or EECS 443 | Digital Systems Design | 4
or EECS 470 | Electronic Devices and Properties of Materials | 3
or CHEM 191 | and Foundations of Chemistry I Laboratory, Honors | 4
or CHEM 190 | Foundations of Chemistry I, Honors | 4
or CHEM 170 | Chemistry for the Chemical Sciences I | 5
or CHEM 135 | General Chemistry II | 3
or CHEM 195 | Foundations of Chemistry II, Honors | 3
or CHEM 380 | Organic Chemistry I, Honors | 3
CHEM 530 | Physical Chemistry I | 3
C&PE 221 | Chemical Engineering Thermodynamics | 3
C&PE 511 | Momentum Transfer | 3
or AE 345 | Fluid Mechanics | 3
or ME 510 | Fluid Mechanics | 3
C&PE 512 | Chemical Engineering Thermodynamics II | 3
C&PE 522 | Economic Appraisal of Chemical and Petroleum Projects | 2
C&PE 524 | Chemical Engineering Kinetics and Reactor Design | 3
C&PE 525 | Heat and Mass Transfer | 4
C&PE 611 | Design of Unit Operations | 3
C&PE 613 | Chemical Engineering Design I | 4
C&PE 615 | Introduction to Process Dynamics and Control | 3
C&PE 616 | Chemical Engineering Laboratory I | 4
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or PHSX 536 | Electronic Circuit Measurement and Design | 4
or EECS 316 | Circuits, Electronics and Instrumentation | 4
& EECS 318 | and Circuits and Electronics Lab | 4
EPHX 611 | Introductory Quantum Mechanics | 3
or PHSX 611 | Introductory Quantum Mechanics | 3

Code | Title | Hours
--- | --- | ---
CHEM 130 | General Chemistry I | 5
CHEM 135 | General Chemistry II | 3
CHEM 195 | Foundations of Chemistry II, Honors | 3
CHEM 196 | Foundations of Chemistry II Laboratory, Honors | 3
CHEM 191 | and Foundations of Chemistry I Laboratory, Honors | 4
CHEM 150 | Chemistry for Engineers | 4
CHEM 170 | Chemistry for the Chemical Sciences I | 5
CHEM 175 | Chemistry for the Chemical Sciences II | 5
CHEM 330 | Organic Chemistry I | 3
CHEM 380 | Organic Chemistry I, Honors | 3
CHEM 525 | Physical Chemistry for Engineers | 4
CHEM 530 | Physical Chemistry I | 3
EECS 443 | Digital Systems Design | 4
EECS 470 | Electronic Devices and Properties of Materials | 3
EECS 514 | Computer Systems Architecture | 3
EECS 541 | Computer Systems Design Laboratory I | 3
EECS 542 | Computer Systems Design Laboratory II | 3
EECS 645 | Computer Systems Design Laboratory I | 3
EECS 646 | Computer Systems Design Laboratory II | 3
EECS Elective | Must be 400 level or above | 3
EPHX 611 | Introductory Quantum Mechanics | 3
or PHSX 611 | Introductory Quantum Mechanics | 3

Code | Title | Hours
--- | --- | ---
CHEM 130 | General Chemistry I | 5
CHEM 135 | General Chemistry II | 3
CHEM 195 | Foundations of Chemistry II, Honors | 3
CHEM 196 | Foundations of Chemistry II Laboratory, Honors | 3
CHEM 191 | and Foundations of Chemistry I Laboratory, Honors | 4
CHEM 150 | Chemistry for Engineers | 4
CHEM 170 | Chemistry for the Chemical Sciences I | 5
CHEM 175 | Chemistry for the Chemical Sciences II | 5
CHEM 330 | Organic Chemistry I | 3
CHEM 380 | Organic Chemistry I, Honors | 3
CHEM 525 | Physical Chemistry for Engineers | 4
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EECS 470 | Electronic Devices and Properties of Materials | 3
EECS 514 | Computer Systems Architecture | 3
EECS 541 | Computer Systems Design Laboratory I | 3
EECS 542 | Computer Systems Design Laboratory II | 3
EECS 645 | Computer Systems Design Laboratory I | 3
EECS 646 | Computer Systems Design Laboratory II | 3
EECS Elective | Must be 400 level or above | 3
EPHX 611 | Introductory Quantum Mechanics | 3
or PHSX 611 | Introductory Quantum Mechanics | 3
Engineering graduates also have careers in medicine and medical device and aerospace industries, and industrial manufacturing. Mechanical but not limited to: the energy and power industries, the automotive machines. Mechanical engineers are employed in diverse areas including not limited to power-producing machines as well as power-consuming machines and other mechanical devices. Such devices include but are not limited to: the energy and power industries, the automotive and aerospace industries, and industrial manufacturing. Mechanical Engineering graduates also have careers in medicine and medical device application fundamental principles to develop, design, manufacture, and test technologies in both traditional and emerging fields. Mechanical engineers apply fundamental principles to develop, design, manufacture, and test machines and other mechanical devices. Such devices include but are not limited to power-producing machines as well as power-consuming machines. Mechanical engineers are employed in diverse areas including but not limited to: the energy and power industries, the automotive and aerospace industries, and industrial manufacturing. Mechanical Engineering graduates also have careers in medicine and medical device

The mission of the Mechanical Engineering Department is to provide our students with a high quality education, to generate and apply knowledge, and to serve both society and the engineering profession.

In support of our mission, upon graduation our undergraduate students will be:

1. technically skilled in the application of the principles of mechanical engineering, and will demonstrate the ability to work collaboratively and in teams;
2. successful in their chosen career paths, demonstrating the attitudes, abilities, and personal leadership to effectively adapt to our changing global society while maintaining and promoting the highest engineering, professional, and ethical standards; and
3. actively engaged in continuous learning and professional growth throughout their careers while productively contributing to their organizations and communities.

In support of our mission, upon graduation our graduate students will be:

1. capable of performing research at the highest possible level and contribute valuable advances to their chosen areas of specialization;
2. enthusiastic and have a strong desire to instruct young engineers in their chosen areas of specialization; and
3. qualified to work at the most prestigious research institutions and universities in the world.

Undergraduate Programs

The Department of Mechanical Engineering offers a 128-hour bachelor of science degree in mechanical engineering. The Bachelor of Science degree in mechanical engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. Students interested in biomedical engineering or applying to medical school after graduation may elect to complete a concentration in biomechanics (see the Bioengineering program for requirements).

There is also a four and one-half year MBA bridge program in which students earn a B.S. in mechanical engineering as well as a MBA degree. Depending on the employer, mechanical engineering graduates might be expected to become licensed. Formal study in an accredited engineering program, such as at the University of Kansas, is the first step to becoming licensed in Kansas and other states. After completion of a majority of coursework, students are encouraged to take the Fundamentals of Engineering examination which is necessary to become a Licensed Professional Engineer (P.E.).

The mechanical engineering curriculum builds on the basic foundation of mathematics and physical sciences, and focuses on engineering design and analysis in 2 primary areas:

1. Mechanical systems.
2. Thermal, fluids, and energy systems.

Engineering science, analysis, and design is integrated throughout the curriculum, culminating in a senior capstone design project where

Graduation Plans

A suggested graduation plan for each of the design concentrations is available on the Engineering Physics website (http://ephx.engr.ku.edu/overview-engineering-physics-bs/).

Departmental Honors

Engineering physics undergraduates may graduate with departmental honors by achieving a minimum grade-point average of 3.5 in major courses taken in residence and at other institutions, by completing at least 1 credit hour of undergraduate research with a grade of B or better in EPHX 501 or EPHX 503, and the results presented in a manner specified by the Department. Please see your advisor (https://ephx.engr.ku.edu/advising/) for details.

Department of Mechanical Engineering

Mechanical Engineering

The broad discipline of mechanical engineering enables students to have productive and rewarding careers, and to develop and improve new technologies in both traditional and emerging fields. Mechanical engineers apply fundamental principles to develop, design, manufacture, and test machines and other mechanical devices. Such devices include but are not limited to power-producing machines as well as power-consuming machines. Mechanical engineers are employed in diverse areas including but not limited to: the energy and power industries, the automotive and aerospace industries, and industrial manufacturing. Mechanical Engineering graduates also have careers in medicine and medical device
students complete a year-long, hands-on design and build experience in one of four areas:

- Formula SAE vehicle design,
- Industrial sponsored topics, and
- Research sponsored topics.

The industrial and/or research projects may include alternative energy topics (EcoHawks), biomechanics topics or general mechanical engineering topics.

**Graduate Programs**

The University of Kansas Department of Mechanical Engineering offers the Master of Science in Mechanical Engineering degree and the Doctor of Philosophy. Areas of study in Mechanical Engineering include:

1. **Biomechanics and Biomaterials**: biomechanics of human motion, biomaterials, orthopedic biomechanics and biomedical product design, transport phenomena, and drug delivery.

2. **Computational Mechanics and Mathematics of Computations**: computational mechanics, finite element analysis, finite element methods and software.

3. **Thermal-Fluid Systems and Heat Transfer**: energy and thermal-power system design, heat transfer and computational fluid dynamics.

4. **Mechanical Design, Manufacturing, and Microprocessor Applications**: computer-aided mechanical design, continuum mechanics, computer-integrated manufacturing, computational mechanics, finite element analysis, machine stress analysis, microcomputer applications, and automatic control systems.

**Graduate Admission**

Please review the corresponding pages for admission to the MS or PhD programs:

- Master of Science (p. 536)
- Doctor of Philosophy (p. 537)

**Graduate Financial Aid**

All applicants are considered for scholarships, fellowships, and Graduate Teaching Assistant (GTA) positions upon submission of a complete application. It is suggested that applicants complete their applications by the priority deadlines (December 15 for Fall applicants; September 30 for Spring applicants) to ensure consideration before positions are filled. The department offers funding opportunities for first-year graduate students. Graduate Research Assistant (GRA) positions are dependent on faculty research (http://me.engr.ku.edu/faculty-research/) and applicants should contact individual faculty members regarding their research openings. Note: Graduate students who meet the prerequisite eligibility (https://selfgraduate.ku.edu/SGFEEligibility/) and have completed an application by December 15 will be considered by our Admissions Committee for nomination for the Self Graduate Fellowship (https://selfgraduate.ku.edu/). Information regarding the benefits available to GTAs and GRAs can be found in the KU Policy Library (https://policy.ku.edu/graduate-studies/benefits-for-GRAs-GTAs-GAs/).

**Courses**

**ME 101. Mechanical Engineering Freshman Seminar. 0-1 Credits.**

This seminar is intended to provide the student with an overview of the mechanical engineering profession. Seminar topics will include an overview of the engineering profession, career opportunities within mechanical engineering, an introduction to the mechanical engineering department (faculty, research and student groups), and strategies to be successful at the university. Prerequisite: Fewer than 30 credit hours from the University of Kansas.

**ME 201. Statics. 2 Credits.**

The principles of statics, with particular attention to engineering applications. Prerequisite: PHSX 210 or PHSX 211.

**ME 206. Introduction to Digital Computational Methods in Mechanical Engineering. 3 Credits.**

Digital computing methods for solving mechanical engineering problems utilizing current programming languages and commercial software. Topics from the course are applied through open-ended team projects throughout the semester which also give students an introduction to mechanical engineering. One lecture and lab meets with ME 228, therefore ME 208 cannot be taken concurrently with ME 228, but should be taken in back-to-back semesters. Prerequisite: Corequisite: MATH 116 or MATH 125 or MATH 145.

**ME 210. Introduction to Mechanics. 1 Credits.**

An introduction to mechanics of materials including stress, strain, and axial loading. Prerequisite: ME 201 or CE 201.

**ME 211. Statics and Introduction to Mechanics. 3 Credits.**

The principles of statics, with particular attention to engineering applications and an introduction to mechanics of materials. This course is a combination of material covered in ME 201 and ME 210. Prerequisite: PHSX 210 or PHSX 211 or PHSX 212 or PHSX 201.

**ME 212. Basic Engineering Thermodynamics. 3 Credits.**

An introduction to the concepts of heat, work, the first and second laws of thermodynamics and equations of state. These concepts are applied to flow and nonflow systems including power and refrigeration cycles. Prerequisite: PHSX 210 or PHSX 211 or PHSX 201 and MATH 126 or MATH 146, with a grade of C- or higher.

**ME 228. Computer Graphics. 3 Credits.**

An introduction to solid modeling computer graphics used in mechanical design. Visualization skills and drawing practices are developed. Topics from the course are applied through open-ended team projects throughout the semester which also give students an introduction to mechanical engineering. One lecture and lab meets with ME 208, therefore ME 228 cannot be taken concurrently with ME 208, but should be taken in back-to-back semesters.

**ME 306. Science of Materials. 3 Credits.**

An introductory course on materials. Emphasis is placed on structure and the relation of structure to the behavior and properties of engineering materials. Prerequisite: CHEM 150 or CHEM 130 or CHEM 135 or CHEM 170 or CHEM 175 or CHEM 190 or CHEM 184 or CHEM 185 or consent of instructor.

**ME 307. Engineering Materials Laboratory. 2 Credits.**

Laboratory supplement lecture on engineering materials properties and selection, manufacturing processes, and design for manufacturing. Prerequisite: CHEM 150 or CHEM 130 or CHEM 170 and ME 228. Corequisite: ME 306 and ME 311.

**ME 309. Introduction to Mechanical Design. 1 Credits.**

An introduction to mechanical design after completing a course in mechanics of materials. Topics include theories of failure and energy methods. ME 201, CE 310, and ME 309 together are equivalent to ME 211 and ME 311. Prerequisite: Permission of instructor.

**ME 311. Mechanics of Materials. 3 Credits.**
The principles of mechanics of materials with particular emphasis on mechanical systems including theories of failure. Prerequisite: ME 211 or ME 210 with a grade of C- or higher, and MATH 126 or MATH 146, with a grade of C- or higher.

**ME 320. Dynamics. 3 Credits.**
Kinematics and kinetics of particles and of rigid bodies as applied to mechanical engineering problems. Prerequisite: ME 201 or ME 211 or CE 201 or ME 210, with a grade of C- or higher, and MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291.

**ME 321. Dynamics Simulations. 1 Credits.**
Introduction to dynamics simulations on the computer. Prerequisite: Corequisite: ME 320.

**ME 360. Mechanical Engineering Problems. 1-3 Credits.**
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop student capability for independent research or application of engineering science and technology. After completion of the project, a report is required. Maximum credit is three hours. Not open to students who have taken ME 361. Prerequisite: Approval of an outline of the proposed project by the instructor and department chair.

**ME 361. Undergraduate Honors Research. 1-3 Credits.**
Investigation of a particular mechanical engineering problem. Research will involve defining the problem, developing a research methodology, applying the research methodology and gathering data, analyzing and interpreting the data, and presenting the results of the research. The student must have a faculty sponsor and submit a proposal in writing stating the objective of the research, the planned research method that will be used, and the method of reporting the results. Maximum credit is three hours. Not open to students who have taken ME 360. Prerequisite: Participation in the University Honors Program, consent of instructor, and approval of the chair required.

**ME 390. Special Topics: _____, 1-5 Credits.**
Courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

**ME 412. Thermal Systems. 3 Credits.**
Application of the principles of thermodynamics to the analysis and design of thermal systems. Prerequisite: ME 212 or ME 312.

**ME 420. Mechanisms. 3 Credits.**
Design and analysis of mechanisms composed of linkages, cams, and gears. Mechanical vibration. Prerequisite: PHSX 211 and MATH 220.

**ME 455. Mechanical Engineering Measurements and Experimentation. 4 Credits.**
Lectures and laboratories on the basics of measurement, instrumentation, data acquisition, analysis, design and execution of experiments, and written and oral reports. Topics selected from heat transfer, fluid mechanics, thermodynamics, mechanics, strength of materials, and dynamics. Prerequisite: ME 208 or C&PE 121 or EECS 168 or EECS 138 or AE 211, ME 307, ME 320, and MATH 365 or MATH 526. Corequisite: EECS 318 and ME 612.

**ME 501. Mechanical Engineering Design Process. 2 Credits.**
The design process of a mechanical or thermal system. Establishment of specifications and consideration of realistic constraints such as safety, codes, economic factors, reliability, oral and written communications, and other factors as they impact the design process. Prerequisite: ME 228 and ME 311.

**ME 508. Numerical Analysis of Mechanical Engineering Problems. 3 Credits.**
Introduction to numerical methods for solution of mechanical engineering problems by use of digital computers. Prerequisite: ME 208 or equivalent, MATH 220 and MATH 290.

**ME 510. Fluid Mechanics. 3 Credits.**
An introduction to the mechanics of fluid flow. The principles of conservation of mass, momentum, and energy are developed in differential and integral form. Laws of dimensional analysis and similitude are presented as the basis for empirical correlations. Engineering applications include: calculation of hydrostatic forces on submerged objects, analysis of flow and pressure loss in piping systems, estimation of aerodynamic lift and drag, and performance characteristics of pumps and fans. Prerequisite: ME 211, ME 201, CE 301 or CE 260 with a grade of C- or higher, and MATH 127 or MATH 147 and ME 212 or ME 312, with a grade of C- or higher.

**ME 590. Special Topics: _____, 1-5 Credits.**
Courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

**ME 612. Heat Transfer. 3 Credits.**
An applied study of conductive, convective, and radiative heat transfer mechanisms in solid and fluid systems. Engineering applications include solid conduction, free and forced convection in fluids, thermal radiation and heat exchangers, evaporators, and furnaces. Prerequisite: MATH 220 and ME 510 or C&PE 511.

**ME 617. Research for Design Project Option B. 1 Credits.**
Basic research in one targeted area of vehicle design, and competition rules, based on the student's plan for ME 627 and ME 642. Prerequisite: ME 501 and permission of instructor.

**ME 627. Automotive Design. 3 Credits.**
Basic concepts of automotive design and manufacture. Primary focus of course on vehicle design and performance. Design is subdivided into vehicle components of frame, suspension, front and rear axle, steering power train, front and rear wheel drive, and braking. Integration of these ideas into a vehicle design project with analysis of its performance culminates the course. Prerequisite: ME 617 and permission of instructor.

**ME 628. Mechanical Design. 3 Credits.**
Design of mechanical components and systems. Prerequisite: ME 311.

**ME 633. Basic Biomechanics. 3 Credits.**
Provides an overview of musculoskeletal anatomy. Biodynamics includes linear and angular dynamics of human movement, energy expenditure and power required to perform a given activity. Students will learn to determine joint forces and torques (in 2-D) from kinematic data for body segments and force plate data. The tissue mechanics section builds on mechanics of materials. Students will learn about tissue properties, appropriate constitutive models and determination of stresses and strains in tissues and structures under normal loading conditions. Prerequisite: ME 311 and ME 320 or equivalent.

**ME 636. Internal Combustion Engines. 3 Credits.**
Study and analysis of internal combustion engine physical phenomena dynamic function, components, and system design. Emphasis on spark ignition and compression ignition engine analysis. Performance, current technology, thermodynamics, fluid-mechanics, combustion products and pollution, fuels and lubrication, and mechanical design. Prerequisite: ME 412.

**ME 637. Steam Power Plants. 3 Credits.**
A study of steam power plant equipment including thermodynamic analysis, design and performance of modern steam generators, prime movers, and auxiliaries. Prerequisite: ME 412 or permission of instructor.

**ME 639. Alternative Energy Systems. 3 Credits.**
This course is a survey of energy resources and the available technology for meeting current energy needs with alternative energy systems. An overview of the U.S. energy system and world-wide energy consumption is included to provide context. The primary course objective is to develop the students' ability to apply engineering fundamentals to the design and operation of alternative energy systems. The students will be introduced to databases and modeling methods used to represent alternative energy resources. Assignments will include: engineering problem analysis, group design projects, individual research papers, oral and written presentations. Prerequisite: ME 510, AE 345, or C&PE 511 and (ME 412 or ME 612 or C&PE 521).

**ME 640. Design Project. 2 Credits.**
Planning for a capstone design project. Development of a formal project proposal is required. Must be used with two credit hours of ME 641 or ME 643 in the subsequent semester to complete the capstone design requirements. Prerequisite: ME 501 and ME 628.

**ME 641. Design Project Option A. 2 Credits.**
Design and development of a mechanical or thermal/fluid system. An individual or group report that includes designs, analysis/testing, drawings, and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 640. Corequisite: ME 455.

**ME 642. Design Project Option B. 3 Credits.**
Manufacturing and testing of a mechanical system designed and developed in ME 627 - Vehicle Design. A group report with individual assignments which details the manufacturing procedures and testing procedures and results is required. A completed, working project with a design file documenting all aspects of the project development must be submitted. Prerequisite: ME 627, ME 501 and ME 628. Corequisite: ME 455.

**ME 643. Design Project Option C. 2 Credits.**
Design and development of a mechanical system related to biomechanics that has been investigated in ME 633 - Basic Tissue Mechanics and Biodynamics. A report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, ergonomics, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 633 and ME 640. Corequisite: ME 455.

**ME 644. Design Project Option D. 2-3 Credits.**
Design and development of a thermal or fluid system. A group report that includes design, analysis/testing, drawings, and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics, and reliability are required. Prerequisite: ME 412, ME 455, and ME 501. Corequisite: ME 628.

**ME 645. Design Project Option E. 2-3 Credits.**
Design and development of a mechanical, electrical or thermal/fluid system related to a sustainable approach to automobiles and energy infrastructure. This may include, but is not limited to alternative fuels, biomass, batteries and advanced vehicle powertrains along with solar/ wind energy at various scales. An individual or group report that includes designs, analysis/testing, drawings and/or schematics is required. Establishment of specifications and consideration of realistic constraints such as safety, economic factors, design impact, aesthetics and reliability are required. Prerequisite: ME 501, ME 510, and ME 628. Corequisite: ME 412 and ME 455.

**ME 661. The Finite Element Method. 3 Credits.**
An introduction to the underlying theory of the finite element (FE) method and its application to linear solid and structural mechanics. FE formulations are derived for bars, beams, 2D formulations such as: plane stress, plane strain, and 3D solids. Basic issues are treated such as assembly and generation of FE equations, computation, post-processing, and interpretation of FE solutions (e.g. stresses and strains analysis). Prerequisite: ME 311 or ME 309, MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291.

**ME 682. System Dynamics and Control Systems. 3 Credits.**
An introduction to the modeling and analysis of analog linear systems and the design of control systems. Topics include mathematical models of mechanical, electrical, fluid and thermal systems, feedback concepts, transient response, frequency response and vibration, system stability, and design of feedback control systems including PID. Prerequisite: ME 320.

**ME 696. Design for Manufacturability. 3 Credits.**
Tools to incorporate manufacturing and life-cycle concerns into the design of products. Prerequisite: ME 501 or equivalent.

**ME 702. Mechanical Engineering Analysis. 3 Credits.**
A study of advanced methods for engineering analysis of practical problems utilizing fundamental principles from engineering disciplines. The emphasis is on the solution of these problems and the interpretation and generalization of the results. Prerequisite: A course in differential equations.

**ME 708. Microcomputer Applications in Mechanical Engineering. 3 Credits.**
Design and implementation of interfaces of microcomputers to mechanical equipment. Includes laboratory experiments presenting selected industrial applications. Emphasis on human factors, functional design parameters and microprocessor interfaces. Includes instruction concerning specifications of practical hardware configurations and writing of programs necessary to accomplish mechanical systems applications. Prerequisite: Permission of instructor.

**ME 711. Bearings and Bearing Lubrication. 3 Credits.**
Theoretical aspects of lubrication, determination of pressure distribution in bearings from viscous flow theory, application of hydrodynamic and hydrostatic bearing theories to the design of bearings, high speed bearing design problems, properties of lubricants, methods of testing. Prerequisite: ME 510 and a course in differential equations.

**ME 712. Advanced Engineering Thermodynamics. 3 Credits.**
An advanced course in thermodynamics, mathematical in nature, with emphasis on a critical re-evaluation of the laws of thermodynamics, thermodynamics of one-dimensional gas flow, development of the classical thermodynamic relations and their application to engineering problems. Prerequisite: ME 508 and ME 412.

**ME 716. Introduction to Surface and Interface Science. 3 Credits.**
Surface and Interface Science plays a crucial role in various industrial, environmental, and biomedical areas, as well as in emerging technologies. These include wetting, water purification, enhanced oil recovery and other petrochemical processes. Surface and Interface Science also provides an intriguing arena for the integration of fundamental concepts, theoretical methods, and experimental techniques from a variety of scientific disciplines including engineering, physics, chemistry, biology, and medicine. This course presents fundamental and applied aspects of this rapidly developing field. The first segment of the course is devoted to understanding interfacial phenomena by examining the roles of surface composition and surface texture. The second segment covers how this fundamental understanding can be used to design bio-inspired surfaces for various applications that involve self-
cleaning mechanisms, anti-reflective coating, fog harvesting and de-icing. Prerequisite: ME 312 or physical chemistry or equivalent.

ME 718. Fundamentals of Fuel Cells. 3 Credits.
The principles of fuel cells, with focus on low temperature fuel cells using polymer electrolytes. Prerequisite: A course in engineering thermodynamics (e.g., ME 412), heat transfer (e.g., ME 612), and fluid Mechanics (e.g., ME 510.)

ME 720. Advanced Dynamics of Machinery. 3 Credits.
Dynamics of particles and of rigid bodies with advanced engineering applications; generalized coordinates; Hamilton's principles; Lagrange's equations; Hamilton-Jacobi theory. Prerequisite: ME 320 or equivalent.

ME 722. Modeling Dynamics of Mechanical Systems. 3 Credits.
Modeling, analysis and simulation of dynamic mechanical systems. Emphasis on the analysis of kinematics and dynamics of rigid mechanical multibody systems undergoing large overall motion using interactive computer simulation programs. Applications to the design and control of dynamic systems such as robots, machine tools, and artificial limbs. Prerequisite: ME 320 or CE 300.

ME 733. Gas Dynamics. 3 Credits.
A study of the thermodynamics and fluid dynamics of gaseous media. Emphasis is placed on the rigorous application of conservation laws to represent physical processes. Classical and statistical models for the thermodynamic and transport properties are examined. Applications include determination of gas properties, wave propagation, and high-speed flow. Prerequisite: ME 412 and ME 510 or equivalents.

ME 736. Catalytic Exhaust Aftertreatment Modeling. 3 Credits.
Fundamental concepts behind catalytic exhaust aftertreatment devices for automobiles including both monolithic catalysts and particulate filters. Studies of other catalytic devices intended for applications in the mechanical and chemical engineering fields. Topics covered are the development of governing equations based on conservation laws and their numerical solutions using finite difference methods. Studies will include a monolithic catalyst. Project assignments will be included. Prerequisite: ME 412 and ME 510 or permission of instructor.

ME 750. Biomechanics of Human Motion. 3 Credits.
Fundamental concepts of anatomy and physiology are introduced but the focus is on the biomechanics of human motion. Human body segment kinematics and joint kinematics are analyzed. An introduction to muscle mechanics is provided. Applications in balance and gait are covered. Prerequisite: Corequisite: ME 320 or equivalent.

ME 751. Experimental Methods in Biomechanics. 3 Credits.
This course will focus on methods of experimental measurement and computational modeling used in biomechanics. Instrumentation used to measure three-dimensional motion, ground reaction forces, center of pressure and EMG measures are considered. Methods used for inverse dynamics, direct dynamics and simulation are introduced. Prerequisite: ME 320 or equivalent.

ME 752. Acoustics. 3 Credits.
This course will teach the production, propagation, and effects of sound waves. Detailed topics include plane wave, spherical wave, and cylindrical wave propagation in free space and waveguides, wave reflection and transmission on an interface, piston radiation, wave scattering and diffraction. Prerequisite: ME 320 or permission of instructor.

ME 753. Bone Biomechanics. 3 Credits.
Provides an in-depth knowledge of bone as a living mechanical system. Topics include the microstructure, biology, mechanical properties, mechanical modeling, adaptation of bone to the mechanical environment, and its simulation. Students assignments include homework, a poster presentation, basic finite element analysis laboratory, and bone remodeling simulations. Prerequisite: ME 311 or equivalent.

ME 754. Biomedical Optics. 3 Credits.
This course will cover the fundamentals of photon transport in biological tissues, including explanations of Rayleigh and Mie scattering, Monte Carlo simulations, the radiative transport equations and more. Also, the basic physics and engineering of various optical imaging techniques for biological tissues, including ballistic or quasi-ballistic imaging (such as confocal microscopy, and optical coherence tomography), diffuse imaging, photoacoustic imaging, will be introduced. Prerequisite: ME 508 or permission of instructor.

ME 755. Computer Simulation in Biomechanics. 3 Credits.
Provides an in-depth knowledge of 1) the process of developing a research question to be addressed with computer simulation, 2) various techniques for medical imaging to obtain model geometries (including hands-on experience with low-field MR imaging), 3) image segmentation techniques, 4) issues affecting geometric accuracy in model building, 5) the determination and specification of loading and/or kinematic boundary conditions, 6) the interpretation of model results in the context of the model limitations and the medical application. Knowledge and/or experience with finite elements is desirable, but not required. Prerequisite: ME 311 and ME 320 or equivalent.

ME 756. Biofluid Dynamics. 3 Credits.
An introduction to the fundamentals of biofluid dynamics, and the application of these principles to a variety of biological flows. Fluid flows in physiology, drug delivery, and biotechnology are investigated at a variety of scales, ranging from subcellular to organ groups. Topics include non-Newtonian constitutive equations, solution techniques, and principles of modeling and simulating. Prerequisite: ME 208 and ME 510 or equivalents.

ME 757. Biomechanical Systems. 3 Credits.
A course on the dynamics and motor control of human and animal motion. The course will focus on applying mechanical principles of dynamics, lumped parameter systems, and control theory to problems in biomechanics. Topics include muscle mechanics and dynamics, reflex and voluntary control, proprioception, anatomy of the muscular and nervous systems, and system dynamics in locomotion and other movements. Prerequisite: ME 682 or permission of instructor.

ME 758. Physiological System Dynamics. 3 Credits.
This course covers the use of engineering systems modeling approaches to understand the function of physiological systems. Systems covered include the cardiovascular system, the respiratory system, the renal system, the gastrointestinal system, and the musculoskeletal system. Prerequisite: ME 510, ME 320, Physics 212 or permission of instructor.

ME 760. Biomedical Product Development. 3 Credits.
Introduction to methods of taking medical product inventions from conception to initial stage production. Students work in cross-functional teams to investigate development potential of inventions. Topics covered include product development processes, regulatory issues with the FDA, quality system requirements, SBIR/STTR funding pathways, biomaterial and biomechanics issues in medical product design, and ethical considerations. Prerequisite: Senior or graduate student standing in engineering, business, industrial design, or an applicable life science field and permission of instructor.

ME 765. Biomaterials. 3 Credits.
An introductory course on biomaterials science and consideration of biomaterials in the design of biomedical implants. Topics including ethical considerations in biomaterials research and the role of the FDA in medical device design are also presented. Prerequisite: ME 306.
ME 767. Molecular Biomimetics. 3 Credits.
The lessons learned from biological materials are discussed toward developing novel biomimetic materials and systems using environmentally benign processing. Upon completing this course, students will be able to understand the essential features of biological sciences combined with nano- and molecular technologies for next generation bioinspired, biomimetic and bio-enabled materials and systems. Prerequisite: CHEM 130, CHEM 150 or equivalent; introductory course in Material Science (e.g., ME 306.)

ME 770. Conductive Heat Transfer. 3 Credits.
The formulation of steady- and unsteady-state conduction heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent.

ME 774. Radiative Heat Transfer. 3 Credits.
The formulation of steady and unsteady radiation heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent.

ME 788. Optimal Estimation. 3 Credits.
Covers the principles of optimal estimation theory, with particular focus on Kalman filtering and its engineering applications. Prerequisite: A course in elementary linear algebra (e.g., MATH 290), statistics (e.g. MATH 365, MATH 526, or DSCI 202), and system dynamics and control systems (e.g., ME 682.)

ME 789. Energy Storage Systems and Control. 3 Credits.
This course offers an introduction to the mechanisms, modeling, monitoring and control of energy storage systems with a primary focus on batteries but includes coverage of fuel cells and ultra-capacitors. A major theme is to offer students state-of-the-art knowledge of energy storage systems and aid them in developing the ability to apply estimation and control theory in order to address the problems arising in energy storage management. After completion of the course, a student is expected to: 1) understand the respective work mechanisms, advantages and disadvantages of batteries, fuel cells and ultra-capacitors, 2) understand the mathematical modeling methodologies for batteries, 3) understand the key estimation/control methods and tools, and 4) build effective solutions for energy storage management problems leveraged with estimation/ control theory. Prerequisite: ME 682 or equivalent.

ME 790. Special Topics: _______. 1-5 Credits.
Advanced courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

ME 797. Materials for Energy Applications. 3 Credits.
Focus on fundamentals of materials for energy applications. The main topics covered will be: 1) introduction to material science & engineering and electrochemical technologies, 2) microscopic view of solid materials, 3) mass transfer by migration and diffusion, 4) energy related materials and devices, 5) electrochemical engineering fundamentals, etc. Prerequisite: Basic Engineering Thermodynamics (e.g., ME 312) or equivalent.

ME 798. Manufacturing for Energy Applications. 3 Credits.
The focus of the course is on fundamentals of materials for energy applications. The main topics covered include: 1) introduction and overview of manufacturing, 2) material properties and engineering materials, 3) traditional and nontraditional manufacturing processes, 4) surface engineering and processing, and 5) energy-related materials and device fabrication. Prerequisite: ME 508 or equivalent and ME 797.

ME 801. Responsible Conduct of Research in Engineering. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in bioengineering. Topics include the nature of ethics, the roles of the scientist as a reviewer, entrepreneur, employer and teacher, research ethics in the laboratory, social responsibility and research ethics regulation. (Same as BIOE 801.) Prerequisite: Permission of instructor.

ME 808. Advanced Microprocessor Applications. 3 Credits.
Advanced design and development of microprocessor based mechanical systems. Individual and team projects involving the development and integration of hardware and software into a “smart” system which includes the sensing, processing, and controlling functions are accomplished. Emphasis is on the use of the latest sensors and development tools. Prerequisite: Permission of instructor.

ME 810. Advanced Fluid Mechanics. 3 Credits.
Topics include kinematic and dynamic behavior of fluids, derivation of Navier-Stokes equations, flow classification, solutions of viscous and inviscid flows for simple geometries, potential flow theory and laminar and turbulent boundary layer theory. Prerequisite: ME 510 or equivalent.

ME 831. Convective Heat and Momentum Transfer. 3 Credits.
The formulation and solution of steady and unsteady convective heat, mass, and momentum transfer problems. Topics include boundary layers, duct flows, natural convection with and without phase change, development of analogies, transport properties, numerical methods. Prerequisite: ME 612 or equivalent.

ME 832. Computational Fluid Dynamics and Heat Transfer. 3 Credits.
The fundamentals of the finite-difference method are presented and applied to the formulation of numerical models for heat and momentum transfer. The accuracy, stability, and computational efficiency of different algorithms are analyzed. Computer programs are developed for classical benchmark problems. Prerequisite: ME 508, ME 510, and ME 612 or equivalents.

ME 833. Radiative Heat Transfer. 3 Credits.
The formulation of steady and unsteady radiation heat transfer problems and their solution by analytical and numerical methods. Prerequisite: ME 612 or equivalent.

ME 836. Hybrid and Electric Vehicles. 3 Credits.
Topics covered include history of electrified vehicles, vehicle modeling, battery chemistry, and electric motors. Review of fundamental electrical engineering concepts provided. Application of real world driving profiles through homework assignments. Laboratories will explore battery and motor fundamentals. Homework assignments will be included along with a semester project involving the design, construction, and testing of a scale electric vehicle. Prerequisite: ME 636 or permission of instructor.

ME 840. Continuum Mechanics I. 3 Credits.
Principles of Continuum Mechanics for solids, fluids, and gases. Frames of references, measures of motion, deformation, strains, stresses, their rates, objectivity and invariance. Conservation laws, constitutive equations, equations of state and thermodynamic principles for developing mathematical models of continuum matter. Theoretical solutions of model problems. Prerequisite: Background in Calculus and Differential Equations is recommended.

ME 841. Continuum Mechanics II. 3 Credits.
Fundamental principles of Continuum Plasticity, measures of plastic strains, stresses and constitutive equations for flow theory of plasticity. Internal variable theory of thermo-mechanical behaviors and endochronic theory of plasticity and viscoplasticity. Anisotropic plasticity and advanced topics. Continuum mechanics principles for viscoelastic solids with emphasis on constitutive equations. Development of complete
mathematical models and solutions of selected model problems. Prerequisite: ME 840.

**ME 854. Continuum Mechanics for Soft Tissues. 3 Credits.**
An introductory course in the analysis of the mechanical behavior of materials modeled on the continuum assumption. The course will provide background on soft tissue properties and will focus on the tools necessary to model soft tissues, including the essential mathematics, stress principles, kinematics of deformation and motion, and viscoelasticity. Prerequisite: ME 311 or equivalent.

**ME 860. Advanced Mechanical Engineering Problems. 1-3 Credits.**
An analytical or experimental study of problems or subjects of immediate interest to a student and faculty member and which is intended to develop students capability for independent research or application of engineering science and technology. Maximum credit toward any degree is three hours unless waived in writing by the departmental chairperson. Prerequisite: Approval of instructor.

**ME 861. Theory of the Finite Element Method. 3 Credits.**
Finite element method for solid mechanics, heat transfer, fluid mechanics, and dynamics. Modeling techniques, software implementation, and solution of problems. Prerequisite: Background in Calculus and Differential Equations is recommended.

**ME 862. Finite Element Method for Transient Analysis. 3 Credits.**
Advanced treatment of dynamic and transient response for linear and nonlinear problems in solid mechanics. Formulation and solution of time dependent linear and nonlinear field problems using finite element techniques. Prerequisite: ME 861.

**ME 864. Mesh Generation and Adaptivity for Finite Element Simulations in Engineering. 3 Credits.**
The generation of Finite Element meshes in the analysis and simulation of engineering systems. Important topics are treated such as initial mesh generation and refinements (i.e. geometric modeling and mesh adaptivity or grading), choice of type of element, and assessment of solution accuracy (i.e. error estimation). Assignments include solving problems using FE software. Prerequisite: ME 661, ME 861, or equivalent.

**ME 882. Advanced Control Systems. 3 Credits.**
Advanced methods in the modeling, analysis and design of linear and nonlinear control systems. Topics include but not limited to digital controls, energy-based modeling, and state-space methods. Prerequisite: ME 862.

**ME 890. Special Topics: ____. 1-5 Credits.**
Advanced courses on special topics of current interest in mechanical engineering, given as the need arises. Prerequisite: Approval of instructor.

**ME 899. Independent Investigation. 1-16 Credits.**
An analytical or experimental investigation of an engineering problem requiring independent research. Twenty four hours as a minimum are awarded for the Ph.D. dissertation. An original contribution suitable for publication in a refereed journal is required of Ph.D. candidates. Graded on a satisfactory progress/limited progress/no progress basis.

**Bachelor of Science in Mechanical Engineering**

The 128-hour bachelor of science degree in mechanical engineering offered by the Department of Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. Students typically take four years to complete the program. The mechanical engineering curriculum builds on the basic foundation of mathematics and physical sciences learned in the first three semesters, and then focuses on engineering design and analysis in mechanical, thermal, fluids, and energy systems. First-year students are quickly immersed in hands-on design/build team projects as part of the cornerstone mechanical engineering courses. Engineering science, analysis, and design are integrated throughout the curriculum, culminating in a senior capstone design project where students complete a year-long hands-on design and build experience in one of three areas:

- Formula SAE vehicle design,
- Industrial sponsored topics, and
- Research sponsored topics.

The industrial and/or research projects may include alternative energy topics (EcoHawks), biomechanics topics or general mechanical engineering topics.

Students interested in biomedical engineering or applying to medical school after graduation may elect to complete a concentration in biomechanics (or follow a pre-medicine plan) or complete an Undergraduate Certificate in Bioengineering (see the Bioengineering program for requirements). Students are encouraged to be active with the different engineering societies, including The American Society of Mechanical Engineers, The Society of Automotive Engineers, Engineers Without Borders, The Biomedical Engineering Society, The Society of Women Engineers, The National Society of Black Engineers, and The Society of Hispanic Engineers. KU also has active chapters of Tau Beta Pi, the national engineering society, and Pi Tau Sigma, the national mechanical engineering honor society. Study abroad is strongly
encouraged and generally does not delay students' graduation since they will be taking engineering classes abroad.

Professional Licensing

Formal study in an accredited engineering program is the principal means of becoming licensed to practice engineering in Kansas and other states. During the junior or senior year, students are strongly encouraged to take the national Fundamentals of Engineering examination. After 4 or more years of practice satisfactory to the State Board (licensing regulations vary among states), engineering graduates may take the examination to become registered professional engineers.

Job Search Assistance

The Engineering Career Center (http://ecc.ku.edu/) offers a comprehensive array of services to students seeking permanent employment and career-related summer or co-op employment. These include on-campus interviewing; 2 career fairs each year; individual advising and group workshops on résumés; interviewing, and job search strategies; online interviewing sign-up; online job postings from many employers not interviewing on campus; a library of employer and career literature; and an online résumé book searchable by employers.

The Engineering Career Center offers services to all engineering students. Students are encouraged to visit the Engineering Career Center early in their undergraduate or graduate studies. Many employers actively seek KU engineering and computer science students. Some prefer to hire students as early as the first-year level for internships. The Career Center is in 1410 LEEP2; additional information is available from 785-864-3891.

Undergraduate Regulations

The Mechanical Engineering program follows the undergraduate regulations of the university and school. The program has adopted a more limiting transfer policy regarding upper level mechanical engineering courses. The program also has required minimum grades in select classes for progression in the degree.

Transfer of Credit

In general, course number equivalents greater than KU Mechanical Engineering’s ME 399 cannot be transferred to count towards the 128 credit hour BS in mechanical engineering curriculum. For a non-KU course that might be related to a KU Mechanical Engineering course greater than ME 399 course:

1. The KU Mechanical Engineering program may consider a one-time petition for transfer.
2. To be considered for transfer, the petitioned course must have been taken from an ABET-EAC accredited program.
3. Study Abroad courses will be handled on a case-by-case basis.

Grades of C- or Better

While a D may be considered a passing grade in MATH 125, MATH 126, ME 211 (CE 201 and ME 210) and ME 212, it does not meet the mechanical engineering program’s requirements for satisfying prerequisites for subsequent classes. The mechanical engineering program requires a C- or better in MATH 125 and MATH 126 for progression in the degree. The program requires a C- or better in ME 211 (or CE201 and ME 210) for progression in the degree. Students earning a D-, D or D+ in ME 212 may progress in the degree providing they successfully complete ME 412 (counts as Technical Elective) in the next semester that it is offered.

Undergraduate Admission to the School of Engineering

Admission to the KU School of Engineering (and its degree programs) is selective. Students may be admitted to an engineering or computer science degree program (https://engr.ku.edu/2021-curriculum-guide-links/) as freshmen (first year) students, but all admissions, for both in-state and out-of-state students, are selective. Applications are judged on several factors, such as high school record, scores on national tests, academic record at college or university level, and trend of grades and more. High school transcripts are required.

Minimum Academic Standards for Admission to the School of Engineering

To be considered for admission to the School of Engineering, beginning first-year students must meet or exceed the following minimum standards:

- Must be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 22+ (or math SAT score of 540+), or
  - Achieving a ‘C’ or better in college algebra or a more advanced mathematics course, or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.

Minimum Academic Standards for Direct Admission into Degree Program for incoming Freshmen

Students with a 26+ Math ACT (600+ Math SAT) or meet eligibility requirements for MATH 125 (Calculus I) (p. 1612) may be admitted directly into their chosen major, with the exception of those seeking admission into the Electrical Engineering, Computer Science, Computer Engineering, and Interdisciplinary Computing (EECS) majors. For EECS program admission, students must:

- Be admissible (https://admissions.ku.edu/major-specific-requirements/) to the University of Kansas by assured admissions or individual review, AND
- Have a 3.0+ high school GPA, AND
- Demonstrate mathematics preparedness by:
  - Obtaining a mathematics ACT score of 28+ (or math SAT score of 660+), or
  - Achieving a ‘C’ or better in college algebra or a more advanced mathematics course, or
  - Achieving at minimum a qualifying score for MATH 104 on the ALEKS mathematics placement exam.
Students who are not admissible to their desired major are admitted to the School of Engineering as undecided engineering undergraduate students.

Exploring Engineering

Students not admitted directly to the School of Engineering or their major but who are admissible to the university may be admitted to the College of Liberal Arts and Sciences as an Undecided student. They can later re-apply to the School of Engineering during the semester they are completing the admission requirements for transfer students.

Transfer Admission Standards

Applications from all transfer students, whether from other institutions or from other academic schools at the University of Kansas, are evaluated on a case-by-case basis. Transfer students must be admissible (http://admissions.ku.edu/apply/requirements/ustransfer/) to KU AND have a cumulative college transferable grade-point average of 2.5+ to be considered. In addition, students must have grades of “C” or better in those courses in math (must include MATH 125 Calculus I or equivalent), science, and engineering applicable to the engineering degree.

Current KU Students admitted to other academic units may apply to the School of Engineering by completing a Change of School form (https://inowformsprivate.ku.edu/imagenowforms/fs/?form=OUR%20Change%20of%20School%20Form).

Already Applied to KU, But Not Engineering?

Don’t worry. It’s not too late to change your mind if you’ve already applied to KU and selected a major outside the School of Engineering. If you think one of the 12 engineering or computer science majors is a better fit for your talents, you can still change your requested major — preferably before May 1 — and be considered for admission to the School of Engineering and all the benefits that go with it.

To update your application, visit Undergraduate Admissions (http://admissions.ku.edu/update-your-application/) and click on “Change application term, major, mailing address, and/or email address.”

Please contact a member of our recruitment team (studyengineering@ku.edu), 785-864-3881, if you have any difficulty.

Application Deadlines For New Freshman and Transfer Applicants

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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</thead>
<tbody>
<tr>
<td>September 15</td>
<td>Priority deadline for current KU students to apply for spring admission to Engineering.</td>
</tr>
<tr>
<td>November 1</td>
<td>Final deadline for scholarship consideration for incoming freshmen planning to enter in fall or summer semesters.</td>
</tr>
<tr>
<td>December 1</td>
<td>Final deadline to apply for the Self Engineering Leadership Fellows Program for incoming freshmen</td>
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</tbody>
</table>

| February 1  | Final deadline for scholarship consideration for transfer students planning to enter in fall or summer semesters. Applications available for the Engineering Learning Community |
| February 15 | Priority deadline for current KU students to apply for summer or fall admission to Engineering. |
| May 1       | Enrollment Deposit due. |

**Mechanical Engineering 4-Year Graduation Plan**

<table>
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<tr>
<th>Major</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
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<tr>
<td>ME 101</td>
<td>1 ME 208</td>
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<tr>
<td>ME 228</td>
<td>3 MATH 126</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 125 (KU Core GE 1.2)</td>
<td>4 MATH 365 or 526</td>
<td>3</td>
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<tr>
<td>CHEM 150 (KU Core GE 3N)</td>
<td>5 PHSX 210 (KU Core GE 1.1)</td>
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<td>ENGL 101 (KU Core GE 2.1)</td>
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<td>ENGL 102 (KU Core GE 2.1)</td>
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<tr>
<td>Sophomore</td>
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<tr>
<td>ME 211</td>
<td>3 ME 311</td>
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<tr>
<td>ME 306</td>
<td>3 ME 212</td>
<td>3</td>
<td></td>
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<tr>
<td>MATH 127</td>
<td>4 MATH 220</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSX 212</td>
<td>3 MATH 290</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PHSX 236</td>
<td>1 ECON 142, 144, or 104 (KU Core GE 3S)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHIL 160 or 180 (KU Core AE5.1)</td>
<td>3 KU Core (GE2.2, GE3H, AE4.1, or AE4.2)</td>
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<td>17</td>
<td>17</td>
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<tr>
<td>Junior</td>
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<tr>
<td>ME 307</td>
<td>2 EECS 316</td>
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<tr>
<td>ME 320</td>
<td>3 EECS 318</td>
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<tr>
<td>ME 321</td>
<td>1 ME 501</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ME 412</td>
<td>3 ME 510</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ME 508</td>
<td>3 ME 628</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core (GE2.2, GE3H, AE4.1, or AE4.2)</td>
<td>3 ME 661</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>15</td>
<td>15</td>
<td></td>
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<tr>
<td>Senior</td>
<td></td>
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</tr>
<tr>
<td>ME 455</td>
<td>4 Capstone Design Opt A, B, or C</td>
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Bachelor of Science in Mechanical Engineering Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tr>
<td></td>
<td><strong>Mathematics and Basic Sciences</strong></td>
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<td><strong>Mathematics:</strong></td>
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<tr>
<td>MATH 125</td>
<td>Calculus I (KU Core GE1.2)</td>
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<td>MATH 126</td>
<td>Calculus II</td>
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<tr>
<td>MATH 127</td>
<td>Calculus III</td>
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<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td>3</td>
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<tr>
<td>or MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td></td>
</tr>
<tr>
<td>ME 508</td>
<td>Numerical Analysis of Mechanical Engineering Problems</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Basic Sciences:</strong></td>
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<tr>
<td>CHEM 150</td>
<td>Chemistry for Engineers (KU Core GE3N)</td>
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<td>PHSX 210</td>
<td>General Physics I for Engineers (satisfies GE1.1)</td>
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</tr>
<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory</td>
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<td>PHSX 212</td>
<td>General Physics II</td>
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<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
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<td><strong>Electives and KU Core Requirements</strong></td>
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<td></td>
<td>Written Communication electives - KU Core GE2.1</td>
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<td></td>
<td>Oral Communication elective - KU Core GE2.2</td>
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<td>Arts and Humanities elective - KU Core GE3H</td>
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<td>Economics elective (ECON 104, ECON 105, ECON 142, ECON 143, ECON 144, ECON 145) - KU Core GE3S</td>
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<td>Human Diversity elective - KU Core AE4.1</td>
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<td></td>
<td>Global Culture/Awareness elective - KU Core AE4.2</td>
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<td></td>
<td>Ethics elective (CE 610) - KU Core AE5.1</td>
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<tr>
<td></td>
<td><strong>General Electives</strong></td>
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<td></td>
<td><strong>Mechanical Engineering</strong></td>
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<tr>
<td>ME 211</td>
<td>Statics and Introduction to Mechanics</td>
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<td>ME 311</td>
<td>Mechanics of Materials</td>
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<td>ME 320</td>
<td>Dynamics</td>
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<td>ME 321</td>
<td>Dynamics Simulations</td>
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<td>ME 306</td>
<td>Science of Materials</td>
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<tr>
<td>ME 307</td>
<td>Engineering Materials Laboratory</td>
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<tr>
<td>ME 628</td>
<td>Mechanical Design</td>
<td>3</td>
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<tr>
<td>ME 682</td>
<td>System Dynamics and Control Systems</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Thermal Fluids:</strong></td>
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<tr>
<td>ME 212</td>
<td>Basic Engineering Thermodynamics</td>
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<td>ME 510</td>
<td>Fluid Mechanics</td>
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<tr>
<td>ME 612</td>
<td>Heat Transfer</td>
<td>3</td>
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<td></td>
<td><strong>Basic Engineering:</strong></td>
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<td>ME 208</td>
<td>Introduction to Digital Computational Methods in Mechanical Engineering</td>
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<tr>
<td>ME 228</td>
<td>Computer Graphics</td>
<td>3</td>
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<tr>
<td>EECS 316</td>
<td>Circuits, Electronics and Instrumentation</td>
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<td>EECS 318</td>
<td>Circuits and Electronics Lab</td>
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<tr>
<td>ME 455</td>
<td>Mechanical Engineering Measurements and Experimentation</td>
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<tr>
<td>ME 661</td>
<td>The Finite Element Method</td>
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<tr>
<td></td>
<td><strong>Capstone Design:</strong></td>
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<tr>
<td>ME 501</td>
<td>Mechanical Engineering Design Process</td>
<td>2</td>
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<tr>
<td></td>
<td>Select one of the following (satisfies KU Core AE6.1)</td>
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<tr>
<td></td>
<td><strong>Option A:</strong></td>
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<tr>
<td>ME 640</td>
<td>Design Project (Taken first semester)</td>
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<tr>
<td>ME 641</td>
<td>Design Project Option A (Taken second semester after successfully completing ME 640)</td>
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<tr>
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<td><strong>Option B:</strong></td>
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<td>ME 617</td>
<td>Research for Design Project Option B</td>
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<td>ME 642</td>
<td>Design Project Option B (Taken after successfully completing ME 627. ME 627 counts as an Advanced Engineering Elective.)</td>
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<td><strong>Option C:</strong></td>
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<tr>
<td>ME 640</td>
<td>Design Project (Taken first semester)</td>
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<tr>
<td>ME 643</td>
<td>Design Project Option C (Taken second semester after successfully completing ME 640 and ME 643. ME 633 counts as an Advanced Engineering Elective.)</td>
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<tr>
<td></td>
<td><strong>Advanced Engineering Electives (15 hours)</strong></td>
<td>9</td>
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</table>

Approved General and Advanced Engineering Electives (15 hours)

A maximum of 6 credits of General Electives (and a minimum of 0 if 9 credits of Advanced Engineering Electives are taken) can be applied toward the B.S.M.E. degree and are meant to allow a student to broaden their education. These electives are taken throughout a student’s curriculum and include mathematics, basic science (ASTR, ATMO, BIOL, CHEM, EVRN, GEOG, GEOL, and PHSX) and engineering courses beyond what is already required for the degree (without replicating content). Also included are any courses satisfying a KU Core requirement beyond what is already required for the degree (e.g. a second GE3H course). Any course from a foreign language department (in a non-native language) can satisfy the requirements. Up to 6 credit hours from courses in aerospace studies, military science, or naval science may be applied toward graduation as General Electives for the mechanical engineering degree. A student normally must complete the ROTC curriculum, whether or not it leads to a commission, to receive ROTC hours toward a bachelor’s degree in mechanical engineering. Courses in business, economics, music, design, visual art, and honors can also be used to satisfy the elective requirement. A complete list of current approved General Electives can be found at the KUME office.

A minimum of 9 hours of Advanced Engineering Electives (and a maximum of 12) can be applied toward the B.S.M.E. degree and are designed to provide students with additional technical depth in the discipline. These electives are usually taken by seniors in the program.
and consist of advanced topics in the field of mechanical engineering. These courses tend to be all 500-, 600- and 700-level ME courses not explicitly named above. A complete list of current approved Advanced Engineering Electives can be obtained from the KUME office.

In a case where an experience has been used to satisfy a KU Core requirement without an accompanying credit-hour load, the student will be allowed to use any General Electives course to fulfill the number of credit hours required for graduation.

The Mechanical Engineering Department requires six credits of ENGL courses to satisfy the English requirement, with KU-allowed exemptions being possible.

**Potential Core Credit Hour Waivers**

For GE2.1, GE2.2, and AE4.2, it is possible to obtain ME Department waivers, as listed below; but the maximum total hours waived by the ME department is six.

1. If your KU transcript shows that the ENGL 101 and/or ENGL 102 requirements (GE2.1) have been waived (e.g., due to an ACT score) while giving zero hours of credit, the ME department accepts this waiver as a three or six credit hour reduction in the total hours required for graduation.
2. If your KU transcript shows that your Oral Communications Core has been waived while giving zero hours of credit, the ME Department accepts petitions for potentially waiving three credit hours. The KU transcript waiver must be the result of actual oral communications experience that was at least the equivalent of one semester of study. “Credit by exam” alone will not be acceptable.
3. If your KU transcript shows that your Global Culture/Awareness Core requirement (AE4.2) has been waived while giving zero hours of credit, the ME department accepts petitions for potentially waiving three credit hours. An example of an acceptable waiver request could be for a semester-long Study Abroad experience while immersed in the country’s culture. An unacceptable waiver request would be for a four to six week time period spent abroad.

**Chemistry**

CHEM 130/135, CHEM 170/175, or Honors equivalent courses may be substituted for CHEM 150. Both courses in the Chemistry sequence must be taken to fulfill the Chemistry requirement. The additional credit hours can count as General Electives.

**Biomechanics Concentration**

Students interested in a career in biomechanics can obtain a concentration in the area which will be noted on the student’s BSME transcript. To obtain the concentration students must complete the following four courses:

1. One of the following BIOL courses (all of which count as General Electives): 150/151, 152/153, 240, or 246.
2. ME 633 Basic Tissue Mechanics and Biodynamics (which counts as an Advanced Engineering Elective).
3. A Biomechanics Capstone Design Project (ME 643).
4. A Biomechanics Advanced Engineering Elective (ME 750, 751, 753, 755, 756, 757, 758, 760, 765, or 767)

**Master of Science in Mechanical Engineering**

**Master of Science (M.S.) Degree**

The Department of Mechanical Engineering offers both a thesis option and a non-thesis (project) option leading to the M.S. degree. Areas of study in Mechanical Engineering include:

1. **Biomechanics and Biomaterials**: biomechanics of human motion, biomaterials, orthopedic biomechanics and biomedical product design, transport phenomena, and drug delivery
2. **Computational Mechanics and Mathematics of Computations**: computational mechanics, finite element analysis, finite element methods and software
3. **Thermal-Fluid Systems and Heat Transfer**: energy and thermal-power system design, heat transfer and computational fluid dynamics
4. **Mechanical Design, Manufacturing, and Microprocessor Applications**: computer-aided mechanical design, continuum mechanics, computer-integrated manufacturing, computational mechanics, finite element analysis, machine stress analysis, microcomputer applications, and automatic control systems

**Mission**

The broad discipline of mechanical engineering enables students to have productive and rewarding careers, and to develop and improve new technologies in both traditional and emerging fields. Mechanical engineers apply fundamental principles to develop, design, manufacture, and test machines and other mechanical devices. Such devices include, but are not limited to power-producing machines, as well as power-consuming machines. Mechanical engineers are employed in diverse areas including, but not limited to the energy and power industries, the automotive and aerospace industries, and industrial manufacturing. Mechanical Engineering graduates also have careers in medicine and medical device development, patent law, engineering and corporate management, forensic engineering, and engineering sales.

The mission of the Mechanical Engineering Department is to provide our students with a high-quality education, to generate and apply knowledge, and to serve both society and the engineering profession.

Graduates holding the M.S. degree in Mechanical Engineering will be able to:

1. Conduct original research in mechanical engineering (for the Master of Science with thesis option), or complete a substantial project related to mechanical engineering (for the Master of Science with project option).
2. Demonstrate the ability to learn new concepts and build new skills relevant to the discipline of mechanical engineering.
3. Effectively communicate advanced mechanical engineering concepts, both in writing and orally.
4. Qualified to work at the most prestigious research institutions and universities in the world.
Admission Requirements

To qualify for graduate study in any of the graduate programs in the Department of Mechanical Engineering, a student generally must have earned a baccalaureate degree from an accredited mechanical engineering program. However, a student with good preparation in some other engineering discipline or a related program, such as physics, may qualify by taking appropriate undergraduate courses specified by the Mechanical Engineering Department Graduate Admissions Committee.

Minimum English Proficiency Requirements

These guidelines are subject to change by official action of the appropriate Graduate School governance bodies. Visit the full English Proficiency Requirements for Admission to Graduate study at: http://policy.ku.edu/graduate-studies/english-proficiency-international-students.

GTA and GRA Eligibility

Graduate teaching and research assistant eligibility requirements are distinct from admission requirements. Additional information on eligibility for graduate teaching assistants and graduate research assistants may be found in the GTA, GRA, and GA Appointments: General Guidelines and Eligibility.

Contact Information

Please contact the Mechanical Engineering Graduate Program Coordinator at kume@ku.edu or +1 (785) 864-3181, to schedule a visit or with questions about the application process.

The University of Kansas
Mechanical Engineering Graduate Program
3138 Learned Hall
1530 W. 15th Street
Lawrence, KS 66045

Master of Science (M.S.) Degree Requirements

The Department of Mechanical Engineering offers both a thesis and a non-thesis option leading to the M.S. degree. Both options require a minimum of 30 credit hours of graduate work. The thesis option must include a thesis for six hours of credit (ME 899) and 24 credit hours of coursework. The non-thesis option must include three-credit hours of independent investigation (ME 860 or ME 899) and 27 credit hours of coursework.

A maximum of 6 hours of mechanical engineering courses numbered between 500 and 699 may be included in the program. Other courses outside of mechanical engineering (besides mathematics) between 500 and 699 require approval by the Graduate Director prior to enrolling. Courses either required or used for the B.S. degree may not be used to fulfill M.S. degree requirements.

Major

The major will be selected from the energy and thermal-fluids category, the mechanical design category, the computational mechanics category or the biomechanics category. At least half of the graduate level coursework must be taught by graduate faculty employed full-time by the Department of Mechanical Engineering.

Plan of Study

The M.S. degree student selects an adviser in the first semester of graduate study. The student and the student’s advisory committee determine a program of study during the first semester of enrollment. The program of study must include (1) a minimum of 12 credit hours in a major selected from Mechanical Engineering courses (excluding credit for mathematics and the independent investigation or thesis) and (2) no fewer than three credit hours dealing with advanced mathematics. The complete plan of study must be approved by the Advisory Committee and the Graduate Director before the beginning of the second semester of graduate enrollment and filed electronically with the Department and the Graduate Division of the School of Engineering. The online Plan of Study can be found at https://gradplan. engr. ku. edu/accounts/login/.

Thesis Option

A thesis-option student is expected to do original work that would be the basis of a paper suitable for publication in a refereed journal. After the final oral examination has been passed, and after any changes required by the examination committee have been made in the thesis, the thesis should be submitted electronically in PDF Format to ProQuest/UMI on or before the date specified by the Graduate Studies Office (see http://graduate.ku.edu/graduation for deadlines). Supplementary materials may be added in formats other than PDF.

The student is responsible for submitting any bound copies that may be required by the department and/or advisor. Recommended binding services for personal or departmental copies may be found at http://www. graduate. ku. edu/submitting. Formatting requirements for the thesis are presented here: http://graduate. ku. edu/etd-formatting-and-working-multimedia-files.

Non-Thesis Option

A non-thesis option student must do an analytical or experimental study acceptable to the advisory committee. An oral presentation of the results of the independent investigation before Mechanical Engineering graduate students and faculty is required. A typed unbound project report must also be provided to the advisory committee.

Final Examination

Each Masters’ degree candidate must pass a final examination that may be oral, or both written and oral, as determined by the advisory committee. The examination must be publicized at least one week before the date of the examination. The examination will cover the field of Mechanical Engineering for both the thesis and non-thesis options and emphasize the thesis for the thesis option.

The thesis presentation portion of the examination shall be open. The written portion of the examination, if required, will be composed and evaluated by the examination committee. The examination committee, which is normally the advisory committee, must consist of at least three members of the Graduate Faculty and at least two must be Mechanical Engineering Faculty.

For every scheduled examination, the department will report a grade of honors, satisfactory, or unsatisfactory as decided upon by the committee.
The request to schedule the examination must be submitted to the Mechanical Engineering Department at least two weeks prior to the examination date. Unbound or electronic thesis copies are to be submitted to the examination committee two weeks before the examination.

Note: Masters Candidates must be enrolled for at least one credit hour during the semester in which the Masters’ final examination is taken, or the semester prior if meeting the early graduation deadline in a given semester.

Only two attempts to pass the Masters’ examination are allowed. If the examination is not passed in two attempts, the student will be terminated from the program and will not receive the degree.

Program Time Constraints
Normal expectations are that most master’s degrees (excluding some professional terminal degrees) should be completed in two years of full-time study. However, master’s degree students are allowed seven years for completion of all degree requirements.

In cases in which compelling reasons or circumstances recommend a one-year extension, the Graduate Division, on recommendation of the department/committee, has authority to grant the extension. In cases where more than eight years are requested, the appropriate appeals body of the school considers petitions for further extensions and, where evidence of continuous progress, currency of knowledge, and other reasons are compelling, may grant them.

Credit by Transfer
At the discretion of the major department and the Graduate Division, up to nine (9) hours of graduate credit taken at a regionally-accredited graduate school may be transferred and applied to a KU master’s degree plan if the credits were taken prior to the final semester of enrollment at KU. Only work graded B (3.0 on a 4.0 scale) or higher may be transferred. KU does not accept transfer credit for courses that have been graded B- or below.

In cases in which compelling reasons or circumstances recommend a one-year extension, the Graduate Division, on recommendation of the department/committee, has authority to grant the extension. In cases where more than eight years are requested, the appropriate appeals body of the school considers petitions for further extensions and, where evidence of continuous progress, currency of knowledge, and other reasons are compelling, may grant them.

Graduates holding the Ph.D. degree in Mechanical Engineering will be able to:

1. Conduct independent, publishable, impactful research on a topic or topics related to mechanical engineering.
2. Demonstrate the ability to learn new concepts and build new skills relevant to the discipline of mechanical engineering.
3. Demonstrate expertise in at least one area of mechanical engineering.
4. Effectively communicate advanced mechanical engineering concepts, both in writing and orally, at a professional level.

Admission Requirements
To qualify for graduate study in any of the graduate programs in the Department of Mechanical Engineering, a student generally must have earned a baccalaureate degree from an accredited mechanical engineering program. However, a student with good preparation in some other engineering discipline or a related program, such as physics, may qualify by taking appropriate undergraduate courses specified by the Mechanical Engineering Department Graduate Admissions Committee.

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Mechanical Engineering Graduate Program
3138 Learned Hall
1530 W. 15th Street
Lawrence, KS 66045

Doctor of Philosophy (Ph.D.) Degree

A minimum of 72 credit hours of graduate credit beyond the bachelor’s degree is required for a Ph.D. For students with a 30-credit Master’s degree in Mechanical Engineering, a minimum of an additional 18 credits hours of graduate course work and 24 credit hours of dissertation are required. If a Master’s degree is not sought, 42 credit hours of graduate course work beyond the bachelor’s degree and 30 credit hours of dissertation credit are required. A minimum of 9 credit hours of the 18 (or 21 of the 42) must be mechanical engineering courses numbered 700-900 (excluding ME 702, ME 801, ME 899, ME 901, and ME 999). A minimum of 9 credit hours of advanced mathematics beyond the bachelor’s degree is required.

Doctoral Qualifying Examination

For a student with a Master’s degree, a qualifying examination will normally be taken in the first semester of participation in the doctoral program on regular status. It should not be taken later than the end of the second semester. For a direct admit with a bachelor’s degree, a qualifying examination will typically be taken after completion of 30 hours of graduate course work.

The Qualifying Examination Committee consists of three or more members of the graduate faculty within the area of emphasis and are normally expected to be members of the Research and Graduate Studies Committee of the Department of Mechanical Engineering. A grade of pass or fail will be assigned and be kept in the departmental records.

Three evaluation criteria for the Qualifying Examination were established by the faculty on August 19, 2019.

Criterion #1: The student must demonstrate an understanding in a core set of fundamental undergraduate mechanical engineering knowledge.

Criterion #2: The student must demonstrate an understanding in a subset of core advanced mechanical engineering knowledge.

Criterion #3: The student must demonstrate the ability to communicate effectively through writing, oral presentation, and open questioning.

The faculty from the four areas of study in Mechanical Engineering, as defined by the Graduate Student Handbook, are responsible for developing separate methods to evaluate the criteria. The areas of study are: Biomechanics and Biomaterials; Computational Mechanics and Mathematics of Computations; Thermal-Fluid Systems and Heat Transfer; and Mechanical Design, Manufacturing, and Microprocessor Applications. The methods for the four areas to assess the three criteria area listed below.

Criterion #1

This criterion will be assessed and satisfied with the current policies for entrance to the KUME graduate program. This includes the current requirements for satisfying deficiencies in the undergraduate mechanical engineering curriculum. At the time of the Ph.D. qualifying exam, the student must have satisfied and completed all requirements and conditions specified by the Department of Mechanical Engineering and the SOE to address deficiencies.

Criterion #2

A) The student will identify three 3-credit mechanical engineering technical elective courses (excluding courses required for the KU BSME degree, ME 702, ME 801, ME 860, ME 899, and ME 999) and one 3-credit mathematics course from the approved list in the KUME Graduate Handbook (or approved prior by the Graduate Director). The chosen ME courses should reflect three specific subjects in the focus area of study. Equivalent graduate courses that are completed at other institutions may be used to satisfy the requirements. All courses must meet the approval of the student’s advisor and the Qualifying Examination Committee including a review by the Graduate Director.

B) OR, DEPENDING ON ADVISOR PREFERENCE, the student will be required to demonstrate an understanding of three specific ME subjects and mathematics by passing written exams in each of these four subjects. The series of written exams will be scheduled during one week each fall and/or spring semester. Each exam will be graded separately on an A to F basis and count similarly to a 3-credit course towards this assessment. Scheduling and generation of the exams is the responsibility of the student’s major advisor with other faculty assistance.

In order to pass this criterion, the student must achieve at least a cumulative 3.7 GPA over all four courses or exams. A conditional pass may be awarded for a 3.5 GPA or greater (up to 3.7 GPA) with the student required to address said deficiency in the lowest graded course by either (depending on advisor preference): (1) completing extra coursework in that subject while achieving an A grade, or (2) re-taking the exam in that subject area and passing with an A grade. The student must address this deficiency before taking the Ph.D. comprehensive exam.

Criterion #3

The student will give an oral presentation that will last 20 minutes or less, and including questions from the Qualifying Examination Committee, the overall presentation will last 60 minutes or less. The material for the presentation will be a summary of one to three pertinent and related papers (with no conflict of interest) to the student’s Ph.D. topic area given to the student one week prior to the oral presentation date. These paper(s) will be approved by the advisor and the Qualifying Examination Committee.

Two days before the oral presentation, the student will provide a one-page summary (single-spaced, 12 point font, Times New Roman, 1” margins) to the committee of the material to be presented. No outside help will be allowed. To receive a passing grade, the student must demonstrate to the committee their ability to effectively communicate the information. For a student that receives a grade of conditional pass, the committee will
recommend appropriate remedies. If a student receives a grade of fail, a second and final attempt will be granted.

Plan of Study
On successful completion of the qualifying examination, the student selects a major professor from the Department to serve as the chairperson of the advisory committee and to direct the research. An advisory committee of at least five Graduate Faculty members from the School of Engineering with at least three from the Mechanical Engineering faculty is then selected by the student and their adviser to assist the student in preparing the plan of study, to conduct the comprehensive examination, and to assist the student in planning research.

Courses completed without an approved program of study filed will not necessarily count toward the degree. The complete plan of study must be submitted before the end of the first semester and include the specific courses and all other requirements (research skills, research topic, etc.), and filed electronically with the Department and the Graduate Division of the School of Engineering.

Credit by Transfer
No graduate credit may be transferred toward a doctoral degree, but departments may take relevant prior graduate work into consideration in setting up programs of study.

Proficiency in Research Skill Area and Responsible Scholarship
All doctoral students must meet the Research Skills requirement before proceeding to comprehensive exams. The requirement must include at least two components:

- Every doctoral student is required to have training in responsible scholarship pertinent to the field of research.
- Every doctoral student is required to obtain research skills pertinent to the doctoral level of research in their field(s).

The responsible scholarship requirement may be met by taking ME 801, in addition to all other course and credit requirements. The Ph.D. student must demonstrate proficiency in at least one research skill area. Since the needs of students differ, the research skills are determined with the advice and approval of the advisory committee. Possible areas may include:

1. **Foreign Language.** The aspirant may demonstrate a reading knowledge in a foreign language in either of two ways:
   a. Receive a score in the language on the Educational Testing Service Graduate School Foreign Language Test at, or above, the minimal level prescribed by the Graduate Studies Office.
   b. Complete a language course approved by the advisory committee with a grade of B or better.
2. **Computer Science.** To establish competence in computer science, it is necessary to satisfy the advisory committee by demonstrating proficiency in a commonly used programming language and creating at least one original program.
3. **Laboratory Training.** Specific training on research skills relevant to the topic of dissertation by the advisor in their respective laboratory with the help of senior students.

All research skill and responsible scholarship requirements must be satisfied prior to the comprehensive examination and reported to the Graduate Division.

Doctoral Comprehensive Examination
When a doctoral aspirant has completed the major portion of the course work at a level satisfactory to the graduate degree program and school (typically 18 credit hours beyond the Master’s degree, or 42 beyond the Bachelor’s degree) and met all other program, school, and general requirements prerequisite to the comprehensive oral examination, including the research skills requirement as appropriately applied and established for the student’s particular program, the degree program must request the Graduate Division of its school to schedule the comprehensive oral examination. It should be determined that the student is in good academic standing (3.0 or higher grade-point average) before scheduling the examination. The examination request (using the Progress to Degree system) must be submitted in advance of the examination date by at least the period specified by the Graduate Division, normally a minimum of two weeks. The Graduate Division ascertains whether all pertinent requirements have been satisfied and if reports of any previously scheduled comprehensive oral examinations have been properly submitted and recorded. http://policy.ku.edu/graduate-studies/doctoral-oral-exams

The committee for the comprehensive oral examination must consist of at least five members, all of whom must be members of the Graduate Faculty and at least three of whom must be tenured / tenure track Mechanical Engineering Faculty including the committee chair. Its members are appointed by the Graduate Division of the school or college on the basis of nominations submitted by the graduate degree program. At least one member must be from a department other than the aspirant’s major department. This member represents Graduate Studies and must be a regular member of the Graduate Faculty. The Graduate Studies representative is a voting member of the committee and has full right to participate in the examination. In the case of any unsatisfactory or irregular aspects of the exam or violation of Graduate Studies policy, the Graduate Studies representative shall provide a written report to the Dean of Graduate Studies for consideration of further action. The examination may be scheduled provided that at least five months have elapsed from the time of the aspirant’s first enrollment at KU considering the Qualifying Exam has been successfully passed.

The comprehensive oral examination covers the major field and any extra-departmental work for which the program wishes to hold the aspirant responsible (students should discuss the oral examination requirements with their advisor and committee). For every scheduled examination, the degree program reports a grade of Honors, Satisfactory, or Unsatisfactory. If the aspirant receives a grade of Unsatisfactory on the comprehensive oral examination, it may be repeated on the recommendation of the degree program, but under no circumstances may it be taken more than three times. In any case, the examination may not be repeated until at least 90 days have elapsed since the last unsuccessful attempt. The schedule for the examination should be announced throughout the Department at least 7 days in advance.

Post-comprehensive Enrollment
Doctoral candidates are required, after passing the comprehensive oral examination, to be continuously enrolled each fall and spring semester in one or more hours of dissertation or programmatically equivalent coursework (for example, document hours for DMA students) that both moves the student towards degree completion and reflects, as accurately as possible, the candidate’s demands on faculty time and university facilities. During this time, until all requirements for the degree are completed (including the filing of
committees are not required to have a co-chair, the student or the

Post-comprehensive enrollment may include enrollment during
the semester or summer session in which the comprehensive
oral examination has been passed. If after 18 hours of post-
comprehensive enrollment the degree is not completed, the
candidate must continue to enroll each semester until all degree
requirements have been met. The number of hours of each
enrollment must be determined by the candidate’s advisor and must
reflect as accurately as possible the candidate’s demands on faculty
time and university facilities.

Dissertation

The doctoral candidate must present a dissertation showing the planning,
conduct, and results of original research and/or scholarly creativity. The
purpose of the dissertation is to encourage and ensure the development
of broad intellectual capabilities and to demonstrate an intensive focus
on a problem or research area. The dissertation itself should be an
evident product of the candidate’s growth and attainment of the ability
to identify significant problems; organize, analyze, and communicate
scholarly results; and bring to bear on an area of scholarly or scientific
interest a variety of research skills and scholarly or creative processes.
The dissertation must show some original accomplishment (sufficient
quality to merit publication(s) in refereed journals and it is anticipated
that the student will submit one or more journal publications prior to their
defense), but it should also demonstrate without doubt the candidate’s
talent to make future contributions to knowledge and understanding.
Furthermore, a candidate for a doctoral degree must satisfy all Graduate
School requirements for the degree.

Both the dissertation research and the dissertation itself are to be
completed under the guidance and direction of the committee appointed
as described in the Doctoral Student Oral Exam Committee Composition
policy:

1. Doctoral committees are composed of at least five voting members;
2. The majority of committee members serving on a doctoral student oral
examination committee must be tenured/tenure-track faculty holding
regular or dissertation graduate faculty status in the candidate’s
department/program of study. Tenured/tenure-track faculty who are
appointed as courtesy faculty within the program/department are
considered (for the purposes of committee composition) to be faculty
of that program/department;
3. One member must meet the requirements for serving as the Graduate
Studies representative. A faculty member from a different department
with a courtesy appointment in the student’s department may serve as
the Graduate Studies representative or in fulfillment of the committee
majority, but cannot serve in both roles at the same time; and
4. Beyond the majority requirement, the additional member may hold
any graduate faculty status, including regular, dissertation, or special
status. This fifth member can be, but need not be, a member of the
candidate’s department/program.

As long as the conditions above are met, the committee may include more
than five members.

The doctoral committee chair must hold dissertation status. While
committee members may decide to select a co-chair. The co-chair can
hold any graduate faculty status.

Substitutions of the committee chair (and/or co-chair) are prohibited after
the committee has been approved by the Graduate Division of the school/
college. If a committee chair (and/or co-chair) needs to be replaced, the
revised committee must be approved by the Graduate Division in advance
of the exam.

Substitutions of the committee members are permitted as long as the
new members hold regular or dissertation graduate faculty status. Special
members can be added after the committee has been approved by the
Graduate Division of the school/college, but these additions must be
approved by the Graduate Division in advance of the exam.

Dissertation Oral Examination

Completion of the dissertation is the final academic phase of
a doctoral program, culminating in the final oral examination
and defense of the dissertation. In all but the rarest cases,
tentative approval of the dissertation is followed promptly by
the final oral examination. When the completed dissertation
has been accepted by the committee in final draft form, and all
other degree requirements have been satisfied, the chair of the
candidate requests the Graduate Division to schedule the final
oral examination. This request must be made in advance of the
desired examination by at least the period specified by the Graduate
Division (ordinarily three weeks). The submission of the request must
allow sufficient time to publicize the examination so that interested
members of the university community may attend. The final oral
examination may be held no earlier than one (1) month after the
successful completion of the comprehensive oral examination.
Departments, programs, schools, or the College may require a
longer minimum interval between the oral comprehensive exam and
the final dissertation defense.

The committee for the final oral examination must consist of at least
five members (the members of the dissertation committee plus other
members of the Graduate Faculty recommended by the committee
chair and the department and appointed by the Graduate Division).
At least one member must be from a department other than the
major department. This member represents Graduate Studies and
must be a regular member of the Graduate Faculty. Before the
examination, the Graduate Division provides a list of responsibilities
to the Graduate Studies representative. The Graduate Studies
representative is a voting member of the committee and has full right
to participate in the examination. In the case of any unsatisfactory or
irregular aspects of the exam or violation of Graduate Studies policy,
the Graduate Studies representative shall provide a written report to
the Dean of Graduate Studies for consideration of further action.

The Graduate Division ascertains whether all other degree
requirements have been met and it reports of any previously
scheduled final oral examinations have been submitted and
recorded. Upon approval of the request, the final oral examination
is scheduled at the time and place designated by the Graduate
Division. This information must be published in a news medium
as prescribed by the Graduate Faculty. Interested members of the
university community are encouraged to attend these examinations.

For every scheduled final oral examination, the department reports
to the Graduate Division a grade of Honors, Satisfactory, or
Unsatisfactory for the candidate’s performance. If an Unsatisfactory
When the candidate has passed the final oral examination and the members of the dissertation committee have signed the dissertation, a title page and acceptance page with original signatures are to be delivered to the Graduate Affairs office of the school/college in which the student’s program resides so that completion of degree requirements may be officially certified. As a requirement of graduation, the candidate must arrange publication of the dissertation and payment of all applicable fees, through the electronic submission process.

Moreover, the candidate must provide a bound copy to the major professor, and one bound copy to the Mechanical Engineering Department.

Program Time Constraints

Minimum Tenure
The student must spend three full academic years, or the bona fide equivalent thereof, in resident study at this or some other approved university, including the time spent in attaining the master’s degree. Resident study at less than full time requires a correspondingly longer period, but the requirement is not measured merely in hours of enrollment. Because a minimum number of hours for the degree is not prescribed, no transfer of credit is appropriate. However, graduate degree programs take relevant prior graduate work into consideration in setting up programs of study leading to the doctorate.

Residence Requirement
Two semesters, which may include one summer session, must be spent in resident study at KU. During this period, the student must be involved full time in academic or professional pursuits, which may include an appointment for teaching or research if it is directed specifically toward degree objectives. Enrollment in approved distance-learning courses offered through KU cannot be used to meet the doctoral residency requirement. The student must be enrolled in a minimum of 6 credit hours per semester, and the increased research involvement must be fully supported and documented by the dissertation supervisor as contributing to the student’s dissertation or program objectives. Research must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off campus.

Maximum Tenure
After being admitted to doctoral programs at KU, students complete all degree requirements in eight years. In cases in which compelling circumstances recommend a one-year extension, the Graduate Division has authority to grant the extension on the written advice of the department and dissertation committee. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in two years of full-time study, and both master’s and doctorate in six years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.

A student in any of the above categories may petition the Graduate Division through the department for a leave of absence during either the pre- or post-comprehensive period to pursue full-time professional activities related to the doctoral program and long-range professional goals. Leaves of absence also may be granted because of illness or other emergency. Ordinarily a leave of absence is granted for one year, with the possibility of extension upon request. After an absence of five years, however, a doctoral aspirant or candidate loses status as such and must apply for readmission to the program and the Graduate Division.
## Health Professions

Located on the KU Medical Center campus in Kansas City, Kansas, the KU School of Health Professions (http://healthprofessions.kumc.edu) offers more than 30 academic programs and prepares students for careers in health care, research and leadership.

Undergraduate and graduate degree programs are available, as well as several certificate programs. Admission and degree requirements vary by program.

### Advising

It is strongly recommended for students to seek advising from their academic program of interest as soon as possible in their collegiate study. Please refer to the specific academic program for appropriate contact information and advising availability.

To connect with a program in the school, please contact Alex Lopez, outreach and recruitment specialist, at alopez12@kumc.edu or 913-588-1743 (711 TTY)

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The Office of Graduate Studies at KU Medical Center reviews and approves matters related to graduate study including admission, coursework and degree requirements. Each college or school at the University of Kansas has a graduate division reporting to KU Lawrence Graduate Studies. The Office of Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies.html) serves as the graduate division for the schools located on the medical center campus.

Students do not enter programs in the School of Health Professions before the junior year of college. Some programs require an associate’s or bachelor’s degree in a specific field prior to beginning course work. All have specific prerequisites and minimum grade-point averages for collegiate course work.

Bachelor’s degrees are available in the following fields:

- Clinical laboratory science
- Health information management
- Respiratory care

In addition, the following certificate programs at the undergraduate level are available:

- Cardiovascular sonography
- Diagnostic ultrasound technology (general and vascular)
- Nuclear medicine technology

### University Honors Program

The school encourages qualified students to participate in the University Honors Program (http://www.honors.ku.edu/).

The School of Health Professions offers graduate programs in the fields of dietetics and nutrition, molecular biotechnology, nurse anesthesia, occupational therapy, physical therapy, rehabilitation science, and therapeutic science. In addition, programs in audiology and speech-language pathology are offered cooperatively with the Lawrence campus via the Intercampus Program in Communicative Disorders.

Basic admission requirements are listed in the Graduate Studies (p. 2408) section of the online catalog; however, individual graduate programs have specific additional requirements.
The School of Health Professions (p. 542) offers the following graduate degrees:

- Master of Arts
- Master of Science
- Doctor of Audiology
- Doctor of Clinical Laboratory Science
- Doctor of Nurse Anesthesia Practice
- Doctor of Occupational Therapy
- Doctor of Physical Therapy
- Doctor of Philosophy
- Doctor of Speech-Language Pathology

Two certificate programs are available at the graduate level:

- Dietetic internship
- Dietetics and integrative medicine

For information about university regulations, see Regulations (http://catalog.ku.edu/regulations/) or visit the University of Kansas Policy Library (http://www.policy.ku.edu/). All students in the School of Health Professions are required to follow and abide by policies stated in the KU School of Health Professions student handbook (https://www.kumc.edu/school-of-health-professions/academics/student-handbook.html) as well as those defined in the handbook of the student’s academic program.

### Undergraduate Regulations

#### Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. Students may enroll in one course each semester under the option, if the course is not in the student's major or minor. For more information, visit the KU Policy Library (http://policy.ku.edu/).

**Warning:** Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to "F" when computing grade-point averages.

Check with the department before electing the Credit/No Credit option because most programs will NOT accept this designation for prerequisite courses.

#### Grading

The departments of Clinical Laboratory Sciences, Health Information Management, and Respiratory Care recognize only grades of A, B, or C as passing. Grades of D and F are not considered passing for the purpose of advancing in the curriculum.

#### Graduation with Distinction and Highest Distinction

The School of Health Professions awards the Highest Distinction honor to undergraduates having achieved the highest grade-point average among the programs in the school upon graduation. Distinction honors are bestowed upon those with the next highest final grade-point average. The total number of these two categories combined may exceed ten percent of that year's graduating class.

### Honor Roll

Students with grade-point averages of 3.5 having completed at least 12 hours with letter grades are recognized on the honor roll or dean's list in fall and spring. An honor roll notation appears on the transcript.

### Transfer of Credit

Only transfer grades of C or higher apply toward graduation from the School of Health Professions. Not all programs in the school accept transfer students. Please check with the appropriate program for full eligibility requirements.

CredTran (http://creditransfer.ku.edu/) is a transfer course equivalency system listing more than 2,200 colleges and universities from which KU has accepted transfer courses in the past. If your school or course is not listed, the student's evaluation will be completed after admittance to KU.

### Graduate Regulations

Programs at the graduate level follow policies administered by the Office of Graduate Studies (p. 2432) in addition to those indicated in the KU School of Health Professions student handbook (https://www.kumc.edu/school-of-health-professions/academics/student-handbook.html) as well as those detailed in the handbook of the student's specific academic program.

#### Credit/No Credit

Graduate students may select the Credit/No Credit option for certain courses. Students should follow the policy outlined in the University Senate Rules and Regulations, Section 2, article 2.27, and contact the department or program for more information.

### Anatomy and Cell Biology Courses

**ANTM 380. Special Topics In Anatomy. 1-5 Credits.**

Advanced instruction is offered in the form of tutorials for a limited number of undergraduate students with prior experience in anatomical sciences. The emphasis of the course will be advanced study of a specific area of gross anatomy, neuroanatomy, or histology. In gross anatomy and neuroanatomy, students will do a complete, detailed dissection of a specific area of the body and present it to the faculty with a term paper on a clinically significant aspect of the dissection. In histology, students will prepare specific organs for special histological and immunocytochemical techniques with an oral presentation and term paper. Prerequisite: Permission of instructor.

### Clinical Lab Sciences Courses

**CLS 210. Introduction to Clinical Laboratory Sciences. 1 Credits.**

An introductory overview of the professions of Clinical Laboratory Sciences including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in the Clinical Laboratory Sciences to have a clear definition of the professions. (Same as BIOL 210.)

**CLS 520. Phlebotomy. 1 Credits.**

Principles and practice of collecting blood specimens for clinical laboratory analyses. Includes specimen identification, equipment, anticoagulants, safety precautions, specimen transport, and processing. Hepatitis immunization required. Prerequisite: Admission to the Clinical Laboratory Science Program or consent of instructor.
CLS 523. Fundamentals of Analytical Techniques Laboratory. 3 Credits.
This course, including lecture, recitation, and laboratory provides theory and hands-on practice of basic laboratory skills. Laboratory exercises include enhancement of skills needed for reagent preparation, pipetting of reagents and specimen, and test performance using a variety of assays (spectrophotometry, urinalysis etc.). Following the accurate collection of data in each experiment, students will analyze and interpret data applying the appropriate analytic/statistical tools, evaluate results for validity, and justify their conclusions. The theory underlying accuracy and precision in laboratory testing (quality control and quality assurance) will be included. Basic laboratory mathematics, method validation, and problem-solving strategies will be emphasized. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 530. Clinical Chemistry I. 3 Credits.
Introduction to human physiology and pathophysiology I with emphasis on proteins, carbohydrates, lipids, enzymes, liver & kidney function, blood gases and body fluids. The related clinical chemistry tests, their principles, analysis, interpretation, and significance are included. Prerequisite: CLS 523 or consent of instructor.

CLS 532. Clinical Microbiology I. 3 Credits.
Pathogenesis and disease processes of pathogenic, opportunistic, and saprophytic bacteria; composition and preparation of media; sterilization and disinfection; antimicrobial agents and susceptibility testing; topics related to theory and applications. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 533. Clinical Microbiology I Laboratory. 2 Credits.
A laboratory with recitation addressing diagnostic procedures used for isolation and identification of clinically significant bacteria. Prerequisite: CLS 532 or CLS 532 concurrently, or consent of the instructor.

CLS 536. Hematology I. 3 Credits.
Fundamentals of hemopoiesis; the physiology, function, and cytochemistry of normal and abnormal blood cells; the theory and performance of clinical laboratory methods related to these parameters. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 537. Hematology I Laboratory. 2 Credits.
A laboratory with recitation emphasizing basic hematologic techniques and identification of normal and abnormal cells in peripheral blood and bone marrow. Prerequisite: CLS 536, or CLS 536 concurrently, or consent of the instructor.

CLS 538. Immunology. 3 Credits.
Covers basic theory of molecular and cellular immunity of innate and adaptive immune systems. Lectures include: structure and function of antibodies, complement, major histocompatibility complexes, B- and T-cells and their receptors, cellular and molecular basis of the immune response and immune regulation, hypersensitivity, and immune tolerance. Clinical applications and methodologies will be incorporated into lectures. Prerequisite: Admission to the Department of Clinical Laboratory Sciences or consent of instructor.

CLS 540. Clinical Chemistry II. 2 Credits.
Introduction to human physiology and pathophysiology II with emphasis on hormones, therapeutic drugs, clinical toxicology, tumor markers, vitamins and trace elements. The related clinical chemistry tests, their principles, analysis, interpretation, and significance are included. Prerequisite: CLS 530 or consent of instructor.

CLS 541. Professional Development. 2 Credits.
This course combines lectures and projects to give students an introduction to and practice in the following: resume writing and interviewing skills; the components of and the production of a scholarly product; the basic principles involved in education with the identification and writing of educational objectives; the activities and responsibilities involved in laboratory management. Prerequisite: CLS 520 - CLS 549 or consent of instructor.

CLS 542. Clinical Microbiology II. 2 Credits.
Pathogenesis, disease processes, and diagnostic protocols for parasites, medically important fungi and mycobacteria. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 543. Clinical Microbiology II Laboratory. 2 Credits.
A laboratory with recitation addressing diagnostic procedures used for isolation and identification of parasites, medically important fungi, and mycobacteria. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 544. Immunohematology I. 3 Credits.
Principles of immunohematology as applied to transfusion services, donor services, component preparation and storage, and transfusion therapy. Includes problem solving for transfusion related situations and evaluation of problems related to hemolytic disease of the newborn, autoimmune hemolytic disorders, and transfusion reactions. Prerequisite: BIOL 503 or CLS 538, CLS 546, or consent of instructor.

CLS 545. Immunohematology I Laboratory. 2 Credits.
Principles of immunohematology as applied to transfusion services, donor services, component preparation and storage, and transfusion therapy. Includes problem solving for transfusion related situations and evaluation of problems related to hemolytic disease of the newborn, autoimmune hemolytic disorders, and transfusion reactions. Prerequisite: BIOL 503 or CLS 538, CLS 546, or consent of instructor.

CLS 546. Hematology II. 3 Credits.
Lectures on hemopoiesis, the physiology, function, and cytochemistry of normal and abnormal blood cells, normal and abnormal hemostasis, and the theory and performance of laboratory methods related to these parameters. Prerequisite: CLS 536 and CLS 537 or consent of instructor.

CLS 547. Hematology II Laboratory. 2 Credits.
A laboratory with recitation involving performance of hematology laboratory procedures with emphasis on basic hematologic and coagulation techniques and the identification of normal and abnormal cells in the peripheral blood and bone marrow. Prerequisite: CLS 536, CLS 537 and CLS 546 or CLS 546 concurrently, or consent of the instructor.

CLS 549. Clinical Immunology I Laboratory. 2 Credits.
A laboratory with recitation involving performance of immunooassays. Emphasis on theory, methodologies, and clinical correlations. Prerequisite: CLS 523, BIOL 503 or CLS 538, or consent of instructor.

CLS 560. Introductory Biochemistry. 3 Credits.
An introduction to the chemistry and metabolism of carbohydrates, lipids, proteins, nucleic acids, and other biologically important molecules. Topics include cellular processes, reactions and interactions occurring in living organisms. Prerequisite: Admission to the Department of Clinical Laboratory Sciences or consent of instructor.

CLS 605. Introduction to Molecular Diagnostics I. 1 Credits.
An introduction to molecular biology and molecular biological methodologies and technologies commonly used in basic, applied, and diagnostic laboratories. An emphasis is placed on molecular biology principles and techniques used in the clinical laboratory for diagnosis, prognosis, and treatment of disease. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 607. Introduction to Molecular Diagnostics I Laboratory. 1 Credits.
An introduction to molecular diagnostic methodologies and technologies commonly used in clinical laboratories. Principles and performance of nucleic acid isolation, restriction enzyme digestion, electrophoresis, amplification, hybridization, and analysis. Applications in infectious and genetic disease. Prerequisite: Admission to the Clinical Laboratory Science program or Cytotechnology program or consent of the instructor.

CLS 608. Introduction to Advanced Biotechniques. 0 Credits.
A lecture course introducing the theory behind a variety of current molecular, biochemical and immunologic techniques utilized in molecular research and diagnostic laboratories. Course content is continued in CLS 610, Advanced Biotechniques Lecture. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 609. Introduction to Advanced Biotechniques Laboratory. 0 Credits.
Introductory laboratory course with practical application of selected molecular, biochemical, and immunologic techniques. Course content is continued in CLS 611, Advanced Biotechniques Laboratory. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 610. Advanced Biotechniques Lecture. 3 Credits.
A lecture course covering the theory behind a variety of current molecular, biochemical and immunologic techniques utilized in today’s research and diagnostic laboratories. Material presented will include proper specimen preparation and handling; technique set-up and quality control; trouble shooting and technique modification. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 611. Advanced Biotechniques Laboratory. 2 Credits.
Laboratory course with practical application of selected molecular, biochemical, and immunologic techniques. Designed to provide limited experience with protein purification and analysis techniques, electrophoresis techniques, nucleic acid analysis and manipulation. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 621. Biotechnology Methodologies Practicum. 4 Credits.
Placement of the student in clinical laboratories performing molecular diagnostic techniques for the analysis of infectious diseases, hereditary conditions, or acquired genetic conditions. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 622. Problems in Molecular Diagnostics. 2 Credits.
Provides a targeted review of current theory, techniques and application of molecular techniques in the diagnosis of infectious disease, and hereditary and acquired genetic disease. Prerequisite: Admission to the Clinical Laboratory Science or Cytotechnology program, or consent of instructor.

CLS 623. Molecular Genetics Practicum. 4 Credits.
Placement of the student in a molecular genetics research laboratory (utilizing either prokaryotic or eucaryotic organisms or both) working with laboratory staff on an on-going small project within the laboratory. Molecular genetics laboratories utilized could be involved in, but not restricted to, any of the following activities: gene sequencing, cloning or splicing; elucidation of the mechanisms that regulate gene expression; proto-oncogene activation. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 633. Special Topics Practicum. 4 Credits.
Placement of the student in any of a variety of research laboratories actively participating in molecular biological projects utilizing advanced genetic, biochemical immunologic, or other molecular techniques. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 638. Clinical Competency Review. 0 Credits.
This review will enable students to identify areas of weakness in their understanding of clinical laboratory science in preparation for clinical rotations. Students will participate in Blackboard-based and in-person laboratory sessions in order to evaluate their performance in meeting required competencies. Prerequisite: CLS 520-CLS 549 inclusive, CLS 605, CLS 607, or consent of instructor.

CLS 639. Urinalysis. 1 Credits.
Tutorial instruction and clinical laboratory experience in urinalysis with the application of knowledge and skills to methodology, instrumentation, and quality control. Advanced content on renal disorders with emphasis on pathological mechanisms, interpretation, and clinical correlation of test results. Prerequisite: CLS 540, or consent of instructor.

CLS 640. Clinical Chemistry III and Immunology II. 2 Credits.
Tutorial instruction in the chemistry of body fluids and immune function focusing on correlation of chemical and immunological analyses to disease states. Addresses organ system disease, metabolic disease, and other special topics. Prerequisite: CLS 540 and CLS 549, or consent of instructor.

CLS 641. Clinical Chemistry and Immunology Practicum. 3 Credits.
Tutorial instruction and clinical laboratory experience in the chemistry of body fluids, with the application of knowledge and skills to methodology, instrumentation, and quality control. Involves correlation of chemical and immunological analyses to pathophysiology. Prerequisite: CLS 540 and CLS 549, or consent of instructor.

CLS 642. Clinical Microbiology III. 2 Credits.
Tutorial instruction addressing pathophysiology and diagnostic protocols of viruses, rickettsia, chlamydia, mycoplasma, and other unusual organisms. Prerequisite: CLS 532, CLS 533, CLS 542 and CLS 543, or consent of instructor.

CLS 643. Clinical Microbiology Practicum. 3 Credits.
Tutorial instruction and clinical laboratory experience in diagnostic microbiology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisite: CLS 532, CLS 533, CLS 542 and CLS 543, or consent of instructor.

CLS 644. Immunohematology II. 1 Credits.
Tutorial instruction addressing advanced transfusion medicine theory and concepts. Focuses on hospital transfusion services, blood utilization, management, legal and regulatory issues, and special topics. Prerequisite: CLS 544 and CLS 545, or consent of instructor.

CLS 645. Immunohematology Practicum. 2 Credits.
Tutorial instruction and clinical laboratory experience in transfusion medicine, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisite: CLS 544, CLS 545, or consent of instructor.

CLS 646. Hematology III. 2 Credits.
Tutorial instruction on hematologic and hemorrhagic disorders with emphasis on pathological mechanisms, interpretation, and clinical correlation of test results. Prerequisite: CLS 546 and CLS 547, or consent of instructor.

CLS 647. Hematology Practicum. 3 Credits.
Tutorial instruction and clinical laboratory experience in hematology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisite: CLS 546 and CLS 547, or consent of instructor.
CLS 650. Clinical Laboratory Science Review. 0 Credits.
Review of the clinical laboratory science body of knowledge in preparation for, and culminating in the BS in CLS - Clinical Concentration comprehensive examination. Prerequisite: CLS 520-CLS 549 inclusive, CLS 605, CLS 607, CLS 661, and CLS 639-CLS 647 inclusive, or consent of instructor.

CLS 655. Molecular Biotechnology Review. 0 Credits.
Review of the clinical laboratory science body of knowledge in preparation for, and culminating in the BS in CLS - Molecular Biotechnology Concentration comprehensive examination. Prerequisite: CLS 520-CLS 549 inclusive, CLS 605-CLS 633 inclusive, and CLS 661 or consent of instructor.

CLS 661. Management Principles in Health Care. 2 Credits.
Introduction to basic principles of management and their application in the current health care environment at they pertain to the clinical laboratory. Course content includes: management theory, scope of management, quality issues, budgeting, personnel issues, evaluation and application of management concepts, introductory research methods. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 690. Special Topics. 1-5 Credits.
A course of study offering the student the opportunity for acquisition of additional knowledge and skills in one of the clinical laboratory routine areas or a specialty area, e.g., cytogenetics, metabolic analysis, or supervision; or at another clinical site. Course requirements designed in cooperation with student. Prerequisite: Admission to the Clinical Laboratory Science program or consent of instructor.

CLS 710. Molecular Techniques I. 2 Credits.
A lecture course covering the theory underlying molecular techniques involving nucleic acids and mammalian cell culture. Topics include purification and analysis of nucleic acids, recombinant DNA, construction and screening of genetic libraries, genetic engineering, control of gene expression, construction of gene fusions, amplification, hybridization, and nucleic acid databases and bioinformatic analysis. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor.

CLS 711. Molecular Techniques Laboratory I. 2 Credits.
A laboratory course emphasizing the application, practice, and troubleshooting of molecular techniques involving nucleic acids and mammalian cell culture. Topics include purification and analysis of nucleic acids, recombinant DNA, genetic engineering, control of gene expression, construction of gene fusions, amplification, hybridization. Topics are covered through a project-based approach. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor.

CLS 720. Molecular Techniques II. 2 Credits.
Lecture and discussion course covering the theory and practice of molecular techniques for protein analysis. General topics include: protein detection, quantification, and characterization; protein separation and identification; protein expression systems; protein extraction, fractionation, solubilization and purification; analysis of protein-protein interactions; proteomics; and mass spectroscopy. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor.

CLS 721. Molecular Techniques Laboratory II. 2 Credits.
Laboratory course for the practice and application of molecular techniques for analyzing and manipulating proteins. Techniques will include: bioinformatics analyses; expression, purification and solubilization of epitope tagged fusion proteins, protein-protein interactions; protein quantification; protein separation by electrophoresis and column chromatography; protein detection by chemical and immunological methods; and LC-MS. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor.

CLS 730. Current Issues in Biotechnology. 1 Credits.
A seminar course that address topics including scientific, business, legal, social, and ethical issues in biotechnology. Students explore these topics through literature discussions, student presentations, and discussions with speakers from biotechnology-related academic and industry sectors. This course is meant for graduate students in the Molecular Biotechnology program. Prerequisite: Consent of instructor.

CLS 740. Journal Club. 1 Credits.
This course is an introduction to the critical reading of journal articles from the current literature in molecular biotechnology. Discussions will emphasize the analysis of experimental design and technique, as well as the significance of the results and validity of the author's conclusions. Students will learn how to search for articles and background information pertaining to selected topics, an how to present a polished, professional summary of that literature. Assigned papers for discussion and student presentations will focus on new strategies and technologies in molecular biotechnology of wide fundamental importance, or on hypothesis-based research that uses molecular biotechnological approaches. Prerequisite: Completion of (or concurrent enrollment in ) CLS 710 and CLS 720.

CLS 742. Scientific Writing. 1 Credits.
Formats, techniques, and styles of scientific writing. Emphasis will be placed on clear, concise, and effective writing. The class will focus on the process of writing scientific manuscripts and grant proposals. Students will identify and define the sections of scientific manuscripts as well as grant proposals. During the course, each student will write an R21-type (NIH Exploratory/Developmental Research Grant) proposals as could be submitted to the most appropriate NIH Institute. This course is intended for students enrolled in their final semester of the Master of Science in Molecular Biotechnology program. Prerequisite: Consent of Instructor

CLS 744. Topics in Molecular Biotechnology. 1-5 Credits.
Advanced course on special topics in molecular biotechnology, offered by arrangement. May include lectures, discussions, readings, laboratory techniques, and supervised research experience. This course is intended for graduate students in the Molecular Biotechnology program. Prerequisite: Consent of instructor.

CLS 750. Practicum I. 4 Credits.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 751 (Practicum II) and CLS 752 (Practicum III). Prerequisite: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor.

CLS 751. Practicum II. 5 Credits.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 750 (Practicum I) and CLS 752 (Practicum III). Prerequisite: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor.

CLS 752. Practicum III. 5 Credits.
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend
their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 750 (Practicum I) and CLS 751 (Practicum II). Prerequisite: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor.

Clinical Lab Sciences Courses

DCLS 800. DCLS Advanced Topics. 1 Credits.
Seminar course that addresses topics and issues relevant to DCLS clinical practice, including ethical and social issues in healthcare practice, health informatics, and communication techniques needed for interaction with healthcare colleagues and patients. Repeatable. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 802. Principles of Healthcare Education. 3 Credits.
This course will address various aspects of teaching in healthcare settings. This includes educating patients and their families, educating other healthcare professionals, and the more formal area of undergraduate and graduate education. Education theory, pedagogical methods, educational resources, learning objectives, and evaluation techniques applicable to each type of educational situation will be addressed. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 805. Advanced Molecular Diagnostics. 2 Credits.
This course focuses on the enhancement of scientific and technical knowledge in nucleic acid-based testing for the diagnosis of acquired and hereditary genetic disorders, and infectious diseases. Topics include an in-depth review of the theory of molecular techniques and the application of these techniques in inherited disorders, oncology, infectious disease, pharmacogenetics, histocompatibility, identity determination, and genomics. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 815. Research Methods in Clinical Laboratory Sciences. 2 Credits.
A discussion of research methods used in clinical laboratory sciences, with an emphasis on selecting and applying appropriate research designs. Includes an overview of the research methods and various approaches in current use in clinical laboratory science; focused on research question formulation; internal and external validity of research; variable measurement and reliability, and generalizability of findings. Specific approaches covered include non-experimental, experimental and quasi-experimental designs, epidemiologic methods (e.g., cohort and case-control studies), survey research, and qualitative research. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 820. Evidence Based Practice. 3 Credits.
Evidence-Based Practice (EBP) encompasses Evidence-Based Medicine and Evidence-Based Laboratory Medicine. EBP is a problem-based approach to decision making using research evidence combined with clinical expertise, the patient's values, circumstances, and the clinical context. This course addresses the historical development of EBP, why using EBP in clinical decision making improves patient care, when and how to implement and use EBP in clinical decision making, and how to discuss the EBP finding with patients, family members, and other healthcare practitioners. Evaluating research studies for their applicability to EBP and designing research studies based on clinical evidence focused on laboratory testing will make up most of the course content, activities, and assignments. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 828. Advanced Immunology and Transplant. 3 Credits.
This course focuses on enhancement of scientific and technical knowledge in clinical immunology and transplantation in order to consult with other healthcare practitioners on clinical applications and diagnostic and therapeutic testing of immune-mediated diseases. Topics include autoimmunity, hypersensitivity, immunotherapy and immunotoxicology, transplantation and HLA testing/compatibility, cancer immunology and immunodeficiency. This course also includes test methodologies in cellular, humoral, and molecular immunology, selection and interpretation of test results, and recommendations for follow-up testing for patient monitoring. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 830. Advanced Clinical Chemistry. 3 Credits.
This course focuses on in depth physiology and pathophysiology together with the principles of current and emerging chemistry tests. Emphasis on the correlation between chemistry tests and disease states, interpretation and limitations of chemistry test results. Current clinical chemistry literature, clinical scenarios, case studies, and advanced laboratory practice issues will be used to enhance knowledge and skills. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 836. Advanced Hematology. 3 Credits.
This course focuses on enhancement of scientific and technical knowledge in hematology and hemostasis to consult with other healthcare practitioners on the selection of screening and diagnostic tests for hematological disorders, interpretation of results, and recommendations for follow-up testing. Topics to be investigated include physiology and regulation of the hematopoietic system and hemostasis, and the genetic, molecular and cellular mechanisms underlying the pathophysiology of selected hematological disorders such as anemias, leukemias, lymphomas, and disorders of hemostasis with additional focus on utilization of appropriate hematology, hemostasis, and molecular diagnostic tests, and reducing turn-around time. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 838. Advanced Immunology and Transplant. 3 Credits.
This course focuses on enhancement of scientific and technical knowledge in clinical immunology and transplantation in order to consult with other healthcare practitioners on clinical applications and diagnostic and therapeutic testing of immune-mediated diseases. Topics include autoimmunity, hypersensitivity, immunotherapy and immunotoxicology, transplantation and HLA testing/compatibility, cancer immunology and immunodeficiency. This course also includes test methodologies in cellular, humoral, and molecular immunology, selection and interpretation of test results, and recommendations for follow-up testing for patient monitoring. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 842. Advanced Clinical Microbiology. 3 Credits.
Course Description: This course focuses on enhancement of scientific and technical knowledge in clinical microbiology necessary for consultation with other healthcare practitioners for (i) the selection of screening and diagnostic tests for suspected infectious diseases, (ii) interpretation of results, and (iii) recommendations for follow-up testing. Topics to be investigated include utilizing molecular diagnostic tests, antimicrobial susceptibility testing and resistance mechanisms, bioterrorism, biofilms, opportunistic and emerging infections, utilization of appropriate microbiology tests, evidence based practice in clinical microbiology, and reducing turn-around time. Current scientific literature, clinical scenarios, case studies, and advanced laboratory practice issues will be used to enhance knowledge and skills. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.
DCLS 844. Advanced Immunohematology. 3 Credits.
This course will explore advanced blood banking theory and transfusion medicine concepts pertaining to basic-to-advanced serological testing techniques, blood product utilization, molecular immunohematology testing methods, quality assurance, and other relevant topics. Learners will be re-introduced to specialized blood banking procedures including (but not limited to) the following: ABO/Rh, antibody screens, antibody identification, fetal screen, elutions, phenotyping, and crossmatching. Using case studies and discussion, learners will correlate laboratory data to clinical disease processes encountered in transfusion medicine. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 851. Clinical Correlations I. 3 Credits.
Course Description: This course will correlate clinical presentation and laboratory testing as it relates to physiological changes associated with select diseases of major organ systems (e.g., endocrine, muscle, cardiovascular, respiratory, renal, gastrointestinal, immune, nervous, and reproductive). Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program or instructor permission.

DCLS 852. Clinical Correlations II. 3 Credits.
This course will complement CLS851 Clinical Correlations I and will correlate clinical laboratory testing as it relates to physiological changes associated with patient symptomology (e.g., chest pain, shortness of breath, unresponsiveness, fever of unknown origin, jaundice) and treatment in a consultation model. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program or instructor permission.

DCLS 880. Principles of Interprofessional Education and Practice Theory. 1 Credits.
An introductory course to core competencies in interprofessional education and practice for healthcare teams including roles and responsibilities, values and ethics, teamwork, communication, and collaborative practice as it relates to the improvement of patient safety outcomes and the provision of quality patient care. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 881. DCLS Interprofessional Practice. 1 Credits.
This course is designed for DCLS program students to apply core competencies in interprofessional practice for healthcare teams including roles and responsibilities, values and ethics, teamwork, communication, and collaborative practice via participation in interprofessional activities. Prerequisite: Successful completion of DCLS 880 and admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 890. Advanced Laboratory Operations. 3 Credits.
This course will explore laboratory quality, utilization, accreditation, regulation, and management topics. Core course content explores the selection, implementation, strengths, and weaknesses of appropriate quality assurance programs to maintain desired quality goals. All aspects of laboratory services will be explored to enhance consultative skills that will be applied in the clinical residency. The use of practice guidelines, critical or clinical pathways, algorithms and reflex testing, direct access testing, evidenced-based practice, and outcomes measurements, as well as initiatives to change the practice of laboratory services in all phases (pre-analytical, analytical, and post-analytical) are covered. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 899. Independent Study. 1-3 Credits.
Faculty-guided, student-directed individualized study for students enrolled in the DCLS program who need additional enrollment associated with their plan of study. The specific course requirements are to be described in the Independent Study proposal form to be completed by the student and approved by the faculty mentor and DCLS Program Director prior to enrollment. Can be repeated for credit. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program.

DCLS 901. DCLS Research I. 2 Credits.
Research I is part of a three-course series (DCLS 901, DCLS 902, DCLS 903) taken consecutively. The goal of DCLS 901 is to initiate the development of a research project by preparing a formal written research proposal that includes selecting a topic, reviewing current literature, preparing and submitting an IRB approval, and other activities required to begin data collection. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program.

DCLS 902. DCLS Research II. 3 Credits.
Research II is part of a three-course series (DCLS 901, DCLS 902, DCLS 903) taken consecutively. The goal of DCLS 902 is to continue the work begun in DCLS 901 by initiating data collection, analyzing and interpreting the data collected, beginning the writing of a manuscript draft, and other activities required to move the research project forward. Prerequisite: Satisfactory completion of DCLS 901.

DCLS 903. DCLS Research III. 3 Credits.
Research III is part of a three-course series (DCLS 901, DCLS 902, DCLS 903) taken consecutively. The goal of DCLS 903 is to complete the project begun in DCLS 901 and DCLS 902 by finalizing the analysis and interpretation of the data collected and develop a defendable conclusion regarding the research hypothesis. Completion of a final draft of the manuscript describing the research project and outcomes is the culmination of this course. Prerequisite: Satisfactory completion of DCLS 902.

DCLS 911. Clinical Residency I. 4 Credits.
The first of a three-course series (DCLS 911, DCLS 912, DCLS 913) providing a structured and supervised experience correlating coursework with practice. Designed to develop the DCLS student to meet national professional responsibilities. Students work with management, laboratory staff, physicians, nurses, and other members of the healthcare team to provide guidance in laboratory utilization and interpretation to optimize patient outcomes. Requires 14-16 weeks of full-time placement at a program affiliate. Prerequisite: Permission of instructor.

DCLS 912. Clinical Residency II. 5 Credits.
The second of a three-course series (DCLS 911, DCLS 912, DCLS 913) providing a structured and supervised experience correlating coursework with practice. Designed to develop the DCLS student to meet national professional responsibilities. Students work with management, laboratory staff, physicians, nurses, and other members of the healthcare team to provide guidance in laboratory utilization and interpretation to optimize patient outcomes. Requires 14-16 weeks of full-time placement at a program affiliate. Prerequisite: Permission of instructor.

DCLS 913. Clinical Residency III. 5 Credits.
The third of a three-course series (DCLS 911, DCLS 912, DCLS 913) providing a structured and supervised experience correlating coursework with practice. Designed to develop the DCLS student to meet national professional responsibilities. Students work with management, laboratory staff, physicians, nurses, and other members of the healthcare team to provide guidance in laboratory utilization and interpretation to optimize patient outcomes. Requires 14-16 weeks of full-time placement at a program affiliate. Prerequisite: Permission of instructor.

DCLS 999. DCLS Capstone. 1 Credits.
The capstone is completed during the final semester of the program and consists of a written manuscript and an oral examination. The manuscript, suitable for publication, is based on the research developed and completed during the research course series DCLS 901, 902, and
Dietetics and Nutrition Courses

**DIET 660. Management of Human Resources in Dietetics. 6 Credits.**

Focus on human resource development and utilization as the student works with food service personnel. Learning encompasses recruiting, training, supervision, and evaluation of employees in a food service system. Open only to seniors majoring in dietetics. Prerequisite: Management concepts or personnel administration.

**DIET 661. Management of Food Processing and Service. 6 Credits.**

Application of theories and concepts pertaining to management functions and interdepartmental relationships in a variety of clinical food service settings. Consideration is given to the newer technological developments in the administration of food services. Open only to seniors majoring in dietetics. Prerequisite: Food service systems and management in dietetics.

**DIET 662. Special Problems in Food Service Management. 3 Credits.**

Advanced experience in the practice of dietetics in an assigned setting. Problems and procedures will vary with interest and needs of the students. Open only to seniors majoring in dietetics. Prerequisite: Food service systems.

**DIET 672. Nutrition Care of Patients. 6 Credits.**

Directed observation and supervised experience in nutritional care of patients. Nutrition principles studied in DIET 670, Applied Normal Nutrition, and DIET 671, Nutrition in Medical Science, are applied in clinical situations. Open only to seniors majoring in dietetics. Prerequisite: Principles of nutrition; and nutrition throughout the life cycle.

**DIET 675. Seminar in Dietetics and Nutrition. 1 Credit.**

Involves study and discussion of text and general materials pertaining to philosophy and methodology in the field of dietetics and nutrition. Guest lecturers will participate. May be repeated for credit providing no course duplication takes place. Open only to seniors majoring in dietetics. Prerequisite: Introduction to dietetics.

**DIET 800. Selected Topics in Dietetics. 1-3 Credits.**

An elective course to allow student credit hours in special issues or problems in dietetics offered by individual faculty. Course content can provide students with investigation of problems and/or issues relevant to theory, research investigation and/or practice related to the field of nutrition and dietetics.

**DIET 801. Current Issues or Trends. 3 Credits.**

Review of current issues in the economic, social, ethical, political, legal, technological, and ecological environments and the effects of these changes on dietetics practice.

**DIET 802. Foods Writing for Professionals. 3 Credits.**

A course focusing on the writing skills needed by the food professional in order to communicate effectively in writing about food and food-related topics. Student experiences include hands-on projects in research and writing for various audiences and types of publications.

**DIET 803. Accounting Concepts & Analysis. 3 Credits.**

An emphasis on financial statement analysis is the main objective of the course. A review of all major accounts in the income statement, balance sheet and statement of cash flow is made in determining a firm's performance and financial condition in relation to what matters most to shareholders and investors. Prerequisite: General Calculus and Linear Algebra

**DIET 805. Entrepreneurship Theory and Practice. 3 Credits.**

Development and management of small businesses or private practice within the dietetics industry. Business plan development, marketing, cost considerations. Overview of consulting to health care and hospitality operations and examination of skills required for success.

**DIET 819. Grant and Scientific Writing for the Professional. 3 Credits.**

Grant writing, identifying external funding, managing grants, preparing manuscripts for peer-reviewed publication, and preparing papers and poster for presentation at professional meetings. Prerequisite: Enrolled GPIDEA.

**DIET 822. Healthcare Administration. 3 Credits.**

A comprehensive review of today's health care institutions and their response to the economic, social/ethical, political/legal, technological, and ecological environments.

**DIET 824. Financial Management and Cost Controls in Dietetics. 3 Credits.**

This course overviews the fundamental knowledge of financial management, managerial accounting, and operational cost controls for dietetics professionals. Topics include a review of managerial accounting concepts for not-for-profit organizations and for-profit organizations based on the Uniform System of Accounts, value and risk analyses, budgeting, asset management, franchising and management contracts, cost-volume-profit analyses, and operational applications for financial performance.

**DIET 829. Nutrition and Aging. 3 Credits.**

An overview of nutrition and the aging process. Physiological, psychological, and sociological aspects of aging, theories of aging, internal and external factors related to nutrient intake, and nutrient needs will be considered. Physical activity and practical application to community settings is addressed.

**DIET 830. Nutrition: a Focus on Life Stages. 3 Credits.**

The influence of normal physiological stresses on nutritional needs throughout the life span will be explored. Evaluating nutritional status at different stages of life and identifying appropriate needs and services will be included while, at the same time, consideration given for specific characteristics such as physiological condition and cultural heritage.

**DIET 832. Functional Foods for Chronic Disease Prevention. 3 Credits.**

Integrate and evaluate the regulatory principles, food science, nutrient science and nutritional metabolism for the development of functional foods, nutraceuticals, and dietary supplements for chronic disease prevention. Prerequisite: Biochemistry, Human Nutrition, Basic Food Science or consent of instructor.

**DIET 833. Principles of Statistics. 3 Credits.**

A basic course in statistics: Statistical methods applied to experimental and survey data from social or natural sciences; test of hypotheses concerning treatment means; linear regression; product-moment, rank, and bi-serial correlations; contingency tables and chi-square tests.

**DIET 834. Methods of Research in Nutrition. 3 Credits.**

A study of basic research terminology and designs commonly used in nutrition research. Topics include: research on animals, tissue culture and human subjects; qualitative, quantitative and outcomes research; ethical
issues in research; dissemination of research findings; and appropriate use of research findings. Prerequisite: Consent of instructor.

**DIET 835. Nutritional Epidemiology. 3 Credits.**
This course emphasizes the important issues related to designing, conducting, and interpreting research on the role of diet or physical activity in the development of disease (& health) in human populations. Prerequisite: DIET 833 Statistics or Permission of Instructor.

**DIET 836. Biochemical, Physiological, and Genetic Aspects of Human Nutrition. 3 Credits.**
The topics covered will examine the integration of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the combination cellular structure and function is related to the metabolic needs of the cell and its response to the environment. The integrated approach will form a basis for evaluating nutritional needs in humans. Prerequisite: courses in nutrition, physiology, and biochemistry, or consent of instructor.

**DIET 837. Nutrition in Diabetes. 3 Credits.**
(3 hours) An in-depth study of diabetes management with emphasis in nutrition care. Topics will include diabetes pathophysiology, clinical care guidelines, basic pharmacology, clinical nutrition education and counseling strategies, and nutrition care planning. Prerequisite: A course in medical nutrition therapy or consent of instructor. Must be a student in the Great Plains IDEA degree program.

**DIET 838. Advanced Medical Nutrition Therapy. 3 Credits.**
This course will discuss the role of diet in disease including diet as a factor related to prevention of diseases or illness, diet as an etiologic agent in illness and diet as a treatment for disease. Medical nutrition therapy is the use of specific nutrition services to treat an illness, injury or condition and involves two phases: 1) assessment and 2) treatment, which includes diet therapy, counseling and/or the use of specialized nutrition supplements.

**DIET 839. Clinical Aspects of Nutrition Support. 3 Credits.**
The course content provides in depth study of specialized visceral and somatic nutrition assessment of the critically ill patient. Content includes extensive review of methods for determining energy expenditure and substrate utilization during specific disease states. Discussion of the aspects of feeding the critically ill patient including timing, enteral and parenteral feeding methodology, specialized medical foods, equipment requirements, feeding complications and prevention, and pharmacological issues. Students will be expected to calculate formulas for both types feeding modalities and provide discussion of the evidence based guidelines for administration of these nutrition therapies. Prerequisite: minimum of 3 cr hours in Medical Nutrition Therapy.

**DIET 840. Foundations of Leadership in Dietetics. 3 Credits.**
Study of the key issues in the theory, research and application of leadership in organizations. This includes defining leadership, understanding situational characteristics that facilitate/hinder effective leadership, understanding effective/dysfunctional leadership and gaining greater insight into one's own leadership style and functioning. Prerequisite: Must be admitted to the GPIDEA Program.

**DIET 841. International Nutrition and World Hunger. 3 Credits.**
Advanced study of the magnitude, cause, and nature of hunger and undernutrition in low income countries; emphasis on programs, policies and planning directed toward alleviating hunger.

**DIET 842. United States Public Health Nutrition. 1-3 Credits.**
A study of US public health and nutrition concerns in diverse US populations, assessment of nutritional status in commonalities, health communication, nutrition policies and community based nutrition interventions. Exploration of the roles of dietitians, nutritionists, and others in developing and delivering nutrition policies and interventions in US communities. Prerequisite: Must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor.

**DIET 843. Nutrition Education in the Community. 3 Credits.**
Principles and practices of teaching individuals and groups to translate nutrition knowledge into action. Emphasis on research in and evaluation of nutrition education.

**DIET 844. Behavior Management Theory. 3 Credits.**
An in-depth analysis of the development of the behavioral basis of individual and group behavior in business, governmental, educational, and other organizations with emphasis on current research literature and applications.

**DIET 845. Nutritional Aspects of Oncology. 3 Credits.**
A course focusing on current research examining the role of nutrition in specific cancers. Topics include basic cancer biology, pathology and nutritional research methodology. Sources of information for cancer prevention programs and the application of translational research to clinical patient populations will be discussed.

**DIET 846. Nutrition and Wellness. 3 Credits.**
Course will address wellness promotion through nutrition. Nutritional risk and protective factors will be examined as they relate to public health and individual nutrition.

**DIET 850. Operations Management and Analysis. 3 Credits.**
The study of the role of operations systems in the provision of value for the customer. Operations systems design; capacity determination, resource requirements planning and control, theory of constraints, supply chain management, quality management and control and project management are discussed and analyzed. Prerequisite: Basic graduate statistics course

**DIET 854. Non-Thesis Research. 1-3 Credits.**
Directed study of special problems in nutrition or nutrition care. This course provides for the individual or group study of special problems. Through directed readings, investigations and projects, the student acquires information with reference to questions in dietetics and nutrition not covered in organized courses. This course fulfills the research requirements for the Non-Thesis Option.

**DIET 862. Maternal and Child Nutrition. 3 Credits.**
Critical examination of behavioral, physiological, and public health issues impacting dietary and nutritional factors that support normal growth and development. Course content focuses on the early stages of the life cycle: gestation, lactation, infancy, preschool, school age, and adolescence. Topics include the fetal programming hypothesis, growth and nutritional requirements, breast and formula feeding of infants, infant weaning, and eating behaviors that lead to normal growth, growth faltering, and pediatric obesity. Cross-listed with DN 862. Prerequisite: Registered Dietitian, or registry eligible dietitian.

**DIET 865. Nutrition and Human Performance. 3 Credits.**
This course is designed to develop an understanding of nutrition, based upon knowledge of the biochemical and physiological processes and functions of specific nutrients in meeting nutritional requirements. Emphasis will be placed upon the relationship of optimal nutrition and physical efficiency and performance.

**DIET 870. Nutrition Counseling and Education Methods. 3 Credits.**
Nutrition education for groups and individuals in clinical and community settings. Includes discussion and experience in applying learning theory, assessing educational needs, stating goals and objectives,
selecting learning activities, implementing and evaluating instruction, and documenting care provided.

**DIET 874. Nutrition Therapy for Eating Disorders. 3 Credits.**
An online study of eating disorders management and nutrition care. Topics will include eating disorders medical complications, clinical care guidelines, basic pharmacology, clinical nutrition education, nutrition care planning, psychology of eating disorders, team collaboration, and therapeutic modalities for nutrition counseling. Prerequisite: A course in medical nutrition therapy or consent of instructor.

**DIET 875. Pediatric Clinical Nutrition. 3 Credits.**
Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medicine conditions found in this population will be discussed including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems. Cross-listed with DN 875. Prerequisite: Registered Dietitian or registry eligible dietitian.

**DIET 876. Intervention for the Prevention & Management of Obesity. 3 Credits.**
This course emphasizes obesity in a population group ranging from childhood to the adult. Course materials will examine the impact of obese conditions on disease development throughout the life cycle. The course will critically analyze current evidence focused on interventions used in the behavioral and clinical management of overweight and obese individuals in community and clinical settings. Prerequisite: Consent of instructor.

**DIET 880. Dietary and Herbal Supplements. 3 Credits.**
Explore the safety and efficacy of botanical/herbal and dietary supplements in health applications including dietary supplementation in the prevention and treatment of chronic disease. Prerequisite: Human physiology is advisable.

**DIET 881. Phytochemicals. 3 Credits.**
The course is an overview on phytochemicals (non-nutritive biologically active compounds which may have health benefits) from fruits, vegetables, cereals and oils/seed. The course will include discussions of functional foods which are designer foods providing these compounds to the public. It will cover recent findings on chemistry, physiological functions, potential health implications of phytochemicals.

**DIET 885. Advanced Human Nutrition: Macronutrients. 3 Credits.**
Physiological and biochemical aspects of macronutrients metabolism and human nutrition. Prerequisite: Must be admitted to the GPIDEA Program.

**DIET 886. Advanced Nutrition: Nutrigenomics, Nutrigenetics and Advanced Lipid Metabolism in Human Nutrition. 3 Credits.**
This course integrates topics related to current biochemical issues in nutritional science. The course will examine topics ranging from the cellular, molecular, and biochemical aspects of nutritional science to translational and applied research at the clinical and educational level. The goal is to emphasize the integrative and complex nature of human nutrition research ranging from basic science to clinical studies to translational and applied studies.

**DIET 887. Nutrition and Immunology. 3 Credits.**
This course examines the mechanisms underlying the modulation of immune responses by nutritional, naturally occurring and orally active food compounds. The role of nutritional status and changes in the life stages which impact immune response impacting disease initiation and progression. Contributions of the GI system and changes in life stages impacting immunity and their relationship to immune response will be discussed.

**DIET 896. Micronutrients in Human Nutrition. 3 Credits.**
Interrelationships of micronutrients in terms of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the coordination of structure and function is related to the metabolic needs of the cell and its response to the environment. This integrated approach will form the basis for evaluating the micronutrient needs of humans in both normal and altered metabolic states.

**DIET 899. Thesis. 1-6 Credits.**
Scholarly essay based research, written under the guidance of the student's adviser. Credit given upon meeting thesis requirements for the master’s program.

**Dietetics and Nutrition Courses**

**DN 671. Nutrition in Medical Science. 6 Credits.**
Study of the science of medical nutrition therapy and evidence based practice in the nutritional management of disease during specific stages of the life cycle. Prerequisite: Consent of Instructor

**DN 796. Social and Cultural Aspects of Dietetics and Nutrition. 2-4 Credits.**
A study of the aspects of society, culture and personality related diet, food habits, and nutrition. The role of the community and its agencies will be considered. Includes field work. Prerequisite: Consent of instructor.

**DN 800. Selected Topics in Clinical Dietetics:_____ 1-6 Credits.**
A learner-centered, self paced study of topics in applied clinical dietetics. Independent modules are offered to address the science and art of nutritional care relating to specific issues to clinical dietetics. Topics will be grouped in various combinations to provide flexibility of choice. Students may enroll in one or more topics for a total of six credit hours. Prerequisite: By permission of instructor only.

**DN 810. Nutrition Assessment. 3 Credits.**
Methods and tools used in screening and assessment of nutritional status of individuals and population groups are studied. Assessment methodology includes dietary surveys, computerized dietary intake analysis, anthropometric measures, biochemical measures and clinical evaluations. Laboratory experiences are provided to allow students practice time for learning and applying assessment techniques. Prerequisite: Permission of instructor.

**DN 817. Seminar in Dietetics & Nutrition I. 1 Credits.**
Seminar designed to promote effectiveness of professional written and oral communication, increase knowledge of research, and review content information in selected topics in dietetics.

**DN 818. Seminar in Dietetics & Nutrition II. 1 Credits.**
To promote effectiveness of professional written and oral communication, to increase knowledge of research, and to review content information in selected areas in dietetics.

**DN 819. Scientific Writing for the Nutritional Sciences. 1 Credits.**
Research proposal preparation and / or scientific manuscript writing experience. This course will provide the student with an overview of the steps used in proposal writing and / or the steps in preparation of a scientific manuscript for publication.

**DN 820. Nutrition Education Skills for School Teachers. 3 Credits.**
This graduate level course will expand understanding of nutrition and healthy eating for classroom teachers and other professionals who work with children. The course has a special emphasis on child and adolescent nutrition and how to translate nutrition facts into classroom applications and school-based interventions. Course topics will include healthy food
choices, nutrition guidelines, nutrients, energy balance and weight, child and adolescent nutrition, and nutrition education in the classroom, school-based nutrition interventions, and measuring outcomes of nutrition interventions. Prerequisite: Student must be classroom teacher or consent of instructor.

DN 822. Management Dietetics & Nutrition I. 2 Credits.
Managerial skills in health care quality improvement and food service are practiced. Students are typically enrolled in DN 827 Practicum supervised practice experiences associated with the dietetic internship. Prerequisite: food service systems or commensurate practical experience.

DN 823. Management Dietetics & Nutrition II. 2 Credits.
Managerial style is related to food policy, financial benchmarking and applied nutrition practice. Students are typically enrolled in DN 827 Practicum supervised practice experiences associated with the dietetic internship. Prerequisite: food service systems or commensurate practical experience.

DN 825. Medical Nutrition Therapy I. 3 Credits.
Course content introduces the student into the concepts of an intermediate study of nutritional therapy of disease. Course content includes evidence-based practice in prevention and nutritional management of diseases. Patient assessment and medical chart documentation are covered. Elements of pathology and biochemistry of the nutrition-related problems are integrated into course topics. This course is designed for students enrolled in the dietetic internship, but students from other departments may enroll with consent of instructor. Prerequisite: Undergraduate coursework in nutrition, diet therapy, biochemistry and physiology or consent of instructor.

DN 826. Medical Nutrition Therapy II. 3 Credits.
Course content includes current nutrition theory and evidence-based practice in treatment of disease. Advanced therapies and patient management in nutrition support will be discussed. Course topics include parenteral nutrition, fluid and electrolyte management, liver diseases, cancer, gestational diabetes, and renal diseases. Elements of pathology and biochemistry of the nutrition-related problems are integrated into course topics. This course is designed for students enrolled in the dietetic internship, but students from other departments may enroll with consent of instructor. Prerequisite: Undergraduate coursework in nutrition, diet therapy, biochemistry and physiology; DN 825; or consent of instructor.

DN 827. Practicum in Dietetics and Nutrition. 1-10 Credits.
Supervised practice experience for graduate level students to fulfill the requirements for the Dietetic Internship. Experiences take place in hospitals, clinics, community health care agencies, and other practice settings in which dietetics and nutrition services are provided. Prerequisite: Admission to the graduate program, permission of dietetic internship director or course instructor.

DN 828. Clinical Education in Dietetics. 2-3 Credits.
A study of teaching methods appropriate for use in a clinical setting. Emphasis on development of instructional objectives, learning situations, and methods of evaluations to be used in clinical teaching in dietetics. Prerequisite: Consent of instructor.

DN 829. Nutrition and Aging. 3 Credits.
An overview of nutrition and the aging process. Physiological, psychological, and sociological aspects of aging, theories of aging, internal and external factors related to nutrient intake, and nutrient needs will be considered.

DN 830. Food Technology. 2-3 Credits.
Consideration of current food processing methods and the factors affecting the palatability and nutritive values of human foods. Course includes pertinent information regarding the protection of the food supply.

DN 834. Methods of Research in Nutrition. 3 Credits.
A study of basic research terminology and designs commonly used in nutrition research. Topics include: research on animals, tissue culture and human subjects; qualitative, quantitative and outcomes research; ethical issues in research; dissemination of research findings; and appropriate use of research findings. Prerequisite: Consent of instructor. Same as DIET 834.

DN 836. Biochemical, Physiological, and Genetic Aspects of Human Nutrition. 3 Credits.
The topics covered will examine the integration of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the combination cellular structure and function is related to the metabolic needs of the cell and its response to the environment. The integrated approach will form a basis for evaluating nutritional needs in humans. Prerequisite: courses in nutrition, physiology, and biochemistry, or consent of instructor. Same as DIET 836.

DN 837. Nutrition in Diabetes. 3 Credits.
(3 hours) An in-depth study of diabetes management with emphasis in nutrition care. Topics will include diabetes pathophysiology, clinical care guidelines, basic pharmacology, clinical nutrition education and counseling strategies, and nutrition care planning. Prerequisite: A course in medical nutrition therapy or consent of instructor.

DN 838. Advanced Medical Nutrition Therapy. 3 Credits.
This course evaluates current issues in medical nutrition therapy. Course content includes evidence based analysis, the role of diet in disease management including factors related to disease pathophysiology, nutritional assessment and medical nutrition management of specific disease states. Prerequisite: undergraduate medical nutrition therapy, biochemistry, physiology, or consent of the instructor. Same as DIET 838.

DN 839. Clinical Aspects of Nutrition Support. 3 Credits.

DN 840. Advanced Topics in Nutrition. 1-2 Credits.
Reading and preparation of a paper and/or oral presentation on a selected subject in nutrition. Prerequisite: Consent of instructor.

DN 841. International Nutrition. 1-3 Credits.
A study of global public health and nutrition concerns in various nations, assessment of nutritional status of diverse populations, international health and nutrition organizations, policies, and interventions. We explore the roles of dietitians, nutritionists, and others in creating and implementing international public health and nutrition policies and interventions. To enroll in the course, you must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor. Cross-listed with DIET 841.

DN 842. United States Public Health Nutrition. 1-3 Credits.
A study of US public health and nutrition concerns in diverse US populations, assessment of nutritional status in commonalities, health communication, nutrition policies and community based nutrition interventions. Exploration of the roles of dietitians, nutritionists, and others in developing and delivering nutrition policies and interventions in US communities. Prerequisite: Must be a student in the Graduate Certificate
Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor.

DN 854. Special Problems in Dietetics and Nutrition. 1-4 Credits.
Directed study of special problems in nutrition or nutrition care. This course provides for the individual or group study of special problems. Through directed readings, investigations, and projects, the student acquires information with reference to questions in dietetics and nutrition not covered in organized courses.

DN 857. Motivational Interviewing in Public Health Settings. 1 Credit.
The course is designed to introduce participants to Motivational Interviewing, its concepts, and to the subsequent skills required for helping people to change. This course will be cross-listed with PRVM 857.

DN 860. Collaboration Strategies in Health Care. 1 Credit.
Persuasion and negotiation techniques: skills to evaluate and promote collaboration and goal achievement in a multidisciplinary health care team; analysis of communication styles and strategies to achieve mutual beneficial outcomes.

DN 862. Maternal and Child Nutrition. 3 Credits.
Critical examination of behavioral, physiological, and public health issues impacting dietary and nutritional factors that support normal growth and development. Course content focuses on the early stages of the life cycle: gestation, lactation, infancy, preschool, school age and adolescence. Topics include the fetal programming hypothesis, growth and nutritional requirements, breast and formula feeding of infants, infant weaning, and eating behaviors that lead to normal growth, growth faltering, and pediatric obesity. Prerequisite: Consent of the instructor.

DN 865. Nutrition in Sports and Exercise. 3 Credits.
Gain a deeper understanding of exercise physiology and nutrient requirements in sports and exercise. Examine, discuss, and develop critical thinking skills in areas within sport and exercise nutrition such as exercise metabolism and general exercise periodization as well as energy, macronutrient, micronutrient and fluid needs of athletes engaged in specific sports. Learn and explore current scientific literature regarding body composition and nutrition supplementation in addition to reviewing eating disorders in athletes and evidence-based approaches to weight management in sport. Prerequisite: Biochemistry and/or exercise physiology class or permission of the instructor.

DN 870. Health Behavior Counseling. 3 Credits.
Theoretical and applied issues in health behavior counseling. Students will learn the theories of behavior change and how to apply these to health care issues. Specific health behaviors (i.e., dietary changes, smoking cessation, exercise adherence) will be discussed in the context of chronic disease for children, adults, and the elderly. Effective methods of counseling patients and promoting changes on an individual and small group basis will be presented.

DN 874. Nutrition Therapy for Eating Disorders. 3 Credits.
An online study of eating disorders management and nutrition care. Topics will include eating disorders medical complications, clinical care guidelines, basic pharmacology, clinical nutrition education, nutrition care planning, psychology of eating disorders, team collaboration, and therapeutic modalities or nutrition counseling. Prerequisite: A course in medical nutrition therapy or consent of instructor.

DN 875. Pediatric Clinical Nutrition. 3 Credits.
Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medical conditions found in this population will be discussed including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems.

DN 876. Intervention for the Prevention & Management of Obesity. 3 Credits.
This course emphasizes obesity in a population group ranging from childhood to the adult. Course materials will examine the impact of obese conditions on disease development throughout the life cycle. The course will critically analyze current evidence focused on interventions used in the behavioral and clinical management of overweight and obese individuals in community and clinical settings. Prerequisite: Consent of instructor. Same as DIET 876.

DN 880. Dietary and Herbal Supplements. 3 Credits.
Designed to develop the health professional’s skills in partnering with patients to make dietary supplement decisions. Students will investigate the use of botanicals and dietary supplements in nutritional support of aging, maternal health, and wellness. Discussion on supplementation in the prevention and treatment of chronic diseases will include: arthritis, cardiovascular, diabetes, digestive, liver and renal disorders, memory deficits, and ophthalmic dysfunctions. Prerequisite: Human physiology is advisable.

DN 881. Introduction to Dietetics and Integrative Medicine. 3 Credits.
Introduction to principles guiding integrative and functional Medical Nutrition Therapy; assessing, diagnosing, intervening, monitoring, and evaluating an individual client to restore function; focusing on the unique nutritional imbalances characteristic of chronic disease pathophysiology; supporting individuals with persistent symptoms; preventing chronic disease. Prerequisite: Introductory genetics, medical nutrition therapy, or consent of instructor.

DN 882. A Nutrition Approach to Inflammation and Immune Regulation. 3 Credits.
Inflammation and immune system dysregulation is common in chronic disease. The course presents the integrative nutrition approach to identify the underlying causes of inflammatory and immune-related conditions and associated nutritional influences; applies individualized nutritional interventions, as powerful modulators of the pathophysiology of inflammatory and immune responses. Prerequisite: Medical nutrition therapy, genetics or consent of instructor.

DN 884. Diet, Physical Activity & Cancer. 3 Credits.

DN 885. Nutritional Biochemistry. 3 Credits.
Course content facilitates the understanding of advanced biochemical principles applied to human nutrition. Topics include protein structure, bioenergetics, enzyme function, nutrient digestion, absorption and metabolism, metabolic regulation and intermediary metabolism, cellular signaling, and genomics encompassing nucleotide metabolism, gene expression and gene regulation. Prerequisite: Undergraduate biochemistry or consent of instructor

DN 890. Graduate Research. 1-4 Credits.
Individual investigation of special problems in dietetics and nutrition or hospital dietary administration approved by the student's advisor or advisory committee. Investigation involves original research.

DN 895. Advanced Macronutrients and Integrated Metabolism. 3 Credits.
Energy containing macronutrients and fiber presented from the perspective of their importance in human nutrition. Structural properties, digestion, absorption and metabolism are emphasized. Fuel utilization in response to food intake and exercise, cellular and whole-animal energetic and energy balance integrate metabolism. Students take an active role in presenting and discussing and exhibit advanced skills in analysis and presentation. Prerequisite: BCHM 702 or Equivalent.

DN 896. Advanced Micronutrients and Integrated Metabolism. 3 Credits.

Vitamins and minerals presented from the perspective of their requirements as nutrients for normal human physiological functions with emphasis on their underlying roles in structure, function and metabolism. Students take an active role in selecting, presenting and discussing recent published research and to exhibit advanced skills in analysis and presentation. Prerequisites BCHM 702 or equivalent.

DN 897. Micronutrient Research in Human Nutrition. 1 Credits.

This course requires students to design a research study on a vitamin or mineral. Students submit a written proposal and present it orally and defend the proposal in class. Students will be evaluated on the basis of plausibility, feasibility and originality of the proposed research. Co-require DN 896. Prerequisite: Consent of Instructor.

DN 899. Thesis. 1-6 Credits.

Scholarly essay based on research, written under the guidance of the student's advisor. Credit given upon meeting thesis requirements for the master’s degree. Prerequisite: Consent of advisor.

DN 900. Techniques in Nutrition Research. 3 Credits.

A series of seven laboratory modules emphasizing quantitative methods and experimental analysis. The series of modules will be team taught by departmental faculty. Each module requires data collection, data analysis, and written interpretation and report. Instrumentation, dietary assessment software utilization and cellular microtechniques will be emphasized. Students will be responsible for learning one technique practiced in an outside laboratory setting. Student will rotate between the module sequence based on the number of students enrolled in the class. Prerequisite: DN 895 and DN 896 or permission of instructor of record.

DN 901. Graduate Seminar in Nutrition. 1 Credits.

Advanced course examining current research topics in nutrition. Extensive student and faculty interaction is emphasized utilizing lectures, class discussion of selected scientific readings and oral presentations. Prerequisite: Admission to PhD program in Dietetics and Nutrition or permission of instructor.

DN 910. Leadership Essentials in Clinical Nutrition. 3 Credits.

This course builds upon leadership theories to develop the skills to link theory and practice. After completing this course students will be able to successfully evaluate leadership theories; identify and develop a personal leadership style, increase competencies for effective leadership, and identify positive applications in clinical nutrition. The class also examines the differences between leadership and management and why those differences are important in clinical nutrition. Students also engage in practice of essential management skills for clinical nutrition. The class is designed to be an interactive exploration of personal leadership development and management skills. The student will be asked to respond to critical thinking opportunities and demonstrate their understanding of key concepts through exercises, discussion questions, quizzes, a Learning Journal, and their Leadership Growth Plan.

DN 915. Advanced Nutrition Assessment in Clinical Nutrition. 3 Credits.

This course builds on students’ prior knowledge and provides advanced concepts and skills for nutrition assessment of individuals. The course is structured into four assessment components: biochemical, dietary intake, body composition and nutrition focused physical exam. Main topics include in-depth overview of the assessment methods, strengths and limitations of methodology, evaluation and interpretation of assessment data, sources of measurement errors, validity of assessment methods, and advanced analytical approaches used to assess and interpret laboratory data.

DN 920. Nutrition Communication for Advanced Practice. 3 Credits.

The overall goal of this course is to enhance the student’s professional communication skills across a range of nutrition practice areas. This course will emphasize the nutrition professional’s ability to effectively communicate with a wide audience including community members of all ages, races, and ethnicities; patients in public health and clinic settings, hospitalized patients, non-nutrition health professionals, peers, and researchers. The course will use online didactic methods to establish a background of theory, but student learning and assessment will be project-based.

DN 930. Evidence Analysis in Clinical Nutrition. 3 Credits.

Students will identify a pertinent clinical nutrition question and utilize the Academy of Nutrition and Dietetics’ Evidence Analysis Library Manual to conduct a systematic review. Students will follow the rigorous process of defining a research question, searching and critically evaluating published literature, developing an evidence summary table and composing a systematic review. The goal of the course is a manuscript suitable for publication. Prerequisite: Consent of the instructor.

DN 931. Research Proposal and Proposal Writing. 1 Credits.

Students take an active role in selecting, presenting and discussing recent published research and to exhibit advanced skills in analysis and presentation. Prerequisite: Consent of the instructor if student is not enrolled in a DN degree program.

DN 932. Ethics in Clinical Nutrition Research. 1 Credits.

This course provides information and insights on important tenets that are essential for clinical nutrition research. Topics covered in lectures and moderated discussions include ethical, regulatory, and legal issues, informed consent for research participation, role and function of institutional review boards, just selection of research subjects, ethical aspects of study design, and privacy and confidentiality. Additionally, given the social, religious, and other influences on an individual's food choice, the moral and political aspects of food and nutrition research will be discussed. Prerequisite: Permission of instructor if student is not enrolled in a DN degree program.

DN 933. Advanced Methods of Research in Clinical Nutrition. 3 Credits.

This course prepares clinical nutrition students with the knowledge to design, conduct and write up results of a research project; and to read and review the clinical nutrition literature at an advanced level. Broad topics include ethical, regulatory and legal issues, study design and biostatistics, technology transfer, data management and sources of funding support, and clinical research infrastructure. Within these topics special emphasis is paid to educating the student about study designs that could be particularly useful to those with a clinical doctorate, e.g., designs that make use of electronic health records or other pre-existing databases. Students will get practice writing a research protocol and budgeting for a trial. Prerequisite: DN 834 or equivalent introduction to basics of research, or by permission of instructor.

DN 941. Applied Nutritional Epidemiology. 3 Credits.

The overall goal of this course is to provide graduate students the conceptual and applied skills to better interpret and conduct nutrition epidemiology research. Emphasis of this course includes design of a nutritional epidemiology research study, statistical computing, management of nutrition and outcomes-related datasets, methods of statistical analysis, and interpretation of analyses. Prerequisite: DN 934 Advanced Methods of Research in Clinical Nutrition.
DN 950. Interprofessional Collaboration in Clinical Nutrition. 2 Credits.  
This course seeks to improve students' abilities to function and lead inter-professional healthcare teams. Students will apply core competencies in interprofessional practice for healthcare including roles and responsibilities, values and ethics, communication, team formation, teamwork, leading teams, decision making in teams, and managing conflict in teams. Prerequisite: Permission of Instructor.

DN 970. Pharmacology in Clinical Nutrition. 3 Credits.  
This course provides the principles of clinical pharmacology and nutrition as therapeutic interventions and drug-nutrient and drug-food interactions. Students will apply the concepts to the pharmacological and nutritional management of compromised body systems. The strong conceptual base will prepare students to evaluate and monitor the use of commonly used medications and nutrition and herbal supplements. Applications across the lifespan will be incorporated within the class. Prerequisite: Consent of Instructor.

DN 980. Nutrigenomics and Nutrigenetics in Health and Disease. 3 Credits.  
Nuclear receptors and their mechanisms of action, nutritional control of gene expression and functional genomic studies with relationships to nutrient intake and polymorphisms. Prerequisite: DN 836, DN 895, DN 896 or permission of instructor.

DN 990. Doctoral Research. 1-9 Credits.  
Original and independent investigation approved by and conducted under the supervision of the student’s advisor or advisory committee. This course is in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Corequisite: Restricted to Dietetics & Nutrition Ph.D. candidates, or consent of DN advisor. Students must have completed the qualifying exam.

This capstone course is designed to enhance the student’s ability to apply graduate knowledge to achieve tangible and relevant clinical research outcomes. All aspects of this translational research project will be included (i.e., planning, data collection, analysis and interpretation of results, written documentation, and oral presentation of the project). The outcome is a manuscript which has been submitted for publication. Collaborative interprofessional patient care projects are strongly encouraged. Prerequisite: DN 930, DN 934, DN 940, and permission of instructor.

DN 992. Applied Clinical Residency in Clinical Nutrition. 3 Credits.  
The residency experience is designed to span 360 hours and will be completed within a professional workplace setting. Students will identify an area of practice through which they will provide leadership to develop a research-based clinical initiative or program. Upon completion, the students will provide their clinical team with the program or clinical initiative, along with program evaluation methods. Prerequisite: Acceptance into the DCN program.

DN 999. Dissertation. 1-6 Credits.  
Preparation of the written dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: DN 990 or consent of advisor.

Health Information Mgmt Courses

HEIM 177. First Year Seminar. 3 Credits.  
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in health data and management. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience and the University Core Curriculum Committee. Prerequisite: First-time freshman status.

HEIM 210. Introduction to Healthcare. 1 Credits.  
This course is an introductory overview of the United States healthcare system. Course content emphasizes organizational structures and patient care settings in healthcare, healthcare professionals and their roles, as well as laws and regulations that influence how healthcare is paid for, quality is assessed, and healthcare data is protected. Current events in healthcare are also addressed. Open to all students.

HEIM 230. Medical Terminology. 3 Credits.  
A study of the language of medicine including word construction, definitions, medical abbreviations, and use of terms related to various areas of medical science and health professions. Course requires students to be able to break down medical terms, understand their meanings and pronounce them correctly. This online course is designed for students interested in clinical and health professions.

HEIM 410. Introduction to Health Information Management (HIM). 3 Credits.  
This course introduces students to the foundational concepts of health record content, characteristics and requirements, along with the operational processes designed to support and safeguard the healthcare data and information contained therein. Joint Commission survey process is also included. Industry standard software applications are used for applied, hands-on learning in this course.

HEIM 415. Healthcare Delivery Systems. 3 Credits.  
This course is an in-depth overview of the United States healthcare system and focuses on the structure and function of services across settings. Special emphasis is placed on the history of healthcare, reimbursements and financing, health policy, outcomes (cost, quality, access) and the integration of care across delivery settings using health information technology.

HEIM 420. Legal Aspects of Healthcare. 3 Credits.  
This course introduces the student to some of the basic legal principles found in healthcare and health information management (HIM). Fundamentals of law including statutory, regulatory, and judiciary practices are reviewed in the context of HIM including tort and liability. Emphasis is placed on HIPAA regulations. Patient legal rights and responsibilities as related to their healthcare are included, as well as fraud and abuse prevention and compliance.

HEIM 425. Pharmacology Concepts for Health Information Management. 2 Credits.  
A fundamental overview of how drugs affect the human body and how the body impacts drugs used in pharmacotherapy. This course is designed to provide the student with the knowledge necessary for managing patient health information specific to medication administration and management. This course also covers pharmacology topics relevant to analyzing medication administration documentation in the patient health record. Prerequisite: Admission to BS in HIM program or instructor permission.

HEIM 435. Clinical Concepts for Health Information Management. 3 Credits.  
This course examines ways in which health information professionals apply knowledge of clinical concepts in professional practice. Course content surveys professional practice roles and application of clinical knowledge in daily work, clinical documentation in health records, as well as diseases and conditions affecting the various body systems. Prerequisite: Anatomy and physiology lecture and lab, medical terminology, or instructor consent.
HEIM 450. Introduction to Professional Practices Experiences. 1 Credit.
This course is designed to provide students a better understanding of the various career opportunities in the Health Information Management field and develop skills required for professional environments. The emphasis is on professional behavior for health information management professionals in the workplace. Course content is intended to prepare students for site visits, professional practice experiences, internships, and their future careers.

HEIM 485. Independent Study in Health Information Management. 1-10 Credits.
The content will vary depending on material appropriate to students. May be repeated for additional credit utilizing a variety of projects and special assignments. Prerequisite: Permission of the program director.

HEIM 501. Information Resources and Professional Development. 2 Credits.
This course prepares students to effectively utilize information resources and technology on an academic medical center campus to foster success in the Health Information Management program, professional practice experiences and the health professions. Students will learn to apply software applications, project management strategies, and professional writing and literacy skills. This course has a special emphasis on professionalism, self-awareness, communication, collaboration and critical thinking.

HEIM 510. Professional Practice Experience / Lab I. 1 Credits.
Through supervised learning situations, students are given opportunities to visit different types of healthcare facilities in the area. These opportunities vary from year-to-year based upon availability. Opportunities might include (but not be limited to) developing competence while practicing a specific HIM function in an actual HIM department, exploring nontraditional HIM career roles, or visiting with and interviewing a long term care, behavioral health, rehabilitation, or managed care HIM department manager. Prerequisite: Successful completion of Junior-level HIM academic courses or permission from instructor.

HEIM 525. Healthcare Database and Architecture. 3 Credits.
This course is designed to help students understand databases and database management systems. Students will learn to model and understand database design, in conjunction with learning methods to structure data as records, tables, or objects. Students will also learn how query languages are used for searching, sorting, reporting, and other "decision support" activities to best utilize the available data. Along with acquiring knowledge fundamental to management of the electronic health record (EHR), students will develop general technical knowledge to become capable health information professionals.

HEIM 540. Health Information Systems. 3 Credits.
The increased use of technology to support health data and information continues to evolve. This course introduces students to core topics and concepts in health informatics, emphasizing the implementation and management of health information systems. Students learn the conceptual framework and foundational elements of health informatics, selecting and implementing systems through the Systems Development Life Cycle (SDLC), data and information infrastructure, privacy and security aspects, human-computer interaction frameworks and usability concepts, and current trends and supporting technologies.

HEIM 565. Clinical Terminologies and Classifications I. 4 Credits.
This course introduces classification systems and terminologies used in healthcare and the relationship of these systems to patient care, research, and reimbursement systems. Course content provides study and application of coding guidelines, conventions, and rules of coding systems. Prerequisite: HEIM 435 or permission of the instructor.

HEIM 567. Quality and Performance Improvement in Healthcare. 3 Credits.
This course provides instruction on the principles of quality (QI) and performance improvement (PI) in the context of healthcare. PI drivers, models, techniques, and processes are covered including workflow reengineering. QI program organization, management and effectiveness are addressed. This course also includes content on patient safety, risk management, resource management and assessment of provider competence.

HEIM 570. Introduction to Healthcare Management. 3 Credits.
This course introduces theoretical and applicable concepts of management with an emphasis on managing in healthcare organizations. Students explore traditional management roles as well as leadership concepts. Course content depicts management in the context of a complex stakeholder environment evidenced in the healthcare system of the United States.

HEIM 571. Human Resource Management in Healthcare. 3 Credits.
Through the course students will have the opportunity to obtain working knowledge of human resource management. Technology and the continuing uncertainty of the economy have affected many aspects of human resource management; a number of tasks formerly performed by an HR office are now the purview of department managers. The course will familiarize students with the environment in which HR functions and the tasks involved in managing people. Topics include: social sustainability, culture, vision, staffing needs analysis, recruiting and selecting, training, developing, retaining, motivating, and legal rights of the people within the rapidly changing business environment. Prerequisite: HEIM 570 Healthcare Management.

HEIM 575. Applied Statistics and Research Methods in Healthcare. 3 Credits.
Emphasis is on the statistical analysis of healthcare data. Content includes hospital-based statistics, an introduction to epidemiological concepts, research design and methodology, research ethics and protocol, hypothesis testing, data management, analysis and presentation. Prerequisite: MATH 365 Elementary Statistics, or similar.

HEIM 585. Healthcare Reimbursement. 3 Credits.
This course examines complex financial systems within the United States healthcare system. Students explore content related to healthcare reimbursement methodologies and revenue cycle management.

HEIM 635. Clinical Terminologies and Classifications II. 3 Credits.
This course offers continued study of classification systems and terminologies used in healthcare and the relationship of these systems to patient care, research, and reimbursement systems. This course includes an introduction to the role of mapping between the various classification systems, nomenclatures and clinical terminologies used in healthcare. Prerequisite: HEIM 565 or permission of the instructor.

HEIM 661. Management Principles in Health Care. 3 Credits.
Introduction to basic principles of management and education and their application in the current healthcare environment. Course content includes: management, quality issues, budgeting, personnel issues, evaluation and application of management concepts, and educational methodologies. Cross listed with CLS 661 and RESP 661. Prerequisite: Admission to the Health Information Management Program or permission of the instructor.

HEIM 665. Topics in Health Information Management. 2 Credits.
Heim 670. Independent Study in Health Information Management. 1-10 Credits.
The content will vary depending on material appropriate to students. May be repeated for additional credit utilizing a variety of projects and special assignments. Prerequisite: Permission of the program director.

Heim 671. Leadership in Healthcare. 3 Credits.
This course applies key concepts in personal, professional and organizational leadership for healthcare management. Special emphasis is on strategic leadership and planning for enterprise-wide health information strategies. Students will focus on leadership styles with an emphasis on self-discovery and professional development within an ever-changing environment.

Heim 676. Healthcare Analytics. 3 Credits.
This course covers data-driven, computer-based tools and data analysis techniques that aid decision-making in healthcare. Effective use of data analysis increases the quality of strategic and operative planning and reduces the time used for decision-making processes. The course focuses on data-driven techniques and tools including such topics as medical coding systems, database fundamentals, business performance monitoring (managerial dashboards), and data mining applied to the healthcare industry. A number of data mining and predictive modeling approaches are discussed to address specific issues in healthcare.

Heim 679. Information Governance in Healthcare. 3 Credits.
This course examines the role of health information managers as facilitators and champions of information governance in healthcare organizations. Course content includes an exploration of the topic of information governance, as well as introduces strategic considerations for enterprise processes, policies and procedures, standards, and metrics to support information governance efforts. Information is considered throughout the course as a strategic asset for organizational optimization. External users of information and related implications are also discussed.

Heim 680. Management Internship. 3 Credits.
This is a four-week internship that provides the student with a management capstone experience with the activities and responsibilities commonly performed by the health information administrator. Students receive "hands-on" managerial experience. The internship may take place in any type of healthcare setting throughout the healthcare continuum and industry. Students interpret classroom theory into actual planning, organizing, assessing, and controlling situations in a health information department or related administrative or technical environment. Students are responsible for all costs including room, board, and transportation. Management internship sites are selected based upon such factors as: HIM experience, credentials of the student, expressed wishes from their internship choices. Prerequisite: Successful completion of all HIM professional coursework and/or permission of the instructor.

Heim 681. Management Practicum. 3 Credits.
This practicum experience provides the student with a management capstone experience in the activities and responsibilities of the health information administrator. The specific practicum topics are selected based on the experience and credentials of the student. Prerequisite: Successful completion of all HIM professional coursework and/or permission of the instructor.

Hearing and Speech Courses
Aud 805. Introduction to Clinical Research. 1 Credit.
The course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of instructor.

Aud 810. Diagnostic Audiology. 4 Credits.
Audiometric calibration, pure tone and speech testing, analysis of audiograms, middle ear testing.

Aud 811. Hearing Disorders. 3 Credits.
A study of disorders of the auditory system including anatomical, physiological, perceptual, and audiological manifestations of pathologies affecting hearing. Prerequisite: Aud 810 and Aud 829.

Aud 813. Psychoacoustics and Theories of Hearing. 3 Credits.
A study of relations between common acoustic stimuli and the responses they elicit; consideration of sensory scales, noise phenomena, and speech intelligibility. Prerequisite: Aud 829.

Aud 814. Hearing Conservation. 1 Credit.
A study of the major components of hearing conservation programs in industrial, educational, and military settings. Forensic audiology issues related to occupational hearing loss are included. Prerequisite: Aud 810 and Aud 829.

Aud 816. Speech Perception. 2 Credits.
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. (Same as SPLH 716.)

Aud 817. Pediatric Audiology. 3 Credits.
Normal and pathological development of the auditory system; pediatric audiometric testing; auditory and communication aspects in the habilitation of hearing-impaired children. Prerequisite: Aud 810.

Aud 818. Vestibular Systems and Disorders. 3 Credits.
Study of the anatomy and physiology of the normal peripheral and central vestibular system; clinical assessment of vestibular disorders; vestibular rehabilitation.

Aud 819. Hearing Aids I. 3 Credits.
Study of the components, function, fitting, and performance characteristics of hearing aids, applications of amplification in rehabilitative audiology. Prerequisite: Aud 810.

Aud 820. Rehabilitative Audiology and Counseling. 3 Credits.
Principles and methods of auditory, communication, and social assessment and intervention with hard of hearing and deaf adults, children, and their families. Prerequisite: Aud 810 and Aud 819 or equivalent.

Aud 821. Hearing Aids II. 3 Credits.
The advanced study of the theoretical bases, techniques, and clinical application of hearing aids and their assessment. Participants will review, present, and discuss contemporary issues in hearing aid literature and research. Prerequisite: Aud 819.
AUD 822. Electro-Acoustics and Instrumentation. 3 Credits.
A study of the generation, control and measurement of the simple and complex sounds essential to clinical audiology and hearing research.

AUD 823. Cochlear Implants and Hearing Assistance Technologies. 2 Credits.
Through lecture and discussion format, this course will cover the principles and methods of assessment, candidacy, surgery, programming and rehabilitation of patients receiving cochlear implants. In addition, hearing assistance technologies such as large area systems and alerting devices will be covered with emphasis on classroom amplification. Prerequisite: AUD 819 and AUD 821 or permission of instructor.

AUD 824. Central Auditory Processing. 2 Credits.
The study of the anatomy and physiology of the central auditory system. Analysis and review of the diagnostic procedures and the therapeutic strategies for central auditory processing disorders.

AUD 826. Tinnitus Management. 2 Credits.
This course provides an advanced lesson in the evaluation and treatment of tinnitus and decreased sound tolerance. Topics include: diagnostic evaluation, CBT, biofeedback therapy, sound generator selection and programming, hearing aid considerations and programming, verification/validation, and pediatric considerations. Prerequisite: AUD 821.

AUD 828. Genetics and Hearing Loss. 2 Credits.
The fundamentals of human genetics as related to hearing loss, including patterns of inheritance, genotypic and phenotypic characteristics of the major forms of syndromic and nonsyndromic hearing loss; genetic counseling, genetic testing, possible genetic treatment, and issues related to them; resources for keeping up with this rapidly changing field. Prerequisite: Permission of instructor.

AUD 829. Anatomy and Physiology of the Hearing and Vestibular Mechanisms. 3 Credits.
Advanced study of the anatomical and physiological properties of the human hearing and vestibular mechanisms.

AUD 841. Clinical Observation. 1 Credits.
This course provides a community-based application of foundational audiology topics. First-year Au.D. students will observe a variety of community audiology clinics.

AUD 842. Interprofessional Education for Audiologists. 1 Credits.
Observation of healthcare professionals providing services at regional hospitals or clinics. Through observations, readings, and reflections, students are oriented to the work of healthcare professionals outside the field of audiology and the role of audiology within an interprofessional healthcare team.

AUD 843. Clinical Practice in Audiology. 1-6 Credits.
Supervised simulation experiences and clinical work at the University and/or University Medical Center audiology clinics, or affiliated, off-campus practicum sites. Prerequisite: Permission of instructor.

AUD 846. Independent Study in Problems in Audiology. 1-10 Credits.

AUD 851. Auditory Evoked Potentials. 3 Credits.
Theoretical bases, techniques, and clinical applications for auditory evoked potentials including electrocochleography, auditory brainstem response, middle and late latency and cognitive responses. Prerequisite: AUD 810, AUD 822, AUD 829, or permission of instructor.

AUD 853. Pharmacology for Audiology. 2 Credits.
Presentation and discussion topics including: basic pharmacology (pharmacokinetics and pharmacodynamics), mechanisms of ototoxicity, selected ototoxic agents, drugs used in otolaryngology, and a review of patient management strategies. Prerequisite: Enrollment in the Au.D. or Ph.D. audiology program or permission of instructor.

AUD 858. Business Audiology. 2 Credits.
An introduction to audiology business practice principles. Operational functions of the audiology clinic will be reviewed, including human resources, marketing, legal and ethical practice concerns, billing, coding and reimbursement. Prerequisite: enrollment in the Au.D. or Ph.D. audiology program or permission of instructor.

AUD 899. Thesis. 1-10 Credits.

AUD 940. Seminar in Audiology: ______. 1-4 Credits.
Advanced study of selected topics in audiology such as (but not limited to): cochlear micromechanics and other physiological processes; psychoacoustics, speech perception, cochlear implants, scientific reading, etc. Prerequisite: Enrollment in the Audiology Ph.D. or Au.D. program or permission of instructor.

AUD 941. Grand Rounds in Audiology. 1 Credits.
Presentations/discussion of clinical case studies and professional issues in Audiology. Au.D. students and audiology faculty members will participate in these sessions.

AUD 942. Investigation and Conference. 1 Credits.
Readings and case study analysis in preparation for the formative and comprehensive exams. Enrollment is restricted to Au.D. students. Prerequisite: 2 semesters of full-time enrollment in the Au.D. program.

AUD 944. Clinical Rotation. 1-6 Credits.
Supervised clinical work at university-affiliated, off-campus sites. The Clinic Rotation is intended to prepare students for entry into their Clinical Externship and to foster increasing independence. Clinical skills required are defined in standards set forth by the American Speech-Language Association.

AUD 945. Clinical Externship. 1-9 Credits.
Supervised clinical work at the University of Kansas and/or KUMC audiology clinics, or affiliated, off-campus sites. The Clinical Externship is intended to refine clinical skills, increase clinical independence, and ensure that clinical skills meet the certification standards in audiology set forth by the American speech-Language-Hearing Association. Open to 3rd and 4th year Au.D. students. Approval from Instructor needed for 3rd year students.

AUD 946. Advanced Grand Rounds in Audiology. 1 Credits.
Advanced, critical discussion of clinical case studies and professional issues in audiology and interprofessional collaboration. Third- and fourth-year Au.D. students and audiology faculty will participate in these sessions. Prerequisite: 4 credits of AUD 941 or by permission.

AUD 999. Doctoral Dissertation. 1-12 Credits.

Hearing and Speech Courses

SLPD 801. Seminar on Evidence-Based Practice in Speech-Language Pathology and Other HealthSciences I. 3 Credits.
This course is designed to give students a thorough understanding of evidence-based principles and procedures so that they could provide evidence-based services in a clinical setting. It is also designed to prepare students to assume a position of leadership in which they would be required to promote and teach evidence-based practices to their staff clinicians. Prerequisite: Consent of instructor.

SLPD 802. Seminar in Evidence-Based Practices in Communicative Disorders. 3 Credits.
In this course, students apply information covered in SLPD 801 to their areas of primary concentration. In-class and on-line sessions are led by students and guests from the university and community. Student
presentations include primarily reports of progress on their semester project, a meta-analysis dealing with a clinical issue of their choice. Students report on status of (a) their development of the research question; (b) details of the literature search; (c) evaluation of relevant studies; (d) determination of level of evidence provided by the studies; (e) calculation and aggregation of effect sizes; and (f) conclusions regarding the impact of the analysis on clinical practice. Guest presenters, including program and university faculty as well as clinic administrators and practitioners from the community, lead discussions on advantages of and problems with using evidence-based practices to help them make decisions in the speech-language clinic. Students will enroll in the class with class instructor. They will identify a lab instructor as well.

**SLPD 804. Clinical Practice in Speech-Language Pathology: Advanced Training for the Experienced Clinician. 1-3 Credits.**
Students participate in clinical experiences (assessment and/or treatment) related to their primary and/or secondary area of concentration. Clinical experiences in which the student learns about a particular patient population, standardized and non-standardized assessment measures, instrumentation, computer software, devices, and/or treatment techniques and strategies are possible. Prerequisite: certification in speech-language pathology from the American Speech-Language-Hearing Association.

**SLPD 805. Independent Study in Speech-Language Pathology. 1-3 Credits.**
Investigation of special topics by individual SLPD students. Prerequisite: Consent of Instructor.

**SLPD 903. Capstone Project. 1-6 Credits.**
The Capstone Project reflects the culmination of academic and advanced clinical study and may take many forms (e.g., small original research study, original analysis of data collected by another researcher, research literature meta-analysis, program design and analysis, etc.). The Capstone project will comprise a written report that involves both literature and field activity. A Capstone project represents the research and application of knowledge, as well as an articulated plan for dissemination of the outcomes. Students will enroll in this course for a total of 6 credits. Prerequisite: Consent of Instructor.

**Nurse Anesthesia Courses**

**NURA 800. Professional Aspects of Anesthesia. 3 Credits.**
This course includes orientation to the profession of nurse anesthesia. The student will gain an understanding of the anesthesia department management and organization. The history of anesthesia will be discussed. Ethical, psychological, professional adjustments and legal responsibilities of the nurse anesthetist will be presented.

**NURA 801. Introduction to Clinical Practicum. 1 Credits.**
Students will engage in clinical practice that involves introduction to basic anesthesia skills. Emphasis is given to patient assessment, anesthetic planning and management of the patient population of low risk categories. The course includes introduction to clinical problem solving and "call" experiences that address the trauma patient and emergency surgical/ anesthetic interventions for pathological states. Prerequisite: Permission of Instructor.

**NURA 805. Clinical Anatomy. 4 Credits.**
An intensive study of the major anatomical systems and regions of the body which have clinical significance for anesthetists and others. Particular attention devoted to the respiratory, cardiovascular, and nervous systems. Regional topics include the anatomy of the head, neck, vertebral column, thorax, axilla, and femoral triangle. Involves both lectures and cadaver dissection, plus appropriate models, x-ray films, and audiovisual materials. Prerequisite: Admission to the Nurse Anesthesia Program or permission of instructor.

**NURA 806. Advanced Physiology. 4 Credits.**
A course designed to lead to an advanced comprehension of the physiology of organ systems in the human in both cellular and organ processes. Physiology subject matter relevant to clinical health sciences include membrane transport, muscle, cardiovascular, respiratory, renal, water and electrolyte balance, gastrointestinal, and endocrine physiology as well as neurophysiology. Cellular mechanisms include the structure and function of ion channels and pumps, mechanisms of calcium regulation, excitation-coupling processes and mechanisms of oxidative cell damage and apoptosis. Prerequisite: Permission of instructor.

**NURA 808. Health Care Policy for Advanced Nursing Practice. 2 Credits.**
Students will utilize current clinical and legislative issues to examine ways to conceptualize the issues into social policy contexts. Assignments throughout the course are employed to both demonstrate and engage students in leadership and structural systems theories to effect change in healthcare policy. The course includes social policy development across the lifespan, leadership styles which influence change, and the implementation and analysis of policy solutions. Prerequisite: Successful completion of first three semesters of Doctor of Nurse Anesthesia Practice curriculum.

**NURA 809. Adv Pathophysiology. 3 Credits.**
A course designed to lead to advanced comprehension of pathophysiologic processes in the human body. Course content will build upon prior nursing education and professional experiences to provide a scientific basis for clinical application related to anesthetic planning and implementation. The intent of this course is to prepare the nurse anesthesia student to engage in critical thinking and problem-solving skills pertinent to the application of best practices involving anesthesia considerations for patients with pathological conditions. Prerequisite: NURA 806 Advanced Physiology.

**NURA 811. Advanced Theory in Anesthesia I. 3 Credits.**
This is the first of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of ophthalmology and otorhinolaryngology procedures and patients with alterations in the endocrine system. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor.

**NURA 812. Advanced Theory in Anesthesia II. 3 Credits.**
This is the second of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of gastrointestinal and hepatobiliary disorders, bariatrics, robotic/laparoscopic procedures, otorhinolaryngology disorders, and renal disorders. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor.

**NURA 813. Advanced Theory in Anesthesia III. 2 Credits.**
This is the third of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of obstetrical, neonatal and pediatric patients. Students enhance their
critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor.

NURA 814. Advanced Theory in Anesthesia IV. 3 Credits.
This is the fourth of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of neurosurgical, cardiovascular, thoracic, and transplantation patients. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor.

NURA 815. Advanced Theory in Anesthesia V. 3 Credits.
This is the fifth of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. This is the final theory course of didactic study for the art and science of nurse anesthesia. Students will acquire the advanced knowledge pertinent to the perioperative anesthetic management of geriatric patients and patients undergoing orthopedic procedures. Students will enhance their critical problem-solving skills and ability to analyze/synthesize didactic anesthesia content for application to clinical practice. In addition, students will be required to review and engage in analysis of contemporary research to identify "best practices." The course content is provided as web-based and instructor facilitated learning. Prerequisite: Permission of Instructor.

NURA 820. Information Systems and Data Management in Anesthesia. 1 Credits.
Information systems, data management concepts, and their applications will be explored. This will enable the doctoral prepared nurse anesthetists to utilize resources to facilitate quality improvement, increase patient safety through outcome measurements, and improve resource utilization in the perioperative period. Prerequisite: Permission of instructor.

NURA 821. Advanced Practicum in Anesthesia I. 2 Credits.
This is the first of six courses relative to the application of the art and science of nurse anesthesiology. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor.

NURA 822. Advanced Practicum in Anesthesia II. 2 Credits.
This is the second of six courses relative to the application of the art and science of nurse anesthesiology. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor.

NURA 823. Advanced Practicum in Anesthesia III. 2 Credits.
This is the third of six courses relative to the application of the art and science of nurse anesthesiology. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor, and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor.

NURA 831. Advanced Chemistry and Physics. 2 Credits.
Chemical and physical principles including states and properties of matter, laws governing the behavior of gases, flow and vaporization, oxidation and combustion; principles of electricity and electrical safety; and chemical properties and structure-activity relationships as a foundation for pharmacology. Course will also cover pertinent areas of organic chemistry. Prerequisite: Permission of Instructor.

NURA 833. Basic Principles of Anesthesia Practice. 3 Credits.
This course introduces students to the introductory principles and theories regarding the art and science of anesthesia practice. Students will develop a conceptual basis for practice gained through a systems approach applied to development of anesthesia care based upon a strong foundation in physical assessment, physiological monitoring, applications of pharmacology, anesthesia systems, physical and chemical basic sciences. Prerequisite: Admission to the nurse anesthesia program or permission of instructor.

NURA 835. Advanced Physical Assessment and Patient Care Technology for Anesthesia. 3 Credits.
This course is designed to develop and refine the physical assessment skills of the practitioner as well as enhance their understanding, interpretation, and application of laboratory measurements and advanced diagnostic procedures in the perioperative setting. The course is arranged in a systems approach with emphasis placed on the cardiovascular, pulmonary, renal, neurological, and endocrine. Diagnostic procedures and laboratory values specific to each of these systems and their relevance to anesthesia principles and practice will be discussed. The selection of appropriate monitoring devices specific to each system related to individual patient needs will be discussed. Prerequisite: Permission of instructor.

NURA 839. Regional Anesthesia/Pain Management. 3 Credits.
Includes study of conductive anesthesia techniques, pharmacokinetics of local anesthetics, anatomical placement, and physiologic response. The course is inclusive of acute and chronic pain management techniques.

NURA 880. Advanced Topics: _____. 1-4 Credits.
Special study allowing a student to pursue a particular subject through readings, directed assignments, and conferences with a faculty member. Prerequisite: Consent of instructor.

NURA 889. Introduction to Theory, Research Methods and Evidence-Based Practice. 3 Credits.
Methods of theory development and analysis provide the foundation for the study of concepts and theories from nursing, anesthesiology and related scientific disciplines. Historical, scientific and philosophical frameworks relevant to the theoretical basis of nurse anesthesia are explored. The fundamentals of research methodology are examined including elements of design, measurement, statistical analysis and dissemination. The relationships between research, theory and practice are developed to create an awareness of how "best practice" resources support professional growth, competence and quality. Prerequisite: Permission of instructor.

NURA 892. Applied Statistics and Analysis in Health Care. 3 Credits.
Concepts include graduate-level statistical reasoning, statistical principles, and the role as the scientific basis for clinical and public health research and practice. Content includes hospital-based statistics, introduction to epidemiology, relationship of research design to statistical methods, research ethics/protocol, hypothesis testing, and data management. Prerequisite: Permission of instructor.

NURA 901. Evaluation and Application of Evidence-Based Practice in Anesthesia I. 1 Credits.
First of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor.

**NURA 902. Evaluation and Application of Evidence-Based Practice in Anesthesia II. 1 Credits.**
Second of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor.

**NURA 903. Evaluation and Application of Evidence-Based Practice in Anesthesia III. 1 Credits.**
Third of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor.

**NURA 904. Evaluation and Application of Evidence-Based Practice in Anesthesia IV. 1 Credits.**
Fourth of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor.

**NURA 912. Leadership in Nurse Anesthesia I. 1 Credits.**
First of two courses which focus the students on leadership projects which were designed in NURA 800, Professional Aspects of Anesthesia. Students will apply a variety of leadership theories as they conduct the projects with nurse anesthesia faculty supervision. At the conclusion of NURA 913, students will evaluate the projects and determine if goals were met, recognize which principles of leadership theory(ies) were utilized in the projects, and prepare an action plan for revisions. Presentations and self-analysis of the projects will be posted as VOPPTs on the ANGEL course site. Prerequisite: Permission of instructor.

**NURA 913. Leadership in Nurse Anesthesia II. 1 Credits.**
Second of two courses which focus the students on leadership projects which were designed in NURA 800, Professional Aspects of Anesthesia. Students will apply a variety of leadership theories as they conduct the projects with nurse anesthesia faculty supervision. At the conclusion of NURA 913, students will evaluate the projects and determine if goals were met, recognize which principles of leadership theory(ies) were utilized in the projects, and prepare an action plan for revisions. Presentations and self-analysis of the projects will be posted as VOPPTs on the ANGEL course site. Prerequisite: Permission of instructor.

**NURA 924. Advanced Practicum IV. 2 Credits.**
Fourth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor.

**NURA 925. Advanced Practicum V. 2 Credits.**
Fifth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor.

**NURA 926. Advanced Practicum VI. 2 Credits.**
Sixth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor.

**NURA 880. DNAP Senior Scholarly Project. 1-6 Credits.**
The DNAP Senior Scholarly Project is a merger of students’ accumulated knowledge base, didactic and clinical, relevant to the practice of nurse anesthesia in the Doctor of Nurse Anesthesia Practice (DNAP) curriculum. The Senior Scholarly Project requires that a practice-focused problem, issue, or concern be identified and examined in depth. The project will include application of an innovation or intervention suitable to an area of focus (e.g. organizational leadership, clinical practice, education, administration, etc.) that involves the development, evaluation, and dissemination of the project findings to a targeted audience. The DNAP Senior Scholarly Project is designed in a series of phases. Each phase is to be completed during an enrolled semester. Continuous enrollment in the project is required during the final year of the DNAP course of study. During each semester of enrollment in the DNAP Senior Scholarly Project, students will participate in project committee reviews lead by the assigned Advisory Committee Chair relative to the progression and completion of the project. The DNAP Senior Scholarly Project committee and the student share joint responsibility for the facilitation, progression, and
completion of the scholarly project. Prerequisite: NURA 889, NURA 892, PRVM 800.

Occupational Therapy (MS) Courses

OTMS 699. Special Projects. 1-6 Credits.
(1-6) An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analyses as negotiate with the faculty mentor. May be repeated for credit. Prerequisite: Enrollment as a non-degree seeking student and permission of the instructor.

OTMS 701. Professional Development. 3 Credits.
With an emphasis on leadership skills and professionalism, this course will include mentoring, supervising, managing, organizing presentations, and teaching, writing, and contributing through professional organizations (interdisciplinary and occupational therapy). Students professionalism on issues of concern to administrators, staff therapists, educators, or those in private practice. Prerequisite: Permission of Instructor.

OTMS 705. Multidisciplinary Theoretical Perspectives. 3 Credits.
Students will identify and explore the key theories in occupational therapy and those more specific to their emphasis area with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories. Students will develop rationales for theory guided interventions. Furthermore, they will develop an impact summary in their identified area of emphasis. Prerequisite: Permission of Instructor.

OTMS 735. Practice Models for Applied Science. 3 Credits.
Issues and trends relative to advanced application of theory, assessment and intervention with emphasis on pediatrics will be presented in lecture and discussion. Special projects will emphasize the student’s special interests. Although faculty directed, student presentation will be emphasized.

OTMS 799. Special Topics in Occupational Therapy. 1-6 Credits.
An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analyses as negotiate with the faculty mentor. May be repeated for credit. Prerequisite: Permission of instructor.

OTMS 800. Research Proseminar. 1 Credits.
A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meeting will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of fours credits. (Same as TS 800.)

OTMS 801. Applied Neuroscience. 3 Credits.
The course will address the major functions of the systems within the central nervous system and how they interact to produce responses to environmental demands. Sensory input, central processing, and output mechanisms will be analyzed. The student will then appraise human behavior in relation to function and dysfunction of the nervous system, both in formulating potential behavioral signs when a specific neurological site is presented, and in hypothesizing about neurological involvement when analyzing a particular individuals problems. Prerequisite: Undergraduate neuroscience course or permission of instructor.

OTMS 835. Interpreting Research for Applied Science. 3 Credits.
This on-line course examines selected research studies, analysis methods and results employed, and applies research findings to practical problems. Students will design their own research project reflecting their area of interest.

OTMS 890. Graduate Research. 1-6 Credits.
Students investigate an empirical question relevant to occupational therapy and write a literature review and a research proposal under the guidance of a faculty advisor. Pending approval of the proposal, the student will carry out initial phases of the project, including materials preparation and data collection.

OTMS 899. Thesis. 1-6 Credits.
Course requires data analyses, interpretation, and scholarly writing based on individual original research carried out under the guidance of the student’s adviser. These activities, along with an oral presentation of research, must meet with approval of the student’s advisory committee to complete thesis requirements. Prerequisite: OTMS 890.

Occupational Therapy Doctorate Early Entry Courses

OTDE 700. Foundations in Occupational Therapy. 2 Credits.
This foundational course will support transition to the graduate program and the occupational therapy profession. Students will understand occupation as the foundation of the discipline and discuss the philosophy, history, current practice parameters and future directions of the occupational therapy profession. This course introduces students to constructs of professionalism including ethics and professional behaviors, interprofessionalism, and professional responsibilities within context of occupational therapy. Prerequisite: Acceptance to the entry-level professional OTD program of study.

OTDE 705. Functional Anatomy and Kinesiology to Support Occupational Performance. 3 Credits.
This course will focus on understanding of the physical components of human movement which serve as one foundation for occupational performance. The instructor will facilitate a section-based review of anatomy (e.g., shoulder, elbow, wrist, hand, hip, knee) integrated with the biomechanical and kinesiology principles that occur in typical and atypical movement within each section. The emphasis in this course will be on how to use biomechanical and kinesiology principles to guide the development of occupation-based interventions in people with various abilities across the lifespan through promotion, compensation, adaptation and prevention. Prerequisite: Acceptance to the entry-level doctoral program in Occupational Therapy.

OTDE 710. Professionalism in Context - I: Interpersonal and Interprofessional. 2 Credits.
This course includes professional opportunities for students to apply interpersonal and interprofessional skills and professional reasoning through service learning. Students will gain understanding regarding occupational performance in medical, community and educational contexts across the lifespan. Students will participate in reflections through small group discussions, apply knowledge from fieldwork experiences, conduct assessments, and develop evidence-based interventions. The emphasis for this course in the series is becoming familiar with the interprofessional team process and structure. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.
This course will explore the importance of context in understanding how OTDE 711. Professionalism in Context II. 3 Credits.

This course will explore the importance of context in understanding how the person, environment, and tasks all interact to guide occupational performance in everyday life. Students will apply the fundamentals of the evaluation process to assess occupational performance across the lifespan. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 715. Occupational Therapy Scholarship - I. 2 Credits.

This course provides a beginning structure for the development of foundational scholarship skills to support and inform evidence-based occupational therapy practice. Topics include university resources for scholarship; finding and evaluating evidence related to conditions, assessments, interventions, outcomes, populations, and patient experiences. Students will be guided in understanding and categorizing levels of evidence provided by primary sources, books, web resources & practice journals. Students will complete writing assignments and identify key elements of scientific reasoning. Prerequisite: Acceptance to the entry-level professional OTD program.

OTDE 716. Occupational Therapy Scholarship - II. 3 Credits.

This course builds on the basic scholarship skills and emphasizes development of intermediate skills to inform occupational therapy practice. Topics include: finding evidence related to intervention, preventative strategies, cost-effectiveness of treatments, understanding the contribution of peer-reviewed research articles and developing professional writing skills. Students will appraise and synthesize evidence to make practice recommendations. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 720. Theory to Practice in Occupational Therapy. 2 Credits.

This course prepares students to use occupational therapy theories and professional reasoning to guide the OT process of evaluation, intervention and outcomes. Students will explore contemporary themes in current OT theories and models and examine the roots of these ideas. Students will explore how theory develops and evolves and the potential role of occupational therapy theories to influence health and well-being of individuals, groups and populations. Prerequisite: Acceptance to the entry-level professional OTD program.

OTDE 725. Analysis & Adaptation I. 3 Credits.

This course will analyze the role of occupations and the factors influencing occupational performance in everyday contexts. This course will apply the occupational therapy practice framework to understand occupation as a means and end to occupational therapy practice. This course will use experiential learning for understanding occupation, the occupational therapy process, and person-centered practice. Prerequisite: Acceptance to the entry-level professional OTD program.

OTDE 726. Analysis & Adaptation II. 4 Credits.

This course will apply concepts of professional reasoning and the occupational therapy framework to explore the impact of selected medical and psychosocial conditions on person factors and occupational performance in everyday life. An understanding of these conditions is paired with appropriate occupational therapy assessments and task analysis to understand performance considerations and occupation as a therapeutic means and end to occupational therapy practice. This course will use practical lab and service learning experiences as a context for understanding performance considerations, occupation, the occupational therapy process, and person-centered. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 730. Population Health & Wellness. 3 Credits.

This course will present population-based concepts, theory, and evidence that link occupation, health, wellness, and quality of life and prioritize the health and life participation needs of populations. The course will draw from experiences with community partners to develop assessment and intervention emphasizing health promotion, maintenance and restoration of health and wellness and disease prevention for all populations in communities. Prerequisite: Acceptance to the entry-level professional OTD program.

OTDE 740. Neuroscience Foundations to Support Occupational Performance. 3 Credits.

Principles of neuroscience will be interpreted in clinical application using a strength-based approach to advance understanding of nervous system function. The integration and function of neural systems will be considered in relation to specific challenges and capacity of the nervous system as a whole to support behavior. A practical application and problem-based perspective will be encouraged throughout the course, with students invited to consider consumer perspective and availability of potential supports. Students will consider human behavior and occupational performance in relation to development and to function/dysfunction of the nervous system, both in formulating potential behavioral signs when a specific neurological site is presented, and in hypothesizing about neurological involvement when given a client description. Prerequisite: Open to students enrolled in the entry-level OTD graduate program or those with permission from the OTEd department. Successful completion of all prior courses required by the OTDE curriculum.

OTDE 754. Occupational Performance and Participation Across the Lifespan - I. 3 Credits.

This course is part 1 of theory and practice related to children and adolescents. This course will emphasize the need to examine participation in meaningful activities within authentic contexts with considerations for the effects of a disability, conditions, and age on occupational performance using a person-centered approach. Prerequisite: Successful completion of all prior courses in the OTDE curriculum.

OTDE 755. Occupational Performance and Participation Across the Lifespan - II. 3 Credits.

This is PART 2 of the OPPAL series that focuses on theory and practice related to children and adolescents. This course will emphasize the need to examine participation in meaningful activities within authentic contexts with considerations for the effects of a disability, conditions, and age on occupational performance using a person-centered approach. Prerequisites: Successful completion of all prior courses required by the OTDE curriculum.

OTDE 756. Occupational Performance and Participation Across the Lifespan - III. 5 Credits.

This course includes study about developmental theories and how occupations change across the lifespan related to adults and older adults. This course will emphasize the need to examine participation in meaningful activities within authentic contexts with considerations for the effects of a disability, conditions, and age on occupational performance. Prerequisite: Successful completion of all prior courses required by the OTDE curriculum.

OTDE 760. Policy and Advocacy for Occupational Therapy - I. 2 Credits.

This foundational course will introduce policies and the impact of professional advocacy on occupational therapy practice and systems. Students will understand what policy is, why policy matters, and how laws, payment/reimbursement policy, practice acts and regulatory agencies shape our view of health, ability/disability, and OT practice. Self-assessments provide baseline information for professional development
related to policy and advocacy. Prerequisite: Successful completion of all prior courses required by the OTDE curriculum.

OTDE 761. Policy and Advocacy for Occupational Therapy - II. 3 Credits.
This course will build on foundational policy information by introducing system specific policies and the work of advocacy as applied to the OT profession, populations and policy development/implementation. Students will examine policy within and across settings and systems that impacts OT practice. Students will learn about stakeholders, policy development and will demonstrate advocacy within teams, across public/private systems. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 795. Research Discovery for Occupational Therapy. 2 Credits.
This course introduces students to the process of conducting research. Students will apply the evidence-based practice cycle, scientific method, and critical thinking skills of research to occupational therapy practice. Students will develop research questions aligned with their interests for OT practice needs, and then explore existing literature and evidence related to their research question. Students will learn about responsible conduct of research as they begin to employ the research process. Students will learn and practice the steps for quantitative research processes using a statistical software package. Students will learn the preliminary stages of how to write and put together the components of a manuscript for a peer-reviewed publication. Prerequisite: Successful completion of all prior courses required by the OTDE curriculum.

OTDE 815. Supporting Occupational Performance Across the Mental Health Continuum. 3 Credits.
This course will apply theory and evidence to occupational therapy practice across the continuum of mental health through mental illness in healthcare, social, and educational settings. Students will consider opportunities to support positive mental health for all people and support individuals with psychiatric disorders through assessment and intervention for meaningful, client-determined engagement in everyday life. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 845. Research Implementation and Dissemination in Occupational Therapy. 4 Credits.
This course will emphasize the processes of conducting and disseminating a research study. Conducting a study includes activities such as subject recruiting, data management and analysis, and evaluating how findings may be used to guide practice. Disseminating research involves understanding how to frame the research based on stakeholder interests and could involve manuscript writing, professional presentations, or discussions with community agencies, families, or consumers. This course allows students to implement a research project based on research questions developed as part of the prior courses in the research sequence in this curriculum. Additionally, students will create a dissemination plan for a community agency wanting information to advance their mission. The goals are to produce an entry-level occupational therapist who is aware of the relation between good research and good practice, is capable of critical analysis of scientific and clinical research literatures, and who is aware of the need for problem identification, good research design and methodology, and the appropriate evaluation, interpretation, and presentation of research findings. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 850. Professionalism in Education. 2 Credits.
This course focuses on teaching and learning activities in a variety of contexts. This course builds on professional communication strategies introduced in previous Professionalism in Context I. Students will learn effective teaching strategies to communicate information to clients, families, and other professionals while gaining confidence as an entry-level occupational therapy practitioner. Students will gain experience in the development of scholarly presentations for health care professionals. Relationship development, the exchange of messages, conflict management, and a better understanding of the Self, will all contribute to the student's knowledge and understanding of the importance of effective communication in teaching. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 860. Professionalism in Practice I. 3 Credits.
Students will apply the professional reasoning process to understand individuals’ occupational performance based on cases from level II fieldwork experiences. Students will conduct case analysis and develop evidence-based intervention plans. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 861. Professionalism in Practice II. 3 Credits.
This course will use professional reasoning to examine occupational practice within various delivery systems. Students will use lecture and small group seminars to analyze systems from level II fieldwork experiences and provide evidence to support the role of OT in innovative and traditional practice settings. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 870. Contemporary Community Engagement. 2 Credits.
This course introduces the concept of community engagement as a strategy for supporting healthy individuals, populations, and communities. Students will reflect on professional experiences and interests to identify gaps in community resources that impact occupational justice. Students will gain competency in identifying health disparities, analyzing policy, and identifying and communicating with funding agencies to engage community interprofessional partnerships. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 900. Occupational Therapy Level II Fieldwork - Part I. 12 Credits.
The first of a required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists supervise the experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Prerequisite: Satisfactory completion of required academic coursework with a cumulative grade point average of 3.0.

OTDE 901. Occupational Therapy Level II Fieldwork - Part II. 12 Credits.
The second required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists supervise the experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. By the end of the three-month period, students will be expected to perform at the level of an entry-level therapist. Prerequisite: Satisfactory completion of required academic coursework with a cumulative grade point average of 3.0.

OTDE 902. Occupational Therapy Level II Fieldwork - Alternative. 6-12 Credits.
An alternative supervised experience in a facility meeting specific criteria. Qualified occupational therapists supervise the experience. By the end of the experience, students will be expected to perform at the level of an entry-level therapist. Prerequisite: Satisfactory completion of required academic coursework with a cumulative grade point average of 3.0.

OTDE 915. Professionalism in Leadership and Administration. 3 Credits.
This course will focus on professional responsibilities and essential skills associated with leadership, administration, and management of occupational therapy services. Students will gain knowledge in the principles of program evaluation, business aspects of practice, as well as supervisory and management issues. In addition, students will acquire skills in professional development and leadership skills for the entry-level practitioner. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**OTDE 925. Independent Study - Special Topics. 1-3 Credits.**
This is a learning experience tailored to the needs and interests of a student, focused on topic outside of the regular curriculum or explored in greater detail than is covered by the regular curriculum. The student will work closely with the faculty sponsor to define, pursue, and complete the project. This syllabus is accompanied by a "proposal" form, which must be completed and submitted for consideration by the faculty sponsor at least 8 weeks prior to the start of the term in which the experience will take place. Permission to enroll in this course will not be granted until the proposal has been reviewed and approved by the faculty sponsor. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum. Consent of the instructor.

**OTDE 935. Independent Study - Study Abroad. 1-3 Credits.**
This independent study allows occupational therapy students to explore the profession in an international setting. The experience must be closely coordinated with the Office of International Programs at KU Medical Center. The student establishes individual learning objectives with the OT department faculty mentor in the semester preceding the experience. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum. Consent of the instructor.

**OTDE 950. Capstone Project Planning. 3 Credits.**
This course is designed to foster development of in-depth and advanced knowledge in a specific interest area through guided planning of the Capstone Project. Students will pursue a literature review while considering the needs of a population or organization, and then propose a Capstone Project. This course supports student development of in-depth knowledge as they explore an area of: a) research and scholarship, b) policy and advocacy, c) advanced practice, or other content area specified by ACOTE. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum. Consent of the instructor.

**OTDE 952. Capstone Project Planning - III. 1 Credits.**
This course will prepare students for their capstone experiences as they begin implementing a plan for their capstone project. Building upon the activities started in OTDE 950 & 951, this course supports student development of in-depth knowledge as they explore an area of: a) research and scholarship, b) policy and advocacy, c) advanced practice, or other content area specified by ACOTE. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**OTDE 980. Capstone Dissemination. 3 Credits.**
Students will collaborate with faculty mentors and site supervisors to develop scholarly presentations for dissemination. Students will present the results of the capstone project to local, regional and/or national audiences. Students will assume a leadership role in identifying opportunities for publication of the capstone project and completing the submission. This course is completed in conjunction with the capstone experience to provide students with the opportunity to develop skills in professional presentations and publications. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**OTDE 990. Capstone Experience. 14 Credits.**
Students will participate in practical experiences and scholarly activities designed to promote autonomous learning. Students will assume a leadership role in the implementation of the capstone project with guidance from faculty mentor and site supervisor. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**OCTH 101. Introduction to Occupational Therapy. 1 Credits.**
Survey of the profession of occupational therapy. Includes information on academic and professional requirements, career opportunities, general description, and history of the profession. Open to all students.

**OCTH 601. Human Anatomy. 6 Credits.**
In OCTH 601, the study of gross anatomy and neuroanatomy in relation to human function and behavior will introduce students to how occupational therapists use anatomical knowledge to gather information about clients. Learning opportunities include lecture and laboratory. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

**OCTH 602. Orientation to the Occupational Therapy Profession. 3 Credits.**
In OCTH 602, we will examine occupation, explore the underlying philosophy and history of the occupational therapy profession, and implications for current practice and future directions. We will establish expectations for professionalism and practice application of ethical and professional behaviors within the context of occupational therapy practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

**OCTH 605. Theory and Practice in Occupational Therapy. 2 Credits.**
In OCTH 605, we will present established and emerging conceptual models of occupational therapy to guide students in exploration and discussion of assessment and intervention practices. Emerging professional reasoning skills and strategies will support individuals and small groups in synthesis and integration of theoretical concepts applied to diverse practice settings. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

**OCTH 622. Analysis and Adaptations of Occupations - I. 4 Credits.**
In OCTH 622, we will study the role of occupations and factors influencing occupational performance using the "top-down/bottom-up" analytic approach recommended by the WHO and reinforced by the OT Practice Framework. This course will use service learning as the context for synthesizing an understanding of occupation, the occupational therapy process, and person-centered practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

**OCTH 630. Practicum - I. 2 Credits.**
In OCTH 630, we will support students to experience and demonstrate person-centered and strength-based approaches when engaging individuals in their natural context, and to use observation, interview, and documentation skills to guide OT practice with children and families. Students will explore individual leadership strengths and styles to better understand individual roles within a complex system. Students as individuals and in small groups will undertake leadership assessment, reflection and application. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.
OCTH 635. Lifespan Development from an Occupational Perspective. 4 Credits.
In OCTH 635, we will examine in detail developmental theories and how they intersect with changes in occupations across the lifespan. We will promote an advanced understanding of participation in meaningful activities by practical experiences with real people in authentic settings. Students will gain an understanding and appreciation of the qualitative differences between typical and atypical occupational performance across the lifespan. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 645. Contexts of Occupation. 2 Credits.
In OCTH 645, contextual supports and features of physical, social, and other environments will be explored as potential tools to facilitate maintaining or enhancing occupational performance irrespective of disability status. The interaction of person, context, and environment will be explored through guided discussion, reflection, and extra-mural exploratory assignments. A culminating activity inspires teams of students to assemble course elements to develop a cohesive summary project with practical application. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 655. Neuroscience Analysis of Occupational Performance. 3 Credits.
In OCTH 655, we will build upon prior knowledge of neuroanatomy gained through OCTH 601. Principles of neuroscience will be interpreted in clinical application using a strength-based approach to advance understanding of nervous system function. The integration and function of neural systems will be considered in relation to specific challenges and capacity of the nervous system as a whole to support behavior. A practical application and problem-based perspective will be encouraged throughout the course, with students invited to consider consumer perspective and availability of potential supports. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 662. Physical Considerations in Facilitating Occupational Performance. 4 Credits.
In OCTH 662, we will appraise the impact of select medical conditions on person factors and occupational performance in everyday life using scientific reasoning. Students will implement occupational therapy assessment and intervention strategies integrated with knowledge of injury and disease processes to facilitate an understanding of occupational performance outcomes. Particular consideration will be given to addressing complex comorbidities within the context occupational performance. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 670. Practicum - II. 2 Credits.
In OCTH 670, we will employ the occupational therapy process, to participate in service provision to individuals through level I fieldwork experiences. We will build upon skills from OCTH 630 to advance leadership development and effective communication. This course will use both classroom and community-based practicum experiences. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 672. Psychiatric Considerations in Facilitating Occupational Performance. 3 Credits.
In OCTH 672, we will examine in detail occupational performance as influenced by psychological conditions using evidence-based practices and principles of mental health. We will emphasize the importance of considering individuals, groups and organizations with the context of occupational performance. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 680. Independent Study. 1-6 Credits.
An elective course to allow students to pursue areas of special interest under direction of faculty of his or her choice. Investigation of special issues relevant to an aspect of occupational therapy practice will include study of pertinent practice factors. Student will complete special projects relevant to the practice areas, such as oral presentation, written paper or case analyses. May be repeated for credit. Prerequisite: Permission of department and instructor (offered Spring, Summer and Fall).

OCTH 682. Analysis and Adaptation of Occupations - II. 2 Credits.
In OCTH 682, we will support students in service learning settings to expand OCTH 622 task analysis outcomes to include the occupational therapy practice framework to further analyze and apply the occupational therapy process using person-centered practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 690. Evaluation and Assessment of Occupational Performance. 2 Credits.
In OCTH 690, we will examine in detail principles of the evaluation process to analyze occupational performance across the lifespan. We will differentiate, select, interpret, and document both formal and informal measures within a person-centered and contextually relevant approach. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 704. Planning and Intervention in Occupational Therapy. 2 Credits.
This course will use professional reasoning to analyze cases across the lifespan. We will work in small groups using a problem-based format with faculty mentors as we develop an occupational profile, occupational analysis and evidence-based intervention plans for each case.

OCTH 710. Service Management: Delivery Systems. 1 Credits.
This course will explore how service delivery systems influence pragmatic reasoning and occupational therapy practice. We will examine American and global health care systems along with occupational therapy health care delivery settings with a focus on quality, cost, and access related to service delivery. Teaching and learning experiences occur through lecture, on-line materials, class discussion and small group activities.

OCTH 715. Supervision, Team Relations, and Management Communication. 1 Credits.
This course emphasizes entry level skills related to supervision, teamwork, and communication within practice environments.

OCTH 720. Occupational Therapy Practice Models. 7 Credits.
This course will use practice models to guide evaluation and intervention in occupational therapy practice. Students will gain an understanding of historical and contemporary models, learn the evidence underlying each model and conduct assessments with a consumer from each of the contemporary models.

OCTH 725. The Research Process. 1 Credits.
This course will transition from understanding and appraising research (OCTH 783) to generating research (OCTH 790). The purpose of this course is to guide students through planning research by introducing the components of research and describing ways in which research may be conducted. The course reviews research ethics, writing research questions and hypotheses, sampling, measurement and data collection, components of quantitative and qualitative research, and information about disseminating research.
OCTH 730. Practicum III. 2 Credits.
This course will build upon practicum and level I fieldwork experiences to continue developing necessary skills for level II fieldwork experiences. We will determine the relevant variables for intervention, work collaboratively with others within each setting, analyze, and reflect upon the experience. We will analyze principles of evidence-based practice and occupation-based intervention.

OCTH 738. Special Topics in Practice. 1-3 Credits.
Focused study of theory application, professional topics and skills, and emerging practice questions. Learning experiences may be in the form of guided readings and discussion, directed projects, seminars, or community/clinical experience with focus on advanced supplemental or exploratory learning. Specific topics and formats will vary as they are generated by student interest and faculty expertise.

OCTH 750. Case-Based Clinical Reasoning. 2 Credits.
This course will apply the professional reasoning process to understand individuals' occupational performance and analyze services provided based on cases from level II fieldwork experiences. We will participate in small group discussion using a problem-based format to conduct case analysis and develop evidence-based intervention plans.

OCTH 755. Issues and Trends Seminar. 1 Credits.
This course will analyze key professional, political, and cultural issues and trends that impact service provision and the populations served by occupational therapists. This seminar format incorporates student-driven service experiences, discussion forums, and small group work to examine issues/trends and recognize opportunities to shape the future of the occupational therapy profession.

OCTH 760. Professional Development and Leadership in Service Management. 3 Credits.
This course will discuss professional responsibilities and career development opportunities as they relate to leadership, administration, and management of occupational therapy services. We will use reflective assessments to identify professional leadership strengths and career paths. Students working in small work groups will apply management principles to develop and propose community-based health promotion programs.

OCTH 765. Family and Community Service Systems. 2 Credits.
This course will use professional reasoning to examine occupational practice within various delivery systems. We will use lecture and small group seminars to analyze systems from level II fieldwork experiences and develop a program evaluation plan based on collaborations between students and fieldwork supervisors.

OCTH 770. Level II Fieldwork, Part 1. 6 Credits.
A required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists supervise the experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Prerequisite: Satisfactory completion of required academic coursework.

OCTH 775. Level II Fieldwork, Part 2. 6 Credits.
A required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists will supervise this experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Ages, disabilities, and service provision systems for this course will differ from the student's prior fieldwork experience. Prerequisite: Satisfactory completion of required academic coursework.

OCTH 776. Population-Based Clinical Reasoning. 3 Credits.
This course will consider population-based concepts and theories to identify, prioritize and meet the health and life participation needs of populations. Within an interprofessional online learning context, students collaborate to develop community-based assessment and intervention emphasizing promotion, maintenance and restoration of health and wellness and disease prevention for specific populations.

OCTH 780. Elective Level II Fieldwork. 3-6 Credits.
An elective (optional) supervised experience in a facility meeting specific criteria. Qualified occupational therapist will supervise this experience. This fieldwork would allow students to pursue areas of special interest. Length and time commitment of experience will be commensurate with credit hours (e.g., each credit requires 80 hours of fieldwork contact at specified site). Prerequisite: Satisfactory completion of required academic coursework and OCTH 770.

OCTH 783. Evidence-Based Practice. 2 Credits.
This course will review, appraise, and integrate various levels of evidence to inform occupational therapy practice. Students will learn how and how to find relevant evidence as well as what factors should be considered in the assessment of evidence. We will review statistics and their use in interpreting outcome data. Students will also learn to synthesize and translate evidence into useful information for practice.

OCTH 790. Research Practicum and Professional Writing. 3 Credits.
This course will explore how the process of conducting a faculty-mentored research project becomes a platform for developing occupational therapy principles and for guiding practice, and how conveying meaning through professional writing is essential for communicating outcomes, interpretations, and instructions. Prerequisite: OCTH 725. Students from programs outside the MS in Occupational Therapy or PhD in Therapeutic Science need to contact the Occupational Therapy Department for permission to enroll.

OccupationalTherapy(Doctorate) Courses

OTD 750. Clinical Reasoning and Problem Based Learning. 3 Credits.
Students will apply a clinical reasoning process to individuals with occupational performance needs. Cases will be presented from students' clinical experiences. In a problem solving format, students will evaluate models of service delivery, evaluation and intervention delivery and dissemination of information received by the individual. Students will identify and discuss alternatives given a variety of situations and environments. PREREQUISITE: Permission of Department.

OTD 770. Knowledge For Specialty Practice Area. 3 Credits.
This course is designed to support and correspond with OTD 780. Students will be matched with a faculty mentor as they develop a literature review in an area of clinical interest. This experience is designed to supplement students' ongoing clinical practice as they develop a library of pertinent empirical readings. Students will be mentored as they develop skills in analytical reading and identification of information that informs best practice. PREREQUISITE: Admission to OTD Program or Permission of Instructor.

OTD 776. Population Based Health Care. 3 Credits.
This course will coordinate with OCTH 776. The purpose of this course is to introduce concepts and theories related to providing health care to complex systems and aggregates in the community, state and nation. Emphasis is placed on the promotion, maintenance and restoration of health and wellness and the prevention of disease. Internal and external environmental components which include historical, political, social, cultural and economic factors are presented. The role of the health care provider in identifying, prioritizing and meeting the health and
life participation needs of aggregates is discussed. PREREQUISITE: Permission of department. LEC

OTD 780. Practicum in Specialty Practice Area. 3 Credits.
This course is designed to support and correspond with OTD 770. Students will complete this course as they work in a clinical environment. They will meet with a faculty mentor to support the analysis and dissemination of their empirical information gathered during OTD 770. They will present their empirical literature findings to their professional colleagues via a clinical research forum. Students will be expected to create three forms of information dissemination and critically review the professional feedback they receive. PREREQUISITE: Permission of department.

OTD 783. Evidence Based Practice. 3 Credits.
This course will coordinate with OTCH 783. Students will address the parameters and criteria for evidence-based practice. They will build a library of information that facilitates their evaluation of the status, beliefs, and practice of Occupational Therapy. They will develop skill in the synthesis of empirical evidence and explore dissemination options to service recipients. Students' work will culminate in the formulation of a decision-making paradigm for their future practice decisions. PREREQUISITE: Permission of Department.

OTD 799. Practice and Research. 3 Credits.
This is an elective course that allows students to pursue areas of special interest under the direction of a faculty member of his or her choice. This course is designed to support students' learning as they complete their pre-doctoral studies. Investigation of special issues relevant to an aspect of occupational therapy practice will include study of pertinent practice factors. Students will complete special projects relevant to the practice areas of interest, such as an oral presentation, written paper, or case analysis. May be repeated for credit. PREREQUISITE: Permission of Department.

OTD 825. Qualitative Research Methods. 3 Credits.
This course is an introduction to qualitative research techniques. Students will have several opportunities to gain hands-on experience using fundamental qualitative research techniques to sharpen their data collection, analysis and write-up skills. The goals of this course are to better understand the role qualitative techniques play in research, identify various ethical issues, sharpen interview and observation skills, and develop foundation skills for collecting, analyzing and interpreting qualitative data. Prerequisite: Permission of Department. Lecture course.

OTD 835. Quantitative Research for Applied Science. 3 Credits.
Research relevant to therapeutic intervention comes from a variety of disciplines involving varied research designs and analysis strategies. Students in this course will examine selected research studies and gain skill in analyzing methods and results as well as in applying research findings to practical problems. Students will conduct a systematic review on a specific area of occupational therapy practice.

OTD 850. Teaching Practicum. 1-3 Credits.
The purpose of this course is to provide practical learning whereby students receive individual mentorship for the development, implementation and evaluation of a teaching experience. Students will be responsible for developing the material, instructing students, grading assignments and evaluating the teaching experience. The teaching experience is expected to include at least 12 hours of face to face instruction (or the equivalent in on-line teaching or written materials). Teaching experiences can include MOT program lectures or labs, continuing education workshops, patient education programs, or staff inservices or another experience that meets the time and competency requirements. Prerequisite: A graduate level teaching methods course such as NSG 873, NSG 874, C & T 740, C & T 840

OTD 860. Theory and Practice in Occupational Therapy. 3 Credits.
This course will cover major theoretical frameworks and practice models in occupational therapy. The history of occupational therapy will be included to provide a basis for understanding the evolution of the profession as well as past and current issues and trends. Students will learn how to critically analyze theories, evaluate research evidence related to specific theories and practice models, and assess pragmatic issues in applying practice models to specific settings and populations.

OTD 865. Occupation-Based Practice. 3 Credits.
This course is designed to critically review Occupational Therapy theories, research, practice models and frameworks using the tenets of occupation based practice. Students will analyze seminal literature from occupational science and relate theory and evidence to practice. Students will review their specified area of practice to develop a proposed method of practice that incorporates empirical evidence and practice methods. Finally, students will select a mentor from their practice area to review their proposal. Critical feedback will be incorporated into a final presentation and paper. PREREQUISITE: Permission of Department.

OTD 875. Professional Development. 3 Credits.
This course will explore professional development from an advanced practice perspective. Students will examine aspects of advanced practice such as leadership (both work and professional), management, group and system communication and change agency. They will explore these topics within their current practice settings and select an area of advanced skills to explore in more depth. Students will develop an understanding of how they can impact systems and contribute to the development of the occupational therapy profession.

OTD 880. Program Evaluation. 3 Credits.
Leadership in areas of specialty practice will require our graduates to critically evaluate their practice programs. In this course, students will explore the traditional and innovative ways to evaluate professional services and systems, and they will develop skills to conduct program evaluations. Students will examine the purpose and process of program evaluations in a variety of clinical settings. Through lecture, discussion and a project they will develop and execute a program evaluation in their area of practice. PREREQUISITE: Permission of Department.

OTD 885. Advanced Practicum. 1-3 Credits.
This practicum is designed to span 400 hours. Students will identify an area of practice through which they want to develop clinical initiatives and leadership. Selected field experiences will provide opportunities for program development, leadership, and information dissemination. Upon completion, the students will provide his or her clinical team with a program, or research based initiative, along with specified program evaluation methods. PREREQUISITE: Permission of Department and continuous enrollment until completion of competencies.

OTD 890. Capstone Project. 1-3 Credits.
The capstone project will comprise a scholarly report individualized to the scope of the project chosen. A capstone project report represents the application of knowledge as well as the search for it, and differs from a thesis such that student opinion and experience is involved. The student must negotiate capstone objectives, evaluation standards and any potential approvals prior to initiation of the project. PREREQUISITE: Permission of OTE Advisor/Mentor after completion of core, elective, and practicum coursework. Total capstone credit will equal 3 hours. Prerequisite: All core, elective, and practicum coursework.

OTD 899. Special Projects. 1-3 Credits.
This is an elective course that allows students to pursue areas of special interest under the direction of a doctoral faculty member of his or her choice. This course is designed to support doctoral training. Academic options range from research based studies and/or activities to critical analysis of clinical practice methods. Students will complete special projects relevant to their designated practice area of interest. Students must negotiate learning objectives, academic projects and evaluation standards with their mentor. May be repeated for credit. PREREQUISITE: Permission of department.

PhysThr, RehabSci & AthlTrng Courses

ATTR 701. Foundations in Athletic Training. 1 Credits.
Introduction to foundational content and basic skills of clinical practice for the athletic training profession. Specific emphasis is placed on behavioral practices of healthcare professionals and clinical skills in patient management. Prerequisite: Admission into the MSAT program or permission of instructor.

ATTR 708. Applied Anatomy. 1 Credits.
This course introduces how to use anatomical knowledge to gather basic examination information about the patient. Learning opportunities include lecture and laboratory. Prerequisite: Admission into the MSAT program or permission of instructor.

ATTR 709. Advanced Topics in Human Anatomy. 6 Credits.
The student will obtain a basic understanding of human gross anatomy with specific knowledge of upper and lower extremities, head and neck, back and neural structures. At the end of the course the student will be able to apply this knowledge of anatomy to functional and clinical situations. Prerequisite: Admission into the MSAT program or permission of instructor.

ATTR 713. Integrated Clinical Education I. 2 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide opportunities for application of didactic course work. Emphasis will be placed on developing communication, interpersonal, and documentation skills, as well as other athletic training skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 714. Evaluation & Management I. 4 Credits.
Review of integrative human pathophysiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the athletic trainer with an emphasis on clinical tools to medically screen patients for the presence of symptoms and signs. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 716. Interventions I. 2 Credits.
Application of the skills obtained in clinical coursework and clinical problem-solving using common athletic training interventions. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 718. Documentation and Health Informatics. 1 Credits.
Emphasizes the development of effective documentation skills, including exposure to a variety of documentation formats across various practice setting and implications for proper reimbursement. Concepts of healthcare informatics are introduced including use of an electronic documentation systems and the capability of information systems to support quality care. Disablement classification models, behavioral objectives, and functional outcome concepts are applied to organize patient data and identify treatment goals. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 719. Applied Kinesiology and Biomechanics. 4 Credits.
This course involves a study of joint structure and function, and biomechanical principles underlying human motion. Emphasis is placed on the application of kinesiological principles to athletic training situations. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 723. Integrated Clinical Education II. 2 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide opportunities for application of didactic course work. Emphasis will be placed on developing communication, interpersonal, and documentation skills, as well as other athletic training skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

ATTR 724. Evaluation & Management II. 6 Credits.
Builds on the foundation from anatomy, kinesiology and biomechanics. Examination skills and treatment interventions that apply specifically to the musculoskeletal system are provided. Basic examination skills, gait analysis, and therapeutic exercise are discussed and reviewed for common orthopedic conditions. The course will integrate instruction with case-based clinical problem solving. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

ATTR 725. Research Seminar. 1 Credits.
An introduction to research in evidence-based practice that allows students to develop clinical questions and integrate evidence into clinical practice. Emphasis is placed on clinical research pertinent to athletic training. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

ATTR 726. Interventions II. 4 Credits.
Application of the skills obtained in clinical coursework and clinical problem-solving using common athletic training treatment interventions. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

ATTR 727. Clinical Reasoning I. 1 Credits.
Explores the nature of clinical reasoning and involves self-reflection, informed decision making, and medical ethics in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students’ educational exposure. The Capstone Project will be introduced. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

ATTR 755. Pharmacology. 2 Credits.
Pharmacological background for the clinical treatment of patients. Fundamentals of the actions of drugs including mechanisms of therapeutic and adverse effects. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 793. Integrated Clinical Education III. 1 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide opportunities for application of didactic course work. Emphasis will be placed on developing communication, interpersonal, and documentation skills, as well as other athletic training skills and procedures that have been introduced in courses. Prerequisite:
Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 800. Independent Study. 1-8 Credits.**
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Admission to the MSAT program, or permission of instructor.

**ATTR 807. Clinical Reasoning II. 1 Credits.**
Application and integration of clinical reasoning and medical ethics in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students’ educational exposure. The Capstone Project will continue. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 812. Health Care Administration. 2 Credits.**
Contemporary issues in health care which impact the practice of athletic training in the health care system. Changes in the US health care system will be discussed, including managed care, plus essential elements and principles of management in health care organizations, and an overview of human resources and operational management. Financial management specifically reimbursement for patient services, risk management, information management, and compliance will be discussed. Discussion of professional development is intertwined throughout the course. Students will be exposed to business development and entrepreneurial skills needed to practice. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 813. Clinical Experience I. 2 Credits.**
An immersive clinical experience that allows for graduated autonomy in developing and providing patient centered skills for successful health care practice. The student will work alongside and under the supervision of a Preceptor to experience all aspects of athletic training practice. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 814. Evaluation & Management III. 2 Credits.**
Incorporates concepts from anatomy, kinesiology, basic biomechanics and knowledge of peripheral joint examination and treatment. Terminology, examination, evaluation, development of a treatment plan and treatment techniques and basic differential diagnosis skills for the head, neck, and spine are taught. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 816. Interventions III. 3 Credits.**
Application of the skills obtained in clinical coursework and clinical problem-solving using common athletic training interventions. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 818. Medical Imaging. 1 Credits.**
An introduction to medical imaging and an overview of its role in the health care delivery system. Topics include basic imaging equipment with an emphasis on digital acquisition and processing. Factors affecting the quality of images and limitations to the techniques are reviewed. Imaging techniques covered include: X-rays, CT scans, Nuclear medicine, ultrasound, MRI and PET. This course will include a component covering the microscopic anatomy of cells. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 821. Athletic Training Seminar. 1 Credits.**
Graduate seminar focusing on current issues in athletic training and preparation for the athletic training credentialing exam. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

**ATTR 822. Behavioral Health. 2 Credits.**
Exploration of the development and integration of behavioral, psychosocial, and biomedical science knowledge and techniques relevant to the understanding of health and illness. Content will include application of knowledge and techniques to patient centered care. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

**ATTR 824. Performance Enhancement. 1 Credits.**
Development and application of interventions to optimize sport performance. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

**ATTR 827. Clinical Reasoning III. 1 Credits.**
Application and integration of clinical reasoning and medical ethics in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students’ educational exposure. The Capstone Project will continue. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor.

**ATTR 837. Clinical Reasoning Capstone. 1 Credits.**
Application and integration of clinical reasoning and medical ethics in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students’ educational exposure. The Capstone Project will be completed. Prerequisite: Successful completion of the first 5 semesters of the MSAT curriculum or permission of instructor.

**ATTR 843. Clinical Experience II. 4 Credits.**
An immersive clinical experience that allows for graduated autonomy in developing and providing patient centered skills for successful health care practice. The student will work alongside and under the supervision of a Preceptor to experience all aspects of athletic training practice. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 863.

**ATTR 863. Integrated Clinical Education IV. 1 Credits.**
This course consists of supervised experiences in a clinical setting and seminar sessions that provide opportunities for application of didactic course work. Emphasis will be placed on developing communication, interpersonal, and documentation skills, as well as other athletic training skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

**ATTR 883. Clinical Experience III. 8 Credits.**
An immersive clinical experience that allows for graduated autonomy in developing and providing patient centered skills for successful health care practice. The student will work alongside and under the supervision of a Preceptor to experience all aspects of athletic training practice. Prerequisite: Successful completion of the first 5 semesters of the MSAT curriculum or permission of instructor.

**PhysThr, RehabSci & AthlTrng Courses**

**PTRS 702. Physical Therapy Documentation and Health Informatics. 1 Credits.**
Emphasizes the development of effective documentation skills, including exposure to a variety of documentation formats across various practice setting and implications for proper reimbursement. Concepts of healthcare informatics are introduced including use of an electronic documentation systems and the capability of information systems to support quality care. Disablement classification models, behavioral objectives, and functional
outcome concepts are applied to organize patient data and identify treatment goals. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

**PTRS 703. Applied Anatomy. 1 Credits.**
This course introduces the learner to how physical therapists use anatomical knowledge to gather basic examination information about the patient. Prerequisite: Admission into the DPT program or permission of instructor.

**PTRS 704. Physical Therapy Interventions I. 3 Credits.**
This course focuses on development of skills required by the physical therapist in the generalist acute care environment. Emphasis is placed on body mechanics, workplace safety, infection control, basic mobility assessment, transfers, positioning, line management, responding to clinical emergencies, wheelchair basics, therapeutic exercise, assistive devices, gait training, plan of care and discharge planning. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

**PTRS 705. Physical Therapy Interventions II. 4 Credits.**
This course will introduce the principles and application of therapeutic biophysical agents. Students will apply skills obtained in previous course work and begin clinical problem-solving using common physical therapy treatment interventions. Topics include integumentary management for wound healing interventions, therapeutic modalities with an emphasis on the healing process, and electrical modalities. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor.

**PTRS 710. Advanced Topics in Human Anatomy. 6 Credits.**
The student will obtain a basic understanding of human gross anatomy with specific knowledge of upper and lower extremities, head and neck, back and neural structures. At the end of this course the student will be able to apply this knowledge of anatomy to functional and clinical situations. Prerequisite: Admission into the DPT program or permission of instructor.

**PTRS 711. Applied Kinesiology and Biomechanics. 4 Credits.**
This course involves a study of joint structure and function, and biomechanical principles underlying human motion. Emphasis is placed on the application of kinesiological principles to clinical physical therapy situations. Prerequisite: Successful completion of semester 1 of DPT curriculum or permission of instructor.

**PTRS 720. Integrated Clinical Experience I. 1 Credits.**
This course consists of supervised experiences in a clinical setting and seminar sessions that provide preliminary opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

**PTRS 730. Integrated Clinical Experience II. 1 Credits.**
This course consists of supervised experiences in a clinical setting and seminar sessions that provide preliminary opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor.

**PTRS 745. Orthopedic Physical Therapy I. 6 Credits.**
This course builds on the foundation from anatomy, kinesiology and biomechanics. Examination skills and treatment interventions that apply specifically to the musculoskeletal system are provided. Basic examination skills for all peripheral joints, gait analysis, and therapeutic exercise are discussed and reviewed for common orthopedic conditions. The course will integrate instruction with case-based clinical problem solving. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor.

**PTRS 746. Musculoskeletal Conditions and Management. 3 Credits.**
Mastery of physical therapy subjective and objective examination and treatment intervention for patients of all ages who present with a musculoskeletal problem with emphasis on amputation, prosthetics, upper and lower extremity orthoses, fracture management and connective tissue disorders. Emphasis will be placed on the most common clinical problems and physical therapy diagnoses. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor.

**PTRS 750. Research in Evidence-Based Physical Therapy Practice. 3 Credits.**
An introduction to research in the evidence-based physical therapy practice including the Scientific Method, library and multimedia resources, research process, measurement theory (reliability and validity), research designs, experimental design principles, research ethics, critical review and analysis of research publications, statistical concepts, and writing of a research report and/or research proposal. Throughout, emphasis is placed on clinical research pertinent to physical therapy. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor.

**PTRS 807. Ethics in Health Care. 1 Credits.**
This course covers the basic ethical concepts, principles, relevant theories, and ethical decision-making models applied to major contemporary health care issues and dilemmas facing health professionals. Development of skills for ethical clinical decision making is the focus. Prerequisites: Permission of instructor.

**PTRS 817. Ethics in Health Care. 2 Credits.**
This course covers basic ethical concepts, principles, relevant theories and ethical decision-making models applied to major contemporary health care issues and dilemmas facing health professionals. Development of skills for ethical clinical decision making is the focus. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor.

**PTRS 825. Exercise Physiology. 3 Credits.**
This course will provide entry-level DPT students with the knowledge of the physiological functions and adaptations of the human body with exercise. Emphasis will be placed on familiarizing students with sound medical rationale and the basis for treatment considering the immediate and long-term effects of exercise. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum, or consent of the instructor.

**PTRS 826. Cardiopulmonary Physical Therapy. 5 Credits.**
Anatomy, physiology and pathophysiology of the cardiovascular and pulmonary systems are studied and related to clinical signs and symptoms. Students are introduced to common evaluation and treatment techniques, as well as the rationale for including physical therapy in the management of cardiopulmonary conditions. These topics are discussed in conjunction with case studies and current research. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor.

**PTRS 828. Medical Imaging. 1 Credits.**
An introduction to medical imaging and an overview of its role in the health care delivery system. Topics include an introduction to basic imaging equipment with an emphasis on digital acquisition and processing. Factors affecting the quality of images and limitations to the
techniques are reviewed. Imaging techniques covered include: X-rays, CT scans, Nuclear medicine, ultrasound, MRI and PET. This course will also include a component covering the microscopic anatomy of cells. Prerequisite: Admission to the DPT program or permission of instructor.

**PTRS 830. Integrated Clinical Experience III. 2 Credits.**
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor.

**PTRS 833. Pediatric Physical Therapy. 3 Credits.**
This course introduces fundamental concepts necessary for the entry-level physical therapist to examine, evaluate, and treat the pediatric client. Lecture and lab experiences emphasize a problem oriented approach to physical therapy management of children with musculoskeletal, neurological, and/or cardiopulmonary impairments. Students will learn to recognize components of normal and abnormal development, particularly during the first year of life. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor.

**PTRS 840. Integrated Clinical Experience IV. 2 Credits.**
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor.

**PTRS 845. Orthopedic Physical Therapy II. 6 Credits.**
This course incorporates concepts from anatomy, kinesiology and basic biomechanics, and knowledge of peripheral joint examination and treatment. Terminology, examination, evaluation, development of a treatment plan and treatment techniques and basic differential diagnosis skills for the spine and the temporomandibular joint are taught. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor.

**PTRS 846. Orthopedic Physical Therapy III. 3 Credits.**
This course incorporates concepts from anatomy, kinesiology, biomechanics, and Orthopedic Physical Therapy I and II courses. Terminology, examination, evaluation, development of a treatment plan and treatment techniques and advanced differential diagnosis skills for complex peripheral and/or spinal disorders are taught. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor.

**PTRS 852. Neurologic Physical Therapy and Rehabilitation I. 6 Credits.**
This course will introduce the principles of neuroscience and describe their application as relevant to physical therapists. The course will introduce the terminology of the nervous system and cover the major functions of the nervous systems. This course will also integrate neurophysiology and neuroanatomy into the clinical presentation of adults with neurologic pathology. The etiology, epidemiology signs, and symptoms of selected neurological conditions will be presented. The medical management of patients with nervous system disorders will be presented in relationship to the practice of physical therapy. The course will introduce examination of impairments for persons with neuromuscular pathologies. Students will be presented with simple case studies and progress to more complex patient problems. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor.

**PTRS 853. Neurologic Physical Therapy and Rehabilitation II. 6 Credits.**
This course will focus on rehabilitation approaches for people with neurologic pathology. Students will examine factors that contribute to the control of voluntary movement and the learning of motor skills, and develop an understanding of the relationship between the brain and the purposeful movements that make us human. Students will acquire the skills to hypothesize about the relationship of health conditions and body function/structure to limitations in activities and participation in adults with neurologic pathology. A clinical decision making approach will combine contemporary rehabilitation approaches, consideration of psychosocial and cognitive factors, and research evidence in the discussion of complex patient cases. After completing this course, students will demonstrate novice-level knowledge and skills necessary to complete a physical therapy examination and develop a comprehensive treatment plan for adults with neurologic pathology. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of the instructor.

**PTRS 855. Pharmacology for Physical Therapists. 2 Credits.**
Pharmacological background for the clinical treatment of patients referred to physical therapy. Fundamentals of the actions of drugs including mechanisms of therapeutic and adverse effects. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

**PTRS 860. Evidence-Based Research Practicum I. 1 Credits.**
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the enhancement of evidence-based physical therapy practice. The student will be supervised by a member of the faculty. This is a two-semester course. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor.

**PTRS 861. Evidence-Based Research Practicum II. 1 Credits.**
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the presentation and communication of an evidence-based research project. The student will be supervised by a member of the faculty. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum, or consent of instructor.

**PTRS 865. Independent Study. 1-3 Credits.**
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Admission to the DPT program, or permission of instructor.

**PTRS 877. Administration in Physical Therapy. 2 Credits.**
Designed to familiarize the entry-level therapist with contemporary issues in health care which impact the practice of physical therapy in the health care system. Changes in the U.S. health care system will be discussed, including managed care, plus essential elements and principles of management in health care organizations, and an overview of human resources and operational management. Financial management specifically reimbursement for patient services, risk management, information management, and compliance will be discussed. Discussion of professional development is intertwined throughout the course. Students will be exposed to business development and entrepreneurial skills needed to expand or start up a physical therapy practice. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum or permission of instructor.
PTRS 882. Pathophysiology and Physical Therapist Screens. 6 Credits.
Review of integrative human pathophysiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the physical therapist with an emphasis on clinical tools to medically screen patients for the presence of symptoms and signs. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

PTRS 890. Specialties in Physical Therapy Practice. 2 Credits.
Requires students to apply the five elements of patient/client management for addressing multi-system impairments across diverse and complex patient populations. Exposure to physical therapy advanced practice specialty areas included, but not limited to, sport medicine, women's health, neurology, pediatrics, geriatrics, and oncology. Seminar format instruction incorporating case-based instruction, group discussion, and speakers with advanced clinical credentials. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor.

PTRS 920. Full-Time Clinical Experience I. 6-8 Credits.
Nine to twelve weeks of full-time clinical experience. During the clinical rotation, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

PTRS 921. Full-Time Clinical Experience II. 6-8 Credits.
Nine to twelve weeks of full-time clinical experience. During the clinical rotation, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

PTRS 922. Full-Time Clinical Experience III. 6-8 Credits.
Nine to twelve weeks of full-time clinical experience. During the clinical rotation, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

PTRS 923. Full-Time Clinical Experience IV. 2-6 Credits.
Three to nine weeks of full-time clinical experience. During the clinical rotation the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

PTRS 924. Specialized Clinical Experience. 1-6 Credits.
One and a half to nine weeks of clinical experience. During the clinical rotation the student will have the opportunity to have exposure to a different health care system such as an international clinical experience, or a specialized area of physical therapy practice. The student will be under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

PhysThr, RehabSci & AthlTrng Courses

REHS 760. Introduction to Matlab Programming. 1 Credits.
Introduction: matlab windows, input-output, file types, general commands; interactive computation; matrices and vectors, matrix and array operations, scripts and functions applications, graphics. Prerequisite: None

REHS 803. Research Observations. 1 Credits.
Students will be introduced to different types of research projects conducted in the department. Students will rotate in up to three research laboratories, sequentially, during a semester. The course is designed to help students select a faculty researcher to mentor them in their dissertation research. Prerequisite: Entry into the PhD in Rehabilitation Science program.

REHS 850. Seminar in Rehabilitation Science. 1 Credits.
Students will become familiar with the organization of an experimental scientific paper and learn how to critically assess papers in the field of rehabilitation science. Students will develop writing skills by summarizing scientific papers and communication skills by orally presenting and discussing research literature with his/her peers and colleagues, course coordinator and other faculty members. Prerequisite: Entry into the PhD program in Rehabilitation Science or permission of instructor.

REHS 855. Research Design and Methods I. 2 Credits.
An introduction to research design and methods including library and multimedia resources; research process; measurement theory (reliability and validity); experimental design principles; single subject design and other non-experimental design; critical thinking skill and procedure; critical review and analysis of a research article; basic scientific writing skills; and skills in writing a research report/manuscript. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 857. Research Design and Methods II. 2 Credits.
An introduction to research design and method including critically appraising the state of art on a research topic; conducting a systematic review of literature; basic concept of statistical analysis, performing and interpreting data analysis using parametric, non-parametric, or correlational analyses; preparation of a research proposal focusing on study rational, novelty, and research questions and hypotheses; ethical issues related to research; basic knowledge of bioinformatics; meta-analysis; and writing of a research proposal. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 862. Cellular and Molecular Basis of Rehabilitation. 2 Credits.
A study of the biology, at the cellular and molecular levels, of pathological processes that impair human function will highlight the mechanisms by which cells/tissues repair and/or adapt following disease/injury or aging. Emphasis will be placed on the body's endogenous ability for rehabilitation or adaptation to disease/injury. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 864. Introduction to Rehabilitation Science. 3 Credits.
This course provides introduction to and overview of rehabilitation science, an interdisciplinary field of study that focuses on restoring functional capacity in a person and improving their interactions with the surrounding environment. Different areas of rehabilitation science will be presented. Features of the pathological conditions and targeted individuals, factors that contribute to the outcomes of the rehabilitation, research tools and measurements, potential optimal rehabilitation techniques, and directions of future research will be discussed.
Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 865. Independent Study. 1-3 Credits.
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Entry in the PhD in Rehabilitation Science program, or permission of instructor. IND

REHS 866. Developing Research Aims in Rehabilitation Science. 2 Credits.
Students will practice writing specific aims, hypothesis and general study design of a research proposal. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 870. Teaching Practicum. 1-3 Credits.
Directed experiences in a planned instructional activity. Student will write course objectives, plan and deliver lectures, produce practical and written exams and assign grades. Prerequisite: Entry in the PhD in Rehabilitation Science program or consent of instructor.

REHS 873. Research Practicum. 1-3 Credits.
This course is designed to provide supervised research experience in various laboratories in the department. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor.

REHS 875. Clinical Practicum. 1-3 Credits.
Specialized clinical training in a highly specific area of specialization. The primary purpose of this course is for the student to develop advanced clinical skills in his/her area of specialization. Prerequisite: Admission to the PhD in Rehabilitation Science program, and permission of instructor.

REHS 884. Motor Control and Learning. 3 Credits.
The course will explore the study of the conditions and factors that influence the acquisition, control, and performance of motor skills. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 886. Musculoskeletal Rehabilitation. 3 Credits.
This course will explore the current concepts in musculoskeletal rehabilitation. The healing process of different types of tissue will be reviewed. The pathophysiological mechanisms of pain and acute and chronic injuries will be studied. Examination, evaluation and treatment interventions for the principal musculoskeletal conditions will be reviewed and discussed. Current scientific literature will be investigated and group discussions will be directed to scientific evidence for the variety of rehabilitation practices in musculoskeletal conditions. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor; REHS 884 Motor Control and Learning or an equivalent.

REHS 887. Neurorehabilitation. 3 Credits.
This course will provide an overview of the evidence of neurorehabilitation interventions on all domains of the International Classification of Functioning in various neurological conditions. Following a review of neuroanatomy, neurophysiology, and clinical presentation of common neurological conditions, principles of neuroplasticity and functional reorganization in neurorehabilitation will be outlined. Evidence of traditional concepts and emerging therapies in neurorehabilitation will be presented. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 889. Grant Writing. 3 Credits.
Research proposal writing for PhD comprehensive examinations and grant applications to federal and private funding agencies including all elements of the grant proposal - aims, innovation, significance and design. The process of grant proposal submission, review and resubmission is covered. Prerequisite: Current enrollment in a recognized graduate degree program or permission of instructor.

REHS 970. Instrumented Analysis of Human Biomechanical Function. 3 Credits.
An in-depth study that provides critical analysis of equipment and other resources used in analyzing human motion, balance, strength, electrophysiological responses, and cardiorespiratory function. Students will be required to conduct a preliminary study, including design, methodology and data collection using one or more of these instruments. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor.

REHS 980. Graduate Research. 1-10 Credits.
Original laboratory investigation conducted under the supervision of a senior staff member. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor.

REHS 990. Dissertation in Rehabilitation Science. 1-10 Credits.
For students in advanced standing enrolled in the PhD in Rehabilitation Science program.

Respiratory Care Courses

CVS 20. Cardiac Anatomy and Physiology. 1 Credits.
This course will provide the student with basic cardiac terminology, knowledge of congenital heart defects, coronary vessels and the conduction system. The student will also study the circulatory system and physiology of the heart. Prerequisite: Admission to the cardiovascular sonography program.

CVS 21. EKG I. 1 Credits.
This course is designed to present basic principles of ECG and the fundamentals of the ECG waveform. The student will be introduced to normal basic pattern and common abnormality recognition. Prerequisite: Admission to the advanced cardiovascular technology program.

CVS 22. Cardiovascular Physiology. 1 Credits.
During this course the student will focus on cardiovascular physiology. The student will study the circulatory system, addressing the physiology of the heart and blood vessels throughout the body. Prerequisite: Admission to the advanced cardiovascular technology program.

CVS 23. Patient Care I. 1 Credits.
This course will provide the student with the basic care skills necessary to function in a hospital and clinical setting. The student will learn about patient rights, HIPPA, patient transfers, proper ergonomics of scanning, hand hygiene, sterile technique, radiation safety and infection control. Prerequisite: Admission to the cardiovascular sonography program.

CVS 24. Vascular Anatomy and Physiology. 1 Credits.
The student will learn basic vascular terminology, anatomy and physiology. Prerequisite: Admission to the cardiovascular sonography program.

CVS 25. Physics I. 2 Credits.
This course is designed to introduce the student to the fundamental physical principles of Doppler echocardiography, the basic physics of Doppler ultrasound and the fundamental principles of pulsed wave, continuous wave and color flow Doppler. Prerequisite: Admission to the advanced cardiovascular technology program.

CVS 26. Clinical Practicum I. 6 Credits.
This course will provide meaningful, well-balanced experiences for the student in the adult echocardiography labs. Clinical Practicum I will focus on the development of image recognition, anatomy identification and patient care. Prerequisite: Admission to the cardiovascular sonography program.

CVS 27. Adult Cardiovascular Technician I. 2 Credits.
This course will introduce the student to the principles of diagnostic cardiac catheterization. The student will learn basic skills to assist the cardiologist during cardiac catheterization procedures. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 28. Pediatric Anatomy and Physiology. 1 Credits.**
The student will learn basic pediatric cardiac anatomy and physiology. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 30. Adult Echocardiography I. 2 Credits.**
The student will learn the pathophysiology of acquired valvular heart disease. Two-dimensional, spectral and color flow Doppler findings associated with each valvular disease state will be evaluated. The student will learn to obtain and effectively apply accurate two-dimensional and Doppler measurements as they relate to evaluation and quantification of valvular disease. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 31. Physics II. 2 Credits.**
The student will learn how to derive hemodynamic data from the pulsed-wave, continuous wave and color-flow Doppler examinations. Special emphasis will be given to understanding the physical principles governing the ultrasound machine and applying those principles to practice. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 32. Pharmacology. 1 Credits.**
The student will become familiar with common medicines used in the cardiovascular setting. The student will learn pharmacological management of patients undergoing invasive and non-invasive cardiac and vascular procedures. Students will learn to correlate drug therapies with interventional procedures and disease states. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 33. EKG II. 2 Credits.**
This course is designed to present advanced principles of ECG. The student will be exposed to advanced pattern recognition and the underlying etiology of the rhythm. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 35. Patient Care II. 2 Credits.**
This course will provide the student with the advanced care skills necessary to function as a cardiovascular technologist within the laboratory. The student will learn about radiation safety, interpretation of lab values, patient management, high risk patient management, basic life support and advanced cardiac life support. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 36. Clinical Practicum II. 8 Credits.**
The student will have hands-on experience working in their chosen field; catheterization lab, electrophysiology lab, vascular lab or the echocardiography lab. Here they will be given the opportunity to improve their technical skills working one-on-one with their preceptor and patients in the clinical setting. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 39. Adult Echocardiography II. 3 Credits.**
The student will learn echocardiographic findings associated with cardiomyopathies, the etiology, physiology, cardiac auscultation, physical examination, symptoms and EKG findings associated with the various cardiac disease states. The student will learn to obtain and effectively apply accurate two-dimensional and Doppler measurements as they relate to evaluation and quantification of systolic function, diastolic function and the echocardiographic role in evaluation of diseases of the myocardium. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 40. Vascular Ultrasound I. 3 Credits.**
The student will learn how to assess basic vascular disease using two-dimensional, spectral and color flow Doppler information in the areas of arterial Doppler segmental pressures, plethysmography, ankle brachial indices and carotid duplex imaging. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 41. Pediatric Echocardiography I. 3 Credits.**
The student will demonstrate an understanding of how to utilize a sequential developmental approach. This course will review congenital heart diseases and their associated clinical signs and symptoms. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 42. Physics Review. 1 Credits.**
This course is designed to prepare students to sit for their Sonography Principles and Instrumentation examination through ARDMS. During this course students will review all that they have learned in Physics I and Physics II. Prerequisite: Admission to the program.

**CVS 43. Adult Interventional Cardiology Technician I. 3 Credits.**
The student will receive progressive didactic exposure to the technology, procedures, techniques and basic concepts of interventional cardiology. Prerequisite: Admission to the program.

**CVS 44. Adult Electrophysiology Technician I. 3 Credits.**
The student will have didactic exposure to the technology, procedures, techniques and basic concepts of electrophysiology. Prerequisite: Admission to the program.

**CVS 45. Diversity in Cardiovascular Patient Care. 1 Credits.**
Explore current evidence regarding the demographic based variations in the population that impact cardiovascular care. Prerequisite: Admission to the program.

**CVS 49. Clinical Practicum III. 4 Credits.**
The student will have hands-on experience working in the adult echocardiography lab. Here they will be given the opportunity to improve their technical skills working one-on-one with their preceptor and patients in the clinical setting. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 55. Cardiovascular Assessment and Special Procedures. 1 Credits.**
The student will become familiarized with the special procedures utilized in the echocardiography laboratory. These special procedures will include: transesophageal echocardiography, contrast agents, strain, strain rate imaging and 3D echocardiography. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 56. Adult Echocardiography III. 3 Credits.**
The student will continue to build upon their knowledge of echocardiography by learning cardiac diseases secondary to systemic illness, connective tissue disorders, neurological diseases, hematological disorders, pericardial disease, cardiac tumors, masses and diseases of the great vessels. Prerequisite: Admission to the program.

**CVS 57. Vascular Ultrasound II. 4 Credits.**
The student will learn to perform basic vascular assessments using two-dimensional, spectral and color flow Doppler information in the areas of renal duplex ultrasounds, abdominal aorta and iliac imaging. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 58. Pediatric Echocardiography II. 4 Credits.**
The student will learn of Ebstein's malformation of the tricuspid valve, tricuspid atresia with and without D-transposition, partial and complete endocardial cushion defect, cor triatriatum and double outlet right ventricle. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 59. Physics II. 2 Credits.**
This is the second of two ultrasound physics courses designed to prepare the student for the Sonography Principles and Instrumentation exam required for registration through ARDMS. The content of this course will cover fluid dynamics, hemodynamics, vascular principles and cardiovascular principles. The content of Physics I will be heavily reviewed in preparation for the registry exam. Prerequisite: Admission to the program.

**CVS 61. Adult Cardiovascular Cardiology Technician II. 3 Credits.**

The student will have progressive didactic exposure to the technology, procedures, techniques and concepts of interventional cardiology. Prerequisite: Admission to the program.

**CVS 62. Adult Electrophysiology Technician II. 2 Credits.**

The student will have continued progressive didactic exposure to the technology, procedure, techniques, and concepts of electrophysiology. Prerequisite: Admission to the program.

**CVS 63. Patient Care III. 2 Credits.**

The continuation of advanced radiographic identification of the cardiac and vascular anatomy will be presented. In addition, the student will learn about coronary artery disease, angina, heart failure, acute coronary syndrome, shock, valvular heart disease and how this knowledge will be used while working in an invasive cardiology setting. Prerequisite: Admission to the program.

**CVS 64. Complex Arrhythmia Assessment. 1 Credits.**

During this course the student will assess complex electrocardiography, telemetry, and cardiac arrhythmia cases. The student will evaluate the association of significant arrhythmias with cardiac diseases and common treatment options. Prerequisite: Admission to the program.

**CVS 65. Complex Hemodynamic Assessment. 2 Credits.**

The purpose of this course is to provide the student with the knowledge base necessary to understand acquired and congenital cardiovascular diseases, the etiologies associated with the disease state and the presenting clinical signs and symptoms. This course will introduce the student to the principles of hemodynamic monitoring, waveform analysis and interventional cardiovascular procedures. Prerequisite: Admission to the program.

**CVS 66. Adult Interventional Cardiology Technician II. 2 Credits.**

The student will have continued progressive didactic exposure to the technology, procedure, techniques, and concepts of interventional cardiology. Prerequisite: Admission to the program.

**CVS 67. Clinical Practicum IV. 8 Credits.**

The student will have hands-on experience working in their chosen field of adult echocardiography, vascular or pediatric echocardiography. Here they will be given the opportunity to improve their technical skills by working one-on-one with their preceptor in the clinical setting. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 75. Congenital Heart Disease. 1 Credits.**

The student will be introduced to the evaluation of congenital heart disease using the segmental approach. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 76. Vascular Ultrasound III. 3 Credits.**

Upon completion of this course the student will have the necessary knowledge to perform basic vascular assessments using two-dimensional, spectral and color flow Doppler information in the areas of renal duplex ultrasounds, abdominal aorta and iliac imaging. Prerequisite: Admission to the program.

**CVS 77. Pediatric Echocardiography III. 3 Credits.**

Upon completion of this course the student will demonstrate an understanding of Ebstein's malformation of the tricuspid valve, tricuspid atresia with and without D-transposition, partial and complete endocardial cushion defect, cor triatriatum and double outlet right ventricle. Prerequisite: Admission to the program.

**CVS 78. Adult Interventional Cardiology Technician III. 3 Credits.**

The student will have continued progressive didactic exposure to the technology, procedure, techniques, and concepts of interventional cardiology. Prerequisite: Admission to the program.

**CVS 79. Adult Electrophysiology Technician III. 2 Credits.**

The student will have continued progressive didactic exposure to the technology, procedure, techniques, and concepts of electrophysiology. Prerequisite: Admission to the program.

**CVS 80. Introduction to Cardiovascular Research Principles. 1 Credits.**

This course requires the student to research a cardiovascular disease process, write a research paper and present the topic at a cardiology conference in front of peers, nursing personnel, cardiology fellows and the medical staff. The student may include the natural history of the disease process, the historical approach to the diagnosis of the disease, an overview of other modalities used in diagnosing the disease, the imaging techniques used in its diagnosis and the scientific rationale behind the technique. Prerequisite: Admission to the program.

**CVS 81. Concepts in Intravascular Imaging and Intervention I. 2 Credits.**

The student will expand their basic knowledge of the various imaging modalities used during vascular interventional procedures and the various endovascular treatments that they will see throughout their careers. Prerequisite: Admission to the program.

**CVS 82. Concepts in Cardiac Rhythm Management I. 2 Credits.**

During this course the student will learn the fundamentals of cardiac pacing, will understand the basic techniques for interrogation, programming, surveillance and the measurement of pacing and sensing thresholds of ICDs and CRT-Ds. Upon conclusion of this course the student will be able to recognize normal and abnormal pacemaker function. Prerequisite: Admission to the program.

**CVS 83. Senior Project. 1 Credits.**

This course requires the student to research a cardiovascular disease process, write a research paper and present the topic at cardiology conference in front of peers, nursing personnel, cardiology fellows and the medical staff. The student may include the natural history of the disease process, the historical approach to the diagnosis of the disease, an overview of the other modalities used in diagnosing the disease and the scientific rationale behind the technique. In addition, the student may include case studies in the presentation. Prerequisite: Admission to the program.

**CVS 86. Clinical Practicum V. 8 Credits.**

The student will have hands-on experience working in their chosen field of adult echocardiography, vascular or pediatric echocardiography. Here they will be given the opportunity to improve their technical skills by working one-on-one with their preceptor in the clinical setting. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 89. Vascular Ultrasound IV. 3 Credits.**

This course requires the student to research a vascular disease process, write a research paper and present the topic at a cardiovascular conference in front of peers, nursing personnel, cardiology fellows and the medical staff. The student may include the history of the disease process, the approach to the diagnosis of the disease and any other modality used...
in the diagnosis of the disease. In addition, the student may include case studies in the presentation. Prerequisite: Admission to the program.

**CVS 90. Pediatric Echocardiography IV. 3 Credits.**
Upon the completion of this course the student will demonstrate an understanding of partial and total anomalous pulmonary venous return, persistent left superior vena cava, hypoplastic left heart syndrome and single ventricle. Prerequisite: Admission to the program.

**CVS 91. Adult Echocardiography IV. 1 Credits.**
This course is designed to enable the student to review the materials covered throughout their time spent in the program, preparing them to step into the profession of echocardiography and become registered through ARDMS by passing their RDCS registration exam. Prerequisite: Admission to the program.

**CVS 94. Concepts in Cardiac Rhythm Management II. 3 Credits.**
The student will learn the following basic device knowledge, arrhythmias, remote monitoring management and indications and limitations of biventricular pacing. The student will also learn about echo AV optimization, radiation oncology, MRI, withdrawal of therapy and other specialized inter-departmental workflows. Prerequisite: Admission to the program.

**CVS 95. Concepts in Intravascular Imaging and Intervention II. 3 Credits.**
Intravas Imaging & Interv II Prerequisite: Admission to the program.

**CVS 97. Clinical Practicum VI. 7 Credits.**
The student will have hands-on experience working in their chosen field; catheterization lab, electrophysiology lab, echocardiography lab, vascular lab or the pediatric echocardiography lab. Here they will be given the opportunity to improve their technical skills by working one-on-one with their preceptor in a clinical setting. Prerequisite: Admission to the program.

**Respiratory Care Courses**

**NMED 70. Introduction to Nuclear Medicine and Medical Law and Ethics for the Imaging Professional. 3.3 Credits.**
An introductory overview of the field of nuclear medicine technology with includes medical terminology for clinical nuclear medicine, patient and nursing skills including phlebotomy and vital signs, departmental organization and function, and a basic overview of applied mathematical and statistical analysis used in clinical nuclear medicine. This course will also introduce to the imaging profession the legal aspects to patient care regarding patient rights, ethical theories, risk management, quality patient care. The student will participate in group discussion. Prerequisite: Acceptance into the Nuclear Medicine Training Program

**NMED 71. Nuclear Chemistry and Physics. 2 Credits.**
This course is designed to present the theories of nuclear chemistry and physics including theory of Bohr's atom, radiation production, decay, physical half life and interaction with matter, chemical reactions and equations, review of periodic chart of elements and trinuclear chart of nuclides. Prerequisite: College Physics and College Chemistry along with acceptance into the Nuclear Medicine Training Program

**NMED 72. Radiopharmacy I. 3.4 Credits.**
This course is designed to present the aspects of radiopharmaceuticals including safety and handling, methods of localization, pharmacology, dose calculation and record keeping, methods of production, and quality control. The course will begin to identify the clinical uses of radiopharmaceuticals as this course will be a prerequisite for Radiopharmacy II. Prerequisite: Acceptance into the Nuclear Medicine Training Program

**NMED 73. Clinical Procedures I. 2.4 Credits.**
This course is taught in modules corresponding to organ systems of the body. This course provides instruction in Skeletal, Liver and Spleen, Hepatobiliary and Respiratory systems. Each module includes: review of anatomy and physiology, cross-sectional anatomy, clinical indications for nuclear imaging, nuclear imaging procedures including radiopharmaceuticals for current clinical practices, image interpretation and review. Prerequisite: Acceptance into the Nuclear Medicine Training Program

**NMED 74. Radiation Biology and Protection. 1.5 Credits.**
This course is designed to provide the student with an understanding of the effects of radiation on the human body at the cellular, organ and whole body levels including late effects of radiation exposure and the risk to benefit ratio. This course will provide the students with current federal and state regulations in regards to safe handling, disposal, record keeping, and licensing for the clinical use of radiation. Prerequisite: Acceptance into the Nuclear Medicine Training Program

**NMED 75. Clinical Internship I. 6 Credits.**
Through supervised learning situations in a clinical nuclear medicine imaging department the student will gain knowledge and be required to demonstrate competence in specific imaging of nuclear medicine procedures, radiopharmaceutical distribution, imaging instrumentation, patient safety, occupational safety, and quality control practices in the clinical setting. Prerequisite: Acceptance into the Nuclear Medicine Training Program

**NMED 80. Nuclear Instrumentation, Medical Informatics and Quality Assurance. 2.5 Credits.**
This course is designed to familiarize the students with basic non-imaging and imaging with nuclear medicine equipment in the clinic. This course will include basic principles of operation, system configuration and performance characteristics of Scintillation cameras and PET systems, computers and quality control and assurance as required by manufacturer and regulatory agencies. It will introduce the student to various types of medical information systems and their uses in the medical imaging. Prerequisite: Acceptance into the Nuclear Medicine Training Program

**NMED 82. Radiopharmacy II. 1 Credits.**
This course is the advanced course to Radiopharmacy I. The students will have an understanding of the radiopharmaceuticals that are used in the clinical nuclear medicine department. This course will also cover monoclonal, polyclonal, peptides, PET, therapeutic radiopharmaceuticals, pharmacology, as well as advancement in research that is current on radiopharmaceuticals to be used in the nuclear clinical setting. Prerequisite: Radiopharmacy I

**NMED 83. Clinical Procedures II. 8 Credits.**
This course is taught in modules corresponding to organ systems of the body. This course provides instruction in Genito-Urinary, Endocrine, EKG, Nuclear Cardiology, Infection/Tumor, Gastro-Intestinal, Neurology, PET, CT, Miscellaneous procedures, and Non-Imaging In-Vivo. Each module includes: review of anatomy and physiology, cross-sectional anatomy, clinical indications for nuclear imaging, nuclear imaging procedures including radiopharmaceuticals for current clinical practices, image interpretation and review. Prerequisite: Clinical Procedures I

**NMED 84. Clinical Internship II. 8 Credits.**
Through supervised learning situations in a clinical nuclear medicine imaging department the student will gain knowledge and be required to demonstrate competence in specific imaging of nuclear medicine procedures, radiopharmaceutical distribution, imaging instrumentation, patient safety, occupational safety, and quality control practices in the clinical setting. Prerequisite: Clinical Internship I
NMED 85. Research Methods and Health Administration. 1 Credits.

This course is designed to familiarize the student in research methodology and advances in nuclear medicine for future developments. This course will also demonstrate the phases of research and research different divisions of the research cycle. The second portion of the class will familiarize the student with the administration techniques of health management. Health management will include billing, coding and budget and equipment selection processes of maintaining a nuclear medicine department. Prerequisite: Acceptance into the Nuclear Medicine Training Program.

NMED 90. Seminar. 2.5 Credits.

This course is designed to prepare the student for national boards in the filed of nuclear medicine technology. The student will be responsible for in class review of nuclear clinical procedures, nuclear instrumentation and quality assurance, radiopharmacy, radiation protection and patient care. Students will be required to attend guest lectures and video conferences. Prerequisite: Clinical Procedures I and II, Radiopharmacy I and II, Nuclear Instrumentation and Quality Assurance, Radiation Biology and Protection and Introduction to Nuclear Medicine

NMED 91. Clinical Internship III. 6 Credits.

Through supervised learning situations in a clinical nuclear medicine imaging department the student will gain knowledge and be required to demonstrate competence in specific imaging of nuclear medicine procedures, radiopharmaceutical distribution, imaging instrumentation, patient safety, occupational safety, and quality control practices in the clinical setting. Prerequisite: Clinical Internship II

NMED 100. NMED Preceptorship. 10 Credits.

The student will be exposed to the Positron Emission Tomography and Computed Tomography clinical imaging modules of the field of Nuclear Medicine. The student will observe and perform specified imaging procedures in the clinical setting as well as inject radiopharmaceuticals for the imaging procedure. The student will be responsible for their own learning experience in the fields of Positron Emission Tomography and Computed Tomography. This preceptorship will provide the student with patient care clinical experience. Prerequisite: Board certified in Nuclear Medicine Technology by the American Registry of Radiologic Technologists (A.R.R.T.) or Nuclear Medicine Technology Certification Board (N.M.T.C.B)

Respiratory Care Courses

RESP 200. Introduction to Respiratory Therapy. 1 Credits.

This course is intended to be an introductory course for learners who are entering college-level health care programs or for those who believe they may be interested in pursuing a career in Respiratory Therapy. Topics are appropriate for professions that involve direct patient care, as well as those that provide support services.

RESP 300. Introduction to Respiratory Care Procedures. 4 Credits.

An introductory course designed to acquaint the student with the fundamental theory, procedures, and equipment used in respiratory therapy. Emphasis is placed on understanding application of equipment and procedures to the patient, and the respiratory therapy treatment of patients requiring non-continuous ventilatory assistance. This course introduces such topics as cardiopulmonary resuscitation, bronchopulmonary hygiene, airway care, oxygen therapy, and cleaning and sterilization of equipment. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 301. Respiratory Care Evidence Based Practice 1. 1 Credits.

This course is designed to provide the participant with a basic introduction to healthcare research with emphasis on evidence based practices. Students will learn how to identify a research question and conduct a proper literature search. This course will teach students the strengths and weaknesses of different search sources, how to review and critique a scientific article, and present the results of their literature review. Students will learn how to properly cite and develop a bibliography that is consistent with scientific writing, as well as, develop an introduction section of a research paper. This course will familiarize the students with cardiorespiratory medical terminology. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 302. Respiratory Care Evidence Based Practice 2. 1 Credits.

This course is the continuation of Respiratory Care Evidence Based Practice 1 and designed to reinforce the principles of healthcare research, evidence based practices, and the medical terminology used in the cardiorespiratory sciences. Students will refine their ability to identify a research question, conduct a literature search, review and critique a scientific article, and present the results of their literature review. This course will continue to emphasize proper citation and bibliography documentation consistent with scientific writing. Prerequisite: RESP 301 and Enrollment in the Respiratory Care Education Program.

RESP 305. Cardiopulmonary Anatomy and Physiology. 2 Credits.

This course will introduce the student to normal anatomy and physiology of the cardiopulmonary systems. Students will focus on the etiology, and treatment of pulmonary and cardiac diseases, with emphasis on the pulmonary system.

RESP 306. Cardiopulmonary Pathophysiology. 2 Credits.

This course will introduce the student to normal cardiopulmonary systems, as well as, cardiopulmonary pathology. Students will focus on the etiology, pathophysiology, and treatment of pulmonary and cardiac diseases, with emphasis on the pulmonary system.

RESP 310. Clinical Pharmacology. 2 Credits.

The student will learn about adrenergic and parasympatholytic bronchodilators, corticosteroids, mucus-controlling drugs, surfactant agents, antitussives, and the anti-infective drugs used for the treatment of respiratory disorder. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 315. Clinical Application 1. 3 Credits.

This course introduces the beginning respiratory therapy student to the clinical environment. The student participates in clinically-oriented workshops, observation rotations, learning laboratory sessions, or simulations that focus on the application of respiratory therapy equipment, theory, patient management, and communication in the clinical setting. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 325. Mechanical Ventilators. 3 Credits.

This course contains such topics as arterial puncture, classification of mechanical ventilators and adjunct devices, and their application to the patient. Four hours of lecture/discussion and a 3 hour weekly laboratory acquainting the student with the rationale for continuous mechanical ventilation and the basic operation of
adult, pediatric, and neonatal mechanical ventilators. Emphasis is placed on the selection of appropriate equipment and assessment of its effect on the patient. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 330. Pulmonary Function. 2 Credits.
Lecture and laboratory introducing the student to basic pulmonary function procedures. This course allows the student to practice pulmonary function tests and interpret the results. Lecture and laboratory topics include such topics as the measurement of lung volumes and capacities, body plethysmography, blood gas analysis, and flow volume loops. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 335. Clinical Application 2. 4 Credits.
This course provides the respiratory therapy student with an introduction to the critical care setting. The student will begin to apply the procedures and equipment most often utilized in the intensive care areas. Emphasis is placed on continuous mechanical ventilation, artificial airways, airway care, and bedside pulmonary function testing. The student will assume limited patient care responsibility in the critical care areas. Prerequisite: RESP 315.

RESP 340. Respiratory Review 1. 2 Credits.
Respiratory Care Review- This course provides a complete review of the junior year respiratory care curriculum and aids in the preparation for students to take the Self-Assessment examination. Upon successful completion, students will be prepared to begin the senior year curriculum. Prerequisite: Successful completion of the first and second semesters of the respiratory care curriculum.

RESP 345. Clinical Application 3. 3 Credits.
This course is a continuation of the clinical sequence that provides the respiratory therapy student with experience in the critical care setting. The student applies the procedures and equipment utilized by respiratory care practitioners in the intensive care areas. Emphasis is placed on continuous mechanical ventilation, artificial airways, airway care, and bedside diagnosis. The student assumes progressively more patient care responsibility in the critical care areas under preceptor supervision. Prerequisite: Completion of RESP 335.

RESP 350. Clinical Application (special). 1 Credits.
This course provides the intermediate respiratory therapy student with opportunities to practice basic respiratory therapy procedures. Emphasis placed on performance of respiratory therapy procedures and application of equipment. This course emphasizes such topics as oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and IPPB therapy. The student will assume limited patient care responsibilities.

RESP 375. Clinical Special. 0 Credits.
This course provides the advanced respiratory therapy student with opportunities to refine procedural and evaluative skills in the critical care areas. The student will spend a minimum of twenty-four hours per week in the clinical setting. Emphasis is placed upon the students ability to evaluate the patients' clinical situation and recommend appropriate therapy modalities to the clinical supervisor. During this course the student will assume wider-ranging patient care responsibilities.

RESP 399. Generalist Practice. 1 Credits.
This course is designed to allow students the opportunity to improve and perfect skills acquired in the junior year clinical courses. Emphasis will be given to refining the students' abilities to assess patient status and administer appropriate therapy modalities. This course may also be used to assess respiratory therapy knowledge and skills of students transferring from other programs. Prerequisite: Permission of instructor.

RESP 400. Chronic Respiratory Disease Management: The Evolving Role of the Respiratory Therapist. 3 Credits.
This course is an introduction to the evolving role of respiratory therapists in health care, especially in the area of chronic disease management. The students will explore various trends that are contributing to the role respiratory therapy may play in patient care. Topics covered in this course include COPD and asthma management, pulmonary rehabilitation, cardiopulmonary exercise testing, home care, elderly care, nutritional care of the pulmonary patient, and communication skills necessary for patient education. Students in this course will gain an understanding of how they can contribute to an inter-professional team in order to provide safe and effective patient care. Presentation of topics in this course may include lecture, group work/discussion, audiovisual, computer and other multimedia aids. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 405. Advanced Critical Care. 4 Credits.
Concepts of the diseases and disorders that effect the critically ill adult are explored. Emphasis is placed on understanding common illnesses such as cardiac dysrhythmias, acute coronary syndrome, trauma of the chest and head, organ failure and toxin exposure as well as the other medical challenges of the critically ill patient. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 410. Neonatal Respiratory Care. 3 Credits.
This course is designed to provide the student with an introductory knowledge of fetal and newborn cardiorespiratory anatomy, physiology, development, pathophysiology, and care. Prerequisite: Senior year standing or permission of instructor.

RESP 411. Neonatal/Pediatric Respiratory Care Lab. 2 Credits.
This Course is designed to provide the student with an introductory knowledge of fetal and newborn cardiorespiratory anatomy, physiology, development, pathophysiology, and care in a lab setting. Prerequisite: Senior year standing.

RESP 415. Clinical Application 4. 4 Credits.
This course provides the advanced respiratory therapy student with opportunities to refine procedural and evaluative skills in the critical care areas. In the clinical setting emphasis is placed upon the student's ability to evaluate the patient's clinical situation and recommend appropriate therapy modalities to the clinical instructor. During the course the student will assume a progressively wider range of patient care responsibilities. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 420. Health Care Management, Ethics and Law. 2 Credits.
This course provides an overview of fundamental concepts in healthcare management, law, and ethics. Students will learn the skills and knowledge necessary to be successful in management leadership, management design, and managing diversity. Ethical concerns relevant to the healthcare manager will be addressed. Current and historical controversies in healthcare will be discussed. Upon completion of this course, students will have the knowledge to understand laws, ethics, and management principles of the complex healthcare landscape.

RESP 450. Chronic Respiratory Disease Management. 3 Credits.
This course is open only to online students. This course is an introduction to the evolving role of respiratory therapists in health care, especially in the area of chronic disease management. The students will explore various trends that are contributing to the role respiratory therapy may play in patient care. Topics covered in this course include COPD and asthma management, pulmonary rehabilitation, cardiopulmonary exercise testing, home care, elderly care, nutritional care of the pulmonary patient, and communication skills necessary for patient education. Students in this course will gain an understanding of how they can contribute to an inter-professional team in order to provide safe and effective patient care.
Presentation of topics in this course may include lecture, group work/discussion, audiovisual, computer and other multimedia aids.

RESP 460. ACCS Specialty Credential Prep. 3 Credits.
This course will serve as review of material covered on the NBRC Matrix for the NBRC Adult Critical Care Specialty Examination. The purpose of this course is to guide students in the review and preparation for the NBRC ACCS Specialty Examination. This will include weekly covered content, as well as practice exams.

RESP 465. NPS Specialty Credential Prep. 3 Credits.
This course will serve as review of material covered on the NBRC Matrix for the NBRC Neonatal/Pediatric Specialty Examination. The purpose of this course is to guide students in the review and preparation for the NBRC NPS Specialty Examination. This will include weekly covered content, as well as practice exams.

RESP 470. AE-C Specialty Credential Prep. 3 Credits.
This course will provide an in-depth review of asthma education based on the National Asthma Educator Certification Board (NAECB) detailed content outline. Including the asthma condition, patient and family assessment, asthma management and organizational issues. Prerequisite: Enrollment in Respiratory Care.

RESP 480. Simulation and Interprofessional Education (IPE). 3 Credits.
This introductory course is designed for health care students to learn key concepts of building and leading a collaborative health care team. The course addresses both the clinical and behavioral aspects of performance with emphasis on interprofessional simulation-based education. The course is offered in a self-paced online format with a competency-based approach. The course will be taught over an eight-week period. The object of the course is to introduce collaborative practice for providing patient-centered care. The student will be introduced to: Interprofessional education and collaborative practice terminology Core Competencies for Interprofessional Collaborative Practice Foundations of effective health care teamwork Leading a collaborative health care team Skills to develop and implement simulation-based education. Prerequisite: Enrollment in Respiratory Care.

RESP 490. Special Studies or Projects. 1-9 Credits.
This course involves individual study, research or projects in the field of respiratory care under instructor guidance. Written reports and periodic conferences are required. Content and unit credit will be determined by student-instructor conferences and/or departmental conferences. This course may be repeated for a maximum of nine credits. Prerequisite: Admission to the respiratory care program and consent of instructor.

RESP 495. Management, Ethics, and Law in Respiratory Care. 3 Credits.
This course is only open to online students. This course provides an overview of fundamental concepts in healthcare management, law, and ethics. Students will learn the skills and knowledge necessary to be successful in management leadership, management design, and managing diversity. Ethical concerns relevant to the healthcare manager will be addressed. Current and historical controversies in healthcare will be discussed. Upon completion of this course, students will have the knowledge to understand laws, ethics, and management principles of the complex healthcare landscape.

RESP 605. Scientific Investigation Part I. 1 Credits.
This course is designed to provide the participant with an introduction to research skills culminating in a group Proposal of a bench study or chart review. The Proposal will consist of three sections: Introduction, Review of the Literature and Methods. The three sections will be developed through a series of progress reports with the aid of a faculty advisor. Students will work in groups to develop a research question about their daily practice that can only be answered by conducting research. This course will include discussions of the types of research data and the structure of a research proposal. Students will have opportunities to read, interpret and analyze research reports and practice in writing critical evaluations of the literature as it applies to their research question. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 610. Scientific Investigation Part II. 1 Credits.
Each study group will write the Discussion and Conclusion sections of their paper and share their findings in a poster presentation. The final version of each group's study manuscript must be submitted to course instructor prior to graduation. The quality of the manuscript will be appropriate for submission to the journal of Respiratory Care. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 615. Respiratory Review II. 2 Credits.
This course involves individual student under instructor guidance. A series of practice exams are taken and discussed including a secured practice registry exam and clinical simulation exam. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 620. Community and Global Health. 3 Credits.
This course will explore a wide variety of major health issues that impact us as global citizens. Students will be exposed to an overview of challenges that face the world today as they learn about strategies and programs that promote health in a variety of settings. Through this course, students will become more culturally competent healthcare providers. They will learn about disparities related to ethnicity, socioeconomic issues, human rights, and resource limits as they relate to the health of populations. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 625. Clinical Application 5. 4 Credits.
This course provides the student with the opportunity to integrate clinical activities and responsibilities related to neonatal and pediatric respiratory care. Prerequisites: Enrolled in Respiratory Care Program.

RESP 630. Lean Management. 3 Credits.
Lean Management-This course will introduce students to lean management principles such as Lean Six Sigma in healthcare. Students will learn process improvement through lean management concepts which will prepare them for management positions. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 640. Professional Communication. 3 Credits.
Professional Communication-this course will provide students with the tools they need to communicate clearly and effectively which will prepare them for the working world and leadership. Students will learn how to have crucial conversations on how to address serious issues via written or verbal. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 650. Medical Writing & Research. 3 Credits.
This course is designed to introduce the student to the basics of health research and writing methods. Health care research is the necessary foundation for meaningful improvements in clinical practice. This course will make the health research and writing process accessible, manageable, and enjoyable for health care students. Prerequisite: Enrollment in Respiratory Care.

RESP 655. Leadership Management. 3 Credits.
The objective of this course is to prepare undergraduate students to become successful leaders in healthcare by viewing leadership competencies by studying relevant and contemporary skills in today's ever changing healthcare landscape. By the end of the course, students should have an understanding of how to approach complex leadership problems.
and comprehend them. Prerequisite: Senior year standing or permission of the instructor.

RESP 665. Capstone Project. 6 Credits.
This course is designed to give the student the opportunity to develop a project that is professionally relevant. This project will allow the student to explore opportunities such as implementing process change, protocol creation, and curriculum development. The course is individualized to the students' intellectual interests and professional development. Prerequisite: 5 Core Courses (RESP 650, RESP 495, RESP 620, RESP 480, and RESP 450), 3 Track courses (RESP 460, RESP 470, RESP 465, RESP 630, RESP 640, RESP 655).

Respiratory Care Courses

UTEC 50. Introduction to Diagnostic Ultrasound and Medical Law and Ethics for the Imaging Professional. 4.8 Credits.
An introductory overview of the field of Diagnostic Ultrasound Technology which encompasses medical terminology for the sonographer, patient and nursing skills, departmental organization and function and computer safety modules. In addition, the review of the department's ultrasound equipment with extensive review of functionality and design of each specific unit. Competency check-off required. This course will also introduce to the imaging professional the legal aspects to patient care. The student will participate in group discussions analyzing practical incidents that may occur in the clinical didactic training. Prerequisite: Acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 51. Introduction to Sonography Principles and Instrumentation I. 1.5 Credits.
This course is designed to introduce the students to the basic terminology, the principles of propagation, beams and transducers and possible biological effects. Prerequisite: College Physics along with acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 53. Abdominal I Sonography. 1.25 Credits.
This course is designed to introduce renal anatomy, physiology and pathology and the associated sonographic appearances. This includes clinical indications for ultrasound of the kidneys along with sonographic appearances of normal and disease processes with instrumentation, technique and protocols. Prerequisite: College anatomy and physiology along with acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 54. Small Parts Sonography I. 1 Credits.
This course is taught in modules corresponding to superficial structures of the body. This course provides instruction in Neck and Scrotal sonography. Each module includes: review of anatomy, physiology and pathology, clinical indications for sonography, sonographic appearances of normal and disease processes, along with instrumentation, technique and protocols. Prerequisite: College anatomy and physiology along with acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 55. Gynecologic Sonography. 1.75 Credits.
This course is designed to educate the student on gynecologic anatomy, physiology and pathology and the sonographic appearances. This includes clinical indications for ultrasound along with instrumentation, technique and protocols. Prerequisite: College Anatomy and Physiology along with acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 56. Clinical Internship I. 4.4 Credits.
Through supervised clinical experience in the ultrasound imaging department the student will gain knowledge and be required to demonstrate competence in gynecologic and small part clinical imaging and instrumentation. Prerequisite: Abdominal I, Small Part I and Gynecologic Sonography.

UTEC 60. Advanced Sonography Principles and Instrumentation II. 2.4 Credits.
This course is designed to educate the student on advanced areas of ultrasonic propagation principles, transducer parameters, instrumentation, interactive properties with tissues, possible biological effects and quality control procedures. Introduction to Color and Spectral Doppler is included. Prerequisite: Introduction to Sonography Principles and Instrumentation I.

UTEC 61. Obstetrical Sonography 1st Trimester. 1 Credits.
This course is designed to educate the student on normal maternal changes and fetal development throughout gestation. Embryonic and fetal anatomy, anomalies, pathology, biometry and the sonographic appearances are reviewed. Instrumentation, technique, and protocols are studied. Prerequisite: Gynecologic Sonography and college anatomy and physiology.

UTEC 62. Obstetrical Sonography II. 2.8 Credits.
This course is taught in module corresponding to abdominal organs and compartments imaged in the abdomen. This course provides instruction in Liver, Biliary, Pancreas and Spleen. Each module includes: review of anatomy, physiology and pathology, clinical indications for sonography, sonographic appearances of normal and disease processes, along with instrumentation, technique and protocols. Abdominal Doppler of normal, diseased, and transplanted liver and pancreas will be included. Prerequisite: Abdominal Sonography I.

UTEC 63. Obstetrical Sonography 2nd and 3rd Trimester. 1.75 Credits.
This course is designed to educate the student on normal maternal changes and fetal development throughout gestation. Embryonic and fetal anatomy, anomalies, pathology, biometry and the sonographic appearances are reviewed. Instrumentation, technique, and protocols are studied. Prerequisite: Obstetrical Sonography 1st Trimester.

UTEC 64. Small Parts Sonography II. 1 Credits.
This course is taught in modules corresponding to superficial structures of the body. This course provides instruction in breast sonography. The module includes: review of anatomy, physiology and pathology, clinical indications for sonography, sonographic appearances of normal and disease processes, along with instrumentation, technique and protocols. Prerequisite: Small Parts Sonography I.

UTEC 65. Vascular Technology I. 1 Credits.
This course is taught in modules corresponding to selected sites in the vascular system. Each module includes review of: anatomy, physiology, pathology, and clinical indications for noninvasive vascular imaging and disease processes. Instrumentation, technique, and protocols are included. Prerequisite: Advanced Sonography Principles and Instrumentation II and Abdominal Sonography I.

UTEC 66. Clinical Internship II. 8.9 Credits.
Through supervised clinical experience in the ultrasound imaging department and perinatology department the student will gain knowledge and be required to demonstrate competence in gynecologic, obstetrical, small parts and abdominal clinical imaging and instrumentation including Color and Spectral Doppler evaluation. Prerequisite: Gynecologic Sonography, Small Parts Sonography I and II, Obstetrical 1st, 2nd & 3rd Trimester Sonography and Abdominal Sonography I and II.

UTEC 70. Abdominal Sonography III. 1.3 Credits.
This course is taught in modules corresponding to abdominal organs and compartments imaged in the abdomen. This course provides instruction in the Retroperitoneum, Peritoneum, Gastrointestinal, Abdominal Wall and Great Vessels. Each module includes: review of anatomy, physiology and
pathology, clinical indications for sonography, sonographic appearances of normal and disease processes, along with instrumentation, technique and protocols. Prerequisite: Abdominal Sonography I and II

**UTEC 71. Vascular Technology II. 3 Credits.**
This course is taught in modules corresponding to selected sites in the vascular system. Each module includes review of: anatomy, physiology, pathology, and clinical indications for noninvasive vascular imaging and disease processes. Instrumentation, technique, and protocols are included. Prerequisite: Advanced Sonography Principles and Instrumentation II and Abdominal Sonography I, II and III.

**UTEC 72. Clinical Internship III. 5.8 Credits.**
Through supervised clinical experience in the ultrasound imaging department and perinatology department the student will gain knowledge and be required to demonstrate competence in gynecologic, obstetrical, small parts, abdominal and vascular clinical imaging and instrumentation including Color and Spectral Doppler evaluation. Prerequisite: Gynecologic Sonography, Small Parts I and II Sonography, Obstetrical 1st, 2nd & 3rd Trimester Sonography, Abdominal Sonography I, II, III and Vascular Technology.

**UTEC 80. Senior Seminar and Review I. 5 Credits.**
This course is designed to prepare the student for national board examinations administered by the American Registry of Diagnostic Medical Sonographers in the field of ultrasound and vascular technology. The student will be responsible for "in class" review of ultrasound clinical procedures, including anatomy, physiology, disease processes and sonographic appearances, and sonography principles and instrumentation. In addition, the student will learn post graduate skills to enhance professional opportunities. Prerequisite: Gynecologic, Small Parts I and II, Obstetrical 1st, 2nd & 3rd Trimester, and Abdominal Sonography I, II and III, Clinical Internship I, II, III and IV and Introduction to Sonography Principles and Instrumentation I and Advanced Sonography Principles and Instrumentation II and Vascular Technology I and II.

**UTEC 81. Clinical Internship IV. 8.3 Credits.**
Through supervised clinical learning situations in a clinical ultrasound imaging department the student will gain knowledge and be required to demonstrate competence in noninvasive vascular imaging procedures and all aspects of instrumentation. Prerequisite: Gynecologic Sonography, Small Parts I and II Sonography, Obstetrical 1st, 2nd & 3rd Trimester Sonography, Abdominal Sonography I, II, III and Vascular Technology.

**UTEC 90. Senior Seminar and Review II. 3 Credits.**
This course is designed to prepare the student for national boards administered by the American Registry of Diagnostic Medical Sonographers in the field of ultrasound and vascular technology. The student will be responsible for in class review of ultrasound clinical procedures, including anatomy, physiology, disease processes and sonographic appearances, ultrasound physics and instrumentation and vascular physics and instrumentation. In addition, the student will learn post graduate skills to enhance professional opportunities. Prerequisite: Gynecologic, Small Parts I and II, Obstetrical 1st, 2nd & 3rd Trimester, and Abdominal Sonography I, II and III, Clinical Internship I, II, III and IV and Ultrasound Physics and Instrumentation, Vascular Technology and Vascular Physics and Instrumentation and Senior Seminar and Review I.

**UTEC 91. Clinical Internship V. 4.7 Credits.**
Through supervised clinical learning situations in a clinical ultrasound imaging department the student will gain knowledge and be required to demonstrate competence in noninvasive vascular imaging procedures and all aspects of instrumentation. Prerequisite: Gynecologic Sonography, Small Parts I and II Sonography, Obstetrical 1st, 2nd & 3rd Trimester Sonography, Abdominal Sonography I, II, III and Vascular Technology.

**Therapeutic Science Courses**

**TS 800. Research Proseminar. 1 Credits.**
A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meetings will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of four credits. (Same as OTMS 800.)

**TS 805. Multidisciplinary Theoretical Perspectives. 3 Credits.**
Students will identify and explore key theories in behavioral and social science with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories, while also developing knowledge about theory guided research and interventions.

**TS 850. From Beliefs to Evidence. 1 Credits.**
Analysis of the role of beliefs about practice in professional culture and how beliefs are affected by the accumulation of research evidence. Topics include the nature of science and beliefs, the nature of evidence, and the debate over evidence-based practice. Students will use topics from their own professional interests for class presentations and written assignments. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS900 and TS950, and is offered in the Fall & Spring every 3rd year. Prerequisites: Permission of the instructor.

**TS 880. Special Projects. 1-6 Credits.**
An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analysis as negotiated with the faculty member. May be repeated for credit. Prerequisite: Permission of instructor.

**TS 900. Evolving Interdisciplinary Views of Disablement. 1 Credits.**
Assessment of how our social and cultural context defines notions of disability and disablement in our society. Topics include historical constructs of disability, public policy related to disability, and social paradigms of disability. Students will evaluate views of disablement from the perspective of their own discipline. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS850 and TS950, and is offered in the Fall & Spring every 3rd year. Prerequisite: Consent of the Instructor.

**TS 950. Designing Effective Knowledge Transfer. 1 Credits.**
Examination of the principles of knowledge transfer and diffusion of innovation as they relate to practices in therapeutic professions. Topics include the diffusion process, change agents, innovation adoption, and current diffusion methods. Students will evaluate diffusion processes that have occurred within their own professions. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS850 and TS950, and is offered in the Fall & Spring every 3rd year. Prerequisite: Consent of the instructor.

**TS 980. Advanced Study in Therapeutic Science. 1-9 Credits.**
Students engage in advanced study of a topic of their interest, guided by an appropriate mentor. Options for engaging in learning include directed readings, interpretation of evidence, discussions, and written syntheses of existing literature. Students typically enroll in offerings of this course several times over a series of successive terms, with the course sequence culminating in a written proposal for original research and an oral defense of that proposal (oral comprehensive examination). Prerequisite: Permission of instructor.

**TS 990. Dissertation in Therapeutic Science. 1-9 Credits.**
Research experience leading to dissertation for doctoral students in Therapeutic Science. Students enroll in offerings of this course over a series of successive terms, culminating in a written dissertation describing original research and an oral defense of the dissertation research. Prerequisite: Permission of instructor.

**Intercampus Program in Communicative Disorders**

KU offers a clinical doctorate in audiology, a master’s degree in speech-language pathology, a clinical doctorate in speech-language pathology and Ph.D. degrees in audiology and speech-language pathology through its Intercampus Program in Communicative Disorders.

**About the Intercampus Program in Communicative Disorders**

The Intercampus Program in Communicative Disorders comprises the Department of Speech-Language-Hearing: Sciences and Disorders (http://splh.ku.edu/) on the Lawrence campus and the Department of Hearing and Speech (http://www.kumc.edu/school-of-health-professions/ipcd.html) on the KU Medical Center campus. The Department of Speech-Language-Hearing is part of the College of Liberal Arts and Sciences, while the Department of Hearing and Speech is part of the School of Health Professions.

Students pursuing these graduate degrees take course work on the Medical Center campus in Kansas City and on the main campus in Lawrence. A student may live in either community. Block scheduling of courses reduces the frequency of commuting. A committee of faculty from both departments is responsible for instruction, curriculum planning, student selection and advising, clinical practicum policies, and course scheduling.

The College of Liberal Arts and Sciences also offers undergraduate programs in Speech-Language-Hearing: Sciences and Disorders (http://splh.ku.edu/). The Lawrence department collaborates with the departments of Applied Behavioral Science, Linguistics, and Psychology to offer a Ph.D. in child language (p. 1216).

**Hearing and Speech Courses**

**AUD 805. Introduction to Clinical Research. 1 Credits.**
The course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of instructor.

**AUD 810. Diagnostic Audiology. 4 Credits.**
Audiometric calibration, pure tone and speech testing, analysis of audiograms, middle ear testing.

**AUD 811. Hearing Disorders. 3 Credits.**
A study of disorders of the auditory system including anatomical, physiological, perceptual, and audiological manifestations of pathologies affecting hearing. Prerequisite: AUD 810 and AUD 829.

**AUD 813. Psychoacoustics and Theories of Hearing. 3 Credits.**
A study of relations between common acoustic stimuli and the responses they elicit; consideration of sensory scales, noise phenomena, and speech intelligibility. Prerequisite: AUD 829.

**AUD 814. Hearing Conservation. 1 Credits.**
A study of the major components of hearing conservation programs in industrial, educational, and military settings. Forensic audiology issues related to occupational hearing loss are included. Prerequisite: AUD 810 and AUD 829.

**AUD 816. Speech Perception. 2 Credits.**
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. (Same as SPLH 716.)

**AUD 817. Pediatric Audiology. 3 Credits.**
Normal and pathological development of the auditory system; pediatric audiometric testing; auditory and communication aspects in the habilitation of hearing-impaired children. Prerequisite: AUD 810.

**AUD 818. Vestibular Systems and Disorders. 3 Credits.**
Study of the anatomy and physiology of the normal peripheral and central vestibular system; clinical assessment of vestibular disorders; vestibular rehabilitation.

**AUD 819. Hearing Aids I. 3 Credits.**
Study of the components, function, fitting, and performance characteristics of hearing aids, applications of amplification in rehabilitative audiology. Prerequisite: AUD 810.

**AUD 820. Rehabilitative Audiology and Counseling. 3 Credits.**
Principles and methods of auditory, communication, and social assessment and intervention with hard of hearing and deaf adults, children, and their families. Prerequisite: AUD 810 and AUD 819 or equivalent.

**AUD 821. Hearing Aids II. 3 Credits.**
The advanced study of the theoretical bases, techniques, and clinical application of hearing aids and their assessment. Participants will review, present, and discuss contemporary issues in hearing aid literature and research. Prerequisite: AUD 819.

**AUD 822. Electro-Acoustics and Instrumentation. 3 Credits.**
A study of the generation, control and measurement of the simple and complex sounds essential to clinical audiology and hearing research.

**AUD 823. Cochlear Implants and Hearing Assistance Technologies. 2 Credits.**
Through lecture and discussion format, this course will cover the principles and methods of assessment, candidacy, surgery, programming and rehabilitation of patients receiving cochlear implants. In addition,
hearing assistance technologies such as large area systems and alerting devices will be covered with emphasis on classroom amplification. Prerequisite: AUD 819 and AUD 821 or permission of instructor.

AUD 824. Central Auditory Processing. 2 Credits.
The study of the anatomy and physiology of the central auditory system. Analysis and review of the diagnostic procedures and the therapeutic strategies for central auditory processing disorders.

AUD 826. Tinnitus Management. 2 Credits.
This course provides an advanced lesson in the evaluation and treatment of tinnitus and decreased sound tolerance. Topics include: diagnostic evaluation, CBT, biofeedback therapy, sound generator selection and programming, hearing aid considerations and programming, verification/validation, and pediatric considerations. Prerequisite: AUD 821.

AUD 828. Genetics and Hearing Loss. 2 Credits.
The fundamentals of human genetics as related to hearing loss, including patterns of inheritance, genotypic and phenotypic characteristics of the major forms of syndromic and nonsyndromic hearing loss; genetic counseling, genetic testing, possible genetic treatment, and issues related to them; resources for keeping up with this rapidly changing field. Prerequisite: Permission of instructor.

AUD 829. Anatomy and Physiology of the Hearing and Vestibular Mechanisms. 3 Credits.
Advanced study of the anatomical and physiological properties of the human hearing and vestibular mechanisms.

AUD 841. Clinical Observation. 1 Credits.
This course provides a community-based application of foundational audiology topics. First-year Au.D. students will observe a variety of community audiology clinics.

AUD 842. Interprofessional Education for Audiologists. 1 Credits.
Observation of healthcare professionals providing services at regional hospitals or clinics. Through observations, readings, and reflections, students are oriented to the work of healthcare professionals outside the field of audiology and the role of audiology within an interprofessional healthcare team.

AUD 843. Clinical Practice in Audiology. 1-6 Credits.
Supervised simulation experiences and clinical work at the University and/or University Medical Center audiology clinics, or affiliated, off-campus practicum sites. Prerequisite: Permission of instructor.

AUD 846. Independent Study in Problems in Audiology. 1-10 Credits.

AUD 851. Auditory Evoked Potentials. 3 Credits.
Theoretical bases, techniques, and clinical applications for auditory evoked potentials including electrocochleography, auditory brainstem response, middle and late latency and cognitive responses. Prerequisite: AUD 810, AUD 822, AUD 829, or permission of instructor.

AUD 853. Pharmacology for Audiology. 2 Credits.
Presentation and discussion topics including: basic pharmacology (pharmacokinetics and pharmacodynamics), mechanisms of ototoxicity, selected ototoxic agents, drugs used in otolaryngology, and a review of patient management strategies. Prerequisite: Enrollment in the Au.D. or Ph.D. audiology program or permission of instructor.

AUD 858. Business Audiology. 2 Credits.
An introduction to audiology business practice principles. Operational functions of the audiology clinic will be reviewed, including human resources, marketing, legal and ethical practice concerns, billing, coding and reimbursement. Prerequisite: enrollment in the Au.D. or Ph.D. audiology program or permission of instructor.

AUD 899. Thesis. 1-10 Credits.

AUD 940. Seminar in Audiology: _______. 1-4 Credits.
Advanced study of selected topics in audiology such as (but not limited to): cochlear micromechanics and other physiological processes; psychoacoustics, speech perception, cochlear implants, scientific reading, etc. Prerequisite: Enrollment in the Audiology Ph.D. or Au.D. program or permission of instructor.

AUD 941. Grand Rounds in Audiology. 1 Credits.
Presentations/discussion of clinical case studies and professional issues in Audiology. Au. D. students and audiology faculty members will participate in these sessions.

AUD 942. Investigation and Conference. 1 Credits.
Readings and case study analysis in preparation for the formative and comprehensive exams. Enrollment is restricted to Au.D. students. Prerequisite: 2 semesters of full-time enrollment in the Au.D. program.

AUD 944. Clinical Rotation. 1-6 Credits.
Supervised clinical work at university-affiliated, off-campus sites. The Clinic Rotation is intended to prepare students for entry into their Clinical Externship and to foster increasing independence. Clinical skills required are defined in standards set forth by the American Speech-Language Association.

AUD 945. Clinical Externship. 1-9 Credits.
Supervised clinical work at the University of Kansas and/or KUMC audiology clinics, or affiliated, off-campus sites. The Clinical Externship is intended to refine clinical skills, increase clinical independence, and ensure that clinical skills meet the certification standards in audiology set forth by the American speech-Language-Hearing Association. Open to 3rd and 4th year Au.D. students. Approval from Instructor needed for 3rd year students.

AUD 946. Advanced Grand Rounds in Audiology. 1 Credits.
Advanced, critical discussion of clinical case studies and professional issues in audiology and interprofessional collaboration. Third- and fourth-year Au.D. students and audiology faculty will participate in these sessions. Prerequisite: 4 credits of AUD 941 or by permission.

AUD 999. Doctoral Dissertation. 1-12 Credits.

Hearing and Speech Courses

SLPD 801. Seminar on Evidence-Based Practice in Speech-Language Pathology and Other HealthSciences I. 3 Credits.
This course is designed to give students a thorough understanding of evidence-based principles and procedures so that they could provide evidence-based services in a clinical setting. It is also designed to prepare students to assume a position of leadership in which they would be required to promote and teach evidence-based practices to their staff clinicians. Prerequisite: Consent of instructor.

SLPD 802. Seminar in Evidence-Based Practices in Communicative Disorders. 3 Credits.
In this course, students apply information covered in SLPD 801 to their areas of primary concentration. In-class and on-line sessions are led by students and guests from the university and community. Student presentations include primarily reports of progress on their semester project, a meta-analysis dealing with a clinical issue of their choice. Students report on status of (a) their development of the research question; (b) details of the literature search; (c) evaluation of relevant studies; (d) determination of level of evidence provided by the studies; (e) calculation and aggregation of effect sizes; and (f) conclusions
regarding the impact of the analysis on clinical practice. Guest presenters, including program and university faculty as well as clinic administrators and practitioners from the community, lead discussions on advantages of and problems with using evidence-based practices to help them make decisions in the speech-language clinic. Students will enroll in the class with class instructor. They will identify a lab instructor as well.

SLPD 804. Clinical Practice in Speech-Language Pathology: Advanced Training for the Experienced Clinician. 1-3 Credits. Students participate in clinical experiences (assessment and/or treatment) related to their primary and/or secondary area of concentration. Clinical experiences in which the student learns about a particular patient population, standardized and non-standardized assessment measures, instrumentation, computer software, devices, and/or treatment techniques and strategies are possible. Prerequisite: certification in speech-language pathology from the American Speech-Language-Hearing Association.

SLPD 805. Independent Study in Speech-Language Pathology. 1-3 Credits. Investigation of special topics by individual SLPD students. Prerequisite: Consent of Instructor.

SLPD 903. Capstone Project. 1-6 Credits. The Capstone Project reflects the culmination of academic and advanced clinical study and may take many forms (e.g., small original research study, original analysis of data collected by another researcher, research literature meta-analysis, program design and analysis, etc.). The Capstone project will comprise a written report that involves both literature and field activity. A Capstone project represents the research and application of knowledge, as well as an articulated plan for dissemination of the outcomes. Students will enroll in this course for a total of 6 credits. Prerequisite: Consent of Instructor.

Speech-Language-Hearing Courses

SPLH 161. Survey of Communication Disorders. 3 Credits. SI S Provides a general understanding of normal and deviant speech, language, and hearing in adults and children. This course considers the normal development of communication behavior, the nature of communication disorders, and the interaction of speech pathology and audiology with allied fields (e.g., education, medicine, psychology, special education).

SPLH 177. First Year Seminar: 3 Credits. U A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Speech-Language and Hearing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-year freshman status.

SPLH 220. The Physics of Speech. 4 Credits. N An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as LING 120.) Prerequisite: MATH 101 or 104 or equivalent.

SPLH 250. Study Abroad Topics in: 1-5 Credits. S A course designed to enhance international experience in topic areas related to speech-language-hearing at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

SPLH 418. Introduction to Cognitive Science. 3 Credits. S Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and PSYC 418.) Prerequisite: Consent of instructor.

SPLH 430. Communication in Autism. 3 Credits. This course will provide you with an introduction to the characteristics and communication of individuals with Autism Spectrum Disorder (ASD). This course will focus on diagnostic criteria, early identification, communication assessment and intervention considerations, and partnering with families who have family members with ASD. This course is offered at the 400 and 800 levels with additional assignments at the 800 level. Not open to students with credit in SPLH 830.

SPLH 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N LFE This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, BIOL 449, and PSYC 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

SPLH 450. Study Abroad Topics in: 1-5 Credits. S A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

SPLH 451. Directed Study Abroad in Speech-Language-Hearing. 1-3 Credits. S An independent study designed to enhance international experience in topic areas related to speech-language-hearing. Investigation of special topic or project selected by the student with advice, approval, and supervision by a KU SPLH instructor and an authorized agent of the study abroad site. Experience must be arranged through the Office of KU Study Abroad. Such study may take the form of directed reading and/or directed research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor

SPLH 452. Examining Global Perspectives in Speech-Language-Hearing: 3 Credits. S For students enrolled in an SPLH-sponsored Study Abroad program. Students participate in 12 hours of meetings in preparation for the Study Abroad experience. Pre-trip meetings focus generally on multi-cultural issues relevant to speech-language-hearing practice as well as specific cultural, linguistic, and service delivery issues for the target country. Students spend two weeks abroad, visiting sites to observe different types of service delivery for people with disabilities and places that are culturally and historically relevant. Periodic debriefing and small group discussions are conducted during the time abroad. A daily journal and
post-visit reflection paper is required. Prerequisite: Instructor permission required.

**SPLH 462. Principles of Speech Science. 3 Credits. N**
Survey of the physiology of speech production, and the physics of sound. Emphasis upon methodologies in the laboratory study of normal speech. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120 or consent of instructor.

**SPLH 463. Principles of Hearing Science. 3 Credits. N**
This class discusses the concepts and principles relevant to normal hearing processing: anatomy, psychophysical methods, and basic subjective correlates of the auditory system. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120, or consent of instructor.

**SPLH 464. Undergraduate Seminar in: _______. 1-3 Credits. S**
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.)

**SPLH 465. Fundamentals of Clinical Phonetics. 1 Credits. S**
Introduction to classification of American English speech sounds based on articulatory phonetics. Practice in phonetic transcription and analysis of normal and abnormal speech. Laboratory exercises to give students hands-on experience with selected topics from lecture. Prerequisite: Corequisite: SPLH 120.

**SPLH 466. Language Science. 3 Credits. S**
Introduction to structure/function of human languages as it relates to language development and disorders; processes involved in the expression and reception of language and the methodologies employed to study these processes.

**SPLH 497. Mentored Research Experience. 2-8 Credits. S**
Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor’s guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially meets the requirements for Research Experience Certification. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Research Experience Coordinator.

**SPLH 498. Departmental Honors Research. 2-8 Credits. S**
Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor’s guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially fulfills the requirements for Departmental Honors. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Honors Coordinator.

**SPLH 499. Directed Study in Speech-Language-Hearing. 1-3 Credits. S**
Investigation of special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading and/or directed research/clinical observation. Individual reports and conferences. (Distribution credit given for two-three hours only.) A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Prerequisite: Consent of instructor.

**SPLH 516. Speech Perception. 2 Credits. S**
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. Prerequisite: SPLH 120 Physics of Speech. Prerequisite or Corequisite: SPLH 463 Principle of Hearing Science.

**SPLH 565. Language Sample Analysis Lab. 1 Credits. S**
The study of the analysis of language produced by children with respect to its phonological, lexical, morphological, syntactic, and pragmatic characteristics. Prerequisite: Corequisite: SPLH 566.

**SPLH 566. Language Development. 3 Credits. SI S**
Study of language acquisition in children, including phonologic, morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use are included. May be taught in lecture or online format.

**SPLH 568. Introduction to Audiological Assessment and Rehabilitation. 4 Credits. U**
Introduction to methods for assessing and treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. Prerequisite: SPLH 463.

**SPLH 571. Introduction to Speech-Language Pathology. 4 Credits. U**
This course provides training in clinical management of communicative disorders in children and adults. Principles of evaluation, application of diagnostic information, intervention planning, intervention process, data collection and application, report writing, and interactions with parents and other professionals are examined. Participation in observation and laboratory activities is required.

**SPLH 588. Multicultural Considerations in Speech-Language-Hearing I. 1 Credits. S**
This course introduces foundational concepts of culture and diversity, bilingualism, bias, and components and processes leading to cultural competency. Students explore health and educational disparities in the United States and beyond. Students will reflect on their cultural identity, and how their experiences and perspectives may differ from others, and how their experiences can influence service delivery in speech-language pathology and audiology. Prerequisite: SPLH 566 or LING 415 or consent of instructor.

**SPLH 589. Multicultural Considerations in Speech-Language-Hearing II. 1 Credits. S**
This course builds on foundational concepts from SPLH 588 by exploring potential cultural and linguistic characteristics of populations that are typically underrepresented in many sectors of the Unites States, including education and health care. Case studies are implemented to examine cultural and linguistic influences on assessment and treatment processes in speech-language pathology and audiology. Prerequisite: SPLH 588.

**SPLH 620. The Communicating Brain: The Ultimate Personal Computer. 3 Credits. U**
This course introduces the study of human neuroscience with a particular focus on human communication. The course provides an overview of the relevant anatomical structures and function along with an introduction to the basic methods used to investigate central nervous system function.
Students are introduced to the study of perceptual, motor, and language function in the nervous system through a series of examples drawn from normal function and clinical cases. The examples are selected to highlight how these systems develop and are influenced by experience, implantable devices developed to interface with the nervous system, and how computers and animals are used as models to learn about nervous system function. Prerequisite: A 400-level course in SPLH, or consent of instructor.

SPLH 660. Research Methods in Speech-Language-Hearing. 3 Credits.
Research Methods is about the methods used to conduct, describe and evaluate science in communication disorders. Goals for learner outcomes include: 1) evaluation of research including adequacy of research to address scientific and clinical problems, 2) reading, summarizing and describing research through a literature review, 3) describing a hypothetical research study that addresses a specific question or hypothesis identified by the student, and 4) providing constructive peer reviews of research paper drafts. Prerequisite: 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor.

SPLH 668. Introduction to Audiological Rehabilitation. 2 Credits.
Introduction to methods for treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. This course should only be taken by graduate students in SPLH who have not completed this prerequisite. Not open to students with credit in SPLH 568. Prerequisite: Graduate standing.

SPLH 670. Beginning Clinical Practice in Audiology. 1-3 Credits. N
Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. Prerequisite: SPLH 568, or concurrent enrollment in SPLH 568, overall GPA 3.0 and consent of instructor.

SPLH 672. Clinical Practice in Speech-Langaugage Pathology. 3 Credits. S
Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 571 and overall GPA of 3.0.

SPLH 716. Speech Perception. 2 Credits.
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. (Same as AUD 816.)

SPLH 736. Foundations of Early Intervention. 3 Credits.
This course explores evidence-based principles and practices of providing early intervention services, including requirements of IDEA Part C, mission and key principles of early intervention and recommended practices and standards. Students will engage in guided field observations of assessment, intervention and collaborative practices, reflective practice and teaming/coaching activities. (Same as SPED 736.)

SPLH 737. Infants and Toddler with Significant Needs. 3 Credits.
This course explores the challenges infants and toddlers with significant developmental needs face and how to best support their participation in daily activities. Challenges faced by medical, physical, communication, social-emotional, hearing, vision, and mental health issues will be discussed along with how to support these needs across disciplines and in the home and community activities. This course will provide in-depth review of the unique challenges these children and families face and how providers from various backgrounds can work together to best support children and families. Environmental adaptations and direct instructional techniques to maximize independence tailored to the infant and toddler’s strengths and needs will be explored. Information is also provided on assistive technology designed to provide supports. Functional behavioral assessment procedures, proactive intervention strategies and psycho-educational approaches as well as the development of collaborative support plans will be studied. (Same as SPED 737.)

SPLH 752. Examining Global Perspectives in Speech-Language-Hearing: ______. 3 Credits.
For students enrolled in an SPLH-sponsored Study Abroad program. Students will participate in 12 hours of meetings in preparation for the Study Abroad experience. Pre-trip meetings will focus generally on multicultural issues relevant to speech-language-hearing practice as well as specific cultural, linguistic, and service delivery issues for the target country. Students may be required to facilitate discussions or prepare presentations for these meetings. Students will spend two weeks abroad, visiting sites to observe different types of service delivery for people with disabilities and places that are culturally and historically relevant. Students may partner with undergraduates to facilitate any clinically focused experiences. Periodic debriefing and small group discussions will be conducted during the time abroad. A daily journal and post-visit reflection paper will be required.

SPLH 764. Seminar in: ______. 1-3 Credits.
The subject matter of this seminar will be special topics from speech pathology and audiology. Special prerequisite may be established for a given topic.

SPLH 799. Proseminar in Child Language. 2 Credits.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, CLDP 799, LING 799 and PSYC 799.)

SPLH 816. Language Development. 3 Credits.
Study of language acquisition in children, including the morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use will be included. Not open to students who have credit for SPLH 566. Laboratory by appointment.

SPLH 820. Developmental Phonological Disorders. 2 Credits.
Focuses on speech and non-speech characteristics of children with developmental phonological disorders. Emphasis placed on collection and phonetic transcription of speech samples, phonological analysis of transcribed data, and decision-making processes in assessment and intervention.

SPLH 822. Dysarthria/Apraxia. 2 Credits.
This course describes the neuroanatomic bases of motor-speech processes, the diagnosis, classification, assessment, prognosis, and treatment of dysarthria(s) and apraxia(s).

SPLH 824. Fluency Disorders. 2 Credits.
The nature of stuttering in children and adults is discussed. Theories regarding etiology, development, and maintenance of the disorder are presented. Emphasis is placed on various clinical approaches to assessment, measurement, and treatment.

SPLH 826. Phonicatory Disorders. 2 Credits.
This course reviews the function of the laryngeal and respiratory mechanisms including the parameters and processes of phonation. Primary content addresses diagnosis, description, and treatment of organic and non-organic disorders of phonation.
SPLH 828. Speech Disorders in Special Populations. 2 Credits.
This course reviews anatomy and physiology of the velopharyngeal mechanism. Diagnosis and management of velopharyngeal dysfunction and associated problems considered. Anatomy, physiology, and rehabilitation associated with certain oral, pharyngeal, and laryngeal abnormalities discussed. Emphasis is on the speech problems of adults following medical management. Populations include individuals with laryngectomies, glossectomies, and tracheotomies.

SPLH 830. Communication in Autism. 3 Credits.
This course will provide an introduction to the characteristics and communication of individuals with Autism Spectrum Disorder (ASD). This course will focus on diagnostic criteria, early identification, communication assessment and intervention considerations, and partnering with families who have family members with ASD. This course is offered at the 400 and 800 levels with additional assignments at the 800 level. Not open to students with credit in SPLH 430.

SPLH 832. Dysphagia. 2 Credits.
This course covers normal and disordered swallowing. Evaluation and treatment of swallowing disorders, the dysphagia team, and dysphagia in special populations are considered.

SPLH 833. Dysphagia Treatment in Adults. 2 Credits.
This course is designed to build critical thinking and analysis skills for developing and implementing appropriate treatment plans for adults with dysphagia. Foundations of non-instrumental swallow assessment, rehabilitation, and compensation will be addressed. This course will also cover issues of ethics, cultural considerations in dysphagia management, and professional communication. Learning experiences will include evidence-based curriculum, hands-on practice, and critical thinking activities. Prerequisite: SPLH 832.

SPLH 834. Augmentative and Alternative Communication and Literacy. 2 Credits.
This course is designed to provide resources and information to prepare students to collaborate with others in increasing the literacy opportunities and skills of individuals with complex communication needs, particularly those who use augmentative and alternative communication.

SPLH 838. Augmentative and Alternative Communication in Schools. 2 Credits.
This course provides information about augmentative and alternative communication (AAC) services in school settings. Students will participate in readings and activities that will provide information concerning the roles, responsibilities, and contributions of school speech-language pathologists relative to AAC.

SPLH 840. Language Disorders of Children: Infants and Toddlers. 2 Credits.
This course examines factors relating to language disorders in the birth to three population. At-risk populations, as well as those with known etiologies, are considered. Information on assessment, intervention, and service delivery models is addressed. Issues relating to Public Law 99-457 are also examined.

SPLH 842. Language Disorders of Children: Preschool. 2 Credits.
This course examines language disorders of preschool-age children in the late preschool years. The course includes information on incidence, characteristics, assessment, and intervention. Theoretical issues and their implication for language intervention are also examined.

SPLH 844. Language Disorders of Children: School Age. 2 Credits.
This course examines language development during the school years and how problems in this development interact with school performance.

SPLH 846. Language Disorders of Adults. 2 Credits.
Neurological aspects of language processes, classification of aphasia, and assessment of language deficits are discussed. Management approaches including intervention strategies and rehabilitation are also considered.

SPLH 848. Language Disorders of Special Populations. 2 Credits.
This course focuses on communication differences in individuals with intellectual disabilities, autism, cerebral palsy, dual sensory impairments, and other conditions affecting communication competence. Communication characteristics as well as assessment and intervention strategies are studied.

SPLH 850. Cognitive-Linguistic Disorders of Adults. 2 Credits.
This course will prepare students to work with adults with acquired cognitive-linguistic disorders, with a focus on: Alzheimer's Disease, Traumatic Brain Injury, and Right Hemisphere Disorder, including etiologies and disease processes. Theoretical and practical knowledge will be presented regarding the primary cognitive domains of attention, memory, and executive function, as well as their impact on discourse-level language. The course will cover neuroanatomy, assessment procedures, interventions, family/communication partner training, and psychosocial aspects of cognitive-linguistic disorders.

SPLH 852. Augmentative and Alternative Communication. 2 Credits.
This course describes augmentative and alternative communication (AAC) assessment and intervention issues as they apply to children and adults with both congenital and acquired speech and/or language disabilities. Areas of study include AAC systems, assessment strategies and procedures, intervention strategies, and AAC information resources.

SPLH 853. Augmentative and Alternative Communication and Adult Acquired Disorders. 2 Credits.
This course will discuss the concepts and evidence related to assessment and intervention in the area of augmentative and alternative communication for adults with acquired disorders. Content will be related specifically to adults with acquired communication disorders and focus more on high tech than low tech but information and evidence related to both will be presented. Information about AAC systems appropriate for adults, assessment protocols, approaches to intervention, and advocacy will be applied in a case-based format.

SPLH 854. Reading Disorders. 2 Credits.
This course addresses the perceptual, linguistic, and cognitive processes utilized in written communication. Acquired and developmental disorders of written language are examined in relation to issues concerning characteristics, etiology, early identification, assessment, and remediation.

SPLH 856. Evaluation of Speech and Language. 2 Credits.
Provides a general framework for speech and language evaluations. Issues related to initiation and termination of treatment are discussed. Practice is provided in evaluating norm- and criterion-referenced information used in diagnostic, referral, and treatment decisions.

SPLH 861. Seminar in Research Methodology in Speech Pathology and Audiology. 3 Credits.
This seminar is concerned with the design, instrumentation, execution, and reporting of research in audiology and speech pathology. SPLH 760 or its equivalent and some statistics are recommended before entering this seminar.
SPLH 862. Clinical Processes. 1 Credits.
Orients student to clinical procedures, policies, requirements, and expectations of program. Therapy models, planning, and philosophies are discussed along with implementation and evaluation of therapy procedures. Professional issues are also considered. May be repeated for credit.

SPLH 864. Advanced Clinical Practice in Speech-Language Pathology. 1-6 Credits.
Students conduct supervised clinical work in a variety of settings. May be repeated for credit. Prerequisite: Department approval. Group and individual conferences with staff required.

SPLH 866. Field Study in Speech-Language Pathology. 5-12 Credits.
The field study provides work experiences in clinical and/or research activities. The student takes this course near the end of the degree program. Assignments include supervised work in a variety of approved settings. May be repeated for credit. Prerequisite: Department approval.

SPLH 868. Professional Issues. 1 Credits.
Forum for the presentation and discussion of scientific and professional issues by faculty and advanced graduate students. May be repeated for credit.

SPLH 874. Master's Research Practicum. 1-3 Credits.
This course is designed to give students experience in conducting research. Students apply and extend their knowledge and skills by participating in a research project under the supervision of a mentor. Students may assist with or independently conduct research in speech, language, or hearing. Prerequisite: SPLH 660 or equivalent research methods course.

SPLH 876. Independent Study in Problems of Speech, Language, and Hearing. 1-6 Credits.
Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor.

SPLH 888. Multicultural Considerations in Speech-Language-Hearing I. 1 Credits.
This course introduces foundational concepts of culture and diversity, bilingualism, bias, and components and processes leading to cultural competency. Students explore health and educational disparities in the United States and beyond. Students will reflect on their cultural identity, and how their experiences and perspectives may differ from others, and how their experiences can influence service delivery in speech-language pathology and audiology. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level.

SPLH 889. Multicultural Considerations in Speech-Language-Hearing II. 1 Credits.
This course builds on foundational concepts from SPLH 888 by exploring potential cultural and linguistic characteristics of populations that are typically underrepresented in many sectors of the United States, including education and healthcare. Case studies are implemented to examine cultural and linguistic influences on assessment and treatment processes in speech-language pathology and audiology. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level. Prerequisite: SPLH 888 or consent of instructor.

SPLH 899. Master's Thesis. 1-6 Credits.
Thesis Hours. Graded on a satisfactory progress/limited progress/no progress basis.

SPLH 900. Proseminar in Communicative Disorders. 1 Credits.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communicative disorders and related fields. May be repeated for credit. Limited to two hours credit counted toward an MA or AuD degree. Limited to four hours credit counted toward the PhD degree. Graded on a satisfactory/unsatisfactory basis.

SPLH 964. Seminar in: ______. 1-3 Credits.
The subject matter of this seminar will be special topics from speech pathology and audiology, including those related to research methodology and research or academic careers. Special prerequisites may be established for a given topic.

SPLH 970. Independent Study in Problems of Speech and Hearing. 1-6 Credits.
Investigation of special topics by individual students. Paper required.

SPLH 974. Doctoral Research Practicum. 1-6 Credits.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech or hearing.

SPLH 975. Directed Teaching: Speech Pathology and Audiology. 1-3 Credits.
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. May be repeated up to a maximum of six semester hours.

SPLH 976. Independent Study in Grant Writing. 1-3 Credits.
Students will identify a funding agency appropriate for their research, learn the application procedures for that agency, and draft a grant application following the identified agency's format. The faculty mentor will arrange for a review of the grant application following the agency's review criteria and format. May be repeated up to a maximum of three credits.

SPLH 982. Issues in Scientific Conduct. 3 Credits.
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as CLDP and PSYC 982.)

SPLH 998. Investigation and Conference (For Doctoral Candidates). 1-8 Credits.
(Limited to eight hours credit towards the Ph.D. degree.) Readings, critical thinking, and scientific writing in preparation for the oral comprehensive exam.

SPLH 999. Doctoral Dissertation. 1-12 Credits.
Dissertation Hours. Graded on a satisfactory progress/limited progress/no progress basis.

Clinical Doctor of Speech-Language Pathology

The Doctor of Speech-Language Pathology (SLPD) degree program is designed for post-master's speech-language pathologists holding the ASHA Certificate of Clinical Competence wanting to specialize in an area of interest with a clinical doctoral degree. At this time, the SLPD program does not require accreditation from ASHA.

Master's Degree and GPA

Admission to the program requires a master's degree in speech-language pathology from an ASHA-accredited university program (https://www.asha.org/eweb/ashadynamicpage.aspx?site=ashacms&webcode=caalisting&caacat=all) with a cumulative grade-
point average of a minimum 3.0 on a 4.0 scale. Note that applicants with higher GPAs may receive admissions preference.

ASHA Certification
In addition, applicants must present evidence of current ASHA Certificate of Clinical Competence (http://www.asha.org/certification/).

English Language Requirement
All students are expected to have strong command of the English language. Both domestic and international students may be subject to evaluation of English proficiency. All students may be subject to the TOEFL requirement if his/her native language is not English. The requirement is posted in the Academic Catalog (p. 2413) and on the International Programs (http://www.kumc.edu/international-programs/academic-english-requirements.html) website.

Background Check
The Joint Commission requires all incoming students to pay for a background check, (p. 2415) and this may affect eligibility to enter the program. Applicants will be asked to provide information and make the payment once officially accepted into the program. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html) A drug screening is required of all students participating in clinical settings.

Technical Standards and Accommodations
Please read the program technical standards (http://www.kumc.edu/school-of-health-professions/ipcd/speech-language-pathology-(slpd)/technical-standards.html) carefully. Signed verification will be required of students after they have been accepted. Reasonable accommodations will be made for any accepted student who has a documented disability and can meet program expectations. Applicants with documented disabilities can request reasonable accommodations if needed during the admissions process.

International Students
An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please visit the KU Office of International Student Services before applying. (http://iss.ku.edu) More information: information for international students in the School of Health Professions. (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

For more information or to contact the program, please visit the IPCD website (http://hearing.kumc.edu).

The SLPD (Clinical Doctor of Speech-Language Pathology) degree program is designed for post-master's speech-language pathologists holding the ASHA Certificate of Clinical Competence and wanting to specialize in an area of interest with a clinical doctoral degree.

It may be completed in eighteen months (including summer and with a common entry point in the fall semester). Exceptions to this timeline may occur for the student who chooses to complete the program on a part-time basis. A full-time student usually enrolls in 10 - 14 credit hours each fall and spring semester and 6 to 8 credit hours in the summer session. A minimum of 33 credit hours is required to complete the SLPD program requirements.

Degree requirements:

- Degree requirements are normally completed within one full-time to three part-time years of admission to the program with the maximum time allowed as eight years.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of a minimum of 33 credit hours.
- Successful completion of the Capstone Project. This is an individually designed, mentored project that demonstrates a synthesis of the knowledge and skills developed in the program.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of the following courses:

  **Program Applied Research Concentration = 15 credits**
  - SLPD 801, Seminar in Evidence Based Practices in Communication Disorders A, 3 credits
  - SLPD 802, Seminar in Evidence Based Practices in Communication Disorders A, 3 credits
  - SLPD 903, Applied Research Experience (Capstone Project), 6 credits
  - BIOS 704, Biostatistics - Prin Stat Pub Hlth, 3 credits

  **Primary Concentration of Study = 10 - 12 credits**

  Courses may be taken from within the IPCD program or other graduate programs on the KUMC and KU campuses, however, selected courses should reflect advanced knowledge not present in the MA curriculum.
  
  - Neuro-developmental disorders
  - Adult language disorders
  - Child language disorders
  - Clinical Supervision
  - Clinical Leadership
  - Literacy

  **Secondary Concentration of Study = 8 - 10 credits**

  Courses are selected jointly by student and advisor to represent a correlative area of study.

  **TOTAL HOURS = 33**

  - Specific elective courses are selected to complement the student's program in consultation with the student's academic advisor.
  - Degree requirements and course descriptions are subject to change. See student handbook (https://www.kumc.edu/school-of-health-professions/academics/departments/hearing-and-speech/academics/student-handbooks.html) for additional program information. In most cases, use the catalog of the year student entered the program. Other years' catalogs».
  - For more information or to contact the program, please visit the IPCD website (http://hearing.kumc.edu/).

Example Plan of Study #1: Primary Concentration: Adult Neurodegenerative Disease (motor speech and dysphagia); Secondary Concentration: Mental Health/Psychology of Aging
<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOS 704</td>
<td>3</td>
<td>SLPD 801</td>
<td>3</td>
<td>SLPD 805 (Swallowing Disorders)</td>
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<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPD 802</td>
<td>3</td>
<td>SLPD 804*</td>
<td>3</td>
<td>SLPD 903**</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SLPD 805 (Therapeutic Interventions)</td>
<td>2</td>
<td>REHS 865 (Patient Simulation)</td>
<td>1</td>
<td>PSYC 986*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SW 863*</td>
<td>3</td>
<td>SLPD 805 (Neurodegenerative Disorders)</td>
<td>1</td>
<td>SLPD 805 (Course Instruction)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PSYC 838*</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPD 805 (Neuro Extern Placements)</td>
<td>2</td>
<td>SLPD 903*</td>
<td>3</td>
<td>SLPD 903**</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

** = Primary Concentration: Adult Neurodegenerative Disease (motor speech and dysphagia)

^^ = Secondary Concentration: Prelinguistic & Early Communication

++ = Applied Research Concentration

** = Primary Concentration: Clinical Supervision & Leadership

Total Hours 33

Technical Standards

The clinical doctorate degree in speech-language pathology signifies that the holder is prepared to assume leadership in clinical practice after developing advanced practice competencies. Therefore, all individuals admitted to the University of Kansas must meet the following abilities and expectations with or without accommodation(s). KU is an AA/EO/Title XI institution.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose a disability are considered for the program if otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to one of the following offices:

Cynthia Ukoko
Senior Coordinator for Academic Accommodations
3901 Rainbow Boulevard, MS 4029
Kansas City, KS 66160
cukoko@kumc.edu
913-588-7035; 711 TTY

Andrew Shoemaker
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Academic Achievement & Access Center
1450 Jayhawk Blvd., Room 22
Lawrence, KS 66045
shoe@ku.edu
785-864-4064; 711 TTY

All students admitted to the KU Intercampus Program in Communicative Disorders must be able to meet the following requirements and expectations with or without accommodation(s).

Problem Solving:

The culminating activity in the preparation of the clinical doctorate in speech-language pathology is advanced clinical reasoning. The SLPD student is expected to develop advanced expertise and demonstrate leadership, teaching, advanced practice, and evidence-based practice skills. Therefore, a candidate should be able to understand research, make correct observations, and engage in reasoning, analysis, and synthesis.

Communication:

- Written Communication – The student must be able to assimilate information from a variety of written sources (e.g., medical/school records, professional journals and texts, etc.). Students are required to use information from written sources and to produce appropriate written documentation for a variety of readers. Students demonstrate...
the ability to prioritize written information based on the needs of the reader.

- Verbal Communication – Students must be able to communicate factual information effectively to a variety of audiences. Student communication must be appropriate to the setting (e.g., patients/clients, caregivers, professional colleagues, etc.). Students demonstrate the ability to prioritize verbal information based on the needs of the audience.

Sensorimotor:

Students must have sufficient gross motor, fine motor, and equilibrium functions, and functional use of sensory systems to enable them to perform all tasks essential to their career paths.

Behavior and Social Attributes:

Students are expected to exhibit professional behaviors and attitudes during their participation in classroom, clinical, and research experiences. The student must be able to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds. This includes, but is not limited to, an ability to establish rapport and communicate with others, to use appropriate language, possess flexibility toward changes, and to accept responsibility for one’s own conduct.

Doctor of Audiology

The Doctor of Audiology (Au.D.) degree is intended to produce audiologists for clinical practice and is designed to be completed in four years (including summers).

This program has been planned to meet the academic and clinical requirements of the American Speech-Language-Hearing Association (ASHA). The ASHA Council on Academic Accreditation in Audiology and Speech-Language Pathology accredits this program.

A combined Au.D./Ph.D. track also is available. This track facilitates the completion of both degrees in a 6-year post-baccalaureate period. Students who wish to earn both Au.D. and Ph.D. degrees should contact an advisor.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

A bachelor's degree is required. It is expected students will have obtained a broad general education to serve as a background prior to graduate study. Undergraduate course work in mathematics and in basic and applied sciences is strongly encouraged.

If the bachelor's degree is not in the area of audiology or communication sciences and disorders, applicants should have 12 hours of basic sciences and mathematics in addition to courses in the following content areas (or their equivalents):

- Physics of Speech
- Principles of Speech Science
- Principles of Hearing Science
- Language Development
- Intro to Aud Assessment and Rehab
- Intro to Speech-Language Pathology

Background Check

The Joint Commission requires all incoming students to obtain a background check (p. 2415). This one-time fee must be paid directly to the company performing the background investigation and the report provided to KU after acceptance into the program. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html) A drug screening may be required prior to work in clinical settings.

International Students:

An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

All students, both domestic and foreign, must meet minimum English proficiency (p. 2414) requirements.

For more information or to contact the program, please visit the IPCD website (http://hearing.kumc.edu).

The Au.D. program prepares students to meet the academic and clinical requirements for the ASHA Certificate of Clinical Competence. The degree is designed to be completed in 4 years (including summers, with a common entry point in fall semester). A minimum of 98 credit hours including academic course work, independent research, and clinical practicum is required.

Specific guidelines for certification are contained in the ASHA Certification and Membership Handbook, available on the ASHA website http://www.asha.org/.

Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUD 810</td>
<td>Diagnostic Audiology</td>
<td>4</td>
</tr>
<tr>
<td>AUD 811</td>
<td>Hearing Disorders</td>
<td>3</td>
</tr>
<tr>
<td>AUD 813</td>
<td>Psychoacoustics and Theories of Hearing</td>
<td>3</td>
</tr>
<tr>
<td>AUD 814</td>
<td>Hearing Conservation</td>
<td>1</td>
</tr>
<tr>
<td>AUD 816</td>
<td>Speech Perception</td>
<td>2</td>
</tr>
<tr>
<td>AUD 817</td>
<td>Pediatric Audiology</td>
<td>3</td>
</tr>
<tr>
<td>AUD 818</td>
<td>Vestibular Systems and Disorders</td>
<td>3</td>
</tr>
<tr>
<td>AUD 819</td>
<td>Hearing Aids I</td>
<td>3</td>
</tr>
<tr>
<td>AUD 820</td>
<td>Rehabilitative Audiology and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>AUD 821</td>
<td>Hearing Aids II</td>
<td>3</td>
</tr>
</tbody>
</table>
**Example Plan of Study**

For more information or to contact the program, please use the catalog of the year student entered the program. Degree requirements and course descriptions are subject to change. See student handbook for additional program information. In most cases, use the catalog of the year student entered the program. Other years’ catalogs ».

For more information or to contact the program, please visit the IPCD website.

### Example Plan of Study

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUD 822</td>
<td>Electro-Acoustics and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>AUD 823</td>
<td>Cochlear Implants and Hearing Assistance Technologies</td>
<td>2</td>
</tr>
<tr>
<td>AUD 824</td>
<td>Central Auditory Processing</td>
<td>2</td>
</tr>
<tr>
<td>AUD 826</td>
<td>Tinnitus Management</td>
<td>2</td>
</tr>
<tr>
<td>AUD 828</td>
<td>Genetics and Hearing Loss</td>
<td>2</td>
</tr>
<tr>
<td>AUD 829</td>
<td>Anatomy and Physiology of the Hearing and Vestibular Mechanisms</td>
<td>3</td>
</tr>
<tr>
<td>AUD 846</td>
<td>Independent Study in Problems in Audiology</td>
<td>2</td>
</tr>
<tr>
<td>AUD 851</td>
<td>Auditory Evoked Potentials</td>
<td>3</td>
</tr>
<tr>
<td>AUD 853</td>
<td>Pharmacology for Audiology</td>
<td>2</td>
</tr>
<tr>
<td>AUD 858</td>
<td>Business Audiology</td>
<td>2</td>
</tr>
<tr>
<td>AUD 940</td>
<td>Seminar in Audiology: _____</td>
<td>2</td>
</tr>
<tr>
<td>AUD 941</td>
<td>Grand Rounds in Audiology (taken years 1 &amp; 2 for a total of 4 credits)</td>
<td>4</td>
</tr>
<tr>
<td>AUD 942</td>
<td>Investigation and Conference</td>
<td>2</td>
</tr>
<tr>
<td>AUD 946</td>
<td>Advanced Grand Rounds in Audiology (taken years 3 &amp; 4 for a total of 4 credits)</td>
<td>4</td>
</tr>
<tr>
<td>SPLH 888</td>
<td>Multicultural Considerations in Speech-Language-Hearing I</td>
<td>1</td>
</tr>
<tr>
<td>SPLH 889</td>
<td>Multicultural Considerations in Speech-Language-Hearing II</td>
<td>1</td>
</tr>
</tbody>
</table>

### Other Requirements:
- Pass comprehensive exam taken in year 2
- Completion of 1 of 2 research project options through enrollment in AUD 846

Degree requirements and course descriptions are subject to change. See student handbook for additional program information. In most cases, use the catalog of the year student entered the program. Other years’ catalogs ».

For more information or to contact the program, please visit the IPCD website.

### Technical Standards

The doctorate degree in audiology signifies that the holder will satisfy the academic and clinical practicum requirements as stated by the American Speech-Language-Hearing Association for the Certificate of Clinical Competence. It follows that graduates must have the knowledge and skills to practice in the area of audiology. Therefore, all individuals admitted to the University of Kansas Intercampus Program in Communicative Disorders must meet the following abilities and expectations with or without accommodation(s). KU is an AA/EO/Title XI institution.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose a disability are considered for
the program if otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to one of the following offices:

Cynthia Ukoko  
Senior Coordinator for Academic Accommodations  
3901 Rainbow Boulevard, MS 4029  
Kansas City, KS 66160  
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Andrew Shoemaker  
Director  
Academic Achievement & Access Center  
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Lawrence, KS 66045  
shoe@ku.edu  
785-864-4064; 711 TTY

The culminating activity in the preparation of an audiologist is clinical reasoning. Therefore, a candidate for the Au.D. degree must be able to make correct observations and have the skills of measurement, calculation, reasoning, analysis, and synthesis.

All students admitted to the KU Intercampus Program in Communicative Disorders must be able to meet the following requirements and expectations with or without accommodation(s).

**Observation/Sensory Motor**
- Observe demonstrations and learn from experiences in the classroom, laboratory, and clinical situations.
- Carry out speech/language/hearing assessments and intervention strategies/techniques including the operation of complex, electronic instrumentation. Diagnosis, assessment, and intervention of speech/language/hearing problems typically involves the functional use of the senses in order to palpate certain areas of the patients’ head and neck.
- Interpret and comprehend text, numbers, and graphs displayed in print and video.
- Observe and respond to subtle cues of patient’s moods, temperament, and social behavior.

**Physical/Psychomotor**
- Perform actions requiring coordination of both gross and fine muscular movement, equilibrium and use of the senses.
- Respond quickly in clinic situations, not only for safety, but also therapeutically.
- Travel to numerous clinical sites for practical experience.
- Use an electronic keyboard to operate instruments and to calculate, record, evaluate, and transmit information.

**Communication**
- Be able to share and to elicit information from patients/clients, supervisor, peers and other health professionals verbally and in a recorded format.
- Effectively, confidently, and sensitively converse with patients and their families.
- Interpret and comprehend technical and professional materials.
- Prepare papers, produce reports, and complete documentation for patient records.
- Assimilate information from written sources (texts, journals, medical/school records).
- Take paper, computer, and laboratory examinations and prepare scholarly papers.

**Judgment**
- Demonstrate judgment in the classroom, laboratory, and clinic situations that shows the intellect and emotional health necessary to make mature, sensitive, and effective decisions in the following areas:
  - Relationships with professors, supervisors, peers, and patients/clients
  - Professional and ethical behavior
  - Effectiveness of diagnostic, assessment, and intervention strategies.
- Demonstrate an understanding of the rationale and justification for one’s performance.
- Critically evaluate one’s own performance and be flexible toward change to promote professional and clinical process.
- Recognize and correct behaviors disruptive to classroom teaching, research, and patient care.
- Manage the use of time to complete clinical and academic assignments within realistic constraints.
- Recognize potentially hazardous materials, equipment, and situations and proceed in a manner to minimize risk of injury to those in the area.
- Make correct observations and have the problem solving skills necessary for measurement, calculation, reasoning, analysis, and synthesis.

**Doctor of Philosophy in Speech-Language Pathology or Audiology**

The Intercampus Program in Communicative Disorders offers Ph.D. programs in both speech-language pathology and in audiology for post-baccalaureate study of normal and disordered aspects of communication. These programs are designed to prepare suitably qualified individuals for leadership positions in research and academia. A major focus of these programs is to advance the science of these fields, and to elucidate the scientific basis for the procedures and processes used in clinical practice.

Students may pursue the Ph.D. in conjunction with entry-level clinical graduate degrees. As a result, the program offers both a combined M.A./Ph.D. and a combined Au.D./Ph.D. track. These tracks facilitate the completion of both degrees (the clinical graduate degree and the Ph.D.) in approximately a 6-year post-baccalaureate period. Students
interested in the M.A./Ph.D track are encouraged to contact the program for information about the application process. Students who wish to earn both Au.D. and Ph.D. degrees should contact their advisor.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission to the Ph.D. Program**

Although applications may be submitted at any time, January 5th is the deadline for priority status, as it aligns with funding and scholarship availability.

Eligibility criteria for admission to the Ph.D. program follow Graduate Studies’ admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission to graduate status in the program, a student must hold a bachelor’s degree.

Because PhD students pursue an individualized plan of study, a faculty mentor is a critical requirement of the program. Potential applicants should investigate faculty mentor possibilities by (1) reviewing faculty bios and laboratory information (http://ipcd.kumc.edu/), and (2) reading recent research articles written by KU faculty. Applicants are strongly encouraged to contact faculty who may be a good match to their interests prior to applying.


All students are expected to have strong command of the English Language. Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Upon admission, the student and his or her adviser choose a doctoral advisory committee. The committee is responsible for guiding the student’s progress through the selected program of study.

Incoming students who have not completed a substantive graduate research project (e.g., a master’s thesis, Au.D. research project, etc.) must initiate a thesis-equivalent research project, under the direction of a three-member committee, during the first year of enrollment. This project must be completed before the comprehensive oral examination.

**Doctor of Philosophy in Speech-Language Pathology**

Acquiring a doctorate in speech-language pathology at a minimum requires the following:

- Completion of academic coursework
  - A minimum of 24 graduate hours in a major area of interest
  - A minimum of 12 graduate hours in a correlative area
  - A minimum of 15 graduate hours in research skills/responsible scholarship
- Completion of a preliminary research experience
- Satisfactory performance on annual reviews
- Satisfactory completion of a dissertation including written and oral prospectus, and written dissertation and oral defense of the dissertation
- Submission of the dissertation to the KU Office of Graduate Studies

Note that the above are the MINIMUM requirements. Each student’s plan of study will vary depending on entry skills (i.e., relevant knowledge and skills acquired through prior training, work or research experience), chosen specialization, and career aspirations.

Students in this program must meet the general requirements of the university including the research skills and responsible scholarship requirement (http://policy.ku.edu/graduate-studies/research-skills-responsive-scholarship/) and fulfill the basic program requirements to receive the Ph.D. degree.

**Doctor of Philosophy in Audiology**

Acquiring a doctorate in audiology at a minimum requires the following:

- Completion of academic coursework
  - A minimum of 24 graduate hours in a major area of interest
  - A minimum of 12 graduate hours in a correlative area
  - A minimum of 15 graduate hours in research skills/responsible scholarship
- Completion of a preliminary research experience
- Satisfactory performance on annual reviews
- Satisfactory performance on written and oral comprehensive examinations
- Satisfactory completion of a dissertation including written and oral prospectus, and written dissertation and oral defense of the dissertation
- Submission of the dissertation to the KU Office of Graduate Studies

Note that the above are the MINIMUM requirements. Each student’s plan of study will vary depending on entry skills (i.e., relevant knowledge and skills acquired through prior training, work or research experience), chosen specialization, and career aspirations.

Students in this program must meet the general requirements of the university including the research skills and responsible scholarship...
requirement (http://policy.ku.edu/graduate-studies/research-skills-
responsible-scholarship/) and fulfill the basic program requirements to
receive the Ph.D. degree.

Different entry paths:
Students without a graduate degree (e.g., MA, AuD) have several
options in pursuing the Ph.D. degree. Some decide to pursue a research
emphasis plan of study. Others opt to work on clinical certification in
the speech-language pathology or audiology programs while also in the
Ph.D. program. This combined degree track involves a higher course
load. Details may be found in the Ph.D. student handbook (https://
www.kumc.edu/school-of-health-professions/academics/departments/
hearing-and-speech/academics/student-handbooks.html).

Students entering the Ph.D. program with a graduate degree will complete
the Ph.D. program requirements outlined in the curriculum on this page,
with some adjustments based on relevant skills acquired during prior
graduate study. Details may be found in the Ph.D. student handbook
(https://www.kumc.edu/school-of-health-professions/academics/
departments/hearing-and-speech/academics/student-handbooks.html).

For more information or to contact the program, please visit the IPCD
website (https://www.kumc.edu/school-of-health-professions/academics/
departments/hearing-and-speech.html).

Technical Standards

The Ph.D. degrees in audiology and speech-language pathology signifies
that the holder is ready to engage in a research career. Therefore, all
individuals admitted to the University of Kansas Intercampus Program
in Communicative Disorders must meet the following abilities and
expectations with or without accommodation(s). KU is an AA/EO/Title
XI institution.

NOTE: Reasonable accommodations will be considered and may be
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Director
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The culminating activity in the preparation of a researcher is the ability
to formulate, conduct and disseminate research. In the academic arena,
teaching skills usually also are required. Therefore, a candidate for the
Ph.D. degree must be able to make correct observations and have the
skills of measurement, calculation, reasoning, analysis, and synthesis.

All students admitted to the KU Intercampus Program in Communicative
Disorders must be able to meet the following requirements and
expectations with or without accommodation(s).

Observation/Sensory Motor

• Observe demonstrations and learn from experiences in the
  classroom, laboratory, and other research settings.
• Carry out research techniques including the operation of complex,
  electronic instrumentation. Some types of research may involve
  the functional use of the senses in order to palpate certain areas of
  the patients' head and neck or to observe the function of the head
  and neck.
• Interpret and comprehend text, numbers, and graphs displayed in
  print and video.
• Observe and respond to subtle cues of participant's moods,
  temperament, and social behavior.

Physical/Psychomotor

• Perform actions requiring coordination of both gross and fine
  muscular movement, equilibrium and use of the senses.
• Respond quickly in research situations, not only for safety, but also
  therapeutically.
• Travel to numerous research sites for practical experience.
• Use an electronic keyboard to operate instruments and to calculate,
  record, evaluate, and transmit information.

Communication

• Be able to share and to elicit information from participants, mentors,
  peers and other research collaborators verbally and in a recorded
  format.
• Effectively, confidently, and sensitively converse with participants
  and their families.
• Interpret and comprehend technical and professional materials.
• Prepare papers, produce reports, and complete documentation for
  research purposes.
• Assimilate information from written sources (texts, journals, medical/
  school records).
• Take paper, computer, and laboratory examinations and prepare
  scholarly papers.

Judgment

• Demonstrate judgment in the classroom, laboratory, and other
  research situations that shows the intellect and emotional health
  necessary to make mature, sensitive, and effective decisions in the
  following areas:
  • Relationships with professors, collaborators, peers, and
    participants
  • Professional and ethical behavior
  • Effectiveness of research approaches.
• Demonstrate an understanding of the rationale and justification for
  one's performance.
• Critically evaluate one's own performance and be flexible toward
  change to promote professional and research process.
• Recognize and correct behaviors disruptive to classroom teaching, and research.
• Manage the use of time to complete research and academic assignments within realistic constraints.
• Recognize potentially hazardous materials, equipment, and situations and proceed in a manner to minimize risk of injury to those in the area.
• Make correct observations and have the problem solving skills necessary for measurement, calculation, reasoning, analysis, and synthesis.

Master of Arts in Speech-Language Pathology

The master’s degree in speech-language pathology is designed to produce highly skilled clinicians seeking to enter the field and is typically completed in five full-time semesters (including a summer semester). The program length may vary, for example, for the student requiring prerequisites to be completed or one pursuing additional thesis or course work. A master’s degree from KU will, in most circumstances, satisfy the American Speech-Language-Hearing Association’s (http://www.asha.org)’s certification standards for continuing on to the clinical fellowship year. A certificate of clinical competence in speech-language pathology is awarded upon completion of a successful clinical fellowship.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A. Program

Prospective students are admitted to the M.A. program for the summer or fall semester. The deadline to submit applications is January 5th.

Eligibility criteria for admission to the M.A. program follow Graduate Studies’ admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission in the program, a student must hold a bachelor’s degree.

Ideally students will have completed an undergraduate degree in speech pathology or a related field. Individuals who have not completed prerequisite coursework may apply and be admitted on an exceptional basis if they have exceptionally strong academic credentials. For a full list of the prerequisite course work please see our prerequisite (http://splh.ku.edu/academics/degrees/pre-req/) page.


Requirements for the M.A. Degree with a Major in Speech-Language Pathology

Students with undergraduate degrees in other fields (e.g., psychology, linguistics) typically need to complete undergraduate prerequisite coursework in communication sciences and disorders before applying and/or being admitted to a graduate program in speech-language pathology or audiology.

Prerequisite Course Work for the MA SLP Graduate Program

• An acceptable bachelor’s degree
• Coursework in speech-language-hearing must include the following: Physics of Speech; Principles of Speech Science; Principles of Hearing Science; Fundamentals of Clinical Phonetics; Language Analysis Lab; Language Development; Introduction to Audiological Assessment and Rehabilitation; Introduction to Speech-Language Pathology; Research Methods in Speech-Language-Hearing; Statistics.
• Additional requirements for ASHA Certification include coursework in biological sciences, physical sciences, and social/behavioral sciences. Courses in biological and physical sciences specifically related to communication sciences and disorders cannot be applied to this requirement.

Degree Requirements

The program requires 34 credit hours of experiences for breadth and an additional 12 to 16 hours for depth. All of these credit hours are at the 700-level or above, with the exception of the Advanced Elective hours. Advanced Electives can include any approved graduate courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPLH 888</td>
<td>Multicultural Considerations in Speech-Language-Hearing I</td>
<td>1</td>
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<tr>
<td>SPLH 889</td>
<td>Multicultural Considerations in Speech-Language-Hearing II</td>
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</tr>
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<td>SPLH 860</td>
<td>Evaluation of Speech and Language</td>
<td>2</td>
</tr>
<tr>
<td>SPLH 862</td>
<td>Clinical Processes</td>
<td>2</td>
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<tr>
<td>SPLH 864</td>
<td>Advanced Clinical Practice in Speech-Language Pathology</td>
<td>7</td>
</tr>
<tr>
<td>SPLH 868</td>
<td>Professional Issues</td>
<td>2</td>
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<tr>
<td>Research experience (thesis or nonthesis option)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SPLH electives (8 seminars, 2 credit hours each)</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>SPLH 866</td>
<td>Field Study in Speech-Language Pathology</td>
<td>5</td>
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</table>
Advanced electives (SPLH, outside department, or thesis) 6
Second field study or fourth practicum experience 1-5

1 This course is taken twice for a total of 2 credit hours.
2 This course is taken more than once for a total of 7 credit hours
3 This course is taken more than once for a total of 2 credit hours

Other requirements:
• Pass both formative and summative exam (including thesis defense if applicable).

For more information or to contact the program, please visit the IPCD website (http://hearing.kumc.edu)

Technical Standards

The master's degree in speech-language pathology signifies the holder will satisfy the academic and practicum requirements as stated by the American Speech-Language-Hearing Association to be eligible to continue on to the clinical fellowship year. It follows that graduates must have the knowledge and skills to practice in the area of speech-language pathology. Therefore, all individuals admitted to the University of Kansas Intercampus Program in Communicative Disorders must meet the following abilities and expectations with or without accommodation(s).

KU is an AA/EO/Title XI institution.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to one of the following offices:

Cynthia Ukoko
Senior Coordinator for Academic Accommodations
3901 Rainbow Boulevard, MS 4029
Kansas City, KS 66160
cukoko@kumc.edu
913-588-7035; 711 TTY

Andrew Shoemaker
Director
Student Access Center
1450 Jayhawk Blvd., Room 22
Lawrence, KS 66045
shoe@ku.edu
785-864-4064; 711 TTY

The culminating activity in the preparation of a speech-language pathologist is clinical reasoning. Therefore, a candidate for the master’s degree must be able to make correct observations and have the skills of measurement, calculation, reasoning, analysis, and synthesis.

All students admitted to the KU Intercampus Program in Communicative Disorders must be able to meet the following requirements and expectations with or without accommodation(s).

Observation/Sensory Motor

• Observe demonstrations and learn from experiences in the classroom, laboratory, and clinical situations.
• Carry out speech/language/hearing assessments and intervention strategies/techniques including the operation of complex, electronic instrumentation. Diagnosis, assessment, and intervention of speech/language/hearing problems typically necessitates the functional use of the senses of vision, hearing, and touch such as palpating certain areas of the patient’s head and neck.
• Comprehend text, numbers, images and graphs.
• Observe and respond to subtle cues of patient’s moods, temperament, and social behavior.

Physical/Psychomotor

• Perform actions requiring coordination of both gross and fine muscular movement, equilibrium and use of tactile, hearing, and visual senses.
• Respond quickly in clinic situations, not only for safety, but also therapeutically.
• Travel to numerous clinical sites for practical experience.
• Use an electronic keyboard to operate instruments and to calculate, record, evaluate, and transmit information.

Communication

• Be able to share and to elicit information from patients/clients, supervisor, peers and other health professionals verbally and in a recorded format.
• Effectively, confidently, and sensitively converse with patients and their families.
• Comprehend technical and professional materials.
• Prepare papers, produce reports, and complete documentation for patient records.
• Assimilate information from written sources (texts, journals, medical/school records).
• Take paper, computer, and laboratory examinations and prepare scholarly papers.

Judgment

• Demonstrate judgment in the classroom, laboratory, and clinic situations that shows the intellect and emotional health necessary to make mature, sensitive, and effective decisions in the following areas:
  • relationships with professors, supervisors, peers, and patients/clients
  • professional and ethical behavior
  • effectiveness of diagnostic, assessment, and intervention strategies.
• Demonstrate an understanding of the rationale and justification for one’s performance.
• Critically evaluate one’s own performance and be flexible toward change to promote professional and clinical process.
• Recognize and correct behaviors disruptive to classroom teaching, research, and patient care.
• Manage the use of time to complete clinical and academic assignments within realistic constraints.
• Recognize potentially hazardous materials, equipment, and situations and proceed in a manner to minimize risk of injury to those in the area.
• Make correct observations and have the problem solving skills necessary for measurement, calculation, reasoning, analysis, and synthesis.

Cardiovascular Sonography

This is a 21-month certificate program in which students spend 30 to 40 hours each week dividing time between didactic course work and hands-on clinical applications.

Students in the program benefit from the wide variety of diagnostic examinations conducted at The University of Kansas Health System and affiliated clinical sites. The curriculum incorporates detailed, structured, and comprehensive course work and teaches the student to use independent judgment in the acquisition of diagnostic information.

The following concentration areas are available in this program:

- **Adult echocardiography and vascular technology** Become a credentialed Registered Diagnostic Cardiac Sonographer (RDACS) and Registered Vascular Technologist (RVT) through American Registry for Diagnostic Medical Sonography (ARDMS) or a Registered Cardiac Sonographer (RCS) and a Registered Vascular Specialist (RVS) through Cardiovascular Credentialing International (CCI).
- **Adult and pediatric echocardiography** Become a credentialed Registered Diagnostic Cardiac Sonographer with a specialty in pediatric echocardiography (PE) through ARDMS or a Registered Congenital Cardiac Sonographer (RCCS) through Cardiovascular Credentialing International (CCI).

Courses

**CVS 20. Cardiac Anatomy and Physiology. 1 Credits.**
This course will provide the student with basic cardiac terminology, knowledge of congenital heart defects, coronary vessels and the conduction system. The student will also study the circulatory system and physiology of the heart. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 21. EKG I. 1 Credits.**
This course is designed to present basic principles of ECG and the fundamentals of the ECG waveform. The student will be introduced to normal basic pattern and common abnormality recognition. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 22. Cardiovascular Physiology. 1 Credits.**
During this course the student will focus on cardiovascular physiology. The student will study the circulatory system, addressing the physiology of the heart and blood vessels throughout the body. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 23. Patient Care I. 1 Credits.**
This course will provide the student with the basic care skills necessary to function in a hospital and clinical setting. The student will learn about patient rights, HIPPA, patient transfers, proper ergonomics of scanning, hand hygiene, sterile technique, radiation safety and infection control. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 24. Vascular Anatomy and Physiology. 1 Credits.**
The student will learn basic vascular terminology, anatomy and physiology. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 25. Physics I. 2 Credits.**
This course is designed to introduce the student to the fundamental physical principles of Doppler echocardiography, the basic physics of Doppler ultrasound and the fundamental principles of pulsed wave, continuous wave and color flow Doppler. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 26. Clinical Practicum I. 6 Credits.**
This course will provide meaningful, well-balanced experiences for the student in the adult echocardiography labs. Clinical Practicum I will focus on the development of image recognition, anatomy identification and patient care. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 27. Adult Cardiovascular Technician I. 2 Credits.**
This course will introduce the student to the principles of diagnostic cardiac catheterization. The student will learn basic skills to assist the cardiologist during cardiac catheterization procedures. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 28. Pediatric Anatomy and Physiology. 1 Credits.**
The student will learn basic pediatric cardiac anatomy and physiology. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 30. Adult Echocardiography I. 2 Credits.**
The student will learn the pathophysiology of acquired valvular heart disease. Two-dimensional, spectral and color flow Doppler findings associated with each valvular disease state will be evaluated. The student will learn to obtain and effectively apply accurate two-dimensional and Doppler measurements as they relate to evaluation and quantification of valvular disease. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 31. Physics II. 2 Credits.**
The student will learn how to derive hemodynamic data from the pulsed-wave, continuous wave and color-flow Doppler examinations. Special emphasis will be given to understanding the physical principles governing the ultrasound machine and applying those principles to practice. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 32. Pharmacology. 1 Credits.**
The student will become familiar with common medicines used in the cardiovascular setting. The student will learn pharmacological management of patients undergoing invasive and non-invasive cardiac and vascular procedures. Students will learn to correlate drug therapies with interventional procedures and disease states. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 33. EKG II. 2 Credits.**
This course is designed to present advanced principles of ECG. The student will be exposed to advanced pattern recognition and the underlying etiology of the rhythm. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 35. Patient Care II. 2 Credits.**
This course will provide the student with the advanced care skills necessary to function as a cardiovascular technologist within the laboratory. The student will learn about radiation safety, interpretation of lab values, patient management, high risk patient management, basic life support and advanced cardiac life support. Prerequisite: Admission to the advanced cardiovascular technology program.

**CVS 36. Clinical Practicum II. 8 Credits.**
The student will have hands-on experience working in their chosen field; catheterization lab, electrophysiology lab, vascular lab or the echocardiography lab. Here they will be given the opportunity to improve their technical skills working one-on-one with their preceptor and patients.
in the clinical setting. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 39. Adult Echocardiography II. 3 Credits.**
The student will learn echocardiographic findings associated with cardiomyopathies, the etiology, physiology, cardiac auscultation, physical examination, symptoms and EKG findings associated with the various cardiac disease states. The student will learn to obtain and effectively apply accurate two-dimensional and Doppler measurements as they relate to evaluation and quantification of systolic function, diastolic function and the echocardiographic role in evaluation of diseases of the myocardium. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 40. Vascular Ultrasound I. 3 Credits.**
The student will learn how to assess basic vascular disease using two-dimensional, spectral and color flow Doppler information in the areas of arterial Doppler segmental pressures, plethysmography, ankle brachial indices and carotid duplex imaging. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 41. Pediatric Echocardiography I. 3 Credits.**
The student will demonstrate an understanding of how to utilize a sequential developmental approach. This course will review congenital heart diseases and their associated clinical signs and symptoms. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 42. Physics Review. 1 Credit.**
This course is designed to prepare students to sit for their Sonography Principles and Instrumentation examination through ARDMS. During this course students will review all that they have learned in Physics I and Physics II. Prerequisite: Admission to the program.

**CVS 43. Adult Interventional Cardiology Technician I. 3 Credits.**
The student will receive progressive didactic exposure to the technology, procedures, techniques and basic concepts of interventional cardiology. Prerequisite: Admission to the program.

**CVS 44. Adult Electrophysiology Technician I. 3 Credits.**
The student will have didactic exposure to the technology, procedures, techniques and basic concepts of electrophysiology. Prerequisite: Admission to the program.

**CVS 45. Diversity in Cardiovascular Patient Care. 1 Credit.**
Explore current evidence regarding the demographic based variations in the population that impact cardiovascular care. Prerequisite: Admission to the program.

**CVS 49. Clinical Practicum III. 4 Credits.**
The student will have hands-on experience working in the adult echocardiography lab. Here they will be given the opportunity to improve their technical skills working one-on-one with their preceptor and patients in the clinical setting. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 55. Cardiovascular Assessment and Special Procedures. 1 Credit.**
The student will become familiarized with the special procedures utilized in the echocardiography laboratory. These special procedures will include: transesophageal echocardiography, contrast agents, strain, strain rate imaging and 3D echocardiography. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 56. Adult Echocardiography III. 3 Credits.**
The student will continue to build upon their knowledge of echocardiography by learning cardiac diseases secondary to systemic illness, connective tissue disorders, neurological diseases, hematological disorders, pericardial disease, cardiac tumors, masses and diseases of the great vessels. Prerequisite: Admission to the program.

**CVS 57. Vascular Ultrasound II. 4 Credits.**
The student will learn to perform basic vascular assessments using two-dimensional, spectral and color flow Doppler information in the areas of renal duplex ultrasounds, abdominal aorta and iliac imaging. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 58. Pediatric Echocardiography II. 4 Credits.**
The student will learn of Ebstein's malformation of the tricuspid valve, tricuspid atresia with and without D-transposition, partial and complete endocardial cushion defect, cor triatriatum and double outlet right ventricle. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 59. Physics II. 2 Credits.**
This is the second of two ultrasound physics courses designed to prepare the student for the Sonography Principles and Instrumentation exam required for registration through ARDMS. The content of this course will cover fluid dynamics, hemodynamics, vascular principles and cardiovascular principles. The content of Physics I will be heavily reviewed in preparation for the registry exam. Prerequisite: Admission to the program.

**CVS 61. Adult Cardiovascular Cardiology Technician II. 3 Credits.**
The student will have progressive didactic exposure to the technology, procedures, techniques and concepts of interventional cardiology. Prerequisite: Admission to the program.

**CVS 62. Adult Electrophysiology Technician II. 2 Credits.**
The student will have continued progressive didactic exposure to the technology, procedure, techniques, and concepts of electrophysiology. Prerequisite: Admission to the program.

**CVS 63. Patient Care III. 2 Credits.**
The continuation of advanced radiographic identification of the cardiac and vascular anatomy will be presented. In addition, the student will learn about coronary artery disease, angina, heart failure, acute coronary syndrome, shock, valvular heart disease and how this knowledge will be used while working in an invasive cardiology setting. Prerequisite: Admission to the program.

**CVS 64. Complex Arrhythmia Assessment. 1 Credit.**
During this course the student will assess complex electrocardiography, telemetry, and cardiac arrhythmia cases. The student will evaluate the association of significant arrhythmias with cardiac diseases and common treatment options. Prerequisite: Admission to the program.

**CVS 65. Complex Hemodynamic Assessment. 2 Credits.**
The purpose of this course is to provide the student with the knowledge base necessary to understand acquired and congenital cardiovascular diseases, the etiologies associated with the disease state and the presenting clinical signs and symptoms. This course will introduce the student to the principles of hemodynamic monitoring, waveform analysis and interventional cardiovascular procedures. Prerequisite: Admission to the program.

**CVS 66. Adult Interventional Cardiology Technician II. 2 Credits.**
The student will have continued progressive didactic exposure to the technology, procedure, techniques, and concepts of interventional cardiology. Prerequisite: Admission to the program.

**CVS 67. Clinical Practicum IV. 8 Credits.**
The student will have hands-on experience working in their chosen field of adult echocardiography, vascular or pediatric echocardiography. Here they will be given the opportunity to improve their technical skills.
by working one-on-one with their preceptor in the clinical setting. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 75. Congenital Heart Disease. 1 Credits.**
The student will be introduced to the evaluation of congenital heart disease using the segmental approach. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 76. Vascular Ultrasound III. 3 Credits.**
Upon completion of this course the student will have the necessary knowledge to perform basic vascular assessments using two-dimensional, spectral and color flow Doppler information in the areas of renal duplex ultrasounds, abdominal aorta and iliac imaging. Prerequisite: Admission to the program.

**CVS 77. Pediatric Echocardiography III. 3 Credits.**
Upon completion of this course the student will demonstrate an understanding of Ebstein's malformation of the tricuspid valve, tricuspid atresia with and without D-transposition, partial and complete endocardial cushion defect, cor triatriatum and double outlet right ventricle. Prerequisite: Admission to the program.

**CVS 78. Adult Interventional Cardiology Technician III. 3 Credits.**
The student will have continued progressive didactic exposure to the technology, procedure, techniques, and concepts of interventional cardiology. Prerequisite: Admission to the program.

**CVS 79. Adult Electrophysiology Technician III. 2 Credits.**
The student will have continued progressive didactic exposure to the technology, procedure, techniques, and concepts of electrophysiology. Prerequisite: Admission to the program.

**CVS 80. Introduction to Cardiovascular Research Principles. 1 Credits.**
This course requires the student to research a cardiovascular disease process, write a research paper and present the topic at a cardiology conference in front of peers, nursing personnel, cardiology fellows and the medical staff. The student may include the natural history of the disease process, the historical approach to the diagnosis of the disease, an overview of other modalities used in diagnosing the disease, and any other modality used in the diagnosis of the disease. In addition, the student may include case studies in the presentation. Prerequisite: Admission to the program.

**CVS 81. Concepts in Intravascular Imaging and Intervention I. 2 Credits.**
The student will expand their basic knowledge of the various imaging modalities used during vascular interventional procedures and the various endovascular treatments that they will see throughout their careers. Prerequisite: Admission to the program.

**CVS 82. Concepts in Cardiac Rhythm Management I. 2 Credits.**
During this course the student will learn the fundamentals of cardiac pacing, will understand the basic techniques for interrogation, programming, surveillance and the measurement of pacing and sensing thresholds of ICDs and CRT-Ds. Upon conclusion of this course the student will be able to recognize normal and abnormal pacemaker function. Prerequisite: Admission to the program.

**CVS 84. Senior Project. 1 Credits.**
This course requires the student to research a cardiovascular disease process, write a research paper and present the topic at cardiology conference in front of peers, nursing personnel, cardiology fellows and the medical staff. The student may include the natural history of the disease process, the historical approach to the diagnosis of the disease, an overview of the other modalities used in diagnosing the disease and the scientific rationale behind the technique. In addition, the student may include case studies in the presentation. Prerequisite: Admission to the program.

**CVS 86. Clinical Practicum V. 8 Credits.**
The student will have hands-on experience working in their chosen field of adult echocardiography, vascular or pediatric echocardiography. Here they will be given the opportunity to improve their technical skills by working one-on-one with their preceptor in the clinical setting. Prerequisite: Admission to the cardiovascular sonography program.

**CVS 89. Vascular Ultrasound IV. 3 Credits.**
This course requires the student to research a vascular disease process, write a research paper and present the topic at a cardiovascular conference in front of peers, nursing personnel, cardiology fellows and the medical staff. The student may include the history of the disease process, the approach to the diagnosis of the disease and any other modality used in the diagnosis of the disease. In addition, the student may include case studies in the presentation. Prerequisite: Admission to the program.

**CVS 90. Pediatric Echocardiography IV. 3 Credits.**
Upon the completion of this course the student will demonstrate an understanding of partial and total anomalous pulmonary venous return, persistent left superior vena cava, hypoplastic left heart syndrome and single ventricle. Prerequisite: Admission to the program.

**CVS 91. Adult Echocardiography IV. 1 Credits.**
This course is designed to enable the student to review the materials covered throughout their time spent in the program, preparing them to step into the profession of echocardiography and become registered through ARDMS by passing their RDCS registration exam. Prerequisite: Admission to the program.

**CVS 94. Concepts in Cardiac Rhythm Management II. 3 Credits.**
The student will learn the following basic device knowledge, arrhythmias, remote monitoring management and indications and limitations of biventricular pacing. The student will also learn about echo AV optimization, radiation oncology, MRI, withdrawal of therapy and other specialized inter-departmental workflows. Prerequisite: Admission to the program.

**CVS 95. Concepts in Intravascular Imaging and Intervention II. 3 Credits.**
Intravas Imaging & Interv II Prerequisite: Admission to the program.

**CVS 97. Clinical Practicum VI. 7 Credits.**
The student will have hands-on experience working in their chosen field; catheterization lab, electrophysiology lab, echocardiography lab, vascular lab or the pediatric echocardiography lab. Here they will be given the opportunity to improve their technical skills by working one-on-one with their preceptor in a clinical setting. Prerequisite: Admission to the program.

## Certificate in Cardiovascular Sonography

This is a 21-month certificate program in which students spend 30 to 40 hours each week at clinical affiliates dividing time between didactic coursework and hands-on clinical applications.

Students in the program benefit from the wide variety of diagnostic examinations conducted at The University of Kansas Health System and affiliated clinical sites. The curriculum incorporates detailed, structured, and comprehensive course work and teaches the student to use independent judgment in the acquisition of diagnostic information.
The following concentration areas are available in this program:

• **Adult echocardiography and vascular technology**
  - Become a credential Registered Diagnostic Cardiac Sonographer (RDCS) and Registered Vascular Technologist (RVT) through American Registry for Diagnostic Medical Sonography (ARDMS) or a Registered Cardiac Sonographer (RCS) and a Registered Vascular Specialist (RVS) through cardiovascular Credentialing International (CCI).

• **Adult and pediatric echocardiography**
  - Become a credentialed Registered Diagnostic Cardiac Sonographer with a specialty in pediatric echocardiography (PE) through ARDMS or a Registered Congenital Cardiac Sonographer (RCCS) through Cardiovascular Credentialing International (CCI).


1. **Degree/Academic Requirements**

   A bachelor’s or associate’s degree with an emphasis in science is preferred. Students without a bachelor's degree must be currently enrolled in a bachelor’s program with an emphasis on health care-related field, and/or have substantial experience working in a health care field. All college coursework must be from accredited institutions. Credentials or transcripts not from an accredited U.S. academic institution will require evaluation by KU before acceptance.

2. **Prerequisite Courses**

   The following courses must be completed from an accredited institution with a "C" grade or better to be eligible for this program: algebra, English or speech/oral communication, human anatomy and physiology, medical terminology, and physics.

3. **Grade Point Average**

   An overall grade point average of **2.5** (on a 4.0 scale) is required to be eligible to apply. In addition, student transcripts must document an individual course grade of no less than a "C" on each prerequisite course (above).

4. **Health and Physical Requirements**

   Good physical and mental health are essential to this field. Specifically, excellent visual acuity is necessary. The student must also possess manual dexterity, sufficient hearing and speech ability, and good physical coordination in positioning patients and operating equipment. Students must have a full utility of both arms, both hands, and fingers in order to perform examinations and operate the equipment. The ability to handle extremely heavy objects is required.


5. **Background Check and Drug Screen**

   The Joint Commission requires all incoming students to submit to a background check ([http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html](http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)) and provide the report to KU. This one-time fee must be paid directly to the company performing the background investigation. Applicants will be asked to provide information and make the payment only after official acceptance into the program. For more information, please see the School of Health Professions background check instructions. ([http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html](http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)) Drug screening is required for activities in a clinical environment. Depending on geographic location, more than one drug test may be needed.

6. **International Students**

   An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation are required for international students to become eligible for KU programs. Please review the information for international students ([http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html](http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)) before applying.

   This is a 21-month certificate program in which students spend 30 to 40 hours each week at clinical affiliates dividing time between didactic course work and hands-on clinical applications. Students in the program benefit from the wide variety of diagnostic examinations conducted at The University of Kansas Health System and affiliated clinical sites. The curriculum incorporates detailed, structured, and comprehensive course work and teaches the student to use independent judgment in the acquisition of diagnostic information.

   During training, students choose to specialize in one of the following concentration areas:

   - Adult Echocardiography & Vascular Technology
   - Adult & Pediatric Echocardiography

### Adult Echocardiography and Vascular Technology Concentration

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Adult and Pediatric Echocardiography Concentration

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Total Hours 58

Clinical Laboratory Sciences

The mission of the Department of Clinical Laboratory Sciences is to provide undergraduate and graduate programs in which qualified students can prepare themselves for careers in the clinical laboratory sciences and molecular biotechnology. The department is responsive to current workforce needs in health care and life science systems, and provides leadership in developing programs to meet those needs.

Located at the region’s premier academic health center, the Department of Clinical Laboratory Sciences is a part of the School of Health Professions (http://healthprofessions.kumc.edu/) on the Medical Center campus of the University of Kansas. KU Medical Center (http://www.kumc.edu/) is located in the heart of the Kansas City metropolitan area at 39th and Rainbow Boulevard – about 40 minutes away from the main KU campus (http://www.ku.edu/) in Lawrence, Kansas.

To support its missions, the Department of Clinical Laboratory Sciences offers the following degree programs:

**Bachelor of Science in Clinical Laboratory Science**

This four-year, entry-level degree is for those with an interest in performing diagnostic testing on blood, bodily fluids, and other human specimens. The BS in CLS is available in two options: (i) the Clinical Concentration which is an accredited Medical Laboratory Science (MLS) program, or (ii) the Molecular Biotechnology Concentration which is an accredited Diagnostic Molecular Scientist (DMS) program. Students are also offered the option of completing both the MLS and DMS programs by adding an additional semester of study. The MLS and DMS programs are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (http://www.naacscl.org/), 5600 N. River Road, Suite 720, Rosemont, IL 60018, 773-714-8880.

**Master of Science in Molecular Biotechnology**

A two-year, non-thesis program, this graduate-level degree prepares students for research careers in molecular biotechnology-oriented clinical, industrial and basic science laboratories. Students obtain training in the use and application of cutting edge molecular-based methodologies and instrumentation as well as critical thinking, trouble shooting, and communication skills.

**Doctorate in Clinical Laboratory Science**

The doctorate program allows practicing, certified medical laboratory scientists the opportunity for advanced practice and training at the highest level. Besides providing career advancement opportunities, the DCLS graduate will be able to institutionalize new models of clinical consultation to clinicians, other health care providers, and patients to guide their decisions about utilization of laboratory tests or services. This three-year program includes two years of core curriculum courses and one year of clinical residency, if completed on a full-time basis (part-time options are available).

**Advising and FAQ**

For information about clinical laboratory science at KU, please visit the department’s website (http://cls.kumc.edu/). Students interested in entering these programs should contact an advisor as early as possible to ensure prerequisite course work will be completed. Advising and campus visits are available Monday-Friday by appointment. Please email clsed@kumc.edu for information. For advising on the KU Lawrence campus, please see the KU Undergraduate Advising Center (http://advising.ku.edu/).

**Courses**

**CLS 210. Introduction to Clinical Laboratory Sciences.** 1 Credits.

An introductory overview of the professions of Clinical Laboratory Sciences including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in the Clinical Laboratory Sciences to have a clear definition of the professions. (Same as BIOL 210.)

**CLS 520. Phlebotomy.** 1 Credits.

Principles and practice of collecting blood specimens for clinical laboratory analyses. Includes specimen identification, equipment, anticoagulants, safety precautions, specimen transport, and processing. Hepatitis immunization required. Prerequisite: Admission to the Clinical Laboratory Science Program or consent of instructor.

**CLS 523. Fundamentals of Analytical Techniques Laboratory.** 3 Credits.

This course, including lecture, recitation, and laboratory provides theory and hands-on practice of basic laboratory skills. Laboratory exercises include enhancement of skills needed for reagent preparation, pipetting of reagents and specimen, and test performance using a variety of assays (spectrophotometry, urinalysis etc.). Following the accurate collection of data in each experiment, students will analyze and interpret data applying the appropriate analytic/statistical tools, evaluate results for validity, and justify their conclusions. The theory underlying accuracy and precision in laboratory testing (quality control and quality assurance) will be included. Basic laboratory mathematics, method validation, and problem-solving strategies will be emphasized. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

**CLS 530. Clinical Chemistry I.** 3 Credits.

Introduction to human physiology and pathophysiology I with emphasis on proteins, carbohydrates, lipids, enzymes, liver & kidney function, blood gases and body fluids. The related clinical chemistry tests, their principles, analysis, interpretation, and significance are included. Prerequisite: CLS 523 or consent of instructor.

**CLS 532. Clinical Microbiology I.** 3 Credits.
Pathogenesis and disease processes of pathogenic, opportunistic, and saprophytic bacteria; composition and preparation of media; sterilization and disinfection; antimicrobial agents and susceptibility testing; topics related to theory and applications. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 533. Clinical Microbiology I Laboratory. 2 Credits.
A laboratory with recitation addressing diagnostic procedures used for isolation and identification of clinically significant bacteria. Prerequisite: CLS 532 or CLS 532 concurrently, or consent of the instructor.

CLS 536. Hematology I. 3 Credits.
Fundamentals of hematopoiesis; the physiology, function, and cytochemistry of normal and abnormal blood cells; the theory and performance of clinical laboratory methods related to these parameters. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 537. Hematology I Laboratory. 2 Credits.
A laboratory with recitation emphasizing basic hematologic techniques and identification of normal and abnormal cells in peripheral blood and bone marrow. Prerequisite: CLS 536, or CLS 536 concurrently, or consent of the instructor.

CLS 538. Immunology. 3 Credits.
Covers basic theory of molecular and cellular immunology of innate and adaptive immune systems. Lectures include: structure and function of antibodies, complement, major histocompatibility complexes, B- and T-cells and their receptors, cellular and molecular basis of the immune response and immune regulation, hypersensitivity, and immune tolerance. Clinical applications and methodologies will be incorporated into lectures. Prerequisite: Admission to the Department of Clinical Laboratory Sciences or consent of instructor.

CLS 540. Clinical Chemistry II. 2 Credits.
Introduction to human physiology and pathophysiology II with emphasis on hormones, therapeutic drugs, clinical toxicology, tumor markers, vitamins and trace elements. The related clinical chemistry tests, their principles, analysis, interpretation, and significance are included. Prerequisite: CLS 530 or consent of instructor.

CLS 541. Professional Development. 2 Credits.
This course combines lectures and projects to give students an introduction to and practice in the following: resume writing and interviewing skills; the components of and the production of a scholarly product; the basic principles involved in education with the identification and writing of educational objectives; the activities and responsibilities involved in laboratory management. Prerequisite: CLS 530 or consent of instructor.

CLS 542. Clinical Microbiology II. 2 Credits.
Pathogenesis, disease processes, and diagnostic protocols for parasites, medically important fungi and mycobacteria. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 543. Clinical Microbiology II Laboratory. 2 Credits.
A laboratory with recitation addressing diagnostic procedures used for isolation and identification of parasites, medically important fungi, and mycobacteria. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 544. Immunohematology I. 3 Credits.
Principles of immunohematology as applied to transfusion services, donor services, component preparation and storage, and transfusion therapy. Includes problem solving for transfusion related situations and evaluation of problems related to hemolytic disease of the newborn, autoimmune hemolytic disorders, and transfusion reactions. Prerequisite: BIOL 503 or CLS 538, CLS 546, or consent of instructor.

CLS 545. Immunohematology I Laboratory. 2 Credits.
Principles of immunohematology as applied to transfusion services, donor services, component preparation and storage, and transfusion therapy. Includes problem solving for transfusion related situations and evaluation of problems related to hemolytic disease of the newborn, autoimmune hemolytic disorders, and transfusion reactions. Prerequisite: BIOL 503 or CLS 538, CLS 546, or consent of instructor.

CLS 546. Hematology II. 3 Credits.
Lectures on hematopoiesis, the physiology, function, and cytochemistry of normal and abnormal blood cells, normal and abnormal hemostasis, and the theory and performance of laboratory methods related to these parameters. Prerequisite: CLS 536 and CLS 537 or consent of instructor.

CLS 547. Hematology II Laboratory. 2 Credits.
A laboratory with recitation involving performance of hematologic laboratory procedures with emphasis on basic hematologic and coagulation techniques and the identification of normal and abnormal cells in the peripheral blood and bone marrow. Prerequisite: CLS 536, CLS 547 and CLS 546 or consent of instructor.

CLS 549. Clinical Immunology I Laboratory. 2 Credits.
A laboratory with recitation involving performance of immunoassays. Emphasis on theory, methodologies, and clinical correlations. Prerequisite: CLS 523, BIOL 503 or CLS 538, or consent of instructor.

CLS 600. Introductory Biochemistry. 3 Credits.
An introduction to the chemistry and metabolism of carbohydrates, lipids, proteins, nucleic acids, and other biologically important molecules. Topics include cellular processes, reactions and interactions occurring in living organisms. Prerequisite: Admission to the Department of Clinical Laboratory Sciences or consent of instructor.

CLS 605. Introduction to Molecular Diagnostics I. 1 Credits.
An introduction to molecular biology and molecular biological methodologies and technologies commonly used in basic, applied, and diagnostic laboratories. An emphasis is placed on molecular biology principles and techniques used in the clinical laboratory for diagnosis, prognosis, and treatment of disease. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of the instructor.

CLS 607. Introduction to Molecular Diagnostics I Laboratory. 1 Credits.
An introduction to molecular diagnostic methodologies and technologies commonly used in clinical laboratories. Principles and performance of nucleic acid isolation, restriction enzyme digestion, electrophoresis, amplification, hybridization, and analysis. Applications in infectious and genetic disease. Prerequisite: Admission to the Clinical Laboratory Science program or Cytotechnology program or consent of the instructor.

CLS 608. Introduction to Advanced Biotechniques. 0 Credits.
A lecture course introducing the theory behind a variety of current molecular, biochemical and immunologic techniques utilized in molecular research and diagnostic laboratories. Course content is continued in CLS 610, Advanced Biotechniques Lecture. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 609. Introduction to Advanced Biotechniques Laboratory. 0 Credits.
Introductory laboratory course with practical application of selected molecular, biochemical, and immunologic techniques. Course content is continued in CLS 611, Advanced Biotechniques Laboratory. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.
CLS 610. Advanced Biotechniques Lecture. 3 Credits.
A lecture course covering the theory behind a variety of current molecular, biochemical and immunologic techniques utilized in today's research and diagnostic laboratories. Material presented will include proper specimen preparation and handling; technique set-up and quality control; trouble shooting and technique modification. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 611. Advanced Biotechniques Laboratory. 2 Credits.
Laboratory course with practical application of selected molecular, biochemical, and immunological techniques. Designed to provide limited experience with protein purification and analysis techniques, electrophoresis techniques, nucleic acid analysis and manipulation. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 621. Biotechnology Methodologies Practicum. 4 Credits.
Placement of the student in clinical laboratories performing molecular diagnostic techniques for the analysis of infectious diseases, hereditary conditions, or acquired genetic conditions. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 622. Problems in Molecular Diagnostics. 2 Credits.
Provides a targeted review of current theory, techniques and application of molecular techniques in the diagnosis of infectious disease, and hereditary and acquired genetic disease. Prerequisite: Admission to the Clinical Laboratory Science or Cytotechnology program, or consent of instructor.

CLS 623. Molecular Genetics Practicum. 4 Credits.
Placement of the student in a molecular genetics research laboratory (utilizing either prokaryotic or eucaryotic organisms or both) working with laboratory staff on an on-going small project within the laboratory. Molecular genetics laboratories utilized could be involved in, but not restricted to, any of the following activities: gene sequencing, cloning or splicing; elucidation of the mechanisms that regulate gene expression; proto-oncogene activation. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 633. Special Topics Practicum. 4 Credits.
Placement of the student in any of a variety of research laboratories actively participating in molecular biological projects utilizing advanced genetic, biochemical immunologic, or other molecular techniques. Prerequisite: Admission to the Clinical Laboratory Sciences program or consent of instructor.

CLS 638. Clinical Competency Review. 0 Credits.
This review will enable students to identify areas of weakness in their understanding of clinical laboratory science in preparation for clinical rotations. Students will participate in Blackboard-based and in-person laboratory sessions in order to evaluate their performance in meeting required competencies. Prerequisite: CLS 520-CLS 549 inclusive, CLS 605, CLS 607, or consent of instructor.

CLS 639. Urinalysis. 1 Credits.
Tutorial instruction and clinical laboratory experience in urinalysis with the application of knowledge and skills to methodology, instrumentation, and quality control. Advanced content on renal disorders with emphasis on pathological mechanisms, interpretation, and clinical correlation of test results. Prerequisite: CLS 540, or consent of instructor.

CLS 640. Clinical Chemistry III and Immunology II. 2 Credits.
Tutorial instruction in the chemistry of body fluids and immune function focusing on correlation of chemical and immunological analyses to disease states. Addresses organ system disease, metabolic disease, and other special topics. Prerequisite: CLS 540 and CLS 549, or consent of instructor.

CLS 641. Clinical Chemistry and Immunology Practicum. 3 Credits.
Tutorial instruction and clinical laboratory experience in the chemistry of body fluids, with the application of knowledge and skills to methodology, instrumentation, and quality control. Involves correlation of chemical and immunological analyses to pathophysiology. Prerequisite: CLS 540 and CLS 549, or consent of instructor.

CLS 642. Clinical Microbiology III. 2 Credits.
Tutorial instruction addressing pathophysiology and diagnostic protocols of viruses, rickettsia, chlamydia, mycoplasma, and other unusual organisms. Prerequisite: CLS 532, CLS 533, CLS 542 and CLS 543, or consent of instructor.

CLS 643. Clinical Microbiology Practicum. 3 Credits.
Tutorial instruction and clinical laboratory experience in diagnostic microbiology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisite: CLS 532, CLS 533, CLS 542 and CLS 543, or consent of instructor.

CLS 644. Immunohematology II. 1 Credits.
Tutorial instruction addressing advanced transfusion medicine theory and concepts. Focuses on hospital transfusion services, blood utilization, management, legal and regulatory issues, and special topics. Prerequisite: CLS 544 and CLS 545, or consent of instructor.

CLS 645. Immunohematology Practicum. 2 Credits.
Tutorial instruction and clinical laboratory experience in transfusion medicine, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisite: CLS 544, CLS 545, or consent of instructor.

CLS 646. Hematology III. 2 Credits.
Tutorial instruction on hematologic and hemorrhagic disorders with emphasis on pathological mechanisms, interpretation, and clinical correlation of test results. Prerequisite: CLS 546 and CLS 547, or consent of instructor.

CLS 647. Hematology Practicum. 3 Credits.
Tutorial instruction and clinical laboratory experience in hematology, with the application of knowledge and skills to methodology, instrumentation, and quality control. Prerequisite: CLS 546 and CLS 547, or consent of instructor.

CLS 650. Clinical Laboratory Science Review. 0 Credits.
Review of the clinical laboratory science body of knowledge in preparation for, and culminating in the BS in CLS - Clinical Concentration comprehensive examination. Prerequisite: CLS 520-CLS 549 inclusive, CLS 605, CLS 607, CLS 661, and CLS 639-CLS 647 inclusive, or consent of instructor.

CLS 655. Molecular Biotechnology Review. 0 Credits.
Review of the clinical laboratory science body of knowledge in preparation for, and culminating in the BS in CLS - Molecular Biotechnology Concentration comprehensive examination. Prerequisite: CLS 520-CLS 549 inclusive, CLS 605-CLS 633 inclusive, and CLS 661 or consent of instructor.

CLS 661. Management Principles in Health Care. 2 Credits.
Introduction to basic principles of management and their application in the current health care environment at they pertain to the clinical laboratory. Course content includes: management theory, scope of management, quality issues, budgeting, personnel issues, evaluation and application of management concepts, introductory research methods. Prerequisite:
Admission to the Clinical Laboratory Sciences program or consent of the instructor.

**CLS 690. Special Topics. 1-5 Credits.**
A course of study offering the student the opportunity for acquisition of additional knowledge and skills in one of the clinical laboratory routine areas or a specialty area, e.g., cyto genetics, metabolic analysis, or supervision; or at another clinical site. Course requirements designed in cooperation with student. Prerequisite: Admission to the Clinical Laboratory Science program or consent of instructor.

**CLS 710. Molecular Techniques I. 2 Credits.**
A lecture course covering the theory underlying molecular techniques involving nucleic acids and mammalian cell culture. Topics include purification and analysis of nucleic acids, recombinant DNA, construction and screening of genetic libraries, genetic engineering, control of gene expression, construction of gene fusions, amplification, hybridization, and nucleic acid databases and bioinformatic analysis. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor.

**CLS 711. Molecular Techniques Laboratory I. 2 Credits.**
A laboratory course emphasizing the application, practice, and troubleshooting of molecular techniques involving nucleic acids and mammalian cell culture. Topics include purification and analysis of nucleic acids, recombinant DNA, genetic engineering, control of gene expression, construction of gene fusions, amplification, and hybridization. Topics are covered through a project-based approach. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor.

**CLS 720. Molecular Techniques II. 2 Credits.**
Lecture and discussion course covering the theory and practice of molecular techniques for protein analysis. General topics include: protein detection, quantification, and characterization; protein separation and identification; protein expression systems; protein extraction, fractionation, solubilization and purification; analysis of protein-protein interactions; proteomics; and mass spectroscopy. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor.

**CLS 721. Molecular Techniques Laboratory II. 2 Credits.**
Laboratory course for the practice and application of molecular techniques for analyzing and manipulating proteins. Techniques will include: bioinformatics analyses; expression, purification and solubilization of epitope tagged fusion proteins, protein-protein interactions; protein quantification; protein separation by electrophoresis and column chromatography; protein detection by chemical and immunological methods; and LC-MS. Prerequisite: Admission to the MS in Molecular Biotechnology program or consent of instructor.

**CLS 730. Current Issues in Biotechnology. 1 Credits.**
A seminar course that addresses topics including scientific, business, legal, social, and ethical issues in biotechnology. Students explore these topics through literature discussions, student presentations, and discussions with speakers from biotechnology-related academic and industry sectors. This course is meant for graduate students in the Molecular Biotechnology program. Prerequisite: Consent of instructor.

**CLS 740. Journal Club. 1 Credits.**
This course is an introduction to the critical reading of journal articles from the current literature in molecular biotechnology. Discussions will emphasize the analysis of experimental design and technique, as well as the significance of the results and validity of the author’s conclusions. Students will learn how to search for articles and background information pertaining to selected topics, an how to present a polished, professional summary of that literature. Assigned papers for discussion and student presentations will focus on new strategies and technologies in molecular biotechnology of wide fundamental importance, or on hypothesis-based research that uses molecular biotechnological approaches. Prerequisite: Completion of (or concurrent enrollment in) CLS 710 and CLS 720.

**CLS 742. Scientific Writing. 1 Credits.**
Formats, techniques, and styles of scientific writing. Emphasis will be placed on clear, concise, and effective writing. The class will focus on the process of writing scientific manuscripts and grant proposals. Students will identify and define the sections of scientific manuscripts as well as grant proposals. During the course, each student will write an R21-type (NIH Exploratory/Developmental Research Grant) proposals as could be submitted to the most appropriate NIH Institute. This course is intended for students enrolled in their final semester of the Master of Science in Molecular Biotechnology program. Prerequisite: Consent of Instructor.

**CLS 744. Topics in Molecular Biotechnology. 1-5 Credits.**
Advanced course on special topics in molecular biotechnology, offered by arrangement. May include lectures, discussions, readings, laboratory techniques, and supervised research experience. This course is intended for graduate students in the Molecular Biotechnology program. Prerequisite: Consent of instructor.

**CLS 750. Practicum I. 4 Credits.**
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 751 (Practicum II) and CLS 752 (Practicum III). Prerequisite: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor.

**CLS 751. Practicum II. 5 Credits.**
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 750 (Practicum I) and CLS 752 (Practicum III). Prerequisite: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor.

**CLS 752. Practicum III. 5 Credits.**
Advanced practical experience in a selected laboratory pursuing applied, basic, or diagnostic research projects utilizing genetic, biochemical, or other molecular biology-related approaches. Students apply and extend their knowledge and skills by performing a research and/or development project under the supervision of a site mentor. This practicum is performed at a site other than those utilized for CLS 750 (Practicum I) and CLS 751 (Practicum II). Prerequisite: Completion of CLS 710, CLS 711, CLS 720, and CLS 721, and consent of the instructor.

**Courses**

**DCLS 800. DCLS Advanced Topics. 1 Credits.**
Seminar course that addresses topics and issues relevant to DCLS clinical practice, including ethical and social issues in healthcare practice, health informatics, and communication techniques needed for interaction with healthcare colleagues and patients. Repeatable. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 802. Principles of Healthcare Education. 3 Credits.**
This course will address various aspects of teaching in healthcare settings. This includes educating patients and their families, educating other healthcare professionals, and the more formal area of...
undergraduate and graduate education. Education theory, pedagogical methods, educational resources, learning objectives, and evaluation techniques applicable to each type of educational situation will be addressed. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 805. Advanced Molecular Diagnostics. 2 Credits.**
This course focuses on the enhancement of scientific and technical knowledge in nucleic acid-based testing for the diagnosis of acquired and hereditary genetic disorders, and infectious diseases. Topics include an in-depth review of the theory of molecular techniques and the application of these techniques in inherited disorders, oncology, infectious disease, pharmacogenetics, histocompatibility, identity determination, and genomics. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 815. Research Methods in Clinical Laboratory Sciences. 2 Credits.**
A discussion of research methods used in clinical laboratory sciences, with an emphasis on selecting and applying appropriate research designs. Includes an overview of the research methods and various approaches in current use in clinical laboratory science; focused on research question formulation; internal and external validity of research; variable measurement and reliability, and generalizability of findings. Specific approaches covered include non-experimental, experimental and quasi-experimental designs, epidemiologic methods (e.g., cohort and case-control studies), survey research, and qualitative research. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 820. Evidence Based Practice. 3 Credits.**
Evidence-Based Practice (EBP) encompasses Evidence-Based Medicine and Evidence-Based Laboratory Medicine. EBP is a problem-based approach to decision making using research evidence combined with clinical expertise, the patient’s values, circumstances, and the clinical context. This course addresses the historical development of EBP, why using EBP in clinical decision making improves patient care, when and how to implement and use EBP in clinical decision making, and how to discuss the EBP finding with patients, family members, and other healthcare practitioners. Evaluating research studies for their applicability to EBP and design research studies based on clinical evidence focused on laboratory testing will make up most of the course content, activities, and assignments. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 828. Advanced Immunology and Transplant. 3 Credits.**
This course focuses on enhancement of scientific and technical knowledge in clinical immunology and transplantation in order to consult with other healthcare practitioners on clinical applications and diagnostic and therapeutic testing of immune-mediated diseases. Topics include autoimmunity, hypersensitivity, immunotherapy and immunotoxicology, transplantation and HLA testing/compatibility, cancer immunology and immunodeficiency. This course also includes test methodologies in cellular, humoral, and molecular immunology, selection and interpretation of test results, and recommendations for follow-up testing for patient monitoring. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 830. Advanced Clinical Chemistry. 3 Credits.**
This course focuses on in depth physiology and pathophysiology together with the principles of current and emerging chemistry tests. Emphasis on the correlation between chemistry tests and disease states, interpretation and limitations of chemistry test results. Current clinical chemistry literature, clinical scenarios, case studies, and advanced laboratory practice issues will be used to enhance knowledge and skills. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 836. Advanced Hematology. 3 Credits.**
This course focuses on enhancement of scientific and technical knowledge in hematology and hemostasis to consult with other healthcare practitioners on the selection of screening and diagnostic tests for hematological disorders, interpretation of results, and recommendations for follow-up testing. Topics to be investigated include physiology and regulation of the hematopoietic system and hemostasis, and the genetic, molecular and cellular mechanisms underlying the pathophysiology of selected hematological disorders such as anemias, leukemias, lymphomas, and disorders of hemostasis with additional focus on utilization of appropriate hematology, hemostasis, and molecular diagnostic tests, and reducing turn-around time. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 838. Advanced Clinical Microbiology. 3 Credits.**
Course Description: This course focuses on enhancement of scientific and technical knowledge in clinical microbiology necessary for consultation with other healthcare practitioners on clinical applications and diagnostic and therapeutic testing of immune-mediated diseases. Topics include autoimmunity, hypersensitivity, immunotherapy and immunotoxicology, transplantation and HLA testing/compatibility, cancer immunology and immunodeficiency. This course also includes test methodologies in cellular, humoral, and molecular immunology, selection and interpretation of test results, and recommendations for follow-up testing for patient monitoring. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 844. Advanced Immunohematology. 3 Credits.**
This course will explore advanced blood banking theory and transfusion medicine concepts pertaining to basic-to-advanced serological testing techniques, blood product utilization, molecular immunohematology testing methods, quality assurance, and other relevant topics. Learners will be re-introduced to specialized blood banking procedures including (but not limited to) the following: ABO/Rh, antibody screens, antibody identification, fetal screen, elutions, phenotyping, and crossmatching. Using case studies and discussion, learners will correlate laboratory data to clinical disease processes encountered in transfusion medicine. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

**DCLS 851. Clinical Correlations I. 3 Credits.**
Course Description: This course will correlate clinical presentation and laboratory testing as it relates to physiological changes associated with select diseases of major organ systems (e.g., endocrine, muscle, cardiovascular, respiratory, renal, gastrointestinal, immune, nervous,
and reproductive). Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program or instructor permission.

DCLS 852. Clinical Correlations II. 3 Credits.
This course will complement CLS851 Clinical Correlations I and will correlate clinical laboratory testing as it relates to physiological changes associated with patient symptomology (e.g., chest pain, shortness of breath, unresponsiveness, fever of unknown origin, jaundice) and treatment in a consultation model. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program or instructor permission.

DCLS 880. Principles of Interprofessional Education and Practice Theory. 1 Credits.
An introductory course to core competencies in interprofessional education and practice for healthcare teams including roles and responsibilities, values and ethics, teamwork, communication, and collaborative practice as it relates to the improvement of patient safety outcomes and the provision of quality patient care. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 881. DCLS Interprofessional Practice. 1 Credits.
This course is designed for DCLS program students to apply core competencies in interprofessional practice for healthcare teams including roles and responsibilities, values and ethics, teamwork, communication, and collaborative practice via participation in interprofessional activities. Prerequisite: Successful completion of DCLS 880 and admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 890. Advanced Laboratory Operations. 3 Credits.
This course will explore laboratory quality, utilization, accreditation, regulation, and management topics. Core course content explores the selection, implementation, strengths, and weaknesses of appropriate quality assurance programs to maintain desired quality goals. All aspects of laboratory services will be explored to enhance consultative skills that will be applied in the clinical residency. The use of practice guidelines, critical or clinical pathways, algorithms and reflex testing, direct access testing, evidenced-based practice, and outcomes measurements, as well as initiatives to change the practice of laboratory services in all phases (pre-analytical, analytical, and post-analytical) are covered. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 899. Independent Study. 1-3 Credits.
Faculty-guided, student-directed individualized study for students enrolled in the DCLS program who need additional enrollment associated with their plan of study. The specific course requirements are to be described in the Independent Study proposal form to be completed by the student and approved by the faculty mentor and DCLS Program Director prior to enrollment. Can be repeated for credit. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program.

DCLS 901. DCLS Research I. 2 Credits.
Research I is part of a three-course series (DCLS 901, DCLS 902, DCLS 903) taken consecutively. The goal of DCLS 901 is to initiate the development of a research project by preparing a formal written research proposal that includes selecting a topic, reviewing current literature, preparing and submitting an IRB approval, and other activities required to begin data collection. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program.

DCLS 902. DCLS Research II. 3 Credits.
Research II is part of a three-course series (DCLS 901, DCLS 902, DCLS 903) taken consecutively. The goal of DCLS 902 is to continue the work begun in DCLS 901 by initiating data collection, analyzing and interpreting the data collected, beginning the writing of a manuscript draft, and other activities required to move the research project forward. Prerequisite: Satisfactory completion of DCLS 901.

DCLS 903. DCLS Research III. 3 Credits.
Research III is part of a three-course series (DCLS 901, DCLS 902, DCLS 903) taken consecutively. The goal of DCLS 903 is to complete the project begun in DCLS 901 and DCLS 902 by finalizing the analysis and interpretation of the data collected and develop a defendable conclusion regarding the research hypothesis. Completion of a final draft of the manuscript describing the research project and outcomes is the culmination of this course. Prerequisite: Satisfactory completion of DCLS 902.

DCLS 911. Clinical Residency I. 4 Credits.
The first of a three-course series (DCLS 911, DCLS 912, DCLS 913) providing a structured and supervised experience correlating coursework with practice. Designed to develop the DCLS student to meet national professional responsibilities. Students work with management, laboratory staff, physicians, nurses, and other members of the healthcare team to provide guidance in laboratory utilization and interpretation to optimize patient outcomes. Requires 14-16 weeks of full-time placement at a program affiliate. Prerequisite: Permission of instructor.

DCLS 912. Clinical Residency II. 5 Credits.
The second of a three-course series (DCLS 911, DCLS 912, DCLS 913) providing a structured and supervised experience correlating coursework with practice. Designed to develop the DCLS student to meet national professional responsibilities. Students work with management, laboratory staff, physicians, nurses, and other members of the healthcare team to provide guidance in laboratory utilization and interpretation to optimize patient outcomes. Requires 14-16 weeks of full-time placement at a program affiliate. Prerequisite: Permission of instructor.

DCLS 913. Clinical Residency III. 5 Credits.
The third of a three-course series (DCLS 911, DCLS 912, DCLS 913) providing a structured and supervised experience correlating coursework with practice. Designed to develop the DCLS student to meet national professional responsibilities. Students work with management, laboratory staff, physicians, nurses, and other members of the healthcare team to provide guidance in laboratory utilization and interpretation to optimize patient outcomes. Requires 14-16 weeks of full-time placement at a program affiliate. Prerequisite: Permission of instructor.

DCLS 999. DCLS Capstone. 1 Credits.
The capstone is completed during the final semester of the program and consists of a written manuscript and an oral examination. The manuscript, suitable for publication, is based on the research developed and completed during the research course series DCLS 901, 902, and 903. The final oral defense will be scheduled once the final draft of the manuscript is accepted by the student's Graduate Committee. The oral examination is a defense of the manuscript and can include questions regarding general knowledge of clinical laboratory science concepts and applications from across the entire DCLS curriculum. Prerequisite: Satisfactory completion of DCLS 902.

Bachelor of Science in Clinical Laboratory Science

As “illness investigators,” medical laboratory scientists use sophisticated instruments to analyze blood and other body tissue and fluids. They provide the essential information used to make diagnoses and plan treatment. The University of Kansas’ one-of-a-kind program offers cutting-edge training and technology combined with real-world experience for students interested in clinical laboratory science. Students learn in a
innovative dual-track program featuring molecular biotechnology and the traditional clinical concentrations.

Students interested in clinical laboratory science should contact an advisor (clsed@kumc.edu) early in their college work. This program requires two years of preparatory college course work and two years of professional course work in the CLS program at KU Medical Center in Kansas City, Kan. The program also is open to students with a bachelor’s degree and having completed the prerequisites (https://www.kumc.edu/school-of-health-professions/academics/departments/clinical-laboratory-sciences/academics/bachelors-degree-in-cls-program/eligibility-and-requirements/prerequisites.html).

This program requires two years of preparatory college study (57 hours minimum) and two years of professional course work in clinical laboratory science. Interested students should contact the department (http://cls.kumc.edu/) at KU Medical Center for advising as early as possible in their college careers (advising is also available in the Undergraduate Advising Center on the Lawrence campus).

Applications are available online (http://cls.kumc.edu/). The program begins each fall semester. Applications should be submitted by December 15 of the year before the anticipated start date. Also required: complete college transcript(s) and three letters of recommendation, two of which should be from college basic science instructors.

Admission Requirements

An applicant to the program must have completed the required college preparatory course work, with a minimum grade of C in each prerequisite course, before entering the program in the fall. The student must have earned a 2.70 GPA overall and in the following courses: chemistry, biology, and math.

International students, or those for whom English is a second language, may have additional requirements relative to language proficiency, residency, and citizenship status. See: information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

Good physical and mental health is essential. Minor physical handicaps are not considered deterrents to admission. Physical examinations are required before registration in CLS course work. The admissions committee requires a personal interview with the applicant.

A background check and documentation of shadow experience is also required. Prospective students should review the program requirements, including prerequisite course work, and complete list of eligibility requirements (https://www.kumc.edu/school-of-health-professions/academics/departments/clinical-laboratory-sciences/academics/bachelors-degree-in-cls-program/eligibility-and-requirements/prerequisites.html).

Prerequisites

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| Mathematics

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<td>BIOL 570</td>
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<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
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<td>BIOL 350</td>
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<td>BIOL 544</td>
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Communication Studies

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Liberal Arts and Sciences

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Elections

Elective that meets KU Core Goal 4.1

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Recommended Elective

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<tr>
<td>CLS 210</td>
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The following courses are included during the first year (junior year) of the professional program. Students with previous credit for these courses or equivalents do not need to enroll in them if they earned a C or better in the course:

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<td>Immunology</td>
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<tr>
<td>BIOL 600</td>
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<tr>
<td>or CLS 600</td>
<td>Introductory Biochemistry</td>
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Following 2 years of preparatory undergraduate study, students enter the program as juniors. A clinical concentration and molecular biotechnology concentration are available. Until the second semester of the senior year, students in both concentrations take the same course work. Also during the senior year, students rotate through 14 to 16 weeks of practicum experience at several of the school’s many collaborating affiliates.

A new course of study, categorical concentration, has been developed for science majors who already hold a baccalaureate degree from an accredited institution and are currently working in a clinical laboratory in hematology, chemistry, or microbiology.
Clinical Concentration Curriculum

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<td>Clinical Chemistry I</td>
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<td>CLS 532</td>
<td>Clinical Microbiology I</td>
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<td>CLS 536</td>
<td>Hematology I</td>
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<td>CLS 541</td>
<td>Professional Development</td>
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<td>CLS 542</td>
<td>Clinical Microbiology II</td>
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Molecular Biotechnology Concentration Curriculum

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Doctor of Clinical Laboratory Sciences

The Doctorate in Clinical Laboratory Science (DCLS) is the terminal practice degree for the Clinical Laboratory Science profession. This degree provides an opportunity for advanced practice in multiple venues including clinical institutions, reference laboratories, physician practices, industry, public health agencies, government facilities, and academic institutions. Clinical Laboratory Science professionals holding the DCLS will provide a critical interface between practice, research, and health care policy. They will assure the effective and appropriate utilization of laboratory tests and information by eliminating unnecessary tests and ordering tests that should have been ordered but were not. This will result in decreased costs, earlier diagnosis, and improved patient outcomes.

The three-year, full-time program consists of a minimum of 76 credit hours divided between advanced theory courses (core curriculum), research, and a one-year clinical residency. Course delivery may include face-to-face, online, and hybrid formats. The core curriculum may be completed as a distance learning program and on a full-time or part-time basis. However, the residency component requires full-time attendance at a clinical affiliate.

The core curriculum is designed to advance the foundational knowledge of the bachelor’s-level medical laboratory scientist in the areas of hematology, clinical chemistry, clinical microbiology, immunohematology, clinical immunology, and molecular diagnostics. The core curriculum also includes clinical correlations, evidence-based medicine, and interprofessional practice. Information gained from this course work is integrated with knowledge from other disciplines in health care such as health policy and management, pharmacology, health care education, public health and epidemiology, and advanced pathophysiology.

Research is a component of this program and students will be expected to complete research projects over the course of the program culminating in a capstone project suitable for publication. Research projects will advance practice in clinical laboratory medicine, such as the development
and implementation of diagnostic and interpretive algorithms, clinical practice guidelines, and collaborative interprofessional patient care.

The one-year clinical residency will provide immersion in the workings of the health care system by integrating the resident into patient care alongside physicians, nurses, pharmacists, and other health care professionals in clinical practice environments at program affiliates. During the residency, the students will work with management, laboratory staff, physicians, nurses, and other members of the healthcare team to provide guidance in laboratory utilization and interpretation thereby optimizing patient outcomes. The residency focuses on laboratory test selection and result interpretation. In addition to the direct learning by the resident, he or she can educate the patient and the other members of the health care team on the proper utilization of lab tests, correct specimen requirements, and interfering factors affecting results.

Graduates of this program will be prepared to act as consultants to health care providers, serve as laboratory directors, educate patients and health care providers, perform and disseminate research on evidence-based practice and test utilization, and enter academic positions.

The DCLS curriculum addresses the competencies established for the profession by the American Society for Clinical Laboratory Science Doctorate in Clinical Laboratory Science Oversight Committee and NAACLS accreditation guidelines for the DCLS.

Admission to the doctorate in clinical laboratory science program is a competitive application process. Applications are submitted online. Applications and supporting materials are reviewed, and qualified applicants are invited for a personal interview. Detailed instructions on how to apply are posted on the doctorate in clinical laboratory science program (https://www.kumc.edu/school-of-health-professions/academics/departments/clinical-laboratory-sciences/academics/doctorate-in-cls-program/how-to-apply.html) website. Students are admitted for the fall semester only. Applications for the fall semester must be received by March 1 for first consideration.

In order to be considered for admission into this program, the following are required:

**Completed prerequisite course work**

- Bachelor's degree in a life science (e.g., biochemistry, biology, cell biology, clinical laboratory science, microbiology, molecular biosciences etc.) must be completed prior to enrollment in the program.
- A NAACLS-accredited MLS/MT program must be completed (or equivalent).

**Grade point average**

- Cumulative undergraduate grade point average of 3.00 on a 4.00 scale is required.
- For applicants who transferred credits into their Bachelor’s degree, the Office of Graduate Studies will take those credits into consideration for the cumulative Bachelor’s GPA.
- Applicants with a GPA below 3.00 may be considered for admission on a case-by-case basis.

**Required credentials**

- Professional certification as a generalist from the American Society of Clinical Pathology Board of Certification is required: MLS(ASCP), or MT(ASCP) with proof of continuing education equivalent to the BOC CMP.

**Professional work experience**

- A minimum two-years, post-certification, full-time experience in a clinical laboratory as a medical laboratory scientist is required at the time of application. Preference will be given to those with experience as a generalist or who have worked in multiple areas of the clinical laboratory. Applicants with less than two-years of full-time experience may be considered for admission on a case-by-case basis.
- The department will evaluate work experience and determine if the work experience criteria are met for each applicant.

**Health and physical requirements**

- Good physical and mental health are essential. Physical or other disabilities are evaluated on a case-by-case basis by the program and by the Office of Equal Opportunity and Academic Compliance. Please review the program's technical standards (https://www.kumc.edu/school-of-health-professions/academics/departments/clinical-laboratory-sciences/academics/doctorate-in-cls-program/technical-standards.html) for details.
- Physical examinations are required prior to the time of registration for classes at KU Medical Center.
- All students are required to carry health insurance. KU Medical Center offers a health insurance policy for eligible students. Selected for the Kansas Board of Regents institutions by the State of Kansas, this plan is offered through Student Health Services at KU Medical Center and is underwritten by UnitedHealthCare Student Resources. For information about the policy, please visit www.uhcsr.com/kumc (http://www.uhcsr.com/kumc/).

Students exclusively taking courses online are not eligible to enroll in the Basic Student Plan through UnitedHealthCare.

**Background check/drug screening**

- The Joint Commission requires all incoming students to pay for a background check and provide the report to the university. This one-time fee must be paid directly to the company performing the background investigation. This requirement only applies to students officially admitted into the program. A drug screen may also be required by each clinical residency site the student utilizes during the program. More: School of Health Professions background check and drug screening. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

**English language proficiency**

All applicants, regardless of citizenship or residency status, are required to have command of the English language. Proof of English language proficiency may be required through the TOEFL or IELTS testing systems, a personal interview, the personal goals statement or other methods.

- Internet-based TOEFL minimum requirements: at least 23 or higher on the reading and listening sections; a score of 5.0 or 23 or higher on the writing section; a score of 26 or higher on the speaking section.
- IELTS minimum requirements: overall band score of 7.5 and no part score lower than 7.0.

**International Students**

An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent
residency. Additional requirements and documentation are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

DCLS Core Course Descriptions

DCLS 800. DCLS Advanced Topics. 1 Credits.
Seminar course that addresses topics and issues relevant to DCLS clinical practice, including ethical and social issues in healthcare practice, health informatics, and communication techniques needed for interaction with healthcare colleagues and patients. Repeatable. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 802. Principles of Healthcare Education. 3 Credits.
This course will address various aspects of teaching in healthcare settings. This includes educating patients and their families, educating other healthcare professionals, and the more formal area of undergraduate and graduate education. Education theory, pedagogical methods, educational resources, learning objectives, and evaluation techniques applicable to each type of educational situation will be addressed. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 805. Advanced Molecular Diagnostics. 2 Credits.
This course focuses on the enhancement of scientific and technical knowledge in nucleic acid-based testing for the diagnosis of acquired and hereditary genetic disorders, and infectious diseases. Topics include an in-depth review of the theory of molecular techniques and the application of these techniques in inherited disorders, oncology, infectious disease, pharmacogenetics, histocompatibility, identity determination, and genomics. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 815. Research Methods in Clinical Laboratory Sciences. 2 Credits.
A discussion of research methods used in clinical laboratory sciences, with an emphasis on selecting and applying appropriate research designs. Includes an overview of the research methods and various approaches in current use in clinical laboratory science; focused on research question formulation; internal and external validity of research; variable measurement and reliability, and generalizability of findings. Specific approaches covered include non-experimental, experimental and quasi-experimental designs, epidemiologic methods (e.g., cohort and case-control studies), survey research, and qualitative research. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 820. Evidence Based Practice. 3 Credits.
Evidence-Based Practice (EBP) encompasses Evidence-Based Medicine and Evidence-Based Laboratory Medicine. EBP is a problem-based approach to decision making using research evidence combined with clinical expertise, the patient’s values, circumstances, and the clinical context. This course addresses the historical development of EBP, why using EBP in clinical decision making improves patient care, when and how to implement and use EBP in clinical decision making, and how to discuss the EBP finding with patients, family members, and other healthcare practitioners. Evaluating research studies for their applicability to EBP and designing research studies based on clinical evidence focused on laboratory testing will make up most of the course content, activities, and assignments. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 830. Advanced Clinical Chemistry. 3 Credits.
This course focuses on in depth physiology and pathophysiology together with the principles of current and emerging chemistry tests. Emphasis on the correlation between chemistry tests and disease states, interpretation and limitations of chemistry test results. Current clinical chemistry literature, clinical scenarios, case studies, and advanced laboratory practice issues will be used to enhance knowledge and skills. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 836. Advanced Hematology. 3 Credits.
This course focuses on enhancement of scientific and technical knowledge in hematology and hemostasis to consult with other healthcare practitioners on the selection of screening and diagnostic tests for hematological disorders, interpretation of results, and recommendations for follow-up testing. Topics to be investigated include physiology and regulation of the hematopoietic system and hemostasis, and the genetic, molecular and cellular mechanisms underlying the pathophysiology of selected hematological disorders such as anemias, leukemias, lymphomas, and disorders of hemostasis with additional focus on utilization of appropriate hematology, hemostasis, and molecular diagnostic tests, and reducing turn-around time. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 838. Advanced Immunology and Transplant. 3 Credits.
This course focuses on enhancement of scientific and technical knowledge in clinical immunology and transplantation in order to consult with other healthcare practitioners on clinical applications and diagnostic and therapeutic testing of immune-mediated diseases. Topics include autoimmunity, hypersensitivity, immunotherapy and immunotoxicology, transplantation and HLA testing/compatibility, cancer immunology and immunodeficiency. This course also includes test methodologies in cellular, humoral, and molecular immunology, selection and interpretation of test results, and recommendations for follow-up testing for patient monitoring. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 842. Advanced Clinical Microbiology. 3 Credits.
Course Description: This course focuses on enhancement of scientific and technical knowledge in clinical microbiology necessary for consultation with other healthcare practitioners for (i) the selection of screening and diagnostic tests for suspected infectious diseases, (ii) interpretation of results, and (iii) recommendations for follow-up testing. Topics to be investigated include utilizing molecular diagnostic tests, antimicrobial susceptibility testing and resistance mechanisms, bioterrorism, biofilms, opportunistic and emerging infections, utilization of appropriate microbiology tests, evidence based practice in clinical microbiology, and reducing turn-around time. Current scientific literature, clinical scenarios, case studies, and advanced laboratory practice issues will be used to enhance knowledge and skills. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 844. Advanced Immunohematology. 3 Credits.
This course will explore advanced blood banking theory and transfusion medicine concepts pertaining to basic-to-advanced serological testing techniques, blood product utilization, molecular immunohematology
testing methods, quality assurance, and other relevant topics. Learners will be re-introduced to specialized blood banking procedures including (but not limited to) the following: ABO/Rh, antibody screens, antibody identification, fetal screen, elutions, phenotyping, and crossmatching. Using case studies and discussion, learners will correlate laboratory data to clinical disease processes encountered in transfusion medicine. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 851. Clinical Correlations I. 3 Credits.
Course Description: This course will correlate clinical presentation and laboratory testing as it relates to physiological changes associated with select diseases of major organ systems (e.g., endocrine, muscle, cardiovascular, respiratory, renal, gastrointestinal, immune, nervous, and reproductive). Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program or instructor permission.

DCLS 852. Clinical Correlations II. 3 Credits.
This course will complement CLS851 Clinical Correlations I and will correlate clinical laboratory testing as it relates to physiological changes associated with patient symptomology (e.g., chest pain, shortness of breath, unresponsiveness, fever of unknown origin, jaundice) and treatment in a consultation model. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program or instructor permission.

DCLS 880. Principles of Interprofessional Education and Practice Theory. 1 Credits.
An introductory course to core competencies in interprofessional education and practice for healthcare teams including roles and responsibilities, values and ethics, teamwork, communication, and collaborative practice as it relates to the improvement of patient safety outcomes and the provision of quality patient care. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 881. DCLS Interprofessional Practice. 1 Credits.
This course is designed for DCLS program students to apply core competencies in interprofessional practice for healthcare teams including roles and responsibilities, values and ethics, teamwork, communication, and collaborative practice via participation in interprofessional activities. Prerequisite: Successful completion of DCLS 880 and admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

DCLS 890. Advanced Laboratory Operations. 3 Credits.
This course will explore laboratory quality, utilization, accreditation, regulation, and management topics. Core course content explores the selection, implementation, strengths, and weaknesses of appropriate quality assurance programs to maintain desired quality goals. All aspects of laboratory services will be explored to enhance consultative skills that will be applied in the clinical residency. The use of practice guidelines, critical or clinical pathways, algorithms and reflex testing, direct access testing, evidenced-based practice, and outcomes measurements, as well as initiatives to change the practice of laboratory services in all phases (pre-analytical, analytical, and post analytical) are covered. Prerequisite: Admission into the Doctorate in Clinical Laboratory Science program, or consent of instructor.

The Doctorate in Clinical Laboratory Science (DCLS) program at the University of Kansas is designed to prepare certified medical laboratory scientists for advanced practice in multiple venues including clinical institutions, reference laboratories, physician practices, industry, public health agencies, government facilities, and academic institutions. Course work is divided between advanced theory courses ("Core Curriculum"), research, and clinical residency. The DCLS curriculum addresses the competencies established for the profession by the American Society for Clinical Laboratory Science Doctorate in Clinical Laboratory Science Oversight Committee and NAACLS accreditation guidelines for the DCLS.

Degree Requirements:

- On a full-time basis, degree requirements are normally completed within 3 years of admission to the program, although a maximum of 8 years is allowed. The core curriculum can be complete on a part-time basis, but the DCLS Research and Clinical Residency components require one year of full-time enrollment.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of a minimum of 76 credit hours.
- Successful completion of the University's Research Skills and Responsible Scholarship requirement before proceeding to the DCLS comprehensive exam.
- Successful completion of DCLS 815 (Research Methods in Clinical Laboratory Sciences) and DCLS 820 (Evidence Based Practice) meets the Research Skills requirement.
- Successful completion of PRVM 853 (Responsible Conduct of Research) or PTRS 807 (Ethics in Health Care) meets the Responsible Scholarship requirement.
- Successful completion of the DCLS comprehensive examination. Prior to starting the clinical residency, a comprehensive examination is required of all degree candidates. Students will demonstrate their (i) command of the clinical laboratory science body of knowledge, (ii) ability to analyze data, and (iii) expertise in the broad scope of clinical practice. Students must be in good academic standing (i.e. hold a minimum 3.0 cumulative GPA) to be eligible for the comprehensive examination. The examination must be completed prior to enrollment in residency courses with a minimum score of 80% to be considered successful.
- Successful completion of the DCLS Research Project requirement. A prospectively planned and approved translational research project which is advisor-guided, student-directed, and designed to support and enhance students’ ability to apply their graduate knowledge and achieve tangible outcomes. The DCLS Research Project is a three-course series (DCLS 901, DCLS 902, DCLS 903) that includes all aspects of a translational research project, including the planning, data collection, analysis/interpretation of results, preparation, and presentation of the research project, both oral and written. Research projects will advance practice in clinical laboratory medicine, such as the development and implementation of diagnostic and interpretive algorithms, clinical practice guidelines, and collaborative interprofessional patient care.
- Successful completion of the DCLS Clinical Residency requirement. A three-course series (DCLS 911, DCLS 912, DCLS 913), this year-long clinical residency is designed to develop the DCLS professional to meet national professional responsibilities. Residency places the student in clinical practice environments at program affiliates. During the residency, the students will work with management, laboratory staff, physicians, nurses, and other members of the healthcare team to provide guidance in laboratory utilization and interpretation thereby optimizing patient outcomes. Residency is provided in structured clinical rotations occurring at clinical affiliates. Skills and knowledge will be evaluated through competency-based assessments and portfolio development. The portfolio will contain documentation of experiences and work products developed during the residency rotations. This may include de-identified summaries of consultations, papers and abstracts published or submitted,
PowerPoint presentations, method evaluation data and/or written procedures from utilization projects.

- Successful completion of the DCLS Capstone requirement. The capstone is completed during the final semester of the program and consists of a written and an oral examination. The written component consists of a manuscript suitable for publication based on the research requirement described above. The oral examination is a defense of the manuscript and can include questions regarding general knowledge of clinical laboratory science concepts and applications.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Successful completion of the following courses:

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<tr>
<th>Code</th>
<th>Title</th>
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<td>Research Methods in Clinical Laboratory Sciences</td>
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<td>DCLS 838</td>
<td>Advanced Immunology and Transplant</td>
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<td>BIOS 704</td>
<td>Principles of Statistics in Public Health</td>
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<td>HP&amp;M 810</td>
<td>The Health Care System</td>
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<td>PHCL 898</td>
<td>Principles of Pharmacology</td>
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<td>or PTRS 855</td>
<td>Pharmacology for Physical Therapists</td>
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<tr>
<td>PHSL 843</td>
<td>Physiology of Disease</td>
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<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
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<td>or PTRS 807</td>
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### Core Curriculum

#### Code
- DCLS 800
- DCLS 802
- DCLS 805
- DCLS 815
- DCLS 820
- DCLS 830
- DCLS 836
- DCLS 838
- DCLS 842
- DCLS 844
- DCLS 851
- DCLS 852
- DCLS 880
- DCLS 890
- BIOS 704
- HP&M 810
- PHCL 898
- PRVM 800
- PRVM 853
- PHSL 843
- NRSG 812
- PTRS 855
- DCLS 801
- DCLS 802
- DCLS 803
- DCLS 999

#### Title
- DCLS Advanced Topics
- Principles of Healthcare Education
- Advanced Molecular Diagnostics
- Research Methods in Clinical Laboratory Sciences
- Evidence Based Practice
- Advanced Clinical Chemistry
- Advanced Hematology
- Advanced Immunology and Transplant
- Advanced Clinical Microbiology
- Advanced Immunohematology
- Clinical Correlations I
- Clinical Correlations II
- Principles of Interprofessional Education and Practice Theory
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- The Health Care System
- Principles of Pharmacology
- Pharmacology for Physical Therapists
- Physiology of Disease
- Advanced Pathophysiology
- Principles of Epidemiology
- Responsible Conduct of Research
- Ethics in Health Care

### Research

#### Code
- DCLS 801
- DCLS 802
- DCLS 803
- DCLS 999

#### Title
- DCLS Research I
- DCLS Research II
- DCLS Research III
- DCLS Capstone

### Practicum

#### Code
- DCLS 911
- DCLS 912
- DCLS 913

#### Title
- Clinical Residency I
- Clinical Residency II
- Clinical Residency III

* DCLS 800 will be taken during each residency semester.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs (http://catalog.ku.edu/archives/).

The DCLS is a minimum 76 credit hour program designed to be completed in a three year time frame if enrolled full time (see program progression below, part-time options are available). Course work is divided between the “Core Curriculum” (advanced theory courses) completed in the first two years of full-time study, and one full year of full-time clinical residency (during which research and residency courses are completed).

A recommended plan of study for full-time students in the DCLS program is shown below.

#### Year 1

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<td>DCLS 836</td>
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<td>DCLS 851</td>
<td>3 PRTR 807 (or PRVM 853 during Year 1, Fall semester)</td>
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#### Year 2

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<th>Summer</th>
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#### Year 3

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**Total Hours 77**

Students enroll in DCLS 800 during each clinical residency semester.

Graduates of the clinical laboratory science doctoral program must have the knowledge and skills to function in a broad variety of clinical laboratory and patient care environments, including hospitals, reference, public
health, and physician office settings. Therefore, the following abilities and expectations must be met by all students in the program.

**Essential Observational Requirements**

1. Read and comprehend text, numbers, and graphs displayed in print and other visual displays.
2. Perform comparative observations of text, movement, shapes, graphs, colors, etc.
3. Observe and respond to subtle cues of individual's moods, temperament, and social behavior.
4. Observe, learn from, and analyze medical record content, including discernment and use of clinical and administrative data displayed within the medical record.
5. Observe, learn from, and analyze statistical, financial, and reimbursement data, including utilizing spreadsheets, software, databases, and performing mathematical calculations.
6. Observe, learn from, and analyze class demonstrations and experiences in disciplines relevant to Clinical Laboratory Sciences that include but are not limited to information management, biochemistry, physiology, statistics, clinical correlations, and research methodology.

**Essential Movement Requirements**

1. Perform actions requiring coordination of both gross and fine muscular movement, equilibrium and use of senses.
2. Move freely and safely about healthcare settings (hospitals, patient rooms, clinics, laboratory, etc.).
3. Travel to sites both on and off campus involved in coursework and residency.
4. Perform moderately taxing continuous physical work over several hours.
5. Use an electronic keyboard to generate, calculate, record, evaluate, and transmit information.
6. Prepare assignments, both written and on-line.
7. Deliver public presentations to large and small audiences.

**Essential Communication Requirements**

1. Read, interpret, and comprehend technical and professional materials (e.g., textbooks, journal articles, handbooks, instruction manuals, and patient healthcare records).
2. Be able to share and to elicit information from patients, healthcare providers, peers, and research collaborators verbally and in a recorded format.
3. Assimilate information to prepare papers, produce reports, and complete documentation for patient care and research purposes.
4. Effectively, confidently, sensitively, and confidentially communicate with patients, laboratory staff, and healthcare providers regarding laboratory test selection, interpretation, and follow-up.
5. Communicate effectively (speaking, writing, typing, graphics, or telecommunication) with faculty, students, laboratory staff, patients, and other healthcare professionals.
6. Take paper and computer examinations.

**Essential Intellectual Requirements**

1. Understand and perform measurements, calculations, synthesis, analysis, reasoning and problem solving.
2. Participate in research activities involving the laboratory or patient oriented research activities.
3. Possess sufficient judgment to recognize and correct performance deviations.

**Essential Behavioral and Social Requirements**

1. Manage the use of time and be able to systematize actions in order to complete academic, professional and technical tasks within realistic constraints.
2. Possess the emotional health necessary to effectively employ intellect, act ethically, and exercise appropriate judgment.
3. Demonstrate appropriate affective behaviors and mental attitudes as to not jeopardize the emotional, physical, mental and behavioral safety of other individuals with whom there is interaction in academic, clinical, and residency settings.
4. Possess the mental and emotional rigor to maintain relationships and demonstrate respect to all people, including students, faculty, patients, and other healthcare professionals at residency settings, without showing bias or preference on the basis of race, color, age, sex, religion or creed, national origin or ancestry, gender expression, gender identity, disability, veteran status, sexual orientation or genetic testing & screening.
5. Adapt to professional and technical change, being flexible and creative.
6. Use appropriate language.
7. Demonstrate empathy when appropriate.
8. Work effectively in inter-professional teams.
9. Demonstrate an understanding of the rationale and justification for one's performance.
10. Demonstrate attention to detail and flexibility to function in a clinical and/or research setting.
11. Recognize potentially hazardous materials, equipment, and situations and proceed safely in order to minimize risk of injury to self and nearby individuals.
12. Practice honesty, compassion, and responsibility.
13. Be forthright about errors or uncertainty.
15. Critically evaluate the performance of students, patients, and healthcare providers, tactfully offering constructive comments.
16. Provide professional and technical services while experiencing the stresses of heavy workloads (i.e., large number of tasks to complete in a limited amount of time), task-related uncertainty (i.e., ambiguous test-ordering, ambivalent test interpretation), emergent demands (i.e., "stat" test orders, interaction with other members of the healthcare team), and a distracting environment (i.e., high noise levels, crowding, complex visual stimuli).

### Diagnostic Ultrasound Technology (General and Vascular)

#### Overview

KU's certificate in diagnostic ultrasound and vascular technology is an 18-month accredited certificate program that prepares the student sonographer to use complex ultrasound equipment in a clinical setting.
The sonographer, after advanced training, uses high-frequency sound waves for diagnostic purposes under the direction of a radiologist. A certificate from The University of Kansas School of Health Professionals is awarded to the student upon successful completion of the program at its KU Medical Center campus in Kansas City, Kansas.

Graduates are candidates to take the national registry examinations given by the American Registry of Diagnostic Medical Sonographers in the areas of abdomen, obstetrics and gynecology, vascular technology, and sonography principles and instrumentation. Those who pass the exams become registered diagnostic medical sonographers and registered vascular technologists.

More about this program and the profession can be found on the program’s website (http://www.kumc.edu/school-of-health-professions/ultrasound.html).

The University of Kansas Diagnostic Ultrasound and Vascular Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org (http://www.caahep.org)) upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). The Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756; 727-210-2350, www.caahep.org (http://www.caahep.org).

Program accreditation, outcomes, and gainful employment disclosure are available at ultrasound.kumc.edu (http://ultrasound.kumc.edu).

Courses

UTEC 50. Introduction to Diagnostic Ultrasound and Medical Law and Ethics for the Imaging Professional. 4.8 Credits.

An introductory overview of the field of Diagnostic Ultrasound Technology which encompasses medical terminology for the sonographer, patient and nursing skills, departmental organization and function and computer safety modules. In addition, the review of the department’s ultrasound equipment with extensive review of functionality and design of each specific unit. Competency check-off required. This course will also introduce to the imaging professional the legal aspects to patient care. The student will participate in group discussions analyzing practical incidents that may occur in the clinical didactic training. Prerequisite: Acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 51. Introduction to Sonography Principles and Instrumentation I. 1.5 Credits.

This course is designed to introduce the students to the basic terminology, the principles of propagation, beams and transducers and possible biological effects. Prerequisite: College Physics along with acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 53. Abdominal I Sonography. 1.25 Credits.

This course is designed to introduce renal anatomy, physiology and pathology and the associated sonographic appearances. This includes clinical indications for ultrasound of the kidneys along with sonographic appearances of normal and disease processes with instrumentation, technique and protocols. Prerequisite: College anatomy and physiology along with acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 54. Small Parts Sonography I. 1 Credits.

This course is taught in modules corresponding to superficial structures of the body. This course provides instruction in Neck and Scrotal sonography. Each module includes: review of anatomy, physiology and pathology, clinical indications for sonography, sonographic appearances of normal and disease processes, along with instrumentation, technique and protocols. Prerequisite: College anatomy and physiology along with acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 55. Gynecologic Sonography. 1.75 Credits.

This course is designed to educate the student on gynecologic anatomy, physiology and pathology and the sonographic appearances. This includes clinical indications for ultrasound along with instrumentation, technique and protocols. Prerequisite: College Anatomy and Physiology along with acceptance into the Diagnostic Ultrasound Technology Program.

UTEC 56. Clinical Internship I. 4.4 Credits.

Through supervised clinical experience in the ultrasound imaging department the student will gain knowledge and be required to demonstrate competence in gynecologic and small part clinical imaging and instrumentation. Prerequisite: Abdominal I, Small Part I and Gynecologic Sonography.

UTEC 60. Advanced Sonography Principles and Instrumentation II. 2.4 Credits.

This course is designed to educate the student on advanced areas of ultrasonic propagation principles, transducer parameters, instrumentation, interactive properties with tissues, possible biological effects and quality control procedures. Introduction to Color and Spectral Doppler is included. Prerequisite: Introduction to Sonography Principles and Instrumentation I.

UTEC 61. Obstetrical Sonography 1st Trimester. 1 Credits.

This course is designed to educate the student on normal maternal changes and fetal development throughout gestation. Embryonic and fetal anatomy, anomalies, pathology, biometry and the sonographic appearances are reviewed. Instrumentation, technique, and protocols are studied. Prerequisite: Gynecologic Sonography and college anatomy and physiology.

UTEC 62. Abdominal Sonography II. 2.8 Credits.

This course is taught in module corresponding to abdominal organs and compartments imaged in the abdomen. This course provides instruction in Liver, Biliary, Pancreas and Spleen. Each module includes: review of anatomy, physiology and pathology, clinical indications for sonography, sonographic appearances of normal and disease processes, along with instrumentation, technique and protocols. Abdominal Doppler of normal, diseased, and transplanted liver and pancreas will be included. Prerequisite: Abdominal Sonography I.

UTEC 63. Obstetrical Sonography 2nd and 3rd Trimester. 1.75 Credits.

This course is designed to educate the student on normal maternal changes and fetal development throughout gestation. Embryonic and fetal anatomy, anomalies, pathology, biometry and the sonographic appearances are reviewed. Instrumentation, technique, and protocols are studied. Prerequisite: Obstetrical Sonography 1st Trimester.

UTEC 64. Small Parts Sonography II. 1 Credits.

This course is taught in modules corresponding to superficial structures of the body. This course provides instruction in breast sonography. The module includes: review of anatomy, physiology and pathology, clinical indications for sonography, sonographic appearances of normal and disease processes, along with instrumentation, technique and protocols. Prerequisite: Small Parts Sonography I.

UTEC 65. Vascular Technology I. 1 Credits.

This course is taught in modules corresponding to selected sites in the vascular system. Each module includes review of: anatomy, physiology, pathology, and clinical indications for noninvasive vascular imaging and disease processes. Instrumentation, technique, and protocols...
are included. Prerequisite: Advanced Sonography Principles and Instrumentation II and Abdominal Sonography I.

**UTEC 66. Clinical Internship II. 8.9 Credits.**

Through supervised clinical experience in the ultrasound imaging department and perinatology department the student will gain knowledge and be required to demonstrate competence in gynecologic, obstetrical, small parts and abdominal clinical imaging and instrumentation including Color and Spectral Doppler evaluation. Prerequisite: Gynecologic Sonography, Small Parts Sonography I and II, Obstetrical 1st, 2nd & 3rd Trimester Sonography and Abdominal Sonography I and II.

**UTEC 70. Abdominal Sonography III. 1.3 Credits.**

This course is taught in modules corresponding to abdominal organs and compartments imaged in the abdomen. This course provides instruction in the Retroperitoneum, Peritoneum, Gastrointestinal, Abdominal Wall and Great Vessels. Each module includes: review of anatomy, physiology and pathology, clinical indications for sonography, sonographic appearances of normal and disease processes, along with instrumentation, technique and protocols. Prerequisite: Abdominal Sonography I and II

**UTEC 71. Vascular Technology II. 3 Credits.**

This course is taught in modules corresponding to selected sites in the vascular system. Each module includes review of: anatomy, physiology, pathology, and clinical indications for noninvasive vascular imaging and disease processes. Instrumentation, technique, and protocols are included. Prerequisite: Advanced Sonography Principles and Instrumentation II and Abdominal Sonography I, II and III.

**UTEC 72. Clinical Internship III. 5.8 Credits.**

Through supervised clinical experience in the ultrasound imaging department and perinatology department the students will gain knowledge and be required to demonstrate competence in gynecologic, obstetrical, small parts, abdominal and vascular clinical imaging and instrumentation including Color and Spectral Doppler evaluation. Prerequisite: Gynecologic Sonography, Small Parts I and II Sonography, Obstetrical 1st, 2nd & 3rd Trimester Sonography, Abdominal Sonography I, II, III and Vascular Technology.

**UTEC 80. Senior Seminar and Review I. 5 Credits.**

This course is designed to prepare the student for national board examinations administered by the American Registry of Diagnostic Medical Sonographers in the field of ultrasound and vascular technology. The student will be responsible for "in class" review of ultrasound clinical procedures, including anatomy, physiology, disease processes and sonographic appearances, ultrasound physics and instrumentation and vascular physics and instrumentation. In addition, the student will learn post graduate skills to enhance professional opportunities. Prerequisite: Gynecologic, Small Parts I and II, Obstetrical 1st, 2nd & 3rd Trimester, and Abdominal Sonography I, II and III, Clinical Internship I, II, III and IV and Ultrasound Physics and Instrumentation, Vascular Technology and Vascular Physics and Instrumentation and Senior Seminar and Review I.

**UTEC 91. Clinical Internship V. 4.7 Credits.**

Through clinical supervised learning situations in a clinical ultrasound imaging department the student will gain knowledge and be required to demonstrate competence in noninvasive vascular imaging procedures and all aspects of instrumentation. Prerequisite: Gynecologic Sonography, Small Parts and II Sonography, Obstetrical 1st, 2nd & 3rd Trimester Sonography, Abdominal Sonography I, II, III and Vascular Technology.

**Certificate in Diagnostic Ultrasound Technology (General and Vascular)**

KU's certificate in diagnostic ultrasound and vascular technology is an 18-month, accredited certificate program that prepares the student sonographer to use complex ultrasound equipment in a clinical setting. The sonographer, after advanced training, uses high-frequency sound waves for diagnostic purposes under the direction of a radiologist.

A certificate from the University of Kansas is awarded to the student upon successful completion of the program at its KU Medical Center campus in Kansas City, Kansas. Instruction is provided by skilled professionals employed by The University of Kansas Health System and KU Medical Center.

Graduates are candidates to take the national registry examinations given by the American Registry of Diagnostic Medical Sonographers in the areas of abdomen, obstetrics and gynecology, vascular technology, and sonography principles and instrumentation. Those who pass the exams become registered diagnostic medical sonographers and registered vascular technologists.

More about this program and the profession can be found on the program’s website (http://www.kumc.edu/school-of-health-professions/ultrasound.html).

**Admission**

The following are required for entry to this program:

1. Applicant must have completed, or be currently enrolled in, at the minimum a 24-month radiologic technology program (60 semester credit hours or 84 quarter credit hours).

**Please note:** The required RT program is not available at the University of Kansas – please visit the program website (https://www.kumc.edu/school-of-health-professions/academics/departments/respiratory-care-and-diagnostic-science/academics/diagnostic-ultrasound-and-vascular-technology-certificate-program.html) for schools offering accredited AART programs.

2. Applicants must be a registered radiologic technologist (ARRT) or must be registry-certified before program start date in September.
3. Post-secondary credits, with a cumulative grade-point average of 2.5 on a 4.0 scale, are required in the following courses:

- Communication skills (English, speech, or composition)
- General college-level physics and/or radiographic physics
- Human anatomy and physiology
- Algebra, statistics (or higher) mathematics course

4. The student will be required to pass the ARRT registry exam before entrance into the ultrasound program.

5. Good physical and mental health are essential to the field of ultrasound. Physical or other disabilities are evaluated on a case by case basis by the program and by the Office of Institutional Opportunity and Access. Please review the program's technical standards (https://www.kumc.edu/school-of-health-professions/academics/departments/respiratory-care-and-diagnostic-science/academics/respiratory-care-degree-programs/respiratory-care-bachelors-degree/technical-standards.html) for details.

6. Background check: the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requires all incoming students to pay for a background check. Applicants will be asked to provide information and make the payment once officially accepted into the program. A drug screening may also be required. For more information, please see School of Health Professions background check and drug screening information. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

7. International students: an applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

Certificate Program Requirements

The student spends 40 hours a week in the 18-month program, with time divided between classroom courses and clinical application. Didactic studies include courses in medical law and ethics, introduction to sonography, sonography principles and instrumentation, abdomen, OB/GYN, small parts, neurosonology, and vascular technology.

Curriculum

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Total Hours 64.9

Dietetics and Nutrition

Dietetics is the science of managing food and nutrition to promote health. Registered dietitians are food and nutrition experts who provide nutritional services in hospitals, schools, nursing care facilities, and other institutions. These essential health care professionals are responsible for developing food and nutrition programs to prevent and treat illness or promote general dietary health.

The mission of the KU Department of Dietetics and Nutrition:

“To conduct research in nutrition science and dietetics, and to produce exemplary graduates empowered to influence human health.”

The department offers the following programs in the fields of dietetics and nutrition:

Dietetic Internship Graduate Certificate

This program prepares graduates for a career as a registered dietitian. A baccalaureate degree from an accredited university or college and completed course work approved by the Accreditation Council for Education in Nutrition and Dietetics is required. Graduates are eligible for the registration examination to acquire the RD credential. The certificate includes 14 graduate credit hours applicable toward the Master of Science degree.

Dietetics and Integrative Medicine Graduate Certificate

An opportunity for working professionals or graduate students, students in this online program explore a personalized approach to prevention and treatment of chronic disease by embracing conventional and complementary therapies. Students may enter with bachelor’s or master’s degrees in dietetics, nutrition, biological sciences or other health care professions.

Master of Science in Dietetics and Nutrition

With course work in biochemical, clinical and behavioral aspects of nutrition, this program offers many benefits including expanded job opportunities and increased knowledge in the science of nutrition. Students engage in the research process while interacting with leading nutrition and clinical researchers.

Doctor of Clinical Nutrition (p. 637)

The Doctorate in Clinical Nutrition (DCN) is an online, professional practice degree focused on producing advanced-level practitioners in clinical nutrition; food and nutrition managers, administrators, and consultants; public health nutritionists; and transformational researchers in higher education. Graduates of the KUMC Doctorate in Clinical Nutrition (DCN) program will be rigorously trained to provide leadership in prevention, intervention, and treatment of chronic diseases at the individual and population level. DCN graduates will complete cutting-edge coursework, a work-based practicum, and an outcomes-based research project.
Ph.D. in Medical Nutrition Science
Students with degrees in nutrition or biological sciences have the opportunity for clinical and translational research at a world-class academic health center renowned for its research facilities. This program emphasizes training in the core sciences of nutrition, biochemistry, biostatistics and the most advanced research methodology.

Courses

DIET 660. Management of Human Resources in Dietetics. 6 Credits.
Focus on human resource development and utilization as the student works with food service personnel. Learning encompasses recruiting, training, supervision, and evaluation of employees in a food service system. Open only to seniors majoring in dietetics. Prerequisite: Management concepts or personnel administration.

DIET 661. Management of Food Processing and Service. 6 Credits.
Application of theories and concepts pertaining to management functions and interdepartmental relationships in a variety of clinical food service settings. Consideration is given to the newer technological developments in the administration of food services. Open only to seniors majoring in dietetics. Prerequisite: Food service systems and management in dietetics.

DIET 662. Special Problems in Food Service Management. 3 Credits.
Advanced experience in the practice of dietetics in an assigned setting. Problems and procedures will vary with interest and needs of the students. Open only to seniors majoring in dietetics. Prerequisite: Food service systems.

DIET 670. Applied Normal Nutrition. 3 Credits.
Directed observation and supervised experience in nutritional care of patients. Nutrition principles studied in DIET 670, Applied Normal Nutrition, and DIET 671, Nutrition in Medical Science, are applied in clinical situations. Open only to seniors majoring in dietetics. Prerequisite: Principles of nutrition; and nutrition throughout the life cycle.

DIET 675. Seminar in Dietetics and Nutrition. 1 Credit.
Involves study and discussion of text and general materials pertaining to philosophy and methodology in the field of dietetics and nutrition. Guest lecturers will participate. May be repeated for credit providing no course duplication takes place. Open only to seniors majoring in dietetics. Prerequisite: Introduction to dietetics.

DIET 800. Selected Topics in Dietetics. 1-3 Credits.
An elective course to allow student credit hours in special issues or problems in dietetics offered by individual faculty. Course content can provide students with investigation of problems and/or issues relevant to theory, research investigation and/or practice related to the field of nutrition and dietetics.

DIET 801. Current Issues or Trends. 3 Credits.
Review of current issues in the economic, social, ethical, political, legal, technological, and ecological environments and the effects of these changes on dietetics practice.

DIET 660. Management of Human Resources in Dietetics. 6 Credits.
A course focusing on the writing skills needed by the food professional in order to communicate effectively in writing about food and food-related topics. Student experiences include hands-on projects in research and writing for various audiences and types of publications.

DIET 803. Accounting Concepts & Analysis. 3 Credits.
An emphasis on financial statement analysis is the main objective of the course. A review of all major accounts in the income statement, balance sheet and statement of cash flow is made in determining a firm’s performance and financial condition in relation to what matters most to shareholders and investors. Prerequisite: General Calculus and Linear Algebra

DIET 805. Entrepreneurship Theory and Practice. 3 Credits.
Development and management of small businesses or private practice within the dietetics industry. Business plan development, marketing, cost considerations. Overview of consulting to health care and hospitality operations and examination of skills required for success.

DIET 819. Grant and Scientific Writing for the Professional. 3 Credits.
Grant writing, identifying external funding, managing grants, preparing manuscripts for peer-reviewed publication, and preparing papers and poster for presentation at professional meetings. Prerequisite: Enrolled GPIDEA.

DIET 822. Healthcare Administration. 3 Credits.
A comprehensive review of today’s health care institutions and their response to the economic, social/ethical, political/legal, technological, and ecological environments.

DIET 824. Financial Management and Cost Controls in Dietetics. 3 Credits.
This course overviews the fundamental knowledge of financial management, managerial accounting, and operational cost controls for dietetics professionals. Topics include a review of managerial accounting concepts for not-for-profit organizations and for-profit organizations based on the Uniform System of Accounts, value and risk analyses, budgeting, asset management, franchising and management contracts, cost-volume-profit analyses, and operational applications for financial performance.

DIET 829. Nutrition and Aging. 3 Credits.
An overview of nutrition and the aging process. Physiological, psychological, and sociological aspects of aging, theories of aging, internal and external factors related to nutrient intake, and nutrient needs will be considered. Physical activity and practical application to community settings is addressed.

DIET 830. Nutrition: a Focus on Life Stages. 3 Credits.
The influence of normal physiological stresses on nutritional needs throughout the life span will be explored. Evaluating nutritional status at different stages of life and identifying appropriate needs and services will be included while, at the same time, consideration given for specific characteristics such as physiological condition and cultural heritage.

DIET 832. Functional Foods for Chronic Disease Prevention. 3 Credits.
Integrate and evaluate the regulatory principles, food science, nutrient science and nutritional metabolism for the development of functional foods, nutraceuticals, and dietary supplements for chronic disease prevention. Prerequisite: Biochemistry, Human Nutrition, Basic Food Science or consent of instructor.

DIET 833. Principles of Statistics. 3 Credits.
A basic course in statistics: Statistical methods applied to experimental and survey data from social or natural sciences; test of hypotheses
Dietetics and Nutrition

concerning treatment means; linear regression; product-moment, rank, and bi-serial correlations; contingency tables and chi-square tests.

DIET 834. Methods of Research in Nutrition. 3 Credits.
A study of basic research terminology and designs commonly used in nutrition research. Topics include: research on animals, tissue culture and human subjects; qualitative, quantitative and outcomes research; ethical issues in research; dissemination of research findings; and appropriate use of research findings. Prerequisite: Consent of instructor.

DIET 835. Nutritional Epidemiology. 3 Credits.
This course emphasizes the important issues related to designing, conducting, and interpreting research on the role of diet or physical activity in the development of disease (health) in human populations. Prerequisite: DIET 833 Statistics or Permission of Instructor.

DIET 836. Biochemical, Physiological, and Genetic Aspects of Human Nutrition. 3 Credits.
The topics covered will examine the integration of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the combination cellular structure and function is related to the metabolic needs of the cell and its response to the environment. The integrated approach will form a basis for evaluating nutritional needs in humans. Prerequisite: courses in nutrition, physiology, and biochemistry, or consent of instructor.

DIET 837. Nutrition in Diabetes. 3 Credits.
(3 hours) An in-depth study of diabetes management with emphasis in nutrition care. Topics will include diabetes pathophysiology, clinical care guidelines, basic pharmacology, clinical nutrition education and counseling strategies, and nutrition care planning. Prerequisite: A course in medical nutrition therapy or consent of instructor. Must be a student in the Great Plains IDEA degree program.

DIET 838. Advanced Medical Nutrition Therapy. 3 Credits.
This course will discuss the role of diet in disease including diet as a factor related to prevention of diseases or illness, diet as an etiologic agent in illness and diet as a treatment for disease. Medical nutrition therapy is the use of specific nutrition services to treat an illness, injury or condition and involves two phases: 1) assessment and 2) treatment, which includes diet therapy, counseling and/or the use of specialized nutrition supplements.

DIET 839. Clinical Aspects of Nutrition Support. 3 Credits.
The course content provides in depth study of specialized visceral and somatic nutrition assessment of the critically ill patient. Content includes extensive review of methods for determining energy expenditure and substrate utilization during specific disease states. Discussion of the aspects of feeding the critically ill patient including timing, enteral and parenteral feeding methodology, specialized medical foods, equipment requirements, feeding complications and prevention, and pharmacological issues. Students will be expected to calculate formulas for both types feeding modalities and provide discussion of the evidence based guidelines for administration of these nutrition therapies. Prerequisite: minimum of 3 cr hours in Medical Nutrition Therapy.

DIET 840. Foundations of Leadership in Dietetics. 3 Credits.
Study of the key issues in the theory, research and application of leadership in organizations. This includes defining leadership, understanding situational characteristics that facilitate/hinder effective leadership, understanding effective/dysfunctional leadership and gaining greater insight into one's own leadership style and functioning. Prerequisite: Must be admitted to the GPIDEA Program.

DIET 841. International Nutrition and World Hunger. 3 Credits.
Advanced study of the magnitude, cause, and nature of hunger and undernutrition in low income countries; emphasis on programs, policies and planning directed toward alleviating hunger.

DIET 842. United States Public Health Nutrition. 1-3 Credits.
A study of US public health and nutrition concerns in diverse US populations, assessment of nutritional status in commonalities, health communication, nutrition policies and community based nutrition interventions. Exploration of the roles of dietitians, nutritionists, and others in developing and delivering nutrition policies and interventions in US communities. Prerequisite: Must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor.

DIET 843. Nutrition Education in the Community. 3 Credits.
Principles and practices of teaching individuals and groups to translate nutrition knowledge into action. Emphasis on research in and evaluation of nutrition education.

DIET 844. Behavior Management Theory. 3 Credits.
An in-depth analysis of the development of the behavioral basis of individual and group behavior in business, governmental, educational, and other organizations with emphasis on current research literature and applications.

DIET 845. Nutritional Aspects of Oncology. 3 Credits.
A course focusing on current research examining the role of nutrition in specific cancers. Topics include basic cancer biology, pathology and nutritional research methodology. Sources of information for cancer prevention programs and the application of translational research to clinical patient populations will be discussed.

DIET 846. Nutrition and Wellness. 3 Credits.
Course will address wellness promotion through nutrition. Nutritional risk and protective factors will be examined as they relate to public health and individual nutrition.

DIET 850. Operations Management and Analysis. 3 Credits.
The study of the role of operations systems in the provision of value for the customer. Operations systems design; capacity determination, resource requirements planning and control, theory of constraints, supply chain management, quality management and control and project management are discussed and analyzed. Prerequisite: Basic graduate statistics course.

DIET 854. Non-Thesis Research. 1-3 Credits.
Directed study of special problems in nutrition or nutrition care. This course provides for the individual or group study of special problems. Through directed readings, investigations and projects, the student acquires information with reference to questions in dietetics and nutrition not covered in organized courses. This course fulfills the research requirements for the Non-Thesis Option.

DIET 862. Maternal and Child Nutrition. 3 Credits.
Critical examination of behavioral, physiological, and public health issues impacting dietary and nutritional factors that support normal growth and development. Course content focuses on the early stages of the life cycle: gestation, lactation, infancy, preschool, school age, and adolescence. Topics include the fetal programming hypothesis, growth and nutritional requirements, breast and formula feeding of infants, infant weaning, and eating behaviors that lead to normal growth, growth faltering, and pediatric obesity. Cross-listed with DN 862. Prerequisite: Registered Dietitian, or registry eligible dietitian.

DIET 865. Nutrition and Human Performance. 3 Credits.
This course is designed to develop an understanding of nutrition, based upon knowledge of the biochemical and physiological process
and functions of specific nutrients in meeting nutritional requirements. Emphasis will be placed upon the relationship of optimal nutrition and physical efficiency and performance.

**DIET 870. Nutrition Counseling and Education Methods. 3 Credits.**

Nutrition education for groups and individuals in clinical and community settings. Includes discussion and experience in applying learning theory, assessing educational needs, stating goals and objectives, selecting learning activities, implementing and evaluating instruction, and documenting care provided.

**DIET 874. Nutrition Therapy for Eating Disorders. 3 Credits.**

An online study of eating disorders management and nutrition care. Topics will include eating disorders medical complications, clinical care guidelines, basic pharmacology, clinical nutrition education, nutrition care planning, psychology of eating disorders, team collaboration, and therapeutic modalities for nutrition counseling. Prerequisite: A course in medical nutrition therapy or consent of instructor.

**DIET 875. Pediatric Clinical Nutrition. 3 Credits.**

Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medicine conditions found in this population will be discussed including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems. Cross-listed with DN 875. Prerequisite: Registered Dietitian or registry eligible dietitian.

**DIET 876. Intervention for the Prevention & Management of Obesity. 3 Credits.**

This course emphasizes obesity in a population group ranging from childhood to the adult. Course materials will examine the impact of obese conditions on disease development throughout the life cycle. The course will critically analyze current evidence focused on interventions used in the behavioral and clinical management of overweight and obese individuals in community and clinical settings. Prerequisite: Consent of instructor.

**DIET 880. Dietary and Herbal Supplements. 3 Credits.**

Explore the safety and efficacy of botanical/herbal and dietary supplements in health applications including dietary supplementation in the prevention and treatment of chronic disease. Prerequisite: Human physiology is advisable.

**DIET 881. Phytochemicals. 3 Credits.**

The course is an overview on phytochemicals (non-nutritive biologically active compounds which may have health benefits) from fruits, vegetables, cereals and oilseeds. The course will include discussions of functional foods which are designer foods providing these compounds to the public. It will cover recent findings on chemistry, physiological functions, potential health implications of phytochemicals.

**DIET 885. Advanced Human Nutrition: Macronutrients. 3 Credits.**

Physiological and biochemical aspects of macronutrients metabolism and human nutrition. Prerequisite: Must be admitted to the GPIDEA Program.

**DIET 886. Advanced Nutrition: Nutrigenomics, Nutrigenetics and Advanced Lipid Metabolism in Human Nutrition. 3 Credits.**

This course integrates topics related to current biochemical issues in nutritional science. The course will examine topics ranging from the cellular, molecular, and biochemical aspects of nutritional science to translational and applied research at the clinical and educational level. The goal is to emphasize the integrative and complex nature of human nutrition research ranging from basic science to clinical studies to translational and applied studies.

**DIET 887. Nutrition and Immunology. 3 Credits.**

This course examines the mechanisms underlying the modulation of immune responses by nutritional, naturally occurring and orally active food compounds. The role of nutritional status and changes in the life stages which impact immune response impacting disease initiation and progression. Contributions of the GI system and changes in life stages impacting immunity and their relationship to immune response will be discussed.

**DIET 896. Micronutrients in Human Nutrition. 3 Credits.**

Interrelationships of micronutrients in terms of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the coordination of structure and function is related to the metabolic needs of the cell and its response to the environment. This integrated approach will form the basis for evaluating the micronutrient needs of humans in both normal and altered metabolic states.

**DIET 899. Thesis. 1-6 Credits.**

Scholarly essay based research, written under the guidance of the student's adviser. Credit given upon meeting thesis requirements for the master's program.

**Courses**

**DN 671. Nutrition in Medical Science. 6 Credits.**

Study of the science of medical nutrition therapy and evidence based practice in the nutritional management of disease during specific stages of the life cycle. Prerequisite: Consent of Instructor.

**DN 796. Social and Cultural Aspects of Dietetics and Nutrition. 2-4 Credits.**

A study of the aspects of society, culture and personality related diet, food habits, and nutrition. The role of the community and its agencies will be considered. Includes field work. Prerequisite: Consent of instructor.

**DN 800. Selected Topics in Clinical Dietetics: ____. 1-6 Credits.**

A learner-centered, self paced study of topics in applied clinical dietetics. Independent modules are offered to address the science and art of nutritional care relating to specific issues to clinical dietetics. Topics will be grouped in various combinations to provide flexibility of choice. Students may enroll in one or more topics for a total of six credit hours. Prerequisite: By permission of instructor only.

**DN 810. Nutrition Assessment. 3 Credits.**

Methods and tools used in screening and assessment of nutritional status of individuals and population groups are studied. Assessment methodology includes dietary surveys, computerized dietary intake analysis, anthropometric measures, biochemical measures and clinical evaluations. Laboratory experiences are provided to allow students practice time for learning and applying assessment techniques. Prerequisite: Permission of instructor.

**DN 817. Seminar in Dietetics & Nutrition I. 1 Credits.**

Seminar designed to promote effectiveness of professional written and oral communication, increase knowledge of research, and review content information in selected topics in dietetics.

**DN 818. Seminar in Dietetics & Nutrition II. 1 Credits.**

To promote effectiveness of professional written and oral communication, to increase knowledge of research, and to review content information n selected areas in dietetics.

**DN 819. Scientific Writing for the Nutritional Sciences. 1 Credits.**

Research proposal preparation and / or scientific manuscript writing experience. This course will provide the student with an overview of
the steps used in proposal writing and / or the steps in preparation of a scientific manuscript for publication.

**DN 820. Nutrition Education Skills for School Teachers. 3 Credits.**

This graduate level course will expand understanding of nutrition and healthy eating for classroom teachers and other professionals who work with children. The course has a special emphasis on child and adolescent nutrition and how to translate nutrition facts into classroom applications and school-based interventions. Course topics will include healthy food choices, nutrition guidelines, nutrients, energy balance and weight, child and adolescent nutrition, and nutrition education in the classroom, school-based nutrition interventions, and measuring outcomes of nutrition interventions. Prerequisite: Student must be classroom teacher or consent of instructor.

**DN 822. Management Dietetics & Nutrition I. 2 Credits.**

Managerial skills in health care quality improvement and food service are practiced. Students are typically enrolled in DN 827 Practicum supervised practice experiences associated with the dietetic internship. Prerequisite: food service systems or commensurate practical experience.

**DN 823. Management Dietetics & Nutrition II. 2 Credits.**

Managerial style is related to food policy, financial benchmarking and applied nutrition practice. Students are typically enrolled in DN 827 Practicum supervised practice experiences associated with the dietetic internship. Prerequisite: food service systems or commensurate practical experience.

**DN 825. Medical Nutrition Therapy I. 3 Credits.**

Course content introduces the student into the concepts of an intermediate study of nutritional therapy of disease. Course content includes evidence-based practice in prevention and nutritional management of diseases. Patient assessment and medical chart documentation are covered. Elements of pathology and biochemistry of the nutrition-related problems are integrated into course topics. This course is designed for students enrolled in the dietetic internship, but students from other departments may enroll with consent of instructor. Prerequisite: Undergraduate coursework in nutrition, diet therapy, biochemistry and physiology or consent of instructor.

**DN 826. Medical Nutrition Therapy II. 3 Credits.**

Course content includes current nutrition therapy and evidence-based practice in treatment of disease. Advanced therapies and patient management in nutrition support will be discussed. Course topics include parenteral nutrition, fluid and electrolyte management, liver diseases, cancer, gestational diabetes, and renal diseases. Elements of pathology and biochemistry of the nutrition-related problems are integrated into course topics. This course is designed for students enrolled in the dietetic internship, but students from other departments may enroll with consent of instructor. Prerequisite: Undergraduate coursework in nutrition, diet therapy, biochemistry and physiology; DN 825; or consent of instructor.

**DN 827. Practicum in Dietetics and Nutrition. 1-10 Credits.**

Supervised practice experience for graduate level students to fulfill the requirements for the Dietetic Internship. Experiences take place in hospitals, clinics, community health care agencies, and other practice settings in which dietetics and nutrition services are provided. Prerequisite: Admission to the graduate program, permission of dietetic internship director or course instructor.

**DN 828. Clinical Education in Dietetics. 2-3 Credits.**

A study of teaching methods appropriate for use in a clinical setting. Emphasis on development of instructional objectives, learning situations, and methods of evaluations to be used in clinical teaching in dietetics. Prerequisite: Consent of instructor.

**DN 829. Nutrition and Aging. 3 Credits.**

An overview of nutrition and the aging process. Physiological, psychological, and sociological aspects of aging, theories of aging, internal and external factors related to nutrient intake, and nutrient needs will be considered.

**DN 830. Food Technology. 2-3 Credits.**

Consideration of current food processing methods and the factors affecting the palatability and nutritive values of human foods. Course includes pertinent information regarding the protection of the food supply.

**DN 834. Methods of Research in Nutrition. 3 Credits.**

A study of basic research terminology and designs commonly used in nutrition research. Topics include: research on animals, tissue culture and human subjects; qualitative, quantitative and outcomes research; ethical issues in research; dissemination of research findings; and appropriate use of research findings. Prerequisite: Consent of instructor. Same as DIET 834.

**DN 836. Biochemical, Physiological, and Genetic Aspects of Human Nutrition. 3 Credits.**

The topics covered will examine the integration of biochemistry, physiology, genetics, and nutrition. Emphasis will be placed on developing an understanding of how the combination cellular structure and function is related to the metabolic needs of the cell and its response to the environment. The integrated approach will form a basis for evaluating nutritional needs in humans. Prerequisite: courses in nutrition, physiology, and biochemistry, or consent of instructor. Same as DIET 836.

**DN 837. Nutrition in Diabetes. 3 Credits.**

(3 hours) An in-depth study of diabetes management with emphasis in nutrition care. Topics will include diabetes pathophysiology, clinical care guidelines, basic pharmacology, clinical nutrition education and counseling strategies, and nutrition care planning. Prerequisite: A course in medical nutrition therapy or consent of instructor.

**DN 838. Advanced Medical Nutrition Therapy. 3 Credits.**

This course evaluates current issues in medical nutrition therapy. Course content includes evidence based analysis, the role of diet in disease management including factors related to disease pathophysiology, nutritional assessment and medical nutrition management of specific disease states. Prerequisite: undergraduate medical nutrition therapy, biochemistry, physiology, or consent of the instructor. Same as DIET 838.

**DN 839. Clinical Aspects of Nutrition Support. 3 Credits.**


**DN 840. Advanced Topics in Nutrition. 1-2 Credits.**

Reading and preparation of a paper and/or oral presentation on a selected subject in nutrition. Prerequisite: Consent of instructor.

**DN 841. International Nutrition. 1-3 Credits.**

A study of global public health and nutrition concerns in various nations, assessment of nutritional status of diverse populations, international health and nutrition organizations, policies, and interventions. We explore the roles of dietitians, nutritionists, and others in creating and implementing international public health and nutrition policies and interventions. To enroll in the course, you must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor. Cross-listed with DIET 841.
DN 842. United States Public Health Nutrition. 1-3 Credits.
A study of US public health and nutrition concerns in diverse US populations, assessment of nutritional status in commonalities, health communication, nutrition policies and community based nutrition interventions. Exploration of the roles of dietitians, nutritionists, and others in developing and delivering nutrition policies and interventions in US communities. Prerequisite: Must be a student in the Graduate Certificate Dietetic Internship Program, the Dietetics and Nutrition Master of Science Program, or the Great Plains IDEA, or have the consent of the instructor.

DN 854. Special Problems in Dietetics and Nutrition. 1-4 Credits.
Directed study of special problems in nutrition or nutrition care. This course provides for the individual or group study of special problems. Through directed readings, investigations, and projects, the student acquires information with reference to questions in dietetics and nutrition not covered in organized courses.

DN 857. Motivational Interviewing in Public Health Settings. 1 Credits.
The course is designed to introduce participants to Motivational Interviewing, its concepts, and to the subsequent skills required for helping people to change. This course will be cross-listed with PRVM 857.

DN 860. Collaboration Strategies in Health Care. 1 Credits.
Persuasion and negotiation techniques: skills to evaluate and promote collaboration and goal achievement in a multidisciplinary health care team; analysis of communication styles and strategies to achieve mutual beneficial outcomes.

DN 862. Maternal and Child Nutrition. 3 Credits.
Critical examination of behavioral, physiological, and public health issues impacting dietary and nutritional factors that support normal growth and development. Course content focuses on the early stages of the life cycle: gestation, lactation, infancy, preschool, school age and adolescence. Topics include the fetal programming hypothesis, growth and nutritional requirements, breast and formula feeding of infants, infant weaning, and eating behaviors that lead to normal growth, growth faltering, and pediatric obesity. Prerequisite: Consent of the instructor.

DN 865. Nutrition in Sports and Exercise. 3 Credits.
Gain a deeper understanding of exercise physiology and nutrient requirements in sports and exercise. Examine, discuss, and develop critical thinking skills in areas within sport and exercise nutrition such as exercise metabolism and general exercise periodization as well as energy, macronutrient, micronutrient and fluid needs of athletes engaged in specific sports. Learn and explore current scientific literature regarding body composition and nutrition supplementation in addition to reviewing eating disorders in athletes and evidence-based approaches to weight management in sport. Prerequisite: Biochemistry and/or exercise physiology class or permission of the instructor.

DN 870. Health Behavior Counseling. 3 Credits.
Theoretical and applied issues in health behavior counseling. Students will learn the theories of behavior change and how to apply these to health care issues. Specific health behaviors (i.e., dietary changes, smoking cessation, exercise adherence) will be discussed in the context of chronic disease for children, adults, and the elderly. Effective methods of counseling patients and promoting changes on an individual and small group basis will be presented.

DN 874. Nutrition Therapy for Eating Disorders. 3 Credits.
An online study of eating disorders management and nutrition care. Topics will include eating disorders medical complications, clinical care guidelines, basic pharmacology, clinical nutrition education, nutrition care planning, psychology of eating disorders, team collaboration, and therapeutic modalities or nutrition counseling. Prerequisite: A course in medical nutrition therapy or consent of instructor.

DN 875. Pediatric Clinical Nutrition. 3 Credits.
Examines physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medicine conditions found in this population will be discussed including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems. Prerequisite: DN 826: Applied Clinical Nutrition or equivalent or consent of instructor.

DN 876. Intervention for the Prevention & Management of Obesity. 3 Credits.
This course emphasizes obesity in a population group ranging from childhood to the adult. Course materials will examine the impact of obese conditions on disease development throughout the life cycle. The course will critically analyze current evidence focused on interventions used in the behavioral and clinical management of overweight and obese individuals in community and clinical settings. Prerequisite: Consent of instructor. Same as DIET 876.

DN 880. Dietary and Herbal Supplements. 3 Credits.
Designed to develop the health professional's skills in partnering with patients to make dietary supplement decisions. Students will investigate the use of botanicals and dietary supplements in nutritional support of aging, maternal health, and wellness. Discussion on supplementation in the prevention and treatment of chronic diseases will include: arthritides, cardiovascular, diabetes, digestive, liver and renal disorders, memory deficits, and ophthalmic dysfunctions. Prerequisite: Human physiology is advisable.

DN 881. Introduction to Dietetics and Integrative Medicine. 3 Credits.
Introduction to principles guiding integrative and functional Medical Nutrition Therapy; assessing, diagnosing, intervening, monitoring, and evaluating an individual client to restore function; focusing on the unique nutritional imbalances characteristic of chronic disease pathophysiology; supporting individuals with persistent symptoms; preventing chronic disease. Prerequisite: Introductory genetics, medical nutrition therapy, or consent of instructor.

DN 882. A Nutrition Approach to Inflammation and Immune Regulation. 3 Credits.
Inflammation and immune system dysregulation is common in chronic disease. The course presents the integrative nutrition approach to identify the underlying causes of inflammatory and immune-related conditions and associated nutritional influences; applies individualized nutritional interventions, as powerful modulators of the pathophysiology of inflammatory and immune responses. Prerequisite: Medical nutrition therapy, genetics or consent of instructor.

DN 884. Diet, Physical Activity & Cancer. 3 Credits.

DN 885. Nutritional Biochemistry. 3 Credits.
Course content facilitates the understanding of advanced biochemical principles applied to human nutrition. Topics include protein structure, bioenergetics, enzyme function, nutrient digestion, absorption and metabolism, metabolic regulation and intermediary metabolism, cellular signaling, and genomics encompassing nucleotide metabolism,
DN 890. Graduate Research. 1-4 Credits.
Individual investigation of special problems in dietetics and nutrition or hospital dietary administration approved by the student’s advisor or advisory committee. Investigation involves original research.

DN 895. Advanced Macronutrients and Integrated Metabolism. 3 Credits.
Energy containing macronutrients and fiber presented from the perspective of their importance in human nutrition. Structural properties, digestion, absorption and metabolism are emphasized. Fuel utilization in response to food intake and exercise, cellular and whole-animal energetic and energy balance integrate metabolism. Students take an active role in presenting and discussing and exhibit advanced skills in analysis and presentation. Prerequisite: BCHM 702 or Equivalent.

DN 896. Advanced Micronutrients and Integrated Metabolism. 3 Credits.
Vitamins and minerals presented from the perspective of their requirements as nutrients for normal human physiological functions with emphasis on their underlying roles in structure, function and metabolism. Students take an active role in selecting, presenting and discussing recent published research and to exhibit advanced skills in analysis and presentation. Prerequisites: BCHM 702 or equivalent.

DN 897. Micronutrient Research in Human Nutrition. 1 Credits.
This course requires students to design a research study on a vitamin or mineral. Students submit a written proposal and present it orally and defend the proposal in class. Students will be evaluated on the basis of plausibility, feasibility and originality of the proposed research. Co-requisite DN 896. Prerequisite: Consent of Instructor.

DN 898. Research Methods in Dietetics and Nutrition. 3 Credits.
A series of seven laboratory modules emphasizing quantitative methods and experimental analysis. The series of modules will be team taught by departmental faculty. Each module requires data collection, data analysis, and written interpretation or report. Instrumentation, dietary assessment software utilization and cellular microtechniques will be emphasized. Students will be responsible for learning one technique practiced in an outside laboratory setting. Student will rotate between the module sequence based on the number of students enrolled in the class. Prerequisite: DN 895 and DN 896 or permission of instructor of record.

DN 900. Techniques in Nutrition Research. 3 Credits.
A series of seven laboratory modules emphasizing quantitative methods and experimental analysis. The series of modules will be team taught by departmental faculty. Each module requires data collection, data analysis, and written interpretation or report. Instrumentation, dietary assessment software utilization and cellular microtechniques will be emphasized. Students will be responsible for learning one technique practiced in an outside laboratory setting. Student will rotate between the module sequence based on the number of students enrolled in the class. Prerequisite: DN 895 and DN 896 or permission of instructor of record.

DN 901. Graduate Seminar in Nutrition. 1 Credits.
Advanced course examining current research topics in nutrition. Extensive student and faculty interaction is emphasized utilizing lectures, class discussion of selected scientific readings and oral presentations. Prerequisite: Admission to PhD program in Dietetics and Nutrition or permission of instructor.

DN 910. Leadership Essentials in Clinical Nutrition. 3 Credits.
This course builds upon leadership theories to develop the skills to link theory and practice. After completing this course students will be able to successfully evaluate leadership theories; identify and develop a personal leadership style, increase competencies for effective leadership, and identify positive applications in clinical nutrition. The class also examines the differences between leadership and management and why those differences are important in clinical nutrition. Students also engage in practice of essential management skills for clinical nutrition. The class is designed to be an interactive exploration of personal leadership development and management skills. The student will be asked to respond to critical thinking opportunities and demonstrate their understanding of key concepts through exercises, discussion questions, quizzes, a Learning Journal, and their Leadership Growth Plan.

DN 915. Advanced Nutrition Assessment in Clinical Nutrition. 3 Credits.
This course builds on students’ prior knowledge and provides advanced concepts and skills for nutrition assessment of individuals. The course is structured into four assessment components: biochemical, dietary intake, body composition and nutrition focused physical exam. Main topics include in-depth overview of the assessment methods, strengths and limitations of methodology, evaluation and interpretation of assessment data, sources of measurement errors, validity of assessment methods, and advanced analytical approaches used to assess and interpret laboratory data.

DN 920. Nutrition Communication for Advanced Practice. 3 Credits.
The overall goal of this course is to enhance the student’s professional communication skills across a range of nutrition practice areas. This course will emphasize the nutrition professional’s ability to effectively communicate with a wide audience including community members of all ages, races, and ethnicities; patients in public health and clinic settings, hospitalized patients, non-nutrition health professionals, peers, and researchers. The course will use online didactic methods to establish a background of theory, but student learning and assessment will be project-based.

DN 930. Evidence Analysis in Clinical Nutrition. 3 Credits.
Students will identify a pertinent clinical nutrition question and utilize the Academy of Nutrition and Dietetics’ Evidence Analysis Library Manual to conduct a systematic review. Students will follow the rigorous process of defining a research question, searching and critically evaluating published literature, developing an evidence summary table and composing a systematic review. The goal of the course is a manuscript suitable for publication. Prerequisite: Consent of the instructor.

DN 932. Ethics in Clinical Nutrition Research. 1 Credits.
This course provides information and insights on important tenets that are essential for clinical nutrition research. Topics covered in lectures and moderated discussions include ethical, regulatory, and legal issues, informed consent for research participation, role and function of institutional review boards, just selection of research subjects, ethical aspects of study design, and privacy and confidentiality. Additionally, given the social, religious, and other influences on an individual’s food choice, the moral and political aspects of food and nutrition research will be discussed. Prerequisite: Permission of instructor if student is not enrolled in a DN degree program.

DN 934. Advanced Methods of Research in Clinical Nutrition. 3 Credits.
This course prepares clinical nutrition students with the knowledge to design, conduct and write up results of a research project; and to read and review the clinical nutrition literature at an advanced level. Broad topics include ethical, regulatory and legal issues, study design and biostatistics, technology transfer, data management and sources of funding support, and clinical research infrastructure. Within these topics special emphasis is paid to educating the student about study designs that could be particularly useful to those with a clinical doctorate, e.g., designs that make use of electronic health records or other pre-existing databases. Students will get practice writing a research protocol and budgeting for a trial. Prerequisite: DN 834 or equivalent introduction to basics of research, or by permission of instructor.

DN 941. Applied Nutritional Epidemiology. 3 Credits.
The overall goal of this course is to provide graduate students the conceptual and applied skills to better interpret and conduct nutrition epidemiology research. Emphasis of this course includes design of a nutritional epidemiology research study, statistical computing, management of nutrition and outcomes-related datasets, methods of statistical analysis, and interpretation of analyses. Prerequisite: DN 934 Advanced Methods of Research in Clinical Nutrition.

DN 950. Interprofessional Collaboration in Clinical Nutrition. 2 Credits.
This course seeks to improve students’ abilities to function and lead inter-professional healthcare teams. Students will apply core competencies in interprofessional practice for healthcare including roles and responsibilities, values and ethics, communication, team formation, teamwork, leading teams, decision making in teams, and managing conflict in teams. Prerequisite: Permission of Instructor.

DN 970. Pharmacology in Clinical Nutrition. 3 Credits.
This course provides the principles of clinical pharmacology and nutrition as therapeutic interventions and drug-nutrient and drug-food interactions. Students will apply the concepts to the pharmacological and nutritional management of compromised body systems. The strong conceptual base will prepare students to evaluate and monitor the use of commonly used medications and nutrition and herbal supplements. Applications across the lifespan will be incorporated within the class. Prerequisite: Consent of Instructor.

DN 980. Nutrigenomics and Nutrigenetics in Health and Disease. 3 Credits.
Nuclear receptors and their mechanisms of action, nutritional control of gene expression and functional genomic studies with relationships to nutrient intake and polymorphisms. Prerequisite: DN 836, DN 895, DN 896 or permission of instructor.

DN 990. Doctoral Research. 1-9 Credits.
Original and independent investigation approved by and conducted under the supervision of the student's advisor or advisory committee. This course is in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Corequisite: Restricted to Dietetics & Nutrition Ph.D. candidates, or consent of DN advisor. Students must have completed the qualifying exam.

This capstone course is designed to enhance the student's ability to apply graduate knowledge to achieve tangible and relevant clinical research outcomes. All aspects of this translational research project will be included (i.e., planning, data collection, analysis and interpretation of results, written documentation, and oral presentation of the project). The outcome is a manuscript which has been submitted for publication. Collaborative interprofessional patient care projects are strongly encouraged. Prerequisite: DN 930, DN 934, DN 940, and permission of instructor.

DN 992. Applied Clinical Residency in Clinical Nutrition. 3 Credits.
The residency experience is designed to span 360 hours and will be completed within a professional workplace setting. Students will identify an area of practice through which they will provide leadership to develop a research-based clinical initiative or program. Upon completion, the students will provide their clinical team with the program or clinical initiative, along with program evaluation methods. Prerequisite: Acceptance into the DCN program.

DN 999. Dissertation. 1-6 Credits.
Preparation of the written dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: DN 990 or consent of advisor.

Dietetic Internship Graduate Certificate
KU offers a dietetic internship program with a medical nutrition therapy emphasis that prepares graduates for a career as a registered dietitian. The mission of the program is to produce competent entry-level registered dietitian nutritionists with enhanced skills in nutrition therapy using evidence-based practices to support the health of citizens of Kansas, the region, the nation, and the world.

The program prepares graduates to be competent entry-level registered dietitian nutritionists.

- At least 80% of program interns complete program requirements within 15 months (150% of the program length).
- 80% of program graduates take the CDR credentialing exam for dietitian nutritionists within 12 months of program completion.
- The program's one-year pass rate (graduates who pass the registration exam within one year of first attempt) on the CDR credentialing exam for dietitian nutritionists is at least 80%.
- 80% of employers who respond to a survey on program graduates in their first year of employment indicate that graduates demonstrate adequate knowledge and practice ability for entry-level practice as a dietitian (rating of at least 4 on a 5-point scale) over a 3-year period.
- Three years post program completion, 80% of respondents to graduate surveys rate their preparation for entry level practice as adequately prepared or better over a 3-year period.

The program prepares graduates for practice in the field of dietetics and nutrition and participation in professional organizations.

- Of graduates seeking employment, 75% are employed in nutrition and dietetics or related fields within 12 months of graduation.
- 60% of respondents to graduate surveys are members of the Academy of Nutrition and Dietetics or related professional organizations over a 3-year period.

The majority of graduates from KU's dietetic internship program proceed to complete the department's master's degree in dietetics and nutrition (p. 630). Degree-seeking students in the graduate certificate program may count 14 hours of the certificate program course work (all courses other than the 10 credit hours of DN 827 Practicum) toward the master's degree. Two additional semesters are required to complete the master's degree after finishing the dietetic internship program.

Students completing the dietetic internship program are eligible to complete the national examination administered by the Commission on Dietetic Registration (https://www.cdrnet.org/entry-level-examinations/) for the purpose of receiving the registered dietitian credential. KU dietetic interns have an excellent first-time pass rate on the national exam. All U.S. states with licensure and certification requirements currently accept the registered dietitian credential for state licensure and certification purposes. The Commission on Dietetic Registration provides information on specific state licensure requirements.

Accreditation
The University of Kansas dietetic internship graduate certificate program is fully accredited by the Accreditation Council for Education in Nutrition
Admission requirements:

- A bachelor's degree from a didactic program in dietetics (DPD) accredited by the Accreditation Council for Education in Nutrition and Dietetics is required and must be documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from all institutions attended are also required.
- Personal statement of no more than 1000 words is required. Questions to be addressed in the personal statement include the following:
  - Why do you want to enter the dietetics profession?
  - Discuss experiences that have helped to prepare you for a career as an RDN.
  - What are your short-term and long-term goals?
  - What are your strengths and weaknesses or areas needing improvement?
- If an Applicant meets the admission requirements, he/she will be asked to complete a brief virtual interview.
- The Joint Commission requires all incoming students to pay for a background check (p. 2415). This one-time fee must be paid directly to the company performing the background investigation. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)
- Applicants will be assessed on academic performance, work and volunteer experience, leadership and awards, references, personal statement and responses to interview questions. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application. Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs.

Certificate Program information: (p. 2425)

No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

Graduate credit from another institution may not be transferred to a graduate certificate program.

The Dietetic Internship Graduate Certificate program consists of 24 credit hours. The program prepares graduates for entry into careers as registered dietitians. Successful completion of the internship allows the student to take the registration examination to acquire the registered dietitian (RD) credential and enter the profession as a registered dietitian.

Certificate requirements:

- Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 15 months is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.
- Enrollment in a minimum of one (1) credit hour the semester the program is completed. Graduate certificates may not be granted retroactively.
- Successful completion of 1,000 hours of supervised practice in a variety of practice settings. Satisfied through enrollment in a minimum of 10 credit hours of DN 827 Practicum in Dietetics and Nutrition.
- The practice experiences include clinical and community nutrition, food and nutrition management and a culminating practice area of interest experience designed by the intern to meet personal
Typical Plan of Study

### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 817</td>
<td>1</td>
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<td>DN 822</td>
<td>2</td>
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</tr>
<tr>
<td>DN 825</td>
<td>3</td>
<td>DN 826</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DN 827</td>
<td>4</td>
<td>DN 827</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 24

Upon acceptance into the program, candidates will be asked to acknowledge their ability to meet these standards with or without accommodations.

The following technical standards, in conjunction with the academic standards, are requirements for admission, retention, and program completion. The term “candidate” refers to candidates for admission to the program as well as current students who are candidates for retention or program completion.

These requirements may be achieved with or without reasonable accommodations. Candidates with disabilities are encouraged to contact the Academic Accommodations Office at (913) 945-7035 (711 TTY) or cukoko@kumc.edu early in the application process to begin a confidential conversation about what accommodations they may need to meet these standards.

The program prepares candidates to practice dietetics and nutrition within organizations and businesses. Graduates require knowledge and skills to function in diverse practice settings. An essential requirement for completing the Dietetic Internship Graduate Certificate is an ability to function within a clinical learning environment and to interact with a variety of interprofessional teams and patients.

Candidates admitted in the program must be able to perform the following:

**Communicate:** Candidates must have the ability to use multiple communication techniques (oral, written, nonverbal) to enable communication with clients, teachers, and the health care team. Candidates must be able to report to members of the team, express accurate information to clients, and teach, explain, direct, and counsel people.

**Observe:** Candidates must be able to observe lectures, demonstrations, research, and practice situations in the practice of health sciences. Observation is necessary to perform competent health assessments and interventions. Candidates must also be able to observe, learn from, and analyze health record content, including discernment and use of clinical data displayed within the health record.

**Ethical Standards:** Candidates must demonstrate professional attitudes and behaviors and must perform in an ethical manner in dealing with others. Personal integrity is required and the adherence to standards that reflect the values and functions of the profession of dietetics. Candidates are required to abide by the professional code of ethics for dietetics and student honor codes.

**Psychomotor:** Candidates must have sufficient motor capacities and motilities to be able to generate, calculate, record, evaluate and transit information; prepare assignments; deliver public presentations to large and small audiences; collect specimens and perform basic tests and physical assessments on individuals, e.g., finger sticks for blood glucose testing, using glucometers, assessing skin fold thickness, taking blood pressure, and placing feeding tubes; work in institutional and food demonstration kitchens to prepare foods and direct employees involved in food services; and conduct patient visits individually and with health care team members to provide nutrition care. Candidates must be able to travel to supervised practice experiences.
Intellectual and Cognitive Abilities: Candidates must be able to measure, calculate reason, analyze, synthesize, integrate, and remember to apply information. Creative problem solving and clinical reasoning requires all of these intellectual abilities.

Professional and Social Attributes: Candidates must exercise good judgment and promptly complete all responsibilities required of the program. They must develop mature, sensitive, and effective professional relationships with others. Candidates must be able to evaluate one’s own performance critically, accept constructive criticism, and look for ways to improve.

In addition, candidates must be able to tolerate taxing workloads and function effectively under stress. They must be able to adapt to changing environments, display flexibility, and function in the face of uncertainties and ambiguities. Concern for others, interpersonal competence, and motivation are requisites for the program.

Accommodations are not applied retroactively and a disability-related explanation will not negate poor performance. More information may be found in the Students with Disabilities Policies and Procedures Manual (https://kumc-publicpoliciesandprocedures.policystat.com/policy/6321369/latest/).

Dietetics and Integrative Medicine Graduate Certificate

KU’s graduate certificate in dietetics and integrative medicine offers an opportunity for working professionals or graduate students to acquire knowledge to function as a skilled advisor to the patient and a collaborative member of interprofessional health care teams. The program is open to students with bachelor’s or master’s degrees in dietetics, nutrition, biological sciences or other health care professions.

The program explores a personalized approach to prevention and treatment of chronic disease that embraces conventional and complementary therapies. It reaffirms the importance of the therapeutic relationship, a focus on the whole person, lifestyle, biochemical individuality and environmental influences.

This is an online program only with no campus visits required. The 12 credit hours are delivered as web-based courses, affording great flexibility to students. The program is administered by the KU Department of Dietetics and Nutrition (p. 618).

This program is open to students with bachelor's or master's degrees in dietetics, nutrition, biological sciences or other healthcare professions. Applications are accepted online. Detailed instructions on how to apply are available on the Department of Dietetics and Nutrition (http://www.kumc.edu/school-of-health-professions/dietetics-and-nutrition/dietetics-and-integrative-medicine-graduate-certificate.html) website. Application deadlines are July 1 for fall semester, December 1 for spring semester, and May 1 for summer semester.

Admission requirements:

- A bachelor’s degree from a regionally accredited institution is required and must be documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts for all courses from all institutions attended are also required. The bachelor’s degree may be in any field.

- Students with degrees from outside the U.S. require transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative grade-point average requirement.

- Students must have a cumulative grade-point average of at least a 3.0 on a 4.0 scale in his or her bachelor's degree program.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.

- Students must possess the registered dietitian license (or other health care professional certification) and/or be enrolled in a health professions degree program at the graduate level at the time of application.

- A résumé or curriculum vitae is required and must include prior employment, participation in professional and/or voluntary organizations (e.g., hospital, alumni or nonprofit).

- A statement of career goals will be submitted with the application or may be included in the résumé document.

- Three references are required. The references must be from faculty, advisors, employers, or others familiar with the applicant's work and character. The recommendations may not be obtained from family members, friends, etc.

- The Joint Commission requires all incoming students to pay for a background check (p. 2415). This one-time fee must be paid directly to the company performing the background investigation. For more information, please see the School of Health Professions Background Check Instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application. Admission requirements are subject to change. In most cases, use the catalog of the year a student entered the program. Other years' catalogs.

Certificate Program information: (p. 2425)
No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.
Graduate credit from another institution may not be transferred to a graduate certificate program.

The Dietetics and Integrative Medicine Graduate Certificate program consists of 12 credit hours. This is an online program only, with no campus visits required. The program offers an opportunity for working professionals or graduate students to acquire knowledge to function as a skilled advisor to the patient and a collaborative member of multidisciplinary health care teams.

Certificate requirements:

- Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.
- Enrollment in a minimum of one (1) credit hour the semester the program is completed. Graduate certificates may not be granted retroactively.
- Successful completion of a minimum of 12 credit hours.
- Successful completion of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 880</td>
<td>Dietary and Herbal Supplements</td>
<td>3</td>
</tr>
<tr>
<td>DN 881</td>
<td>Introduction to Dietetics and Integrative Medicine</td>
<td>3</td>
</tr>
<tr>
<td>DN 882</td>
<td>A Nutrition Approach to Inflammation and Immune Regulation</td>
<td>3</td>
</tr>
<tr>
<td>DN 980</td>
<td>Nutrigenomics and Nutrigenetics in Health and Disease</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Hours | 12 |

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year entered the program. Other years’ catalogs».

This certificate program is only offered online and no campus visits are required. The 12 credit hours are delivered as web-based courses, affording great flexibility to students. The curriculum includes the four courses below with one course offered per semester. The program may be started fall, spring or summer semester.

Typical Plan of Study (Fall semester start)

### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 880</td>
<td>3</td>
<td>DN 881</td>
<td>3</td>
<td>DN 882</td>
<td>3</td>
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<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 980</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Hours | 12 |

Reasonable accommodation will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to: The Office for Academic Accommodations

Cyn Ukoko, Senior Coordinator of Academic Accommodations
913-945-7035 or 711 TTY
cukoko@kumc.edu

The Department of Dietetics & Nutrition and the University of Kansas Medical Center have a commitment to nondiscrimination, access and reasonable accommodation of students with disabilities. Therefore, all students admitted to the Dietetics and Integrative Medicine Certificate program in Dietetics & Nutrition must be able to meet the following requirements and expectations with or without an accommodation. The certificate prepares students to practice dietetics and nutrition and to interpret and participate in research in nutrition within academic and healthcare organizations. Graduates need knowledge and skills to function in diverse practice and research settings. All students who are admitted into the certificate program in Dietetics & Nutrition are able to do the following:

**Observe:** Students must be able to observe lectures, demonstrations, research, and practice situations in the practice and research of health sciences.

**Communicate:** Students must have the ability to use multiple communication techniques (oral, written, nonverbal) to enable communication with clients, teachers, health providers, and faculty. Students must be able to report to members of the team, express accurate information to clients, and teach, explain, direct, and counsel people.

**Psychomotor:** Students must have sufficient motor capacities and motilities to execute various tasks and physical maneuvers such as: collecting specimens and perform basic tests and physical assessments on individuals, e.g., finger sticks for blood glucose testing, using glucometers, skin fold thickness, blood pressure, and placing feeding tubes; working in institutional and food demonstration kitchens to prepare foods and direct employees involved in food services; and conducting patient visits individually and with health care team members to provide nutrition care. Graduate students who are not involved with clinical experiences are expected to demonstrate during their research assistantship sufficient motor capabilities and motilities to execute various tasks similar to those in the clinical rotations.

**Intellectual and Cognitive Abilities:** Students must be able to measure, calculate reason, analyze, synthesize, integrate, and remember to apply information. Creative problem solving and clinical reasoning requires all of these intellectual abilities.

**Professional and Social Attributes:** Students must exercise good judgment and promptly complete all responsibilities required of the program. They must develop mature, sensitive, and effective professional relationships with others. They must able to tolerate taxing workloads and function effectively under stress. They must be able to adapt to changing environments, display flexibility, and function in the face of uncertainties.
and ambiguities. Concern for others, interpersonal competence, and motivation are requisites for the program.

**Master of Science in Dietetics and Nutrition**

The master's degree in dietetics and nutrition is designed for professionals in nutrition and for others with a science background.

**Advantages of this program:**

- **Practice Competence:** Students gain advanced knowledge of the biochemical, pathological, and physiological processes of disease to build a better understanding of disease prevention and treatment. While the practice competencies of the dietetics professional are continually evolving, entry into practice as a registered dietitian nutritionist (RDN) will require a master's degree, beginning in 2024.
- **Research Competency:** Research experience is more important than ever in today's health care fields. Students graduating from the MS degree program, with or without the RDN credential, are able to participate in research and apply findings in research, public health, and/or clinical practice. Graduates with RDN credentials are required to conduct outcomes research and utilize evidence-based practice to translate research findings in clinical settings. Participating in research and applying research findings to dietetics and nutrition practice is useful and valued skills.

The master's degree alone does not lead to the registered dietitian credential. More information about becoming a registered dietitian is found here: [http://www.eatrightpro.org/resources/career/become-an-rdn-or-dtr](http://www.eatrightpro.org/resources/career/become-an-rdn-or-dtr)

An online master's degree for registered dietitians is offered through the Great Plains IDEA (p. 633) (Interactive Distance Education Alliance) program.

The application process for this program is online. Detailed instructions on how to apply are posted on the Department of Dietetics and Nutrition ([http://www.kumc.edu/school-of-health-professions/dietetics-and-nutrition/master-of-science-in-dietetics-and-nutrition.html](http://www.kumc.edu/school-of-health-professions/dietetics-and-nutrition/master-of-science-in-dietetics-and-nutrition.html)) website. Application deadlines are July 1 for fall semester, December 1 for spring semester and May 1 for summer semester.

**Admission requirements:**

- A bachelor's degree from a regionally accredited institution is required and must be documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts for all classes taken from all institutions attended are also required. The bachelor's degree may be in any field.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative grade-point average requirement.
- Applicants must possess a cumulative grade-point average of at least a 3.0 on a 4.0 scale for his or her bachelor's degree program.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.
- Before entering the program, students must have completed prerequisite courses in biochemistry (one semester), physiology (one semester), and nutrition (more than one semester preferred).
- A resume or curriculum vitae is required and must include prior employment and participation in professional and/or voluntary organizations (e.g., hospital, alumni or nonprofit.)
- A goal statement will be submitted in the online application and will explain the applicant's educational and professional goals.
- Three references are required. The references must be from a faculty member, adviser, employer, or other person familiar with the applicant's work and character. The recommendations may not be obtained from family members, friends, etc.
- The Joint Commission requires all incoming students to pay for a background check (p. 2415). This one-time fee must be paid directly to the company performing the background investigation. For more information, please see the School of Health Professions Background Check Instructions. ([http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html](http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html))

Applicants will be assessed based on these requirements. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs.

The Master of Science in Dietetics and Nutrition degree program consists of 30-33 credit hours depending on whether the student chooses the non-thesis or thesis option. This program offers course work in the biochemical, clinical, and behavioral aspects of nutrition.

**Degree requirements:**

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed.
- Completion of a minimum of 33 credit hours for the non-thesis option and a minimum of 30 credit hours for the thesis option.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Enrollment in a minimum of one credit hour the semester the student will graduate.

**Successful completion of the following courses:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 817</td>
<td>Seminar in Dietetics &amp; Nutrition I</td>
<td>1</td>
</tr>
<tr>
<td>DN 818</td>
<td>Seminar in Dietetics &amp; Nutrition II</td>
<td>1</td>
</tr>
<tr>
<td>DN 819</td>
<td>Scientific Writing for the Nutritional Sciences</td>
<td>1</td>
</tr>
<tr>
<td>DN 834</td>
<td>Methods of Research in Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DN 895</td>
<td>Advanced Macronutrients and Integrated Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>DN 896</td>
<td>Advanced Micronutrients and Integrated Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 704</td>
<td>Principles of Statistics in Public Health (or another Biostatistics 700-800 level course)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Non-thesis option**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 854</td>
<td>Special Problems in Dietetics and Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

**Thesis option**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number elective credit hours</td>
<td>15</td>
</tr>
</tbody>
</table>
• For the non-thesis option:
  • Successful completion of a general examination (p. 2416) the
    semester the student will graduate. The general exam is an oral
    exam administered by three faculty members that covers the
    competencies students are expected to gain through the M.S.
    degree program.
  • Completion of DN 854-Special Problems in Dietetics and Nutrition
    occurs the semester the student successfully defends the
    project. Students submit a written proposal and conduct an
    oral presentation of the proposal. If satisfactory, students then
    prepare a final written report and conduct an oral presentation
    (defense) of the report which is followed by questions from the
    research committee. The project is generally completed in 1 to 2
    semesters and may include one or more of the following:
    • written intensive review of the literature on a given topic,
      based on "Evidence-Based Analysis" procedures of the
      Academy of Nutrition and Dietetics;
    • participation with a faculty member in the development of a
      research proposal or grant;
    • participation with a faculty member in conducting a pilot
      project;
    • participation with a faculty member in the design,
      implementation, or evaluation of a program in a specialized
      area of dietetics practice;
    • and/or collection and/or analysis of data in conjunction with a
      faculty member engaged in research.
  • Successful completion of a minimum of 15 credit hours of elective
    coursework. For students in the KU dietetic internship program,
    12 hours of electives completed during the internship count as
    the elective hours. For master's students who are not former KU
    interns, up to 6 graduate credit hours of electives may be taken
    outside the department if the courses are relevant to the career
    goals of the student.

Degree requirements and course descriptions are subject to change.
Any courses taken as an equivalent must be approved by the Graduate
Director and the Office of Graduate Studies. In most cases, use the
catalog of the year student entered the program. Other years' catalogs».

Typical Plan of Study
Non-thesis option (33 minimum credit hours with
15 hours elective credits.)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 817 (one of Dietetic Internship courses as elective)</td>
<td>1</td>
<td>DN 818 (one of Dietetic Internship courses as elective)</td>
<td>1</td>
<td>DN 819 (required course)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DN 822 (one of Dietetic Internship courses as elective)</td>
<td>2</td>
<td>DN 823 (one of Dietetic Internship courses as elective)</td>
<td>2</td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DN 825 (one of Dietetic Internship courses as elective)</td>
<td>3</td>
<td>DN 826 (one of Dietetic Internship courses as elective)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DN 841 (one of Dietetic Internship courses as elective)</td>
<td>1</td>
<td>DN 842 (one of Dietetic Internship courses as elective)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• Successful completion of a minimum of 12 credit hours of elective
coursework. For students in the KU dietetic internship program,
14 hours of electives completed during the internship count as
the elective hours. For master's students who are not former KU
interns, up to 6 graduate credit hours of electives may be taken
outside the department if the courses are relevant to the career
goals of the student.

• For the thesis option:
  • Successful completion of a general examination (p. 2416) the
    semester the student will graduate. The general exam is an oral
    exam administered by three faculty members that covers the
    competencies students are expected to gain through the M.S.
    degree program.
  • Successful completion of a thesis defense (p. 2416) and of
    DN 899-Thesis. The defense occurs during the semester the
    student will graduate. Thesis research is usually conducted
    over 3 semesters and involves all aspects of research including
    preparing a proposal, collection and analysis of data, and a thesis.
    The thesis is presented in written form and orally in a presentation
    to the thesis committee followed by questions (or defense) and an
    oral examination before the thesis committee.
  • Successful thesis submission and publication (p. 2416)
    (according to Office of Graduate Studies policy.)
For students in the KU Dietetic Internship program, 14 hours of electives completed during the internship count toward the minimum 12 elective hours required.

For non-internship students, an elective course of their choice may be substituted for the internship electives indicated on this plan of study. Up to 6 graduate credit hours of electives may be taken outside the department if the courses are relevant to the career goals of the student.

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 704 (required course)</td>
<td>7</td>
<td>DN 854 (required course non-thesis option)</td>
<td>7</td>
</tr>
<tr>
<td>DN 834 (required course)</td>
<td>4</td>
<td>DN 896 (required course)</td>
<td>4</td>
</tr>
<tr>
<td>DN 895 (required course)</td>
<td>3</td>
<td>Project defense scheduled semester approved by committee to proceed. Enroll in DN 854 semester defend project.</td>
<td>3</td>
</tr>
<tr>
<td>General examination scheduled the final semester.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 33

**Thesis option (30 minimum credit hours with 12 hours elective credits.)**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 817 (one of Dietetic Internship courses as elective)</td>
<td>1</td>
<td>DN 818 (one of Dietetic Internship courses as elective)</td>
<td>1</td>
<td>DN 819 (required course)</td>
<td>1</td>
</tr>
<tr>
<td>DN 822 (one of Dietetic Internship courses as elective)</td>
<td>2</td>
<td>DN 823 (one of Dietetic Internship courses as elective)</td>
<td>2</td>
<td>DN 899 (required course thesis option)</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 704 (required course)</td>
<td>3</td>
<td>DN 896 (required course)</td>
<td>3</td>
<td></td>
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<tr>
<td>DN 834 (required course)</td>
<td>1</td>
<td>DN 899 (required course thesis option)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DN 895 (required course)</td>
<td>3</td>
<td>Thesis defense scheduled semester approved by committee to graduate. Enroll in DN 899 semester defend thesis.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Professional and Social Attributes: Students must exercise good judgment and promptly complete all responsibilities required of the program. They must develop mature, sensitive, and effective professional relationships with others. They must be able to tolerate taxing workloads and function effectively under stress. They must be able to adapt to changing environments, display flexibility, and function in the face of uncertainties and ambiguities. Concern for others, interpersonal competence, and motivation are requisites for the program.

Master of Science Great Plains IDEA program

The Great Plains IDEA (https://www.gpidea.org/program/dietetics/) (Interactive Distance Education Alliance) is a consortium of seven universities that provides an online 36-credit hour master’s degree in dietetics and nutrition. Admission is limited to credentialed registered dietitians or registry-eligible individuals having met all requirements of the Commission on Dietetic Registration (CDR). Students enroll for all courses through his or her “home” institution, but the actual courses are delivered online from any of the participating universities and their respective faculty members.

Great Plains IDEA Consortium Members

- University of Kansas Medical Center
- Kansas State University
- Colorado State University
- North Dakota State University
- Oklahoma State University
- South Dakota State University
- University of Nebraska- Lincoln

The program is administered by the KU Department of Dietetics and Nutrition (http://www.kumc.edu/school-of-health-professions/dietetics-and-nutrition/online-masters-program.html) for students selecting the KU Medical Center as his or her “home” institution. Completion of degree requirements depends upon several factors including the semester start date, the specific courses offered each semester, and the student’s desired course load each semester. Many students in this program are working professionals with job and family responsibilities, and this program allows the flexibility to take the number of courses that work in the student’s schedule.

Taking one to two courses a semester (including summers) should allow students to complete the program in approximately two to four years. More courses may be taken each semester provided they are available. To see the current schedule of course offerings, visit the Great Plains IDEA (https://www.gpidea.org/program/dietetics/) website and select the course matrix and course information links.
For questions about this program, please contact Kendra Spaeth by email at dietetics@kumc.edu
Tel: 913-588-5355 (711 TTY)

Students selecting KU Medical Center as the "home" institution apply directly to the Department of Dietetics and Nutrition for admission. These students will receive the master's degree from KU upon completion of the degree requirements. The application process for the program is online only. Detailed instructions on how to apply are posted on the Department of Dietetics and Nutrition (https://www.kumc.edu/school-of-health-professions/academics/departments/dietetics-and-nutrition/academics/online-masters-program/how-to-apply.html) website. Application deadlines are March 15 for fall semester and October 15 for spring semester.

Admission requirements:

- A bachelor's degree from a didactic program in dietetics (DPD) (https://www.eatrightpro.org/acend/accredited-programs/didactic-programs-in-dietetics/) or coordinated program in dietetics (https://www.eatrightpro.org/acend/accredited-programs/coordinated-programs-in-dietetics/) accredited by the Accreditation Council for Education in Nutrition and Dietetics is required and must be documented by submission of official transcript indicating the degree has been conferred before entering the program. Please note: the University of Kansas does not offer an accredited DPD program that meets this requirement.

Official transcripts for all courses taken from all institutions attended are also required.

- Applicants must possess a cumulative grade-point average of at least 3.0 on a 4.0 scale in his or her bachelor's degree program.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.

- Applicants must be credentialed as a registered dietitian by the Commission on Dietetic Registration (https://www.cdrnet.org/certifications/registration-eligibility-requirements-for-dietitians/) or international, must demonstrate they meet the requirements.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs.

The Great Plains IDEA (Interactive Distance Education Alliance) Master of Science in Dietetics and Nutrition consists of 36 credit hours. Students selecting KU Medical Center as their "home" institution will receive their degree from this institution if all degree requirements listed below are successfully completed. Students enroll for all courses through their home institution and the courses are listed as KU courses, but the actual course content is delivered online from any of the participating universities and their respective faculty members.

Degree requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIET 801</td>
<td>Current Issues or Trends</td>
<td>3</td>
</tr>
<tr>
<td>DIET 833</td>
<td>Principles of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>DIET 834</td>
<td>Methods of Research in Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DIET 885</td>
<td>Advanced Human Nutrition: Macronutrients</td>
<td>3</td>
</tr>
<tr>
<td>or DIET 886</td>
<td>Advanced Nutrition: Micronutrients</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Lipid Metabolism in Human Nutrition</td>
<td></td>
</tr>
<tr>
<td>DIET 896</td>
<td>Micronutrients in Human Nutrition</td>
<td>3</td>
</tr>
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</table>

Research courses

Choose course for Non-Thesis or Thesis option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIET 854</td>
<td>Non-Thesis Research</td>
<td>3</td>
</tr>
<tr>
<td>or DIET 899</td>
<td>Thesis</td>
<td></td>
</tr>
</tbody>
</table>

Elective courses

See list of elective course options below. 18

Total Hours 36

- A statement of career goals will be required in the online application and alternatively may be included in the resume.

- Three references are required. A reference should be from a faculty member, advisor, employer or other person familiar with the applicant's work and character. The recommendations may not be obtained from family members, friends, etc.

- The Joint Commission requires all incoming students to obtain a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). This one-time fee must be paid directly to the company performing the background investigation. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

Applicants must meet the following requirements. A bachelor's degree from a didactic program in dietetics (DPD) or international, must meet the requirements.

- Applicants must provide a resume or curriculum vitae that includes prior employment and participation in professional and/or voluntary organizations (e.g., hospital, alumni or nonprofit.)

- Graduates from accredited institutions will be required to complete an examination if the two countries have entered into an agreement to allow this process. The Commission on Dietetics Registration (https://www.cdrnet.org/certifications/registration-eligibility-requirements-for-dietitians/) currently has registration eligibility reciprocity agreements with the following foreign dietetic associations and regulatory boards:
  - Canada - Dietitians of Canada
  - Netherlands - Dutch Association of Dietitians and Ministry of Welfare, Public Health and Culture
  - Philippines - Philippine Professional Regulation Commission
  - Ireland - Irish Nutrition and Dietetic Institute
  - The Great Plains IDEA program acknowledges reciprocity as outlined by the Academy of Nutrition and Dietetics. (http://www.eatrightpro.org/resources/about-us/what-is-an-rdn-and-dtr/what-is-a-registered-dietitian-nutritionist/) Reciprocity is defined as individuals having completed the education and credentialing requirements in one country may be eligible for another country's credentialing examination if the two countries have entered into an agreement to allow this process. The Commission on Dietetics Registration (https://www.cdrnet.org/certifications/registration-eligibility-requirements-for-dietitians/) currently has registration eligibility reciprocity agreements with the following foreign dietetic associations and regulatory boards:
  - Canada - Dietitians of Canada
  - Netherlands - Dutch Association of Dietitians and Ministry of Welfare, Public Health and Culture
  - Philippines - Philippine Professional Regulation Commission
  - Ireland - Irish Nutrition and Dietetic Institute
  - Applicants must provide a resume or curriculum vitae that includes prior employment and participation in professional and/or voluntary organizations (e.g., hospital, alumni or nonprofit.)
  - A statement of career goals will be required in the online application and alternatively may be included in the resume.
  - Three references are required. A reference should be from a faculty member, advisor, employer or other person familiar with the applicant's work and character. The recommendations may not be obtained from family members, friends, etc.
  - The Joint Commission requires all incoming students to obtain a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). This one-time fee must be paid directly to the company performing the background investigation. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

The Great Plains IDEA program acknowledges reciprocity as outlined by the Academy of Nutrition and Dietetics. (http://www.eatrightpro.org/resources/about-us/what-is-an-rdn-and-dtr/what-is-a-registered-dietitian-nutritionist/) Reciprocity is defined as individuals having completed the education and credentialing requirements in one country may be eligible for another country's credentialing examination if the two countries have entered into an agreement to allow this process. The Commission on Dietetics Registration (https://www.cdrnet.org/certifications/registration-eligibility-requirements-for-dietitians/) currently has registration eligibility reciprocity agreements with the following foreign dietetic associations and regulatory boards:
• Enrollment in a minimum of one credit hour the semester the student will graduate.

• Successful completion of the following courses:

The Great Plains IDEA (Interactive Distance Education Alliance) Master of Science in Dietetics and Nutrition consists of 36 credit hours. Students selecting KU Medical Center as their “home” institution will receive their degree from this institution if all degree requirements listed below are successfully completed. Students enroll for all courses through their home institution and the courses are listed as KU courses, but the actual course content is delivered online from any of the participating universities and their respective faculty members.

• For the non-thesis option:
  • Successful completion of a general examination (http://catalog.ku.edu/graduate-studies/kumc/#programstext) the semester the student will graduate. The general exam is an oral exam administered by three faculty members that covers the competencies students are expected to gain through the M.S. degree program.
  • Completion of DIET 854 Non-Thesis Research occurs the semester the student successfully defends the project. Students submit a written proposal and conduct an oral presentation of the proposal. If satisfactory, students then prepare a final written report and conduct an oral presentation (defense) of the report which is followed by questions from the research committee. The project is generally completed in 1 to 3 semesters and may include one or more of the following:
    • written intensive review of the literature on a given topic, based on “Evidence-Based Analysis” procedures of the Academy of Nutrition and Dietetics;
    • participation with a faculty member in the development of a research proposal or grant;
    • participation with a faculty member in conducting a pilot project;
    • participation with a faculty member in the design, implementation, or evaluation of a program in a specialized area of dietetics practice; and/or
    • collection and/or analysis of data in conjunction with a faculty member engaged in research.

• For the thesis option:
  • Successful completion of a general examination (http://catalog.ku.edu/graduate-studies/kumc/#programstext) the semester the student will graduate. The general exam is an oral exam administered by three faculty members that covers the competencies students are expected to gain through the M.S. degree program.
  • Successful completion of a thesis defense (http://catalog.ku.edu/graduate-studies/kumc/#programstext) and of DIET 899 Thesis. The defense occurs during the semester the student will defend the thesis and graduate. Thesis research is usually conducted over 3 semesters and involves all aspects of research including preparing a proposal, collection and analysis of data, and a thesis. The thesis is presented in written form and orally in a presentation to the thesis committee followed by questions (or defense) and an oral examination before the thesis committee. The thesis defense must be completed in person.
  • Successful thesis submission and publication (http://catalog.ku.edu/graduate-studies/kumc/#programstext) (according to Office of Graduate Studies policy).

• Choose elective courses (minimum 18 credit hours required) from the following list. With approval from the Graduate Director, a course not on the list may be counted toward this requirement.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIET 800</td>
<td>Selected Topics in Dietetics</td>
<td>1-3</td>
</tr>
<tr>
<td>DIET 802</td>
<td>Foods Writing for Professionals</td>
<td>3</td>
</tr>
<tr>
<td>DIET 805</td>
<td>Entrepreneurship Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>DIET 819</td>
<td>Grant and Scientific Writing for the Professional</td>
<td>3</td>
</tr>
<tr>
<td>DIET 822</td>
<td>Healthcare Administration</td>
<td>3</td>
</tr>
<tr>
<td>DIET 824</td>
<td>Financial Management and Cost Controls in Dietetics</td>
<td>3</td>
</tr>
<tr>
<td>DIET 829</td>
<td>Nutrition and Aging</td>
<td>3</td>
</tr>
<tr>
<td>DIET 830</td>
<td>Nutrition: a Focus on Life Stages</td>
<td>3</td>
</tr>
<tr>
<td>DIET 832</td>
<td>Functional Foods for Chronic Disease Prevention</td>
<td>3</td>
</tr>
<tr>
<td>DIET 837</td>
<td>Nutrition in Diabetes</td>
<td>3</td>
</tr>
<tr>
<td>DIET 838</td>
<td>Advanced Medical Nutrition Therapy</td>
<td>3</td>
</tr>
<tr>
<td>DIET 839</td>
<td>Clinical Aspects of Nutrition Support</td>
<td>3</td>
</tr>
<tr>
<td>DIET 840</td>
<td>Foundations of Leadership in Dietetics</td>
<td>3</td>
</tr>
<tr>
<td>DIET 841</td>
<td>International Nutrition and World Hunger</td>
<td>3</td>
</tr>
<tr>
<td>DIET 842</td>
<td>United States Public Health Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DIET 843</td>
<td>Nutrition Education in the Community</td>
<td>3</td>
</tr>
<tr>
<td>DIET 845</td>
<td>Nutritional Aspects of Oncology</td>
<td>3</td>
</tr>
<tr>
<td>DIET 846</td>
<td>Nutrition and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>DIET 862</td>
<td>Maternal and Child Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DIET 865</td>
<td>Nutrition and Human Performance</td>
<td>3</td>
</tr>
<tr>
<td>DIET 870</td>
<td>Nutrition Counseling and Education Methods</td>
<td>3</td>
</tr>
<tr>
<td>DIET 875</td>
<td>Pediatric Clinical Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DIET 876</td>
<td>Intervention for the Prevention &amp; Management of Obesity</td>
<td>3</td>
</tr>
<tr>
<td>DIET 880</td>
<td>Dietary and Herbal Supplements</td>
<td>3</td>
</tr>
<tr>
<td>DIET 881</td>
<td>Phytochemicals</td>
<td>3</td>
</tr>
<tr>
<td>DIET 887</td>
<td>Nutrition and Immunology</td>
<td>3</td>
</tr>
</tbody>
</table>

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs-.

**Typical Plan of Study**

**Non-thesis option (minimum 36 credit hours)**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIET 833 (core course)</td>
<td>3</td>
<td>DIET 834 (core course)</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
<td>Hours</td>
<td>Summer</td>
<td>Hours</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>DIET 886 (core course)</td>
<td>3</td>
<td>DIET 896 (core course)</td>
<td>3</td>
<td>DIET 854 (research course non-thesis option)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3 Elective</td>
<td>3</td>
<td>Project defense scheduled semester approved by committee to proceed. Enroll in DIET 854 semester defend project.</td>
<td>6</td>
<td>6</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Total Hours</th>
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<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIET 801 (core course)</td>
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<td></td>
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<tr>
<td>Elective</td>
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<table>
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<th>Year 3</th>
<th>Fall</th>
<th>Hours</th>
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</thead>
<tbody>
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<td></td>
<td>6</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Total Hours 36</th>
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</thead>
<tbody>
<tr>
<td>4</td>
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</table>

**Thesis option (minimum 36 credit hours)**

Students selecting the thesis option must complete the thesis defense in person.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DIET 833 (core course)</td>
<td>3</td>
<td>DIET 834 (core course)</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3 Elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Total Hours</th>
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<td></td>
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<td>6</td>
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</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIET 886 (core course)</td>
<td>3</td>
<td>DIET 896 (core course)</td>
<td>3</td>
<td>DIET 899 (research course thesis option)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3 Elective</td>
<td>3</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Total Hours</th>
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<tbody>
<tr>
<td></td>
<td>6</td>
<td>6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIET 999 (research course thesis option)</td>
<td>1</td>
<td>DIET 801 (core course)</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3 DIET 899 (research course thesis option)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

**Thesis defense scheduled semester approved by committee to graduate. Enroll in DIET 899 semester defend thesis. General examination scheduled the final semester.**

Reasonable accommodation will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to:

The Office for Academic Accommodations

Cyn Ukoko, Senior Coordinator of Academic Accommodations

913-945-7035 or 711 TTY

cukoko@kumc.edu

1006 Dykes Library

The Department of Dietetics & Nutrition and the University of Kansas Medical Center have a commitment to nondiscrimination, access and reasonable accommodation of students with disabilities. Therefore, all students admitted to the MS Degree in Dietetics & Nutrition must be able to meet the following requirements and expectations with or without an accommodation. The MS degree prepares students to practice dietetics and nutrition and to interpret and participate in research in nutrition within academic and healthcare organizations. Graduates need knowledge and skills to function in diverse practice and research settings. All students who are admitted into the MS degree program in Dietetics & Nutrition are able to do the following:

**Observe:** Students must be able to observe lectures, demonstrations, research, and practice situations in the practice and research of health sciences.

**Communicate:** Students must have the ability to use multiple communication techniques (oral, written, nonverbal, group process information technology, and esthetic endeavors) that enable them to communicate with clients, teachers, health providers, and faculty. Students must be able to report to members of the team, express accurate information to clients, and teach, explain, direct and counsel people.

**Psychomotor:** Students must have sufficient motor capacities and motilities to execute various tasks and physical maneuvers such as: collecting specimens and perform basic tests and physical assessments on individuals, e.g., finger sticks for blood glucose testing, using
glucometers, skin fold thickness, blood pressure, and placing feeding tubes; working in institutional and food demonstration kitchens to prepare foods and direct employees involved in food services; and conducting patient visits individually and with health care team members to provide nutrition care. Graduate students who are not involved with clinical experiences are expected to demonstrate during their research assistantship sufficient motor capabilities and motilities to execute various tasks similar to those in the clinical rotations.

**Intellectual and Cognitive Abilities:** Students must be able to measure, calculate reason, analyze, synthesize, integrate, and remember to apply information. Creative problem solving and clinical reasoning requires all of these intellectual abilities.

**Professional and Social Attributes:** Students must exercise good judgment and promptly complete all responsibilities required of the program. They must develop mature, sensitive, and effective professional relationships with others. They must be able to tolerate taxing workloads and function effectively under stress. They must be able to adapt to changing environments, display flexibility, and function in the face of uncertainties and ambiguities. Concern for others, interpersonal competence, and motivation are requisites for the program.

## Doctor of Clinical Nutrition

The Doctorate in Clinical Nutrition (DCN) program is designed for students with a registered dietitian credential (RDN), with current professional licensure when required by their state, a Master's degree, and currently working in the field of nutrition and dietetics. This advanced degree will broaden the knowledge base and enhance critical thinking skills to keep pace with the medical complexity of today's clinical nutrition practice. Students will expand their interprofessional experiences, communication skills, medical nutrition therapy skills, management and leadership skills, and research. The program is offered by the KU Department of Dietetics.

Graduates will be prepared for leadership roles in clinical nutrition or higher education settings through cutting-edge coursework and completion of outcomes-based research projects. Educators, employers and practitioners recognize the competitive advantage that an advanced degree offers to elevate graduates as experts in the field.

Evidence-based practice requires outcomes research to determine best practices. Advanced-level practitioners need strong research skills to develop and direct appropriate and valuable research projects. Program faculty conduct human nutrition research and are well-equipped to mentor students through the research process.

The program is offered fully online, with one orientation and experiential learning campus visit required. The program faculty are located at the KU Medical Center campus of the University of Kansas, which along with The University of Kansas Health System forms the region's top academic health center. The University of Kansas is a major comprehensive research and training institution serving as a center for learning, scholarship, and creative endeavor.

The mission of the Doctorate of Clinical Nutrition is to serve the citizens of Kansas, the region, and the nation by producing advanced-level nutrition and dietetic practitioners, transformational leaders and researchers.

### Academic Goals of Program

- To graduate students with mastery of applied medical nutrition science for advanced-level practice.
- To produce graduates who apply existing knowledge and research to clinical settings, evaluate and disseminate findings to advance clinical practice.
- To produce graduates with mastery of interprofessional collaboration, critical thinking, communication, management and leadership skills.

Application for admission to the DCN program will be made through the Department of Dietetics and Nutrition. Application deadlines are February 1 for fall semester entry and September 1 for spring semester entry. Applicants meeting criteria will undergo a standardized screening interview by DN faculty before acceptance. The following materials are required for admission:

1. Be an RDN with current professional licensure when required by their state.
2. A Master's degree
3. Currently working in the field of nutrition and dietetics (may be part time)
4. Completed graduate application form (including letter of intent with professional goals)
5. Official transcripts from all colleges and/or universities attended with final degrees posted.
6. Three letters of recommendation from supervisors, faculty or advisors in the field.
7. International students must reside in a country that has reciprocity with Commission on Dietetic Registration. Official TOEFL exam scores for international applicants sent directly to KU Medical Center (Institution code 6875). Minimum English proficiency requirements are set by KU Medical Center Office of Graduate Studies and are posted online at https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html
8. Minimum GPA requirements for admission to KU as a graduate student: An undergraduate cumulative GPA of 3.0 or better is required for regular admission status. Previous graduate coursework must have a cumulative GPA of 3.0 or better for admission.

### Degree requirements:

The DCN program would require a total of 48 credit hours. The 39 credits of coursework are offered entirely online. The Advanced Clinical Nutrition Residency and Applied Research Project (see details below) would be completed within a professional workplace with the guidance of their DCN advisor. These courses were specifically selected to enhance communication, collaboration and leadership skills, in addition to research skills and clinical nutrition skills.

- Degree requirements must be completed within a maximum of 8 years.
- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework
- Successful completion of the following courses:

## Communication, Collaboration and Leadership Core
• DN 920: Nutrition Communication for Advanced Practice, 3 credits.
• DN 910: Leadership Essentials in Clinical Nutrition, 3 credits.
• DN 950: Interprofessional Collaboration, 2 credits.
• DCLS 880: Principles of Interprofessional Education and Practice Theory, 1 credit

Research Core

• DN 930: Evidence Analysis in Clinical Nutrition, 3 credits.
• DN 932: Ethics in Clinical Nutrition Research, 1 credit.
• DN 934: Advanced Methods of Research in Clinical Nutrition, 3 credits.
• DN 941: Applied Nutrition Epidemiology, 3 credits.
• NURS 938: Informatics and Technology Applications, 2 credits.

Clinical Nutrition Core

• DN 838: Advanced Medical Nutrition Therapy, 3 credits.
• DN 870: Health Behavior Counseling, 3 credits.
• DN 915: Advanced Nutritional Assessment, 3 credits.
• DN 970: Pharmacology in Clinical Nutrition, 3 credits.
• DN 980: Nutrigenomics & Nutrigenetics in Health and Disease, 3 credits.
• One elective (see list, below), 3 credits.

DN 991: Applied Research Project, 6 credits

DN 992: Advanced Clinical Nutrition Residency, 3 credits (360 hours at workplace)

Select 1 elective class from the following as part of Clinical Nutrition Core Requirements

DN 829 Nutrition in Aging
3 hrs

DN 837 Nutrition in Diabetes
3 hrs

DN 839 Clinical Aspects of Nutrition Support
3 hrs

DN 842 U.S. Public Health Nutrition
3 hrs

DN 865 Nutrition in Sports & Exercise
3 hrs

DN 875 Pediatric Clinical Nutrition
3 hrs

DN 876 Interventions for Prevention & Management of Obesity
3 hrs

DN 880 Dietary and Herbal Supplements
3 hrs

DN 881 Intro to Dietetics and Integrative Medicine
3 hrs

DN 882 Nutrition Approach to Inflammation Immune Regulation
3 hrs

DN 884 Diet, Physical Activity and Cancer
3 hrs

DN 885 Nutritional Biochemistry
3 hrs

DN 895 Advanced Macronutrients and Integrated Metabolism
3 hrs

DN 896 Advanced Micronutrients and Integrated Metabolism
3 hrs

• Advanced Clinical Nutrition Residency (3 hrs): The residency experience is designed to span 360 hours and will be completed within a professional workplace setting. Students will identify an area of practice through which they will provide leadership to develop a research-based clinical initiative or program. Upon completion, the students will provide their clinical team with the program or clinical initiative, along with program evaluation methods.

• Applied Research Project (3 hrs): A planned and approved research project which is advisor-guided, student-directed, and designed to enhance the student’s ability to apply graduate knowledge to achieve tangible and relevant outcomes will be completed. All aspects of this translational research project will be included (i.e., planning, data collection, analysis and interpretation of results, preparation, and oral presentation of the project). The goal is a manuscript suitable for publication. Collaborative interprofessional patient care projects are strongly encouraged.

• DCN students actively working on their research project must maintain active enrollment each semester while in the research phase by enrolling in a suitable and repeatable course (DN 990). The final oral defense of the research project will be scheduled after the final draft of the manuscript has been accepted by the student’s graduate committee. The oral examination is a defense of the manuscript and can include questions about knowledge of clinical nutrition concepts and applications.

Year 1

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 910</td>
<td>3 DCLS 880</td>
<td>1 DN 920</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DN 915</td>
<td>3 DN 838</td>
<td>3 DN 934</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinical Core</td>
<td>3 DN 932</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>DN Elective</td>
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<td></td>
<td></td>
<td>6</td>
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</table>

Year 2

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 980</td>
<td>3 DN 930</td>
<td>3 DN 870</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRSG 938</td>
<td>2 DN 941</td>
<td>3 DN 970</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DN 991</td>
<td>1-6 DN 991</td>
<td>1-6 DN 950</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DN 992</td>
<td>3 DN 991</td>
<td>1-6</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>6-11</td>
<td>10-15</td>
<td>9-14</td>
</tr>
</tbody>
</table>

Total Hours 45-60

Reasonable accommodation will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should
Academic Objectives of Program

• To graduate students capable of conducting research using appropriate research methods, ethical procedures and statistical analysis.

• To graduate students with advanced knowledge in the nutritional sciences who will contribute to the growing body of knowledge in the medical nutrition science arena.
• To graduate students who demonstrate professional attributes such as advocacy, critical thinking, flexibility, time management, and work ethic within various organization cultures.
• To enrich the scholarly and collegial culture of the Department of Dietetics and Nutrition at KU Medical Center.

This program emphasizes course work in the core science of nutrition (integration of nutrition with biochemistry and physiology), biostatistics and human nutrition research using advanced research methodology. The course work required depends upon whether the student is accepted to the program from a bachelor's or master's degree program, as well as on the area of study of these degrees (nutrition, biological sciences or other areas of study). Detailed instructions on how to apply are posted on the Department of Dietetics and Nutrition (https://www.kumc.edu/school-of-health-professions/academics/departments/dietetics-and-nutrition/academics/phd-in-medical-nutrition-science/how-to-apply.html) website. Application deadlines are February 1 for fall semester entry and September 1 for spring semester entry.

Admission requirements:
• A bachelor's degree or master's degree from a regionally accredited institution is required and must be documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts must be submitted for all courses taken at every institution. The bachelor's and/or master's degree should be in nutrition or other biological sciences. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative grade-point average requirement.
• A cumulative grade-point average of at least a 3.0 on a 4.0 scale for the bachelor's degree is required.
• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.
• Before entering the program, students must have completed prerequisite courses in biochemistry (one semester), physiology (one semester), and nutrition (more than one semester preferred).
• A resume or curriculum vitae is required and must include prior employment and participation in professional and/or voluntary organizations (e.g., hospital, alumni or nonprofit.)
• A goal statement will be submitted detailing the applicant's educational and professional goals.
• Three references are required. A reference provides a professional recommendation on the applicant's behalf. It is preferred that college instructors, academic advisors or supervisors provide these recommendations. The recommendations may not be obtained from family members or friends.
• The Joint Commission requires all incoming students to pay for a background check (https://catalog.ku.edu/graduate-studies/kumc/#BackgroundCheck). This one-time fee must be paid directly to the company performing the background investigation. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs».

The Ph.D. in Medical Nutrition Science degree program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Relevant prior graduate work and the student's research interests are taken into consideration in setting up individual programs of study leading to the Ph.D.

The program offers a great deal of flexibility. RDs embedded in clinical departments may continue to be employed and may choose to do their dissertation research on clinical problems relevant to the clinical population with whom they work. Students may also do their dissertation research on a nutrition problem with a mentor from a clinical department (and funded by that individual), however, the dissertation committee must be chaired by a member of the Department of Dietetics and Nutrition holding one or more degrees in nutrition. The total course work required depends upon whether the student is accepted to the program from a bachelor's or a master's degree, and it depends upon the area of study of that degree (nutrition, biological sciences or other areas of study). The hours for completion and suggested coursework is determined by the student's research advisor and research committee.

Degree requirements:
• Degree requirements are normally completed within 4 years of admission to the program although a maximum of 8 years is allowed.
• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
• Successful completion of the University's Research Skills and Responsible Scholarship (http://catalog.ku.edu/graduate-studies/kumc/#programstext) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
• Successful completion of DN 900 Techniques in Nutrition Research and Human Subject certification meets the Research Skills requirement.
• Successful completion of GSMC 856 Introduction to Research Ethics meets the Responsible Scholarship requirement.
• Successful completion of the Residence Requirement (http://catalog.ku.edu/graduate-studies/kumc/#programstext) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
• Successful completion of the Qualifying (written) Examination. This examination takes place after completion of DN 895 and DN 896. The goal of this examination is to assess that a doctoral aspirant has the necessary nutrition knowledge and analytical, communication and writing skills to successfully complete a PhD degree.
• Successful completion of the Oral Comprehensive Examination (http://catalog.ku.edu/graduate-studies/kumc/#programstext). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination. The Ph.D. candidate must submit a written dissertation proposal describing an original research project in some aspect of nutrition research, and defend the proposal in a comprehensive oral exam before beginning the dissertation research. For this examination, students must: exhibit the potential for original scientific thought; be familiar with the relevant literature and be able to identify significant research questions in their field; have a good understanding of the underlying principles of the experimental
Successful completion of the Post-Comprehensive Enrollment (http://catalog.ku.edu/graduate-studies/kumc/#programstext) requirement.

- Enrollment in a minimum of one (1) credit hour of DN 999 Dissertation the semester the student will defend dissertation and graduate.
- Successful completion of the Final Oral Examination (http://catalog.ku.edu/graduate-studies/kumc/#programstext) (dissertation defense.) The dissertation should be comparable in scope to justify first authorship on a rigorously peer-reviewed manuscript. Students qualifying for a PhD degree in Medical Nutrition Science must have at least one first-author peer-reviewed research publication in review and at least one additional first-author publication prepared for submission at the time of the defense. Students are encouraged to submit their work for publication well before the defense if possible, especially if they wish to be competitive for a postdoctoral research position.
- Successful Dissertation Submission and Publication (http://catalog.ku.edu/graduate-studies/kumc/#programstext) (according to Office of Graduate Studies policy.)
- Successful completion of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 890</td>
<td>Advanced Macronutrients and Integrated Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>DN 896</td>
<td>Advanced Micronutrients and Integrated Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>DN 900</td>
<td>Techniques in Nutrition Research</td>
<td>3</td>
</tr>
<tr>
<td>DN 901</td>
<td>Graduate Seminar in Nutrition (take for 1 credit hour two different semesters)</td>
<td>1</td>
</tr>
<tr>
<td>DN 901</td>
<td>Graduate Seminar in Nutrition (take for 1 credit hour two different semesters)</td>
<td>1</td>
</tr>
<tr>
<td>DN 990</td>
<td>Doctoral Research (minimum 9 credit hours required for degree with no more than 9 credit hours taken in a single semester)</td>
<td>9</td>
</tr>
</tbody>
</table>

Core Courses from Outside Department

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 720</td>
<td>Analysis of Variance</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 730</td>
<td>Applied Linear Regression</td>
<td>3</td>
</tr>
<tr>
<td>GSAMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
</tbody>
</table>

Dissertation

Minimum required is 1 credit hour

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 999</td>
<td>Dissertation (this course may be taken multiple semesters while writing the dissertation )</td>
<td>1-6</td>
</tr>
</tbody>
</table>

- Specific elective courses required by the student’s research committee are dependent upon the student’s area of research concentration. The total elective hours may vary according to needs. Elective courses may be chosen from the following list but are not limited to this list. Electives chosen are the ultimate decision of the student’s research advisor and research committee.

Options for General Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN 800</td>
<td>Selected Topics in Clinical Dietetics:______</td>
<td>1-6</td>
</tr>
<tr>
<td>DN 810</td>
<td>Nutrition Assessment</td>
<td>3</td>
</tr>
<tr>
<td>DN 817</td>
<td>Seminar in Dietetics &amp; Nutrition I</td>
<td>1</td>
</tr>
<tr>
<td>DN 818</td>
<td>Seminar in Dietetics &amp; Nutrition II</td>
<td>1</td>
</tr>
<tr>
<td>DN 819</td>
<td>Scientific Writing for the Nutritional Sciences</td>
<td>1</td>
</tr>
<tr>
<td>DN 820</td>
<td>Nutrition Education Skills for School Teachers</td>
<td>3</td>
</tr>
<tr>
<td>DN 822</td>
<td>Management Dietetics &amp; Nutrition I</td>
<td>2</td>
</tr>
<tr>
<td>DN 823</td>
<td>Management Dietetics &amp; Nutrition II</td>
<td>2</td>
</tr>
<tr>
<td>DN 825</td>
<td>Medical Nutrition Therapy I</td>
<td>3</td>
</tr>
<tr>
<td>DN 826</td>
<td>Medical Nutrition Therapy II</td>
<td>3</td>
</tr>
<tr>
<td>DN 828</td>
<td>Clinical Education in Dietetics</td>
<td>2-3</td>
</tr>
<tr>
<td>DN 829</td>
<td>Nutrition and Aging</td>
<td>3</td>
</tr>
<tr>
<td>DN 830</td>
<td>Food Technology</td>
<td>2-3</td>
</tr>
<tr>
<td>DN 834</td>
<td>Methods of Research in Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DN 836</td>
<td>Biochemical, Physiological, and Genetic Aspects of Human Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DN 838</td>
<td>Advanced Medical Nutrition Therapy</td>
<td>3</td>
</tr>
<tr>
<td>DN 839</td>
<td>Clinical Aspects of Nutrition Support</td>
<td>3</td>
</tr>
<tr>
<td>DN 840</td>
<td>Advanced Topics in Nutrition</td>
<td>1-2</td>
</tr>
<tr>
<td>DN 841</td>
<td>International Nutrition</td>
<td>1-3</td>
</tr>
<tr>
<td>DN 842</td>
<td>United States Public Health Nutrition</td>
<td>1-3</td>
</tr>
<tr>
<td>DN 854</td>
<td>Special Problems in Dietetics and Nutrition</td>
<td>1-4</td>
</tr>
<tr>
<td>DN 857</td>
<td>Motivational Interviewing in Public Health Settings</td>
<td>1</td>
</tr>
<tr>
<td>DN 862</td>
<td>Maternal and Child Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DN 865</td>
<td>Nutrition in Sports and Exercise</td>
<td>3</td>
</tr>
<tr>
<td>DN 870</td>
<td>Health Behavior Counseling</td>
<td>3</td>
</tr>
<tr>
<td>DN 875</td>
<td>Pediatric Clinical Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>DN 876</td>
<td>Intervention for the Prevention &amp; Management of Obesity</td>
<td>3</td>
</tr>
<tr>
<td>DN 880</td>
<td>Dietary and Herbal Supplements</td>
<td>2-3</td>
</tr>
<tr>
<td>DN 885</td>
<td>Nutritional Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>DN 897</td>
<td>Micronutrient Research in Human Nutrition</td>
<td>1</td>
</tr>
</tbody>
</table>

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs—.

Students may start this program in the fall or spring semester. Th plan of study below shows a typical progression if the student starts in the fall semester. Course requirements are based on recommendations of the students’ academic advisory committee.
## Typical Plan of Study

### Year 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DN 895</td>
<td>3</td>
<td>DN 896</td>
<td></td>
<td></td>
<td>3 Qualifying (written) Exam is usually completed this semester after completion of DN 895 and DN 896.</td>
</tr>
<tr>
<td></td>
<td>DN 890</td>
<td>2</td>
<td>BIOS 720</td>
<td>3</td>
<td>DN 900</td>
<td>3</td>
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<td></td>
<td>5</td>
<td></td>
<td>6</td>
<td></td>
<td>3</td>
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</table>

### Year 2

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DN 890 (or elective)</td>
<td>2-3</td>
<td>DN 890 (or elective)</td>
<td>2-3</td>
<td>DN 980, 890, or 990</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DN 901</td>
<td>1</td>
<td>DN 901</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>BIOS 730</td>
<td>3</td>
<td>BIOS 740</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oral Comprehensive Exam may be scheduled as early as this semester if approved by committee to proceed.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>6-7</td>
<td>6-7</td>
<td>3</td>
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</tr>
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</table>

### Year 3

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DN 990</td>
<td>3-6</td>
<td>DN 990</td>
<td>3-6</td>
<td>DN 990</td>
<td>3-6</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>1-3</td>
<td>Elective</td>
<td>1-3</td>
<td>Elective</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Enroll in minimum 6 credit hours. Students may petition to reduce their hours to 1 credit per semester through the semester they successfully complete their dissertation defense. To do so, students must have completed 18 credits. Credits taken the semester the oral comprehensive exam is passed can be counted toward the 18 credits required for this petition.

### Year 4

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>DN 999</td>
<td>1</td>
<td>DN 999</td>
<td>1</td>
</tr>
</tbody>
</table>

Final Oral Exam (dissertation defense) may be scheduled as early as this semester if approved by committee to defend and graduate.

### Total Hours 43-60

Reasonable accommodation will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to:

The Office for Academic Accommodations
Cyn Ukoko, Senior Coordinator of Academic Accommodations
913-945-7035 or 711 TTY
cukoko@kumc.edu
1040 Dykes Library

The Department of Dietetics & Nutrition and the University of Kansas Medical Center have a commitment to nondiscrimination, access and reasonable accommodation of students with disabilities. Therefore, all students admitted to the PhD Degree in Medical Nutrition Science must be able to meet the following requirements and expectations with or without an accommodation. The PhD degree prepares students to practice dietetics and nutrition and to interpret and participate in research in nutrition within academic and healthcare organizations. Graduates need knowledge and skills to function in diverse practice and research settings. All students who are admitted into the PhD degree program in Dietetics & Nutrition are able to do the following:

**Observe:** Specific observation skills include, but are not limited to, being able to accurately assess lectures, demonstrations, research, and practice situations in the practice and research of health sciences.

**Communicate:** Students must have the ability to use multiple communication techniques (oral, written, nonverbal) that enable them to communicate with clients, teachers, health providers, and faculty. Students must be able to report to members of the team, express accurate information to clients, and teach, explain, direct and counsel people.

**Psychomotor:** Students must have sufficient motor capacities and motilities to be able to generate, calculate, record, evaluate and transit information; prepare assignments; deliver public presentations to large and small audiences; collect specimens and perform basic tests and...
physical assessments on individuals, e.g. anthropometric assessments, finger sticks for blood glucose testing, using glucometers, assessing skin fold thickness, taking blood pressure; and/or working in institutional and food demonstration kitchens.

**Intellectual and Cognitive Abilities:** Students must be able to measure, calculate reason, analyze, synthesize, integrate, and remember to apply information. Creative problem solving and clinical reasoning requires all of these intellectual abilities.

**Professional and Social Attributes:** Students must exercise good judgment and promptly complete all responsibilities required of the program. They must develop mature, sensitive, and effective professional relationships with others. They must be able to tolerate taxing workloads and function effectively under stress. They must be able to adapt to changing environments, display flexibility, and function in the face of uncertainties and ambiguities. Concern for others, interpersonal competence, and motivation are requisites for the program.

## Health Information Management

The University of Kansas offers a bachelor’s degree in health information management, an exciting health profession focused on managing health data and information to improve health care delivery. This degree program entails the theory and application of this health profession with an emphasis on hands-on applied learning, as well as interprofessional education activities with other health care professionals in training. The curriculum focuses on health care management, data and information management practices, health information systems and technology, types of health care settings and how health services are delivered, and clinical concepts. Students in this program complete their final two years of their bachelor degree at the University of Kansas Medical Center campus.

Graduates of this program are positioned to become leaders in health care with the skills required to analyze and manage health data and information, including the systems, processes, and teams of people who work with health data and information. Those with a degree in health information management may find work in various settings including at health information technology companies, hospitals, physician offices, health insurance companies, and government agencies, among others. To learn more about this program and the profession of health information management, please visit the program website (http://www.kumc.edu/school-of-health-professions/health-information-management/academic-programs.html).

Upon successful completion of the program, students are eligible to take the American Health Information Management Association’s certification exam. Graduates passing this exam become credentialed and nationally recognized as a registered health information administrator (RHIA).

The bachelor’s degree in health information management is accredited by the Commission on Accreditation for Health Informatics and Information Management (http://www.cahiim.org/)

Students interested in entering this field should contact an advisor (http://www.kumc.edu/school-of-health-professions/health-information-management/about-us.html) as early as possible in their collegiate careers to ensure prerequisite courses are completed on schedule. For more information, view the frequently asked questions (http://www.kumc.edu/school-of-health-professions/health-information-management/frequently-asked-questions.html) for prospective students.

### Courses

**HEIM 177. First Year Seminar. 3 Credits.**

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in health data and management. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience and the University Core Curriculum Committee. Prerequisite: First-time freshman status.

**HEIM 210. Introduction to Healthcare. 1 Credits.**

This course is an introductory overview of the United States healthcare system. Course content emphasizes organizational structures and patient care settings in healthcare, healthcare professionals and their roles, as well as laws and regulations that influence how healthcare is paid for, quality is assessed, and healthcare data is protected. Current events in healthcare are also addressed. Open to all students.

**HEIM 230. Medical Terminology. 3 Credits.**

A study of the language of medicine including word construction, definitions, medical abbreviations, and use of terms related to various areas of medical science and health professions. Course requires students to be able to break down medical terms, understand their meanings and pronounce them correctly. This online course is designed for students interested in clinical and health professions.

**HEIM 401. Introduction to Health Information Management (HIM). 3 Credits.**

This course introduces students to the foundational concepts of health record content, characteristics and requirements, along with the operational processes designed to support and safeguard the healthcare data and information contained therein. Joint Commission survey process is also included. Industry standard software applications are used for applied, hands-on learning in this course.

**HEIM 415. Healthcare Delivery Systems. 3 Credits.**

This course is an in-depth overview of the United States healthcare system and focuses on the structure and function of services across settings. Special emphasis is placed on the history of healthcare, reimbursements and financing, health policy, outcomes (cost, quality, access) and the integration of care across delivery settings using health information technology.

**HEIM 420. Legal Aspects of Healthcare. 3 Credits.**

This course introduces the student to some of the basic legal principles found in healthcare and health information management (HIM). Fundamentals of law including statutory, regulatory, and judiciary practices are reviewed in the context of HIM including tort and liability. Emphasis is placed on HIPAA regulations. Patient legal rights and responsibilities as related to their healthcare are included, as well as fraud and abuse prevention and compliance.

**HEIM 425. Pharmacology Concepts for Health Information Management. 2 Credits.**

A fundamental overview of how drugs affect the human body and how the body impacts drugs used in pharmacotherapy. This course is designed to provide the student with the knowledge necessary for managing patient health information specific to medication administration and management. This course also covers pharmacology topics relevant to analyzing medication administration documentation in the patient health record. Prerequisite: Admission to BS in HIM program or instructor permission.

**HEIM 435. Clinical Concepts for Health Information Management. 3 Credits.**

This course examines ways in which health information professionals apply knowledge of clinical concepts in professional practice. Course content surveys professional practice roles and application of clinical
knowledge in daily work, clinical documentation in health records, as well as diseases and conditions affecting the various body systems. Prerequisite: Anatomy and physiology lecture and lab, medical terminology, or instructor consent.

**HEIM 450. Introduction to Professional Practices Experiences. 1 Credits.**
This course is designed to provide students a better understanding of the various career opportunities in the Health Information Management field and develop skills required for professional environments. The emphasis is on professional behavior for health information management professionals in the workplace. Course content is intended to prepare students for site visits, professional practice experiences, internships, and their future careers.

**HEIM 485. Independent Study in Health Information Management. 1-10 Credits.**
The content will vary depending on material appropriate to students. May be repeated for additional credit utilizing a variety of projects and special assignments. Prerequisite: Permission of the program director.

**HEIM 501. Information Resources and Professional Development. 2 Credits.**
This course prepares students to effectively utilize information resources and technology on an academic medical center campus to foster success in the Health Information Management program, professional practice experiences and the health professions. Students will learn to apply software applications, project management strategies, and professional writing and literacy skills. This course has a special emphasis on professionalism, self-awareness, communication, collaboration and critical thinking.

**HEIM 510. Professional Practice Experience / Lab I. 1 Credits.**
Through supervised learning situations, students are given opportunities to visit different types of healthcare facilities in the area. These opportunities vary from year-to-year based upon availability. Opportunities might include (but not be limited to) developing competence while practicing a specific HIM function in an actual HIM department, exploring nontraditional HIM career roles, or visiting with and interviewing a long term care, behavioral health, rehabilitation, or managed care HIM department manager. Prerequisite: Successful completion of Junior-level HIM academic courses or permission from instructor.

**HEIM 525. Healthcare Database and Architecture. 3 Credits.**
This course is designed to help students understand databases and database management systems. Students will learn to model and understand database design, in conjunction with learning methods to structure data as records, tables, or objects. Students will also learn how query languages are used for searching, sorting, reporting, and other "decision support" activities to best utilize the available data. Along with acquiring knowledge fundamental to management of the electronic health record (EHR), students will develop general technical knowledge to become capable health information professionals.

**HEIM 540. Health Information Systems. 3 Credits.**
The increased use of technology to support health data and information continues to evolve. This course introduces students to core topics and concepts in health informatics, emphasizing the implementation and management of health information systems. Students learn the conceptual framework and foundational elements of health informatics, selecting and implementing systems through the Systems Development Life Cycle (SDLC), data and information infrastructure, privacy and security aspects, human-computer interaction frameworks and usability concepts, and current trends and supporting technologies.

**HEIM 565. Clinical Terminologies and Classifications I. 4 Credits.**
This course introduces classification systems and terminologies used in healthcare and the relationship of these systems to patient care, research, and reimbursement systems. Course content provides study and application of coding guidelines, conventions, and rules of coding systems. Prerequisite: HEIM 435 or permission of the instructor.

**HEIM 567. Quality and Performance Improvement in Healthcare. 3 Credits.**
This course provides instruction on the principles of quality (QI) and performance improvement (PI) in the context of healthcare. PI drivers, models, techniques, and processes are covered including workflow reengineering. QI program organization, management and effectiveness are addressed. This course also includes content on patient safety, risk management, resource management and assessment of provider competence.

**HEIM 570. Introduction to Healthcare Management. 3 Credits.**
This course introduces theoretical and applicable concepts of management with an emphasis on managing in healthcare organizations. Students explore traditional management roles as well as leadership concepts. Course content depicts management in the context of a complex stakeholder environment evidenced in the healthcare system of the United States.

**HEIM 571. Human Resource Management in Healthcare. 3 Credits.**
Through the course students will have the opportunity to obtain working knowledge of human resource management. Technology and the continuing uncertainty of the economy have affected many aspects of human resource management; a number of tasks formerly performed by an HR office are now the purview of department managers. The course will familiarize students with the environment in which HR functions and the tasks involved in managing people. Topics include: social sustainability, culture, vision, staffing needs analysis, recruiting and selecting, training, developing, retaining, motivating, and legal rights of the people within the rapidly changing business environment. Prerequisite: HEIM 570 Healthcare Management.

**HEIM 575. Applied Statistics and Research Methods in Healthcare. 3 Credits.**
Emphasis is on the statistical analysis of healthcare data. Content includes hospital-based statistics, an introduction to epidemiological concepts, research design and methodology, research ethics and protocol, hypothesis testing, data management, analysis and presentation. Prerequisite: MATH 365 Elementary Statistics, or similar.

**HEIM 585. Healthcare Reimbursement. 3 Credits.**
This course examines complex financial systems within the United States healthcare system. Students explore content related to healthcare reimbursement methodologies and revenue cycle management.

**HEIM 635. Clinical Terminologies and Classifications II. 3 Credits.**
This course offers continued study of classification systems and terminologies used in healthcare and the relationship of these systems to patient care, research, and reimbursement systems. This course includes an introduction to the role of mapping between the various classification systems, nomenclatures and clinical terminologies used in healthcare. Prerequisite: HEIM 565 or permission of the instructor.

**HEIM 661. Management Principles in Health Care. 3 Credits.**
Introduction to basic principles of management and education and their application in the current healthcare environment. Course content includes: management, quality issues, budgeting, personnel issues, evaluation and application of management concepts, and educational methodologies. Cross listed with CLS 661 and RESP 661. Prerequisite:
Admission to the Health Information Management Program or permission of the instructor.

HEIM 665. Topics in Health Information Management. 2 Credits.
This course will utilize case studies, student discussions and guest presentations to address the latest developments in the management of health information. Students will examine key issues and trends within HIM through a series of seminar topics and presentations.

HEIM 670. Independent Study in Health Information Management. 1-10 Credits.
The content will vary depending on material appropriate to students. May be repeated for additional credit utilizing a variety of projects and special assignments. Prerequisite: Permission of the program director.

HEIM 671. Leadership in Healthcare. 3 Credits.
This course applies key concepts in personal, professional and organizational leadership for healthcare management. Special emphasis is on strategic leadership and planning for enterprise-wide health information strategies. Students will focus on leadership styles with an emphasis on self-discovery and professional development within an ever-changing environment.

HEIM 676. Healthcare Analytics. 3 Credits.
This course covers data-driven, computer-based tools and data analysis techniques that aid decision-making in healthcare. Effective use of data analysis increases the quality of strategic and operative planning and reduces the time used for decision-making processes. The course focuses on data-driven techniques and tools including such topics as medical coding systems, database fundamentals, business performance monitoring (managerial dashboards), and data mining applied to the healthcare industry. A number of data mining and predictive modeling approaches are discussed to address specific issues in healthcare.

HEIM 679. Information Governance in Healthcare. 3 Credits.
This course examines the role of health information managers as facilitators and champions of information governance in healthcare organizations. Course content includes an exploration of the topic of information governance, as well as introduces strategic considerations for enterprise processes, policies and procedures, standards, and metrics to support information governance efforts. Information is considered throughout the course as a strategic asset for organizational optimization. External users of information and related implications are also discussed.

HEIM 680. Management Internship. 3 Credits.
This is a four-week internship that provides the student with a management capstone experience with the activities and responsibilities commonly performed by the health information administrator. Students receive “hands-on” managerial experience. The internship may take place in any type of healthcare setting throughout the healthcare continuum and industry. Students interpret classroom theory into actual planning, organizing, assessing, and controlling situations in a health information department or related administrative or technical environment. Students are responsible for all costs including room, board, and transportation. Management internship sites are selected based upon such factors as: HIM experience, credentials of the student, expressed wishes from their internship choices. Prerequisite: Successful completion of all HIM professional coursework and/or permission of the instructor.

HEIM 681. Management Practicum. 3 Credits.
This practicum experience provides the student with a management capstone experience in the activities and responsibilities of the health information administrator. The specific practicum topics are selected based on the experience and credentials of the student. Prerequisite: Successful completion of all HIM professional coursework and/or permission of the instructor.

Bachelor of Science in Health Information Management

On-Campus Bachelor's Degree Program

In this bachelor's degree program, students work with the latest health information technology at the region's top academic health institution: the University of Kansas Medical Center (KUMC) in Kansas City, Kansas. Students typically enter this program after completing two years of prerequisite course work from a qualified accredited institution; once at KUMC, students complete their final 2-years of study. Graduates of this program are well-versed in managing health data and information, as well as managing people, processes, and information systems related to health data and information. For more information, please refer to the program website (http://www.kumc.edu/school-of-health-professions/health-information-management/bachelors-degree-for-undergraduates.html).

Online Bachelor's Degree-Completion Program

KU offers an online bachelor’s degree-completion program for military service members, veterans, and working professionals including those with the Registered Health Information Technician (RHIT) credential, individuals working in an area related to health information management, or credentialed professionals in another health care field. This program assists those who want to advance to a bachelor’s degree in health information management. As an online program, it offers convenience and flexibility for students. For more information, please refer to the program website (https://www.kumc.edu/school-of-health-professions/academics/departments/health-information-management/academics/bachelors-degree-completion-program-(online-rhit-to-rhia-).html).

Online Minor in Healthcare Management

KU offers a minor in healthcare management which introduces students to relevant topics for health care managers. Students complete coursework focused on health care administration, the United States health care system, health information privacy and security, finance and reimbursement concepts, and quality and performance improvement in health care. Students also gain knowledge and experience in health information systems and data management. Courses are offered online. For more information, please refer to the program website (https://www.kumc.edu/school-of-health-professions/academics/departments/health-information-management/academics/minor-in-health-care-management.html).

Prior to entering the program, students must complete two (2) years of undergraduate college course work – either from the KU Lawrence campus or another regionally accredited university or community college – with a total of at least 60 credit hours.

No grade lower than a “C” is accepted in any prerequisite course. An overall grade point average of 2.5 (on a 4.0 scale) for college course work is required to be eligible to apply.

Changes in health care require frequent curriculum content changes and course revisions. All prospective students should obtain ongoing advising from the department (http://www.kumc.edu/school-of-health-professions/health-information-management.html) to ensure the student's...
transcript meets current prerequisites. Additional advising is available at the Undergraduate Advising Center (http://advising.ku.edu/) in Lawrence.

**KU Students:** Students on the Lawrence campus should declare “prehealth information management” as their major. Please contact the academic advisor for the School of Health Professions at the Undergraduate Advising Center (http://advising.ku.edu/) for advising.

**Transfer Students:** Students from other institutions need to verify that prerequisites are completed. Using the CredTran system (https://credtran.ku.edu/), students can verify equivalent course work is transferable and will meet the program requirements. Please contact the program advisor at him@kumc.edu with questions or for assistance in transferring to KU.

International students, or those for whom English is a second language, may have additional requirements relative to language proficiency, residency, and citizenship status. See more information (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)

A background check is also required. Prospective students should review the program requirements and the complete list of application requirements on the department's website (https://www.kumc.edu/school-of-health-professions/health-information-management/academics.html).

### Prerequisites

**NOTE:** Students may still apply if currently enrolled or working toward prerequisite course work. However, all prerequisites must be completed before starting the program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>Biological Sciences</strong></td>
<td></td>
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<tr>
<td>BIOL 100</td>
<td>Principles of Biology (or other natural sciences course)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 200</td>
<td>Fundamentals of Financial Accounting</td>
<td>3-4</td>
</tr>
<tr>
<td>or ACCT 205</td>
<td>Survey of Accounting</td>
<td></td>
</tr>
<tr>
<td><strong>English</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td><strong>Oral Communication</strong></td>
<td></td>
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<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>Humanities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HUM 204</td>
<td>Western Civilization I (or other culture and diversity elective)</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 148</td>
<td>Reason and Argument <strong>This course will be required for applicants starting the program fall 2022.</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Health Care &amp; Other Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEIM 230</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
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</table>

**Total Hours 60**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEIM 210</td>
<td>Introduction to Healthcare <strong>This course will be required for applicants starting the program fall 2022.</strong></td>
<td>1</td>
</tr>
<tr>
<td>BLAW 301</td>
<td>Legal Aspects of Business (Other) <strong>This course will be required for applicants starting the program fall 2022.</strong></td>
<td>3</td>
</tr>
<tr>
<td>IST 310</td>
<td>Introduction to Information &amp; Management Systems <strong>This course will be required for applicants starting the program fall 2022.</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 49-50**

1. Students may choose any elective fulfilling the KU Core Goal 3, Natural Sciences (https://kucore.ku.edu/courses/).
2. BIOL 241 or BIOL 242 are lab courses for BIOL 240 and are recommended but not required.
3. BIOL 247 is the lab course for BIOL 246 and is recommended but not required.
4. KU requires students to take MATH 101 before taking ACCT 200; transfer students may not need to complete a MATH 101 equivalent if it is not required for the required accounting course.
5. Students may choose any elective fulfilling the KU Core Goal 4, Learning Outcome 2 (https://kucore.ku.edu/courses/).

**Curriculum**

**Junior**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HEIM 420</td>
<td><strong>This course will be required for applicants starting the program fall 2022.</strong></td>
<td>3</td>
</tr>
<tr>
<td>HEIM 450</td>
<td>1 HEIM 415</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 525</td>
<td>3 HEIM 425</td>
<td>2</td>
</tr>
<tr>
<td>HEIM 540</td>
<td>3 HEIM 435</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 565</td>
<td>4 HEIM 501</td>
<td>2</td>
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<tr>
<td>HEIM 570</td>
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<td>3</td>
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</tbody>
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14  16

**Senior**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>HEIM 665</td>
<td>2 HEIM 510</td>
<td>1</td>
</tr>
<tr>
<td>HEIM 671</td>
<td>3 HEIM 567</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 676</td>
<td>3 HEIM 571</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 679</td>
<td>3 HEIM 575</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 680</td>
<td>3 HEIM 585</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 635</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

14  16

**Total Hours 60**

The on-campus program begins each fall on the KU Medical Center campus in Kansas City, KS. and culminates in a 4-week capstone professional experience at the end of the spring semester of the second year. The online program begins both fall and spring semesters with individualized course plans.

Program requirements and course offerings are subject to change. Prospective students should visit the program website (http://www.kumc.edu/school-of-health-professions/health-information-management.html) for the latest information.
The minor in healthcare management provides students with an in-depth understanding of the U.S. health care delivery system, with special emphasis on legal, regulatory and reimbursement issues. Students are introduced to relevant topics for healthcare managers and will be trained in privacy, security and confidentiality practices, and related requirements for health care professionals.

In the program, students will examine the uniquely complex financial and reimbursement systems and the roles of quality and performance improvement in health care. Students will also gain knowledge and experience in health information systems, and specifically, electronic health care records and data management.

The minor requires students to complete 18 hours (6 courses) with a “C” or higher in all of the courses.

IMPORTANT NOTE: Courses are offered online.

Acceptance to this minor is subject to review. To request a declaration for the minor in healthcare management please visit the program website him.kumc.edu (http://him.kumc.edu).

<table>
<thead>
<tr>
<th>Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>HEIM 415</td>
<td>Healthcare Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 567</td>
<td>Quality and Performance Improvement in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 585</td>
<td>Healthcare Reimbursement</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 570</td>
<td>Introduction to Healthcare Management</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 420</td>
<td>Legal Aspects of Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 540</td>
<td>Health Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 18

Students who are admitted to the BS in HIM program may choose, if advisedly, to do so and to be appropriate, to apply to a BS in HIM bridge to Master of Health Services Administration (MHSA) degree option during their junior year. This bridge option provides a degree pathway for HIM students to complete a MHSA degree within 1 year of finishing their bachelor's degree. Application to this bridge program is competitive, and not all students who apply are accepted.

BS in HIM students admitted to the MHSA program through the bridge option, have a slightly modified HIM course schedule during their senior year as follows:

**Senior Year, Fall Term**

- HEIM 485 Independent Study – Health Statistics (1)
- HEIM 510 Professional Practice Experience/Lab I (1)
- HEIM 571 Human Resource Management in Healthcare (3)
- HEIM 585 Healthcare Reimbursement and Financing (3)
- HEIM 635 Clinical Terminologies & Classification Systems II (3)
- HP&M 819 Research for Healthcare Leaders (3) (MHSA program course)
- HP&M 858 Health and Social Behavior (3) (MHSA program course)
- HP&M 859 Professional Development (2) (MHSA program course)

**Senior Year, Spring Term**

- HEIM 665 Topics in Health Information Management (2)
- HEIM 676 Healthcare Analytics (3)
- HEIM 679 Information Governance in Healthcare (3)
- HEIM 680 Management Internship (3)

**Molecular Biotechnology**

Overview

KU's master's degree in molecular biotechnology program prepares students for advanced careers in molecular biotechnology-oriented clinical, industrial and research laboratories. During the 2-year (21 month, 38 credit hour) non-thesis program, students obtain training in the use and application of the molecular biology/biotechnology methodologies and instrumentation as well as critical thinking and troubleshooting skills.

The application of these skills to research and development is emphasized. The innovative curriculum is structured to provide broad-based knowledge and hands-on experience through course work and practica performed in biotechnology settings. Together with state-of-the-art research facilities and excellent faculty, the University of Kansas Medical Center is a premier location to study molecular biotechnology.

Applicants for this program are accepted online. Detailed instructions on how to apply are posted on the molecular biotechnology program (http://www.kumc.edu/school-of-health-professions/molecular-biotechnology/how-to-apply.html) website. Students are admitted for the fall semester only. Applications for the fall semester must be received by February 1 for first consideration.

**Admission requirements:**

- A bachelor’s degree in a life science (e.g., biochemistry, biology, cell biology, clinical laboratory science, microbiology, molecular biosciences, etc.) from a regionally accredited institution is required and must be documented by submission of official transcripts indicating the degree has been conferred. The bachelor's degree can be in progress at the time of application, but must be completed prior to the start of the program. An applicant with a bachelor's degree in other than a life science may be considered for admission provided the prerequisite course work has been successfully completed. Official transcripts for any courses from all institutions attended are also required.

Students with degrees from outside the U.S. are subject to transcript evaluation indicating the degree is equivalent to a U.S. bachelor's, master's or doctoral degree and meets the minimum cumulative grade-point average requirement. To meet this requirement, applicants must submit an official copy of the transcript evaluation.
Students receive training in the use and application of advanced biotechnology-oriented clinical, industrial, and research laboratories. Please note: transcripts and grades earned outside the U.S. must be evaluated, even if classes were taught in English and the transcript is written in English. For example, transcripts from India and other former British colonies with widespread English language use must also be evaluated.

- Applicants must possess a cumulative grade-point average of at least a 3.0 on a 4.0 scale for his or her bachelor’s degree program.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.
- A background check is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination score must be sent from Educational Testing Service to KU Medical Center using ETS institutional 6895. The general exam must have been taken within the last two (2) years and include verbal, quantitative and analytical scores. A subject test is not required.
- The following prerequisite courses should be completed before beginning the program:
  - Biochemistry – one semester
  - Calculus – one semester
  - Cell biology – one semester
  - Chemistry (general) – two semesters
  - Chemistry (organic) lecture and laboratory – at least one semester
  - Genetics – one semester
  - Physics – one semester
- A current resume or curriculum vitae is required and must include information on the applicant’s educational, professional, and research background. This document should include a history of both paid and unpaid research and laboratory experience, and any honors and awards. The applicant’s name appears in chronological order, a list of titles, authors, and complete references for any publications or abstracts on which the applicant’s work and character are required.
- A personal statement that describes applicant’s educational goals and career objectives will be submitted with the online application.
- Three references from a faculty member, advisor, employer or other person familiar with the applicant’s work and character are required. The recommendations may not be obtained from family members, friends, etc.
- Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».

The Master of Science in Molecular Biotechnology (M.S.) program is a two year non-thesis program that provides broad-based knowledge and skills to prepare students for advanced careers in molecular biotechnology-oriented clinical, industrial, and research laboratories. Students receive training in the use and application of advanced methodologies and instrumentation as well as critical thinking, troubleshooting, and communication skills. The application of these skills to research and development is emphasized. The curriculum is divided between core courses and practicum. The majority of the core courses (see list below) are completed during the first year of enrollment with the three practica completed during the second year in the program.

**Degree Requirements:**

- Degree requirements are normally completed within 2 years of admission to the degree program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.
- Successful completion of the core courses and the practicum which totals to 38 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tr>
<td>CLS 710</td>
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<td>2</td>
</tr>
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<td>Molecular Techniques Laboratory I</td>
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</tr>
<tr>
<td>CLS 720</td>
<td>Molecular Techniques II</td>
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<tr>
<td>CLS 721</td>
<td>Molecular Techniques Laboratory II</td>
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</tr>
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<td>CLS 740</td>
<td>Journal Club</td>
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<td>Scientific Writing</td>
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<tr>
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<td>Molecular Genetics</td>
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<td>Introduction to Biomedical Research I</td>
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<td>GSMC 853</td>
<td>Cellular Structure</td>
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<td>GSMC 854</td>
<td>Cell Communication</td>
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<tr>
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</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
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**Practicum**

For the three required practica, students work with investigators, laboratory staff, and other members of the practicum site in the ongoing activities of the practicum site. During the research-oriented practicum, students initially participate in an ongoing research project that leads to independent research activities. While enrolled in a practicum, the primary academic obligation is at the practicum site, and students engage in their practicum-associated activities on a full-time basis (i.e., eight hours a day, Monday through Thursday).

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<tr>
<td>CLS 752</td>
<td>Practicum III</td>
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</table>

**Total Hours** 38

- Successful completion of a general examination (p. 2416) the semester the student will graduate. This is a comprehensive examination, consisting of written and oral components. To satisfy
the written component, students write a grant proposal. Successful completion of the written component is required preliminary to taking the comprehensive oral examination of general knowledge of molecular biotechnology concepts and applications.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs ».

Typical Plan of Study

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<th>Year 1</th>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<th>Year 2</th>
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<th>Spring</th>
<th>Hours</th>
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<td>1</td>
<td>CLS 742</td>
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<td>CLS 751</td>
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<td>CLS 752</td>
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<tr>
<td></td>
<td>General Examination (comprehensive examination consisting of written and oral components)</td>
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<td>6</td>
<td>6</td>
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</tbody>
</table>

Total Hours 38

Technical Standards

Graduates of this program must have the knowledge and skills to function in a broad variety of research environments, including academic, industrial, and clinical settings. Therefore, the following abilities and expectations must be met by all students in the program.

1. Essential Observational Requirements
A Master of Science in Molecular Biotechnology student must be able to perform the following duties:

- Observe and perform laboratory procedures in which biological materials (e.g., proteins, nucleic acids, body fluids, cultured cells, and cellular samples) are analyzed by molecular biological methods.
- Characterize the color, odor, clarity, and viscosity of biological materials, reagents, or chemical reaction products.
- Read and comprehend text, numbers, and graphs displayed in print and other visual displays.
- Perform comparative observations of text, movement, shapes, graphs, colors, etc.

2. Essential Movement Requirements
A Master of Science in Molecular Biotechnology student must possess the ability to do the following:

- Move freely and safely about a laboratory.
- Reach laboratory benchtops and shelves, and lift a minimum of 25 pounds.
- Travel to laboratory sites for practical experience – sites may be located anywhere within the Kansas City metropolitan area.
- Perform moderately taxing continuous physical work over several hours.
- Control laboratory equipment and adjust instruments to perform laboratory procedures.
- Use an electronic keyboard generate, calculate, record, evaluate, and transmit information, and to operate laboratory instruments.

3. Essential Communication Requirements
A Master of Science in Molecular Biotechnology student must have the ability to complete the following responsibilities:

- Read and comprehend technical and professional materials (e.g., textbooks, journal articles, handbooks, and instruction manuals).
- Follow verbal or written instructions in order to correctly and independently perform laboratory procedures.
- Effectively, confidently, and sensitively converse with scientific staff at practicum sites regarding laboratory tests.
- Communicate verbally and in a recorded format (writing, typing, graphics, or telecommunication) with faculty members, fellow students, staff, and scientific staff.
- Independently prepare papers, prepare laboratory reports, and take paper, computer, and laboratory practical examinations.

4. Essential Intellectual Requirements
A Master of Science in Molecular Biotechnology student must exercise the following capabilities:

- Intellectual skills, including comprehension, measurement, mathematical calculation, problem solving, reasoning, integration, analysis, comparison, self-expression, and criticism.
- Sufficient judgment to recognize and correct performance deviations.

5. Essential Behavioral Requirements
A Master of Science in Molecular Biotechnology student must be capable of the following skills and abilities:

- Manage the use of time and be able to systematize actions in order to complete professional and technical tasks within realistic constraints.
- Possess the emotional health necessary to effectively employ intellect and exercise appropriate judgment.
- Demonstrate appropriate affective behaviors and mental attitudes to not jeopardize the emotional, physical, mental and behavioral safety of other individuals with whom there is interaction in academic and practicum settings.
- Possess the mental and emotional rigor to demonstrate respect to all people, including fellow students, faculty, and other individuals at practicum settings, without showing bias or preference on the basis of race, color, age, sex, religion or creed, national origin or ancestry, gender expression, gender identity, disability, veteran status, sexual orientation or genetic testing & screening.
- Perform technical procedures while experiencing the stresses of research environments (e.g., large number of tasks to complete.
in a limited amount of time), emergent demands (e.g., changes in procedures), and potentially distracting environments (i.e., high noise levels, crowding, complex visual stimuli).

- Adapt to professional and technical change and be flexible and creative.
- Recognize potentially hazardous materials, equipment, and situations and proceed safely in order to minimize risk of injury to self and nearby individuals.
- Honesty, compassion, a respect for ethics and responsibility. The student must be forthright about errors or uncertainty. The student must be able to critically evaluate her or his own performance, accept constructive criticism, and look for ways to improve. The student must be able to evaluate the performance of fellow students and tactfully offer constructive comments.

KU Medical Center is committed to equal opportunity for students with disabilities. All students admitted to the KU molecular biotechnology program must be able to meet the technical standards requirements and expectations with or without accommodation(s). Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to the following office:

Cyn Ukoko, Academic Accommodations Office
913-945-7035 (711 TTY)
cukoko@kumc.edu
1006 Dykes Library

Nuclear Medicine Technology

KU’s certificate program in nuclear medicine technology is a 12-month accredited program which prepares technologists to inject radiopharmaceuticals and use highly technical cameras and computers in a clinical setting. The program is a collaboration with the Department of Radiology and The University of Kansas Hospital together with the KU School of Health Professions at KU Medical Center in Kansas City, Kan.

A certificate from the University of Kansas is awarded to the student upon successful completion of the program. Graduates are eligible to take the national registry examinations given by the American Registry of Radiologic Technologists and/or the Nuclear Medicine Technology Certification Board.

More about this profession can be found on the program’s website (http://nuclearmedicine.kumc.edu/).


Courses

NMED 70. Introduction to Nuclear Medicine and Medical Law and Ethics for the Imaging Professional. 3.3 Credits.

An introductory overview of the field of nuclear medicine technology with includes medical terminology for clinical nuclear medicine, patient and nursing skills including phlebotomy and vital signs, departmental organization and function, and a basic overview of applied mathematical and statistical analysis used in clinical nuclear medicine. This course will also introduce to the imaging profession the legal aspects to patient care regarding patient rights, ethical theories, risk management, quality patient care. The student will participate in group discussion. Prerequisite: Acceptance into the Nuclear Medicine Training Program

NMED 71. Nuclear Chemistry and Physics. 2 Credits.

This course is designed to present the theories of nuclear chemistry and physics including theory of Bohr’s atom, radiation production, decay, physical half life and interaction with matter, chemical reactions and equations, review of periodic chart of elements and trilinear chart of nuclides. Prerequisite: College Physics and College Chemistry along with acceptance into the Nuclear Medicine Training Program

NMED 72. Radiopharmacy I. 3.4 Credits.

This course is designed to present the aspects of radiopharmaceuticals including safety and handling, methods of localization, pharmacology, dose calculation and record keeping, methods of production, and quality control. The course will begin to identify the clinical uses of radiopharmaceuticals as this course will be a prerequisite for Radiopharmacy II. Prerequisite: Acceptance into the Nuclear Medicine Training Program

NMED 73. Clinical Procedures I. 2.4 Credits.

This course is taught in modules corresponding to organ systems of the body. This course provides instruction in Skeletal, Liver and Spleen, Hepatobiliary and Respiratory systems. Each module includes: review of anatomy and physiology, cross-sectional anatomy, clinical indications for nuclear imaging, nuclear imaging procedures including radiopharmaceuticals for current clinical practices, image interpretation and review. Prerequisite: Acceptance into the Nuclear Medicine Training Program

NMED 74. Radiation Biology and Protection. 1.5 Credits.

This course is designed to provide the student with an understanding of the effects of radiation on the human body at the cellular, organ and whole body levels including late of effects of radiation exposure and the risk to benefits ratio. This course will provide the students with current federal and state regulations in regards to safe handling, disposal, record keeping, and licensing for the clinical use of radiation. Prerequisite: Acceptance into the Nuclear Medicine Training Program

NMED 75. Clinical Internship I. 6 Credits.

Through supervised learning situations in a clinical nuclear medicine imaging department the student will gain knowledge and be required to demonstrate competence in specific imaging of nuclear medicine procedures, radiopharmaceutical distribution, imaging instrumentation, patient safety, occupational safety, and quality control practices in the clinical setting. Prerequisite: Acceptance into the Nuclear Medicine Training Program

NMED 80. Nuclear Instrumentation, Medical Informatics and Quality Assurance. 2.5 Credits.

This course will include basic principles of operation, system configuration and performance characteristics of Scintillation cameras and PET systems, computers and quality control and assurance as required by manufacturer and regulatory agencies. It will introduce the student to various types of medical information systems and their uses in the medical imaging. Prerequisite: Acceptance into the Nuclear Medicine Training Program

NMED 82. Radiopharmacy II. 1 Credits.
This course is the advanced course to Radiopharmacy I. The students will have an understanding of the radiopharmaceuticals that are used in the clinical nuclear medicine department. This course will also cover monoclonal, polyclonal, peptides, PET, therapeutic radiopharmaceuticals, pharmacology, as well as advancement in research that is current on radiopharmaceuticals to be used in the nuclear clinical setting.

**Prerequisite:** Radiopharmacy I

**NMED 83. Clinical Procedures II. 8 Credits.**

This course is taught in modules corresponding to organ systems of the body. This course provides instruction in Genito-Urinary, Endocrine, EKG, Nuclear Cardiology, Infection/Tumor, Gastro-Intestinal, Neurology, PET, CT, Miscellaneous procedures, and Non-Imaging In-Vivo. Each module includes: review of anatomy and physiology, cross-sectional anatomy, clinical indications for nuclear imaging, nuclear imaging procedures including radiopharmaceuticals for current clinical practices, image interpretation and review. Prerequisite: Clinical Procedures I.

**NMED 84. Clinical Internship II. 8 Credits.**

Through supervised learning situations in a clinical nuclear medicine imaging department the student will gain knowledge and be required to demonstrate competence in specific imaging of nuclear medicine procedures, radiopharmaceutical distribution, imaging instrumentation, patient safety, occupational safety, and quality control practices in the clinical setting. Prerequisite: Clinical Internship I

**NMED 85. Research Methods and Health Administration. 1 Credits.**

This course is designed to familiarize the student in research methodology and advances in nuclear medicine for future developments. This course will also demonstrate the phases of research and research different divisions of the research cycle. The second portion of the class will familiarize the student with the administration techniques of health management. Health management will include billing, coding and budget and equipment selection processes of maintaining a nuclear medicine department. Prerequisite: Acceptance into the Nuclear Medicine Training Program.

**NMED 90. Seminar. 2.5 Credits.**

This course is designed to prepare the student for national boards in the filed of nuclear medicine technology. The student will be responsible for in class review of nuclear clinical procedures, nuclear instrumentation and quality assurance, radiopharmacy, radiation protection and patient care. Students will be required to attend guest lectures and video conferences. Prerequisite: Clinical Procedures I and II, Radiopharmacy I and II, Nuclear Instrumentation and Quality Assurance, Radiation Biology and Protection and Introduction to Nuclear Medicine

**NMED 91. Clinical Internship III. 6 Credits.**

Through supervised learning situations in a clinical nuclear medicine imaging department the student will gain knowledge and be required to demonstrate competence in specific imaging of nuclear medicine procedures, radiopharmaceutical distribution, imaging instrumentation, patient safety, occupational safety, and quality control practices in the clinical setting. Prerequisite: Clinical Internship II

**NMED 100. NMED Preceptorship. 10 Credits.**

The student will be exposed to the Positron Emission Tomography and Computed Tomography clinical imaging modules of the field of Nuclear Medicine. The student will observe and perform specified imaging procedures in the clinical setting as well as inject radiopharmaceuticals for the imaging procedure. The student will be responsible for their own learning experience in the fields of Positron Emission Tomography and Computed Tomography. This preceptorship will provide the student with patient care clinical experience. Prerequisite: Board certified in Nuclear Medicine Technology by the American Registry of Radiologic Technologists (A.R.T.) or Nuclear Medicine Technology Certification Board (N.M.T.C.B.)

**Certificate in Nuclear Medicine Technology**

KU's certificate program in nuclear medicine technology is a 12-month accredited program which prepares technologists to inject radiopharmaceuticals and use highly technical cameras and computers in a clinical setting. The program is a collaboration with the Department of Radiology and The University of Kansas Health System together with the KU School of Health Professions at KU Medical Center in Kansas City, Kansas.

A certificate from the University of Kansas is awarded to the student upon successful completion of the program. Graduates are eligible to take the national registry examinations given by the American Registry of Radiologic Technologists and/or the Nuclear Medicine Technology Certification Board.

More about this profession can be found on the program's website (https://www.kumc.edu/school-of-health-professions/academics/departments/respiratory-care-and-diagnostic-science/academics/nuclear-medicine-technology-certificate-program.html).

Applicants must currently be one of the following registered professionals or possess a bachelor's degree in a health science field such as biology or chemistry:

- Registered Radiology Technologist (ARRT)
- Diagnostic Medical Sonographer (ARDMS)
- Diagnostic Cardiac Sonographer (ARDMS)
- Certified Medical Technologist
- Registered Nurse
- Associate's degree in a medical imaging profession with current registry or licensure

Credentials or transcripts not from an accredited U.S. academic institution require evaluation by the KU Office of International Student Services before they can be accepted for eligibility.

1 The applicant may be a registry candidate but must pass the registry before entrance into the program.

**Prerequisites**

The following college courses must be completed to be eligible for this program.

- College algebra
- College English
- Computer science
- Chemistry with lab
- General physics
- Medical terminology
- Humanities course
- Social sciences course
- Human anatomy and human physiology
- Human anatomy or human physiology lab
- Speech/Oral communication
An overall grade point average of 2.5 (on a 4.0 scale) is required. In addition, student transcripts must document an individual course grade of no less than “C” on each prerequisite course (above).

Health and Physical Requirements
Good physical and mental health are essential to the field of nuclear medicine. Specifically, excellent visual acuity is necessary. The student must also have manual dexterity, sufficient hearing and speech, and good physical coordination in positioning patients and operating nuclear medicine equipment. Students must have full utility of both arms, hands and fingers in order to perform examinations and operate equipment. The ability to handle extremely heavy objects is required.


Background Check/Drug Screening
The Joint Commission requires all incoming students to pay for a background check (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). Applicants will be asked to provide information and make the payment once officially accepted into the program. A drug screening may also be required. For more information, please see the School of Health Professions background check information. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

International Students
An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

Grade-point average and other requirements also apply. Prospective students should review the complete program eligibility requirements and application instructions on the program's website (http://nuclearmedicine.kumc.edu).

The educational programs of the University of Kansas reserve the right to make changes without prior notice to any of the polices stated in this document.

The student spends 40 hours a week in the 12-month program, with time divided between classroom courses and clinical instruction. The Nuclear Medicine Division of the Department of Radiology at KU Medical Center performs a wide variety of diagnostic and therapeutic exams. The student will receive experience in nuclear pharmacy, patient care, imaging of bone, kidney, brain, lung, GI tract and cardiac function, Positron Emission Tomography and an overview of computed tomography. More details about the program curriculum can be found on the program's website (https://www.kumc.edu/school-of-health-professions/academics/departments/respiratory-care-and-diagnostic-science/academics/nuclear-medicine-technology-certificate-program.html).

A certificate from the University of Kansas is awarded to the student upon successful completion of the program. Graduates are eligible to take the national registry examinations given by the American Registry of Radiologic Technologists and/or the Nuclear Medicine Technology Certification Board.

Curriculum

| Year 1 | Hours | Fall | Hours | Spring | Hours | Summer | Hours
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Nurse Anesthesia

Nurse anesthesia is one of many academic programs of the KU School of Health Professions (http://healthprofessions.kumc.edu) and is located on the campus of the KU Medical Center (http://www.kumc.edu) in Kansas City, Kan.

Beginning with the class entering summer 2016, the entry-level clinical doctorate in nurse anesthesia offered at KU is the Doctor of Nurse Anesthesia Practice, replacing the Doctor of Nursing Practice degree. The program draws upon the extraordinary academic and clinical resources offered by the University of Kansas Medical Center (http://www.kumc.edu) and The University of Kansas Health System (http://www.kumed.com), along with the many outstanding clinical affiliate sites (https://www.kumc.edu/school-of-health-professions/academics/departments/nurse-anesthesia-education/academics/clinical-education.html) to enhance the student's learning opportunities.

Program Philosophy

The program is dedicated to helping its graduates achieve full professional competence. The practice of nurse anesthesia requires a strong nursing foundation. The nurse anesthetist must be able to interpret the multiple science disciplines that contribute to nurse anesthesia professional education.

The complexity of contemporary anesthesia practice requires this integration. The nurse anesthetist must be able to practice competently and apply intelligently the humanistic, scientific, and technical skills of the profession.

Mission and Vision

The mission of the KU nurse anesthesia program is to produce an exemplary nurse anesthesia provider fully qualified to deliver safe, competent anesthesia services to the public. The KU Department of Nurse Anesthesia Education, in concert with the broad overall missions of the university, School of Health Professions, and Office of Graduate Studies provides quality graduate education, specific to the practice of nurse anesthesia, based on sound research in a scholarly academic and technologically superior clinical environment.

The vision of the program is to produce highly competent graduates, dedicated to serve the anesthesia health care needs of the public who will be recognized as national leaders and role models for nurse anesthesia education.
Courses

NURA 800. Professional Aspects of Anesthesia. 3 Credits.
This course includes orientation to the profession of nurse anesthesia. The student will gain an understanding of the anesthesia department management and organization. The history of anesthesia will be discussed. Ethical, psychological, professional adjustments and legal responsibilities of the nurse anesthetist will be presented.

NURA 801. Introduction to Clinical Practicum. 1 Credits.
Students will engage in clinical practice that involves introduction to basic anesthesia skills. Emphasis is given to patient assessment, anesthetic planning and management of the patient population of low risk categories. The course includes introduction to clinical problem solving and "call" experiences that address the trauma patient and emergency surgical/anesthetic interventions for pathological states. Prerequisite: Permission of Instructor.

NURA 805. Clinical Anatomy. 4 Credits.
An intensive study of the major anatomical systems and regions of the body which have clinical significance for anesthetists and others. Particular attention devoted to the respiratory, cardiovascular, and nervous systems. Regional topics include the anatomy of the head, neck, vertebral column, thorax, axilla, and femoral triangle. Involves both lectures and cadaver dissection, plus appropriate models, x-ray films, and audiovisual materials. Prerequisite: Admission to the Nurse Anesthesia Program or permission of instructor.

NURA 806. Advanced Physiology. 4 Credits.
A course designed to lead to an advanced comprehension of the physiology of organ systems in the human in both cellular and organ processes. Physiology subject matter relevant to clinical health sciences include membrane transport, muscle, cardiovascular, respiratory, renal, water and electrolyte balance, gastrointestinal, and endocrine physiology as well as neurophysiology. Cellular mechanisms include the structure and function of ion channels and pumps, mechanisms of calcium regulation, excitation-coupling processes and mechanisms of oxidative cell damage and apoptosis. Prerequisite: Permission of instructor.

NURA 808. Health Care Policy for Advanced Nursing Practice. 2 Credits.
Students will utilize current clinical and legislative issues to examine ways to conceptualize the issues into social policy contexts. Assignments throughout the course are employed to both demonstrate and engage students in leadership and structural systems theories to effect change in healthcare policy. The course includes social policy development across the lifespan, leadership styles which influence change, and the implementation and analysis of policy solutions. Prerequisite: Successful completion of first three semesters of Doctor of Nurse Anesthesia Practice curriculum.

NURA 809. Adv Pathophysiology. 3 Credits.
A course designed to lead to advanced comprehension of pathophysiologic processes in the human body. Course content will build upon prior nursing education and professional experiences to provide a scientific basis for clinical application related to anesthetic planning and implementation. The intent of this course is to prepare the nurse anesthesia student to engage in critical thinking and problem-solving skills pertinent to the application of best practices involving anesthesia considerations for patients with pathological conditions. Prerequisite: NURA 806 Advanced Physiology.

NURA 811. Advanced Theory in Anesthesia I. 3 Credits.
This is the first of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of ophthalmology and otolaryngology procedures and patients with alterations in the endocrine system. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor.

NURA 812. Advanced Theory in Anesthesia II. 3 Credits.
This is the second of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of gastrointestinal and hepatobiliary disorders, bariatrics, robotic/laparoscopic procedures, otolaryngology disorders, and renal disorders. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor.

NURA 813. Advanced Theory in Anesthesia III. 2 Credits.
This is the third of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of obstetrical, neonatal and pediatric patients. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor.

NURA 814. Advanced Theory in Anesthesia IV. 3 Credits.
This is the fourth of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. Students will acquire the knowledge base pertinent to the perioperative anesthetic management of neurosurgical, cardiovascular, thoracic, and transplantation patients. Students enhance their critical thinking, problem-solving skills and ability to synthesize didactic information to the clinical environment. In addition, students will be required to engage in analysis of currently published research to identify "best practices" based on research evidence. Prerequisite: Permission of Instructor.

NURA 815. Advanced Theory in Anesthesia V. 3 Credits.
This is the fifth of five successive courses relative to the didactic study of the art and science of nurse anesthesiology. This is the final theory course of didactic study for the art and science of nurse anesthesia. Students will acquire the advanced knowledge pertinent to the perioperative anesthetic management of geriatric patients and patients undergoing orthopedic procedures. Students will enhance their critical problem-solving skills and ability to analyze/synthesize didactic anesthesia content for application to clinical practice. In addition, students will be required to review and engage in analysis of contemporary research to identify "best practices." The course content is provided as web-based and instructor facilitated learning. Prerequisite: Permission of Instructor.

NURA 820. Information Systems and Data Management in Anesthesia. 1 Credits.
Information systems, data management concepts, and their applications will be explored. This will enable the doctoral prepared nurse anesthetists to utilize resources to facilitate quality improvement, increase patient health outcomes, and improve patient safety.
safety through outcome measurements, and improve resource utilization in the perioperative period. Prerequisite: Permission of instructor.

**NURA 821. Advanced Practicum in Anesthesia I. 2 Credits.**
This is the first of six courses relative to the application of the art and science of nurse anesthesiology. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor.

**NURA 822. Advanced Practicum in Anesthesia II. 2 Credits.**
This is the second of six courses relative to the application of the art and science of nurse anesthesia. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor.

**NURA 823. Advanced Practicum in Anesthesia III. 2 Credits.**
This is the third of six courses relative to the application of the art and science of nurse anesthesia. Each section is designed to address specific surgical categories and the relevant patient care needs and risks. Completion of each course requires acquisition and refinement of clinical skills. Students will demonstrate progression in cognitive, psychomotor, and affective skills appropriate to a professional nurse anesthetist. Prerequisite: Permission of Instructor.

**NURA 831. Advanced Chemistry and Physics. 2 Credits.**
Chemical and physical principles including states and properties of matter, laws governing the behavior of gases, flow and vaporization, oxidation and combustion; principles of electricity and electrical safety; and chemical properties and structure-activity relationships as a foundation for pharmacology. Course will also cover pertinent areas of organic chemistry. Prerequisite: Permission of instructor.

**NURA 833. Basic Principles of Anesthesia Practice. 3 Credits.**
This course introduces students to the introductory principles and theories regarding the art and science of anesthesia practice. Students will develop a conceptual basis for practice gained through a systems approach applied to development of anesthesia care based upon a strong foundation in physical assessment, physiological monitoring, applications of pharmacology, anesthesia systems, physical and chemical basic sciences. Prerequisite: Admission to the nurse anesthesia program or permission of instructor.

**NURA 835. Advanced Physical Assessment and Patient Care Technology for Anesthesia. 3 Credits.**
This course is designed to develop and refine the physical assessment skills of the practitioner as well as enhance their understanding, interpretation, and application of laboratory measurements and advanced diagnostic procedures in the perioperative setting. The course is arranged in a systems approach with emphasis placed on the cardiovascular, pulmonary, renal, neurological, and endocrine. Diagnostic procedures and laboratory values specific to each of these systems and their relevance to anesthesia principles and practice will be discussed. The selection of appropriate monitoring devices specific to each system related to individual patient needs will be discussed. Prerequisite: Permission of instructor.

**NURA 839. Regional Anesthesia/Pain Management. 3 Credits.**
Includes study of conductive anesthesia techniques, pharmacokinetics of local anesthetics, anatomical placement, and physiologic response. The course is inclusive of acute and chronic pain management techniques.

**NURA 880. Advanced Topics: _____ 1-4 Credits.**
Special study allowing a student to pursue a particular subject through readings, directed assignments, and conferences with a faculty member. Prerequisite: Consent of instructor.

**NURA 889. Introduction to Theory, Research Methods and Evidence-Based Practice. 3 Credits.**
Methods of theory development and analysis provide the foundation for the study of concepts and theories from nursing, anesthesiology and related scientific disciplines. Historical, scientific and philosophical frameworks relevant to the theoretical basis of nurse anesthesia are explored. The fundamentals of research methodology are examined including elements of design, measurement, statistical analysis and dissemination. The relationships between research, theory and practice are developed to create an awareness of how "best practice" resources support professional growth, competence and quality. Prerequisite: Permission of instructor.

**NURA 892. Applied Statistics and Analysis in Health Care. 3 Credits.**
Concepts include graduate-level statistical reasoning, statistical principles, and the role as the scientific basis for clinical and public health research and practice. Content includes hospital-based statistics, introduction to epidemiology, relationship of research design to statistical methods, research ethics/protocol, hypothesis testing, and data management. Prerequisite: Permission of instructor.

**NURA 901. Evaluation and Application of Evidence-Based Practice in Anesthesia I. 1 Credits.**
First of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesia and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor.

**NURA 902. Evaluation and Application of Evidence-Based Practice in Anesthesia II. 1 Credits.**
Second of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesia and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor.

**NURA 903. Evaluation and Application of Evidence-Based Practice in Anesthesia III. 1 Credits.**
Third of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesia and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor.

**NURA 904. Evaluation and Application of Evidence-Based Practice in Anesthesia IV. 1 Credits.**
Fourth of four courses in which the student will use analytic methods to critically appraise existing literature from nurse anesthesiaology and other disciplines to determine and implement the best evidence for practice. An exploration of the design, implementation and evaluation of quality improvement methodologies will lead the student to an appreciation of the safe, effective, efficient and timely delivery of patient-centered anesthesia care. Previous student knowledge in the domain of research analysis will be applied to the design of evidence-based interventions in current anesthesia practice. Prerequisite: Permission of instructor.

NURA 912. Leadership in Nurse Anesthesia I. 1 Credits.
First of two courses which focus the students on leadership projects which were designed in NURA 800, Professional Aspects of Anesthesia. Students will apply a variety of leadership theories as they conduct the projects with nurse anesthesia faculty supervision. At the conclusion of NURA 913, students will evaluate the projects and determine if goals were met, recognize which principles of leadership theory(ies) were utilized in the projects, and prepare an action plan for revisions. Presentations and self-analysis of the projects will be posted as VOPPTs on the ANGEL course site. Prerequisite: Permission of instructor.

NURA 913. Leadership in Nurse Anesthesia II. 1 Credits.
Second of two courses which focus the students on leadership projects which were designed in NURA 800, Professional Aspects of Anesthesia. Students will apply a variety of leadership theories as they conduct the projects with nurse anesthesia faculty supervision. At the conclusion of NURA 913, students will evaluate the projects and determine if goals were met, recognize which principles of leadership theory(ies) were utilized in the projects, and prepare an action plan for revisions. Presentations and self-analysis of the projects will be posted as VOPPTs on the ANGEL course site. Prerequisite: Permission of instructor.

NURA 924. Advanced Practicum IV. 2 Credits.
Fourth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor.

NURA 925. Advanced Practicum V. 2 Credits.
Fifth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor.

NURA 926. Advanced Practicum VI. 2 Credits.
Sixth of six clinically-based courses related to the art and science of advanced nurse anesthesia practice and care of patients with specialized anesthesia care. The courses are divided into sequential clinical practicum related to diverse patient types in both normal and abnormal states and for those requiring anesthesia care in specialized areas (cardiothoracic, obstetrics, neurosurgical, etc.) Participation in case presentations may be required as warranted by clinical events. An opportunity is provided to apply advanced clinical decision making skills and evidence-based research to the assessment, management, and evaluation of complex health care problems of a diverse patient population in the perianesthesia care setting. Prerequisite: Permission of instructor.

NURA 980. DNAP Senior Scholarly Project. 1-6 Credits.
The DNAP Senior Scholarly Project is a merger of students' accumulated knowledge base, didactic and clinical, relevant to the practice of nurse anesthesia in the Doctor of Nurse Anesthesia Practice (DNAP) curriculum. The Senior Scholarly Project requires that a practice-focused problem, issue, or concern be identified and examined in depth. The project will include application of an innovation or intervention suitable to an area of focus (e.g. organizational leadership, clinical practice, education, administration, etc.) that involves the development, evaluation, and dissemination of the project findings to a targeted audience. The DNAP Senior Scholarly Project is designed in a series of phases. Each phase is to be completed during an enrolled semester. Continuous enrollment in the project is required during the final year of the DNAP course of study. During each semester of enrollment in the DNAP Senior Scholarly Project, students will participate in project committee reviews lead by the assigned Advisory Committee Chair relative to the progression and completion of the project. The DNAP Senior Scholarly Project committee and the student share joint responsibility for the facilitation, progression, and completion of the scholarly project. Prerequisite: NURA 889, NURA 892, PRVM 800.

Doctor of Nurse Anesthesia Practice

The doctorate in nurse anesthesia practice is a comprehensive 36-month program in which registered nurses receive extensive education in both the academic and clinical components of nurse anesthesia. Students learn to administer anesthesia to all patient populations in a variety of clinical settings using all current anesthesia techniques, and graduates are prepared to take the national certification examination required to become Certified Registered Nurse Anesthetists. The program is fully accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (https://www.coacrna.org/), and the Kansas State Board of Nursing (http://www.ksbn.org/).

Goals of the program

This doctorate program prepares the registered nurse to become a nurse anesthesia practitioner with the capability to deliver competent nurse anesthesia services, engage in research, and assume leadership roles in the profession. Strongly rooted in science, the program is designed for the most ambitious and brightest professionals. The basic science and clinical education opportunities help graduates succeed as advanced practice nurses with increased esteem, independence, and earning power.

• Academic
  Obtain an advanced body of specialized knowledge necessary to integrate didactic information and clinical data and formulate a comprehensive individualized care plan.

• Clinical
Demonstrate ability to plan and administer a safe and physiologic anesthetic based on knowledge and synthesis of anesthetic principles and basic science study.

- **Research**
  Demonstrate an appreciation for the role, nature and conduct of research modalities and their application to practice and professional growth.

- **Professionalism**
  Integrate ethical, legal and cultural considerations with personal and professional value systems in nurse anesthesia.

**Faculty and Clinical Instruction**

**Our full-time CRNA faculty**, with extraordinary levels of experience as nurse anesthetists, serve as advisors, teach classes and supervise students in the clinical setting. Anesthesiologists and CRNAs at The University of Kansas Hospital provide advanced clinical instruction. The specialty areas in which KU anesthesiologists have completed fellowships is diverse and impressive. Adjunct faculty at additional affiliate sites (https://www.kumc.edu/school-of-health-professions/academics/departments/nurse-anesthesia-education/academics/clinical-education.html) provide invaluable clinical instruction.

The Department of Nurse Anesthesia Education (http://na.kumc.edu/) is part of the KU School of Health Professions (http://healthprofessions.kumc.edu/) located on the KU Medical Center campus in Kansas City, KS.

Applications for this program are accepted online. Detailed instructions on how to apply are posted on the KU Department of Nurse Anesthesia (http://www.kumc.edu/school-of-health-professions/nurse-anesthesia-education/prospective-students/how-to-apply.html) website. The application period begins March 15 and closes July 15 each year. All prerequisites must be completed August first of the application year.

Students who are Kansas residents have the opportunity to apply for early decision. The early-decision application opens March 15 and closes May 15. Decisions about these interviews will be made in July each year.

The early decision application option includes all of the standard eligibility requirements (http://www.kumc.edu/school-of-health-professions/nurse-anesthesia-education/for-prospective-students/eligibility-and-requirements.html), as well as the following: Kansas residency is required, all five prerequisite courses must be completed at the time of application, and early-decision candidates must have all application materials to KU by the first of June. Please see more information here (http://www.kumc.edu/school-of-health-professions/nurse-anesthesia-education/for-prospective-students/early-decision-application-option.html), as well as our frequently asked questions regarding early decision (http://www.kumc.edu/school-of-health-professions/nurse-anesthesia-education/frequently-asked-questions.html?year=early). The Office of the Registrar has full residency requirements (https://registrar.ku.edu/residency-definition/).

Admission to the program is increasingly competitive. Decisions about interviews will be made in the fall of each year. Qualified applicants who are invited to attend a personal interview must attend their interview to be considered. Applicants receive notification of their acceptance to the program in November of each year. The program begins the first Tuesday after Memorial Day of each year.

**Admission requirements:**

- A bachelor’s degree from a regionally accredited institution is required and must be documented by submission of an unofficial transcript indicating the degree has been conferred before entering the program. Official transcripts for all course work from all institutions are required upon acceptance into the program. A bachelor’s degree in an appropriate discipline such as nursing, respiratory care, biological sciences, health care administration, pharmacology, psychology, or sociology, is required. A bachelor’s degree in nursing is not required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative grade-point average requirement.

- Applicants must possess a cumulative grade-point average of at least a 3.0 on a 4.0 scale for his or her bachelor’s degree program.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement (http://catalog.ku.edu/graduate-studies/kumc/admissiontext).

- Applicants must be a registered nurse with two years of work experience as a licensed registered nurse. Experience as an LPN does not fulfill this requirement.

- Applicants must have at least one year of recent (within the past 2-3 years), full-time experience in an intensive-care unit. This year of ICU experience must be completed prior to the official enrollment date. The admissions committee has found that the most successful applicants have experience in adult ICU, such as cardiac ICU, surgical ICU or medical ICU. Pediatric ICU is acceptable, however, neonatal ICU and emergency department are not accepted. Applicants should have experience with the following:
  - continuous hemodynamic monitoring (PA catheters, Swan-Ganz)
  - ventilators
  - EKG interpretation
  - pharmacological monitoring (instituting, regulating and maintaining patients on drugs related to cardio pulmonary status or life-death situations)
  - independent decision-making necessary in the ongoing care of unstable patients

- All applicants accepted into the program are required to obtain RN licenses for Kansas, Missouri, Nebraska, and Oklahoma prior to the start of the program (end of May each year). Any license with restrictions will not be accepted.

- Students must have completed prerequisite courses in the following basic sciences: chemistry I and II, human anatomy, human physiology, microbiology, and one course in statistics. Courses may be taken at an accredited 2-year college but cannot be taken for credit by examination. A pass grade will not be accepted unless the applicant provides written verification from the institution that the pass designation is equivalent to a grade of C or higher. Applicants not having met all the prerequisites by the application deadline must submit proof of enrollment for any missing prerequisites. All prerequisites must be complete by the end of the summer semester of the year the applicant is applying to the program.

- A minimum grade of C is required in all prerequisite courses with the exception of human physiology. For human physiology a minimum grade of B is required and the course must have been taken within ten years of entering this program. Two semesters of combined human anatomy and physiology will also fulfill the human anatomy and
human physiology requirements. If combined courses are used for this prerequisite, both must have a minimum grade of B and be taken within ten years of entering this program.

- **Two references** are required. Applicants are required to provide the names and contact information (including email addresses) of two (2) specific individuals when completing the online application. Family members and friends may not be included. The references must be provided by 1) a current nurse manager/supervisor and 2) an advanced-practice nurse or physician having routinely worked with and observed the work of the applicant. One of the references must be from the student's most recent ICU position.

- A resume or curriculum vitae is required and must include prior employment including details of all RN and ICU experience. It should also include participation in professional and/or voluntary organizations (e.g., hospital, alumni or nonprofit.)

- The applicant is required to provide a **statement of purpose** of 500 words or less to clearly explain future long-term goals as a nurse anesthesia provider and his or her hopes for contributions to the profession. Writing skills appropriate for graduate-level education are expected.

- **Shadow experience.** Applicants must shadow with either a CRNA or an anesthesiologist to gain a better understanding of the nurse anesthesia profession through both observation and discussion. Applicants are responsible for arranging their own shadow experience and ensuring that the anesthesia provider completes the shadow verification form (http://www.kumc.edu/Documents/shp/nurse-anesthesia/Shadow-Verification-Form-Feb2015.pdf). The shadow experience may be completed at any hospital, including the student’s current employer, or one in which a relationship exists with an anesthesia provider. Arrangements can be made to shadow at The University of Kansas Hospital but are limited by faculty availability.

- A personal interview will be held for selected applicants.

- The Joint Commission requires all incoming students to complete and pay for a background check (p. 2415). This one-time fee must be paid directly to the company performing the background investigation. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

- Applicants are required to have completed certifications in Advanced Cardiovascular Life Support, Basic Life Support, and Pediatric Advanced Life Support prior to starting the program, and must remain certified while in the program.

- CCRN certification is strongly recommended, but not required. If certified, a copy of the certification card must be uploaded with the application. Participation in professional and/or voluntary organizations or committees (e.g., hospital, alumni, nonprofits) is considered an advantage in the application evaluation.

Applicants will be assessed based on these requirements. Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. *Other years’ catalogs*. The Doctor of Nurse Anesthesia Practice (DNAP) program at the University of Kansas is designed with clinical experiences, class time, and study time. During the first 2 semesters, courses are mostly classroom-based during regular weekday hours. For the remainder of the program, students are assigned in the clinic with variable schedules, including 12-hour shifts outside of regular business hours. Students continue to take theory, research, and other courses during this time.

Much of the program’s course work after the first year is web-based. This design permits more learning methods to be incorporated into the program and allows students to continue to gain knowledge through academic course work while developing their skills in the clinic.

**Degree requirements:**

- Degree requirements are normally completed within 3 years of admission to the program although a maximum of 8 years is allowed.

- Successful completion of a minimum of 81 credit hours.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Because of the sequential nature of the curriculum, any grades below "C" in any courses is grounds for non-progression and therefore the student may be considered for dismissal from the Program.

- Please note that grading in our clinical courses is more stringent (NURA 801, 821-823, and 924-926) with the following scale: 90-100 = "A", 80-89 = "B", 79 and below = Fail. A failing grade in a clinical course is grounds for dismissal.

- Successful completion of the University’s Research Skills and Responsible Scholarship (http://catalog.ku.edu/graduate-studies/kumc/degree-programtext) requirement prior to the semester the research practicum is completed.

- Successful completion of NURA 889 Introduction to Theory, Research Methods and Evidence-Based Practice meets the Research Skills requirement.

- Successful completion of NURA 901 Evaluation and Application of Evidence-Based Practice in Anesthesia I meets the Responsible Scholarship requirement.

- Successful completion of a leadership project as indicated in course list below

- Successful completion of supervised clinical practicum as indicated in course list below.

- Successful completion of a senior scholarly project as indicated in course list below.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Students are required to maintain certifications in Advanced Cardiovascular Life Support (ACLS), Basic Life Support (BLS), and Pediatric Advanced Life Support (PALS) current throughout the program (at the student’s expense.)

- Students must meet the clinical requirements for practice as required by the Council on Accreditation of Nurse Anesthesia Educational Programs. The requirements are posted on the Council on Accreditation of Nurse Anesthesia Educational Programs (https://www.coacnrna.org/Pages/default.aspx) website.


- Successful completion of the following courses:

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**Doctor of Nurse Anesthesia Practice**

**Requirements**

- **Total Hours**: 81

**Typical Plan of Study**

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**Total Hours**: 81

**Technical Standards and Requirements**

The Doctor of Nurse Anesthesia Practice degree signifies that the holder is an anesthetist prepared for entry into the practice of nurse anesthesia, thus it follows that graduates must have the knowledge and skills to function in a broad variety of clinical situations and to render a wide spectrum of patient care. This document delineates the cognitive, affective and psychomotor skills deemed essential to the completion of the program. If a student is not able to demonstrate the following skills and abilities, it is the responsibility of the student to request an appropriate accommodation. The University will provide reasonable accommodation as long as it does not fundamentally alter the nature of the nurse anesthetist program. The essential technical standards presented in this document are pre-requisite for matriculation, subsequent
promotion from year to year, and ultimately graduation from the University of Kansas Clinical Doctorate in Nurse Anesthesia. These standards pertain to all matriculated students. All required courses in the curriculum are necessary in order to develop essential skills required to become a competent nurse anesthetist and to protect the health and safety of patients. Therefore, all students admitted to the nurse anesthesia program must be able to meet the following requirements and expectations with or without accommodation(s). Students are required to sign and return the technical standards form with their letter accepting a position in the program.

NOTE: Reasonable accommodation will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodation should provide appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.

1. Intellectual-Conceptual and Integrative and Quantitative Abilities. The nurse anesthesia student must be able to:

   a. use reason, analysis, calculations, problem solving, critical thinking, synthesis, self-evaluation and other learning skills to acquire knowledge, comprehend and synthesize complex concepts

   b. comprehend three dimensional relationships and to understand the spatial relationships of structures

   c. identify significant findings from history, physical examination, and laboratory findings to determine the appropriate sequence of events to implement effective clinical treatments in a timely manner

   d. acquire and develop clinical reasoning and judgment skills under pressure

   e. interpret information derived from auditory, visual, written, and other visual data to determine appropriate patient management plans

   f. recall and retain information in an efficient and timely manner

   g. demonstrate proficiency in both oral and written English language and communicate knowledge to others when indicated

   h. effectively analyzing complex clinical situations such as cardiac or pulmonary arrest or airway obstruction

   i. effectively function as an attentive, productive and constructive member of a healthcare team

   j. demonstrate self-awareness and self-assessment of one’s abilities and deficiencies or limitations and request help when needed.

2. Observational Skills. The nurse anesthesia student must be able to:

   a. observe demonstrations and experiments in the basic sciences, including but not limited to, physiologic and pharmacologic demonstrations in animals, microbiological cultures, microscopic studies of microorganisms and tissues in normal and pathologic states.

   b. observe a patient accurately at a distance or close at hand

   c. discriminate variations in human responses to disease using visual (including color), auditory, tactile and other sensory cues

   d. discriminate changes in monitoring devices and alarms using visual and auditory senses

   e. Students must have visual acuity within normal ranges of motor facility appropriate to work within the confines of anesthetizing areas (with electronic monitoring and ventilatory equipment).

3. Communication. The nurse anesthetist student must be able to:

   a. speak, hear and observe patients in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications.

   b. communicate effectively and sensitively with patients, including not only speech but reading and writing.

   c. communicate effectively and efficiently in oral and written form with all members of the health care team.

   d. have hearing activity within normal ranges of motor facility appropriate to work within the confines of anesthetizing areas (with electronic monitoring and ventilator equipment).

4. Professional, Behavioral and Social Attributes. The nurse anesthesia student must be able to:

   a. possess the emotional health required for full utilization of his/her intellectual abilities

   b. exercise good judgment, the prompt completion of all responsibilities attendant the diagnosis and care of patients, and the development of mature sensitive and effective relationships with patients.

   c. tolerate physically and emotionally taxing workloads

   d. maintain composure and emotional stability during periods of high acute stress as well as periods of chronic stress

   e. adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients.

   f. display compassion, integrity, concern for others, open-mindedness, interpersonal skill, self-discipline, focus and motivation

   g. accept criticism and respond by appropriate behavior modification

   h. use supervision appropriately and act independently when indicated

5. Motor and tactile function. The nurse anesthesia student must be able to:

   a. elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers

   b. physically do basic laboratory tests and to read EKGs and x-rays

   c. execute both gross and fine muscular movements, equilibrium and functional motor movements reasonably required to provide general care and emergency treatment to patients (ex: cardiopulmonary resuscitation, administration of intravenous medication, the application of pressure
to stop bleeding, the opening of obstructed airways and the suturing of simple wounds

d. physically respond to emergency calls without locomotion or transportation limitation

e. document that no disease process exists which predisposes them to hepatic disorders

Occupational Therapy

The Department of Occupational Therapy Education (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education.html) is one of eight departments of the KU School of Health Professions (http://healthprofessions.kumc.edu/) and is located on the KU Medical Center campus in Kansas City, Kan.

- Vision statement: To transform occupational therapy and influence other health professions through leadership, education, and discovery.

- Mission statement: To develop learners who will impact the health professions and occupations of people and their communities through innovative and collaborative practice, education, research, and leadership.

KU’s occupational therapy programs are nationally recognized for excellence in producing leaders in education and research.

The department offers the following degree programs:

Entry-Level Doctorate, Occupational Therapy (OTD) (p. 670)

The entry-level doctorate is for students entering the profession of occupational therapy after acquiring a bachelor's degree at KU or another institution. Our transition to the OTD allows our student to gain greater in-depth practice knowledge, enhance leadership skills and provide experiences that allow our students to participate in policy and systems change to improve healthcare. The OTD culminates in a Doctoral Capstone which includes both a Capstone Project and Doctoral Experience. Graduates are eligible to take the national certification examination to obtain OT licensure. The first cohort of OTD students entered Fall 2019.

Post-Professional Doctorate, Occupational Therapy (OTD) (p. 668)

This is a post-professional, clinically-focused doctoral program designed for practicing occupational therapists wanting to pursue advancement in contemporary and evidence-based practice, professional leadership and foundations in teaching. A degree in occupational therapy from an accredited program, a master’s degree, and a current license to practice as an occupational therapist are required for admission.

Therapeutic Science (Ph.D.) (p. 695)

Administered through the Department of Occupational Therapy Education, this research-focused doctoral program benefits from faculty expertise in many different departments and schools across the University of Kansas. It is designed to support interdisciplinary study of wellness and disability related to individuals and support systems.

Occupational Therapy (MS) Courses

OTMS 699. Special Projects. 1-6 Credits.

(1-6) An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analysis as negotiate with the faculty mentor. May be repeated for credit. Prerequisite: Enrollment as a non-degree seeking student and permission of the instructor.

OTMS 701. Professional Development. 3 Credits.

With an emphasis on leadership skills and professionalism, this course will include mentoring, supervising, managing, organizing presentations, and teaching, writing, and contributing through professional organizations (interdisciplinary and occupational therapy). Students professionalism on issues of concern to administrators, staff therapists, educators, or those in private practice. Prerequisite: Permission of Instructor.

OTMS 705. Multidisciplinary Theoretical Perspectives. 3 Credits.

Students will identify and explore the key theories in occupational therapy and those more specific to their emphasis area with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories. Students will develop rationales for theory guided interventions. Furthermore, they will develop an impact summary in their identified area of emphasis. Prerequisite: Permission of Instructor.

OTMS 735. Practice Models for Applied Science. 3 Credits.

Issues and trends relative to advanced application of theory, assessment and intervention with emphasis on pediatrics will be presented in lecture and discussion. Special projects will emphasize the student’s special interests. Although faculty directed, student presentation will be emphasized.

OTMS 799. Special Topics in Occupational Therapy. 1-6 Credits.

An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analyses as negotiate with the faculty mentor. May be repeated for credit. Prerequisite: Permission of instructor.

OTMS 800. Research Proseminar. 1 Credits.

A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meeting will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of fours credits. (Same as TS 800.)

OTMS 801. Applied Neuroscience. 3 Credits.

The course will address the major functions of the systems within the central nervous system and how they interact to produce responses to environmental demands. Sensory input, central processing, and output mechanisms will be analyzed. The student will then appraise human behavior in relation to function and dysfunction of the nervous system, both in formulating potential behavioral signs when a specific neurological site is presented, and in hypothesizing about neurological involvement when analyzing a particular individuals problems. Prerequisite: Undergraduate neuroscience course or permission of instructor.

OTMS 835. Interpreting Research for Applied Science. 3 Credits.
This on-line course examines selected research studies, analysis methods and results employed, and applies research findings to practical problems. Students will design their own research project reflecting their area of interest.

OTMS 890. Graduate Research. 1-6 Credits.
Students investigate an empirical question relevant to occupational therapy and write a literature review and a research proposal under the guidance of a faculty advisor. Pending approval of the proposal, the student will carry out initial phases of the project, including materials preparation and data collection.

OTMS 899. Thesis. 1-6 Credits.
Course requires data analyses, interpretation, and scholarly writing based on individual original research carried out under the guidance of the student's adviser. These activities, along with an oral presentation of research, must meet with approval of the student's advisory committee to complete thesis requirements. Prerequisite: OTMS 890.

Occupational Therapy Courses

OCTH 101. Introduction to Occupational Therapy. 1 Credits.
Survey of the profession of occupational therapy. Includes information on academic and professional requirements, career opportunities, general description, and history of the profession. Open to all students.

OCTH 601. Human Anatomy. 6 Credits.
In OCTH 601, the study of gross anatomy and neuroanatomy in relation to human function and behavior will introduce students to how occupational therapists use anatomical knowledge to gather information about clients. Learning opportunities include lecture and laboratory. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 602. Orientation to the Occupational Therapy Profession. 3 Credits.
In OCTH 602, we will examine occupation, explore the underlying philosophy and history of the occupational therapy profession, and implications for current practice and future directions. We will establish expectations for professionalism and practice application of ethical and professional behaviors within the context of occupational therapy practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 605. Theory and Practice in Occupational Therapy. 2 Credits.
In OCTH 605, we will present established and emerging conceptual models of occupational therapy to guide students in exploration and discussion of assessment and intervention practices. Emerging professional reasoning skills and strategies will support individuals and small groups in synthesis and integration of theoretical concepts applied to diverse practice settings. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 622. Analysis and Adaptations of Occupations - I. 4 Credits.
In OCTH 622, we will study the role of occupations and factors influencing occupational performance using the "top-down/bottom-up" analytic approach recommended by the WHO and reinforced by the OT Practice Framework. This course will use service learning as the context for synthesizing an understanding of occupation, the occupational therapy process, and person-centered practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 630. Practicum - I. 2 Credits.
In OCTH 630, we will support students to experience and demonstrate person-centered and strength-based approaches when engaging individuals in their natural context, and to use observation, interview, and documentation skills to guide OT practice with children and families. Students will explore individual leadership strengths and styles to better understand individual roles within a complex system. Students as individuals and in small groups will undertake leadership assessment, reflection and application. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 635. Lifespan Development from an Occupational Perspective. 4 Credits.
In OCTH 635, we will examine in detail developmental theories and how they intersect with changes in occupations across the lifespan. We will promote an advanced understanding of participation in meaningful activities by practical experiences with real people in authentic settings. Students will gain an understanding and appreciation of the qualitative differences between typical and atypical occupational performance across the lifespan. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 645. Contexts of Occupation. 2 Credits.
In OCTH 645, contextual supports and features of physical, social, and other environments will be explored as potential tools to facilitate maintaining or enhancing occupational performance irrespective of disability status. The interaction of person, context, and environment will be explored through guided discussion, reflection, and extra-mural exploratory assignments. A culminating activity inspires teams of students to assemble course elements to develop a cohesive summary project with practical application. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 655. Neuroscience Analysis of Occupational Performance. 3 Credits.
In OCTH 655, we will build upon prior knowledge of neuroanatomy gained through OCTH 601. Principles of neuroscience will be interpreted in clinical application using a strength-based approach to advance understanding of nervous system function. The integration and function of neural systems will be considered in relation to specific challenges and capacity of the nervous system as a whole to support behavior. A practical application and problem-based perspective will be encouraged throughout the course, with students invited to consider consumer perspective and availability of potential supports. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 662. Physical Considerations in Facilitating Occupational Performance. 4 Credits.
In OCTH 662, we will appraise the impact of select medical conditions on person factors and occupational performance in everyday life using scientific reasoning. Students will implement occupational therapy assessment and intervention strategies integrated with knowledge of injury and disease processes to facilitate an understanding of occupational performance outcomes. Particular consideration will be given to addressing complex comorbidities within the context occupational performance. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 670. Practicum - II. 2 Credits.
In OCTH 670, we will employ the occupational therapy process, to participate in service provision to individuals through level I fieldwork experiences. We will build upon skills from OCTH 630 to advance leadership development and effective communication. This course will use both classroom and community-based practicum experiences.
OCTH 672. Psychiatric Considerations in Facilitating Occupational Performance. 3 Credits.
In OCTH 672, we will examine in detail occupational performance as influenced by psychological conditions using evidence-based practices and principles of mental health. We will emphasize the importance of considering individuals, groups and organizations with the context of occupational performance. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 680. Independent Study. 1-6 Credits.
An elective course to allow students to pursue areas of special interest under direction of faculty of his or her choice. Investigation of special issues relevant to an aspect of occupational therapy practice will include study of pertinent practice factors. Student will complete special projects relevant to the practice areas, such as oral presentation, written paper or case analyses. May be repeated for credit. Prerequisite: Permission of department and instructor (offered Spring, Summer and Fall).

OCTH 682. Analysis and Adaptation of Occupations - II. 2 Credits.
In OCTH 682, we will support students in service learning settings to expand OCTH 622 task analysis outcomes to include the occupational therapy practice framework to further analyze and apply the occupational therapy process using person-centered practice. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 690. Evaluation and Assessment of Occupational Performance. 2 Credits.
In OCTH 690, we will examine in detail principles of the evaluation process to analyze occupational performance across the lifespan. We will differentiate, select, interpret, and document both formal and informal measures within a person-centered and contextually relevant approach. Prerequisite: Open to students enrolled in the MOT graduate program or those with permission from the OTEd department.

OCTH 704. Planning and Intervention in Occupational Therapy. 2 Credits.
This course will use professional reasoning to analyze cases across the lifespan. We will work in small groups using a problem-based format with faculty mentors as we develop an occupational profile, occupational analysis and evidence-based intervention plans for each case.

OCTH 710. Service Management: Delivery Systems. 1 Credits.
This course will explore how service delivery systems influence pragmatic reasoning and occupational therapy practice. We will examine American and global health care systems along with occupational therapy health care delivery settings with a focus on quality, cost, and access related to service delivery. Teaching and learning experiences occur through lecture, on-line materials, class discussion and small group activities.

OCTH 715. Supervision, Team Relations, and Management Communication. 1 Credits.
This course emphasizes entry level skills related to supervision, teamwork, and communication within practice environments.

OCTH 720. Occupational Therapy Practice Models. 7 Credits.
This course will use practice models to guide evaluation and intervention in occupational therapy practice. Students will gain an understanding of historical and contemporary models, learn the evidence underlying each model and conduct assessments with a consumer from each of the contemporary models.

OCTH 725. The Research Process. 1 Credits.
This course will transition from understanding and appraising research (OCTH 783) to generating research (OCTH 790). The purpose of this course is to guide students through planning research by introducing the components of research and describing ways in which research may be conducted. The course reviews research ethics, writing research questions and hypotheses, sampling, measurement and data collection, components of quantitative and qualitative research, and information about disseminating research.

OCTH 730. Practicum III. 2 Credits.
This course will build upon practicum and level I fieldwork experiences to continue developing necessary skills for level II fieldwork experiences. We will determine the relevant variables for intervention, work collaboratively with others within each setting, analyze, and reflect upon the experience. We will analyze principles of evidence-based practice and occupation-based intervention.

OCTH 738. Special Topics in Practice. 1-3 Credits.
Focused study of theory application, professional topics and skills, and emerging practice questions. Learning experiences may be in the form of guided readings and discussion, directed projects, seminars, or community/clinical experience with focus on advanced supplemental or exploratory learning. Specific topics and formats will vary as they are generated by student interest and faculty expertise.

OCTH 750. Case-Based Clinical Reasoning. 2 Credits.
This course will apply the professional reasoning process to understand individuals' occupational performance and analyze services provided based on cases from level II fieldwork experiences. We will participate in small group discussion using a problem-based format to conduct case analysis and develop evidence-based intervention plans.

OCTH 755. Issues and Trends Seminar. 1 Credits.
This course will analyze key professional, political, and cultural issues and trends that impact service provision and the populations served by occupational therapists. This seminar format incorporates student-driven service experiences, discussion forums, and small group work to examine issues/trends and recognize opportunities to shape the future of the occupational therapy profession.

OCTH 760. Professional Development and Leadership in Service Management. 3 Credits.
This course will discuss professional responsibilities and career development opportunities as they relate to leadership, administration, and management of occupational therapy services. We will use reflective assessments to identify professional leadership strengths and career paths. Students working in small work groups will apply management principles to develop and propose community-based health promotion programs.

OCTH 765. Family and Community Service Systems. 2 Credits.
This course will use professional reasoning to examine occupational practice within various delivery systems. We will use lecture and small group seminars to analyze systems from level II fieldwork experiences and develop a program evaluation plan based on collaborations between students and fieldwork supervisors.

OCTH 770. Level II Fieldwork, Part 1. 6 Credits.
A required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists supervise the experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Prerequisite: Satisfactory completion of required academic coursework.

OCTH 775. Level II Fieldwork, Part 2. 6 Credits.
A required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists will supervise this experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Ages, disabilities, and service provision systems for this course will differ from the student’s prior fieldwork experience. Prerequisite: Satisfactory completion of required academic coursework.

**OTD 776. Population-Based Clinical Reasoning. 3 Credits.**
This course will consider population-based concepts and theories to identify, prioritize and meet the health and life participation needs of populations. Within an interprofessional online learning context, students collaborate to develop community-based assessment and intervention emphasizing promotion, maintenance and restoration of health and wellness and disease prevention for specific populations.

**OTD 780. Elective Level II Fieldwork. 3-6 Credits.**
An elective (optional) supervised experience in a facility meeting specific criteria. Qualified occupational therapist will supervise this experience. This fieldwork would allow students to pursue areas of special interest. Length and time commitment of experience will be commensurate with credit hours (e.g. each credit requires 80 hours of fieldwork contact at specified site). Prerequisite: Satisfactory completion of required academic coursework and OTCH 770.

**OTC 783. Evidence-Based Practice. 2 Credits.**
This course will review, appraise, and integrate various levels of evidence to inform occupational therapy practice. Students will learn how and how to find relevant evidence as well as what factors should be considered in the assessment of evidence. We will review statistics and their use in interpreting outcome data. Students will also learn to synthesize and translate evidence into useful information for practice.

**OTD 790. Research Practicum and Professional Writing. 3 Credits.**
This course will explore how the process of conducting a faculty-mentored research project becomes a platform for developing occupational therapy principles and for guiding practice, and how conveying meaning through professional writing is essential for communicating outcomes, interpretations, and instructions. Prerequisite: OTCH 725. Students from programs outside the MS in Occupational Therapy or PhD in Therapeutic Science need to contact the Occupational Therapy Department for permission to enroll.

**OccupationalTherapy(Doctorate) Courses**

**OTD 750. Clinical Reasoning and Problem Based Learning. 3 Credits.**
Students will apply a clinical reasoning process to individuals with occupational performance needs. Cases will be presented from students’ clinical experiences. In a problem solving format, students will evaluate models of service delivery, evaluation and intervention delivery and dissemination of information received by the individual. Students will identify and discuss alternatives given a variety of situations and environments. PREREQUISITE: Permission of Department.

**OTD 770. Knowledge For Specialty Practice Area. 3 Credits.**
This course is designed to support and correspond with OTD 770. Students will complete this course as they work in a clinical environment. They will meet with a faculty mentor to support the analysis and dissemination of their empirical information gathered during OTD 770. They will present their empirical literature findings to their professional colleagues via a clinical research forum. Students will be expected to create three forms of information dissemination and critically review the professional feedback they receive. PREREQUISITE: Permission of department.

**OTD 783. Evidence Based Practice. 3 Credits.**
This course will coordinate with OTCH 783. Students will address the parameters and criteria for evidence-based practice. They will build a library of information that facilitates their evaluation of the status, beliefs, and practice of Occupational Therapy. They will develop skill in the synthesis of empirical evidence and explore dissemination options to service recipients. Students’ work will culminate in the formulation of a decision-making paradigm for their future practice decisions. PREREQUISITE: Permission of Department.

**OTD 799. Practice and Research. 3 Credits.**
This is an elective course that allows students to pursue areas of special interest under the direction of a faculty member of his or her choice. This course is designed to support students’ learning as they complete their pre-doctoral studies. Investigation of special issues relevant to an aspect of occupational therapy practice will include study of pertinent practice factors. Students will complete special projects relevant to the practice areas of interest, such as an oral presentation, written paper, or case analysis. May be repeated for credit. PREREQUISITE: Permission of Department.

**OTD 825. Qualitative Research Methods. 3 Credits.**
This course is an introduction to qualitative research techniques. Students will have several opportunities to gain hands-on experience using fundamental qualitative research techniques to sharpen their data collection, analysis and write-up skills. The goals of this course are to better understand the role qualitative techniques play in research, identify various ethical issues, sharpen interview and observation skills, and develop foundation skills for collecting, analyzing and interpreting qualitative data. Prerequisite: Permission of Department. Lecture course.

**OTD 835. Quantitative Research for Applied Science. 3 Credits.**
Research relevant to therapeutic intervention comes from a variety of disciplines involving varied research designs and analysis strategies. Students in this course will examine selected research studies and gain skill in analyzing methods and results as well as in applying research findings to practical problems. Students will conduct a systematic review on a specific area of occupational therapy practice.

**OTD 850. Teaching Practicum. 1-3 Credits.**
The purpose of this course is to provide practical learning whereby students receive individual mentorship for the development, implementation and evaluation of a teaching experience. Students will
be responsible for developing the material, instructing students, grading assignments and evaluating the teaching experience. The teaching experience is expected to include at least 12 hours of face to face instruction (or the equivalent in on-line teaching or written materials). Teaching experiences can include MOT program lectures or labs, continuing education workshops, patient education programs, or staff inservices or another experience that meets the time and competency requirements. Prerequisite: A graduate level teaching methods course such as NSG 873, NSG 874, C & T 740, C & T 840

OTD 860. Theory and Practice in Occupational Therapy. 3 Credits.

This course will cover major theoretical frameworks and practice models in occupational therapy. The history of occupational therapy will be included to provide a basis for understanding the evolution of the profession as well as past and current issues and trends. Students will learn how to critically analyze theories, evaluate research evidence related to specific theories and practice models, and assess pragmatic issues in applying practice models to specific settings and populations.

OTD 865. Occupation-Based Practice. 3 Credits.

This course is designed to critically review Occupational Therapy theories, research, practice models and frameworks using the tenets of occupation based practice. Students will analyze seminal literature from occupational science and relate theory and evidence to practice. Students will review their specified area of practice to develop a proposed method of practice that incorporates empirical evidence and practice methods. Finally, students will select a mentor from their practice area to review their proposal. Critical feedback will be incorporated into a final presentation and paper. PREREQUISITE: Permission of Department.

OTD 875. Professional Development. 3 Credits.

This course will explore professional development from an advanced practice perspective. Students will examine aspects of advanced practice such as leadership (both work and professional), management, group and system communication and change agency. They will explore these topics within their current practice settings and select an area of advanced skills to explore in more depth. Students will develop an understanding of how they can impact systems and contribute to the development of the occupational therapy profession.

OTD 880. Program Evaluation. 3 Credits.

Leadership in areas of specialty practice will require our graduates to critically evaluate their practice programs. In this course, students will explore the traditional and innovative ways to evaluate professional services and systems, and they will develop skills to conduct program evaluations. Students will examine the purpose and process of program evaluations in a variety of clinical settings. Through lecture, discussion and a project they will develop and execute a program evaluation in their area of practice. PREREQUISITE: Permission of Department.

OTD 885. Advanced Practicum. 1-3 Credits.

This practicum is designed to span 400 hours. Students will identify an area of practice through which they want to develop clinical initiatives and leadership. Selected field experiences will provide opportunities for program development, leadership, and information dissemination. Upon completion, the students will provide his or her clinical team with a program, or research based initiative, along with specified program evaluation methods. PREREQUISITE: Permission of Department and continuous enrollment until completion of competencies.

OTD 890. Capstone Project. 1-3 Credits.

The capstone project will comprise a scholarly report individualized to the scope of the project chosen. A capstone project report represents the application of knowledge as well as the search for it, and differs from a thesis such that student opinion and experience is involved. The student must negotiate capstone objectives, evaluation standards and any potential approvals prior to initiation of the project. PREREQUISITE: Permission of OTE Advisor/Mentor after completion of core, elective, and practicum coursework. Total capstone credit will equal 3 hours. Prerequisite: All core, elective, and practicum coursework.

OTD 899. Special Projects. 1-3 Credits.

This is an elective course that allows students to pursue areas of special interest under the direction of a doctoral faculty member of his or her choice. This course is designed to support doctoral training. Academic options range from research based studies and/or activities to critical analysis of clinical practice methods. Students will complete special projects relevant to their designated practice area of interest. Students must negotiate learning objectives, academic projects and evaluation standards with their mentor. May be repeated for credit. PREREQUISITE: Permission of department. LEC

Therapeutic Science Courses

TS 800. Research Proseminar. 1 Credits.

A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meetings will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of four credits. (Same as OTMS 800.)

TS 805. Multidisciplinary Theoretical Perspectives. 3 Credits.

Students will identify and explore key theories in behavioral and social science with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories, while also developing knowledge about theory guided research and interventions.

TS 850. From Beliefs to Evidence. 1 Credits.

Analysis of the role of beliefs about practice in professional culture and how beliefs are affected by the accumulation of research evidence. Topics include the nature of science and beliefs, the nature of evidence, and the debate over evidence-based practice. Students will use topics from their own professional interests for class presentations and written assignments. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS900 and TS950, and is offered in the Fall & Spring every 3rd year. Prerequisites: Permission of the instructor.

TS 880. Special Projects. 1-6 Credits.

An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analysis as negotiated with the faculty member. May be repeated for credit. Prerequisite: Permission of instructor.

TS 900. Evolving Interdisciplinary Views of Disablement. 1 Credits.

Assessment of how our social and cultural context defines notions of disability and disablement in our society. Topics include historical constructs of disability, public policy related to disability, and social paradigms of disability. Students will evaluate views of disablement from the perspective of their own discipline. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS850 and
TS950, and is offered in the Fall & Spring every 3rd year. Prerequisite: Consent of the Instructor.

**TS 950. Designing Effective Knowledge Transfer. 1 Credits.**
Examination of the principles of knowledge transfer and diffusion of innovation as they relate to practices in therapeutic professions. Topics include the diffusion process, change agents, innovation adoption, and current diffusion methods. Students will evaluate diffusion processes that have occurred within their own professions. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS850 and TS900, and is offered in the Fall & Spring every 3rd year. Prerequisite: Consent of the instructor.

**TS 980. Advanced Study in Therapeutic Science. 1-9 Credits.**
Students engage in advanced study of a topic of their interest, guided by an appropriate mentor. Options for engaging in learning include directed readings, interpretation of evidence, discussions, and written syntheses of existing literature. Students typically enroll in offerings of this course several times over a series of successive terms, with the course sequence culminating in a written proposal for original research and an oral defense of that proposal (oral comprehensive examination). Prerequisite: Permission of instructor.

**TS 990. Dissertation in Therapeutic Science. 1-9 Credits.**
Research experience leading to dissertation for doctoral students in Therapeutic Science. Students enroll in offerings of this course over a series of successive terms, culminating in a written dissertation describing original research and an oral defense of the dissertation research. Prerequisite: Permission of instructor.

### Occupational Therapy Doctorate Early Entry Courses

**OTDE 700. Foundations in Occupational Therapy. 2 Credits.**
This foundational course will support transition to the graduate program and the occupational therapy profession. Students will understand occupation as the foundation of the discipline and discuss the philosophy, history, current practice parameters and future directions of the occupational therapy profession. This course introduces students to constructs of professionalism including ethics and professional behaviors, interprofessionalism, and professional responsibilities within context of occupational therapy. Prerequisite: Acceptance to the entry-level professional OTD program of study.

**OTDE 705. Functional Anatomy and Kinesiology to Support Occupational Performance. 3 Credits.**
This course will focus on understanding of the physical components of human movement which serve as one foundation for occupational performance. The instructor will facilitate a section-based review of anatomy (e.g., shoulder, elbow, wrist, hand, hip, knee) integrated with the biomechanical and kinesiology principles that occur in typical and atypical movement within each section. The emphasis in this course will be on how to use biomechanical and kinesiology principles to guide the development of occupation-based interventions in people with various abilities across the lifespan through promotion, compensation, adaptation and prevention. Prerequisite: Acceptance to the entry-level doctoral program in Occupational Therapy.

**OTDE 710. Professionalism in Context - I: Interpersonal and Interprofessional. 2 Credits.**
This course includes professional opportunities for students to apply interpersonal and interprofessional skills and professional reasoning through service learning. Students will gain understanding regarding occupational performance in medical, community and educational contexts across the lifespan. Students will participate in reflections through small group discussions, apply knowledge from fieldwork experiences, conduct assessments, and develop evidence-based interventions. The emphasis for this course in the series is becoming familiar with the interprofessional team process and structure. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**OTDE 711. Professionalism in Context II. 3 Credits.**
This course will explore the importance of context in understanding how the person, environment, and tasks all interact to guide occupational performance in everyday life. Students will apply the fundamentals of the evaluation process to assess occupational performance across the lifespan. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**OTDE 715. Occupational Therapy Scholarship - I. 2 Credits.**
This course provides a beginning structure for the development of foundational scholarship skills to support and inform evidence-based occupational therapy practice. Topics include university resources for scholarship; finding and evaluating evidence related to conditions, assessments, interventions, outcomes, populations, and patient experiences. Students will be guided in understanding and categorizing levels of evidence provided by primary sources, books, web resources & practice journals. Students will complete writing assignments and identify key elements of scientific reasoning. Prerequisite: Acceptance to the entry-level professional OTD program.

**OTDE 716. Occupational Therapy Scholarship - II. 3 Credits.**
This course builds on the basic scholarship skills and emphasizes development of intermediate skills to inform occupational therapy practice. Topics include: finding evidence related to intervention, preventative strategies, cost-effectiveness of treatments, understanding the contribution of peer-reviewed research articles and developing professional writing skills. Students will appraise and synthesize evidence to make practice recommendations. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**OTDE 720. Theory to Practice in Occupational Therapy. 2 Credits.**
This course prepares students to use occupational therapy theories and professional reasoning to guide the OT process of evaluation, intervention and outcomes. Students will explore contemporary themes in current OT theories and models and examine the roots of these ideas. Students will explore how theory develops and evolves and the potential role of occupational therapy theories to influence health and well-being of individuals, groups and populations. Prerequisite: Acceptance to the entry-level professional OTD program.

**OTDE 725. Analysis & Adaptation I. 3 Credits.**
This course will analyze the role of occupations and the factors influencing occupational performance in everyday contexts. This course will apply the occupational therapy practice framework to understand occupation as a means and end to occupational therapy practice. This course will use experiential learning for understanding occupation, the occupational therapy process, and person-centered practice. Prerequisite: Acceptance to the entry-level professional OTD program.

**OTDE 726. Analysis & Adaptation II. 4 Credits.**
This course will apply concepts of professional reasoning and the occupational therapy framework to explore the impact of selected medical and psychosocial conditions on person factors and occupational performance in everyday life. An understanding of these conditions is paired with appropriate occupational therapy assessments and task analysis to understand performance considerations and occupation as a therapeutic means and end to occupational therapy practice. This
This foundational course will introduce policies and the impact of professional advocacy on occupational therapy practice and systems. Students will understand what policy is, why policy matters, and how laws, payment/reimbursement policy, practice acts and regulatory agencies shape our view of health, ability/disability, and OT practice. Self-assessments provide baseline information for professional development related to policy and advocacy. Prerequisite: Successful completion of all prior courses required by the OTDE curriculum.

OTDE 761. Policy and Advocacy for Occupational Therapy - II. 3 Credits.
This course will build on foundational policy information by introducing system specific policies and the work of advocacy as applied to the OT profession, populations and policy development/implementation. Students will examine policy within and across settings and systems that impacts OT practice. Students will learn about stakeholders, policy development and will demonstrate advocacy within teams, across public/private systems. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 795. Research Discovery for Occupational Therapy. 2 Credits.
This course introduces students to the process of conducting research. Students will apply the evidence-based practice cycle, scientific method, and critical thinking skills of research to occupational therapy practice. Students will develop research questions aligned with their interests for OT practice needs, and then explore existing literature and evidence related to their research question. Students will learn about responsible conduct of research as they begin to employ the research process. Students will learn and practice the steps for quantitative research processes using a statistical software package. Students will learn the preliminary stages of how to write and put together the components of a manuscript for a peer-reviewed publication. Prerequisite: Successful completion of all prior courses required by the OTDE curriculum.

OTDE 815. Supporting Occupational Performance Across the Mental Health Continuum. 3 Credits.
This course will apply theory and evidence to occupational therapy practice across the continuum of mental health through mental illness in healthcare, social, and educational settings. Students will consider opportunities to support positive mental health for all people and support individuals with psychiatric disorders through assessment and intervention for meaningful, client-determined engagement in everyday life. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 845. Research Implementation and Dissemination in Occupational Therapy. 4 Credits.
This course will emphasize the processes of conducting and disseminating a research study. Conducting a study includes activities such as subject recruiting, data management and analysis, and evaluating how findings may be used to guide practice. Disseminating research involves understanding how to frame the research based on stakeholder interests and could involve manuscript writing, professional presentations, or discussions with community agencies, families, or consumers. This course allows students to implement a research project based on research questions developed as part of the prior courses in the research sequence in this curriculum. Additionally, students will create a dissemination plan for a community agency wanting information to advance their mission. The goals are to produce an entry-level occupational therapist who is aware of the relation between good research and good practice, is capable of critical analysis of scientific and clinical research literatures, and who is aware of the need for problem identification, good research design and methodology, and
OTDE 850. Professionalism in Education. 2 Credits.
This course focuses on teaching and learning activities in a variety of contexts. This course builds on professional communication strategies introduced in previous Professionalism in Context I. Students will learn effective teaching strategies to communicate information to clients, families, and other professionals while gaining confidence as an entry-level occupational therapy practitioner. Students will gain experience in the development of scholarly presentations for health care professionals. Relationship development, the exchange of messages, conflict management, and a better understanding of the Self, will all contribute to the student's knowledge and understanding of the importance of effective communication in teaching. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 860. Professionalism in Practice I. 3 Credits.
Students will apply the professional reasoning process to understand individuals' occupational performance based on cases from level II fieldwork experiences. Students will conduct case analysis and develop evidence-based intervention plans. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 861. Professionalism in Practice II. 3 Credits.
This course will use professional reasoning to examine occupational practice within various delivery systems. Students will use lecture and small group seminars to analyze systems from level II fieldwork experiences and provide evidence to support the role of OT in innovative and traditional practice settings. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 870. Contemporary Community Engagement. 2 Credits.
This course introduces the concept of community engagement as a strategy for supporting healthy individuals, populations, and communities. Students will reflect on professional experiences and interests to identify gaps in community resources that impact occupational justice. Students will gain competency in identifying health disparities, analyzing policy, and identifying and communicating with funding agencies to engage community interprofessional partnerships. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 900. Occupational Therapy Level II Fieldwork - Part I. 12 Credits.
The first of a required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists supervise the experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. Prerequisite: Satisfactory completion of required academic coursework with a cumulative grade point average of 3.0.

OTDE 901. Occupational Therapy Level II Fieldwork - Part II. 12 Credits.
The second required full-time, three-month supervised experience in a facility meeting specified criteria. Qualified occupational therapists supervise the experience. Students will be exposed to a variety of age ranges and disabilities within different service delivery systems. By the end of the three-month period, students will be expected to perform at the level of an entry-level therapist. Prerequisite: Satisfactory completion of required academic coursework with a cumulative grade point average of 3.0.

OTDE 902. Occupational Therapy Level II Fieldwork - Alternative. 6-12 Credits.
An alternative supervised experience in a facility meeting specific criteria. Qualified occupational therapists supervise the experience. By the end of the experience, students will be expected to perform at the level of an entry-level therapist. Prerequisite: Satisfactory completion of required academic coursework with a cumulative grade point average of 3.0.

OTDE 915. Professionalism in Leadership and Administration. 3 Credits.
This course will focus on professional responsibilities and essential skills associated with leadership, administration, and management of occupational therapy services. Students will gain knowledge in the principles of program evaluation, business aspects of practice, as well as supervisory and management issues. In addition, students will acquire skills in professional development and leadership skills for the entry-level practitioner. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 925. Independent Study - Special Topics. 1-3 Credits.
This is a learning experience tailored to the needs and interests of a student, focused on topic outside of the regular curriculum or explored in greater detail than is covered by the regular curriculum. The student will work closely with the faculty sponsor to define, pursue, and complete the project. This syllabus is accompanied by a "proposal" form, which must be completed and submitted for consideration by the faculty sponsor at least 8 weeks prior to the start of the term in which the experience will take place. Permission to enroll in this course will not be granted until the proposal has been reviewed and approved by the faculty sponsor. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum. Consent of the instructor.

OTDE 935. Independent Study - Study Abroad. 1-3 Credits.
This independent study experience allows occupational therapy students to explore the profession in an international setting. The experience must be closely coordinated with the Office of International Programs at KU Medical Center. The student establishes individual learning objectives with the OT department faculty mentor in the semester preceding the experience. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum. Consent of the instructor.

OTDE 950. Capstone Project Planning. 3 Credits.
This course is designed to foster development of in-depth and advanced knowledge in a specific interest area through guided planning of the Capstone Project. Students will pursue a literature review while considering the needs of a population or organization, and then propose a Capstone Project. This course supports student development of in-depth knowledge as they explore an area of: a) research and scholarship, b) policy and advocacy c) advanced practice, or other content area specified by ACOTE. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum. Consent of the instructor.

OTDE 952. Capstone Project Planning - III. 1 Credits.
This course will prepare students for their capstone experiences as they begin implementing a plan for their capstone project. Building upon the activities started in OTDE 950 & 951, this course supports student development of in-depth knowledge as they explore an area of: a) research and scholarship, b) policy and advocacy c) advanced practice, or other content area specified by ACOTE. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

OTDE 980. Capstone Dissemination. 3 Credits.
Students will collaborate with faculty mentors and site supervisors to develop scholarly presentations for dissemination. Students will present the results of the capstone project to local, regional and/or national audiences. Students will assume a leadership role in identifying opportunities for publication of the capstone project and completing the submission. This course is completed in conjunction with the capstone
experience to provide students with the opportunity to develop skills in professional presentations and publications. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**OTDE 990. Capstone Experience. 14 Credits.**

Students will complete a 14-week practical experience at the completion of coursework and level II fieldwork experiences. This experience is designed to provide in-depth knowledge in a specific area of interest. Students will participate in practical experiences and scholarly activities designed to promote autonomous learning. Students will assume a leadership role in the implementation of the capstone project with guidance from faculty mentor and site supervisor. Prerequisite: Successful completion of all prior coursework required by the OTDE curriculum.

**Doctor of Occupational Therapy (Post-Professional)**

This program of study is designed at registered occupational therapists who are seeking advanced practice knowledge to support their adoption of pioneering approaches and opportunities, and to prepare them to be leaders in the field. This program focuses on innovation and professional leadership in practice. Offered entirely online, therapists can obtain this education while continuing to work in the profession.

This program is designed for students who already possess an entry-level Master's or Bachelor's degree in Occupational Therapy and eligibility to practice professionally as an OT.

Applications for this program are accepted online. Detailed instructions on how to apply are available on the Department of Occupational Therapy Education (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education/doctor-of-occupational-therapy.html) website. The application deadline is December 1 for students entering the following summer semester. Applications are not reviewed until all information is received.

**Admission requirements:**

A degree in occupational therapy and a master's degree from an accredited institution is required and must be documented by submission of an official transcript indicating the degree has been conferred before entering the program.

Official transcripts for all courses taken from any institution are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative grade-point average requirement.

- Applicants must possess a cumulative grade-point average of at least 3.2 on a 4.0 scale for his or her bachelor's degree program.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.
- A background check is required during the admission process; it may affect the student's eligibility to enter the program.
- Applicants must provide documentation of registration as an occupational therapist (NBCOT in the USA, or equivalent in a country recognized by WOTF).
- A current resume or curriculum vitae is required and must include information on the applicant's background and educational and professional interests. Professional leadership contributions, as well as community-based volunteer leadership activities, should be highlighted.
- With the online application, applicants will submit a statement of career goals of approximately 400 or fewer words in length. Prepare a statement of your career goals that outlines the following:
  - Why you have chosen to pursue an OTD degree at this point in your career
  - What you hope to learn and achieve during your study toward this degree
  - How you plan to use this degree and what you hope to accomplish after you graduate
- Three references are required, which can include a faculty member, advisor, employer, or other person familiar with the applicant's work and character.

After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs are available on how to apply are available on the [Department of Occupational Therapy Education](http://www.kumc.edu/school-of-health-professions/occupational-therapy-education/doctor-of-occupational-therapy.html) website.

**Post-Professional OTD curriculum** - This program focuses on specialization and professional leadership in practice. This innovative curriculum is intended for practicing OTs, and is designed to be responsive to professional demands and to meet the highest academic standards. Core work and specialization opportunities have been integrated across the curriculum to create a base of both advanced knowledge and specialty knowledge that will prepare graduates for leadership in their chosen areas of concentration. The curriculum incorporates 4 key components: evidence-based practice, professional leadership, specialty practice, and teaching.

**Degree requirements:**

- Degree requirements are normally completed within 3 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University's Research Skills and Responsible Scholarship (http://catalog.ku.edu/graduate-studies/kumc/#programstext) requirement. This is met by completing the following:
  - Identify and examine practice-focused problems and develop quantitative approaches to evaluate efficacy of solution strategies.
  - Explore program evaluation, efficacy of clinical methodology, and assessing client experience through narrative, interview, and other qualitative methodology by participating in qualitative coursework, appropriate for the student’s focus and approved by the OTD faculty mentor.
- Identify professional standards and ethics.
- Uphold professional standards and ethics as outlined in the OTD student handbook.
- Maintain appropriate professional credentials while participating in the OTD program.
- Complete annual KUMC Conflict of Interest reporting form.
- Successful completion of a minimum of 36 credit hours.
- Successful completion of the culminating OTD 890 Capstone Project. This is an individually designed, mentored project that demonstrates a synthesis of the knowledge and skills developed in the program.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of the following courses:

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>OTD 835</td>
<td>Quantitative Research for Applied Science</td>
<td>15</td>
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<tr>
<td>OTD 860</td>
<td>Theory and Practice in Occupational Therapy</td>
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<td>OTD 865</td>
<td>Occupation-Based Practice</td>
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<tr>
<td>OTD 875</td>
<td>Professional Development</td>
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<tr>
<td>OTD 880</td>
<td>Program Evaluation</td>
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Interdisciplinary Electives 12

Four 3-hour courses, with one from each of the following areas: Leadership, Teaching, Qualitative Methods, General Elective

Practicum Courses 9

Each of the following will be taken in one, two, or three credit increments.

OTD 850 Teaching Practicum
OTD 885 Advanced Practicum
OTD 890 Capstone Project

Total Hours 36

- Specific elective courses are selected to complement the student's program in consultation with the student's academic advisor.

The department will provide a program-specific handbook to each student upon their entry into the program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

Typical Plan of Study

The program’s curriculum is a combination of online course meetings held at specific times and online learning activities on their own.

Prior to the first class, students will complete an online tutorial that will introduce them to Blackboard Collaborate.

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<thead>
<tr>
<th>Year 1</th>
<th>Summer</th>
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<th>Hours Spring</th>
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<td>3 Leadership Elective</td>
<td>3 OTD 885</td>
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This is an example plan of study as course offerings may vary by semester and year. Your plan of study will be finalized in consultation with your advisor.

TECHNICAL STANDARDS

Post-Professional Occupational Therapy Doctoral Degree Program

A Doctoral Degree in Occupational Therapy signifies that the holder is prepared to assume leadership in clinical practice after developing advanced practice competencies. It follows that graduates must have the knowledge and skills to promote evidence-based practice, professional leadership, teaching, and advanced practice. Therefore, all individuals admitted to the University of Kansas Medical Center Occupational Therapy Doctoral degree program must have the following abilities and expectations with or without accommodations.

Individuals with disabilities are encouraged to apply to the program, and reasonable accommodation will be made for qualified applicants or students who disclose a disability. Candidates who indicate upon application or after acceptance to the program that they cannot meet an expectation listed will be reviewed further by the OTD Admissions Manager in collaboration with the ADA Panel for the School of Health Professions to determine if reasonable accommodations are likely to lead to successful completion of the occupational therapy graduate program.

1. Problem Solving: The culminating activity in the preparation of an occupational therapist is clinical reasoning. The post professional occupational therapy student is expected to develop advanced expertise and demonstrate leadership, teaching, advanced practice, and evidence-based practice skills. Therefore, a candidate must be able to understand research, make correct observations, and engage in reasoning, analysis, and synthesis.

2. Judgment: The candidate will be expected to demonstrate judgment in classroom and practical settings which shows an ability to make mature, sensitive, and effective decisions in the following areas: a) relationships with supervisors, peers, and patients/consumers, b) professional behavior, c) the effectiveness of intervention strategies. He or she must demonstrate an understanding of the rationale and justification for his or her performance.

3. Communication: A) Written communication: The candidate must be able to assimilate information from written sources (texts, journals, medical/school records, etc.). The candidate must be able to attain, comprehend, retain, and use new information presented in written formats. Candidates are required to use information from written sources and must be able to produce appropriate written documentation. B) Verbal and nonverbal communication: Candidates must be able to communicate effectively to elicit information from patients/consumers/supervisors, and peers. Candidates must possess the ability to convey factual information, but also to communicate the more subtle cues of mood, temperament, and social responses. Communication with patients/consumers and with all members of the intervention team or academic unit must be accurate,
sensitive, effective, and efficient. Response time to emergencies/crisis situations, as well as more routine communication must be appropriate to the situation or setting.

4. **Sensorimotor**: Candidates must have sufficient gross motor, fine motor, and equilibrium functions, and functional use of sensory systems to enable them to perform all tasks essential to their career paths.

5. **Behavioral and social attributes**: Candidates are expected to exhibit professional behaviors and attitudes during their participation in classroom, clinical, and research experiences. The candidate must be able to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds. This includes, but is not limited to, an ability to establish rapport and communicate with others, to use appropriate language, possess flexibility toward change, and to accept responsibility for one’s own conduct. Students are expected to exhibit a positive attitude toward patients/clients, peers, and supervisors.

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**Doctor of Occupational Therapy (Entry-Level)**

In fall 2021, KU's entry-level occupational therapy doctoral program applied for accreditation and was granted Preaccreditation Status by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA). This program has been designed to provide students with skills necessary to work as an occupational therapist in a range of health care, educational and community-based settings. The OTD is a three-year full time on-site commitment. Lectures and labs occur on the KU Medical Center campus. Upon completion of didactic course work, students complete required fieldwork and doctoral capstone experiences throughout the Kansas City metropolitan area, the state of Kansas, and/or across the country. The program has completed an on-site evaluation and must be granted Accreditation Status before its graduates will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate’s ability to sit for the NBCOT certification examination or attain state licensure.

Accreditation Council for Occupational Therapy Education, 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. ACOTE’s telephone number c/o AOTA is (301) 652-AOTA and its web address is www.acoteonline.org (http://www.acoteonline.org/).

Applications for this program are accepted online and requires two parts to be completed separately. Like many entry-level programs across the country, KU uses the Occupational Therapy Centralized Application Service (OTCAS) as the first part of the application process. In the second part, supplemental materials are submitted to KU using an online application portal.

Detailed instructions on how to apply are posted on the Department of Occupational Therapy Education (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education/master-of-occupational-therapy/admission-and-eligibility-requirements.html) website. Application materials are accepted August 1-December 1 for the class entering the program in August of the following fall. All application materials must be received by December 1 for an application to be complete and qualified for review.

**Admission requirements:**

- A bachelor's degree in any field from a regionally accredited institution is required and must be documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from all course work taken at any institution also are required. Although an application may be submitted while course work still is in progress, the student's plan for completion prior to entering the program must be articulated as part of the application. Students with degrees from institutions outside the U.S. may be subject to transcript evaluation to verify the degree is equivalent to a U.S. degree and the student meets the minimum cumulative grade-point average requirement.

- Applicants must possess a cumulative grade-point average (GPA) of at least a 3.2 on a 4.0 scale for his or her bachelor's degree program and specifically a 3.2 GPA on the specific prerequisite courses. Information documented on student transcripts will be used to calculate all grade point averages. Consistent with University of Kansas policy, the admissions committee will replace grades of classes that have been repeated.

- The following prerequisite courses are required: abnormal psychology, lifespan development, statistics, ethics, human physiology, human anatomy with a lab, a social science course, and medical terminology.

Specific requirements for prerequisite courses are as follows:

- Each course (except labs and medical terminology) must be a minimum of three credit hours. Medical terminology may be one credit hour.

- Students must complete prerequisite coursework before beginning the program.

- A passing grade of "C" or higher is required in all prerequisite courses. A grade of "D" is not considered a passing grade.

- It's suggested human anatomy and physiology courses are completed prior to applying; however, this requirement is evaluated on an individual basis and alternatives may be taken into consideration.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement (http://catalog.ku.edu/graduate-studies/kumc/admissiontext).

- As part of the online application, applicants will submit a personal statement describing why occupational therapy is his or her chosen career, and how a degree in OT will support the applicant's personal and professional goals. This statement should include an explanation of how personal, professional, and educational background and experience has prepared the applicant for this career decision and a future in occupational therapy.

- Applicants will also submit a 500-word (or less) statement of interest in which he or she provides information about the reasons why the program at the University of Kansas is of interest. Unlike the personal/professional statement submitted to OTCAS about occupational therapy as a profession, this Interest statement should be specifically about the KU's occupational therapy program.

- Three separate references are required and should be written by a professional, advisor, instructor, supervisor, coach, or other adult contact who can attest to the applicant's potential success in the
program and future contributions to the occupational therapy profession. At least one letter of recommendation must be from an academic reference.

- A background check is required during the admission process; it may affect the student's eligibility to enter the program. This one-time fee must be paid directly to the company performing the background investigation. A drug screening may also be required. More information: School of Health Professions background check and drug screening policy. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html)

- Applicants who have been convicted of a felony should be aware of the fact that application for licensure, certification, or registration will be subject to review and additional information may be requested. Based on the review process, denial of licensure, certification, and/or registration may occur and subsequent opportunities for employment may be compromised.

- All accepted students must submit copies of current, valid CPR and First Aid certifications prior to the program start date. CPR certification must be from the American Heart Association and confirm the Healthcare Provider designation covering the entire lifespan (infant, child, and adult).

Applicants will be assessed based on these requirements. Admission requirements are subject to change.

Entry-level Professional OTD curriculum - This subplan allows students who possess the appropriate prerequisite course work and an undergraduate degree to pursue a 3-year clinical doctorate degree that includes academic, practicum, and fieldwork preparation for professional practice in a variety of OT settings. Capstone and fieldwork experiences are offered throughout the Kansas City community, the state of Kansas and, in some cases, in states other than Kansas. Upon completion, students are eligible for the OT certification examination administered by NBCOT. Only students who have successfully completed the entire three-year program are eligible for this certification exam, which is required for legal employment as a practicing OT.

Degree requirements:

- All students are enrolled as full-time students, and degree requirements are normally completed within 3 years of admission to the program. All academic preparation, fieldwork, and capstone in the professional program must be completed within 4.5 years of the first date of matriculation into the program.

- Cumulative grade-point average (GPA) of at least a 3.0 for all graduate coursework.

- Successful completion of all courses with the grade of “C” or higher.

- Successful completion of required Level II fieldwork experiences with the grade of “B” or higher. A part-time optional Level II fieldwork experience will not count toward satisfying this requirement.

- Successful completion of a minimum of 112 credit hours, including academic course work and fieldwork experiences.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Successful completion of the following courses:

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>OTDE 700</td>
<td>Foundations in Occupational Therapy</td>
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</tr>
<tr>
<td>OTDE 705</td>
<td>Functional Anatomy and Kinesiology to Support Occupational Performance</td>
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OTDE 710 Professionalism in Context - I: Interpersonal and Interprofessional 2
OTDE 711 Professionalism in Context II 3
OTDE 715 Occupational Therapy Scholarship - I 2
OTDE 716 Occupational Therapy Scholarship - II 3
OTDE 720 Theory to Practice in Occupational Therapy 2
OTDE 725 Analysis & Adaptation I 3
OTDE 726 Analysis & Adaptation II 4
OTDE 730 Population Health & Wellness 3
OTDE 740 Neuroscience Foundations to Support Occupational Performance 3
OTDE 754 Occupational Performance and Participation Across the Lifespan - I 3
OTDE 755 Occupational Performance and Participation Across the Lifespan - II 3
OTDE 756 Occupational Performance and Participation Across the Lifespan - III 5
OTDE 760 Policy and Advocacy for Occupational Therapy - I 2
OTDE 761 Policy and Advocacy for Occupational Therapy - II 3
OTDE 795 Research Discovery for Occupational Therapy 2
OTDE 815 Supporting Occupational Performance Across the Mental Health Continuum 3
OTDE 845 Research Implementation and Dissemination in Occupational Therapy 4
OTDE 850 Professionalism in Education 2
OTDE 860 Professionalism in Practice I 3
OTDE 861 Professionalism in Practice II 3
OTDE 870 Contemporary Community Engagement 2
OTDE 900 Occupational Therapy Level II Fieldwork - Part I 12
OTDE 901 Occupational Therapy Level II Fieldwork - Part II 12
OTDE 915 Professionalism in Leadership and Administration 3
OTDE 950 Capstone Project Planning 3
OTDE 980 Capstone Dissemination 3
OTDE 990 Capstone Experience 14

Total Hours 112

Specific elective courses may be selected to complement the student’s program in consultation with the student’s academic advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

The Doctorate of Occupational Therapy degree program at KU Medical Center is a full-time, three-year course of study at the graduate level and includes academic, fieldwork and doctoral capstone preparation.

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
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<td>OTDE 795</td>
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</table>
Essential Sensory Skills: The occupational therapy student must:

- accurately perceive objects in the environment
- accurately observe human performance. For example, the student must be able to discriminate between a safe and an unsafe environment and between therapeutic and non-therapeutic behavior and contexts.

Essential Communication skills: The occupational therapy student must:

- assimilate information from written sources (texts, journals, medical or school records, etc).
- attain, comprehend, retain and use new information presented in written formats.
- independently complete assignments, tests, and professional documentation appropriately, in a timely manner, and in appropriate format.
- impart information so that it can be understood by others.
- elicit information from instructors, peers, persons receiving services, family members, and supervisors.
- follow verbal or written instruction in order to complete assignments.
- note and respond to factual information provided by others as well as to the more subtle cues of mood, temperament, and social responses.
- communicate with others accurately, sensitively, effectively and succinctly.
- communicate in a timely manner and in a way that is appropriate to the situation.

Essential Cognitive Skills: the occupational therapy student must:

A). Clinical Reasoning:

- make correct observations and have the skills of comprehension, measurement, calculation, reasoning, integration, analysis, and synthesis. For example, the student must have the skills to conduct assessments accurately, compute test scores, analyze results and determine the impact of this information on intervention, while synthesizing a variety of input.
- recognize, label, and categorize information to draw conclusions. Then the student must be able to question, analyze, and judge the results of their conclusion.

B). Judgment:

- demonstrate judgment in classroom; laboratory; and fieldwork settings which shows an ability to make mature, sensitive, and effective decisions in appropriate situations
- relate appropriately to instructors, peers, supervisors and persons being served. For example, when provided with constructive feedback from an instructor or supervisor, the student will adapt behavior accordingly.
- demonstrate professional behaviors, such as timeliness and regular attendance.

Essential Behavioral/Social Skills: occupational therapy students must:

- exhibit professional behaviors and attitudes during their participation in the classroom and in clinical situations. This includes, but is not limited to, appropriate language, flexibility toward change and acceptance of responsibility for one’s own conduct.
- exhibit a positive attitude toward persons being served, family members, peers, and supervisors.
Physical Therapy and Rehabilitation Science

The department offers the following programs:

The Master of Science in Athletic Training (p. 679) (MSAT) program offers the required entry-level degree for students planning to become athletic trainers.

The Doctor of Physical Therapy (p. 682) (DPT) program offers the required entry-level degree for students planning to become physical therapists.

In conjunction with the DPT program, the following dual degree programs (p. 685) are offered:

1. A dual DPT/MBA (p. 685) degree program is available to outstanding DPT students interested in becoming physical therapists prepared for the complicated health finance and management fields with business knowledge and experience.

2. A dual DPT/MHSA (p. 685) degree program prepares DPT students for management and leadership positions in health care organizations.

3. A dual DPT/Ph.D. (p. 685) in rehabilitation science degree program is available to outstanding applicants with backgrounds in health-related sciences who wish to become physical therapists and engage in research related to rehabilitation science.

The Doctor of Philosophy (Ph.D.) in Rehabilitation Science (https://catalog.ku.edu/health-professions/physical-therapy-rehabilitation-science/phd/) program prepares outstanding leaders who advance innovative interdisciplinary research in rehabilitation science.

The Department of Physical Therapy, Rehabilitation Science, and Athletic Training is one of eight departments of the KU School of Health Professions at the KU Medical Center in Kansas City, KS.

Courses

ATTR 701. Foundations in Athletic Training. 1 Credits.
Introduction to foundational content and basic skills of clinical practice for the athletic training profession. Specific emphasis is placed on behavioral practices of healthcare professionals and clinical skills in patient management. Prerequisite: Admission into the MSAT program or permission of instructor.

ATTR 708. Applied Anatomy. 1 Credits.
This course introduces how to use anatomical knowledge to gather basic examination information about the patient. Learning opportunities include lecture and laboratory. Prerequisite: Admission into the MSAT program or permission of instructor.

ATTR 709. Advanced Topics in Human Anatomy. 6 Credits.
The student will obtain a basic understanding of human gross anatomy with specific knowledge of upper and lower extremities, head and neck, back and neural structures. At the end of this course the student will be able to apply this knowledge of anatomy to functional and clinical situations. Prerequisite: Admission into the MSAT program or permission of instructor.

ATTR 713. Integrated Clinical Education I. 2 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide opportunities for application of didactic course work. Emphasis will be placed on developing communication, interpersonal, and documentation skills, as well as other athletic training skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 716. Interventions I. 2 Credits.
Application of the skills obtained in clinical coursework and clinical problem-solving using common athletic training interventions. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 718. Documentation and Health Informatics. 1 Credits.
Emphasizes the development of effective documentation skills, including exposure to a variety of documentation formats across various practice setting and implications for proper reimbursement. Concepts of healthcare informatics are introduced including use of an electronic documentation systems and the capability of information systems to support quality care. Disablement classification models, behavioral objectives, and functional outcome concepts are applied to organize patient data and identify treatment goals. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 719. Applied Kinesiology and Biomechanics. 4 Credits.
This course involves a study of joint structure and function, and biomechanical principles underlying human motion. Emphasis is placed on the application of kinesiological principles to athletic training situations. Learning opportunities include lecture and laboratory. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

ATTR 723. Integrated Clinical Education II. 2 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide opportunities for application of didactic course work. Emphasis will be placed on developing communication, interpersonal, and documentation skills, as well as other athletic training skills and procedures that have been introduced in courses. Prerequisite:
Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

**ATTR 724. Evaluation & Management II. 6 Credits.** Builds on the foundation from anatomy, kinesiology and biomechanics. Examination skills and treatment interventions that apply specifically to the musculoskeletal system are provided. Basic examination skills, gait analysis, and therapeutic exercise are discussed and reviewed for common orthopedic conditions. The course will integrate instruction with case-based clinical problem solving. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

**ATTR 725. Research Seminar. 1 Credits.** An introduction to research in evidence-based practice that allows students to develop clinical questions and integrate evidence into clinical practice. Emphasis is placed on clinical research pertinent to athletic training. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

**ATTR 726. Interventions II. 4 Credits.** Application of the skills obtained in clinical coursework and clinical problem-solving using common athletic training treatment interventions. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of the instructor.

**ATTR 727. Clinical Reasoning I. 1 Credits.** Explores the nature of clinical reasoning and involves self-reflection, informed decision making, and medical ethics in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students' educational exposure. The Capstone Project will be introduced. Prerequisite: Successful completion of the first 2 semesters of the MSAT curriculum or permission of instructor.

**ATTR 755. Pharmacology. 2 Credits.** Pharmacological background for the clinical treatment of patients. Fundamentals of the actions of drugs including mechanisms of therapeutics and adverse effects. Prerequisite: Successful completion of the first semester of the MSAT curriculum or permission of instructor.

**ATTR 793. Integrated Clinical Education III. 1 Credits.** This course consists of supervised experiences in a clinical setting and seminar sessions that provide opportunities for application of didactic course work. Emphasis will be placed on developing communication, interpersonal, and documentation skills, as well as other athletic training skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 800. Independent Study. 1-8 Credits.** Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Admission to the MSAT program, or permission of instructor.

**ATTR 807. Clinical Reasoning II. 1 Credits.** Application and integration of critical reasoning and medical ethics in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students' educational exposure. The Capstone Project will continue. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 812. Health Care Administration. 2 Credits.** Contemporary issues in health care which impact the practice of athletic training in the health care system. Changes in the US health care system will be discussed, including managed care, plus essential elements and principles of management in health care organizations, and an overview of human resources and operational management. Financial management specifically reimbursement for patient services, risk management, information management, and compliance will be discussed. Discussion of professional development is intertwined throughout the course. Students will be exposed to business development and entrepreneurial skills needed to practice. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 813. Clinical Experience I. 2 Credits.** An immersive clinical experience that allows for graduated autonomy in developing and providing patient centered skills for successful health care practice. The student will work alongside and under the supervision of a Preceptor to experience all aspects of athletic training practice. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 814. Evaluation & Management III. 2 Credits.** Incorporates concepts from anatomy, kinesiology, basic biomechanics and knowledge of peripheral joint examination and treatment. Terminology, examination, evaluation, development of a treatment plan and treatment techniques and basic differential diagnosis skills for the head, neck, and spine are taught. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 816. Interventions III. 3 Credits.** Application of the skills obtained in clinical coursework and clinical problem-solving using common athletic training interventions. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 818. Medical Imaging. 1 Credits.** An introduction to medical imaging and an overview of its role in the health care delivery system. Topics include basic imaging equipment with an emphasis on digital acquisition and processing. Factors affecting the quality of images and limitations to the techniques are reviewed. Imaging techniques covered include: X-rays, CT scans, Nuclear medicine, ultrasound, MRI and PET. This course will include a component covering the microscopic anatomy of cells. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.

**ATTR 821. Athletic Training Seminar. 1 Credits.** Graduate seminar focusing on current issues in athletic training and preparation for the athletic training credentialing exam. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

**ATTR 822. Behavioral Health. 2 Credits.** Exploration of the development and integration of behavioral, psychosocial, and biomedical science knowledge and techniques relevant to the understanding of health and illness. Content will include application of knowledge and techniques to patient centered care. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

**ATTR 824. Performance Enhancement. 1 Credits.** Development and application of interventions to optimize sport performance. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

**ATTR 827. Clinical Reasoning III. 1 Credits.** Application and integration of clinical reasoning and medical ethics in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students' educational exposure. The Capstone Project will continue. Prerequisite: Successful completion of the first 3 semesters of the MSAT curriculum or permission of instructor.
4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

ATTR 837. Clinical Reasoning Capstone. 1 Credits.
Application and integration of clinical reasoning and medical ethics in managing patient care. Knowledge and skills from the curriculum taught to this point will be incorporated through the use of case studies and simulations within the students’ educational exposure. The Capstone Project will be completed. Prerequisite: Successful completion of the first 5 semesters of the MSAT curriculum or permission of instructor.

ATTR 843. Clinical Experience II. 4 Credits.
An immersive clinical experience that allows for graduated autonomy in developing and providing patient centered skills for successful health care practice. The student will work alongside and under the supervision of a Preceptor to experience all aspects of athletic training practice. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 863.

ATTR 863. Integrated Clinical Education IV. 1 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide opportunities for application of didactic course work. Emphasis will be placed on developing communication, interpersonal, and documentation skills, as well as other athletic training skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 4 semesters of the MSAT curriculum or permission of instructor. Corequisite: ATTR 843.

ATTR 883. Clinical Experience III. 8 Credits.
An immersive clinical experience that allows for graduated autonomy in developing and providing patient centered skills for successful health care practice. The student will work alongside and under the supervision of a Preceptor to experience all aspects of athletic training practice. Prerequisite: Successful completion of the first 5 semesters of the MSAT curriculum or permission of instructor.

Courses

PTRS 702. Physical Therapy Documentation and Health Informatics. 1 Credits.
Emphasizes the development of effective documentation skills, including exposure to a variety of documentation formats across various practice setting and implications for proper reimbursement. Concepts of healthcare informatics are introduced including use of an electronic documentation systems and the capability of information systems to support quality care. Disablement classification models, behavioral objectives, and functional outcome concepts are applied to organize patient data and identify treatment goals. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

PTRS 703. Applied Anatomy. 1 Credits.
This course introduces the learner to how physical therapists use anatomical knowledge to gather basic examination information about the patient. Prerequisite: Admission into the DPT program or permission of instructor.

PTRS 704. Physical Therapy Interventions I. 3 Credits.
This course focuses on development of skills required by the physical therapist in the generalist acute care environment. Emphasis is placed on body mechanics, workplace safety, infection control, basic mobility assessment, transfers, positioning, line management, responding to clinical emergencies, wheelchair basics, therapeutic exercise, assistive devices, gait training, plan of care and discharge planning. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

PTRS 705. Physical Therapy Interventions II. 4 Credits.
This course will introduce the principles and application of therapeutic biophysical agents. Students will apply skills obtained in previous course work and begin clinical problem-solving using common physical therapy treatment interventions. Topics include integrumentary management for wound healing interventions, therapeutic modalities with an emphasis on the healing process, and electrical modalities. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of the instructor.

PTRS 710. Advanced Topics in Human Anatomy. 6 Credits.
The student will obtain a basic understanding of human gross anatomy with specific knowledge of upper and lower extremities, head and neck, back and neural structures. At the end of this course the student will be able to apply this knowledge of anatomy to functional and clinical situations. Prerequisite: Admission into the DPT program or permission of instructor.

PTRS 711. Applied Kinesiology and Biomechanics. 4 Credits.
This course involves a study of joint structure and function, and biomechanical principles underlying human motion. Emphasis is placed on the application of kinesiological principles to clinical physical therapy situations. Prerequisite: Successful completion of semester 1 of DPT curriculum or permission of instructor.

PTRS 720. Integrated Clinical Experience I. 1 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide preliminary opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

PTRS 730. Integrated Clinical Experience II. 1 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide preliminary opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor.

PTRS 745. Orthopedic Physical Therapy I. 6 Credits.
This course builds on the foundation from anatomy, kinesiology and biomechanics. Examination skills and treatment interventions that apply specifically to the musculoskeletal system are provided. Basic examination skills for all peripheral joints, gait analysis, and therapeutic exercise are discussed and reviewed for common orthopedic conditions. The course will integrate instruction with case-based clinical problem solving. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor.

PTRS 746. Musculoskeletal Conditions and Management. 3 Credits.
Mastery of physical therapy subjective and objective examination and treatment intervention for patients of all ages who present with a musculoskeletal problem with emphasis on amputation, prosthetics, upper and lower extremity orthoses, fracture management and connective tissue disorders. Emphasis will be placed on the most common clinical problems and physical therapy diagnoses. Prerequisite: Successful completion of the first 2 semesters of the DPT curriculum or permission of instructor.

PTRS 750. Research in Evidence-Based Physical Therapy Practice. 3 Credits.
An introduction to research in the evidence-based physical therapy practice including the Scientific Method, library and multimedia resources,
Lecture and lab experiences emphasize a problem-oriented approach. This course covers basic ethical concepts, principles, relevant theories, and ethical decision-making models applied to major contemporary health care issues and dilemmas facing health professionals. Development of skills for ethical clinical decision making is the focus. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor.

PTRS 807. Ethics in Health Care. 1 Credits.
This course covers the basic ethical concepts, principles, relevant theories, and ethical decision-making models applied to major contemporary health care issues and dilemmas facing health professionals. Development of skills for ethical clinical decision making is the focus. Prerequisite: Permission of instructor.

PTRS 817. Ethics in Health Care. 2 Credits.
This course covers basic ethical concepts, principles, relevant theories and ethical decision-making models applied to major contemporary health care issues and dilemmas facing health professionals. Development of skills for ethical clinical decision making is the focus. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor.

PTRS 825. Exercise Physiology. 3 Credits.
This course will provide entry-level DPT students with the knowledge of the physiological functions and adaptations of the human body with exercise. Emphasis will be placed on familiarizing students with sound medical rationale and the basis for treatment considering the immediate and long-term effects of exercise. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum, or consent of the instructor.

PTRS 826. Cardiopulmonary Physical Therapy. 5 Credits.
Anatomy, physiology and pathophysiology of the cardiovascular and pulmonary systems are studied and related to clinical signs and symptoms. Students are introduced to common evaluation and treatment techniques, as well as the rationale for including physical therapy in the management of cardiopulmonary conditions. These topics are discussed in conjunction with case studies and current research. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor.

PTRS 828. Medical Imaging. 1 Credits.
An introduction to medical imaging and an overview of its role in the health care delivery system. Topics include an introduction to basic imaging equipment with an emphasis on digital acquisition and processing. Factors affecting the quality of images and limitations to the techniques are reviewed. Imaging techniques covered include: X-rays, CT scans, Nuclear medicine, ultrasound, MRI and PET. This course will also include a component covering the microscopic anatomy of cells. Prerequisite: Admission to the DPT program or permission of instructor.

PTRS 830. Integrated Clinical Experience III. 2 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor.

PTRS 833. Pediatric Physical Therapy. 3 Credits.
This course introduces fundamental concepts necessary for the entry-level physical therapist to examine, evaluate, and treat the pediatric client. Lecture and lab experiences emphasize a problem-oriented approach to physical therapy management of children with musculoskeletal, neurological, and/or cardiopulmonary impairments. Students will learn to recognize components of normal and abnormal development, particularly during the first year of life. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor.

PTRS 840. Integrated Clinical Experience IV. 2 Credits.
This course consists of supervised experiences in a clinical setting and seminar sessions that provide intermediate opportunities for application of didactic course work. Emphasis will be placed on the development of communication and interpersonal skills in the clinical setting, as well as documentation and physical therapy skills and procedures that have been introduced in courses. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor.

PTRS 845. Orthopedic Physical Therapy II. 6 Credits.
This course incorporates concepts from anatomy, kinesiology and basic biomechanics, and knowledge of peripheral joint examination and treatment. Terminology, examination, evaluation, development of a treatment plan and treatment techniques and basic differential diagnosis skills for the spine and the temporomandibular joint are taught. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor.

PTRS 846. Orthopedic Physical Therapy III. 3 Credits.
This course incorporates concepts from anatomy, kinesiology, biomechanics, and Orthopedic Physical Therapy I and II courses. Terminology, examination, evaluation, development of a treatment plan and treatment techniques and advanced differential diagnosis skills for complex peripheral and/or spinal disorders are taught. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor.

PTRS 852. Neurologic Physical Therapy and Rehabilitation I. 6 Credits.
This course will introduce the principles of neuroscience and describe their application as relevant to physical therapists. The course will introduce the terminology of the nervous system and cover the major functions of the nervous systems. This course will also integrate neurophysiology and neuroanatomy into the clinical presentation of adults with neurologic pathology. The etiology, epidemiology signs, and symptoms of selected neurological conditions will be presented. The medical management of patients with nervous system disorders will be presented in relationship to the practice of physical therapy. The course will introduce examination of impairments for persons with neuromuscular pathologies. Students will be presented with simple case studies and progress to more complex patient problems. Prerequisite: Successful completion of the first 4 semesters of the DPT curriculum or permission of instructor.

PTRS 853. Neurologic Physical Therapy and Rehabilitation II. 6 Credits.
This course will focus on rehabilitation approaches for people with neurologic pathology. Students will examine factors that contribute to the control of voluntary movement and the learning of motor skills, and develop an understanding of the relationship between the brain and the purposeful movements that make us human. Students will acquire the skills to hypothesize about the relationship of health conditions and body function/structure to limitations in activities and participation in adults with neurologic pathology. A clinical decision making approach will combine contemporary rehabilitation approaches, consideration of psychosocial and cognitive factors, and research evidence in the discussion of complex patient cases. After completing this course, students will demonstrate novice-level knowledge and skills necessary to complete a physical therapy examination and develop a comprehensive treatment plan for adults with neurologic pathology. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of the instructor.
**PTRS 855. Pharmacology for Physical Therapists. 2 Credits.**
Pharmacological background for the clinical treatment of patients referred to physical therapy. Fundamentals of the actions of drugs including mechanisms of therapeutic and adverse effects. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

**PTRS 860. Evidence-Based Research Practicum I. 1 Credits.**
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the enhancement of evidence-based physical therapy practice. The student will be supervised by a member of the faculty. This is a two-semester course. Prerequisite: Successful completion of the first 5 semesters of the DPT curriculum or permission of instructor.

**PTRS 861. Evidence-Based Research Practicum II. 1 Credits.**
Supervised and directed experiences in conducting evidence-based research activities. The research activities involved in this course are broadly defined with emphasis on the presentation and communication of an evidence-based research project. The student will be supervised by a member of the faculty. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum, or consent of instructor.

**PTRS 865. Independent Study. 1-3 Credits.**
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Admission to the DPT program, or permission of instructor.

**PTRS 877. Administration in Physical Therapy. 2 Credits.**
Designed to familiarize the entry-level therapist with contemporary issues in health care which impact the practice of physical therapy in the health care system. Changes in the US health care system will be discussed, including managed care, plus essential elements and principles of management in health care organizations, and an overview of human resources and operational management. Financial management specifically reimbursement for patient services, risk management, information management, and compliance will be discussed. Discussion of professional development is intertwined throughout the course. Students will be exposed to business development and entrepreneurial skills needed to expand or start up a physical therapy practice. Prerequisite: Successful completion of the first 3 semesters of the DPT curriculum or permission of instructor.

**PTRS 882. Pathophysiology and Physical Therapist Screens. 6 Credits.**
Review of integrative human pathophysiology with an emphasis upon homeostatic mechanisms and etiologies of disease. The interrelationships of function and dysfunction at the molecular, cellular and tissue level (pathology), organ and systemic level (impairment) and to the total human body (functional limitations) will be applied in each of the body systems. Discussions and applied materials will be tailored to the physical therapist with an emphasis on clinical tools to medically screen patients for the presence of symptoms and signs. Prerequisite: Successful completion of semester 1 of the DPT curriculum or permission of instructor.

**PTRS 890. Specialties in Physical Therapy Practice. 2 Credits.**
Requires students to apply the five elements of patient/client management for addressing multi-system impairments across diverse and complex patient populations. Exposure to physical therapy advanced practice specialty areas included, but not limited to, sport medicine, women's health, neurology, pediatrics, geriatrics, and oncology. Seminar format instruction incorporating case-based instruction, group discussion, and speakers with advanced clinical credentials. Prerequisite: Successful completion of the first 6 semesters of the DPT curriculum or permission of instructor.

**PTRS 920. Full-Time Clinical Experience I. 6-8 Credits.**
Nine to twelve weeks of full-time clinical experience. During the clinical rotation, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

**PTRS 921. Full-Time Clinical Experience II. 6-8 Credits.**
Nine to twelve weeks of full-time clinical experience. During the clinical rotation, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

**PTRS 922. Full-Time Clinical Experience III. 6-8 Credits.**
Nine to twelve weeks of full-time clinical experience. During the clinical rotation, the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

**PTRS 923. Full-Time Clinical Experience IV. 2-6 Credits.**
Three to nine weeks of full-time clinical experience. During the clinical rotation the student will have the opportunity to develop the patient care skills needed for successful practice as a physical therapist. The student will work under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

**PTRS 924. Specialized Clinical Experience. 1-6 Credits.**
One and a half to nine weeks of clinical experience. During the clinical rotation the student will have the opportunity to have exposure to a different health care system such as an international clinical experience, or a specialized area of physical therapy practice. The student will be under the supervision of an experienced physical therapist in clinical settings affiliated with the program. Prerequisite: Successful completion of the first 7 semesters of the DPT curriculum or permission of instructor.

**Courses**

**REHS 760. Introduction to Matlab Programming. 1 Credits.**
Introduction: matlab windows, input-output, file types, general commands; interactive computation; matrices and vectors, matrix and array operations, scripts and functions applications, graphics. Prerequisite: None

**REHS 803. Research Observations. 1 Credits.**
Students will be introduced to different types of research projects conducted in the department. Students will rotate in up to three research laboratories, sequentially, during a semester. The course is designed to help students select a faculty researcher to mentor them in their dissertation research. Prerequisite: Entry into the PhD in Rehabilitation Science program.

**REHS 805. Seminar in Rehabilitation Science. 1 Credits.**
Students will become familiar with the organization of an experimental scientific paper and learn how to critically assess papers in the field of
rehabilitation science. Students will develop writing skills by summarizing scientific papers and communication skills by orally presenting and discussing research literature with his/her peers and colleagues, course coordinator and other faculty members. Prerequisite: Entry in the PhD program in Rehabilitation Science or permission of instructor.

REHS 856. Research Design and Methods I. 2 Credits.
An introduction to research design and methods including library and multimedia resources; research process; measurement theory (reliability and validity); experimental design principles; single subject design and other non-experimental design; critical thinking skill and procedure; critical review and analysis of a research article; basic scientific writing skills; and skills in writing a research report/manuscript. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 857. Research Design and Methods II. 2 Credits.
An introduction to research design and method including critically appraising the state of art on a research topic; conducting a systematic review of literature; basic concept of statistical analysis, performing and interpreting data analysis using parametric, non-parametric, or correlational analyses; preparation of a research proposal focusing on study rational, novelty, and research questions and hypotheses; ethical issues related to research; basic knowledge of bioinformatics; meta-analysis; and writing of a research proposal. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 862. Cellular and Molecular Basis of Rehabilitation. 2 Credits.
A study of the biology, at the cellular and molecular levels, of pathological processes that impair human function will highlight the mechanisms by which cells/tissues repair and/or adapt following disease/injury or aging. Emphasis will be placed on the body’s endogenous ability for rehabilitation or adaptation to disease/injury. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 864. Introduction to Rehabilitation Science. 3 Credits.
This course provides introduction to and overview of rehabilitation science, an interdisciplinary field of study that focuses on restoring functional capacity in a person and improving their interactions with the surrounding environment. Different areas of rehabilitation science will be presented. Features of the pathological conditions and targeted individuals, factors that contribute to the outcomes of the rehabilitation, research tools and measurements, potential optimal rehabilitation techniques, and directions of future research will be discussed. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 865. Independent Study. 1-3 Credits.
Individually negotiated learning experiences appropriate to the interests and background of the student. Prerequisite: Entry in the PhD in Rehabilitation Science program, or permission of instructor. IND

REHS 866. Developing Research Aims in Rehabilitation Science. 2 Credits.
Students will practice writing specific aims, hypothesis and general study design of a research proposal. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 870. Teaching Practicum. 1-3 Credits.
Directed experiences in a planned instructional activity. Student will write course objectives, plan and deliver lectures, produce practical and written exams and assign grades. Prerequisite: Entry in the PhD in Rehabilitation Science program or consent of instructor.

REHS 873. Research Practicum. 1-3 Credits.
This course is designed to provide supervised research experience in various laboratories in the department. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor.

REHS 875. Clinical Practicum. 1-3 Credits.
Specialized clinical training in a highly specific area of specialization. The primary purpose of this course is for the student to develop advanced clinical skills in his/her area of specialization. Prerequisite: Admission to the PhD in Rehabilitation Science program, and permission of instructor.

REHS 884. Motor Control and Learning. 3 Credits.
The course will explore the study of the conditions and factors that influence the acquisition, control, and performance of motor skills. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 886. Musculoskeletal Rehabilitation. 3 Credits.
This course will explore the current concepts in musculoskeletal rehabilitation. The healing process of different types of tissue will be reviewed. The pathophysiological mechanisms of pain and acute and chronic injuries will be studied. Examination, evaluation and treatment interventions for the principal musculoskeletal conditions will be reviewed and discussed. Current scientific literature will be investigated and group discussions will be directed to scientific evidence for the variety of rehabilitation practices in musculoskeletal conditions. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 887. Neurorehabilitation. 3 Credits.
This course will provide an overview of the evidence of neurorehabilitation interventions on all domains of the International Classification of Functioning in various neurological conditions. Following a review of neuroanatomy, neurophysiology, and clinical presentation of common neurological conditions, principles of neuroplasticity and functional re-organization in neurorehabilitation will be outlined. Evidence of traditional concepts and emerging therapies in neurorehabilitation will be presented. Prerequisite: Entry into the PhD in Rehabilitation Science program or permission of instructor.

REHS 889. Grant Writing. 3 Credits.
Research proposal writing for PhD comprehensive examinations and grant applications to federal and private funding agencies including all elements of the grant proposal - aims, innovation, significance and design. The process of grant proposal submission, review and resubmission is covered. Prerequisite: Current enrollment in a recognized graduate degree program or permission of instructor.

REHS 970. Instrumented Analysis of Human Biomechanical Function. 3 Credits.
An in-depth study that provides critical analysis of equipment and other resources used in analyzing human motion, balance, strength, electrophysiological responses, and cardiorespiratory function. Students will be required to conduct a preliminary study, including design, methodology and data collection using one or more of these instruments. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor.

REHS 980. Graduate Research. 1-10 Credits.
Original laboratory investigation conducted under the supervision of a senior staff member. Prerequisite: Entry in the PhD in Rehabilitation Science program, or consent of instructor.

REHS 990. Dissertation in Rehabilitation Science. 1-10 Credits.
For students in advanced standing enrolled in the PhD in Rehabilitation Science program.
Master of Science in Athletic Training

The KU Master of Science in Athletic Training (https://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/ms-in-athletic-training.html) program is a 2-year full-time graduate program designed to prepare an entry-level practitioner and foster lifelong professional development. The program begins the Tuesday after Memorial Day and includes classroom, laboratory, scholarship, and clinical education opportunities.

As a leader in academic health sciences, the KU Medical Center (http://www.kumc.edu/) provides ample opportunity for athletic training students to interact with a large number of health care professionals as well as students from other disciplines.

The University of Kansas is currently seeking accreditation for its new athletic training program and is not accredited by the Commission on Accreditation of Athletic Training Education (CAATE) (https://caate.net/). The institution will be submitting a self-study to begin the accreditation process on July 1, 2022. Submission of the self-study and completion of a site visit does not guarantee that the program will become accredited. Students that graduate from the program prior to accreditation will not be eligible to sit for the credentialing examination for athletic trainers and will not be eligible for licensure in most states.

Application Process

Applications for this program are submitted online through the Athletic Training Centralized Application System (ATCAS) (https://atcas.liaisoncas.com/applicant-ux/#/login). Students accepted into the program must submit a secondary application using the KU online application (https://www.kumc.edu/academic-and-student-affairs/departments/registrars-office/admissions/online-application.html). Instructions for the secondary application are provided to students in their letter of offer.

Information on how to apply (http://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/ms-in-athletic-training/how-to-apply.html) is posted on the Master of Science in Athletic Training (https://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/ms-in-athletic-training.html) (MSAT) website. Students are admitted to begin during the summer semester only. Application materials are accepted July 1-March 15 for the class entering the program during the summer semester (Tuesday after Memorial Day). Review of applications will begin as they are received in ATCAS. All application materials should be received by March 15 for consideration. If space is available after the March 15 deadline, new or completed applications may be considered.

Admission Requirements

The Graduate Record Examination (GRE) is not required for this program.

Undergraduate degree: A bachelor’s degree in any field from a regionally accredited institution must be completed prior to the start of the program. Students may apply while course work still is in progress, but a plan for completion prior to entering the program must be articulated as part of the application. Students with degrees from institutions outside the U.S. may be subject to transcript evaluation to verify the degree is equivalent to a U.S. degree and the student meets the minimum cumulative grade-point average requirement.

Transcripts: Official transcripts from all course work taken at any institution should be sent directly to the program via ATCAS. Students may not receive transcripts and forward them.

Grade point average: Applicants must possess an overall and prerequisite grade point average of 3.0 (on a 4.0 scale) to be eligible for this program. In addition, official student transcripts must document an individual course grade of no less than "C" on each prerequisite course. Information documented on student transcripts will be used to calculate all grade point averages. Consistent with University of Kansas policy, the admissions committee will replace grades of classes that have been repeated.

Prerequisite courses: Please note the following requirements related to prerequisite course work.

All prerequisite courses must be from a regionally accredited institution.

A single course may not be used to fulfill more than one prerequisite requirement (except a combined human anatomy/physiology class that is five (5) semester credits or greater and includes a laboratory may be used to fulfill both the anatomy and physiology requirements).

All prerequisite course work must be taken for a grade. Classes scored as pass/fail, credit/noncredit, or satisfactory/unsatisfactory are not acceptable. However CLEP, ACT and advanced placement credits are acceptable when officially documented on a college transcript.

All prerequisite course work must be completed before the start of the program. Preference will be given to students having completed at least 80% of the prerequisites at the time of application.

If a prerequisite course is taken more than once (even if at different universities), all instances that appear on the official transcript must be reported. The grades from the best score on each class will be used in prerequisite GPA calculations.

All courses below must be completed with the minimum grade "C" within the last 10 years.

Required Courses:

- Biology with lab (3-4 credits)
- Human anatomy with lab (3-4 credits)*
- Human physiology with lab (3-4 credits)*
- Kinesiology, biomechanics, or human movement analysis course (3 credits)
- Exercise physiology (3 credits)
- Personal health, community health, or wellness (3 credits)
- Nutrition (3 credits)
- Psychology (3 credits)
- Physics with lab (3-4 credits)
- Chemistry with lab (3-4 credits)
- Statistics (3 credits)

* When taken together, two semesters of human anatomy and physiology (with laboratory) can fulfill this requirement. Alternatively, a single combined human anatomy and physiology course (with laboratory) of five semester credits or greater will meet the requirement.

References: Three references are required. One must be from a credentialed athletic trainer or international equivalent. The other two should be from a faculty member, advisor, employer, etc. who can
objectively attest to the applicant's aptitude, experience, and character. The recommendations may not be obtained from family members, friends, etc.

**Background check:** A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program. This fee must be paid directly to the company performing the background investigation. A drug screening may also be required. More information: School of Health Professions background check and drug screening policy (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html). Applicants who have been convicted of a felony should be aware of the fact that application for licensure, certification, or registration will be subject to review and additional information may be requested. Based on the review process, denial of licensure, certification, and/or registration may occur and subsequent opportunities for employment may be compromised.


**Recommended observation:** Applicants are expected to have a general understanding of health care and athletic training. Although KU does not require specific hours be documented, applicants are encouraged to invest the time needed to acquire knowledge of the role of athletic trainers in health care through a minimum of 40 hours of observation or volunteer experience with a credentialed athletic trainer.

**Program Requirements**

The Master of Science in Athletic Training is seeking accreditation and is not currently accredited by the Commission on Accreditation of Athletic Training Education (CAATE) (https://caate.net/). The master's degree program in athletic training prepares students for a career as an entry-level athletic trainer. The program includes classroom, laboratory, scholarship, and clinical education opportunities.

Degree requirements are normally completed within two years of admission to the program although a maximum of seven years is allowed per university policy.

**Degree Requirements**

- Successful completion of a minimum of 68 credit hours.
- Successful completion of all required clinical experiences.
- Cumulative grade-point average of at least a 3.0 for all KU graduate course work.
- Enrollment in a minimum of one credit hour during the semester the student will graduate.
- Successful completion of the clinical reasoning capstone project.
- Successful completion of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTR 701</td>
<td>Foundations in Athletic Training</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 708</td>
<td>Applied Anatomy</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 709</td>
<td>Advanced Topics in Human Anatomy</td>
<td>6</td>
</tr>
<tr>
<td>ATTR 713</td>
<td>Integrated Clinical Education I</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 714</td>
<td>Evaluation &amp; Management I</td>
<td>4</td>
</tr>
<tr>
<td>ATTR 716</td>
<td>Interventions I</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 718</td>
<td>Documentation and Health Informatics</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 719</td>
<td>Applied Kinesiology and Biomechanics</td>
<td>4</td>
</tr>
<tr>
<td>ATTR 723</td>
<td>Integrated Clinical Education II</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 724</td>
<td>Evaluation &amp; Management II</td>
<td>6</td>
</tr>
<tr>
<td>ATTR 725</td>
<td>Research Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 726</td>
<td>Interventions II</td>
<td>4</td>
</tr>
<tr>
<td>ATTR 727</td>
<td>Clinical Reasoning I</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 755</td>
<td>Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 793</td>
<td>Integrated Clinical Education III</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 807</td>
<td>Clinical Reasoning II</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 812</td>
<td>Health Care Administration</td>
<td>2</td>
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<tr>
<td>ATTR 813</td>
<td>Clinical Experience I</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 814</td>
<td>Evaluation &amp; Management III</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 816</td>
<td>Interventions III</td>
<td>3</td>
</tr>
<tr>
<td>ATTR 818</td>
<td>Medical Imaging</td>
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</tr>
<tr>
<td>ATTR 821</td>
<td>Athletic Training Seminar</td>
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<tr>
<td>ATTR 822</td>
<td>Behavioral Health</td>
<td>2</td>
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<tr>
<td>ATTR 824</td>
<td>Performance Enhancement</td>
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<tr>
<td>ATTR 827</td>
<td>Clinical Reasoning III</td>
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<td>ATTR 837</td>
<td>Clinical Reasoning Capstone</td>
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<tr>
<td>ATTR 843</td>
<td>Clinical Experience II</td>
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<tr>
<td>ATTR 863</td>
<td>Integrated Clinical Education IV</td>
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<tr>
<td>ATTR 883</td>
<td>Clinical Experience III</td>
<td>8</td>
</tr>
</tbody>
</table>

**Total Hours 68**

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. [Other years' catalogs.](#)

**Curriculum**

This program is designed to prepare an entry-level athletic trainer and to foster lifelong learning and professional development. It includes classroom, laboratory, scholarship and clinical learning experiences.

Below is a typical plan of study for completing degree requirements. All students in the program will complete a total of 68 credit hours.

**Year 1**

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTR 701 (lab)</td>
<td>1</td>
<td>ATTR 713</td>
<td>2</td>
<td>ATTR 723</td>
<td>2</td>
</tr>
<tr>
<td>ATTR 708 (lab)</td>
<td>1</td>
<td>ATTR 714 (lab)</td>
<td>4</td>
<td>ATTR 724 (lab)</td>
<td>6</td>
</tr>
<tr>
<td>ATTR 709 (lab)</td>
<td>6</td>
<td>ATTR 716 (lab)</td>
<td>2</td>
<td>ATTR 725</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 718</td>
<td></td>
<td>ATTR 718</td>
<td>1</td>
<td>ATTR 726 (lab)</td>
<td>4</td>
</tr>
<tr>
<td>ATTR 719 (lab)</td>
<td>4</td>
<td>ATTR 727 (lab)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATTR 755</td>
<td>2</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTR 793 (~4 weeks)</td>
<td>1</td>
<td>ATTR 821 (Oct-Dec)</td>
<td>1</td>
<td>ATTR 837</td>
<td>1</td>
</tr>
<tr>
<td>ATTR 807 (lab)</td>
<td>1</td>
<td>ATTR 822 (Oct-Dec)</td>
<td>2</td>
<td>ATTR 883</td>
<td>8</td>
</tr>
</tbody>
</table>
Candidates must also:

Observation: Candidates must meet these standards. This process is the application process to begin a confidential conversation about what accommodations they may need to meet these standards. This process is not intended to deter any candidate for whom reasonable educational opportunities for qualified students with disabilities who apply in Athletic Training program maintains a strong commitment to equal opportunities for all individuals in a respectful and effective manner regardless of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, genetic information, or any other protected status.

Technical Standards

The KU Master of Science in Athletic Training (https://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/ms-in-athletic-training.html) program intends for its graduates to become competent and compassionate health care providers who are capable of entering the profession and meeting all requirements for credentialing as athletic trainers. Students are expected to develop a robust knowledge base and the requisite clinical skills, with the ability to appropriately apply their knowledge and skills, effectively interpret information, and contribute to patient-centered decisions across a broad spectrum of situations and settings related to athletic training.

The following technical standards, in conjunction with the academic standards, are requirements for admission, retention, and graduation. The term "candidate" refers to candidates for admission to the athletic training program as well as current athletic training students who are candidates for retention and graduation. The KU Master of Science in Athletic Training program maintains a strong commitment to equal educational opportunities for qualified students with disabilities who apply for admission to the program or who are already enrolled. The technical standards are not intended to deter any candidate for whom reasonable accommodation will allow the fulfillment of the complete curriculum. Candidates with disabilities are encouraged to contact the Academic Accommodations Office at (913) 945-7035 or cukoko@kumc.edu early in the application process to begin a confidential conversation about what accommodations they may need to meet these standards. This process is informed by the knowledge that students with varied types of disabilities have the ability to become successful health professionals.

Observation: Candidates must acquire information as presented through demonstrations and experiences in the foundational sciences. Candidates must also:

- Evaluate patients’ accurately and assess their relevant health, behavioral, and medical information.
- Obtain and interpret information through a comprehensive assessment of patients, correctly interpret diagnostic representations of patients’ physiologic data, and accurately evaluate patients’ conditions and responses.
- Clinical Skills: Candidates must perform physical examinations and diagnostic maneuvers. These activities require some physical mobility, coordination of both gross and fine motor neuromuscular function, balance, and equilibrium. Candidates must also:
- Provide general care and emergency treatment for patients and respond to emergency situations in a timely manner.
- Meet applicable safety standards for the environment and follow universal precaution procedures.

Communication: Candidates must exhibit interpersonal skills to enable effective caregiving of patients/clients. Candidates must also:

- Communicate effectively, with all members of a multidisciplinary health care team, patients/clients, and those supporting patients/clients, in person and in writing.
- Clearly and accurately record information and accurately interpret verbal and nonverbal communication.

Clinical Reasoning: Candidates must effectively interpret, assimilate, and understand complex information required to function within the athletic training curriculum. Candidates must also:

- Comprehend three-dimensional relationships and understand the spatial relationships of structures.
- Effectively participate in individual, small-group, and lecture learning modalities in the classroom, clinical, and community settings.
- Learn, participate, collaborate, and contribute as a part of a team.
- Synthesize information both in person and via remote technology.
- Interpret causal connections and make accurate, fact-based conclusions based on available data and information.
- Formulate a hypothesis and investigate potential answers and outcomes.
- Reach appropriate and accurate conclusions.

Judgment: Candidates must exercise good judgment; promptly complete all responsibilities attendant to the diagnosis and care of patients; and develop mature, sensitive, and effective relationships with patients. Candidates must also:

- Effectively handle and manage heavy workloads, function effectively under stress.
- Adapt to changing environments, display flexibility, and learn to function in the face of the uncertainties inherent in the clinical problems of patients.

Behavioral and Social Attributes: Candidates are expected to exhibit professionalism, personal accountability, compassion, integrity, concern for others, and interpersonal skills. Candidates must:

- Accept and apply feedback and to respect boundaries.
- Care for all individuals in a respectful and effective manner regardless of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, genetic information, or any other protected status.

Professional Expectations: Candidates must understand, and function within, the legal and ethical aspects of the practice of athletic training. Candidates must also:

- Maintain and display ethical and moral behaviors commensurate with the role of an athletic trainer in all interactions with patients, faculty, staff, students, and the public.
- Maintain interest and motivation throughout the educational processes.

Doctor of Physical Therapy

The KU Doctor of Physical Therapy (DPT) program is an accredited 3-year full-time graduate program designed to prepare a generalist physical therapy practitioner and to foster lifelong professional development. The program begins in late May or early June and includes classroom, laboratory, research and clinical learning experiences. Students participate in 36 weeks of full-time clinical experiences at clinical affiliate sites in the last year of the program.

As a leader in academic health sciences, the KU Medical Center provides ample opportunity for physical therapy students to interact with a large number of health care professionals as well as students from other disciplines.

Admission Requirements:

- A bachelor’s degree from a regionally accredited institution is required and must be documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts for all courses taken from all institutions attended are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative grade-point average requirement.

- Applicants must possess a cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for his or her bachelor’s degree program. Historically, applicants accepted to this program have had a cumulative GPA significantly higher than 3.0.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.

- A background check is required during the admission process and may affect the student’s eligibility to enter the program.

- Prior to entering the program, applicants must have completed the prerequisite courses in basic sciences, mathematics, humanities and social sciences with a grade of "C" or higher on each and a minimum 3.0 grade-point average on a 4.0 scale. Pass/fail, credit/non-credit or satisfactory/unsatisfactory scores are not acceptable; however, CLEP, ACT and Advanced Placement credits are acceptable when officially documented on a college transcript.

- All prerequisite basic science courses must have been completed within the last ten years.

- Three references are required, one of which must be from a physical therapist. It is recommended that the other two references be from a faculty member, advisor, employer and/or other person who can objectively attest to the applicant’s aptitude, experience, and character.

- Applicants are expected to possess a general understanding of health care and physical therapy based upon prior employment, observation or volunteer experiences. Although KU does not require specific hours be documented, applicants are encouraged to invest the time needed to acquire knowledge of the role of physical therapists in health care.

Applicants will be assessed based on these requirements. After an applicant has been admitted, the program may grant a deferral of an applicant’s admission for one year after which time the applicant must submit a new application unless an additional deferral is granted.

Admission requirements are subject to change. Other years’ catalogs.

Students beginning course work in the summer term of 2022 will follow the 2021-2022 academic catalog. Other years’ catalogs.

Required Courses

CHEMISTRY: two courses with laboratory.

These courses must be college level. The courses may be inorganic chemistry or they may be a combination of organic, inorganic or biochemistry. Introductory courses that cannot be used as prerequisites for more advanced courses are not acceptable.

PHYSICS: two courses with laboratory.

These courses must be college level and cover a broad background in physics, including the principles and application of mechanics, fluids, heat, thermodynamics, sound waves, electricity, magnetism, and light.

ANATOMY: one course with laboratory.

This course may be human or mammalian, although human is preferred. A dissection laboratory is not required, but the course must contain some type of laboratory experience to be acceptable.

HUMAN PHYSIOLOGY: one course with laboratory.
This course should introduce the student to basic human physiological principles. A combined human anatomy/physiology course (with laboratory) may be used to fulfill the physiology requirement.

A two-course sequence in anatomy and physiology with lab is acceptable. If a single human anatomy/physiology course (with laboratory) is five semester credits or greater, it can fulfill both the anatomy and physiology requirements.

BIOLOGY: two courses with laboratory.
It is recommended the second biology course be an upper-level course such as microbiology. Botany is not acceptable for this requirement.

STATISTICS: one course.
This course should include the following content areas: elementary descriptive statistics on a sample of measurements, probability, binomial and normal distributions, sampling from populations, and simple problems of statistical inference. Biomedical statistics, education statistics or business statistics courses are acceptable.

PSYCHOLOGY: one course.
It is recommended students enroll in a general psychology course (that includes content in basic psychology theory and research). A second course is recommended in abnormal psychology or developmental psychology.

Recommended Courses
The following courses are not required for admission, and grades from these courses will not be included in any prerequisite GPA calculations. However, our faculty believes incoming students will benefit tremendously from having taken these courses. Therefore, we strongly recommend these courses to prospective applicants:

• One course in exercise physiology.
• Courses that involve strong writing and communication skills.
• One course in kinesiology. This course should introduce the student to the anatomical and mechanical principles of human movement.

The Doctor of Physical Therapy (DPT) program at the University of Kansas is currently accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) (http://www.capteonline.org/home.aspx). The program is designed to prepare a generalist physical therapy practitioner and to foster lifelong professional development. The program includes classroom, laboratory, research and clinical learning experiences.

Degree Requirements:

• Degree requirements are normally completed within 3 years of admission to the program although a maximum of 8 years is allowed.
• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
• Successful completion of the University’s Research Skills and Responsible Scholarship (http://catalog.ku.edu/graduate-studies/kumc/#programtext) requirement prior to starting full-time clinical experiences.
• Successful completion of PTRS 750 Research in Evidence-Based Physical Therapy Practice, PTRS 860 Evidence-Based Research Practicum I, and PTRS 861 Evidence-Based Research Practicum II meets the Research Skills requirement.
• Successful completion of PTRS 817 Ethics in Health Care meets the Responsible Scholarship requirement.
• Successful completion of a minimum of 110 credit hours.
• Successful participation in 36 weeks of clinical experiences as outlined in options 1 and 2 below.
• Successful completion of a research practicum. This requirement is met by completing the PTRS 860 Evidence-Based Research Practicum I and PTRS 861 Evidence-Based Research Practicum II courses.
• Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

Recommended Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTRS 702</td>
<td>Physical Therapy Documentation and Health Informatics</td>
<td>1</td>
</tr>
<tr>
<td>PTRS 703</td>
<td>Applied Anatomy</td>
<td>1</td>
</tr>
<tr>
<td>PTRS 704</td>
<td>Physical Therapy Interventions I</td>
<td>3</td>
</tr>
<tr>
<td>PTRS 705</td>
<td>Physical Therapy Interventions II</td>
<td>4</td>
</tr>
<tr>
<td>PTRS 710</td>
<td>Advanced Topics in Human Anatomy</td>
<td>6</td>
</tr>
<tr>
<td>PTRS 711</td>
<td>Applied Kinesiology and Biomechanics</td>
<td>4</td>
</tr>
<tr>
<td>PTRS 720</td>
<td>Integrated Clinical Experience I</td>
<td>1</td>
</tr>
<tr>
<td>PTRS 730</td>
<td>Integrated Clinical Experience II</td>
<td>1</td>
</tr>
<tr>
<td>PTRS 745</td>
<td>Orthopedic Physical Therapy</td>
<td>6</td>
</tr>
<tr>
<td>PTRS 746</td>
<td>Musculoskeletal Conditions and Management</td>
<td>3</td>
</tr>
<tr>
<td>PTRS 750</td>
<td>Research in Evidence-Based Physical Therapy Practice</td>
<td>3</td>
</tr>
<tr>
<td>PTRS 817</td>
<td>Ethics in Health Care</td>
<td>2</td>
</tr>
<tr>
<td>PTRS 825</td>
<td>Exercise Physiology</td>
<td>3</td>
</tr>
<tr>
<td>PTRS 826</td>
<td>Cardiopulmonary Physical Therapy</td>
<td>5</td>
</tr>
<tr>
<td>PTRS 828</td>
<td>Medical Imaging</td>
<td>1</td>
</tr>
<tr>
<td>PTRS 830</td>
<td>Integrated Clinical Experience III</td>
<td>2</td>
</tr>
<tr>
<td>PTRS 833</td>
<td>Pediatric Physical Therapy</td>
<td>3</td>
</tr>
<tr>
<td>PTRS 840</td>
<td>Integrated Clinical Experience IV</td>
<td>2</td>
</tr>
<tr>
<td>PTRS 845</td>
<td>Orthopedic Physical Therapy II</td>
<td>6</td>
</tr>
<tr>
<td>PTRS 846</td>
<td>Orthopedic Physical Therapy III</td>
<td>3</td>
</tr>
<tr>
<td>PTRS 852</td>
<td>Neurologic Physical Therapy and Rehabilitation I</td>
<td>6</td>
</tr>
<tr>
<td>PTRS 853</td>
<td>Neurologic Physical Therapy and Rehabilitation II</td>
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<tr>
<td>PTRS 855</td>
<td>Pharmacology for Physical Therapists</td>
<td>2</td>
</tr>
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<td>PTRS 860</td>
<td>Evidence-Based Research Practicum I</td>
<td>1</td>
</tr>
<tr>
<td>PTRS 861</td>
<td>Evidence-Based Research Practicum II</td>
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</tr>
<tr>
<td>PTRS 877</td>
<td>Administration in Physical Therapy</td>
<td>2</td>
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<tr>
<td>PTRS 882</td>
<td>Pathophysiology and Physical Therapist Screens</td>
<td>6</td>
</tr>
<tr>
<td>PTRS 890</td>
<td>Specialties in Physical Therapy Practice</td>
<td>2</td>
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</tbody>
</table>

Clinical Experience

Choose either option 1 or 2 listed below.

<table>
<thead>
<tr>
<th>Total Hours</th>
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<tbody>
<tr>
<td>110</td>
</tr>
</tbody>
</table>

• Options for completing the Clinical Experience requirement (minimum 24 credit hours),
### Option 1 for Fulfilling Clinical Experience Requirement

The student enrolls in three 12-week experiences, two in the Fall and one in the Spring.

- PTRS 920 Full-Time Clinical Experience I 8
- PTRS 921 Full-Time Clinical Experience II 8
- PTRS 922 Full-Time Clinical Experience III 8

or

### Option 2 for Fulfilling Clinical Experience Requirement

The student enrolls in four 9-week experiences, two in the Fall and two in the Spring.

- PTRS 920 Full-Time Clinical Experience I 6
- PTRS 921 Full-Time Clinical Experience II 6
- PTRS 922 Full-Time Clinical Experience III 6
- PTRS 923 Full-Time Clinical Experience IV 6

- Students electing to pursue an international clinical experience or specialized clinical experience enroll in PTRS 924 Specialized Clinical Experience as an elective 1-6 credit hour course. The student enrolls in this elective course the semester they participate in the international clinical experience or specialized clinical experience. The number of credit hours for the course (1-6) are clinic specific. The total number of credit hours for the Clinical Experience requirement (24) will remain the same for those completing an international clinical experience or specialized clinical experience under PTRS 924. However, the total hours of either Option 1 or Option 2 for fulfilling the Clinical Experience requirement will be decreased during the semester of the international clinical experience by the number of credit hours the student enrolls in for PTRS 924.

### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTRS 703 (lab based course)</td>
<td>1 PTRS 702</td>
<td>1 PTRS 705 (lab based course)</td>
<td>4</td>
</tr>
<tr>
<td>PTRS 710 (lab based course)</td>
<td>6 PTRS 704 (lab based course)</td>
<td>3 PTRS 730</td>
<td>1</td>
</tr>
<tr>
<td>PTRS 828</td>
<td>1 PTRS 711 (lab based course)</td>
<td>4 PTRS 745 (lab based course)</td>
<td>6</td>
</tr>
<tr>
<td>PTRS 720</td>
<td>1 PTRS 746 (lab based course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PTRS 855</td>
<td>2 PTRS 750</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PTRS 882</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8 17 17

#### Year 2

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTRS 825 (lab based course)</td>
<td>3 PTRS 830</td>
<td>2 PTRS 826 (lab based course)</td>
<td>5</td>
</tr>
<tr>
<td>PTRS 860</td>
<td>1 PTRS 845 (lab based course)</td>
<td>6 PTRS 833</td>
<td>3</td>
</tr>
<tr>
<td>PTRS 877</td>
<td>2 PTRS 852 (lab based course)</td>
<td>6 PTRS 840</td>
<td>2</td>
</tr>
<tr>
<td>PTRS 853</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6 14 16

#### Year 3

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTRS 817</td>
<td>2 Option 1 Clinical Experience - the student enrolls in three 12-week experiences, two in the Fall and one in the Spring.</td>
<td>Option 1 Clinical Experience - the student enrolls in three 12-week experiences, two in the Fall and one in the Spring.</td>
<td>8</td>
</tr>
<tr>
<td>PTRS 846 (lab based course)</td>
<td>3 PTRS 920</td>
<td>8 PTRS 922 (Enroll in this course Spring Year 3, will not start the course until March.)</td>
<td>8</td>
</tr>
<tr>
<td>PTRS 861</td>
<td>1 PTRS 921 (Enroll in this course Fall Year 3, the course extends through February.)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>PTRS 890</td>
<td>2</td>
<td></td>
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</tr>
</tbody>
</table>

8 16 8

Total Hours 110

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».

This program is designed to prepare a generalist physical therapy practitioner and to foster lifelong professional development. It includes classroom, laboratory, research and clinical learning experiences.

Below is a typical plan of study for completing degree requirements. In year three, students may choose from two options to fulfill the clinical experience requirement; regardless of the student’s choice, year three requires 32 credit hours. The first instance of year three below indicates option one, and the second instance of year three below shows option two. All students in the program will complete a total of 110 credit hours.

Students electing to pursue an international clinical experience or specialized clinical experience enroll in PTRS 924 Specialized Clinical Experience as an elective 1-6 credit hour course. The student enrolls in this course the semester in which they participate in the international clinical experience or specialized clinical experience. The number of credit hours for the course (1-6) are clinic specific. The total number of credit hours for the Clinical Experience requirement (24) will remain the same for those completing an international clinical experience or specialized clinical experience under PTRS 924. However, the total hours of either PTRS 920 Full-Time Clinical Experience I, PTRS 921 Full-Time Clinical Experience II or PTRS 922 Full-Time Clinical Experience III will be decreased during the
A dual DPT and Master of Health Services Administration (MHSA) (p. 2102) degree program prepares DPT students for management and leadership positions in health care organizations. The MHSA portion of the curriculum combines social science and business content in the context of health care. As the health care environment becomes more complex and competitive, administrative skills will be important to individuals starting careers in physical therapy.

Students must be accepted into the DPT program in order to enter the DPT/MHSA program. Current DPT students interested in the dual DPT/MHSA program must apply and be accepted into the MHSA program. The MHSA program is offered through the Department of Population Health in the School of Medicine at the University of Kansas Medical Center and consists of 39 credit hours of MHSA coursework in the dual program. The DPT/MHSA program can be completed in 4 years; students will graduate with their DPT degree after 3 years and then finish the MHSA program in the next year. MHSA courses will begin in the fall semester of the second year of the DPT program. The DPT program requirements for graduation remain the same for students completing this dual degree program.

In order to continue in the DPT/MHSA program, students must remain in good academic standing in both the DPT and MHSA programs, including maintaining a minimum 3.0 grade point average in both programs.

Students must also complete the DPT degree before the MHSA degree can be awarded. Any student who does not successfully complete the DPT program will need to take the 17 credit hours of MHSA coursework that were waived by virtue of being in the dual DPT/MHSA program, in order to earn the MHSA degree.

**Option 2 Clinical Experience**

The Department of Physical Therapy, Rehabilitation Science, and Athletic Training offers the following dual degree programs in conjunction with the Doctor of Physical Therapy (DPT) program:

- DPT/MBA (p. 685)
- DPT/MSHA (p. 685)
- DPT/Ph.D. (p. 685)

**DPT/MBA**

A dual DPT and Master of Business Administration (MBA) (p. 141) degree program is available to outstanding DPT students interested in becoming physical therapists prepared for the complicated health finance and management fields with business knowledge and experience.

Students must be accepted into the DPT program in order to enter the DPT/MBA program. Interested students may apply during the second year of their DPT program to be accepted into the MBA program.

The MBA program is offered through the University of Kansas School of Business in Lawrence, Kansas, and consists of 34 credit hours of MBA coursework in the dual program. The DPT/MBA program can be completed in 4 years. Students will complete the MBA portion in one academic year, after successfully completing the first two years in the DPT curriculum. After finishing the MBA curriculum students return to the DPT curriculum to complete the final, third year. In the summer prior to the final year in the DPT curriculum, students enroll in PTRS 924 to complete an MBA project and prepare for DPT full-time clinical experiences. The DPT program requirements for graduation remain the same for students completing this dual degree program.

In order to continue participating in the MBA component in the dual program, students must remain in good academic standing in the DPT program, including a minimum 3.0 grade point average in both programs. Students will not receive their MBA degree before the DPT is awarded. Any student who does not successfully complete the DPT program will need to take the 15 credit hours of MBA coursework that were waived by virtue of being in the dual DPT/MBA program, in order to earn the MBA degree.

**DPT/MHSA**

A dual DPT and Master of Health Services Administration (MHSA) degree program prepares DPT students for management and leadership positions in health care organizations. The MHSA portion of the curriculum combines social science and business content in the context of health care. As the health care environment becomes more complex and competitive, administrative skills will be important to individuals starting careers in physical therapy.

Students must be accepted into the DPT program in order to enter the DPT/MHSA program. Current DPT students interested in the dual DPT/MHSA program must apply and be accepted into the MHSA program. The MHSA program is offered through the Department of Population Health in the School of Medicine at the University of Kansas Medical Center and consists of 39 credit hours of MHSA coursework in the dual program. The DPT/MHSA program can be completed in 4 years; students will graduate with their DPT degree after 3 years and then finish the MHSA program in the next year. MHSA courses will begin in the fall semester of the second year of the DPT program. The DPT program requirements for graduation remain the same for students completing this dual degree program.

In order to continue in the DPT/MHSA program, students must remain in good academic standing in both the DPT and MHSA programs, including maintaining a minimum 3.0 grade point average in both programs.

Students must also complete the DPT degree before the MHSA degree can be awarded. Any student who does not successfully complete the DPT program will need to take the 17 credit hours of MHSA coursework that were waived by virtue of being in the dual DPT/MHSA program, in order to earn the MHSA degree.

**Technical Standards**

The Doctor of Physical Therapy program at the University of Kansas Medical Center continually strives to develop caring physical therapists who exemplify the highest level of clinical expertise and knowledge and who are prepared to enrich the dignity and quality of the human experience by optimizing movement and maximizing functional potential. Because a Doctor of Physical Therapy degree signifies that the holder is eligible to sit for the National Physical Therapy Examination and signifies that the holder is prepared for entry into the profession of physical therapy, graduates must have the knowledge and skills to function in a broad variety of clinical, private, community, or school-based situations and to render a wide spectrum of physical therapy services.
The following technical standards, in conjunction with the academic standards, are requirements for admission, retention, and graduation of applicants and students, respectively.

The term "candidate" refers to candidates for admission to the physical therapy program as well as current physical therapy students who are candidates for retention and graduation. The KU DPT program maintains a strong commitment to equal educational opportunities for qualified students with disabilities who apply for admission to the program or who are already enrolled. The technical standards are not intended to deter any candidate for whom reasonable accommodation will allow the fulfillment of the complete curriculum. Candidates with disabilities are encouraged to contact the Academic Accommodations Office at (913) 945-7035 or cukok@kumc.edu early in the application process to begin a confidential conversation about what accommodations they may need to meet these standards. This process is informed by the knowledge that students with varied types of disabilities have the ability to become successful health professionals.

1. **Observation**: Candidates must acquire information as presented through demonstrations and experiences in the foundational sciences. Candidates must also:

   - Evaluate patients accurately and assess their relevant health, behavioral, and medical information.
   - Obtain and interpret information through a comprehensive assessment of patients, correctly interpret diagnostic representations of patients' physiologic data, and accurately evaluate patients' conditions and responses.

2. **Communication**: Candidates must exhibit interpersonal skills to enable effective caregiving of patients/clients. Candidates must also:

   - Communicate effectively, with all members of a multidisciplinary health care team, patients/clients, and those supporting patients/clients, in person and in writing.
   - Clearly and accurately record information and accurately interpret verbal and nonverbal communication.
   - Use computers and technology for communication as they are essential for manipulating electronic health records, assimilating information, producing documentation and interpreting data.

3. **Clinical Skills**: Candidates must perform physical examinations and diagnostic maneuvers. These activities require some physical mobility, coordination of both gross and fine motor neuromuscular function, balance, and equilibrium. Candidates must also:

   - Provide general care and emergency treatment for patients and respond to emergency situations in a timely manner.
   - Meet applicable safety standards for the environment and follow universal precaution procedures.

4. **Clinical Reasoning**: Candidates must effectively interpret, assimilate, and understand complex information required to function within the physical therapy curriculum. Candidates must also:

   - Comprehend three-dimensional relationships and understand the spatial relationships of structures.
   - Effectively participate in individual, small-group, and lecture learning modalities in the classroom, clinical, and community settings.
   - Learn, participate, collaborate, and contribute as a part of a team.

   - Synthesize information both in person and via remote technology.
   - Interpret causal connections and make accurate, fact-based conclusions based on available data and information.
   - Formulate a hypothesis and investigate potential answers and outcomes.
   - Reach appropriate and accurate conclusions.

5. **Judgment**: Candidates must exercise good judgment; promptly complete all responsibilities attendant to the diagnosis and care of patients; and develop mature, sensitive, and effective relationships with patients. Candidates must also:

   - Effectively handle and manage heavy workloads, function effectively under stress.
   - Adapt to changing environments, display flexibility, and learn to function in the face of the uncertainties inherent in the clinical problems of patients.
   - Self-assess behavior and performance and an understanding of the rationale and justification for their performance.

6. **Behavioral and Social Attributes**: Candidates are expected to exhibit professionalism, personal accountability, compassion, integrity, concern for others, and interpersonal skills. Candidates must:

   - Accept and apply feedback and to respect boundaries.
   - Care for all individuals in a respectful and effective manner regardless of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, genetic information, or any other protected status.

7. **Professional Expectations**: Candidates must understand, and function within, the legal and ethical aspects of the practice of physical therapy. Candidates must also:

   - Maintain interest and motivation throughout the educational processes.

   - Maintain and display ethical and moral behaviors commensurate with the role of physical therapist in all interactions with patients, faculty, staff, students, and the public.

**Doctor of Philosophy in Rehabilitation Science**

The doctorate in rehabilitation science program is designed to prepare outstanding leaders who advance innovative interdisciplinary research in rehabilitation science. A major focus of the program is to advance the science of rehabilitation and to elucidate the scientific basis for the procedures and processes used in clinical practice.

Areas of research emphasis include human and animal studies designed to (1) promote an understanding of the pathophysiology of injury, disease, functional impairment, and associated disabilities, and (2) espouse the rationale for therapies designed to alleviate impaired human function and related physical and mental disabilities.

Applications for this program are submitted online. Detailed instructions on how to apply are available on the Department of Physical Therapy, Rehabilitation Science, and Athletic Training (http://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/
Admission Requirements:

- A bachelor's degree from a regionally accredited institution is required and must be documented by submission of official transcript indicating the degree has been conferred before entering the program. A master's or other advanced degree is preferable. Official transcripts for all courses taken at any institution are also required. Applicants are not required to be physical therapists or possess a degree in physical therapy. Applicants are encouraged to have a broad background in biological sciences, including anatomy, physiology, neuroscience, exercise science, biochemistry, genetics, molecular and cell biology, as well as statistics.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative grade-point average requirement.

- Applicants must possess a cumulative grade-point average of at least a 3.0 on a 4.0 scale for his or her bachelor's degree program.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.

- A background check is required during the admission process; it may affect the student's eligibility to enter the program.

- A current resume or curriculum vitae is required and must include information on the applicant's educational, professional, and research background. The following information will be critical to evaluate the applicant: research experience (including publications and abstracts), professional presentations, awards and honors, intellectual pursuits (continuing education, seminars attended, lectures, etc.), teaching/mentoring experiences and leadership roles.

- In the online application, a purpose of study will be submitted that provides a succinct explanation of relevant background information and experience indicated on the resume/curriculum vitae. Additionally, applicants are encouraged to identify research areas of interest they wish to pursue in the program. It is recommended, though not required, to identify one or more potential research mentors from the faculty of the Department of Physical Therapy, Rehabilitation Science, and Athletic Training (http://www.kumc.edu/school-of-health-professions/physical-therapy-and-rehabilitation-science/our-faculty.html) whose research programs are related to the applicant's field of interest.

- Three letters of recommendation are required. The recommendations should come from either a faculty member, advisor, employer or other person who is familiar with the applicant's work and character and can comment meaningfully on the applicant's performance in an academic and professional setting. At least one of the three letters of recommendation should come from the applicant's current place of employment or academic program. Letters may not be obtained from family members, friends, etc.

Applicant will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, the catalog of the year student entered the program is used. Other years' catalogs».

Degree Requirements:

- Degree requirements are normally completed within 4-5 years of admission to the program although a maximum of 8 years is allowed.

- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.

- Successful completion of the University's Research Skills and Responsible Scholarship requirement (http://catalog.ku.edu/graduate-studies/kumc/#programstext) prior to the semester the Oral Comprehensive Examination is scheduled.

- Successful completion of the following courses meets the Research Skills requirement:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>REHS 856</td>
<td>Research Design and Methods I</td>
<td>2</td>
</tr>
<tr>
<td>REHS 857</td>
<td>Research Design and Methods II</td>
<td>2</td>
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</table>

- Successful completion of the following courses meets the Responsible Scholarship requirement:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHS 856</td>
<td>Research Design and Methods I</td>
<td>2</td>
</tr>
<tr>
<td>REHS 857</td>
<td>Research Design and Methods II</td>
<td>2</td>
</tr>
<tr>
<td>PRVM 853</td>
<td>Responsible Conduct of Research</td>
<td>1</td>
</tr>
</tbody>
</table>

- Successful completion of the Residence Requirement (http://catalog.ku.edu/graduate-studies/kumc/#programstext) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full time status a minimum of two semesters.

- Successful completion of the Oral Comprehensive Examination (http://catalog.ku.edu/graduate-studies/kumc/#programstext). This examination is an oral defense of a dissertation proposal written in a research grant format. The following skills are assessed as a part of the examination: the ability to critically synthesize literature on a specific topic, identify gaps in knowledge and design a significant research question to address the gaps, execute an independent research project, understand and use methodology and data analysis techniques and anticipate experimental outcomes. Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

- Successful completion of the Post-Comprehensive Enrollment (http://catalog.ku.edu/graduate-studies/kumc/#programstext) requirement.

- Enrollment in a minimum of one (1) credit hour of REHS 990 Dissertation in Rehabilitation Science the semester the student will defend dissertation and graduate.

- Successful completion of the Final Oral Examination (http://catalog.ku.edu/graduate-studies/kumc/#programstext) (dissertation defense). For this examination, the PhD candidate defends their written dissertation in an oral forum. The written dissertation consists of an introduction chapter, three experimental chapters (on average), and a chapter for the conclusions, clinical application and future directions. The dissertation should be composed at the level of a high quality scholarly work, with experimental chapters being suitable for peer reviewed publishing as separate manuscripts.
Successful completion of the following core courses. The specific number of credit hours for REHS 870, REHS 873 and REHS 980 is determined in consultation with the student's academic advisor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>REHS 803</td>
<td>Research Observations (Take a minimum of one semester during the first year.)</td>
<td>1</td>
</tr>
<tr>
<td>REHS 805</td>
<td>Seminar in Rehabilitation Science (Take in Fall and Spring semesters for the first two years.)</td>
<td>1</td>
</tr>
<tr>
<td>REHS 856</td>
<td>Research Design and Methods I</td>
<td>2</td>
</tr>
<tr>
<td>REHS 857</td>
<td>Research Design and Methods II</td>
<td>2</td>
</tr>
<tr>
<td>REHS 862</td>
<td>Cellular and Molecular Basis of Rehabilitation</td>
<td>2</td>
</tr>
<tr>
<td>REHS 864</td>
<td>Introduction to Rehabilitation Science</td>
<td>3</td>
</tr>
<tr>
<td>REHS 866</td>
<td>Developing Research Aims in Rehabilitation Science</td>
<td>2</td>
</tr>
<tr>
<td>REHS 870</td>
<td>Teaching Practicum</td>
<td>1-3</td>
</tr>
<tr>
<td>REHS 873</td>
<td>Research Practicum</td>
<td>1-3</td>
</tr>
<tr>
<td>REHS 889</td>
<td>Grant Writing</td>
<td>3</td>
</tr>
<tr>
<td>REHS 980</td>
<td>Graduate Research</td>
<td>1-10</td>
</tr>
<tr>
<td>NRSG 870</td>
<td>Designing a Student Learning Environment</td>
<td>3</td>
</tr>
</tbody>
</table>

Successful completion of a minimum of 8 credit hours of research tools courses as determined in consultation with the student’s academic advisor. BIOS 714 and BIOS 720 or equivalents are mandatory.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHS 970</td>
<td>Instrumented Analysis of Human Biomechanical Function</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 714</td>
<td>Fundamentals of Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 720</td>
<td>Analysis of Variance</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 710</td>
<td>Introduction to Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 711</td>
<td>Lab for Introduction to Statistical Analysis</td>
<td>1</td>
</tr>
<tr>
<td>NRSG 700</td>
<td>Analysis of Variance for Nursing Research</td>
<td>2</td>
</tr>
</tbody>
</table>

Successful completion of a minimum of 6 credit hours of elective courses as determined in consultation with the student’s academic advisor. Electives may be chosen from this list but are not limited to:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHS Elective Course Options</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REHS 760</td>
<td>Introduction to Matlab Programming</td>
<td>1</td>
</tr>
<tr>
<td>REHS 865</td>
<td>Independent Study (The specific number of credit hours for this course is determined in consultation with the student's academic advisor.)</td>
<td>1-3</td>
</tr>
<tr>
<td>REHS 884</td>
<td>Motor Control and Learning</td>
<td>3</td>
</tr>
<tr>
<td>REHS 886</td>
<td>Musculoskeletal Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>REHS 887</td>
<td>Neurorehabilitation</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Course Options from Other Departments (selected in consultation with the student's academic advisor)

Successful completion of a minimum of 12 credit hours of REHS 990 Dissertation in Rehabilitation Science. The specific number of credit hours for this course taken in a specific semester is determined in consultation with the student's academic advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs.

Students may enter this program beginning with the fall semester. This plan of study suggests a typical progression through the program. Students will develop a specific plan of study in consultation with his or her academic advisor. Note: semester credit hours will vary based on elective courses taken.

### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHS 803</td>
<td>1 REHS 803 or 873</td>
<td>1</td>
<td>1 REHS 866</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REHS 805</td>
<td>1 REHS 805</td>
<td>1</td>
<td>1 REHS 873 or 980</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REHS 856</td>
<td>2 REHS 857</td>
<td>2</td>
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</tr>
<tr>
<td>REHS 970</td>
<td>3 BIOS 720</td>
<td>3</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>BIOS 714</td>
<td>3 REHS 862</td>
<td>2</td>
<td></td>
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<tr>
<td>REHS 864</td>
<td>3</td>
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#### Year 2

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<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHS 805</td>
<td>1 REHS 805</td>
<td>1</td>
<td>1 REHS 980</td>
<td>3</td>
<td></td>
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<tr>
<td>REHS 889</td>
<td>3 REHS 887 (elective)</td>
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<td></td>
<td></td>
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<tr>
<td>REHS 980</td>
<td>1 REHS 980</td>
<td>2</td>
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</tr>
<tr>
<td>PRVM 853</td>
<td>1</td>
<td>3</td>
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#### Year 3

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<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHS 805</td>
<td>1 REHS 805</td>
<td>1</td>
<td>1 REHS 980</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REHS 870 (may be taken any semester)</td>
<td>1 REHS 980</td>
<td>5 Oral Comprehensive Examination must be taken before Year 4 Fall semester starts.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>REHS 980</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>NRSG 870</td>
<td>3</td>
<td>3</td>
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#### Year 4

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<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHS 990</td>
<td>6 REHS 990</td>
<td>6</td>
<td>6 REHS 990</td>
<td>3</td>
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</table>

#### Year 5

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<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>REHS 990</td>
<td>1 REHS 990</td>
<td>1</td>
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</table>
Technical Standards

The graduate of this program must have the knowledge and skills to function in a broad variety of clinical, research, academic and industrial settings. Although not all students will have the same experiences or require the same skills (some students may not work with laboratory chemicals or assist patients in transfers), it is still important that each student have the technical skills necessary, in case they are placed in that situation. Therefore, the following abilities and expectations must be met by all students of the program with or without reasonable accommodations.

1. Essential Observational Requirements:
The PhD student must be able to:
• Observe and perform laboratory and/or clinical tests in which human subjects, chemical, and/or biological (body fluids, culture materials, and tissue sections) are tested for their physical attributes including, but not limited to, movement, force, texture, color, sound, odor, viscosity, immunological, microbiological and histochemical components.
• Read and comprehend text, numbers, and graphs displayed in print and on video.
• Perform comparative observations of text, movement, shapes, graphs, colors etc.

2. Essential Movement Requirements:
The PhD student must be able to:
• Move freely and safely about a laboratory and clinic.
• Lift a minimum of 25 pounds (depending on the PhD dissertation project chosen by the student, some projects may not require any lifting, while others may require a minimum of 25 pounds weight lifting).
• Travel to numerous laboratory/clinical sites.
• Perform moderately taxing continuous physical work.
• Control equipment and adjust instruments to perform laboratory procedures.
• Manipulate a computer keyboard.

3. Essential Communication Requirements:
The PhD student must be able to:
• Comprehend technical and professional materials.
• Follow verbal and written instructions.
• Effectively, confidently, and sensitively converse with human research subjects.
• Communicate effectively and efficiently with faculty members, fellow students, staff, and other members of research and health care community to convey information essential for studying and conducting research.

4. Essential Intellectual Requirements:
The PhD student must:
• Possess these intellectual skills: comprehension, measurement, mathematical calculations, problem solving, reasoning, integration, analysis, comparison, self-expression, and criticism.
• Be able to exercise sufficient judgment to recognize and correct performance deviations.

5. Essential Behavioral Requirements:
The PhD student must:
• Be able to manage the use of time and be able to systematize actions in order to complete professional and technical tasks within realistic constraints
• Possess the emotional health necessary to effectively employ intellect and exercise appropriate judgment.
• Be able to provide professional and technical services while experiencing the stresses of heavy workloads, task-related uncertainty, emergent demands, and a distracting environment.
• Be flexible and creative and adapt to professional and technical change.
• Recognize potentially hazardous material, equipment, and situations and proceed safely in order to minimize risk of injury to human subjects, self, and other individuals.
• Support and promote the activities of fellow students and of health care and research professionals. Promotion of peers helps to furnish a team approach to learning, task completion, problem solving, and patient care.
• Be honest, compassionate, ethical, and responsible. The student must be forthright about errors or uncertainty. The student must be able to critically evaluate their own performance, accept constructive criticism, and look for ways to improve. The student must be able to evaluate the performance of fellow students and tactfully offer constructive comments.

It is the student’s responsibility to notify the department if there is any reason they cannot meet the expectations of students in the PhD in Rehabilitation Science program, with or without reasonable accommodations. Reasonable accommodation will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of others. Students may contact KU Medical Center Office of Academic Accommodations (https://www.kumc.edu/academic-and-student-affairs/departments/academic-accommodation-services.html) to discuss accommodations.

Individuals with disabilities are encouraged to apply to the program. Applicants whose response indicates that they cannot meet one or more of the expectations will be reviewed further by the KU Medical Center Office of Academic Accommodations (https://www.kumc.edu/academic-and-student-affairs/departments/academic-accommodation-services.html), with applicant and faculty input, to determine if any reasonable accommodations are possible to facilitate successful completion of the program requirements.

Learning assistance, academic performance enhancement, and psychological services at KU Medical Center are free, confidential, and available at the Counseling and Educational Support Services (https://

<table>
<thead>
<tr>
<th>Eligible for reduced enrollment if 18 hour postcomprehens enrollment completed.</th>
<th>Final Oral Examination (dissertation defense) is taken if approved by committee to defend and graduate.</th>
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</table>

Total Hours 72

Respiratory Care

KU offers a bachelor's degree program in respiratory care. Students enter after completing two years of prerequisites taken from KU's Lawrence campus or any regionally accredited two- or four-year college or university. The advanced curriculum and location at an academic medical center means students receive extensive experience in advanced respiratory therapy techniques.

For working professionals having graduated from a COARC-approved advanced practice level program, KU also offers a flexible online bachelor's degree-advancement program in respiratory care. Students must already have the RRT credential and must take any missing prerequisite courses in addition to the online respiratory care courses to meet the credit-hour requirements for the bachelor's degree.

Located at the region's premier academic health center, the Department of Respiratory Care and Diagnostic Science is a part of the School of Health Professions (http://healthprofessions.kumc.edu/) on the medical center campus of the University of Kansas. KU Medical Center (http://www.kumc.edu/) is located in the heart of the Kansas City metropolitan area at 39th and Rainbow Boulevard – about 40 minutes away from the main KU campus (http://www.ku.edu/) in Lawrence, Kansas.

Advising and FAQ

For information about respiratory care at KU, please visit the department's website (http://respiratorycare.kumc.edu/). Students interested in entering this field should contact an advisor as early as possible in their collegiate career to ensure prerequisite course work will be completed on schedule. Advising and campus visits are available Monday-Friday by appointment. Please email respiratory@kumc.edu for information. For advising on the KU Lawrence campus, please see the KU Undergraduate Advising Center (http://advising.ku.edu/).

Courses

RESP 200. Introduction to Respiratory Therapy. 1 Credits.
This course is intended to be an introductory course for learners who are entering college-level health care programs or for those who believe they may be interested in pursuing a career in Respiratory Therapy. Topics are appropriate for professions that involve direct patient care, as well as those that provide support services.

RESP 300. Introduction to Respiratory Care Procedures. 4 Credits.

An introductory course designed to acquaint the student with the fundamental theory, procedures, and equipment used in respiratory therapy. Emphasis is placed on understanding application of equipment and procedures to the patient, and the respiratory therapy treatment of patients requiring non-continuous ventilatory assistance. This course introduces such topics as cardiopulmonary resuscitation, bronchopulmonary hygiene, airway care, oxygen therapy, and cleaning and sterilization of equipment. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 301. Respiratory Care Evidence Based Practice 1. 1 Credits.

This course is designed to provide the participant with a basic introduction to healthcare research with emphasis on evidence based practices. Students will learn how to identify a research question and conduct a proper literature search. This course will teach students the strengths and weaknesses of different search sources, how to review and critique a scientific article, and present the results of their literature review. Students will learn how to properly cite and develop a bibliography that is consistent with scientific writing, as well as, develop an introduction section of a research paper. This course will familiarize the students with cardiorespiratory medical terminology. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 302. Respiratory Care Evidence Based Practice 2. 1 Credits.

This course is the continuation of Respiratory Care Evidence Based Practice 1 and designed to reinforce the principles of healthcare research, evidence based practices, and the medical terminology used in the cardiorespiratory sciences. Students will refine their ability to identify a research question, conduct a literature search, review and critique a scientific article, and present the results of their literature review. This course will continue to emphasize proper citation and bibliography documentation consistent with scientific writing. Prerequisite: RESP 301 and Enrollment in the Respiratory Care Education Program.

RESP 305. Cardiopulmonary Anatomy and Physiology. 2 Credits.
This course will introduce the student to normal anatomy and physiology of the cardiopulmonary systems. Students will focus on the etiology, and treatment of pulmonary and cardiac diseases, with emphasis on the pulmonary system.

RESP 306. Cardiopulmonary Pathophysiology. 2 Credits.
This course will introduce the student to normal cardiopulmonary systems, as well as, cardiopulmonary pathology. Students will focus on the etiology, pathophysiology, and treatment of pulmonary and cardiac diseases, with emphasis on the pulmonary system.

RESP 310. Clinical Pharmacology. 2 Credits.
The student will learn about adrenergic and parasympatholytic bronchodilators, corticosteroids, mucus-controlling drugs, surfactant agents, antitussives, and the anti-infective drugs used for the treatment of respiratory disorder. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 315. Clinical Application 1. 3 Credits.
This course introduces the beginning respiratory therapy student to the clinical environment. The student participates in clinically-oriented workshops, observation rotations, learning laboratory sessions, or simulations that focus on the application of respiratory therapy equipment, theory, patient management, and communication in the clinical setting. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 325. Mechanical Ventilators. 3 Credits.
This course contains such topics as arterial puncture, classification of mechanical ventilators and adjunct devices, and their application to the patient. Four hours of lecture/discussion and a 3 hour weekly laboratory acquainting the student with the rationale for continuous mechanical ventilation and the basic operation of adult, pediatric and neonatal mechanical ventilators. Emphasis is placed on the selection of appropriate equipment and assessment of its effect on the patient. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 326. Mechanical Ventilation Lab. 2 Credits.
This course contains such topics as arterial puncture, classification of mechanical ventilators and adjunct devices, and their application to the patient. 2 hour weekly laboratory acquainting the student with the rationale for continuous mechanical ventilation and the basic operation of adult, pediatric, and neonatal mechanical ventilators. Emphasis is placed on the selection of appropriate equipment and assessment of its effect on the patient. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 330. Pulmonary Function. 2 Credits.
Lecture and laboratory introducing the student to basic pulmonary function procedures. This course allows the student to practice pulmonary function tests and interpret the results. Lecture and laboratory topics include such topics as the measurement of lung volumes and capacities, body plethysmography, blood gas analysis, and flow volume loops. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 335. Clinical Application 2. 4 Credits.
This course provides the respiratory therapy student with an introduction to the critical care setting. The student will begin to apply the procedures and equipment most often utilized in the intensive care areas. Emphasis is placed on continuous mechanical ventilation, artificial airways, airway care, and bedside pulmonary function testing. The student will assume limited patient care responsibility in the critical care areas. Prerequisite: RESP 315.

RESP 340. Respiratory Review 1. 2 Credits.
Respiratory Care Review- This course provides a complete review of the junior year respiratory care curriculum and aids in the preparation for students to take the Self-Assessment examination. Upon successful completion, students will be prepared to begin the senior year curriculum. Prerequisite: Successful completion of the first and second semesters of the respiratory care curriculum.

RESP 345. Clinical Application 3. 3 Credits.
This course is a continuation of the clinical sequence that provides the respiratory therapy student with experience in the critical care setting. The student applies the procedures and equipment utilized by respiratory care practitioners in the intensive care areas. Emphasis is placed on continuous mechanical ventilation, artificial airways, airway care, and bedside diagnosis. The student assumes progressively more patient care responsibility in the critical care areas under preceptor supervision. Prerequisite: Completion of RESP 335.

RESP 350. Clinical Application (special). 1 Credits.
This course provides the intermediate respiratory therapy student with opportunities to practice basic respiratory therapy procedures. Emphasis placed on performance of respiratory therapy procedures and application of equipment. This course emphasizes such topics as oxygen therapy, aerosol therapy, incentive spirometry, patient assessment, and IPPB therapy. The student will assume limited patient care responsibilities.

RESP 375. Clinical Special. 0 Credits.
This course provides the advanced respiratory therapy student with opportunities to refine procedural and evaluative skills in the critical care areas. The student will spend a minimum of twenty-four hours per week in the clinical setting. Emphasis is placed upon the students ability to evaluate the patients' clinical situation and recommend appropriate therapy modalities to the clinical supervisor. During this course the student will assume wider-ranging patient care responsibilities.

RESP 399. Generalist Practice. 1 Credits.
This course is designed to allow students the opportunity to improve and perfect skills acquired in the junior year clinical courses. Emphasis will be given to refining the students' abilities to assess patient status and administer appropriate therapy modalities. This course may also be used to assess respiratory therapy knowledge and skills of students transferring from other programs. Prerequisite: Permission of instructor.

RESP 400. Chronic Respiratory Disease Management: The Evolving Role of the Respiratory Therapist. 3 Credits.
This course is an introduction to the evolving role of respiratory therapists in health care, especially in the area of chronic disease management. The students will explore various trends that are contributing to the role respiratory therapy may play in patient care. Topics covered in this course include COPD and asthma management, pulmonary rehabilitation, cardiopulmonary exercise testing, home care, elderly care, nutritional care of the pulmonary patient, and communication skills necessary for patient education. Students in this course will gain an understanding of how they can contribute to an inter-professional team in order to provide safe and effective patient care. Presentation of topics in this course may include lecture, group work/discussion, audiovisual, computer and other multimedia aids. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 405. Advanced Critical Care. 4 Credits.
Concepts of the diseases and disorders that effect the critically ill adult are explored. Emphasis is placed on understanding common illnesses such as cardiac dysrhythmias, acute coronary syndrome, trauma of the chest and head, organ failure and toxin exposure as well as the other medical challenges of the critically ill patient. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 410. Neonatal Respiratory Care. 3 Credits.
This course is designed to provide the student with an introductory knowledge of fetal and newborn cardiorespiratory anatomy, physiology, development, pathophysiology, and care. Prerequisite: Senior year standing or permission of instructor.

RESP 411. Neonatal/Pediatric Respiratory Care Lab. 2 Credits.
This Course is designed to provide the student with an introductory knowledge of fetal and newborn cardiorespiratory anatomy, physiology, development, pathophysiology, and care and in a lab setting. Prerequisite: Senior year standing.

RESP 415. Clinical Application 4. 4 Credits.
This course provides the advanced respiratory therapy student with opportunities to refine procedural and evaluative skills in the critical care areas. In the clinical setting emphasis is placed upon the student's ability to evaluate the patient's clinical situation and recommend appropriate therapy modalities to the clinical instructor. During this course the student will assume a progressively wider range of patient care responsibilities. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 420. Health Care Management, Ethics and Law. 2 Credits.
This course provides an overview of fundamental concepts in healthcare management, law, and ethics. Students will learn the skills and knowledge necessary to be successful in management leadership, management design, and managing diversity. Ethical concerns relevant to the healthcare manager will be addressed. Current and historical controversies in healthcare will be discussed. Upon completion of this course, students will have the knowledge to understand laws, ethics, and management principles of the complex healthcare landscape.

RESP 450. Chronic Respiratory Disease Management. 3 Credits.
This course is open only to online students. This course is an introduction to the evolving role of respiratory therapists in health care, especially in the area of chronic disease management. The students will explore various trends that are contributing to the role respiratory therapy may play in patient care. Topics covered in this course include COPD and asthma management, pulmonary rehabilitation, cardiopulmonary exercise testing, home care, elderly care, nutritional care of the pulmonary patient, and communication skills necessary for patient education. Students in this course will gain an understanding of how they can contribute to an inter-professional team in order to provide safe and effective patient care. Presentation of topics in this course may include lecture, group work/discussion, audiovisual, computer and other multimedia aids.

RESP 460. ACCS Specialty Credential Prep. 3 Credits.
This course will serve as review of material covered on the NBRC Matrix for the NBRC Adult Critical Care Specialty Examination. The purpose of this course is to guide students in the review and preparation for the
RESP 465. NPS Specialty Credential Prep. 3 Credits.
This course will serve as review of material covered on the NBRC Matrix for the NBRC Neonatal/Pediatric Specialty Examination. The purpose of this course is to guide students in the review and preparation for the NBRC NPS Specialty Examination. This will include weekly covered content, as well as practice exams.

RESP 470. AE-C Specialty Credential Prep. 3 Credits.
This course will provide an in-depth review of asthma education based on the National Asthma Educator Certification Board (NAECB) detailed content outline. Including the asthma condition, patient and family assessment, asthma management and organizational issues. Prerequisite: Enrollment in Respiratory Care.

RESP 480. Simulation and Interprofessional Education (IPE). 3 Credits.
This introductory course is designed for health care students to learn key concepts of building and leading a collaborative health care team. The course addresses both the clinical and behavioral aspects of performance with emphasis on interprofessional simulation-based education. The course is offered in a self-paced online format with a competency-based approach. The course will be taught over an eight-week period. The object of the course is to introduce collaborative practice for providing patient-centered care. The student will be introduced to: Interprofessional education and collaborative practice terminology Core Competencies for Interprofessional Collaborative Practice Foundations of effective health care teamwork Leading a collaborative health care team Skills to develop and implement simulation-based education. Prerequisite: Enrollment in Respiratory Care.

RESP 490. Special Studies or Projects. 1-9 Credits.
This course involves individual study, research or projects in the field of respiratory care under instructor guidance. Written reports and periodic conferences are required. Content and unit credit will be determined by student-instructor conferences and/or departmental conferences. This course may be repeated for a maximum of nine credits. Prerequisite: Admission to the respiratory care program and consent of instructor.

RESP 495. Management, Ethics, and Law in Respiratory Care. 3 Credits.
This course is only open to online students. This course provides an overview of fundamental concepts in healthcare management, law, and ethics. Students will learn the skills and knowledge necessary to be successful in management leadership, management design, and managing diversity. Ethical concerns relevant to the healthcare manager will be addressed. Current and historical controversies in healthcare will be discussed. Upon completion of this course, students will have the knowledge to understand laws, ethics, and management principles of the complex healthcare landscape.

RESP 605. Scientific Investigation Part I. 1 Credits.
This course is designed to provide the participant with an introduction to research skills culminating in a group Proposal of a bench study or chart review. The Proposal will consist of three sections: Introduction, Review of the Literature and Methods. The three sections will be developed through a series of progress reports with the aid of a faculty advisor. Students will work in groups to develop a research question about their daily practice that can only be answered by conducting research. This course will include discussions of the types of research data and the structure of a research proposal. Students will have opportunities to read, interpret and analyze research reports and practice in writing critical evaluations of the literature as it applies to their research question. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 610. Scientific Investigation Part II. 1 Credits.
Each study group will write the Discussion and Conclusion sections of their paper and share their findings in a poster presentation. The final version of each group's study manuscript must be submitted to course instructor prior to graduation. The quality of the manuscript will be appropriate for submission to the journal of Respiratory Care. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 615. Respiratory Review II. 2 Credits.
This course involves individual student under instructor guidance. A series of practice exams are taken and discussed including a secured practice registry exam and clinical simulation exam. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 620. Community and Global Health. 3 Credits.
This course will explore a wide variety of major health issues that impact us as global citizens. Students will be exposed to an overview of challenges that face the world today as they learn about strategies and programs that promote health in a variety of settings. Through this course, students will become more culturally competent healthcare providers. They will learn about disparities related to ethnicity, socioeconomic issues, human rights, and resource limits as they relate to the health of populations. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 625. Clinical Application 5. 4 Credits.
This course provides the student with the opportunity to integrate clinical activities and responsibilities related to neonatal and pediatric respiratory care. Prerequisites: Enrolled in Respiratory Care Program.

RESP 630. Lean Management. 3 Credits.
Lean Management-This course will introduce students to lean management principles such as Lean Six Sigma in healthcare. Students will learn process improvement through lean management concepts which will prepare them for management positions. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 640. Professional Communication. 3 Credits.
Professional Communication-this course will provide students with the tools they need to communicate clearly and effectively which will prepare them for the working world and leadership. Students will learn how to have crucial conversations on how to address serious issues via written or verbal. Prerequisite: Enrollment in the Respiratory Care Program.

RESP 650. Medical Writing & Research. 3 Credits.
This course is designed to introduce the student to the basics of health research and writing methods. Health care research is the necessary foundation for meaningful improvements in clinical practice. This course will make the health research and writing process accessible, manageable, and enjoyable for health care students. Prerequisite: Enrollment in Respiratory Care.

RESP 655. Leadership Management. 3 Credits.
The objective of this course is to prepare undergraduate students to become successful leaders in healthcare by viewing leadership competencies by studying relevant and contemporary skills in today's ever changing healthcare landscape. By the end of the course, students should have an understanding of how to approach complex leadership problems and comprehend them. Prerequisite: Senior year standing or permission of the instructor.

RESP 665. Capstone Project. 6 Credits.
This course is designed to give the student the opportunity to develop a project that is professionally relevant. This project will allow the student to explore opportunities such as implementing process change, protocol
creation, and curriculum development. The course is individualized to the students' intellectual interests and professional development. Prerequisite: 5 Core Courses (RESP 650, RESP 495, RESP 620, RESP 480, and RESP 450), 3 Track courses (RESP 460, RESP 470, RESP 465, RESP 630, RESP 640, RESP 655).

Bachelor of Science in Respiratory Care

Bachelor's Degree Program (On Campus)

KU offers a bachelor of science degree in respiratory care. Course work covers areas such as neonatal, pediatrics and adult critical care, management, education, sleep disorders, pulmonary rehabilitation, and cardiopulmonary diagnostics. Most students enter the program after completing the sophomore year of undergraduate study or after two years of community college course work. With an advanced curriculum and located at an academic medical center, students receive extensive experience in advanced respiratory therapy techniques. The program includes a semester-long clinical assignment during the senior year in the student's area of specialization.

Degree Advancement Program (Online)

The University of Kansas also offers a program for the respiratory therapist with the RRT credential to obtain a bachelor's degree. This program is perfect for students unable to be physically present on campus or those with schedule constraints which make traditional college class schedules a challenge. Courses ([https://www.kumc.edu/school-of-health-professions/academics/departments/respiratory-care-and-diagnostic-science/academics/respiratory-care-degree-programs/respiratory-care-therapy-degree-advancement/curriculum.html](https://www.kumc.edu/school-of-health-professions/academics/departments/respiratory-care-and-diagnostic-science/academics/respiratory-care-degree-programs/respiratory-care-therapy-degree-advancement/curriculum.html)) in this program are Web-based and are available anytime from anywhere in the world with an Internet connection. Note: This program is only available to professional respiratory therapists having the RRT credential.

On-campus Bachelor's Degree Program

To be eligible for this program, two years of prerequisite course work are needed – either from the KU Lawrence campus or another regionally accredited university or community college. In order to complete prerequisites and recommended electives on-time and in the appropriate sequence, interested students should contact an academic advisor ([https://outlook.office.com/mail/deeplink/compose/?mailtouri=mailto;%3Aabarry2%40kumc.edu](https://outlook.office.com/mail/deeplink/compose/?mailtouri=mailto;%3Aabarry2%40kumc.edu)) for assistance in selecting courses.

Transfer students should be aware that all transfer courses for which they have requested credit must be equivalent to courses required at KU; otherwise, additional course work will be required. Graduates of an associate's degree respiratory care program are eligible to apply for advanced standing as seniors upon completion of all prerequisites.

International students should review current requirements, ([http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html](http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)) International students, or those for whom English is a second language, may have additional requirements relative to language proficiency, residency, and citizenship status, ([http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html](http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html)).

A background check and documentation of shadow experience are required. Prospective students should review the program requirements, including prerequisite course work, and complete list of eligibility requirements ([https://www.kumc.edu/school-of-health-professions/](https://www.kumc.edu/school-of-health-professions/)).

RRT-to-Bachelor's Degree Bridge Program

Applicants must possess professional certification as a registered respiratory therapist (RRT) from the National Board for Respiratory Care, and an associate's degree (or equivalent) from a regionally accredited, CoARC-approved advanced respiratory therapist program. Prior course work must include all the prerequisite courses listed below. An overall grade point average (GPA) of 2.5 (on a 4.0 scale) for college course work is required to enter the degree-completion program for RRTs. In addition, student transcripts must document an individual course grade of no less than "C" on each prerequisite course in math, chemistry, physics and biological sciences.

A minimum 120 hours of college credit are required to earn a bachelor's degree from KU. Students will earn at least 30 credit hours during the respiratory care program.

### Prerequisites

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (meets KU Core goal 2.1a)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102 or BUS 305</td>
<td>Critical Reading and Writing (KU Core goal 2.1b)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____</td>
<td>3</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics (meets KU Core goal 1.2)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 241</td>
<td>Human Anatomy Observation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 247</td>
<td>Principles of Human Physiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 200</td>
<td>Basic Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 203</td>
<td>Introductory Microbiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I (meets KU Core goal 3.2)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (meets KU Core goal 2.2)</td>
<td>3</td>
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<tr>
<td>PHIL 140</td>
<td>Introduction to Philosophy (meets KU Core goal 3.1)</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 160</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HUM 204</td>
<td>Western Civilization I (or other elective meeting KU Core goal 4.2)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology (meets KU Core goal 3.3)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology (or other elective meeting KU Core goal 4.1)</td>
<td>3</td>
</tr>
<tr>
<td>HEIM 230</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>RESP 200</td>
<td>Introduction to Respiratory Therapy</td>
<td>1</td>
</tr>
</tbody>
</table>
Prerequisite Courses

- Human Anatomy* (lab recommended)
- Human Physiology* (lab recommended)
- Microbiology (lab recommended)
- Chemistry
- Algebra
- English Composition I and II
- Oral Communication
- Humanities (2 courses)
- Psychology
- Sociology

*Students having completed a single combined anatomy and physiology course must complete either a second, higher-level A&P course, or a course in physiology only.

Requirements for On-campus Bachelor’s Degree Program

Two years of undergraduate course work — including at least 53 credit hours of specific prerequisites (https://www.kumc.edu/school-of-health-professions/academics/departments/respiratory-care-and-diagnostic-science/academics/respiratory-care-degree-programs/respiratory-care-bachelors-degree/prerequisites.html) — is required prior to entry into this program. Most KU Core requirements must be met by the prerequisites. While in the 2-year respiratory care program, students complete 60 hours of course credits in a prescribed sequence covering five academic semesters. Students are responsible for completing additional electives to fulfill the university’s requirement of 120 total credit hours for a bachelor’s degree from KU.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>RESP 300</td>
<td>4 RESP 302</td>
<td>1 RESP 330</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RESP 301</td>
<td>1 RESP 325</td>
<td>3 RESP 340</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RESP 305</td>
<td>2 RESP 326</td>
<td>2 RESP 345</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RESP 306</td>
<td>2 RESP 335</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESP 310</td>
<td>2 RESP 620</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESP 315</td>
<td>3</td>
<td></td>
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<tr>
<td>Total Hours 14</td>
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</table>

<table>
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<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESP 405</td>
<td>4 RESP 400</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RESP 410</td>
<td>3 RESP 420</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RESP 411</td>
<td>2 RESP 610</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RESP 415</td>
<td>4 RESP 615</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RESP 605</td>
<td>1 RESP 625</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total Hours 14</td>
<td>12</td>
<td></td>
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</tbody>
</table>

Professional Credentialing

Upon graduation, students will be prepared to sit for the national credentialing examinations. To be employed as a respiratory therapist, graduates must pass this exam and will be recognized with the Registered Respiratory Therapist (RRT) credential.


Requirements for Bachelor’s Degree-Completion Program

This program requires a minimum 30 credit hours of respiratory care course work. Upon acceptance, students work with an advisor to organize a graduation plan and select a clinical specialty area. Specialty areas include neonatal critical care, adult critical care, and respiratory care management. Other areas may be considered with advisor approval. To qualify for graduation, a minimum grade of C or better is required on all respiratory care courses. The university requires at least 120 hours of total college credit to receive a bachelor's degree from KU. Previous course work in respiratory care may be eligible for transfer credit. The class schedule follows a typical semester and is designed to be delivered at an organized and manageable pace for the student.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESP 450</td>
<td>Chronic Respiratory Disease Management</td>
<td>3</td>
</tr>
<tr>
<td>RESP 480</td>
<td>Simulation and Interprofessional Education (IPE)</td>
<td>3</td>
</tr>
<tr>
<td>RESP 495</td>
<td>Management, Ethics, and Law in Respiratory Care</td>
<td>3</td>
</tr>
<tr>
<td>RESP 620</td>
<td>Community and Global Health</td>
<td>3</td>
</tr>
<tr>
<td>RESP 650</td>
<td>Medical Writing &amp; Research</td>
<td>3</td>
</tr>
<tr>
<td>RESP 665</td>
<td>Capstone Project (Students will complete this final course of the program in his or her chosen clinical specialty area.)</td>
<td>6</td>
</tr>
</tbody>
</table>

Optional Elective

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESP 460</td>
<td>ACCS Specialty Credential Prep</td>
<td>3</td>
</tr>
<tr>
<td>RESP 465</td>
<td>NPS Specialty Credential Prep</td>
<td>3</td>
</tr>
<tr>
<td>RESP 470</td>
<td>AE-C Specialty Credential Prep (Cardiopulmonary Diagnostics)</td>
<td>3</td>
</tr>
<tr>
<td>RESP 490</td>
<td>Special Studies or Projects 1</td>
<td>1-9</td>
</tr>
<tr>
<td>RESP 630</td>
<td>Lean Management</td>
<td>3</td>
</tr>
<tr>
<td>RESP 640</td>
<td>Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>RESP 655</td>
<td>Leadership Management</td>
<td>3</td>
</tr>
</tbody>
</table>

1 This course involves individual study, research or projects in the field of respiratory care under instructor guidance. Written reports and periodic conferences are required. Content and unit credit will be determined by student-instructor and/or departmental conferences. This course may be repeated for a maximum of 12 credits. Prior consent by the instructor is required to enroll in this course.

Therapeutic Science

Therapeutic Science is an interdisciplinary program that involves faculty across a variety of departments and schools at KU. This program is part of a growing trend to provide interdisciplinary doctoral-level training to address issues related to disability. The KU Therapeutic Science doctoral degree program (p. 695) is administered through the Department of Occupational Therapy Education (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education.html) in the KU School of Health Professions.
This program is designed for students whose interests in disability and quality of life require an integrated, interdisciplinary course of study that cannot be provided by existing programs. Typically, applicants will already have obtained a graduate degree and have a professional credential or identity (e.g., occupational therapist, speech-language pathologist, licensed clinical social worker, clinical psychologist, special educator). Many are likely to be currently working in their chosen field related to issues of disability, but now seek to generate knowledge for understanding disability and improving quality of life for individuals with disabilities.

For more information, please visit the program website (http://www.kumc.edu/school-of-health-professions/therapeutic-science.html).

**Courses**

**TS 800. Research Proseminar. 1 Credits.**
A proseminar conducted by the core graduate faculty in Occupational Therapy and Therapeutic Science. Twice-monthly meetings will involve student and faculty presentations of their current research, as well as provide more opportunities to obtain feedback on research proposals. May be taken more than once for a total of four credits. (Same as OTMS 800.)

**TS 805. Multidisciplinary Theoretical Perspectives. 3 Credits.**
Students will identify and explore key theories in behavioral and social science with an emphasis on those currently influencing clinical reasoning. Students will demonstrate an understanding of contemporary theories and be able to compare and contrast key theories, while also developing knowledge about theory guided research and interventions.

**TS 850. From Beliefs to Evidence. 1 Credits.**
Analysis of the role of beliefs about practice in professional culture and how beliefs are affected by the accumulation of research evidence. Topics include the nature of science and beliefs, the nature of evidence, and the debate over evidence-based practice. Students will use topics from their own professional interests for class presentations and written assignments. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS850 and TS950, and is offered in the Fall & Spring every 3rd year. Prerequisite: Consent of the instructor.

**TS 880. Special Projects. 1-6 Credits.**
An elective course to allow student investigation of special issues or problems relevant to applied research and/or practice, under the direction of a faculty member chosen by the student. Systematic coverage of current issues may include a research investigation or study related to pertinent sociocultural trends, practice factors, or emerging issues in service provision. Students will complete special projects such as oral presentations, written papers, or case analysis as negotiated with the faculty member. May be repeated for credit. Prerequisite: Permission of instructor.

**TS 900. Evolving Interdisciplinary Views of Disablement. 1 Credits.**
Assessment of how our social and cultural context defines notions of disability and disablement in our society. Topics include historical constructs of disability, public policy related to disability, and social paradigms of disability. Students will evaluate views of disablement from the perspective of their own discipline. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS850 and TS950, and is offered in the Fall & Spring every 3rd year. Prerequisite: Consent of the Instructor.

**TS 950. Designing Effective Knowledge Transfer. 1 Credits.**
Examination of the principles of knowledge transfer and diffusion of innovation as they relate to practices in therapeutic professions. Topics include the diffusion process, change agents, innovation adoption, and current diffusion methods. Students will evaluate diffusion processes that have occurred within their own professions. A minimum of two credits over two successive terms (Fall then Spring) is required (i.e., 1 credit each semester). Note this course alternates in succession with TS850 and TS950, and is offered in the Fall & Spring every 3rd year. Prerequisite: Consent of the instructor.

**TS 980. Advanced Study in Therapeutic Science. 1-9 Credits.**
Students engage in advanced study of a topic of their interest, guided by an appropriate mentor. Options for engaging in learning include directed readings, interpretation of evidence, discussions, and written syntheses of existing literature. Students typically enroll in offerings of this course several times over a series of successive terms, with the course sequence culminating in a written proposal for original research and an oral defense of that proposal (oral comprehensive examination). Prerequisite: Permission of instructor.

**TS 990. Dissertation in Therapeutic Science. 1-9 Credits.**
Research experience leading to dissertation for doctoral students in Therapeutic Science. Students enroll in offerings of this course over a series of successive terms, culminating in a written dissertation describing original research and an oral defense of the dissertation research. Prerequisite: Permission of instructor.

**Doctor of Philosophy in Therapeutic Science**

Therapeutic Science is an interdisciplinary doctoral program involving faculty across a variety of departments and schools at KU. This program is part of a growing trend to provide interdisciplinary doctoral-level training addressing issues related to disability. The doctoral program in Therapeutic Science (http://www.kumc.edu/school-of-health-professions/therapeutic-science.html) is administered through the Department of Occupational Therapy Education (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education.html) in the KU School of Health Professions.

This program is designed for graduate students with interests in disability and quality of life requiring an integrated, interdisciplinary course of study that cannot be provided by existing programs. Typically, applicants will already have obtained a graduate degree (or accumulated 24 research-related course credits at the graduate level) and have a professional credential or identity (e.g., occupational therapist, speech-language pathologist, licensed clinical social worker, clinical psychologist, special educator). Many are likely to be working in their chosen field related to issues of disability, but now seek to generate knowledge for understanding disability and improving quality of life for individuals with disabilities. Recognizing the value of insights gained through application of theoretical knowledge in work place settings, the curriculum purposely is flexible to allow students to pursue this program of study while working professionally.

Applications to this program are submitted online. Detailed instructions on how to apply are posted on the program website (https://www.kumc.edu/school-of-health-professions/academics/departments/occupational-therapy-education/academics/phd-in-therapeutic-science.html). The program is administered through the Department of Occupational Therapy Education (http://www.kumc.edu/school-of-health-professions/occupational-therapy-education.html). Applications must be received by
December 1 for consideration, with enrollment in course work typically beginning the following fall semester.

**Admission requirements:**

- A master’s degree from a regionally accredited institution is required, and must be documented by submission of official transcripts indicating the degree has been conferred before entering the program. Students with degrees from outside the U.S. must provide a transcript evaluation from an official, independent service, indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative grade-point average requirement.
- Applicants must possess a cumulative grade-point average of at least a 3.0 on a 4.0 scale in a bachelor's degree program.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the minimum English proficiency requirement.
- A background check is required during the admission process; it may affect the student's eligibility to enter the program.
- A current curriculum vitae or résumé is required and must include details of the applicant's educational, professional, and research background.
- A brief statement of academic interests and professional goals will be submitted with the online application. This statement (no more than 300 words) should include how graduate education at the doctoral level will contribute to the attainment of the student's career goals.
- Applicants will also provide a brief statement (2-3 paragraphs) of their research interests, describing how these interests align with expertise of faculty in the Therapeutic Science program. Applicants are encouraged to contact faculty prior to applying to the program.
- Three references are required and must be provided by faculty members, advisors, employers, or other people familiar with the applicant's work and character.

Applicants will be assessed based on these requirements. In addition, the extent to which the applicant's interests and goals correspond to those of the available faculty will be considered as part of the admissions review process.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs can be found [here](http://catalog.ku.edu/graduate-studies/kumc/#programstext).

The Ph.D. in Therapeutic Science ([http://www.kumc.edu/school-of-health-professions/therapeutic-science.html](http://www.kumc.edu/school-of-health-professions/therapeutic-science.html)) is an interdisciplinary program that involves faculty across a variety of departments and schools at KU that is administered through the Department of Occupational Therapy Education ([http://ot.kumc.edu/](http://ot.kumc.edu/)) in the KU School of Health Professions. The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

**Degree requirements:**

- Degree requirements are normally completed within 5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of a written qualifying exam after three semesters or 18 credit hours (whichever is completed first)
- Successful completion of the University's Research Skills and Responsible Scholarship ([http://catalog.ku.edu/graduate-studies/kumc/#programstext](http://catalog.ku.edu/graduate-studies/kumc/#programstext)) requirement prior to scheduling of the Oral Comprehensive Examination. The goal of the RS&RS requirement is to support the student in developing tools necessary for conducting ethical research, pursuing scholarly endeavors, and addressing research questions through a process that is thoughtful, strategic, and evidence-based.
- Successful completion of the Residence Requirement ([http://catalog.ku.edu/graduate-studies/kumc/#programstext](http://catalog.ku.edu/graduate-studies/kumc/#programstext)) prior to the semester the Oral Comprehensive Examination is scheduled.
- Successful completion of TS 980 Advanced Study in Therapeutic Science which includes written preliminary examinations.
- Successful completion of the Oral Comprehensive Examination ([http://catalog.ku.edu/graduate-studies/kumc/#programstext](http://catalog.ku.edu/graduate-studies/kumc/#programstext)). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination. The format for this examination is an oral defense of a written dissertation proposal.
- Successful completion of the Post-Comprehensive Enrollment ([http://catalog.ku.edu/graduate-studies/kumc/#programstext](http://catalog.ku.edu/graduate-studies/kumc/#programstext)) requirement, typically through continuous enrollment TS 990 Dissertation in Therapeutic Science
- Successful completion of the Final Oral Examination ([http://catalog.ku.edu/graduate-studies/kumc/#programstext](http://catalog.ku.edu/graduate-studies/kumc/#programstext)) (dissertation defense.) At least 5 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination.
- Successful Dissertation Submission and Publication ([http://catalog.ku.edu/graduate-studies/kumc/#programstext](http://catalog.ku.edu/graduate-studies/kumc/#programstext)) (according to Office of Graduate Studies policy).
- Successful completion of a minimum of 60 credit hours including core courses, dissertation related coursework and interdisciplinary content coursework. This minimum number presumes the student already has at least 24 graduate credit hours in content courses and 6 hours in research methods and analysis courses that have been accumulated toward a master's degree before beginning the Ph.D. program.

In addition to the core courses, and reflecting the interdisciplinary nature of the Therapeutic Science PhD program, students are required to complete elective courses, focused scholarship, and research outcomes. The student's mentor must approve the plan of study.

**Successful completion of the following courses:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 800</td>
<td>Research Proseminar (Fall)</td>
<td>1</td>
</tr>
<tr>
<td>TS 800</td>
<td>Research Proseminar (Spring)</td>
<td>1</td>
</tr>
<tr>
<td>TS 800</td>
<td>Research Proseminar (Summer)</td>
<td>1</td>
</tr>
<tr>
<td>TS 850</td>
<td>From Beliefs to Evidence (Fall)</td>
<td>1</td>
</tr>
<tr>
<td>TS 850</td>
<td>From Beliefs to Evidence (Spring)</td>
<td>1</td>
</tr>
<tr>
<td>TS 900</td>
<td>Evolving Interdisciplinary Views of Disablement (Fall)</td>
<td>1</td>
</tr>
<tr>
<td>TS 900</td>
<td>Evolving Interdisciplinary Views of Disablement (Spring)</td>
<td>1</td>
</tr>
<tr>
<td>TS 950</td>
<td>Designing Effective Knowledge Transfer (Fall)</td>
<td>1</td>
</tr>
<tr>
<td>TS 950</td>
<td>Designing Effective Knowledge Transfer (Spring)</td>
<td>1</td>
</tr>
</tbody>
</table>
Dissertation Related Courses
TS 980  Advanced Study in Therapeutic Science (no more than 6 hours in one semester)  9
TS 990  Dissertation in Therapeutic Science  9

Required Elective Courses  33
This interdisciplinary program requires students to complete course work in the areas of: Theory (3 credits), Interdisciplinary electives (6 credits), Advanced Study electives (3 credits), Focused Scholarship (6 credits), and Research (6 credits design and methods, 9 credits statistics/analysis)

Total Hours  60

The department will provide a program-specific handbook to each student upon their entry into the program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Therapeutic Science Program Director and the Office of Graduate Studies.

This table summarizes a typical plan of study for this program.

The details of these courses and their sequence have some degree of flexibility, and students should consult regularly with the academic advisor and research mentor to discuss options. A full-time student should expect to take 4-5 years to complete the minimum of 60 credit hours required by this program of study; most students accrue > 60 credit hours. Students pursuing the degree on a part-time basis will require proportionally longer. Unless special circumstances arise, the program must be completed within 8 years.

### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 850 (core course)</td>
<td>1</td>
<td>TS 850</td>
<td>1</td>
<td>Advanced Study (elective)</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Theory (elective)</td>
<td>3</td>
<td>Interdisciplinary (elective)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary (elective)</td>
<td>3</td>
<td>Research Design</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>7</td>
<td>3</td>
<td></td>
<td></td>
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</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 880 (focused scholarship)</td>
<td>3</td>
<td>TS 880 (focused scholarship)</td>
<td>3</td>
<td>Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>TS 900 (core course)</td>
<td>1</td>
<td>TS 900 (core course)</td>
<td>1</td>
<td>TS 800 (with Qualifying Exam)</td>
<td>1</td>
</tr>
<tr>
<td>Research Design (research process)</td>
<td>3</td>
<td>Data Analysis</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>7</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 950 (core course)</td>
<td>1</td>
<td>TS 950 (core course)</td>
<td>1</td>
<td>TS 990 (dissertation related)</td>
<td>3</td>
</tr>
</tbody>
</table>

### TECHNICAL STANDARDS

**Doctoral Degree Program in Therapeutic Science**

A Doctoral Degree in Therapeutic Science signifies that the holder is prepared to assume leadership in research programs related to human disability. It follows that graduates must have the knowledge and skills to articulate theory and perform scientific research. Therefore, all individuals admitted to the University of Kansas Medical Center Therapeutic Sciences degree program must have the following abilities with or without accommodations.

Individuals with disabilities are encouraged to apply to the Therapeutic Science program, and reasonable accommodation will be made for qualified applicants or students who disclose a disability. Candidates who indicate upon application or after acceptance to the program that they cannot meet an expectation listed will be reviewed further by the TS-PhD Program Director in collaboration with the ADA Panel for the School of Health Professions to determine if reasonable accommodations are likely to lead to successful completion of the therapeutic science graduate program.

1. **Problem Solving:** Doctoral candidates are expected to develop advanced expertise and demonstrate skill in leadership, teaching, research design, and data analysis. Therefore, a candidate must be
able to understand research, make correct observations, and engage in reasoning, analysis, and synthesis.

2. **Judgment:** The doctoral candidate will be expected to demonstrate judgment in classroom, community, and other research settings that shows an ability to make mature, sensitive, and effective decisions in the following areas: a) relationships with supervisors, peers, and subjects/patients/clients/consumers/families, b) professional behavior, c) the effectiveness of intervention or other research strategies. The candidate must demonstrate and articulate an understanding of the rationale supporting decisions and processes, and be able to provide a justification for his or her actions and performance.

3. **Communication:** A) **Written communication:** The candidate must be able to assimilate information from written sources (texts, journals, databases, medical/school records, etc.). The candidate must be able to obtain, comprehend, retain, and use new information presented in written formats. Candidates are required to compile information from written sources, interpret that information, and produce appropriate written documentation. B) **Verbal and nonverbal communication:** Candidates must be able to communicate effectively in order to elicit information from subjects/patients/clients/consumers/families, as well as supervisors and peers. Candidates must possess the ability to convey factual information, but also to communicate the more subtle cues of mood, temperament, and social responses. Candidates must develop skill in providing feedback appropriately to others, as well as personal insight and responsiveness to feedback provided by others to the candidate. Communication with subjects/patients/clients/families and with all members of the research team or academic unit must be accurate, sensitive, effective, and efficient. Response time to emergencies/crisis situations, as well as more routine communication must be appropriate to the situation or setting.

4. **Sensorimotor:** Candidates must have sufficient gross motor, fine motor, and equilibrium functions, and functional use of sensory systems to enable them to perform all tasks essential to their career paths.

5. **Behavioral and social attributes:** Candidates are expected to exhibit professional behaviors and attitudes during participation in classroom, clinical, or research experiences. The candidate must be able to communicate effectively and sensitively with subjects and colleagues, including individuals from different cultural and social backgrounds. This includes, but is not limited to, an ability to establish rapport and communicate with others, to use appropriate language, possess flexibility toward change, and to accept responsibility for one’s own conduct. Students are expected to exhibit a positive attitude toward patients/clients, peers, and supervisors.
The school is accredited by the Accrediting Council on Education in Journalism and Mass Communications.

**School of Journalism Edwards Campus**

**Mission**
To educate marketers for personal development and professional success.

**Vision**
To become the degree of choice for marketing communications professionals in the Kansas City area, growing marketers personally and professionally, growing the program enrollment and market awareness, and growing the marketing industry financially and creatively.

**Values**
- Academically sound … with a high-quality curriculum taught by expert faculty.
- Relationship-oriented … in our interactions with our constituents.
- Attentive … to the unique needs of working adult students.
- Servant-hearted … in our willingness to go “above and beyond” to assist students and prospects.

**Our Promise**
To bring KU’s and the William Allen White School of Journalism and Mass Communications’ reputations for academic excellence to greater Kansas City through high-level service and convenience for the working adult marketing professional seeking to further his/her career with an Integrated Marketing Communications Graduate degree.

**Facilities**

**Stauffer-Flint Hall and Dole Human Development Center**
The school’s classrooms, laboratories, student media, and faculty offices are in Stauffer-Flint Hall and Dole Human Development Center. The school’s Dean’s office, Student Services office, The Agency, The University Daily Kansan, Media Crossroads, KUJH-TV, and the Journalism Resource Center are in Stauffer-Flint, as is the office of the Kansas Scholastic Press Association. The Dole Center houses multimedia labs and graduate student offices and classroom space.

**Journalism Student Services Center**
The Student Services Center, 117 Stauffer-Flint Hall, houses the Recruitment Coordinator, Career and Outreach Coordinator and Undergraduate Advising and Records. For prospective student questions about admissions to KU from a high school or transfer institution, please contact our Recruitment Coordinator at (785) 864-7620. For current KU students seeking admission to the School of Journalism, contact (785) 864-4080. Students who need advising, enrollment and graduation planning and assistance should also call (785) 864-4080.

**Journalism Resource Center**
Professional publications, copies of major national and state newspapers, and reference and research materials are available in the Journalism Resource Center, 210 Stauffer-Flint Hall. Students may check out computers for use in the Resource Center.
Junior standing is required for:

![Image of a page from a document with text]

**KU Edwards Campus**

The KU Edwards Campus in Overland Park consists of three classroom buildings (Regents Center, Regnier Hall and the BEST Building) and a student union building offering comfortable professional accommodations for classes, studying or hanging out with friends. Tiered and flat classrooms, a computer lab, conference rooms, an auditorium, conference space, the Student Success Center and the Hawk’s Nest Study and Open Community Center provide a variety of private and community learning environments.

**Undergraduate Programs**

The school offers the Bachelor of Science (p. 712) degree in Journalism and Mass Communications. The program prepares students for careers in advertising, corporate communications, integrated marketing communications, news, writing and editing, management, and sales in traditional media and emerging and converged media.

The school also offers a minor in journalism and mass communications (p. 715).

**Courses for Nonmajors**

All KU students may take:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 104</td>
<td>Words at Work: Writing Essentials</td>
<td>3</td>
</tr>
<tr>
<td>JMC 150</td>
<td>Stand and Deliver</td>
<td>3</td>
</tr>
<tr>
<td>JMC 177</td>
<td>First Year Seminar: ______</td>
<td>3</td>
</tr>
<tr>
<td>JMC 200</td>
<td>Topics in Journalism: ______</td>
<td>3</td>
</tr>
<tr>
<td>JMC 201</td>
<td>Current Issues in Journalism</td>
<td>3</td>
</tr>
<tr>
<td>JMC 210</td>
<td>Basic Video Production</td>
<td>2</td>
</tr>
<tr>
<td>JMC 211</td>
<td>Tech Tools: Audio / Video</td>
<td>1</td>
</tr>
<tr>
<td>JMC 212</td>
<td>Tech Tools: Graphic Design</td>
<td>1</td>
</tr>
<tr>
<td>JMC 213</td>
<td>Tech Tools: Visuals</td>
<td>1</td>
</tr>
<tr>
<td>JMC 214</td>
<td>Tech Tools: Presentation</td>
<td>1</td>
</tr>
<tr>
<td>JMC 215</td>
<td>Tech Tools: Web Coding</td>
<td>1</td>
</tr>
<tr>
<td>JMC 260</td>
<td>Agency: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>JMC 300</td>
<td>Visual Storytelling</td>
<td>2</td>
</tr>
<tr>
<td>JMC 302</td>
<td>Information Exploration</td>
<td>3</td>
</tr>
<tr>
<td>JMC 308</td>
<td>Ethics in a Wired World</td>
<td>3</td>
</tr>
<tr>
<td>JMC 320</td>
<td>Stratcom I: Introduction to Strategic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>JMC 408</td>
<td>Media Law and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>JMC 488</td>
<td>Laboratory in Media Production</td>
<td>1-3</td>
</tr>
<tr>
<td>JMC 503</td>
<td>History of Journalism and Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>JMC 534</td>
<td>Diversity in Media</td>
<td>3</td>
</tr>
<tr>
<td>JMC 540</td>
<td>Sports, Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 590</td>
<td>International Journalism</td>
<td>3</td>
</tr>
<tr>
<td>JMC 608</td>
<td>Ethics and Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>JMC 611</td>
<td>Sales Strategies</td>
<td>3</td>
</tr>
<tr>
<td>JMC 613</td>
<td>International Strategic Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 618</td>
<td>First Amendment and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Junior standing is required for:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 320</td>
<td>Stratcom I: Introduction to Strategic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td></td>
</tr>
<tr>
<td>JMC 503</td>
<td>History of Journalism and Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>JMC 540</td>
<td>Sports, Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 611</td>
<td>Sales Strategies</td>
<td>3</td>
</tr>
<tr>
<td>JMC 613</td>
<td>International Strategic Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 618</td>
<td>First Amendment and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Students in professional schools who wish to take any other journalism course should consult their schools and the Journalism Student Services Office, 117 Stauffer-Flint Hall.

**Internships**

Through the Career Center (http://www.journalism.ku.edu/career-center-students/), the school enables students to gain professional experience working as interns. Internships vary in time of year, duration, location, compensation, and required course work or other experience. Many students complete internships during the summer, but they also are available during the school year. Staff members provide further guidance on opportunities and requirements.

**Study Abroad**

Journalism students study abroad in a variety of locations. Students should work with their journalism advisor and the Office of Study Abroad and Global Engagement (https://studyabroad.ku.edu/).

**University Honors Program**

The school encourages qualified students to participate in the University Honors Program (http://www.honors.ku.edu/).

**Graduate Programs**

The William Allen White School of Journalism and Mass Communications offers 3 tracks leading to the Master of Science (p. 715) in journalism – a scholarly thesis-based Mass Communications track in Lawrence, including a joint M.S.J./J.D. option, a professional Integrated Marketing Communications track at KU’s suburban Kansas City Edwards Campus, and an online Digital Content Strategy program – and a Ph.D. in Journalism and Mass Communications in Lawrence.

The Lawrence-based Mass Communications program focuses on deeper, theoretical understanding of the professions of the media. The student must complete 37 graduate credit hours with at least a B (3.0) average. A student completes a thesis and passes a general examination of his/her thesis.

The Integrated Marketing Communications course of study trains professional communicators to find solutions for business problems and to explore strategic marketing from a managerial perspective. It emphasizes the integration of research, ethics, writing, creativity, innovation, technology, branding, social media, sales and leadership. The curriculum is an advanced series of courses offered to students who show an aptitude for strategic thinking and have professional experience in marketing communications or other media-related fields. It is offered on the KU Edwards Campus (http://edwardscampus.ku.edu/) in Overland Park and is designed for part-time, evening study to accommodate working professionals, while maintaining the same standards of academic excellence found in full-time graduate programs on the Lawrence campus.
Our online master's program in Digital Content Strategy trains graduates to find, use and analyze information and data to solve organizational problems. With certificates in Social Media Strategy and Data Interpretation and Communication, students can become the information expert in his/her organization. The online program is divided into two certificates. The master's degree is earned by completing both certificates, but students may choose to earn just one certificate. Students may work on either of these certificates independently, building credentials before they complete a master's degree. All classes are online. The program requires 30 hours of coursework to earn a master's degree.

The Ph.D. program in Journalism and Mass Communications is small and, therefore, selective. We admit 4 to 6 students per year to ensure close work with the faculty. We expect our students’ scholarly and research interests to intersect with those of our faculty. Students who hold a master’s in journalism complete at least 40 hours for the degree. The student completes study of appropriate research skills, designed in consultation with the faculty advisor. The student also must meet KU’s requirements for dissertation hours.

Undergraduate Scholarships and Financial Aid

All students with financial need should apply to Financial Aid and Scholarships (https://financialaid.ku.edu/apply-for-aid/). This office awards scholarships to incoming first-year students based on academic merit.

The School of Journalism and Mass Communications has a limited number of scholarships provided by donors who often specify the majors or the geographic areas from which recipients may be selected. Most scholarships from the school are reserved for students already enrolled in journalism courses. To receive a need-based scholarship from journalism, the student must have submitted the FAFSA form (https://studentaid.gov/h/apply-for-aid/fafsa/) and been determined to be eligible. Merit-based scholarships also are offered.

Scholarship applications are available beginning October 1 on the school’s website. The application deadline is December 1. Notices of scholarships awarded by national journalism organizations are posted in Stauffer-Flint Hall and the Dole Center when they are received.

Graduate Fellowships and Assistantships

For information about graduate assistantships (http://journalism.ku.edu/gtas-fellowships-and-awards/), contact the School of Journalism and Mass Communications.

Visit the Graduate Studies website for information about funding opportunities (https://graduate.ku.edu/funding/) for graduate students at KU.

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

Undergraduate University Regulations

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

Absences

The school reserves the right to cancel the enrollment of any student who fails to attend the first class or laboratory meeting. Instructors may require a certain level of attendance for passing a course and may drop a student for lack of attendance without the student’s consent.

Change of School

To change from one school to another, you must submit a Change of School form online (https://admissions.ku.edu/change-school/). Follow the deadlines on the form.

Admission is competitive and occurs three times per year. Applications are due February 15 for summer or fall, July 15 for fall, and September 15 for spring admission. Admission requirements are outlined in the catalog and on the School’s website.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (http://policy.ku.edu/).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

Journalism courses or courses in another school’s major or minor may not be taken for Credit/No Credit.

Graduation with Distinction and Highest Distinction

Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction. In addition to a student’s academic record, other factors may be considered.

Honor Roll

Students with grade-point averages of 3.75 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. Credit/No Credit grades are not accepted. S grades are accepted. An Honor Roll notation appears on the transcript.

Maximum and Minimum Semester Enrollment

The normal enrollment is 15 to 16 hours a semester. A 12-hour enrollment is considered a minimum full-time enrollment. Enrollment in more than 18 hours a semester, or more than 9 hours during the summer session, requires special permission from the assistant dean for student services.

Nonresidence Study Before the Last 30 Hours

Before the last 30 hours required for the degree, students may, under certain conditions, take courses at other institutions and transfer the credit to KU. Before enrolling in a nonresidence course, check on how your courses will transfer to KU (https://admissions.ku.edu/transfer-requirements-deadlines/transfer-college-credits/) or complete KU’s
standard form, Request for Tentative Evaluation of Transfer Credit, in your dean’s office or student services office or in College Advising and Student Services for students in the College. After completing the course work, you must request that an official transcript be sent to the Office of Admissions. (https://admissions.ku.edu/) KU Visitor Center, 1502 Iowa St., Lawrence, KS 66044-7576, 785-864-3911. For transcripts to be official, they must be mailed from the college or university directly to KU. Faxed transcripts are not accepted for posting of transfer credit.

Nonresidence credit includes all credits from another college or university taken after initial enrollment at KU, military service courses, and other undergraduate course work not formally offered in the Schedule of Classes (p. 13).

Majors must submit the Request for Tentative Evaluation of Transfer Credit form before they enroll.

Prerequisites and Corequisites
Course prerequisites are strictly enforced. Students are administratively dropped from courses for which they do not meet prerequisites. Waiver is not granted if the prerequisite course was taken and failed or taken and not completed.

Probation
Students admitted to the school must do the following in order to remain in the school in good standing:

• Maintain a 2.5 cumulative KU grade-point average and a 2.5 journalism grade-point average.

Students failing to meet the condition above are placed on probation for 1 semester. If a student does not raise their cumulative KU and/or journalism grade-point averages to 2.5, they are dismissed from the school.

Students who fail to complete JMC 101 with a C (2.0) or better have their admission rescinded.

Repetition of Courses
The School of Journalism and Mass Communications follows the university’s course repeat and grade replacement policy.

Required Work in Residence
No baccalaureate degree is granted to a student who has not completed at least 30 semester credit hours of residence courses at KU. No exceptions are granted.

To earn a bachelor’s degree from KU, you must complete the last 30 hours of credit for the degree by resident study. You may petition the dean for a waiver.

Time Limits
Students are encouraged to complete the undergraduate degree in 4 years or less. Students experiencing a break in enrollment may return within five years of the last class they attended as an enrolled undergraduate journalism student and complete their coursework under the requirements in place at the time they left. They must maintain continuous enrollment to finish their coursework after they re-enroll.

If it has been longer than five years, students may be readmitted under the current degree requirements in place when they return.

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

A maximum of 12 hours of journalism course work taken at other institutions may count toward a degree. Other journalism courses do appear on the transcript, but the hours are treated as excess, and an equal number of hours is added to the 120 required for graduation. Courses with grades of D are not accepted for transfer credit.

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

Journalism Career Center
The Career Center (http://www.journalism.ku.edu/career-center-students/), 117 Stauffer-Flint Hall, helps students find internships and jobs. Each year, leading media outlets, advertising agencies, and corporations in the state and the nation visit campus to interview students. The Career Center also maintains an online database of internships and jobs that is updated frequently.

Courses

JMC 101. Media and Society. 3 Credits.
Introductory course open to all KU students. The course emphasizes the use of critical and creative thinking as tools to better consider the reliability of information received through newspapers, magazines, radio and television, online media, trade publications, advertising, and business communications. The class also surveys media ethics, economics, technology, and the function and impact of media on a free society. The course is designed for pre-journalism students, students considering journalism as a major, and students from other disciplines who take it as an elective. Not open to seniors. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum.

JMC 104. Words at Work: Writing Essentials. 3 Credits.
This course introduces the formats and language used in professional writing. This course also covers structure, usage, clarity, punctuation and other mechanics, which students apply in writing. Students will learn proper attribution practices, write pieces in various formats and practice the revision process. The course is designed for beginning journalism students, students considering journalism as a major, and students from other disciplines who wish to improve their writing skills and learn principles of professional writing. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum.

JMC 150. Stand and Deliver. 3 Credits.
The ability to inform or persuade confidently through presentation is an incalculable skill no matter where students choose to direct their careers. This course introduces students to presentation approaches, effective oral communication fundamentals, audience analysis, support technologies and structural development. Students will assess their own communication styles and strengths, understand presentation purposes and types, research, edit and organize material, use graphics concepts and techniques to design formats for value-added content, and practice
coherent, relevant and well-articulated stories. Students will apply what they learn in a variety of situations, from individual expository speeches to group business proposals. Open to all undergraduate students.

**JMC 177. First Year Seminar:** ______. 3 Credits. SC
A limited-enrollment, seminar course for first-time freshman, organized around current issues in journalism or media. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**JMC 200. Topics in Journalism:** ______. 3 Credits.
Topics course in Journalism.

**JMC 201. Current Issues in Journalism.** 3 Credits.
An in-depth investigation of a current event or issue confronting the various professions of journalism. The class will examine the implications of the event/issue for professional values, ethics, diversity and free expression. Prerequisite: JMC 101 with a grade of 2.0 or better.

**JMC 205. Career Exploration and Planning.** 1 Credits.
This course will provide students instruction in career planning connected to their major and ultimately life after graduation. Topics include career interests and work styles. Prerequisite: JMC 101 and JMC 104 with a C (2.0) or higher. Not open to seniors.

**JMC 210. Basic Video Production.** 2 Credits.
This course instructs and prepares students to work with multiple media—studio and live production. This is a lab-intensive course designed with live newsroom and live-in-the-field productions. Students will have the opportunity to learn behind the scene skills; studio and live camera, floor directing, lighting, audio, basic Photoshop and field producing skills in production of newscasts and other reports. May be taken twice.

**JMC 211. Tech Tools: Audio / Video.** 1 Credits.
This hands-on course helps students develop skills in audio and video production and editing using industry standard tools including Audition, Premiere and Rush.

**JMC 212. Tech Tools: Graphic Design.** 1 Credits.
This hands-on course will help students develop graphic design skills to create vector graphics, documents and mockups in InDesign, Illustrator and XD.

**JMC 213. Tech Tools: Visuals.** 1 Credits.
This hands-on course will allow students to develop basic skills in mobile photography, image editing, and animation using Photoshop, Lightroom and After Effects.

**JMC 214. Tech Tools: Presentation.** 1 Credits.
This hands-on course will help students develop visual presentation skills and an awareness of accessibility issues in Powerpoint, Keynote and Google Slides.

**JMC 215. Tech Tools: Web Coding.** 1 Credits.
This hands-on course helps students build skills in Wordpress as well as basic coding in HTML and CSS.

**JMC 260. Agency: Introduction.** 3 Credits.
The course familiarizes students with the business, roles, scope and culture of the strategic communications business, including its advertising, public relations and related components. It includes an introduction to brand and creative messaging strategy, critical and creative thinking processes. It also focuses on developing a toolbox of principles for evaluating critical thinking and creative ideas. This class is a prerequisite or corequisite to working in The Agency.

**JMC 300. Visual Storytelling.** 2 Credits.
This course is about understanding how an idea becomes something you can see and how the media use visuals in the most efficient and effective ways possible. Students will develop a visual vocabulary and personal aesthetic as they expand their skills in the use of the digital toolbox—taking the presentation design, the use of graphics, typography, color, photography (still and video) and audio. They will put their learning into practice through production of visual projects for diverse audiences served by print, online and broadcast media. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: JMC 101 with a grade of 2.0 or better. It is highly recommended that students take at least one Tech Tools section concurrently.

**JMC 302. Information Exploration.** 3 Credits.
This course addresses the central role of information literacy and information sources in news and strategic communication. Students learn to gather information by using a wide range of research tools and techniques. They advance their critical thinking by practicing to evaluate the credibility of the information sources they access. They learn to analyze and synthesize the information they collect, in preparation to communicate it. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum.

**JMC 304. Media Writing for Audiences.** 3 Credits.
This course will emphasize journalistic and strategic writing in creating coherent and engaging content. It will build on JMC 104, helping students sharpen their writing and interviewing skills for text and audio/video and sharpen their judgment in choosing information, sources and story forms. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Students must be admitted to the School of Journalism and Mass Communications, journalism minor or in an approved concentration in order to enroll in JMC 304. Prerequisite: JMC 101, and JMC 104 or passage of the School's Grammar Basics course. May be taken after or concurrently with JMC 302.

**JMC 305. Writing for Media, Honors.** 3 Credits.
An Honors section of JMC 304. This course will emphasize journalistic and strategic writing in creating coherent and engaging content. It will build on JMC 104, helping students sharpen their writing and interviewing skills for text and audio/video and sharpen their judgment in choosing information, sources and story forms. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Students must be admitted to the School of Journalism and Mass Communications, journalism minor or in an approved concentration in order to enroll in JMC 305. Prerequisite: JMC 101, and JMC 104 or passage of the School's Grammar Basics course. May be taken after or concurrently with JMC 302. Open only to students in the KU Honors Program.

**JMC 308. Ethics in a Wired World.** 3 Credits.
This course surveys and applies theories, principles and critical-thinking strategies for making ethical decisions related to personal and professional use of media. Students will examine and strive to resolve specific ethics challenges posed by participation in media such as Facebook, Twitter, LinkedIn, Blackboard, news media websites, dating websites, and more. Course is not open to students, including minors, enrolled in the School of Journalism and Mass Communications.

**JMC 309. Data Storytelling.** 3 Credits.
This course will prepare students to draw conclusions from data and statistical evidence, in order to generate insights, support managerial decisions, and communicate compelling stories. Students learn and practice all components of the data workflow, including accessing and collecting data, assessing the credibility of data, using spreadsheets to organize and analyze data, drawing inferences from data, and communicating data with text and visualizations. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: JMC 302 with a grade of 2.0 or better. Students must
be admitted to the School of Journalism and Mass Communications, journalism minor or in an approved concentration to enroll.

JMC 319. Topics in Journalism and Mass Communications: _____. 1 Credits.
A brief overview of a skill or concept relevant to journalism and mass communications. Prerequisites vary depending on topic; see Notes for specifics. May be repeated for credit up to three times for three hours maximum. Prerequisite: Varies by topic.

JMC 320. Stratcom I: Introduction to Strategic Communication. 3 Credits.
Students develop an understanding of how organizations develop effective, research-based communication plans to accomplish their objectives. It examines the role of communications in strategic planning and explores career opportunities in professions such as advertising, public relations and sales. JMC 320 provides insight into how communicators use critical and creative thinking to gather, organize, evaluate and deliver information in a culturally diverse environment. For students entering the Strategic Communication track of the School of Journalism & Mass Communications, JMC 320 provides the foundation for core courses in research methods, message development and strategic campaigns. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: Junior standing or completion of JMC 101 with a grade of C (2.0) or higher. Open to non-majors.

JMC 340. Creative Concepting. 3 Credits.
This course focuses on fundamental concepeting skills necessary for creative content development from ideation to concept presentation. Students will explore and work through the creative concepeting process to inspire and produce creative media. Ideation and concepeting projects are grounded in real-world messaging challenges and audience understanding. Requirement: Must obtain a grade of C (2.0) or above to advance in the curriculum. Prerequisite: Admission to the School of Journalism and Mass Communications and JMC 101, 104, 260. May be taken concurrently with JMC 300.

JMC 345. Audience Experience. 3 Credits.
This course teaches students to research, understand, develop, and produce creative content for diverse audiences across an audience journey in a multimedia, omnichannel digital environment. Known as audience experience, or brand experience, this set of principles and skills is fundamental to the development of creative content in a digital, multi-platform, multi-screen audience environment. Requirement: Must obtain a grade of C (2.0) or above to advance in the curriculum. Prerequisite: Admission to the School of Journalism and Mass Communications and JMC 101, JMC 104, JMC 260. May be taken concurrently with JMC 300.

JMC 406. Media Practicum. 1-3 Credits.
The Media Practicum provides students opportunities to earn credit while gaining practical education and experience working in units of campus media, including the University Daily Kansan/Jayhawk Media Group, KUJH-TV and Media Crossroads, as well as community-based media organizations associated with the William Allen White School of Journalism and Mass Communications, including the Statehouse news bureau and the Eudora Times. Students complete work under supervision of an instructor with defined outcomes and measures, preparing them for work in the media profession. Prerequisite: JMC 101 and JMC 104. Corequisite of JMC 304.

JMC 408. Media Law and Ethics. 3 Credits.
This course examines the ethical and legal foundations of mass communication in the United States and related challenges inherent in the practice of professional communication. Students will study freedom of expression concepts through the joint lens of First Amendment law and ethical decision-making processes. Both ethical and legal assessments of a variety of speech, persuasive media, and press issues, including privacy, intellectual property, and libel, will be discussed. The course will introduce key ethical and legal theories, codes, and principles and will use case studies and decision-making models to address important challenges within the ethical and legal practices of professional communication. Prerequisite: JMC 101 with a C (2.0) or higher.

JMC 409. Special Topics in: ____. 2-4 Credits.
Prerequisite: Approval of instructor.

JMC 410. Media Photography. 3 Credits.
The study of photography including light, cameras, lenses and exposure combined with the practice of photography for media. Students will learn to photograph news, sports, events and portraits. The course will also stress the ethics and practice of digital editing using software. Students will need frequent access to a camera that conveniently allows for setting ISO, aperture and shutter speed. Prerequisite: JMC 300 with a grade of C (2.0) or above.

JMC 415. Multimedia Reporting. 3 Credits.
Hands-on instruction in the gathering, writing, and presentation of news and information for newspapers, magazines, television, radio, and online media. Student work may appear in campus media. A 75-question test on grammar, usage and AP style will be required as part of the course. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: JMC 302 with a C (2.0) or above and JMC 304 (or JMC 305) with a C (2.0) or above.

JMC 419. Multimedia Editing. 3 Credits.
This course emphasizes principles of editing for written and verbal expression, logic, visual presentation, organization, and news judgment for all forms of media: newspaper, magazine, broadcast, and online. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: JMC 302 with a C (2.0) or above and JMC 304 (or JMC 305) with a C (2.0) or above.

JMC 420. Stratcom II: Principles of Advertising and Public Relations. 3 Credits.
This course deepens students' exposure to and understanding of two major disciplines within the broader area of strategic communication: advertising and public relations. Approximately half the course will be devoted to coverage of the principles of advertising; the other half will be devoted to coverage of the principles of public relations. Content will include defining the two professions, exploring their status within the broader area of strategic communication and analyzing current and projected professional activities. Students will gain an understanding of the principles of these evolving, separate but related major professions within strategic communication. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: For students starting at KU Summer 2022 and before: Admission to the School of Journalism and Mass Communications and JMC 320 with a grade of C (2.0) or above. For students starting at KU Fall 2022 and after: Admission to the School of Journalism and Mass Communications, JMC 304, JMC 309, and JMC 320 all with grades of C (2.0) or above.

JMC 460. Research Methods in Strategic Communication. 3 Credits.
Students conduct, analyze and apply research to develop strategy and guide decisions related to communication campaigns. In addition to studying qualitative and quantitative research methods as well as basic statistics, students develop critical thinking skills by defining research problems and producing insightful solutions. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: For students starting at KU Summer 2022 and before: Admission to the School of Journalism and Mass Communications and JMC 320 with a
grade of C (2.0) or above. For students starting at KU Fall 2022 and after: Admission to the School of Journalism and Mass Communications, JMC 304, JMC 309, and JMC 320 all with grades of C (2.0) or above.

**JMC 488. Laboratory in Media Production. 1-3 Credits.**
This course offers students an opportunity to work with multiple media-studio and live production. This is a lab-intensive course designed with live newsroom and/or live in-the-field productions. Students will serve as producers/anchors and directors for programing at KUJH, Media Crossroads and other media. No student may earn more than four hours total in JMC 506, JMC 507, and/or JMC 508, and no student may earn more than nine hours combined for course work in JMC 210, JMC 488, JMC 507, and JMC 508. Excess hours of practicum will add hours to the total number of hours needed to meet graduation requirements. Limit of three hours enrollment in JMC 488 in a student's total course work. Prerequisite: JMC 210 or instructor permission.

**JMC 500. Topics in Journalism: _____. 2-3 Credits.**
Prerequisite: Eight hours of journalism. If a section is designated Advanced Media, the prerequisite is JMC 415 and JMC 419, each with a grade of 2.0 or above.

**JMC 503. History of Journalism and Mass Communication. 3 Credits.**
A survey of the history of the American media emphasizing appreciation and understanding of the technological, social, and cultural trends affecting newspapers, magazines, radio, and television broadcasters, and online media. The class may focus on one segment of journalism history, which will be listed in that semester's timetable. The course may be repeated when the focus varies. Prerequisite: Junior standing.

**JMC 505. Professional Development. 1 Credit.**
Preparation in skills needed in seeking internships and permanent employment, including resume and application letter writing, interviewing and professional presentations. Prerequisite: JMC 415 or JMC 460 with a grade of 2.0 or higher.

**JMC 506. Directed Studies in Journalism. 1-3 Credits.**
Undergraduate research project. Students must submit a written proposal to be approved by the instructor before enrollment. Proposal form can be found on Journalism School website or advising office and must be received by Journalism advising office by the 15th day of the semester. Limit of three hours enrollment in a student's total course work. Prerequisite: 2.5 grade point average overall and in Journalism.

**JMC 507. Practicum in Journalism (Professional). 1-3 Credits.**
Practical experience in a supervised professional setting. Students enrolled receive credit for professional experience in advertising, public relations, news-editorial, radio, television, photojournalism, communications, social media and related fields. Supervision is provided by the employer offering the professional experience. Enrollment requires consent of instructor. Students also must be registered with the Journalism Career Center. Limit of three hours enrollment in JMC 507 in a student's total course work. No student may have more than four hours total in JMC 506, JMC 507, and JMC 508. A student is allowed to receive credit and financial compensation if both are offered by the employer. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Having completed either JMC 415 or JMC 560 with a grade of 2.0 or above, having completed at least 11 hours of journalism, having a grade point average of 2.5 or above, both overall and in journalism, reporting to a journalism or communications professional, working at least 40 hours for one credit, at least 80 hours for two hours of credit, at least 120 hours for three hours of credit, and completing a 4-5 page report accompanied by work samples.

**JMC 534. Diversity in Media. 3 Credits.**
A study of mass media images and portrayals of race, class, and gender in society. The course examines media representations of African-Americans, Latinos, Native Americans, and Asian Americans, as well as media images of masculinility and femininity. The course also explores media images of groups traditionally under-represented in the media, including gays and lesbians, the elderly, the poor, and the disabled. Students study media portrayals in journalism, entertainment, public relations and advertising. The course encourages students to think critically about media images and analyze the role mass media play in reinforcing cultural stereotypes. Prerequisite: 8 hours of Journalism.

**JMC 540. Sports, Media and Society. 3 Credits.**
The role of mass media in shaping and influencing sports and popular culture. Students will think critically about currently accepted media and sports practices, particularly at the Division I college level. Guest speakers represent media and athletics. Discussion, presentation, paper and essay exam. Prerequisite: Junior standing.

**JMC 545. Magazine Publishing. 3 Credits.**
This is an entrepreneurial course in which students work in pairs to come up with an idea for a new magazine, write a business plan and design pages for it. In the process, students learn about magazine media today, how to identify need, understand audience and competition, how to plan an editorial product in print and online, how to develop circulation/promotion and advertising plans, and how to create a visual identity for a magazine. Students also learn how to write a business plan persuasively and concisely, and to edit for continuity. The outcome is a portfolio-quality project that demonstrates critical thinking, writing and design skills. Prerequisite: JMC 302 with a grade of C (2.0) or above and JMC 304 (or JMC 305 Writing for Media, Honors) with a grade of C (2.0) or above.

**JMC 550. Digital Media. 3 Credits.**
This course will allow students to go deeper into one area of news, build their portfolios and prepare for internships. Each section has a separate emphasis: multimedia broadcast, multimedia reporting, or editing/production. The Multimedia Broadcast section will advance the student’s understanding of reporting, writing, shooting and editing video for online and KUJH-TV. The section produces content for KUJH-TV newscasts and for an online audience. The Multimedia Reporting section will provide an immersive reporting opportunity for students in the News and Information track. It allows students to report stories for the University Daily Kansan and Kansan.com. Reporting students will produce depth stories and cover breaking news as it happens. This section prepares students for internships and advanced media courses. In the Editing/Production section, students will work for the University Daily Kansan and Kansan.com, editing stories, writing headlines and cutlines, creating packages, working on search engine optimization and social media, and building graphics. The course gives students hands-on experience with editing on deadline for digital and print, as well as a deeper understanding of news and current production processes. Requirement: Must obtain a grade of C (2.0) or higher to advance in the curriculum. Prerequisite: JMC 415, and JMC 419 each with a grade of C (2.0) or higher.

**JMC 551. Advanced Multimedia Reporting. 3 Credits.**
This course allows students to report stories for the University Daily Kansan and Kansan.com. Students in this course will produce enterprise and spot news content. This section prepares students for internships and upper-level courses. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: JMC 415, and JMC 419 each with a grade of C (2.0) or higher.

**JMC 552. Broadcast Reporting. 3 Credits.**
This course advances the student's understanding of reporting, writing, shooting and editing video for online and KUJH-TV. The section produces content for KUJH-TV newscasts and for an online audience. Must be
completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: JMC 415, and JMC 419 each with a grade of C (2.0) or higher.

JMC 553. Advanced Editing and Production. 3 Credits.
In this course, students edit stories, write display type for multiple platforms, work on digital analytics and social media, and prepare news for print and digital publication. The course gives students hands-on experience with editing on deadline and production processes. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: JMC 415, and JMC 419 each with a grade of C (2.0) or higher.

JMC 560. Message Development. 3 Credits.
Students exercise both critical and creative thinking to develop the multimedia writing skills expected of strategic communicators. Students begin addressing clients' needs by applying research on product or service benefits, brand identity, competition and audience motivations. The research informs the writing of a strategic message planner or creative brief, which students employ to write and produce messages in many forms. Examples of messages created in JMC 560 include print, video and radio advertising; social media messages; sales letters and other business writing; and such public relations writing as news releases. Combining strategy, design, and writing and production skills, students begin to build a professional portfolio throughout this class. JMC 560 prepares students for internships and lays the groundwork for the campaigns class. Must be completed with a grade of C (2.0) or higher to advance in the JMC curriculum. Prerequisite: For students starting at KU Fall 2012 and after: JMC 300, JMC 302 (Infomania), JMC 304 (Media Writing) (or JMC 305 Writing for Media, Honors), JMC 320, JMC 420, and JMC 460 all with grades of C (2.0) or above and passage of the grammar test. May be taken concurrent with JMC 420 and JMC 460. For students starting at KU Fall 2018 and after: JMC 300, JMC 302, JMC 304 (or JMC 305, Honors) JMC 320, JMC 420, and JMC 460 all with grades of C (2.0) or above. Only open to Journalism and Mass Communications majors.

JMC 585. Multimedia Sports Journalism. 3 Credits.
The course would be a hands-on, in-your-face, portfolio-building opportunity for students who want to venture into sports journalism. It would allow students to write sports stories, do live play-by-play, develop video stories and cover live events. It will also introduce them to sports journalism beyond the playing field. Must obtain a grade of C or higher to advance in the curriculum. Prerequisite: JMC 415 and JMC 419, or JMC 560, all of which must be passed with a C (2.0) or higher, or instructor permission. Students must be admitted to the School of Journalism and Mass Communications in order to enroll in JMC 585.

JMC 590. International Journalism. 3 Credits. NW
This course explores print, broadcast and online media in industrialized and developing nations. It examines how government rules and restrictions affect press freedoms, examines the effects of technology on access to information, explores how the U.S. media cover news in foreign countries, explores how foreign media cover news events in the United States, and examines coverage of critical current events. The goal of the course is to make students aware of the effects of mass media in a global economy. Prerequisite: Eight hours of Journalism.

JMC 600. School Journalism and Publications. 3 Credits.
(Open only to education majors and journalism teachers in elementary and secondary schools.) A study of the use of publications in the teaching of secondary school journalism, and an analysis of problems in supervising school newspapers, magazines, and yearbooks. The course covers staff organization, writing and editing, make-up, typography, advertising, and illustration. Students learn through lectures, projects, practice assignments, and directed study of newspapers, yearbooks, and current teaching materials.

JMC 608. Ethics and Professional Practice. 3 Credits.
This course surveys techniques of moral analysis, argument, and decision-making for use by practitioners in both news and persuasive journalism. It employs classical ethical theory, moral reasoning models, and critical-thinking skills to resolve ethical choices through case studies involving reporters, editors, broadcasters, and practitioners in advertising, marketing, and public relations. Prerequisite: Eight hours of Journalism.

JMC 610. Advanced Visual Media. 3 Credits.
Students will learn advanced photography principles, including documentary photography, use of flash, advanced lighting techniques, advanced software skills, and innovative imaging, as well as integration of still and video images. Emphasis on the creation of a digital portfolio, plus creating or finding an outlet for publication. Students should have semester-long access to a camera with multiple lenses that allows for manual exposure adjustment. Students should also have regular access to a detachable electronic flash. Must obtain a grade of C (2.0) or higher. Prerequisite: JMC 410 with a grade of C (2.0) or higher, or portfolio review. Students must be admitted to the School of Journalism and Mass Communications and be in good academic standing in order to enroll in JMC 610.

JMC 611. Sales Strategies. 3 Credits.
The class focuses on the important basics of effective communication, attitudinal and strategic business skills that help persuade, convince and influence others. Communications skills such as asking the right questions, learning to present by taking care of your audience, effective listening and writing are all integrated into the class. Also business skills such as time management, customer service, handling objections, negotiations and business development are just a few of the necessary skills to be successful in a marketing, strategic communications or news path career. Experiential learning is a key element of the class as students have the opportunity to work directly with marque companies in the Kansas City/Lawrence area to learn the value of their sales process and unique selling propositions. The interaction with these industry professionals plus classroom guest speakers provide great experiential learning and career networking opportunities. The class also fulfills a requirement for the Certificate in Professional Selling offered through the Business School. Prerequisite: Junior standing.

JMC 612. Visual Design and Production. 3 Credits.
This course approaches design as a visual problem-solving process. Students create a digital portfolio that uses advanced storytelling techniques and showcases digital media competency. The process explores a number of possible solutions, encouraging students to expand their perspectives and to explore innovative and creative approaches. The resulting portfolio builds a bridge from student work to professional practice. Prerequisite: For students starting prior to Fall 2012, students must be admitted to the School of Journalism and have at least junior standing to enroll in this course. For students starting Fall 2012 and after, completion of JMC 300 (or 310) with a grade of C (2.0) or higher. Must be admitted to the School of Journalism to take JMC 612.

JMC 613. International Strategic Communications. 3 Credits.
This course examines the process by which professional promotional communicators operate in a global multicultural environment. It aims to instill an appreciation for the challenges in crossing cultures, beginning with research and continuing through examining or creating culturally appropriate messages to be delivered in country-specific ways. The course covers differences among cultures and their communication styles, economic systems, demographics, politics, regulatory environment, research practices and media systems. Through case studies and
projects, this course gives students a framework from which to sort through the challenges of global marketing communications. Prerequisite: Junior standing.

JMC 615. Social Media in Strategic Communication. 3 Credits.
This course examines significant changes in strategic communication approaches brought about by the networked information society. Students will study effective ways for organizations to identify social technologies of key audiences, create social media content, disseminate messages and evaluate social media-based strategic communication initiatives. This course combines theoretical and hands-on approaches to issues. Students will work in groups to analyze, evaluate and develop social media strategies for organizations chosen for their case study research. Prerequisite: JMC 460 with a grade of C (2.0) or above or consent of the instructor. Open to non majors with permission of the instructor.

JMC 616. Financial Basics for Communicators. 3 Credits.
An overview of how business and markets operate; balance sheets, income statements and statements of cash flows; how to create and interpret budgets, particularly for non-profit organizations; key documents and regulations of business; how to use various tools of analysis, and how to make personal finance decisions. Each student follows one public company for the semester and explores various aspects of its operations. Prerequisite: Junior standing and completion of JMC 415 Multimedia Reporting or JMC 560 (or JMC 435) with a grade of C (2.0) or better. Open to non majors.

JMC 617. Multimedia Management and Leadership. 3 Credits.
The course addresses challenges faced by managers and leaders in traditional and non-traditional environments. The course explores a range of management and leadership concepts, including organizational culture, organizational change, functions of managers, leadership theory, motivation and reinforcement. Also explores in some detail the new world of work and what it means to be a "contingent employee" or "free agent." Prerequisite: At least one course designated as Advanced Media or JMC 460 (or JMC 568). Open to non majors with permission of the instructor.

JMC 618. First Amendment and Society. 3 Credits.
An examination of the history and philosophy of freedom of speech and press and the limitations imposed upon those rights by statute, common law, and court decisions resolving conflicts with other constitutional rights. Critical-thinking skills and case analysis focus on the roles, rights, and responsibilities of the news and persuasive media in a free society. This course is open to all students at the University of Kansas. It emphasizes the importance of freedom of expression in a free society. Students study key media law court decisions and explore free speech issues more broadly to embrace the philosophical thinking that led to the development of the First Amendment. Prerequisite: Junior standing.

JMC 620. TV News-Advanced Media. 3 Credits.
This course instructs and prepares students to work with multiple media-writing, reporting, web, graphics and live elements-to-tell stories on the appropriate media platform. This is a lab-intensive course designed with live newscast and live in-the-field reporting. Students will also have the opportunity to use producer and directing skills in production of newscasts and other reports. Classroom discussions will concentrate on refining and developing the skills you've learned in previous broadcast news courses, and on discussion and critical evaluation of professional standards and ethics. We will hold critique sessions of your lab work. We try to maintain flexibility in the class discussion topics in order to make them relevant to your lab work and to current issues in broadcast journalism. Requirement: Must obtain a grade of C (2.0) or higher. Prerequisite: JMC 550, JMC 551, JMC 552, or JMC 553 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JMC 415 and JMC 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course.

JMC 621. Data Reporting and Visualization-Advanced Media. 3 Credits.
This class will advance the student's understanding and use of data driven journalism and its effective presentation. It will expand their knowledge of the skills necessary to be a data driven journalist and guide them in the creation of a stories and complementary visuals based on database analysis. Everyone in the class will learn the basic coding skills that the field requires, use those skills to acquire data, and create multiple data driven journalism stories, some of which will be used in media. Requirement: Must obtain a grade of C or higher (2.0). Prerequisite: JMC 550, JMC 551, JMC 552, or JMC 553 with a C (2.0) or better. Students who started at KU prior to Fall 2012 only need to complete JMC 415 and JMC 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take JMC 621.

JMC 625. Digital Media Tools-Advanced Media. 3 Credits.
In Digital Media Tools, students learn to negotiate multiplatform newsrooms, acquiring skills in online production, audience engagement, analytics, social media account management and interactive multimedia storytelling. Must obtain a grade of C (2.0) or higher. Prerequisite: JMC 551, JMC 552 or JMC 553, or both JMC 420 and JMC 460, with a grade of C (2.0) or higher, or instructor permission. Only open to Journalism and Mass Communications majors. Students must be in good academic standing to take this course.

JMC 630. Depth Reporting-Advanced Media/Capstone. 3 Credits.
This is an enterprise reporting class designed to give students hands-on experience covering important issues that impact individuals and communities in Kansas and beyond. Students will produce multimedia stories that include government, social and cultural issues, business, human interest, and non-profit agencies. Requirement: Must obtain a grade of C (2.0) or higher. Prerequisite: JMC 550, JMC 551, JMC 552, or JMC 553 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JMC 415 and JMC 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course.

JMC 635. Statehouse Reporting-Advanced Media/Capstone. 3 Credits.
The purpose of this class is to provide students with an immersive public affairs reporting experience at the State Capital in Topeka while covering the important statewide issues of the day. Students will be assigned to cover the statehouse for specific media outlets and assist those media in fulfilling their public-service missions to their communities. Requirement: Must obtain a grade of C (2.0) or higher. Prerequisite: JMC 550, JMC 551, JMC 552, or JMC 553 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JMC 415 and JMC 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course.

JMC 636. Documentary-Advanced Media/Capstone. 3 Credits.
The study of the field and functions of non-broadcast television: the use of video by business, educational, medical, governmental, and non-profit organizations. Students plan and produce typical video by business, educational, medical, governmental, and non-profit organizations. Students must be in good academic standing to take this course.
who begin at KU Fall 2012 and after: JMC 550, JMC 551, JMC 552, or JMC 553 with a grade of C (2.0) or above. Only open to Journalism majors. Students must be in good academic standing in order to enroll in JMC 636.

**JMC 640. Strategic Campaigns. 3 Credits.**

Students produce a campaign to solve a strategic communications problem for an established organization. Students work with an actual client to develop a campaign from the initial research to the final recommendation. By applying the knowledge, experience and skills gained in previous courses, students confirm their readiness to enter the profession. Requirement: Must obtain a grade of C (2.0) or above. Prerequisite: Senior standing, good standing in the School of Journalism and JMC 420, JMC 460, and JMC 560 all with grades of C (2.0) or above.

**JMC 650. Magazine Journalism-Advanced Media. 3 Credits.**

Students in the course will produce different kinds of articles (departments and longer stories that fit key categories in magazines, including service articles, profiles and informational articles) for a real magazine. The magazine could be in print, online or take some other form. Students will gain an understanding of different parts of a magazine, the difference between departments and articles, and how to report and write short articles and longer substantive stories. Must obtain a grade of C (2.0) or higher. Students must be in good academic standing in order to enroll in JMC 650. Only open to Journalism students. Prerequisite: JMC 550, JMC 551, JMC 552, or JMC 553 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JMC 415 and JMC 419 with a grade of C (2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course.

**JMC 660. TV News II - Advanced Media/Capstone. 3 Credits.**

Students build on their experiences at KUJH-TV by working at a professional television station, cable operation or other approved media outlet where they are expected to generate content that contributes to the on-air/online news content of that media outlet. Students may work in different news functions including, but not limited to, reporting, videography, producing, directing or web/social producing. Instructors confer with students and their supervisors for individual mid-semester and end-of-semester conferences/evaluations. Successful completion of the course requires students to prepare a résumé reel or portfolio of their work and then have that reel or portfolio evaluated by a news professional. Must be completed with a grade of C (2.0) or higher. This class meets the Journalism School requirements as a capstone class. Prerequisite: JMC 620 with a grade of C (2.0) or higher, or permission of instructor. Only open to Journalism and Mass Communications majors. Students must be in good academic standing to take this course.

**JMC 690. Media Innovation-Advanced Media/Capstone. 3 Credits.**

The primary goal of this course is to challenge students to create a marketable final project. By studying the concepts of innovation, entrepreneurial planning and the information needs of multiple audiences, students will develop a business concept for a viable creative media enterprise. The course will require students to integrate principles, theories and methods learned in other JMC courses. The course will also introduce students to entrepreneurial practices and critical thinking in a multi-format, small-group laboratory. Requirement: Must obtain a grade of C (2.0) or higher. Prerequisite: JMC 551, JMC 552, or JMC 553, or JMC 560, with a grade of C (2.0) or higher. Only open to Journalism and Mass Communications majors. Students must be in good academic standing to take this course.

**JMC 691. Community Journalism-Advanced Media/Capstone. 3 Credits.**

Students work at a community newspaper, television station or online operation; and either cover the news, produce or edit the news. Instruction includes newsroom coaching and evaluation by professional journalists. Classroom instruction covers such issues as analyzing media content, diversifying story sources, and practical ethical decisions faced by the students. Instructors also meet with students for individual conferences. Students must complete a written project and present it to the class and to the news professionals. Must obtain a grade of C (2.0) or higher. Prerequisite: JMC 550, JMC 551, JMC 552, or JMC 553 with a grade of C (2.0) or higher. Students who started at KU prior to Fall 2012 only need to complete JMC 419 with a grade of C(2.0) or higher as a prerequisite. Only open to Journalism majors. Students must be in good academic standing to take this course.

**JMC 699. Reporting and Editing for Multimedia-Advanced Media. 3 Credits.**

An intense eight-week summer reporting and editing experience. Two three-hour class sessions each week will focus on the proper concepts and techniques of reporting and editing across platforms. Students will be required to research, report and edit news stories for publication in student media and/or a themed course website. Students also will meet one-on-one on an ongoing basis with the instructor to review work. Must obtain a grade of C (2.0) or higher. Prerequisite: JMC 551, JMC 552, or JMC 553 with a grade of 2.0 or above. Only open to Journalism majors. Students must be in good standing to take this course.

**JMC 700. Advanced Topics in Journalism: ______. 2-3 Credits.**

Prerequisite: Graduate standing in Journalism or related field or permission of instructor. Other prerequisites may be listed with the specific course.

**JMC 711. Sales Strategies. 3 Credits.**

Students learn how to identify consumer, client, news source or employer needs and how to use their product, service or other skills to solve that need in today’s evolving media world. This requires delivering the solution in a way the audience understands best, which is a fundamental to every strategic message or interaction with a news source. Even though students work in a media sales context, the purpose of the course is not to turn out professional media sales people, but to enhance strategic communication abilities.

**JMC 712. Visual Design and Production. 3 Credits.**

This course approaches design as a visual problem-solving process. Students create a digital portfolio that uses advanced storytelling techniques and showcases digital media competency. The process explores a number of possible solutions, encouraging students to expand their perspectives and to explore innovative and creative approaches. The resulting portfolio builds a bridge from student work to professional practice. Prerequisite: Must be admitted to the School of Journalism.

**JMC 715. Social Media Strategic Communication. 3 Credits.**

This course examines significant changes in strategic communication approaches brought about by the networked information society. Students will study effective ways for organizations to identify social technographics of key audiences, create social media content, disseminate messages and evaluate social media-based strategic communication initiatives. This course combines theoretical and hands-on approaches to issues. Students will work in groups to analyze, evaluate and develop social media strategies for organizations chosen for their case study research.

**JMC 718. First Amendment. 3 Credits.**

An examination of the history and philosophy of freedom of speech and press and the limitations imposed upon those rights by statute, common law, and court decisions resolving conflicts with other constitutional rights. Critical-thinking skills and case analysis focus on the roles, rights, and responsibilities of the news and persuasive media in a free society. This
course is open to all students at the University of Kansas. It emphasizes the importance of freedom of expression in a free society. Students study key media law court decisions and explore free speech issues more broadly to embrace the philosophical thinking that led to the development of the First Amendment.

**JMC 720. Military and the Media. 3 Credits.**
This uniquely structured class enrolls up to 16 advanced Kansas University students and 16 U.S. Army majors from Fort Leavenworth’s Command and General Staff College (CGSC). Class goals are to increase the understanding by the military and the media of each other’s functions and roles in a democracy. Kansas University and CGSC students work collaboratively on assignments leading to a multimedia project. The course is taught at Lawrence and at Fort Leavenworth and requires some extended class periods. Contact the instructor for more information. Prerequisite: Graduate standing in Journalism or related field or permission of instructor.

**JMC 725. Digital Media Tools - Advanced Media. 3 Credits.**
In Digital Media Tools, students learn to negotiate multiplatform newsrooms, acquiring skills in online production, audience engagement, analytics, social media account management and interactive multimedia storytelling.

**JMC 734. Diversity in Media. 3 Credits.**
A study of mass media images and portrayals of race, class, and gender in society. The course examines media representations of African-Americans, Latinos, Native Americans, and Asian Americans, as well as media images of masculinity and femininity. The course also explores media images of groups traditionally under-represented in the media, including gays and lesbians, the elderly, the poor, and the disabled. Students study media portrayals in journalism, entertainment, public relations and advertising. The course encourages students to think critically about media images and analyze the role mass media play in reinforcing cultural stereotypes.

**JMC 740. Strategic Campaigns. 3 Credits.**
Students produce a campaign to solve a strategic communications problem for an established organization. Students work with an actual client to develop a campaign from the initial research to the final recommendation. By applying the knowledge, experience and skills gained in previous courses, students confirm their readiness to enter the profession.

**JMC 741. Sports, Media and Society. 3 Credits.**
The role of mass media in shaping and influencing sports and popular culture. Students will think critically about currently accepted media and sports practices, particularly at the Division I college level. Guest speakers represent media and athletics. Discussion, presentation, paper and essay exam. Prerequisite: Junior Standing.

**JMC 750. Magazine Journalism - Advanced Media. 3 Credits.**
Students in the course will produce different kinds of articles (departments and longer stories that fit key categories in magazines, including service articles, profiles and informational articles) for a real magazine. The magazine could be in print, online or take some other form. Students will gain an understanding of different parts of a magazine, the difference between departments and articles, and how to report and write short articles and longer substantive stories.

**JMC 790. International Journalism. 3 Credits.**
A study of mass media images and portrayals of race, class, and gender in society. The course examines media representations of African-Americans, Latinos, Native Americans, and Asian Americans, as well as media images of masculinity and femininity. The course also explores media images of groups traditionally under-represented in the media, including gays and lesbians, the elderly, the poor, and the disabled. Students study media portrayals in journalism, entertainment, public relations and advertising. The course encourages students to think critically about media images and analyze the role mass media play in reinforcing cultural stereotypes.

**JMC 801. Media Communication Theories. 3 Credits.**
A comprehensive review of the theoretical and philosophical underpinnings of media research and practices. This seminar offers a range of perspectives and covers various interpretative, cultural, and critical approaches to understanding mass communication in various contexts. Each student drafts a literature review about a topic of the student’s choice.

**JMC 802. Media Communication Methods. 3 Credits.**
An introduction to methodological approaches to the study of media. Qualitative and quantitative methodologies are reviewed. The class emphasis is on learning appropriate research tools to scientifically learn about messages, media, and audiences. Each student devises a research project during the course. Prerequisite: JMC 801 or concurrent enrollment in JMC 801.

**JMC 803. Research in Action. 3 Credits.**
Covers the activities, functions, and operations of both traditional mass media and new media. The course provides a combination of historical context, current events, and a future perspective. Topics include the business and economics of the media, the role of the media, and rights and responsibilities. Prerequisite: JMC 802.

**JMC 804. Mass Communication Methodology I-Qualitative. 3 Credits.**
Advanced study of qualitative methodological approaches to the study of media. The class emphasis is using interpretative research tools and techniques from narrative analysis, to ethnography, historical analysis, to critical cultural approaches to learn about messages, media, and audiences. Each student devises a research project during the course. Prerequisite: JMC 901, JMC 801 and JMC 802 or permission of instructor.

**JMC 805. Mass Communication Methodology II-Quantitative. 3 Credits.**
Advanced study of quantitative methodological approaches to the study of media. The class emphasis is using social scientific research tools and techniques ranging from content analysis to conducting surveys to experimental designs to learn about messages, media, and audiences. Special focus will be on learning to use SPSS and statistical techniques. Each student devises a research project during the course. Prerequisite: JMC 901, JMC 801 and JMC 802 or permission of instructor.

**JMC 806. College Teaching. 3 Credits.**
Teaching revolves around learning. So a course about teaching must by nature focus on learning about learning. This course will cover more than learning, but learning will be central, both in terms of how you can help your students learn but also how teaching itself is really about learning. The class is rooted in the philosophy of teaching as an intellectual and scholarly activity, and it draws heavily on approaches that have proved effective for learners of all types.

**JMC 807. Research Funding. 3 Credits.**
The course is designed to introduce the theoretical and practical skills in developing proposals for internally or externally funded research or applied interventions. Although the focus of the course is on research funding opportunities offered by federal entities, as they offer the most comprehensive and challenging environment for sponsored research, a portion of the course will be dedicated to non-profit and private funding opportunities, as well as to the development of non-research proposals.

**JMC 815. Investigation and Conference. 1-3 Credits.**
Specialized work by qualified students under direction of the graduate faculty. Investigation and research studies. Prerequisite: Ten hours of graduate work in journalism.

**JMC 818. Advanced Studies in First Amendment. 3 Credits.**
Case studies and explorations in First Amendment theory and practice. Course will have one of two main foci: First Amendment practice such as censorship, libel, privacy; or Administrative Law such as FCC, FTC, FEC practice. Students will produce an original research paper. Course may be repeated once.

**JMC 819. Writing for Marketing Communications. 3 Credits.**
A writing-intensive course focusing on articles and other works about marketing communication, management, general business and related subjects. Students read and discuss a core of designated work as well as works they select on their own. Students write reports, executive summaries and analytical briefings in which they synthesize these readings and apply marketing and management concepts to their own written work.

**JMC 820. Marketing Fundamentals for Communicators. 3 Credits.**
The course is designed to provide a fundamental understanding of marketing theory and process and how these theories relate to integrated Marketing Communications. Specific focus will be spent on the marketing environment, the marketing mix, market segmentation, planning, execution and measurement. As part of the class, students will learn the components of a marketing plan and how to develop a plan based on specific quantifiable corporate objectives.

**JMC 821. Integrated Marketing Communications and Sales Strategies. 3 Credits.**
The concept of integrated selling strategies and how these strategies logically lead to execution in various forms of message delivery systems. Through case studies of specific business cases, students develop insights into potential buyer segments and develop rationales for the most effective way to reach buyers. Students not only offer solutions to cases but also explore ways to measure the impact of each technique and medium used.

**JMC 823. Branding in Marketing Communications. 3 Credits.**
Cases and topics in the development and execution of branding in marketing communications plans. The course emphasizes how organizations define actual brand problems and attempt to solve them.

**JMC 824. Creative Process. 3 Credits.**
An examination of the creative process and techniques of creative problem solving. The course gives students numerous opportunities to solve a variety of marketing communications problems. Students have an opportunity to visit with individuals who practice creativity in their professional lives and individuals who study creativity as scholars.

**JMC 825. Relationship Marketing. 3 Credits.**
An exploration of the principles of relationship marketing and their application to marketing communications. Special emphasis is on the development of relationship messages, the use of databases for constituent management, and a review of appropriate marketing communications media.

**JMC 826. Innovation in Management of Communications. 3 Credits.**
Students shall demonstrate their knowledge of Innovation Theory through papers, presentations and an essay exam. The class will emphasize Management Innovation but will also cover marketing, process and product innovation. The course is very current events oriented.

**JMC 827. Marketing Ethics. 3 Credits.**
An examination of the ethical issues, philosophies, and decision-making systems that affect marketing communications. Through studies of specific business cases, students gain insight into the cultural, legal, and social decisions that affect an organization’s future.

**JMC 828. Financial Fundamentals for Communicators. 3 Credits.**
This course covers a wide range of financially-related concepts from the perspective of the communications function. Topics include: financial markets; finding and using key Securities and Exchange Commission filings; understanding the balance sheet, income statement and cash flows; financial analysis; investor relations; impact of Sarbanes-Oxley; corporate governance issues; building and using budgets; and impact of these concepts for not-for-profits.

**JMC 829. Marketing Communications Research. 3 Credits.**
Students learn how marketing and media research help determine the success of an organization’s marketing planning and strategic communications processes. Students study and conduct primary and secondary research - both qualitative and quantitative - including focus groups, ethnography and surveys. Prerequisite: JMC 820 or permission of instructor.

**JMC 831. Technologies in Marketing Communications. 3 Credits.**
Explores new and emerging technologies and their impact on the delivery of marketing messages. Students will work with the instructor on identifying areas of relevance to them, and on identifying ways to keep up with changes in technology, innovation and audiences.

**JMC 832. Leadership and Management in Marketing Communications. 3 Credits.**
This course examines cases and topics of leadership as a process in a marketing communication organization. As a manager's duties evolve from performing tasks to managing relationships and strategic organizational outcomes, the capacity to lead becomes critical to personal and organizational success. Topics will focus on the role of leadership and vision, strategy, communication, ethics, social responsibility, group dynamics, and change.

**JMC 833. Social Media and Integrated Marketing Communications. 3 Credits.**
Developments in information technology and online social networking have posed opportunities and challenges for those who practice and research marketing, advertising or public relations. This course combines theoretical and hands-on approaches to developing and implementing effective ways for organizations to analyze, create and share social media content, engage key audiences via relevant digital channels, and integrate social media initiatives into overall communication strategies. Students will use various platforms and tools to conduct social media analytics, evaluate social media campaigns, and develop social media planning for the organization chose for their case study.

**JMC 834. International and Multicultural Marketing Communications. 3 Credits.**
The speed and scope of modern marketing communication have made the world a much smaller place. This course explores how international companies use advertising, public relations, promotion, personal selling and other methods to communicate in a global multicultural environment. Students gain a broader understanding of the characteristics of people in different countries and cultures, especially how they rely on media for information about products and services to meet their needs.

**JMC 840. Seminar in: ______. 3 Credits.**
Research in the issues and development of media. Seminars focus on topics of current and historical interest. Students develop projects and presentations in special areas of interest and expertise. Course may be repeated under different topics.
JMC 850. Capstone in Marketing Communications. 3 Credits.
In this capstone course, students use the skills they have developed in the marketing communications program to create a strategic integrated marketing communication plan for a client. The process involves the use of techniques such as research, branding, advertising, public relations, promotion, as well as other activities. Through the project, students demonstrate their knowledge of marketing communications and work with team members to meet an organization's strategic marketing communication needs. Prerequisite: JMC 820, JMC 828, JMC 829 and 24 hours or permission of instructor.

JMC 851. Professional Skills I. 3 Credits.
This course offers the opportunity for a student group of students to develop an individualized project to enhance professional communications skills. The student or group works in conjunction with a graduate faculty advisor to develop a suitable project, presenting a proposal for approval to the School's Graduate Director. The proposal must specify the nature of the project, the products to be delivered, a timeline for completion, and expected impact. Prerequisite: Admission to a KU graduate program.

JMC 852. Professional Skills II. 3 Credits.
This course offers the opportunity for a student or group of students to develop an individualized project to enhance professional communications skills. The student or group works in conjunction with a graduate faculty advisor to develop a suitable project, presenting a proposal for approval to the School's Graduate Director. The proposal must specify the nature of the project, the products to be delivered, a timeline for completion, and expected impact. Prerequisite: Admission to a KU graduate program; satisfactory completion of JMC 851.

JMC 860. Information Insight I. 3 Credits.
This course introduces students to the broad concepts of information, media and audiences. The goal is to ground students in the broad concepts of the master's program and to push them to identify their direction and goals for a certificate or for a degree.

JMC 861. Data Collection I. 3 Credits.
This course helps students understand secondary research methods, shows students how to delve into library resources with a deep search component, and gives students a framework for understanding research credibility. Prerequisite: Successful completion of JMC 860.

JMC 862. Data Collection II. 3 Credits.
This course explores primary research methods for creating and expanding databases. Students explore such areas as tools, processes and best practices for primary data collection. Prerequisite: Successful completion of JMC 861.

JMC 863. Data Analysis. 3 Credits.
This course gives students a framework for basic statistics to explore relationships, solve problems, and answer questions. They gain an understanding of how to apply descriptive and predictive statistics to interpret and communicate results of data meaningfully. Prerequisite: Successful completion of JMC 862.

JMC 864. Data Visualization and Presentation. 3 Credits.
This course helps students use digital resources to communicate results of data analysis effectively to appropriate audiences. Students learn to evaluate, interpret and present the results of data analysis using a variety of media. Prerequisite: Successful completion of JMC 863.

JMC 865. Analyzing Audiences. 3 Credits.
This course focuses on identifying appropriate audiences for media and information, as well as gathering information and analyzing audiences using primary and secondary sources. It includes creating, analyzing and interpreting analytics for websites, mobile technology and other forms of media. Prerequisite: Successful completion of JMC 860.

JMC 866. Social Media Strategy. 3 Credits.
This course provides a broad overview of the social media landscape, examining the development and use of various platforms, best practices in the use of social media, and the tools available for managing social media and social media analytics. It will take a strategic approach, focusing on social media as a conduit for larger content strategy, covering such areas as content marketing, content curation, behavioral targeting, and segmenting target markets on social networks. Students create a social media plan for themselves or their organization. Prerequisite: Successful completion of JMC 860.

JMC 867. Social Media Metrics. 3 Credits.
This course will examine the evaluation, tools and best practices in integrating social media metrics into a strategic plan. Students will gain the following skills: Measure social media effectiveness through the use of appropriate metrics; Analyze social media metrics; Choose the best way to evaluate social media messages; Explore various types of software for evaluating social media; Apply best practices to social media evaluation. Prerequisite: Successful completion of JMC 860.

JMC 868. Information in Context. 3 Credits.
This writing-intensive course explores the many ways that disciplinary focus influences the meaning and understanding of information. It helps students approach problem-solving in an interdisciplinary way, and allows them to understand how context can open new paths to understanding and meaning. Prerequisite: Successful completion of JMC 860.

JMC 869. Information Insight II. 3 Credits.
Students enroll in this course upon completion of all courses in the social media and data certificate. They complete a capstone project, drawing on work they have done in previous courses, conducting additional research, receiving feedback from the instructor and their peers, and reflecting on their study in the Digital Content Strategy program. Prerequisite: Successful completion of JMC 860, JMC 861, JMC 862, JMC 863, JMC 864, JMC 865, JMC 866, JMC 867, JMC 868.

JMC 899. Master's Project/Thesis. 3 Credits.
The student, with the guidance of a master's project/thesis committee, completes execution of the project or thesis. In addition, the student completes the final, general examination and the presentation/defense of the project or thesis. Prerequisite: EPSY 710, EPSY 711, JMC 801, JMC 802, JMC 803 and JMC 804 or JMC 805.

JMC 901. Introduction to Doctoral Studies. 1 Credit.
This course is a portal to doctoral education. Students learn about the structure, function and culture of higher education and the role of doctoral studies in academe. The course examines issues such as tenure, promotion, finances, expectations of the professoriate and the role of professors in academe. The course presents human subjects protocols in research and the role of the scholar and the professional in maintaining ethical standards in the academy and in applied work in mass communications industries. Prerequisite: Admission to Journalism PhD program or permission of instructor.

JMC 999. Dissertation. 1-9 Credits.
The student, with the guidance of a dissertation committee, completes execution of the dissertation. In addition, the student completes the final examination and the presentation/defense of the dissertation. Prerequisite: EPSY 710, EPSY 711, JMC 801, JMC 802, JMC 803, JMC 804, JMC 805, JMC 806 and JMC 807.
Bachelor of Science in Journalism and Mass Communications

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

Undergraduate Admission to the School of Journalism and Mass Communications

There are 2 paths for admission to the William Allen White School of Journalism and Mass Communications:

Path 1: Direct admission from high school

Students will be considered for admission to the School of Journalism and Mass Communications directly out of high school if they

- Admitted to KU by assured admission and
- 3.25 or higher high school GPA (no test score required/ regardless of test score submitted) or
- 3.00 or higher high school GPA and 21 ACT/1060 SAT

The conditions above are minimum requirements. Students must first meet admission requirements for the University of Kansas. Visit the Office of Admissions [http://admissions.ku.edu/] for information about admission to KU. Visit the International Recruitment & Undergraduate Admissions [http://irua.ku.edu/] office for information about international admission. High school GPA is based on a 4.0 scale. Admission is competitive. If the school must set an admissions quota, students with the highest ACT (or SAT-I) scores and grade-point averages will be accepted.

Path 2: Change of school admission

Transfer students and current KU students who do not declare journalism as their major prior to the first semester of the first year may apply for admission if they

- Complete or are enrolled in 24 or more credit hours (either at KU or another institution) with grade-point averages of 2.5 or higher and
- Complete or are enrolled in JMC 101 Media and Society the semester of application and
- Earn a C or higher in JMC 101 (if applying while enrolled in JMC 101, admission is rescinded if a C or higher is not earned)
  - Students who have completed journalism courses beyond JMC 101 with less than a 2.5 Journalism GPA will be considered on a case-by-case basis.
- Current KU students must apply to the J-School by the following deadlines:
  - Summer or fall admission: February 15
  - Fall admission: July 15
  - Spring admission: September 15

Students applying with more than 60 hours of college credit (at KU, another institution, or a combination of both) must meet with a journalism advisor to determine their admission eligibility.

Admission is competitive. The number of students admitted each semester depends on the number graduating in the preceding semester and the school's overall capacity. The school uses a student's transfer cumulative grade-point average if they do not have a KU cumulative grade-point average. The school does not combine transfer and KU cumulative grade-point averages.

Admission requirements are subject to change. A student's first semester of college is the first semester in which they enroll after high school graduation.

Requirements for Good Standing

Students admitted to the school must do the following in order to remain in the school and in good standing:

- Complete JMC 101 Media and Society with a grade of 2.0 or higher.
- Maintain a 2.5 KU cumulative grade-point average and a 2.5 journalism grade-point average. If either or both GPAs drop below 2.5, students will be placed on probation for 1 semester. At the end of the probation semester, the advising office will re-evaluate the student's GPAs. If the student has not raised their GPAs to 2.5 or higher, the student will be dismissed from the School. The student may reapply once their GPAs are above 2.5. In extreme circumstances, the probation period may be extended to a second semester, if the student provides documentation of circumstances beyond the student's control. This decision is made at the discretion of the associate dean, in consultation with the advising office.

General Degree Requirements

In addition to the KU Core requirements, the following general degree requirements:

- One additional unit that satisfies a Goal 4 learning outcome of the KU Core.

*note: This unit cannot be used to simultaneously satisfy another KU Core learning outcome.

Graduation Requirements

In addition to general degree requirements, the following graduation requirements must be met:

1. The candidate must have earned at least 120 hours of college credit. Courses below the 100-level (like MATH 2), more than 48 hours of journalism, more than 4 hours of physical education activities, or more than 4 hours of military science are not included in the 120 hours required to graduate. Only 12 transfer hours in journalism may be counted toward the 120 hours needed for graduation. A maximum of 64 hours may be transferred from a community college.

2. The candidate must have completed a minimum of 48 hours in journalism and at least 72 hours outside journalism within the 120-hour total. Students admitted to KU fall 2016 through summer 2020 must complete a minimum of 42 hours in journalism courses. Students admitted to KU fall 2012 through summer 2016 must complete a minimum of 40 hours in journalism courses. Students admitted to KU before fall 2012 must complete a minimum of 33 hours in journalism courses.

3. The candidate must have at least a 2.5 KU grade-point average overall and in all journalism courses at KU.

4. The candidate must have earned at least 45 hours in upper-division courses, numbered 300 and above.

5. The candidate must complete area distribution requirements in one of two ways:
a. an 18-hour minor outside journalism or
b. a second degree outside journalism.

6. The candidate must have met all requirements of the school. Transfer students must have met the equivalent of those requirements, as outlined above.

7. The candidate must apply to graduate early in their final semester.

8. The candidate must complete a minimum of 30 hours in residence after being admitted to the school.

The primary responsibility for meeting graduation requirements rests with the student. Some graduation requirements are subject to change.

Consult the Journalism Student Services office for current information.

Two Undergraduate Degrees

A student who has earned a B.A. or B.S. degree and wishes to earn a second undergraduate degree in journalism is expected to meet the school’s requirements for area distribution, general degree, foreign language, and journalism and to complete a minimum of 72 hours outside journalism. A candidate for a second undergraduate degree must have earned a minimum grade-point average of 2.5 in previous college work to be considered for admission to the school. A student must complete a minimum of 30 credit hours in residence after admission to the school. Admission is competitive.

Course Requirements for Journalism Majors

To earn the Bachelor of Science degree in Journalism and Mass Communications, students must complete a minimum required total of 48 hours in journalism courses. Twenty-two credit hours form the journalism and mass communications core and are taken by all students. Each student must also complete 15 credit hours for the Multimedia Journalism or Strategic Communication concentration, or 18 credit hours for the Media Arts & Production concentration. Students also take journalism electives, three of which should fulfill the journalism diversity requirement (satisfied by JMC 201, 534, 590 or 613).

Please note that several JMC courses require a C (2.0) or better to progress in the curriculum and/or fulfill the degree requirement. Students should pay close attention to course descriptions for these details.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 104</td>
<td>Words at Work: Writing Essentials</td>
<td>3</td>
</tr>
<tr>
<td>JMC 300</td>
<td>Visual Storytelling</td>
<td>2</td>
</tr>
<tr>
<td>JMC 302</td>
<td>Information Exploration</td>
<td>3</td>
</tr>
<tr>
<td>JMC 304</td>
<td>Media Writing for Audiences</td>
<td>3</td>
</tr>
<tr>
<td>JMC 309</td>
<td>Data Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>JMC 211-220</td>
<td>2 courses, 1 credit hour each</td>
<td>2</td>
</tr>
</tbody>
</table>

Upper-Level Core

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 408</td>
<td>Media Law and Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC diversity course (201, 534, 590 or 613)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>JMC electives</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

1 Completion of JMC 101 with a grade of C (2.0) or higher is a prerequisite for JMC 300, JMC 304, JMC 309, and JMC 408. Additional prerequisites may apply. Admission to the School of Journalism and Mass Communications is a prerequisite for JMC 304 and JMC 309.

After completing the foundation core, the student selects a concentration, Media Arts & Production, Multimedia Journalism or Strategic Communication.

Media Arts & Production

Students in Media Arts & Production are required to complete 18 hours of coursework in addition to the School’s foundation core, upper-level core and electives, for a total of 48 JMC hours.

Concentration Requirements (Note: Students receive a BS in Journalism & Mass Communications with a Concentration in Media Arts & Production)

Requirements for the Media Arts & Production Concentration within the School of Journalism & Mass Communications include a minimum of 18 credit hours of coursework as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 260</td>
<td>Agency: Introduction</td>
<td>3</td>
</tr>
<tr>
<td>JMC 340</td>
<td>Creative Concepting</td>
<td>3</td>
</tr>
<tr>
<td>JMC 345</td>
<td>Audience Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Electives (6 hrs)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 410</td>
<td>Media Photography</td>
<td>3</td>
</tr>
<tr>
<td>JMC 440</td>
<td>Creative Video Production</td>
<td>3</td>
</tr>
<tr>
<td>JMC 445</td>
<td>Scripting for Video &amp; Audio</td>
<td>3</td>
</tr>
<tr>
<td>JMC 450</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>JMC 544</td>
<td>Gamification</td>
<td>3</td>
</tr>
<tr>
<td>JMC 545</td>
<td>Magazine Publishing</td>
<td>3</td>
</tr>
<tr>
<td>JMC 610</td>
<td>Advanced Visual Media</td>
<td>3</td>
</tr>
<tr>
<td>JMC 612</td>
<td>Visual Design and Production</td>
<td>3</td>
</tr>
<tr>
<td>JMC 625</td>
<td>Digital Media Tools-Advanced Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Capstone course (3 hrs)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 636</td>
<td>Documentary-Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 645</td>
<td>Creative Production</td>
<td>3</td>
</tr>
<tr>
<td>JMC 680</td>
<td>Capstone Video</td>
<td>3</td>
</tr>
<tr>
<td>JMC 681</td>
<td>Capstone Audio</td>
<td>3</td>
</tr>
<tr>
<td>JMC 690</td>
<td>Media Innovation-Advanced Media/Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>
Concentration Requirements (Note: Students receive a BS in Journalism & Mass Communications with a Concentration in Multimedia Journalism)

Requirements for the Multimedia Journalism Concentration within the School of Journalism & Mass Communications include a minimum of 15 credit hours of coursework as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 415</td>
<td>Multimedia Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JMC 419</td>
<td>Multimedia Editing</td>
<td>3</td>
</tr>
<tr>
<td>JMC 551</td>
<td>Advanced Multimedia Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JMC 552</td>
<td>Broadcast Reporting</td>
<td>3</td>
</tr>
<tr>
<td>JMC 553</td>
<td>Advanced Editing and Production</td>
<td>3</td>
</tr>
<tr>
<td>JMC 620</td>
<td>TV News-Advanced Media</td>
<td>3</td>
</tr>
<tr>
<td>JMC 621</td>
<td>Data Reporting and Visualization-Advanced Media</td>
<td>3</td>
</tr>
<tr>
<td>JMC 625</td>
<td>Digital Media Tools-Advanced Media</td>
<td>3</td>
</tr>
<tr>
<td>JMC 630</td>
<td>Depth Reporting-Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 635</td>
<td>Statehouse Reporting-Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 636</td>
<td>Documentary-Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 650</td>
<td>Magazine Journalism-Advanced Media</td>
<td>3</td>
</tr>
<tr>
<td>JMC 660</td>
<td>TV News II - Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 690</td>
<td>Media Innovation-Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 691</td>
<td>Community Journalism-Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 699</td>
<td>Reporting and Editing for Multimedia-Advanced Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one course designated as an Advanced Media (3 hrs)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 640</td>
<td>TV News II - Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 690</td>
<td>Media Innovation-Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 691</td>
<td>Community Journalism-Advanced Media/Capstone</td>
<td>3</td>
</tr>
<tr>
<td>JMC 699</td>
<td>Reporting and Editing for Multimedia-Advanced Media</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: A student may take either one advanced media or one capstone course per semester. The advanced media and capstone cannot be taken concurrently. Students must be in good academic standing to take an advanced media and/or capstone.

Strategic Communication

Students in Strategic Communication are required to complete 15 hours of coursework in addition to the School’s foundation core, upper-level core and electives, for a total of 48 JMC hours.

Concentration Requirements (Note: Students receive a BS in Journalism & Mass Communications with a Concentration in Strategic Communication)

Requirements for the Strategic Communication Concentration within the School of Journalism & Mass Communications include a minimum of 15 credit hours of coursework as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 320</td>
<td>Stratcom I: Introduction to Strategic Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 420</td>
<td>Stratcom II: Principles of Advertising and Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>JMC 460</td>
<td>Research Methods in Strategic Communication</td>
<td>3</td>
</tr>
<tr>
<td>JMC 560</td>
<td>Message Development</td>
<td>3</td>
</tr>
<tr>
<td>JMC 640</td>
<td>Strategic Campaigns</td>
<td>3</td>
</tr>
</tbody>
</table>

To enroll in JMC 640, a student must be in good academic standing and must have successfully completed JMC 320, 420, 460 and 560.

B.S.J. Sample 4-Year Graduation Plan

Bachelor of Science in Journalism and Mass Communications

120 hours are required to graduate.

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 101</td>
<td>3</td>
<td>JMC 300</td>
<td>2</td>
</tr>
<tr>
<td>JMC 104</td>
<td>3</td>
<td>JMC 211-220 (one course)</td>
<td>1</td>
</tr>
<tr>
<td>KU Core GE 1.2</td>
<td>3</td>
<td>JMC 302</td>
<td>3</td>
</tr>
<tr>
<td>KU Core GE 3H</td>
<td>3</td>
<td>KU Core GE2.2</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>KU Core GE3N</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 304</td>
<td>3</td>
<td>JMC concentration requirement</td>
<td>3</td>
</tr>
<tr>
<td>JMC 309</td>
<td>3</td>
<td>JMC elective</td>
<td>3</td>
</tr>
<tr>
<td>KU Core AE4.1</td>
<td>3</td>
<td>KU Core AE4.2</td>
<td>3</td>
</tr>
<tr>
<td>Minor course</td>
<td>3</td>
<td>Minor course</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC concentration requirement</td>
<td>3</td>
<td>JMC concentration requirement</td>
<td>3</td>
</tr>
<tr>
<td>JMC diversity course</td>
<td>3</td>
<td>JMC elective</td>
<td>2</td>
</tr>
<tr>
<td>Minor course</td>
<td>3</td>
<td>JMC 211-220 (one course)</td>
<td>1</td>
</tr>
<tr>
<td>KU Core AE4.1 or 4.2 (add'l jour gen ed req)</td>
<td>3</td>
<td>Minor course</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year 4

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 408</td>
<td>3</td>
<td>JMC concentration requirement</td>
<td>3</td>
</tr>
<tr>
<td>JMC concentration requirement</td>
<td>3</td>
<td>JMC elective</td>
<td>3</td>
</tr>
<tr>
<td>KU Core AE6</td>
<td>3</td>
<td>Minor course</td>
<td>3</td>
</tr>
<tr>
<td>Minor course</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>
Minor in Journalism and Mass Communications

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

Minor in Journalism and Mass Communications

The William Allen White School of Journalism and Mass Communications prides itself on providing quality education and job-building skills in a student-focused environment. This 18-credit hour program helps students learn to be effective communicators.

Admission to the Minor

Admission Deadlines

Regular admission deadlines are September 15, February 15 and July 15.

Students should complete the admission application online.

Admission Requirements

Admission is limited and competitive. Completion of 24 credit hours with a 2.5 cumulative grade-point average and at least a C in JMC 101 is required. Students may apply during the semester they are completing JMC 101. Students who have completed journalism courses beyond JMC 101 with less than a 2.5 Journalism GPA will be considered on a case-by-case basis. Transfer students must earn a minimum KU cumulative GPA of 2.5 during their first semester.

Regulations

Students must complete JMC 104 (if admitted to KU Fall 2020 and after) or the Grammar Basics module and exam before taking JMC 304. Students must earn a grade of C (2.0) or better in JMC 101, 104 and other select JMC courses to fulfill minor requirements.

Requirements for the Minor

Curriculum Requirements

A total of 18 hours is required for the minor. Students are allowed a choice of additional elective hours, not to exceed a total of 24 JMC credit hours. The journalism minor requires a 2.5 GPA in journalism and a 2.5 cumulative GPA at KU.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 101</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 104</td>
<td>Words at Work: Writing Essentials</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 18

If you would like to know more about the Journalism and Mass Communications minor, please contact journalism advising at jadvising@ku.edu or 785-864-4080.

Undergraduate Certificate in Sports Media

The Sports Media Certificate is designed to provide fundamental knowledge and skills for developing and managing the communications within and surrounding the amateur, collegiate and professional sports industries. It is open to students in any journalism concentration. Courses are primarily taken in the junior and senior years.

Students must complete at least 12 credit hours as described below to earn the Sports Media Certificate.

JMC 210 is a pre-requisite to JMC 488, but students with previous video production experience may be allowed to enroll with instructor permission.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 488</td>
<td>Laboratory in Media Production</td>
<td>3</td>
</tr>
<tr>
<td>JMC 540</td>
<td>Sports, Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>JMC 585</td>
<td>Multimedia Sports Journalism</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus one elective from this list of courses in the Department of Health, Sport and Exercise Sciences:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSES 289</td>
<td>Introduction to Sport Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES 380</td>
<td>Sociology of Sport</td>
<td>3</td>
</tr>
<tr>
<td>HSES 381</td>
<td>Sport Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HSES 382</td>
<td>Sport Facilities and Event Management</td>
<td>3</td>
</tr>
<tr>
<td>HSES 384</td>
<td>Sport Law</td>
<td>3</td>
</tr>
<tr>
<td>HSES 483</td>
<td>Sport Finance and Economics</td>
<td>3</td>
</tr>
<tr>
<td>HSES 485</td>
<td>Sport Communication</td>
<td>3</td>
</tr>
<tr>
<td>HSES 486</td>
<td>Sport Marketing</td>
<td>3</td>
</tr>
<tr>
<td>HSES 487</td>
<td>Personnel Management in Sport</td>
<td>3</td>
</tr>
</tbody>
</table>

Master of Science in Journalism and Mass Communications

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

Graduate Admission

Admission is based primarily on the student’s undergraduate record, references, and writing samples. Applicants who have baccalaureate degrees in journalism, as well as those with no academic or professional background in journalism, are eligible to apply for the Mass Communications Program on the Lawrence
Applications

Application Deadlines
The School has a “rolling admission process.” Students may enter the Mass Communications program in fall or spring semesters. Students interested in Graduate Teaching Assistant positions, scholarships and awards should apply by January 2.

Students may enter the Integrated Marketing Communications program year-round; fall, spring, or summer. Applicants to the Integrated Marketing Communications program may apply for fall admission by the deadline of May 1. The priority application deadline for the spring, which begins in January, is the preceding November 1. The priority application deadline for the summer, which begins in June, is the preceding February 1.

Application Materials
Applications can be considered only after these items have been submitted:

1. A completed online graduate application (http://www.graduate.ku.edu/ku-graduate-application/).
2. An official transcript of all college-level courses from each college or university attended.
3. Three letters of reference from persons familiar with the applicant’s abilities. At least one academic reference is preferred and required for those who graduated within the past five years.
4. A written, 250-word statement of the applicant’s academic and professional objectives.
5. Applicants for the Mass Communications program must include two writing samples.
6. A current résumé.
7. Applicants for the Integrated Marketing Communications course of study must include three samples of professional work that reflect the applicant’s years of experience.
8. Nonrefundable application fee payable online to the University of Kansas.
9. Students whose native language is not English must follow the policy for English Proficiency Requirements for Admission to Graduate Study. (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/?num1.5)
10. International students must submit proof that they have the financial resources to cover annual expenses.

Submit your graduate application online (http://www.graduate.ku.edu/ku-graduate-application/). Applicants to Mass Communications and the M.S. in journalism/J.D. program should send official transcripts of all college and university course work to Graduate Admissions (graduateadm@ku.edu) or to the school:

The University of Kansas School of Journalism and Mass Communications
Stauffer-Flint Hall
Attn: Graduate Advisor

1435 Jayhawk Blvd.
Lawrence, KS 66045

Applicants to the Integrated Marketing Communications course of study may send official transcripts of all college and university course work to the KU Edwards Campus program:

The University of Kansas Edwards Campus
School of Journalism and Mass Communications
Integrated Marketing Communications
Attn: Graduate Program
12600 Quivira Road
Overland Park, KS 66213

M.S. in Journalism
The Journalism School offers four M.S. options: Mass Communications (Lawrence campus), Digital Content Strategy (Online), Integrated Marketing Communications (p. 717) (KU Edwards Campus in Overland Park), and the Joint M.S.-J.D. degree.

Mass Communications
This track is focused on deeper, theoretical understanding of the professions of the media. Students with an interest in professional performance may take 2 courses in which they design 1 or more professional projects. To earn the degree, a student must complete 37 graduate credit hours with at least a B (3.0) average. Each student must complete and pass a general examination of the thesis. The thesis defense constitutes the final general examination.

Major Components of 37-Hour Requirement
The student entering the program takes

• 16 hours in core courses in Mass Media and Mass Communications, Methodology, Quantitative or Qualitative Research, including statistics.
• 6 hours in JMC 840 seminars.
• 12 hours of electives either inside or outside the school. The student may elect to design and produce 1 or 2 professional projects (such as a series of in-depth news stories or media business cases).

The student also completes an acceptable project/thesis (JMC 899) for 3 hours.

Core Course Requirements
The core graduate courses help students develop strong research and critical-thinking skills. 5 courses and 1 lab are required:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSY 710</td>
<td>Introduction to Statistical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 711</td>
<td>Lab for Introduction to Statistical Analysis</td>
<td>1</td>
</tr>
<tr>
<td>JMC 801</td>
<td>Media Communication Theories</td>
<td>3</td>
</tr>
<tr>
<td>JMC 802</td>
<td>Media Communication Methods</td>
<td>3</td>
</tr>
<tr>
<td>JMC 803</td>
<td>Research in Action</td>
<td>3</td>
</tr>
<tr>
<td>JMC 804</td>
<td>Mass Communication Methodology I-Qualitative</td>
<td>3</td>
</tr>
<tr>
<td>JMC 805</td>
<td>Mass Communication Methodology II-Quantitative</td>
<td>3</td>
</tr>
</tbody>
</table>

Professional Skills Requirements
The student may enroll in JMC 851 and JMC 852 (Professional Skills). The student develops and produces a master's-level professionally
based project or projects with the approval of the advisor and ADGS. The projects help the student expand and advance professional skills.

Advanced Course Requirements
The student completes 2 JMC 840 seminars, 4 graduate-level electives, and an acceptable project/thesis:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 840</td>
<td>Seminar in: _____</td>
<td>3</td>
</tr>
<tr>
<td>JMC 840</td>
<td>Seminar in: _____</td>
<td>3</td>
</tr>
<tr>
<td>JMC 899</td>
<td>Master's Project/Thesis</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

General Examination
Each student must pass an oral examination of the thesis, which constitutes the final general examination. That examination must cover the totality of the student’s master’s experience. The examination will be given and evaluated by a committee of 3 graduate faculty members who serve on the student’s thesis committee.

Enrollment Requirements after Completing Course Requirements
There is no requirement for continuous enrollment after courses are completed and prior to completing the thesis. Students must be enrolled in at least 1 hour of credit in the semester in which they graduate.

A student must complete the M.S.J. degree within 7 years of admission.

Integrated Marketing Communications (IMC)
The Integrated Marketing Communications (http://edwardscampus.ku.edu/prospective/graduate/marketing.shtml) course of study is offered on the KU Edwards Campus (http://edwardscampus.ku.edu/), 12600 Quivira Rd., Overland Park, KS 66213, 913-897-8416. For more information contact mtidwell@ku.edu and www.imc.ku.edu (http://www.imc.ku.edu).

Course Requirements
A student must complete 30 hours of credit with at least a B (3.0) average. A student takes 12 hours of core courses and 18 hours of professional courses. A student must complete the master’s degree program within 7 years of admission.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 820</td>
<td>Marketing Fundamentals for Communicators</td>
<td>3</td>
</tr>
<tr>
<td>JMC 828</td>
<td>Financial Fundamentals for Communicators</td>
<td>3</td>
</tr>
<tr>
<td>JMC 829</td>
<td>Marketing Communications Research</td>
<td>3</td>
</tr>
<tr>
<td>JMC 850</td>
<td>Capstone in Marketing Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

Professional Course Requirements
Those who hold the master’s degree from KU are expected to be able to perform professional tasks. Students therefore must complete a minimum of 18 credit hours of professionally oriented courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 819</td>
<td>Writing for Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 821</td>
<td>Integrated Marketing Communications and Sales Strategies</td>
<td>3</td>
</tr>
<tr>
<td>JMC 823</td>
<td>Branding in Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 824</td>
<td>Creative Process</td>
<td>3</td>
</tr>
<tr>
<td>JMC 825</td>
<td>Relationship Marketing</td>
<td>3</td>
</tr>
<tr>
<td>JMC 826</td>
<td>Innovation in Management of Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 827</td>
<td>Marketing Ethics</td>
<td>3</td>
</tr>
<tr>
<td>JMC 831</td>
<td>Technologies in Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 832</td>
<td>Leadership and Management in Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 833</td>
<td>Social Media and Integrated Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 834</td>
<td>International and Multicultural Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>JMC 840</td>
<td>Seminar in: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

Outside Courses
A student may take up to 6 credit hours outside the school. Any student who wants to take an elective course outside the school must have permission from the instructor of the course, the school offering the course, and the graduate director of the journalism school prior to enrolling in the course. The student should be prepared to indicate how the course contributes to the master’s program. Submission of a course description or syllabus from the course may be required for approval.

Final General Examination
Each student must pass a final general examination before graduating. This examination is part of the capstone course. The examination occurs during the oral presentation before the client and faculty.

Online Digital Content Strategy
Application
- Application Deadlines: Priority – February 1 | Late – May 1
- One official transcript of all college-level courses. (from each college attended) Expected GPA: 3.0 or above. Submit to graduateadm@ku.edu (gapc@ku.edu)
- A current resume
- Two letters of reference from persons familiar with the student’s academic or professional work or potential for graduate study
- Applicants must also submit two writing samples or samples of professional work that reflect your years of experience
- Students whose native language is not English must follow the policy for English Proficiency Requirements for Admission to Graduate Study. (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/?num1.5)
- International students are required to submit evidence of financial support

Our online Master’s Program in Digital Content Strategy trains graduates to find, use and analyze information and data to solve organizational problems. You will build skills you can use immediately while broadening your thinking and encouraging a mindset for adapting to the ever-changing digital landscape.
With certificates in Social Media Strategy and Data Interpretation and Communication, you can become the information expert in your organization. As a digital troubleshooter, you will be able to bridge the gap between those with big ideas but little understanding of how to turn those ideas into reality and those with technical skills who lack the broader vision needed to move beyond the status quo.

Program Requirements

The online program is divided into two certificates. The master's degree is earned by completing both certificates, but students may choose to earn just one certificate. Students may work on either of these certificates independently, building credentials even before they complete a master's degree. All classes are online. The program requires 30 hours of coursework to earn a master's degree.

- The program starts with Information Insight I, which introduces students to online learning, explores the concepts, problems and opportunities in digital content strategy, and lays the foundation for further program work, including work on a possible capstone project. All students must take this course.
- After completing the introductory course, students take courses in the social media sequence, the data communication sequence, or both. All courses are eight weeks.
- After completing both certificates, students enroll in Information Insight II, an eight-week summer course in which they complete a capstone project.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JMC 860</td>
<td>Information Insight I</td>
<td>3</td>
</tr>
<tr>
<td>JMC 861</td>
<td>Data Collection I</td>
<td>3</td>
</tr>
<tr>
<td>JMC 862</td>
<td>Data Collection II</td>
<td>3</td>
</tr>
<tr>
<td>JMC 863</td>
<td>Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>JMC 864</td>
<td>Data Visualization and Presentation</td>
<td>3</td>
</tr>
<tr>
<td>JMC 865</td>
<td>Analyzing Audiences</td>
<td>3</td>
</tr>
<tr>
<td>JMC 866</td>
<td>Social Media Strategy</td>
<td>3</td>
</tr>
<tr>
<td>JMC 867</td>
<td>Social Media Metrics</td>
<td>3</td>
</tr>
<tr>
<td>JMC 868</td>
<td>Information in Context</td>
<td>3</td>
</tr>
<tr>
<td>JMC 869</td>
<td>Information Insight II</td>
<td>3</td>
</tr>
</tbody>
</table>

Joint M.S. J.-J.D.

The joint M.S. in journalism and J.D. degree program combines into approximately 3½ years of full-time study the Master of Science in journalism and the Juris Doctor (p. 720) programs offered by the School of Journalism and Mass Communications and the KU School of Law. The joint degree program offers students academic grounding in both disciplines to prepare them for the professional practice of journalism, law, or media law.

For more information, please contact:

University of Kansas
Associate Dean of Graduate Studies and Faculty Development
William Allen White School of Journalism and Mass Communications
(http://www.journalism.ku.edu/)
Stauffer-Flint Hall
1435 Jayhawk Blvd.
Lawrence, KS 66045-7515

Assistant Dean Matt Tidwell (mtidwell@ku.edu)

and Graduate Advisor Jammie Johnson (jamjohn@ku.edu)

You may also contact:

University of Kansas School of Law (http://www.law.ku.edu/)
Green Hall
1535 W. 15th St.
Lawrence, KS 66045-7540
785-844-4550
admitlaw@ku.edu

Graduate Certificate in Data Interpretation and Communication

All journalism certificate candidates must complete a minimum of 15 graduate credit hours in Data Interpretation Communication with at least a B (3.0) average. Courses include JOUR 860, JOUR 861, JOUR 862, JOUR 863 and JOUR 864.

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University's policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

Specific admissions requirements for this certificate program can be found here (http://journalism.ku.edu/admission-7/).

Graduate Certificate in Social Media Strategy

All journalism certificate candidates must complete a minimum of 15 graduate credit hours in Social Media Strategy with at least a B (3.0) average. Courses include JOUR 860, JOUR 865, JOUR 866, JOUR 867 and JOUR 868.

Applicants must meet all admissions requirements for certificate-seeking graduate admission as defined by the University's policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

Specific admissions requirements for this certificate program can be found here (http://journalism.ku.edu/admission-7/).

Doctor of Philosophy in Journalism and Mass Communications

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

Admission

KU Graduate Admission Standards. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements. The bachelor's degree is not acceptable if it contains credit awarded for work experience that was not directly supervised by faculty members
of an accredited university or not evaluated in units that identify the academic content.

**Journalism School Requirements**

- Master’s degree or equivalent with at least a 3.5 GPA on a 4.0 scale.
- Graduate application: Apply online at [http://www.graduate.ku.edu/application-process/](http://www.graduate.ku.edu/application-process/).
- Application fee (nonrefundable).
- Resume or CV.
- An official transcript from the undergraduate degree-granting institution AND all previous graduate credit, including the master’s degree, sent electronically to the Graduate Application Processing Center. A hard copy is acceptable if the institution cannot send electronic transcripts.
- Examples of research and scholarship. Links to online articles are acceptable.
- Candidates will be required to answer a survey in their application related to their research focus area.
- 3 references, including one from the master’s advisor.
- Students whose native language is not English must follow the policy for English Proficiency Requirements for Admission to Graduate Study. ([http://policy.ku.edu/graduate-studies/english-proficiency-international-students/?num1.5](http://policy.ku.edu/graduate-studies/english-proficiency-international-students/?num1.5))
- International students are required to submit evidence of financial support.

In exceptional cases, students with a bachelor’s degree may be admitted for the full 46-hour program.

**Financial support**

The School provides up to six semesters of financial support for Ph.D. students. The generous support package includes:

- 50 percent Graduate Teaching Assistantship, with an additional scholarship award.
- A minimum salary of $17,750 paid bi-weekly over nine months, paid through normal University payroll with customary deductions.
- $4,000 scholarship paid in two installments each year.
- Assistance in paying for insurance. You will receive the University’s 75 percent contribution toward health insurance coverage, if you need it.
- 100 percent tuition waiver for fall and spring semesters.

Contact Assistant Dean Matt Tidwell (mtidwell@ku.edu) and Graduate Advisor Jammie Johnson (jamjohn@ku.edu) for more information or to express interest in the Ph.D. program.

**Admission Deadline.** For fall admission, the deadline for materials is December 1.

The William Allen White School of Journalism and Mass Communications offers the Ph.D. degree, beginning fall 2012. The school has a solid reputation based in the profession and our faculty study issues and uses of real-world media communications. We seek junior colleagues who share those interests.

Our Ph.D. program is small and, therefore, selective. We admit 4 to 6 students per year to ensure close work with the faculty. We expect our students’ scholarly and research interests to intersect with those of our faculty.

The school’s Ph.D. is a rigorous scholarly research degree requiring mastery of theory and methodology. We expect our Ph.D. program graduates to possess advanced knowledge in the following areas necessary for all scholarship in the discipline:

- Scholarly inquiry and methods of discovery;
- Current theory and research methods of the discipline;
- Statistics appropriate to the discipline;
- Media use by society, historical and current;
- Media roles in society, including issues of diversity;
- The First Amendment, legal and ethical issues of the discipline.

Additionally, we expect our Ph.D. program graduates to possess advanced knowledge in one or more of the following areas as necessary for scholarship in their chosen area of expertise and with the advice and guidance of their respective faculty advisors:

- Advanced practice of theory, methods and concepts in the student’s area of journalism expertise;
- Advanced practice of theory, methods and concepts suitable to the student’s area of concentration;
- Advanced statistics;
- Specific uses and impacts of media, such as in healthcare delivery, in education, in politics, in the military, or in traditional mass media roles;
- The business of the media, historical and current;
- Innovation and entrepreneurship.

The Ph.D. program requires a total of 46 course credit hours (7 three-hour core journalism courses and a one four-hour statistics class with a lab), a one-hour pro-seminar (JMC 901) each fall semester, a 12-hour concentration outside the journalism school plus dissertation hours, which are variable. **40 course hours** are prescribed; the others (six credits) are journalism electives.

Students who hold a master’s in journalism may have this 46-hour requirement adjusted (a maximum of 6 credits) due to prior course work, leaving 40 hours for completion of the degree. The student completes study of appropriate research skills, designed in consultation with the faculty advisor. The student also must meet KU’s requirements for dissertation hours.
Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor (http://www.advising.ku.edu/) for details). Other years’ catalogs (http://catalog.ku.edu/archives/) are also available.

**Juris Doctor Program** (p. 736)
- Two-Year J.D. Program for Foreign-Trained Lawyers (p. 744)
- Master of Laws in American Legal Studies (p. 744)
- Doctor of Juridical Science Program (p. 745)
- Master of Science in Homeland Security: Law and Policy (p. 746)
- Graduate Certificate in Homeland Security: Law and Policy (p. 747)

**The School of Law**

The School of Law is an excellent place to pursue a professional legal education. The school’s primary mission is to prepare its students to be outstanding members of the legal profession, well educated in the law and committed to professional achievement and public service. The school educates students in both the general principles of law and the skills needed for practice in a changing legal environment. Students develop technical competence, pride in legal craftsmanship, a sound sense of ethics and professionalism, and an appreciation for the role of law and of the practice of law in society.

The law school has a venerable history and a commitment to educating for the future. Legal education at KU began in 1878, and the school was a charter member of the Association of American Law Schools (http://www.aals.org/). Since 1924, it has had a chapter of Order of the Coif, a national law school honor society with chapters at leading law schools throughout the country. The law school is fully accredited by the American Bar Association (http://www.americanbar.org/aba.html).

Outside the classroom, student organizations (https://law.ku.edu/current-students/student-organizations/) provide a focus for service as well as social activities and professional development. In a program that may be unique to KU, law students serve the university community and develop litigation skills by acting as prosecutors, defense counsel and judges in the Traffic Court (KU Court of Parking Appeals), which handles all appeals of campus parking tickets.

Two student-edited scholarly publications, the Kansas Law Review (https://law.ku.edu/academics/hands-on-learning/law-review/) and the Kansas Journal of Law and Public Policy (https://law.ku.edu/academics/hands-on-learning/law-journal/), allow students to delve deeply into areas of law that interest them, hone their writing, and expand their editing skills. KU Law students also participate in a rich array of moot court (https://law.ku.edu/academics/hands-on-learning/moot-court/), mock trial (https://law.ku.edu/academics/hands-on-learning/mock-trial/) and transactional law programs (https://law.ku.edu/academics/centers/polsinelli-transactional-law/). Some are courses, and some are extracurricular activities. All provide hands-on writing and advocacy skills that are some of the hallmarks of a KU Law education.

**Prelaw**

Visit prelaw.ku.edu (https://prelaw.ku.edu/) for information about prelaw study at KU.

**Tuition and Fees**

Current information about law school tuition (resident and nonresident) rates and required campus fees, which all law students pay each semester, is available online (https://financialaid.ku.edu/calculate-costs/tuition-and-fees/) or from the Office of the University Registrar (http://www.registrar.ku.edu).

Tuition and fees (https://law.ku.edu/admissions/tuition-scholarships/tuition-fees/) entitle students to course instruction; dispensary care for ordinary illnesses and special medical care at nominal rates; the use of the Kansas Union, libraries, buses, Legal Services for Students, and the Ambler Student Recreation Fitness Center; a copy of The University Daily Kansan and other local and national newspapers; and admission at reduced prices to most campus events, such as concerts, plays, films, lectures, and athletic events.

**Residency Classification**

Students are classified as resident or nonresident based on information provided on the application for admission. The determination of residency status is made by the Office of the University Registrar in accordance with Kansas regulations. This classification makes a difference in the cost of attending the School of Law. If you have questions about your residency status, contact the Office of the University Registrar (http://www.registrar.ku.edu/).

**Scholarships and Financial Aid**

For information about scholarships (https://law.ku.edu/admissions/tuition-scholarships/scholarships/) and financial aid (https://law.ku.edu/admissions/tuition-scholarships/financial-aid/), visit the law school’s website.

**Attendance**

Regular class attendance is a fundamental part of legal education. Instructors may adopt individual policies to monitor attendance. No attendance policy may impose any sanction unless a student’s unexcused absences from class exceed the number of hours of credit given for the course plus one, and no sanction may be more stringent than imposition of a failing grade for the course.

**Adding Classes**

A student may add classes only in the first 2 weeks of the semester (fifth day in a summer session). Students contemplating adding a course after the course has begun should understand that they may be at a significant disadvantage.

**Dropping Classes**

A student may drop a class no later than the last day of classes in the semester or summer session. Enrollment in that class will be canceled and will not appear on the student’s record.

**Special Drop Rule**

Where the nature of the course requires a continuous commitment by the student, the instructor may establish special rules about dropping the course. Notice of these special rules will be provided before enrollment.
Maximum and Minimum Load

Students are expected to complete all required first-year courses during their first year of enrollment in law school. Summer starters must take all required first-year courses in the first year plus sufficient electives in both the fall and spring semesters to carry a course load of no fewer than 12 credit hours and no fewer than 4 courses in each semester. After the first year, the maximum course load is 18 credit hours per semester, and the minimum load is 12 hours. The associate dean for academic affairs may approve a schedule of fewer than 12 credit hours under exceptional circumstances. Any student taking fewer than 12 credits without prior approval of the associate dean for academic affairs will not be in good standing with the law school.

Incomplete Classes

A student must finish an incomplete course by the end of the next semester (excluding summer sessions), whether or not the student is enrolled in the law school during the next semester. If a student does not make up an incomplete grade by the end of the next semester, the incomplete will be changed to a grade of F at the end of that semester. The last day of the final examination period is the end of the semester. Waivers of this rule or extensions of the time allowed for making up incomplete grades may be granted by the academic affairs committee only in cases of extreme hardship.

Withdrawal and Readmission Following Withdrawal

Students considering withdrawing are strongly encouraged to confer with the associate dean for academic affairs. Any student who has completed at least 29 credit hours and is in good standing may withdraw from all law school courses in which he or she is enrolled if the student completes all required administrative steps for withdrawal no later than the last day of classes for the semester. Students who wish to withdraw after the last day of classes for the semester must obtain permission from the academic affairs committee.

Any student who withdraws before completing 29 credit hours must reapply for admission. There are no exceptions to this rule. Any student who has completed at least 29 credit hours and who is not in good standing must have the permission of the associate dean for academic affairs to withdraw if the student wishes to return to school in a subsequent semester. A student who fails to secure permission to return must petition the academic affairs committee for reinstatement.

Students must complete all requirements for the J.D. degree within 5 years of initial enrollment, except in extraordinary circumstances. Following the ABA Standard 311, such extraordinary circumstances, for example, might include an interruption of a student’s legal education because of an illness, family exigency, or military service. A student facing extraordinary circumstances and wishing to complete their degree beyond the 5-year limitation must petition the academic affairs committee promptly in light of the relevant circumstances.

Whenever a student is permitted on the basis of extraordinary circumstances to exceed the 5-year program limitation, the law school shall place in the student’s file a statement signed by the associate dean for academic affairs explaining the extraordinary circumstances leading the law school to permit an exception to the completion rule. Find J.D. Degree Requirements (https://law.ku.edu/academics/degrees/jd-program/requirements/) on the KU Law website.

Examinations

Thorough examinations are given under the honor system at the close of every term. Some faculty members also give midterm examinations. These examinations test students’ reasoning abilities and their knowledge of a particular subject area.

Special examinations are given only in cases of absence from the regular examination because of sickness of the student or in the student’s immediate family or similar exceptional circumstances. Students should contact the faculty member whose examination they must miss as soon as possible, certainly before the date the examination is to be given.

Grading System

The School of Law uses a 4.0 (A-F) grading scale:

- 4.0 (A)
- 3.7 (A-)
- 3.3 (B+)
- 3.0 (B)
- 2.7 (B-)
- 2.3 (C+)
- 2.0 (C)
- 1.7 (C-)
- 1.3 (D+)
- 1.0 (D)
- 0.7 (D-)
- 0 (F)

The average of grades in first-year courses must be 2.8-3.0; the average of grades in Professional Responsibility must be 2.9-3.1; and the average of grades in all other courses must be 3.0-3.6. The recommended range in upper-level courses is 3.2-3.4.

7 percent of students in all first-year courses must receive a C- or lower in each class.

Courses in which the faculty member finds it difficult or impossible to evaluate student performance with the precision necessary to assign letter grades may be graded Credit/No Credit when approved by the academic affairs committee before the beginning of the semester in which the course is taught.

Clinic and Field Placement Rules

No student may accumulate more than 16 credit hours from clinic and field placement courses — including the Criminal Prosecution Field Placement Program, Elder Law Field Placement Program, Field Placement Program, Judicial Field Placement Program, Legal Aid Clinic, Medical-Legal Partnership Field Placement Program, Project for Innocence and Post-Conviction Remedies, and the Tribal Judicial Support Clinic — as part of the 90 hours of law school credit required for graduation. Concurrent enrollment in more than one of these clinics and field placements is permitted only with the consent of the directors of the programs in which enrollment is sought.

Students must be in good standing to enroll in a clinic or field placement. This requirement may be waived by the associate dean for academic affairs in exceptional circumstances.
For some clinics and field placements, the student must qualify as a supervised legal intern under Kansas Rule 719. To qualify, the student must have completed 59 credit hours and Professional Responsibility. The credit-hour requirements are necessary to ensure that heavy course loads in the final 2 semesters will not interfere unduly with clinic work. Under the 59 hours rule, the permit allows students to work in law school clinics, field placements, governmental agencies and law offices. The student practice permit is directly tied to the attorney supervising the intern. Additional information and guidelines about obtaining a Kansas Legal Intern Permit (https://law.ku.edu/current-students/academic-resources/rule-719/) are available on the law school's website.

The Honor Code

Matters of law student honesty and integrity in academic performance are governed by an honor code (http://law.ku.edu/honorable) written and administered by law students. This system of peer review has been in effect for more than half a century and addresses issues such as plagiarism, cheating, and unauthorized collaboration in work assignments. Honor code violations, found to have occurred by the student committee after notice and hearing, are referred to the dean of the law school with recommended sanctions. Final disposition rests within the discretion of the dean. The honor code governs law students in the same way that the Code of Professional Responsibility governs members of the bar. The complete honor code may be found in the Academics (https://law.ku.edu/academics/) section of the law school’s website. Copies also may be obtained from the Student Bar Association.

Exclusion and Probation

A student whose cumulative grade-point average is below 2.0 at the end of any regular semester, whether fall or spring, or at the end of the two 5-week summer sessions is on probation. A student who is on probation is not in good standing for purposes of the rules on withdrawal and readmission following withdrawal and any other rules that require good standing.

All students must achieve a minimum cumulative grade-point average of 2.0 during the semester in which they complete 90 hours, or they will not be permitted to graduate or continue in school. There is no appeal within the law school from this requirement.

A student whose cumulative grade-point average is below 2.0 after the completion of two semesters of full-time enrollment or two 5-week summer sessions and two semesters of full-time enrollment will be excluded from the school. A student whose cumulative grade-point average is below 2.0 after the completion of 59 credit hours or at the end of four semesters of full-time enrollment, regardless of the number of credit hours completed, will be excluded from the school. In either case, exclusion from the school is final. There is no appeal within the law school.

Students in the Two-Year J.D. Program are subject to the same grading system that applies to other J.D. candidates, and these policies of exclusion and probation apply equally to two-year students. Therefore, a two-year J.D. student whose cumulative grade-point average is below 2.0 after the completion of two semesters of full-time enrollment at the University of Kansas School of Law will be excluded from the school. A two-year J.D. student whose cumulative grade-point average is below 2.0 after the completion of four semesters of full-time enrollment at the law school will be excluded from the school. There is no appeal within the law school.

Career Services

Through an intensive one-to-one approach, the Office of Career Services (https://law.ku.edu/careers/) works with students to design and implement a customized career strategy, beginning the first semester of law school and continuing through graduation and beyond. Staff in the office meet with all first-year students individually to discuss their backgrounds, identify interests and consider the numerous programs, clinics and employment opportunities available to them. First-year students may also participate in a mentoring program, matching them with practicing alumni in the area who offer advice on the practice of law and how students can best prepare themselves for success in school and after graduation.

The Office of Career Services is committed to the same open-door policy as the school’s professors. Students are actively encouraged to meet with the members of the office on a walk-in basis or by appointment, as they prefer. Workshops and individual advising sessions help students explore career options and develop job-seeking skills. Excellent resource materials for career planning and placement are available, and staff members are knowledgeable about online resources. KU law students are highly sought after by employers throughout the state, region, and nation. Law firms, government agencies, public interest groups, and other employers post positions and conduct interviews at the law school for summer, school-year and post-graduation employment.

Many graduates join private law firms with practices including corporate and transactional law, civil and criminal litigation, tax, bankruptcy, domestic relations, estate planning and, often, general practice, encompassing all these areas and more. Many graduates enter government service, working at the federal, state, or local level. They become prosecutors and public defenders, and they work in agencies such as the Environmental Protection Agency, the Kansas Attorney General’s office, or the U.S. Securities and Exchange Commission. Still other graduates accept judicial clerkships, working for federal and state court judges at both the trial and appellate levels. The military branches also actively recruit at the school for their JAG programs.

Public interest work is another career avenue attractive to many graduates. From providing legal services to the underrepresented to influencing public policy, KU Law and the Office of Career Services offer numerous opportunities for students to explore and pursue these careers. Of particular note is the annual attendance by students at the Equal Justice Works conference in Washington, D.C., sponsored and fully underwritten by the office. Graduates have succeeded in landing prestigious post-graduate fellowships and joined organizations ranging from Kansas Legal Services to Public Citizen.

Nontraditional careers are another area of focus for the law school. As the lines between industry, policy, and law blur, our students have an ever-expanding range of opportunities where their skills and talents are in high demand. The law school supports students and graduates pursuing these hybrid careers, building alliances with employers well beyond traditional legal practice, and in industries such as insurance, banking, engineering and not-for-profit management.

Ultimately, the Office of Career Services is focused on individual students, engaging them in a personalized, highly intensive experience throughout their time at KU. Our singular goal is to ensure each student has the very best career options available based on his or her unique interests and needs.

KU graduates have been successful in passing Kansas and Missouri bar examinations and have performed extremely well on examinations in
other states, including Colorado and Texas. Law school applicants should secure information about character, fitness, and other qualifications for admission to the bar in states in which they intend to practice.

For more information, explore the Career Services (https://law.ku.edu/careers/) section of the law school’s website.

**Polsinelli Transactional Law Center**

The Polsinelli Transactional Law Center creates unique scholarly and training opportunities for law students by combining the resources, attorneys and client base of a national law firm with the rigor of a Tier 1 research university. The center serves as the umbrella for transactional law courses, symposia and programming related to mergers and acquisitions, joint ventures, financing, real estate and other business transactions — arming students with the practical skills necessary for successful careers.

For more information about the center, visit the Centers (https://law.ku.edu/academics/centers/) section of the law school’s website.

**Shook, Hardy & Bacon Center for Excellence in Advocacy**

The Shook, Hardy & Bacon Center for Excellence in Advocacy capitalizes on its namesake’s distinguished history in litigation to cultivate a new generation of trial lawyers. The center has three broad goals: 1) offer unique skills-based training to KU law students; 2) present valuable programming for KU law alumni and the regional bar; and 3) open new scholarly opportunities for KU law faculty and nonfaculty studying related issues through a fellowship program.

For more information about the center, visit the Centers (https://law.ku.edu/academics/centers/) section of the law school’s website.

**Tribal Law and Government Center**

The Tribal Law and Government Center prepares a new generation of advocates for careers representing the legal interests of indigenous nations and tribes. It provides a forum for research and scholarship on indigenous legal and governance issues.

The Tribal Lawyer Certificate Program ensures that law students who plan careers representing indigenous nations have the skills necessary to appreciate and strengthen the unique nature of their legal systems. The Tribal Law and Government Conference promotes research and scholarship regarding the unique legal and governance issues of indigenous nations. The Tribal Judicial Support Clinic gives second- and third-year students the opportunity to assist tribal court systems through a variety of projects. The joint degree program in law and indigenous studies aspires to facilitate the protection and strengthening of indigenous sovereignty, self-determination, and self-sufficiency in indigenous nations throughout the Americas.

For more information about the center, visit the Centers (https://law.ku.edu/academics/centers/) section of the law school’s website.

**The Dru Mort Sampson Center for Diversity and Inclusion**

The Dru Mort Sampson Center for Diversity and Inclusion is a programmatic, co-curricular center that helps KU Law meet its mission and the changing needs of the legal profession by fostering and promoting diversity within the law school community. The Center encourages community engagement while helping students adjust to the demands of law school.

For more information about the center, visit the Centers (https://law.ku.edu/academics/centers/) section of the law school’s website.

**Law Faculty**

The law faculty is composed of honor graduates from law schools throughout the country. Virtually all have substantial experience in private or public interest practice. Many served as judicial clerks — two as clerks to Supreme Court justices.

Law faculty members are committed to excellence in the classroom and to mentoring law students. Students are encouraged to consult their professors regularly about their progress in the study of law as well as about career plans, job opportunities, and the professional responsibilities of lawyers. Law faculty offices are located throughout Green Hall, and doors are open to students.

Faculty members enrich their teaching by researching and writing about the areas of law they teach. They regularly participate in conferences and symposia, publish widely in legal journals, and enjoy national and international recognition for the quality of their work. Many have written important treatises and casebooks used at law schools around the country.

- **Melanie Daily.** Clinical Associate Professor of Law. A.B., Chicago, 1999; J.D., Washington (St. Louis), 2007. Advanced Legal Aid Clinic, Family Law, Legal Aid Clinic.


• Jennifer Schmidt. Clinical Associate Professor of Law. B.A.; Texas Christian University, 1989; J.D., Kansas, 1994. Field Placement Program, Legislative Simulation, Public Policy Practicum, Sixth Semester in D.C.

• Meredith Schnug. Clinical Associate Professor of Law. B.A., Miami (Ohio), 2003; J.D., Washington (St. Louis), 2006. Advanced Legal Aid Clinic, Advanced Litigation, Legal Aid Clinic.


For more information about law faculty members, go to the Faculty section of the law school’s website (http://www.law.ku.edu/faculty/).

Library Faculty Members


Course Prerequisites

A substantial number of second- and third-year courses have 1 or more upper-level courses as prerequisites.

Course | Prerequisite
-------|------------------
LAW 864 Advanced International Trade Law | A basic course in international trade regulation or equivalent or permission of instructor
LAW 833 Advanced Legal Aid Clinic | LAW 908 Evidence
LAW 857 Advanced Litigation | LAW 908 Evidence
LAW 889 Bankruptcy | LAW 992 Trial Advocacy qualification under Kansas Rule 719 (See Clinic and Externship Rules) (p. 736)
LAW 868 Business Planning Seminar | LAW 855 Taxation of Business Enterprises
LAW 869 Contract Drafting | LAW 908 Evidence
LAW 930 Corporate Finance | LAW 992 Trial Advocacy qualification under Kansas Rule 719 (See Clinic and Externship Rules) (p. 736)
LAW 877 Corporate Governance | LAW 890 Criminal Prosecution Field Placement Program
LAW 890 Criminal Prosecution Field Placement Program | LAW 892 Business Organizations
LAW 828 Deals | LAW 947 Mergers and Acquisitions
LAW 859 Deposition Skills Workshop
LAW 835 Due Diligence in Business Transactions
LAW 907 Estate Planning: Practice
LAW 906 Estate Planning: Principles
LAW 910 Federal Courts and the Federal System
LAW 932 Federal Tax Procedure
LAW 924 Independent Research
LAW 845 Jurisdiction
LAW 952 Legal Aid Clinic
LAW 947 Mergers and Acquisitions
LAW 960 Moot Court Council
LAW 965 Nonprofit and Tax-Exempt Organizations
LAW 977 Patent Law
LAW 979 Patent Practice
LAW 895 Project for Innocence and Post-Conviction Remedies
LAW 986 Securities Regulation
LAW 855 Taxation of Business Enterprises
LAW 948 Transactional Law Competition
LAW 992 Trial Advocacy
LAW 998 Tribal Judicial Support Clinic
LAW 848 Writing for Law Practice
LAW 908 Evidence
LAW 892 Business Organizations
LAW 913 Federal Income Taxation
LAW 996 Trusts and Estates
LAW 913 Federal Income Taxation
LAW 845 Jurisdiction
LAW 913 Federal Income Taxation
LAW 804 Civil Procedure
LAW 908 Evidence
LAW 972 Professional Responsibility
LAW 992 Trial Advocacy * qualification under Kansas Rule 719 (See Clinic and Externship Rules) (p. 736)
LAW 892 Business Organizations
LAW 892 Business Organizations
LAW 982 Business Organizations
LAW 968 Intellectual Property
LAW 896 Intellectual Property
LAW 896 Project for Innocence and Post-Conviction Remedies Class
LAW 878 Criminal Procedure
LAW 820. Lawyering Skills I. 2 Credits.
This course introduces students to legal systems and the skills of lawyers. It includes instruction and discussion on legal traditions, legal institutions and legal methods. It focuses on developing students' skills in legal reasoning, writing and research. Students will complete numerous research and writing assignments, culminating in an open memorandum. Required course.

First-Year Courses

LAW 804. Civil Procedure. 4 Credits.
This course will examine all phases of the litigation process in civil actions. Specific subjects covered may include: pleadings; discovery; disposition of cases without trial; the right to jury trial; post-trial motions; appeals; the bases for jurisdiction over persons and property; notice; venue; subject matter jurisdiction; choice of federal or state law in diversity cases; joinder of claims and parties; and preclusive effects of judgments. Required course.

LAW 809. Contracts. 2-4 Credits.
An introduction to contract law, including topics such as offer and acceptance, consideration, contracts enforceable without consideration, defenses to enforcement of contracts, terms of contracts and their interpretation, performance and breach of contracts, remedies for breach, third-party beneficiaries, and assignments. Required course.

LAW 814. Criminal Law. 2-4 Credits.
An introduction to substantive criminal law, including theories of punishment, basic stages of the criminal process, culpability, defenses, parties to crime, conspiracy, attempts, sentencing, homicide, and other selected offenses. Required course.

LAW 806. Introduction to Constitutional Law. 4 Credits.
An introduction to the law of the United States Constitution, including the historical context and evolution of constitutional principles, methods of constitutional interpretation and analysis, and basic doctrine concerning the structure of government and the protection of individual rights. Doctrinal coverage includes separation of powers, federalism, equal protection, due process, and freedom of religion. Required course.

LAW 820. Lawyering Skills I. 2 Credits.
This course introduces students to legal systems and the skills of lawyers. It includes instruction and discussion on legal traditions, legal institutions and legal methods. It focuses on developing students' skills in legal reasoning, writing and research. Students will complete numerous research and writing assignments, culminating in an open memorandum. Required course.

LAW 821. Lawyering Skills II. 3 Credits.
In this course, students build on the research and writing skills they developed in the first semester and practice additional skills such as client interviewing, negotiation and mediation. Students learn about the expectations and demands of lawyers and the legal profession through instruction on bar admission, professionalism, and ethical advocacy, and by working on assignments in a simulated lawsuit. Student work culminates in an advocacy brief and subsequent oral argument. Required course.

LAW 826. Property. 2-4 Credits.
An introduction to personal property law and to real property law, which includes adverse possession, estates in land, covenants, landlord-tenant law, easements, and real covenants, and which may include other private and public land use controls, eminent domain, and conveyancing. Required course.

LAW 831. Torts I. 2-4 Credits.

Upper-Level Courses

LAW 911. Accounting for Lawyers. 1-2 Credits.
An introduction to Accounting and Auditing for Lawyers. Coverage includes components of Generally accepted Accounting Principles related to assets, liabilities, equity, revenue and expenses; financial statements analysis; auditing standards; corporate governance; audit failure and
forensic accounting. Not open to students who have completed an accounting course while an undergraduate or graduate student.

**LAW 850. Administrative Law. 3 Credits.**
The separation and delegation of powers. The development of administrative function. Administrative discretion, notice, hearing, jurisdiction, conclusiveness of determination, and judicial control. Examination of current problems in various administrative processes.

**LAW 852. Advanced Criminal Procedure. 3 Credits.**
Detailed analysis of the formal criminal process from initial appearance through appeal. Emphasis on pretrial and trial proceedings.

**LAW 864. Advanced International Trade Law. 3-4 Credits.**
Examines and contemporary issues in international trade practice and policy. Among the practical topics covered in detail are: (1) antidumping and countervailing duties against dumping and unfair subsidies, respectively; (2) safeguard actions against fair foreign competition; (3) unilateral trade retaliation under Section 301 and the Sino-American Trade War; and (4) currency manipulation. Among the policy topics emphasized, from both "our" and "their" perspective, are: (1) trade relations with developing, least developed, and Muslim countries; (2) complex interactions among trade, human rights, labor rights, and the environment; and (3) efforts to protect local culture in an era of globalization. This course is designed not only for students intending to work in international trade law, but also for students interested in careers anywhere in the world in other fields of, or relating to, international law who seek an appreciation of the increasingly sophisticated connections among these fields and trade. Prerequisite: A basic course in International Trade law (e.g., suitable summer study program or work experience), concurrent registration in such a course, or permission of the instructor.

**LAW 833. Advanced Legal Aid Clinic. 1-3 Credits.**
Students who have completed a first semester in the Legal Aid Clinic are eligible to apply for enrollment in a second semester as an Advanced Legal Intern. Advanced Legal Interns will continue to represent clients in the Clinic's case work as they did during the first semester; however, they will only be required to commit 10.5-12 hours per week to Clinic work. They will be expected to exercise greater independence and professional role assumption and will mentor newer Clinic students in skills development. Advanced Legal Interns will continue to engage in reflective writing and supervision sessions with faculty; they also will meet as a group with professors for a classroom component featuring a seminar focused on case rounds and advanced litigation skills. Prerequisite: Legal Aid Clinic.

**LAW 856. Advanced Legal Research. 2 Credits.**
Spring semester. Evaluates important legal research tools and techniques not covered in the required first year Lawyering course. Provides an in-depth look at Kansas materials, legal reference books, form books, and computer-assisted research. Research aids in selected subject areas will also be examined.

**LAW 857. Advanced Litigation. 3 Credits.**
This professional skills course builds on the foundational trial skills taught in Trial Advocacy. Through repeated trial performance in a realistic courtroom setting, students will master trial skills such as case analysis and planning, applied legal storytelling, witness examination, and application of the rules of evidence. Special topics may include admitting contemporary forms of evidence and using technology in the courtroom. Prerequisite: Evidence and Trial Advocacy.

**LAW 844. Advanced Project for Innocence and Post Conviction Remedies. 1-3 Credits.**
Advanced Project for Innocence and Post Conviction Remedies: Students who have completed the Project for Innocence and Post Conviction Remedies may be selected to enroll in as Student Director. Student Directors are assigned to work with one of more incoming student teams to assist with case assignments. Depending upon the credit hours enrolled, Student Directors may be assigned as a team member to participate in substantive client work, and if 719 eligible, conduct hearings. In other cases the Student Director will serve in a more advisory capacity. Student Directors will conduct client intake and review. Student Directors will be required to commit to 42.4 hours of work per credit hour enrolled, and will continue to engage in reflective writing and supervision sessions with faculty. They will meet as a group with faculty for a seminar focused on intake and advanced issue spotting skills. Prerequisite: Project for Innocence and Post Conviction Remedies.

**LAW 890. Advanced S.J.D. Seminar. 1 Credits.**
This seminar is required of all second year S.J.D. students and may be audited by all S.J.D students beyond two years with permission of the instructor. During this seminar students will conduct research and writing of their S.J.D. dissertations. Students will be required to submit each chapter of their dissertations to a third year writing assistant and to the instructor for editing and revision as part of their seminar work. Edited and revised chapters will be presented to the seminar as a whole for critique and analysis. Second year S.J.D. students will be expected to submit at least one chapter of their dissertations during the second semester of their second year. Second year S.J.D. students who are not in residence will be excused from attending seminar meetings but will be required to engage in the editorial and revision process and to meet virtually with the instructor as needed. The seminar will meet for two hours bimonthly during the academic year.

**LAW 860. Alternative Dispute Resolution. 2-3 Credits.**
This course introduces the student to arbitration, mediation, negotiation, and other methods for resolving disputes. In addition to serving as alternatives to the court system, these processes also play an increasingly important role in litigation and settlement. This is a survey course, which may include exercises to develop skills such as interviewing, counseling, and negotiation.

**LAW 862. American Legal History. 2-3 Credits.**
An introductory survey of the history of American Law and American legal institutions.

**LAW 863. Antitrust Law. 3 Credits.**
Covers the Sherman Antitrust Act and related federal legislation designed to control the competitive practices and structure of American industries. Examines the law of monopolization, price fixing, group boycotts, vertical restraints such as tie-ins and distribution restrictions, and mergers. Some elementary principles of economic analysis are employed but economics is not a prerequisite.

**LAW 807. Appellate Advocacy. 2-3 Credits.**
This course teaches appellate writing and oral advocacy skills. Students will study leading brief-writing and oral-advocacy texts. Students will engage in numerous in-class exercises that advance their writing and presentation abilities. Students will argue two or more moot court cases, where they will be required to draft briefs and present oral arguments.

**LAW 978. Asylum and Refugee Law. 2 Credits.**
This course will cover the fundamental doctrines of asylum and refugee law. We will discuss the foundational principles, drawn from international agreements, and then examine their application in United States domestic law. The course will examine practice in immigration courts and policy questions, both recent and long-standing.

**LAW 889. Bankruptcy. 3 Credits.**
This survey of bankruptcy and debtor-creditor law covers topics such as: Chapters 7, 11, and 13 of the Bankruptcy Code and enforcement of
money judgments outside of bankruptcy. Prerequisite: Commercial Law: Secured Transactions and Business Organizations.

LAW 870. Biolaw. 2-3 Credits.
This course examines the law of biology and the biology of law. Topics covered will include law and evolution, law and genetics, law and neuroscience, law and ecology, climate change law, biodiversity law, law and biotechnology, reproductive law, behavioral law and economics, and law and deextinction.

LAW 892. Business Organizations. 3-4 Credits.
This introductory business law course covers topics including the law of agency, the formation, ownership, and management of partnerships, limited liability entities, and corporations, and the roles of federal law, state law, and contract in regulating the relationships among the various participants in a business venture, including fiduciary duties and enforcement mechanisms. Special attention will be paid to closely held business associations.

LAW 868. Business Planning Seminar. 3 Credits.
A problem approach to planning important business transactions, such as organization of a close corporation; organization of a public company; dividend and other corporate distributions; corporate liquidations; and corporate combinations such as merger and consolidation. Each problem is analyzed from the perspectives of tax, securities regulation, and corporate law. Prerequisite: Business Organizations, Federal Income Taxation, and Taxation of Business Enterprises.

LAW 871. Capital Punishment. 2-3 Credits.
This course will examine capital punishment as a system of law and will address many of the intertwining questions raised by the existence of the death penalty in America: How, as a statutory and procedural matter, is the death penalty implemented in America? What procedures are unique to the imposition of death as a punishment? Why are those procedures used, and to what extent are they either adequate or inadequate? What are the arguments for and against the death penalty and how persuasive are they? Do we, as lawyers and as individuals, accept capital punishment as a working legal system.

LAW 886. Civil Rights Actions. 2-3 Credits.
A survey of the law governing civil suits against government entities and officials to remedy violations of federal constitutional rights. The focus of the class is litigation under 42 U.S.C. section 1983, which creates a civil cause of action for damages and injunctive relief to remedy violations of federal constitutional rights. This area of law is sometimes referred to as “constitutional torts,” because it involves civil litigation that is in many ways similar to traditional tort actions. The course covers the elements of a Section 1983 action, the constitutional immunity of states and state officers, defenses to Section 1983 liability, defendants’ liability for attorneys fees under 42 U.S.C. section 1988, civil suits against federal defendants, and the relationship between Section 1983 and federal habeas corpus.

LAW 872. Commercial Arbitration. 3 Credits.
Addresses the law and practice of commercial arbitration, a rapidly growing form of alternative dispute resolution. Drafting arbitration agreements, the enforceability of arbitration agreements, selecting arbitrators, the arbitration hearing, and the enforceability of arbitration awards. Gives special emphasis to arbitration of international commercial disputes and the institutional rules under which such arbitrations proceed.

LAW 873. Commercial Law: Secured Transactions. 3 Credits.
Introduction to debtor-creditor law, particularly secured transactions under the Uniform Commercial Code and the Bankruptcy Code.

LAW 879. Comparative Law. 3 Credits.
A general introduction to and comparison of major legal systems of the world, with special emphasis given to how those systems reflect differing cultural values in addressing common legal questions. A major goal of the course is to deepen the students’ understanding of law and practice in the United States and to broaden their perspective of law beyond the boundaries of the common law systems. Prerequisite: Permission from instructor.

LAW 902. Complex Litigation (Non-Writing). 3 Credits.
Explores the many interesting facets of complex litigation in the context of mass torts. Topics include class actions, consolidation, multistate litigation, and complex joinder issues, as well as substantive issues that may arise in mass tort litigation.

LAW 881. Conflict of Laws. 2-3 Credits.
An analysis and consideration of problems respecting the law applicable in transactions or to relationships with elements in more than one state or country. The law to be applied in such situations, the theoretical bases of choice-of-law, and the issues which these matters can present under the Constitution of the United States are discussed. Far-reaching changes are occurring in basic assumptions and methods of approach in the field of choice-of-law, and special attention is given to these developments. Finally, the class considers the recognition and enforcement of foreign state judgments in terms of both standards and requirements that flow from relevant provisions of the Constitution.

LAW 882. Consumer Law. 2-3 Credits.
This course will examine federal and state law governing the formation, terms, and enforcement of consumer contracts. Topics covered will include deception and information in contract formation; regulation of consumer credit, goods, and services; creditors' collection tactics; and consumer remedies.

LAW 869. Contract Drafting. 3 Credits.
An intensive skills course designed to teach the principles of contemporary commercial drafting, including how to translate a business deal into contract concepts; draft each of a contract's parts; draft with clarity and without ambiguity; add value to a deal; work through the drafting process; and review and comment on a contract. Weekly written homework is required. Prerequisite: Business Organizations recommended but not required.

LAW 888. Copyright Law in a Digital Age. 3 Credits.
Explores the major copyright issues that arise as Congress and the courts attempt to adapt the law to an increasingly complex technological environment. We will examine problems posed by such categories of digital works as software, databases containing factual and other public domain content, multi-media materials, computer generated or assisted works, and digital music.

LAW 930. Corporate Finance. 2-3 Credits.
This advanced business law course examines the legal and financial aspects of corporate finance. Topics include the time value of money, valuation of stocks and bonds, the use of debt, equity, and derivative instruments in the firm's capital structure, dividends and distributions, and finance theories, including portfolio theory, the capital asset pricing model, and the efficient capital market hypothesis. Prerequisite or Corequisite: Business Organizations.

LAW 877. Corporate Governance. 2-3 Credits.
This course will engage major debates and key issues in corporate governance, the challenges for designing an optimal system for governing corporations, and the increasingly important role of lawyers in these decisions. Topics for study include the history of corporate governance; the role and responsibility of the board of directors in, among other matters, evaluating and insuring effective corporate compliance, risk
monitoring, litigation and crisis management; and corporate social
responsibility. Substantial comparative content will be included.
Prerequisite: Business Organizations.

**LAW 838. Criminal Practice in Kansas. 2-3 Credits.**
Designed for the student who plans to practice criminal law in Kansas.
Examines the Kansas criminal code and case law, explores practical
and ethical issues from the perspective of the prosecutor and defense
counsel, and develops practical skills in pre- and post-trial proceedings.
Includes filing of the complaint, bail, preliminary hearing, pretrial
proceedings, motions practice, plea negotiations, client counseling, trial
proceedings, jury instructions, post-trial motions, sentencing and appeals.

**LAW 878. Criminal Procedure. 3 Credits.**
An introduction to criminal procedure, including investigation and
police practices, pre-trial proceedings, trials, sentencing, and review
proceedings. Particular emphasis on the application of the exclusionary
rule to arrest, search and seizure, interrogation procedures, and
identification procedures.

**LAW 890. Criminal Prosecution Field Placement Program. 1-6
Credits.**
Students are assigned to the office of the United States Attorney for
Kansas or Kansas state district attorney offices as arranged by the
instructor. Students assist prosecutors in virtually all phases of the
criminal process, including criminal trials. A weekly seminar focusing
on issues confronting criminal prosecutors accompanies the field
work. Unless specifically authorized, students must be enrolled in both
semesters of the academic year for three credit hours per semester.
Prerequisite: Evidence and qualification under Kansas Rule 719. See
Clinic and Externship Rules in the Academic Regulations section of this
bulletin. Prerequisite or corequisite: Trial Advocacy.

**LAW 828. Deals. 2-4 Credits.**
This simulation and professional writing course will serve as an optional
lab component for students who are concurrently enrolled in LAW 947
Mergers and Acquisitions, or have previously completed it. This course
introduces students to the ethical, structural and technical aspects of
negotiating and drafting the documents that bring a business transaction
to life. By following a complex business transaction from start to finish,
students will gain experience grappling with the type of tasks and issues
common to a deals practice in a way that bridges the gap between law
school and practice. The course will also help students prioritize their
clients' business objectives and understand how deal lawyers create
value, manage risk, and work toward optimal outcomes for their clients.
The course will be co-taught by law school faculty and experienced
transactional attorneys. Prerequisite: Contract Drafting and either

**LAW 859. Deposition Skills Workshop. 2 Credits.**
This professional skills course will expose students to substantive and
procedural law, as well as the ethical rules, pertaining to depositions. It
provides students a realistic deposition setting in which they will learn to
conduct and defend a series of depositions in a simulated environment
under the direction of experienced attorneys who serve as the workshop faculty.
Prerequisite: Evidence.

**LAW 835. Due Diligence in Business Transactions. 2 Credits.**
This simulation course will expose students to the due diligence process
that is critical to every business transaction. It offers students a realistic
due diligence setting, in which they will: learn the fundamental scope
and goals of the process, including the various types of information that
must be obtained and reviewed; identify the typical issues that must be
analyzed; practice using a framework for systematically accumulating
information; and understand how that information may affect the structure
of the transaction and the content of the agreement that memorializes it.
Taught by law school faculty and experienced transactional attorneys.
Prerequisite: Contract Drafting and Business Organizations. Corequisite:
Mergers and Acquisitions.

**LAW 901. Elder Law Field Placement Program. 2-6 Credits.**
Involves students in representation of elderly individuals primarily in
consumer, housing, and public benefits litigation. Students work under the
supervision of attorneys from Kansas Legal Services and faculty from the
School of Law. A one-hour classroom component accompanies the field-
work requirement.

**LAW 891. Elections and Campaign Finance. 3 Credits.**
This course will consider the process of elections, campaign finance,
and voting at both the state and federal levels. Topics addressed will
include the role of political parties, voter and candidate eligibility, design of
electoral districts, the mechanics of voting and vote counting, federal and
state campaign regulation, and challenges to election results.

**LAW 899. Electronic Discovery I. 2 Credits.**
This course will explore developing trends in the increasingly prevalent
field of electronically stored information ("ESI") in litigation. Students
will learn about the various types of ESI and gain an understanding of
how the federal rules impact ESI issues. The curriculum will include
discussions of recent cases, the amended federal rules of civil procedure,
and the best practices in litigating recurring e-discovery issues. The
course follows the natural progression of a case, providing students the
opportunity navigate e-discovery matters at each step in the litigation
process, including: records retention policies, litigation holds, discovery
requests, search methods, production and metadata, spoliation sanctions,
and ultimate admission of ESI evidence at trial. No advanced computer
skills are required for this class.

**LAW 903. Employment Discrimination Law. 3 Credits.**
A study of the major federal statutes prohibiting discrimination
in employment and of constitutional objections to employment
discrimination.

**LAW 925. Employment Law. 2-3 Credits.**
A study of state and federal regulation of the employer-employee
relationship, as distinguished from the regulation of collective bargaining
between management and unions. Coverage will include the Occupational
Safety and Health Act, the Fair Labor Standards Act, the Employee
Retirement Income Security Act, Unemployment compensation, and
employment-at-will.

**LAW 963. Energy Law and Policy. 3 Credits.**
This course provides an introduction to the US energy sector in its legal
and regulatory context. Energy law is an interdisciplinary field linking
public utility law, natural resources law, land use law, and environmental
law. From wind and solar to natural gas, energy law structures the
production, processing, delivery, and consumption of energy resources
for electricity and transportation fuel. The overarching focus of this course
is the dynamic state of energy law and policy today, with an emphasis on
current events and emerging issues for the field.

**LAW 904. Environmental Law Seminar. 2-3 Credits.**
An intensive study of one or more aspects of environmental law, such as
wildlife law, energy policy, marine pollution controls, and so forth. May be
repeated for credit, provided there is not duplication of subject matter.

**LAW 905. Environmental Law. 3 Credits.**
A general survey of the legal mechanisms for protecting the environment.
It considers the justifications for and economic implications of regulating
activities with potential adverse effects on the environment and the
various sources of legal constraints (common law, constitutional, and
statutory) on those activities. The course provides an introduction to
environmental litigation, to environmental assessment under the National
Environmental Policy Act, to endangered species protection, and to the various forms of legislative and administrative controls on and inducements to avoid polluting activities reflected in statutes such as the Clean Air Act, the Clean Water Act, and the statutes designed to control contamination of land by hazardous substances.

**LAW 907. Estate Planning: Practice.** 2-3 Credits.

The course replicates the estate planning process, providing experience in gathering facts, analyzing alternatives, and implementing a plan through preparation of wills, trusts, and other documents. Extensive drafting of documents is required. Prerequisite: Estate Planning: Principles.

**LAW 906. Estate Planning: Principles.** 2-3 Credits.

A study of legal principles relating to transmission of property by gift or at death and the vehicles available for these purposes. Primary emphasis is on estate and gift taxation and income taxation of estates and trusts. Prerequisite: Federal Income Taxation and Trusts and Estates.

**LAW 908. Evidence.** 3 Credits.

Functions of the court and jury; burden of proof; presumptions; judicial notice; competency of witnesses; examination of witnesses; hearsay rule, with exceptions; opinion evidence; direct examination and circumstantial evidence; "best evidence" rule; standards of relevancy.

**LAW 943. Extended Bar Exam Preparation.** 2-4 Credits.

The course is designed to ensure students know what to expect from both the post-graduation Themis bar review course and the bar exam itself. It will include both weekly in-class sessions and online homework assignments. The course will begin with a diagnostic exam. Next, the course will address the analytical, information-retrieval, and reading-comprehension skills necessary for success on Multistate Performance Test (MPT). The course will then cover several subtopics which are heavily tested on the Multistate Bar Exam (MBE) and the Multistate Essay Exam (MEE). Students will learn skills necessary for writing a successful MEE essay. Specifically, students will practice careful reading, outlining, time management, and drafting by completing a variety of MEE exercises. The course will also include a sampling of MBE questions, with instruction on how to analyze both correct and incorrect answers for maximum learning. Students will complete both practice and graded MEE and MPT exercises. Students will receive feedback from both the instructor andThemis personnel. The course exists to supplement, not replace, the post-graduation bar review course. Enrollment will be limited to students entering their final year of law school (and 2Ls planning to graduate in December). The course will be graded on a credit/no credit basis.

**LAW 909. Family Law.** 2-3 Credits.

Introduction to marriage and the family as the basic social unit in Western society. Topics include marriage, divorce, annulment, separate maintenance, alimony, child custody and support, antenuptial and post-nuptial agreements, adoption, legitimacy, and minority. Practice points include financial planning, tax considerations, and the attorney's responsibility.

**LAW 910. Federal Courts and the Federal System.** 3 Credits.

This course addresses the role of the federal courts in our constitutional federal system. Topics covered include justiciability, Congressional power over the jurisdiction of the courts, federal common law, abstention doctrines, Supreme Court review of state court decisions, and the role of the state courts in enforcing federal law. Prerequisite: Jurisdiction or permission of the instructor.

**LAW 913. Federal Income Taxation.** 3 Credits.

A survey of the federal income tax system, with special emphasis on the tax laws generally applicable to all taxpayers. Topics include income determination, deductions, credits, planning, and procedure. Historical development and policy issues are addressed throughout the course.

**LAW 914. Federal Indian Law.** 3 Credits.

Addresses the law and policy of the United States regarding Indian nations and their members. Issues include the origins and contours of federal plenary power over Indian affairs, the scope of inherent tribal sovereignty, the limits of state power in Indian country, civil and criminal jurisdiction, and gaming. (Same as ISP 824.)

**LAW 932. Federal Tax Procedure.** 1-2 Credits.

Federal Tax Procedure covers the chronology of tax disputes, from examination by the IRS to final disposition of the case by settlement or court decision. Topics covered include the IRS's procedure for return administration, the administrative appeals process, statutes of limitation on assessment, choice of forum, Tax Court jurisdiction, overpayment and refund procedures. Prerequisite: Federal Income Tax.

**LAW 876. Feminist Jurisprudence.** 2-3 Credits.

This seminar examines the role of law in perpetuating and remedying inequities against women. After studying the historical emergence of sexual equality law in the United States, we discuss several paradigmatic feminist legal theories, including formal equality, MacKinnon's "dominance" theory, relational/cultural feminism, intersectionality and queer theory. We then proceed to apply these analytical structures to various substantive areas of law of particular concern to women, including but not limited to pregnancy, sexual assault, domestic violence, and employment discrimination.

**LAW 894. Field Placement Program.** 1-6 Credits.

Allows students to earn academic credit for performing legal work under the supervision of a practicing attorney at approved governmental agencies, non-profit legal services organizations, and non-profit international organizations. Students will work a specified number of hours per week, complete a goals memo, maintain weekly journals of their experience, and write a reflective paper. Students may enroll for more than one semester with permission of the Director, provided that no student may count more than 6 hours of Field Placement Program credit toward the credit required for graduation. No student may enroll in the Field Placement Program in a placement in which the student was formerly an employee, is currently an employee, or has an offer of employment. No student may enroll in Field Placement Program in a field placement for which there is an existing specialized Law School clinic or externship program without the prior permission of both the director of the affected specialized Law School clinic or externship program and the director of the Field Placement Program. Graded on a credit/no credit basis.

**LAW 959. First Amendment Advocacy.** 3 Credits.

First Amendment Advocacy is an opportunity for students to develop and apply the kinds of skills and knowledge possessed by First Amendment advocates, particularly media lawyers. Students plan and practice how to advise and represent hypothetical clients who are concerned with expressive freedom and the free flow of news and information. In class, students perform as advocates, negotiators, and evaluators of liability risks. Students also perform in the role of lawyer as citizen by planning and practicing how to advance general understanding of the First Amendment. Assignments include research and analysis of media-related law, regulation and public policy. Written work is completed in the form of documents commonly used in practice.

**LAW 824. Global Challenges in Law, Agriculture, Development, and Ecology.** 2-3 Credits.

This course aims to complement the more foundational courses in public international law, international business law, and comparative law by examining a cluster of particularly important "global challenges." These
involve (i) the rule (and role) of law in international relations, (ii) the economic, environmental, and social aspects of modern agriculture, (iii) the quest and prospects for human development, and (iv) the existential threats posed to the ecosphere through climate change, soil degradation, water conflicts, and species extinctions. The course provides also a "paper option": students enrolling in a third credit hour through Independent Research (LAW 924) can, upon satisfactory completion of a research project related to the subject-matter of this course, satisfy the upper-class scholarly-writing requirement.

LAW 951. Global Data Protection Law. 2-3 Credits.
This highly-interactive course explores the rapidly evolving legal field of data protection and privacy. Personal data is used today in multiple ways by a variety of data collectors (from governments to marketers to cybercriminals), and global perspectives differ on what constitutes "personal data" that is worthy of legal protection. The course covers global privacy principles, concepts and models; critical information security concepts; and a wide breadth of data protection and privacy laws. The course also addresses rapidly evolving technologies driving changes in global data protection and privacy laws, and how to manage compliance with such ever-evolving laws.

LAW 920. Health Law and Policy. 2-3 Credits.
A survey of significant legal and policy issues, both historical and current, associated with the delivery of health care. Among these issues are the patient-provider relationship, medical malpractice, the right to die, hospital licensing and physician credentialing, medical staff structure, insurance coverage disputes, and current ideas for health care reform.

LAW 847. Healthcare Regulation. 2 Credits.
This course examines in depth the key areas of state and federal regulation of health care providers, practitioners, and systems in the United States. It will also explore the application of the regulatory regime to a variety of provider affiliation structures that are commonplace in today's health sector. The students will examine applicable statutes, implementing regulations, sub-regulatory agency guidance, and case law as the bases for regulation. Students will come away with a solid foundation in health care regulatory requirements. While LAW 920 is helpful, it is not a prerequisite for this course.

LAW 922. Higher Education and the Law Seminar. 3 Credits.
A seminar focused on the unique legal issues facing colleges and universities. The over 4000 institutions of higher education in the United States require legal services, especially as law schools fight suits alleging they misrepresented job prospects to students and the Supreme Court rules on landmark affirmative action cases such as Fisher v. University of Texas (now returning to the Court after remand). The course will explore academic freedom, tenure, and student rights and discipline, issues that distinguish institutions of higher education from other corporate entities. Consideration will be given to distinctions between public and private institutions. Grades will be based on three memoranda that students will research and write, and on class participation.

LAW 923. Immigration Law. 2-3 Credits.
Topics such as standards for the admission of immigrants; nonimmigrant visas for students, workers, and tourists; the regulation and exclusion of undocumented aliens; legal procedures for admission, exclusion, and deportation; refugee law; and citizenship law.

LAW 924. Independent Research. 1-2 Credits.
Students may undertake a project which involves investigation, research, and scholarship in a particular area of the law. The research must be done under the supervision of a faculty member and must culminate in the writing of a research paper in publishable form. Students must complete and submit for faculty feedback at least two drafts or one draft and one outline in addition to the final research paper. The faculty supervisor must provide meaningful feedback to the student on the outline and draft(s). The final product of the independent research must be submitted at a date set by the faculty supervisor which is no later than the last day of classes of the semester. A student may not earn academic credit unless (1) in the case of a regular semester, that student is enrolled in at least 3 additional credit hours during the same semester, or (2) in the case of summer school, that student is enrolled in at least 2 additional credit hours in either five-week summer session. Students must successfully complete 10-15 double spaced, typed pages of work for every credit hour earned. No student may enroll for more than 2 hours of independent research in one semester, and no student may count more than 6 hours of independent research credit toward the credit required for graduation. However, a student may receive a maximum of 2 hours credit for independent research in either of the summer school sessions if that student is otherwise enrolled in 7 additional hours. Prerequisite: Forty hours of law school credit and an overall average of at least 2.0 at the time of enrolling.

LAW 968. Intellectual Property. 3-4 Credits.
An introduction to substantive patent law, copyright law, and trademark registration designed (1) to provide background knowledge for those interested primarily in the general law practice and (2) to provide a foundation for future specialization in patents, copyrights, and trademarks.

LAW 829. International Business Law Drafting. 1 Credits.
This one-credit-hour course focuses primarily on the preparation of operational documents relating to international business transactions - for example, transnational sales contracts, letters of credit, explanatory memoranda to business clients planning cross-border transactions, international joint venture agreements, etc. - rather than on the drafting of documents that are litigation-oriented or academic in character. The course is available to students who are (or have) enrolled in the International Commerce and Investment course and who wish to engage in an intense set of "companion" legal-drafting exercises. Prerequisite: LAW 945.

LAW 945. International Commerce and Investment. 3 Credits.
Examines the transactional aspects of the sale of goods and direct investment across national borders. The focus is on private international business transactions. Among the subjects covered regarding international commerce (sale of goods) are contract drafting, documentary sales, commercial terms, electronic commerce, agency and distributorship, and contract performance. Among the subjects covered regarding international investment are joint ventures, corporate codes of conduct, corrupt practices, transfer pricing, expropriation, and dispute resolution. This course complements (but is independent of) International Trade Regulation.

LAW 929. International Law Moot Court Competition. 2 Credits.
Spring semester. Open only to the team of students (usually five) selected by a competition held in the preceding fall semester. All students (including first-year students) are eligible to compete for a position on the team. Once selected, the team participates in the Jessup International Law Moot Court Competition, for which briefs are prepared over the winter recess and oral arguments are usually held in February. Graded on a credit/no credit basis.

LAW 827. International Law and Literature. 3 Credits.
This course covers both law "as" literature and law "in" literature, plus legal rhetoric. In Part One, treaties are studied as a form of literature using legal rhetoric. In Part Two, classic works of fiction and poetry, such as those by William Shakespeare (England), Albert Camus (France), E.M. Forster (England), Seamus Heaney (Ireland), Franz Kafka (Czechoslovakia), and Rabindranath Tagore (India), are read closely
to spot enduring legal themes common across all countries, including justice and morality, obedience and rebellion, wealth and poverty, and fairness and prejudice. In Part Three, renowned historical speeches are analyzed to see how they manifest Aristotle's five principles of Rhetoric, with illustrations from Winston Churchill (England), John F. Kennedy (United States), and Martin Luther King (United States).

**LAW 944. International Trade Law. 3 Credits.**
Examines the legal, regulatory, and policy aspects of the sale of goods across national borders. Key topics include: (1) interdisciplinary foundations of international trade; (2) history and institutions of the GATT-WTO system; (3) accession to the WTO; (4) dispute settlement under WTO rules; (5) regulation of import duties and non-tariff barriers; (6) transparency; (7) rules on customs classification and valuation; (8) post-9/11 border security measures; (9) the critical link between trade and national security (and Section 232 actions); (10) trade sanctions and export controls (including with respect to Iran); (11) protection of intellectual property rights against infringement; (12) trade in agriculture (including sanitary and phytosanitary issues); (13) trade in services; and (14) ideological and policy issues relating to trade liberalization and globalization. This course compliments (but is independent of) International Commerce and Investment and is the basis for more advanced study of international trade law.

**LAW 931. Introduction to Elder Law. 2 Credits.**
This course is an introduction to many of the legal issues that face a person who is elderly or has a disability, and focuses on the practical aspects of advising such a client. Topics covered are income (including Social Security and SSI), asset management (including Durable Powers of Attorney and living trusts), estate planning, special needs trusts, health care planning and decision making, Medicare, long-term care planning, long-term insurance, Medicaid, housing issues, guardianship, elder abuse, and end of life issues.

**LAW 946. Introduction to the American Legal System. 1-2 Credits.**
This course introduces international students to the common law system and to U.S. legal institutions, including federal and state courts, and the executive and legislative branches of government. Their constitutional position and the role of constitutional law in the U.S. system is emphasized. The course introduces both civil and criminal procedure and gives students practice in legal analysis using both caselaw and statutory sources. Credit for this course cannot be applied toward the J.D. degree.

**LAW 918. Islamic Law. 2-4 Credits.**
Examines the history, doctrine, texts, and role of Islamic law (Shari’a) throughout the world. This course complements (but is independent of) LAW 879. The course focuses on the background and birth of the Arab-Islamic Empire, the life and times of the Prophet Muhammad (PBUH), the development of Islam, the Rashidun, Umayyad, and Abbasid Caliphas, Moghul and Ottoman Empires, the Koran and Sunnah and other sacred texts, the Sunni-Shi’a split, the principal schools of Islamic law, the status of women and religious minorities, and principles of the substantive areas of law, including criminal, family, inheritance, contract, property, business, banking, and international law (including law of war). Also covered are issues of economic growth, marginalization, and terrorism. (Same as GIST 818.)

**LAW 933. Judicial Field Placement Program. 3 Credits.**
Students serve as law clerks for state and federal judges performing legal research for the judges and observing proceedings in the courtroom and chambers. There is a classroom component to the clinic. Students also submit weekly journals to the clinic director and prepare either a paper based on their experiences or make a class presentation. Students must enroll for the academic year, for three credits per semester.

**LAW 845. Jurisdiction. 2-4 Credits.**
This course deals with issues relating to a court's power to adjudicate claims. Topics covered may include jurisdiction over persons or property, subject matter jurisdiction, venue, determining the applicable law, joinder of parties, and recognition and enforcement of judgments. Prerequisite: Civil Procedure. Not open to students who have had the School's two-semester, six-hour course or its equivalent.

**LAW 934. Jurisprudence. 2-3 Credits.**
Considers issues in legal and political theory or philosophy. The focus is on theories of adjudication, theories of law, and application of these theories to particular cases and problems. Other topics may be added, such as the philosophy of criminal punishment, the theory of legal interpretation, feminist jurisprudence, law and literature, or law and sociology. A writing project is required in place of a final examination.

**LAW 935. Juvenile Law. 2 Credits.**
A study of the juvenile justice system, juvenile courts, and the children and youth who come under juvenile court jurisdiction. Among the subjects covered will be: the history and philosophical basis of the juvenile court, child abuse and neglect, termination of parental rights, status offenders, children who commit criminal offenses, taking children and juveniles into custody, search and seizure, interrogation, intake, informal supervision, diversion, protective and temporary custody, pretrial detention, waiver of adult court, and adjudicatory and dispositional hearings.

**LAW 940. Kansas Journal of Law and Public Policy I. 1 Credits.**
The Kansas Journal of Law and Public Policy publishes articles by scholars, public officials, and others, including student staff members, on public policy topics. The staff of the Journal is chosen on the basis of a yearly writing competition. First year members of the Journal undertake editorial work and write comments for possible publication. Journal members may not enroll concurrently in the Kansas Law Review.

**LAW 937. Kansas Journal of Law and Public Policy II. 2 Credits.**
The Kansas Journal of Law and Public Policy publishes articles by scholars, public officials, and others, including student staff members, on public policy topics. The staff of the Journal is chosen on the basis of a yearly writing competition. Second year members of the Journal select articles for publication, edit the articles, and undertake the other responsibilities of publication. Journal members may not enroll concurrently in the Kansas Law Review.

**LAW 840. Kansas Supreme Court Research Practice. 3 Credits.**
This practicum serves the dual goals of providing students with practical research experience and assisting the Kansas Supreme Court by providing needed research support. Students are assigned research projects from the Kansas Supreme Court and the Office of Judicial Administration as arranged by the instructors. Students employ a variety of methodologies to conduct thorough research and concisely convey their findings to the Kansas Supreme Court, culminating with a presentation to the court at the end of the semester.

**LAW 939. Labor Law. 3-5 Credits.**
A study of the federal regulation of union-employer-employee relationships in the private sector. Subjects include employee organizational rights, union collective action, injunctions, federal preemption, the duty to bargain, antitrust limitations, the enforcement of the collective bargaining agreement, grievance procedures and arbitration, the union's duty of fair representation, and internal union affairs.

**LAW 950. Law Review. 1-2 Credits.**
The Kansas Law Review publishes scholarly commentary on the law by professors, practicing lawyers, judges, and law students. Students are selected for membership by competition, and are responsible for publishing five issues of the Review each year. Students select articles for publication, edit the articles, check citations, and write notes and comments for possible publication. Students must enroll for the academic year, for one-two credits per semester. Students enrolled in this course will not be permitted to enroll in the Kansas Journal of Law and Public Policy. Graded on a credit/no credit basis.

**LAW 952. Legal Aid Clinic.** 2.5-6 Credits.

Students provide legal assistance, including direct client representation, to indigent child and adult clients with active cases in Douglas County District Court and Lawrence Municipal Court. Recent areas of representation have included juvenile criminal defense, misdemeanor municipal defense, family law, protection from abuse, landlord-tenant, and other civil cases. A weekly seminar meeting accompanies the field work and allows students and instructors to study the methodologies underlying lawyering tasks in context, thereby merging theory with practice. Supervision meetings with faculty are designed to encourage creative case planning, practice management, and individual professional development through feedback and critique. Students are required to be qualified under Kansas Rule 719, which requires a minimum of 59 hours of course work or 44 hours if enrolled in an in-house faculty supervised clinic. Students must apply to the clinic and be accepted before enrolling. Applications and deadlines are available in Room 105. Prerequisite: Trial Advocacy and Professional Responsibility; Qualification under Kansas Rule 719. See Clinic and Externship Rules in the Academic Regulations section of this bulletin.

**LAW 803. Legal Analytics.** 2-3 Credits.

Legal analytics is the systematic computational analysis of legal data or statistics. This class teaches students how to use mathematical, statistical, and data analytical approaches to analyzing sources of law such as judicial decisions, briefs, motions, statutes, rules and regulations, legal commentary (e.g., law review articles, treatises), and the vast amounts of data generated by legal institutions (e.g., HHS, USPTO, IRS, SEC, EPA, USDA, FBI). Students will learn how to identify sources of legal data, assemble legal data into usable forms (e.g., database), clean and measure legal data, analyze legal data (e.g., using statistical tests, crowd-sourcing, artificial intelligence, network analysis), interpret results of legal data analysis, and present results of legal data analysis to different audiences (e.g., judges, attorneys, regulators, investors, politicians, the public). The class will include problem sets designed to ensure student mastery of all methods covered. In addition, students will learn how to use powerful legal analytics software tools - access to which will be provided free by commercial vendors for student use - capable of discovering, analyzing, interpreting, communicating, and visualizing legal data. Upon completion of this class, students will possess experience and expertise in all major legal analytics methods.

**LAW 955. Legislative Simulation and Study.** 3 Credits.

This simulation class is designed to give students an in-depth working understanding of our multilayered lawmaking process that will be useful in a legislative practice or when researching legislative history in any type of law practice. In this class, students will fill the roles of legislators in a fictional senate. They will draft legislation, give speeches, form strategies, and negotiate with others. Additionally, they will gain hands-on experience working in the Kansas Legislature. By the end of this class, students will be able to guide a bill through the lawmaking process, assist clients and others in solving problems using the legislative process, and consider lawmaking a viable option for you to assist clients or to solve societal ills.

**LAW 954. Legislation and Statutory Interpretation.** 2-3 Credits.

This course examines the legislative process, the relationship between the common law and statutes, and statutory interpretation. It focuses primarily on the theoretical and practical aspects of statutory interpretation, including overall theories of interpretation, the canons of statutory interpretation, and the use of legislative history. Because statutory interpretation is a skill needed by all attorneys, the course is designed to be of interest to any student.

**LAW 982. Lesbian, Gay, Bisexual, Transgender and Questioning (LGBTQ) Seminar.** 2-3 Credits.

This course will explore the emergence of the LGBTQ civil rights movement and will cover numerous legal topics at the intersection of law and practice involving issues significant to LGBTQ clients. Among others, topics will include: marriage, divorce, employment discrimination, family creation, healthcare and tax consequences. Students will be asked to prepare legal documents and will complete a major drafting project. The course seeks to provide students with skills and knowledge to meet the needs of this unique client base.

**LAW 956. Local Government Law.** 2-3 Credits.

The structure, functions, and jurisdictions of local governmental units; intergovernmental arrangements and relationships, financing and staffing local government; tort liability of local governments.

**LAW 953. Marginalized Bodies in Literature, Medicine and the Law.** 2-3 Credits.

In this course, we will use literature from several different time periods and sociocultural groups to interrogate how and why diseases might disproportionately impact the lives of those who live on the “margins” of U.S. society: people of color, immigrants, the poor, working-class folks, members of LGBTQ+ communities. Writing by authors from a range of genres-science fiction, the history of medicine, memoir, poetry, the personal essay, and the law - will be analyzed from interdisciplinary perspectives to see how each piece speaks to themes and concerns of health and healthcare, such as varying definitions of “medicine” and “illness,” best (and worst) practices for physicians and other healthcare workers, possible tensions between spirituality and science, how disparities like employment opportunities, educational access, housing standards, geographical region, cultural and linguistic bias, and sexism (among others) can affect access to adequate care - both physical and mental. Historical legal principles are still at work in the present, and so all of these data points relate to how we understand the impacts of law and policy on the well-being of marginalized populations.

**LAW 805. Mass Incarceration.** 2-3 Credits.

Approximately 2.2 million adults are incarcerated the United States. More are on some type of penal supervision. This population is the largest penal population in the world. The National Academy of Science has concluded that “[t]he growth in incarceration rates in the United States over the past 40 years is historically unprecedented and internationally unique. This seminar will explore how the United States got here, what the consequences of mass incarceration are, and how should we respond to and remedy this "historically unprecedented" level of incarceration.

**LAW 958. Media and the First Amendment.** 3 Credits.

The study of the First Amendment freedoms of speech and press. The focus is on both traditional media, such as newspapers and broadcast radio and television, and digital media, including blogs, that rely on the Internet to distribute news, opinion, entertainment, and advertising.

**LAW 801. Mediation Skills Workshop.** 2 Credits.

The Mediation Skills Workshop is an intensive, two-week skills training experiential course. This workshop will introduce students to core skills in mediation practice, mediation techniques, and mediation ethics while engaging students in discrete skills exercises and simulated role plays. This workshop has several goals: 1) to give students the skills
to be effective mediators; 2) to give students a theoretical and practical foundation to be good advocates for their clients in mediation; 3) to give students adequate practice to hone their mediation skills; 4) to help students see the benefits and limitations of mediation and other dispute resolution techniques so that they can responsibly counsel clients about their choices; and, 5) to help students understand the difference between the professional standards of practice and ethics for attorneys and mediators. Students taking the Mediation Skills Workshop will receive two (2) ungraded credits. First priority for enrollment is given to students accepted into the Mediation Clinic. Additional students may enroll with special permission of the professor based on available space.

**LAW 947. Mergers and Acquisitions. 2-3 Credits.**
An examination of the substantive law of corporate mergers and acquisitions. Coverage includes structure of the transaction; the buyer’s due diligence process; hostile takeover defenses and the responsibilities of the target’s board; state takeover legislation and issues of federal preemption; friendly acquisitions and the seller board’s duties; conflicts between majority and minority shareholders; and federal regulation of tender offers via the Williams Act. Prerequisite: Business Organizations.

**LAW 949. Mock Trial Competition. 1 Credits.**
This course covers the skills necessary to compete in Mock Trial Competitions. Members of the class will learn to analyze a case file, present pre-trial motions, opening statements, and closing arguments, conduct direct and cross-examinations, and introduce evidence. Students from this class will be competitively selected to compete in national mock trial competitions. Graded on a Credit/No Credit basis.

**LAW 962. Mock Trial Council. 1-3 Credits.**
The Mock Trial Council consists of third-year students who successfully completed Mock Trial Competition in their second year. These students help administer the selection process for the mock trial competition under the supervision of a faculty member responsible for the mock trial competitions and course. The council also assists in identifying competitions and with tasks associated with participation in regional and national mock trial competitions and with preparing our competition teams to compete. Graded on a Credit/No Credit basis. Prerequisite: LAW 949.

**LAW 960. Moot Court Competition. 1 Credits.**
Spring semester. A traditional moot court competition based upon an appeal to the United States Supreme Court with written briefs and oral argument rounds. The competition is conducted as a tournament, with elimination rounds and seeding of teams of pairings after the preliminary rounds. Students compete as two-person teams with two teams advancing to the final round. The competition is limited to second-year students and is usually completed by Mid-April. Graded on a credit/no credit basis. Prerequisite: Second-year status.

**LAW 961. Moot Court Council. 1 Credits.**
Spring semester. The Moot Court Council consists of third-year students who represent KU in various national and international moot court competitions. All students are selected through the Shook Hardy & Bacon Advocates program or through the KU spring in-house Moot Court Competition (LAW 960). The council administers the KU spring in-house moot court competition under the supervision of the faculty member responsible for the course. The council also assists with tasks associated with participation in the various national and international competitions as assigned by the faculty member responsible for the course. Graded on a credit/no credit basis.

**LAW 964. National/International Moot Court Competitions: 1-2 Credits.**
Students compete in various national and international moot court competitions (except the Jessup International Moot Court Competition, LAW 929.) All students are selected through the Shook Hardy & Bacon Advocates program or through the KU spring in-house Moot Court Competition (LAW 960.) Teams will write a brief and participate in practice oral arguments as required by the faculty member responsible for their particular competition, including at least three arguments judged by law faculty, practicing lawyers, or judges. Students travel to regional, national, and international competitions as applicable. Competitions include: Bankruptcy Law Moot Court, Criminal Law Moot Court, Criminal Procedure Moot Court, European Law Students Association International Trade Moot Court, Environmental Law Moot Court, First Amendment Moot Court, National Moot Court, and Stetson International Environmental Moot Court and Health Law Moot Court. Students also must enroll in the Moot Court Council, LAW 961. Graded on a credit/no credit basis.

**LAW 965. Nonprofit and Tax-Exempt Organizations. 1-2 Credits.**
Focuses on the legal issues affecting nonprofit and tax-exempt organizations, with primary emphasis on state nonprofit corporation codes and the Internal Revenue Code. Issues covered include allocation of governance responsibility between members and directors, the role of states attorneys general, charitable trust law, obtaining and maintaining tax exemption, private inurement and private benefit, intermediate sanctions, reporting and disclosure requirements, and consequences of unrelated business income. Prerequisite: Business Organizations and Federal Income Taxation.

**LAW 966. Oil and Gas. 2-3 Credits.**
The oil and gas lease; expressed and implied duties under a lease; the effect of various conditions of ownership on oil and gas transactions; oil and gas conveyances; unitization and pooling; conservation of oil and gas.

**LAW 977. Patent Law. 3-4 Credits.**
This class explores the doctrine, policy and practice of patent law in the United States. It examines the challenges posed to patent law by new technologies, such as biotechnology, pharmaceuticals, the Internet and nanotechnology. Patent law systems in other countries and the role of international patent treaties are also considered. Prerequisite: Intellectual Property Law.

**LAW 979. Patent Practice. 3 Credits.**
This course focuses on the practical application of patent law principles to the practice of patent law, including: assessing patentability, preparing and prosecuting patent applications, and analyzing infringement concepts. Students will examine patent statutes and United States Patent and Trademark rules and guidelines governing patent prosecution, as well as court decisions impacting and interpreting patents. The course will involve in-class and take-home assignments and workshops designed to expose students to situations encountered in actual patent practice, including the preparation of fan opinion of patentability, office action response, and drafting claims. Prior course in Intellectual Property or Patent Law strongly encouraged.

**LAW 973. Practice of Privacy Law. 3 Credits.**
The importance of privacy protection in both the private and public sector continues to grow. The Practice of Privacy Law will focus on the day to day activities of privacy law professionals including risk analyses. In this course, students will be introduced to the implementation of the laws, policies, procedures and day to day practice situated in a variety of privacy contexts. Additionally, through simulations/practice exercises and discussions with privacy law practitioners students will gain a deeper appreciation of privacy law as a practice area.

**LAW 970. Pretrial Advocacy. 3 Credits.**
This skills course is designed to teach the fundamentals of pretrial practice from the client’s first visit to the day before trial begins. Students will learn to interview and counsel clients, consider alternatives to
litigation, draft pleadings, conduct and respond to discovery, and negotiate and draft settlement documents.

**LAW 885. Privacy Law. 3 Credits.**
This course tracks the origins and development of privacy in American law through the examination and analyses of constitutional law, tort law, and some statutory law. We will consider the social impact of emerging technology and social media.

**LAW 971. Product Liability. 2-3 Credits.**
Intensive study of legal developments and problems relating to compensation for injuries resulting from defective products.

**LAW 972. Professional Responsibility. 2-3 Credits.**
Fall and spring semesters. Must be completed by the time the student finishes 60 hours of law school. Considers some of the history of the profession, training for the practice, the lawyer in the office, the lawyer and the public, the lawyer as lawmaker, limitations on personal conduct, the lawyer as judge, the canons of professional ethics, and many other incidents to the practice. Required course.

**LAW 895. Project for Innocence and Post-Conviction Remedies. 3 Credits.**
Provide assistance to the inmates incarcerated at the federal and state facilities in Kansas. Representation includes direct appeals, post-conviction and DNA litigation. Students interview clients, conduct fact investigation, determine the scope of representation and write court briefs. Students who satisfy Kansas Supreme Court Rule 719 may participate in court hearings. Students must enroll for the academic year, for 3 credits per semester. Concurrent enrollment in LAW 896 is required. Prerequisite: Corequisite: Criminal Procedure.

**LAW 896. Project for Innocence and Post-Conviction Remedies Class. 1 Credits.**
Designed to acquaint students with the issues surrounding the professional skills, substance, and ethics that are critical to student participation in LAW 895, Project for Innocence and Post-Conviction Remedies. A corequisite with LAW 895 and enrollment is limited to students concurrently enrolled in that course.

**LAW 974. Public International Law. 3 Credits.**
A general survey of the legal system governing the behavior of states and public international organizations. Includes the nature and sources of international law and the role of international law and procedures in the maintenance of world peace and security, the protection of human rights, the management of the environment, and the regulation of international economic relations.

**LAW 976. Public Policy Practicum. 3 Credits.**
The Public Policy Practicum undertakes in-depth, balanced policy studies in response to requests from public officials. Individual students, or teams of students, supervised by the clinic director, prepare the research reports. Designed to give students practical experience in applying analytical policy methods to public policy issues.

**LAW 985. Real Estate Finance. 1-2 Credits.**
A basic course in the finance of the acquisition and development of real estate. Course involves the mortgage market, basic security transactions, and remedies of secured creditors including mortgage foreclosure.

**LAW 928. Remedies. 2-3 Credits.**
The law of remedies is an important part of understanding substantive law, shedding light on how our civil justice system attempts to "right" wrongs. This course will examine the way in which the law responds to the violations of rights, including an exploration of compensatory damages, punitive damages, and equitable remedies, such as restitution and injunctive relief.

**LAW 984. Renewable Energy Law Practice. 2 Credits.**
This course introduces students to energy law with a focus on renewable energy. The course emphasizes the practice of renewable energy law, from land use and siting for renewable energy facilities to transactional and finance issues that are key to the success of large-scale renewable energy projects. The course will be an excellent introduction to students interested in transactional practice in a regulated legal environment.

**LAW 836. Representing Nonprofit Organizations. 2 Credits.**
Following a nonprofit and tax-exempt organization law refresher and overview, the course focuses on application of the fundamental exemption requirements; charitable and other categories of exempt organizations; the application for recognition of exemption process; private inurement, private benefit, and intermediate sanctions; governance policies and procedures; public charities and private foundations; lobbying and political campaign activity; the unrelated business rules; use of subsidiaries; exempt organizations' involvement in joint ventures; annual reporting to the IRS; and charitable giving and fundraising law. Teaching emphasis will be on case hypotheticals.

**LAW 986. Securities Regulation. 2-5 Credits.**
An analysis of federal and state securities law and state "Blue Sky" laws. Prerequisite: Business Organizations.

**LAW 980. Sex Crimes. 2-3 Credits.**
This course focuses on theory, empirical research, and doctrine related to substantive sex crimes and collateral restrictions on sex offenders. In particular, the course addresses rape, child molestation, incest, child pornography, prostitution, obscenity, and the legal pornography industry. In the latter part of the semester, students will also explore emerging legal issues.

**LAW 825. Sixth Semester in Washington D.C. Field Placement. 1-9 Credits.**
This field placement will be worth three, six, or nine credit hours. Students will work in a public policy or public interest placement, earning one credit hour for each 42.5 hours of work. Students will also be required to complete written work. This written work is comprised of a goal-setting memo, weekly journal entries, and a final reflection paper. Students are also required to participate in monthly full-day programming sessions. These programming sessions will include meetings with practitioners to learn about practice in D.C. and substantive areas of law that are commonly practiced there. There will be no co- or prerequisites for this field placement. Finally, students are expected to take advantage of a mentoring program and planned opportunities to meet KU Law alumni set up by the KU Law School.

**LAW 846. Sixth Semester Capstone. 1 Credits.**
This course is part of the Sixth Semester in Washington, D.C. Program. It contains in-depth lectures, readings, and discussions on several areas of substantive law and surrounding issues important to practice in Washington, DC, including recent developments, policy implications, and controversies.

**LAW 988. S.J.D.. 1-4 Credits.**
Supervised research leading to the Doctorate of Juridical Science.

**LAW 983. S.J.D. First Year Seminar. 1 Credits.**
This seminar is required of all first year S.J.D. candidates. During the first semester we will read and discuss a number of topics including a basic introduction to the American legal system and the American legal profession, common law reasoning and analysis, including the theory of precedent, introduction to common law research, legal scholarship, law reviews and other professional publications, and basic principles of academic writing including introduction to copyright and plagiarism. Students will be required to write a series of short papers on several of
these subjects. During the second semester students will work on topics related to their dissertation research and will present the results of their research to the seminar as a whole for critique and analysis. Students will also be expected to prepare a written version of this research that is suitable for publication. The seminar will meet for two hours bimonthly throughout the academic year.

**LAW 994. Special Topics: ___. 1-4 Credits.**
The content of this course varies, and will be announced prior to pre-enrollment. May be repeated if there is no duplication of subject matter.

**LAW 969. State Court Practice. 3 Credits.**
Designed for the student who intends to enter a private general practice focusing on state court actions. Topics include substantive law of Kansas in domestic relations, landlord-tenant relations, debt collection, probate, and selected areas of criminal law and general civil practice. Students will develop practical skills in pleading and discovery techniques applicable in any state court practice.

**LAW 855. Taxation of Business Enterprises. 2-3 Credits.**
A study of the effect of the federal income tax on corporations, partnerships, and limited liability companies, as well as their owners. Includes coverage of federal income tax provisions having especially important effects on business activities in general. Prerequisite: Federal Income Taxation and Business Organizations.

**LAW 843. The Law of War: History, Principles, and Practice. 2-3 Credits.**
This course will explore the development of legal ideas about the legal regulation of armed conflict, with special attention given to the role and treatment of civilians and other non-combatants. It will not cover American military justice under the Uniform Code of Military Justice nor will it cover internal discipline of military forces. Among the subjects covered will be the history of attempts to legally regulate armed conflict, the law of war at sea, in the air, and in space, treatment of civilians by combatants, treatment of property, particularly significant cultural property by combatants, and non-military combatants, including pirates and terrorists.

**LAW 948. Transactional Law Competition. 1-3 Credits.**
Spring semester. A national competition, the goal of which is to provide participants with a meaningful and realistic simulation of transactional practice. The competition involves regional rounds followed by a national round of regional winners. Each round consists of three distinct phases. First, students work in teams of two or three to prepare a proposed draft agreement on behalf of one of the two parties to a business transaction. Second, each team prepares mark-ups to draft agreements prepared by the opposing teams they will encounter at the regional or national site. Finally, the teams meet to negotiate the final contours of the deal. Enrollment requires permission of the instructor and is competitive. Graded on a credit/no credit basis. Prerequisite: Contract Drafting and permission of instructor.

**LAW 992. Trial Advocacy. 3 Credits.**
A skills course designed to teach the fundamentals of trial practice including opening and closing statements, direct and cross examination, use of demonstrative evidence, introducing exhibits, making evidentiary objections, and courtroom procedure and decorum. Combines skills workshops, lecture/demonstrations, and a mock trial.

**LAW 998. Tribal Judicial Support Clinic. 3 Credits.**
Students are assigned research projects from participating tribal courts as arranged by the instructor. Students provide research assistance to tribal court personnel in an array of projects that range from tribal code development, legal research and drafting of legal memoranda and judicial orders. Prerequisite: Federal Indian Law.

**LAW 996. Trusts and Estates. 3-4 Credits.**
Interstate succession; execution, construction, and revocation of wills; rights of the surviving spouse (including elective share); creation, construction, and termination of trusts; powers of appointment; future interests and the Rule Against Perpetuities; basic introduction to the federal taxation of estates and gifts; fiduciary administration of trusts and estates.

**LAW 995. Water Law. 2-3 Credits.**
A study of water rights including the riparian and prior appropriation doctrines for surface water, and the various doctrines for groundwater. Private and public water distribution organizations, and special water districts. Water pollution control. Interstate conflicts over water resources. Federal government involvement in water distribution including federal powers and programs. Indian and reserved rights. Kansas water law.

**LAW 848. Writing for Law Practice. 2 Credits.**
This course provides an opportunity for upper-level students to practice legal writing skills. It focuses on writing for law practice. Students will draft and revise several documents; engage in editing, workshop and peer critique; and receive intensive feedback from the instructor. By the end of the course, students will have the beginnings of a document portfolio to take with them into their first years of law practice. Prerequisite: Lawyering Skills I and Lawyering Skills 2.

### M.S. in Homeland Security Courses

**LAW 818. Constitutional Limits on Intelligence Gathering. 3 Credits.**
This course examines the intersection between the Constitution and the pressing demand for information regarding threats to national security. Topics covered include a general overview of separation of powers and rule of law constraints on military action, limits on both physical and digital searches and seizures, and constraints on interrogation. Students will learn basic rules regarding these topics and apply them through a series of case studies.

**LAW 849. Cybercrimes. 2-3 Credits.**
Cyber threats are a global problem challenging all areas of business. Attorneys must be able to advise and defend clients from these threats. Similarly, all criminal lawyers must be fluent in how new technologies work and how they impact investigations. In this course, students will learn how these new cyber threats and emerging technologies are challenging attorneys across the country, no matter which area of law they focus upon. The course will prepare students to think about these threats not as consumers or users of these exciting new technologies—but as lawyers confronting the impact of these new devices or services. Course topics will include computer hacking, spear phishing, Internet fraud and social engineering, cyberstalking, and the rising use of computers, mobile devices, and social media in violent crimes. This course will cover methods of investigation of computer crimes, such as the Stored Communications Act (Grand Jury subpoenas, court orders, search warrants), the Pen Register Statute and Wiretap Act (real-time collection of information), as well as current litigation topics like encryption, non-disclosure orders, and privacy. We will also cover the important new Supreme Court cases in this area, Riley v. California and Carpenter v. United States.

**LAW 816. Domestic Aspects of Homeland Security. 3 Credits.**
In this course students will read and discuss materials that provide a basic introduction to the legal, governmental, and policy issues that confront those with responsibility for ensuring the safety of the American homeland. We will be covering American statutes, case law, Presidential executive orders, and other legal sources that regulate issues such as executive orders, and other legal sources that regulate issues such as...
as cyber-security, management of natural disasters, failures in utility networks and other vital domestic infrastructure, etc. Students will be required to take both a midterm and final examination. In order for a J.D. student to take this course they will need prior approval from the Assistant Dean to enroll. The grade they receive in this coursework will not count toward their cumulative GPA, though the credits will count toward their J.D. This course will count toward the 6 credits of external graduate level coursework allowable under law school policy.

**LAW 817. Homeland Security Practicum. 1-6 Credits.**
This course will be taught during the full academic year. The class is divided into three parts: Fall: One credit hour in which students will read materials on a specific potential threat to homeland security. Students will be expected to discuss the reading materials at each class meeting and will prepare a short memorandum at the end of the first semester on their reading. Spring: Two credit hour part in which students will divide into teams that will work together for the rest of the academic year. Each team will be expected to create a long-term strategy both to mitigate potential dangers from the threat assigned for the year and to formulate a short-term action plan to be utilized in the event that the threat materializes. Students will be evaluated on the long-term and short-term planning documents they prepare. Final Simulation: Final three credit hour part consists of a five day intensive real time simulation in which each team will be required to deal with an emerging threat as though they were, in fact, an emergency management team dealing with a real threat. Each team will be monitored by a real world professional emergency manager. The actual simulation will last for two full days. A second two day period will consist of analysis and evaluation of each team's actions by the monitors and the simulation leaders. The final day will be for each individual to prepare a comprehensive analysis of her actions and the actions of her team with suggestions for improvement.

**LAW 815. International Aspects of Homeland Security. 3 Credits.**
In this course students will read and discuss materials that provide a basic introduction to the legal, governmental, and policy issues that confront those with responsibility for ensuring the safety of American interests abroad and in the American homeland from both human caused and naturally occurring problems originating abroad. In the class we will read and discuss materials dealing with the legal, governmental, and policy aspects of this subject such as treaties, international organizations, customary international law, the law of armed conflict, and other relevant materials. We will discuss such problems as internationally originated cyber-attacks, international environmental problems and disasters, epidemics and quarantine laws, etc. Students will be required to take both a midterm and a final examination. In order for a J.D. student to take this course they will need prior approval from the Assistant Dean to enroll. The grade they receive in this coursework will not count toward their cumulative GPA, though the credits will count toward their J.D. This course will count toward the 6 credits of external graduate level coursework allowable under law school policy.

**LAW 994. Special Topics: ______. 1-4 Credits.**
The content of this course varies, and will be announced prior to pre-enrollment. May be repeated if there is no duplication of subject matter.

### Juris Doctor Program

#### Law Programs

##### The First-Year Curriculum
First-year students take courses that ensure they are well grounded in the subject matter that lies at the heart of the Anglo-American legal tradition and that provide a foundation for upper-level classes and for the practice of law. Two aspects of the first-year curriculum — the lawyering course and the small-section program — contribute immeasurably to the process of learning the law at KU.

The Lawyering Skills course focuses on the skills and values of the profession. Taught by faculty members with extensive practice experience who meet with students in both a traditional classroom setting and small groups, the course introduces students to the tools all lawyers use and helps bring students to an understanding of the legal system and legal institutions, case law and statutes, legal research and writing, and advocacy.

All first-year students take one of their other required courses in a small section of approximately 20-25 students. These classes provide an informal learning atmosphere and encourage in-depth discussions and critical analysis.

### Upper-Level Courses

A wide variety of courses are available to upper-level students, covering a broad range of practice areas from environmental law to international trade law. Many are seminars, simulation courses, or clinics. For curriculum guides to Business and Commercial Law; Civil Litigation; Constitutional Law; Criminal Law; Environmental, Energy and Natural Resources Law; General Practice; Intellectual Property Law; International and Comparative Law; Litigation; Media, Law, and Technology; Public Law; Tax Law; and Tribal Law, visit the Areas of Study (https://law.ku.edu/academics/areas/) section of the law school’s website.

Within the context of their particular interests and career goals, the law school strongly encourages students to consider certain principles when selecting upper-class courses.

- First, students should develop core knowledge and essential skills during the second year by taking menu-required courses to lay the foundations for taking advanced courses in the third year.
- Second, given the importance of statutory law and regulatory systems to the modern legal system, students should take courses that focus on complex codes (including statutes, treaties or regulations) and familiarize them with administrative and regulatory systems, also preferably during the second year.
- Third, to provide perspective on the legal system and to be prepared to practice in the modern global environment, before graduation students should take at least one class that concerns a legal system other than the federal or state system in the United States.

To implement these principles, the law school encourages students to talk individually with their faculty advisors about particular courses.

#### Clinics and Field Placements

The KU law school was a pioneer in clinical legal education and today offers many clinics and field placements that expose students to the tasks and challenges faced by lawyers in practice. All law students have a chance to participate in at least one of the school’s experiential learning opportunities. Acting under faculty supervision, students learn substantive law, develop legal skills and learn professional values in actual practice settings.

- The Criminal Prosecution Field Placement Program gives students an opportunity to work with prosecutors in Kansas state district attorneys’ offices as well as the office of the U.S. Attorney. They participate in nearly all phases of the criminal process, including trial work.
• In the Elder Law Field Placement Program, students work under the supervision of attorneys from Kansas Legal Services. Students assist seniors with a variety of legal issues, including income maintenance, access to health care, housing and consumer protection.

• The Field Placement Program provides students an opportunity to perform legal work under the supervision of a practicing attorney at approved governmental agencies, as well as nonprofit legal services organizations and nonprofit public national and international organizations.

• Students in the Judicial Field Placement Program serve as interns for state and federal trial judges. Under the supervision of a judge, law clerk or staff attorney, interns perform research, draft documents and observe courtroom proceedings to expand their knowledge of how our court systems operate.

• Students in the Legal Aid Clinic represent low-income clients under the careful guidance and thoughtful teaching of supervising attorneys. The clinic’s caseload is divided into four general areas: a criminal practice for juveniles charged with crimes in Douglas County District Court; a criminal practice for adults charged with crimes and municipal violations in Lawrence Municipal Court; a civil practice to provide legal assistance for individuals seeking name and gender marker changes through the Douglas County District Court; and a civil practice that may focus on school discipline, mental health, race and educational equity, and other emerging matters.

• In the Medical-Legal Partnership Field Placement Program, the School of Law collaborates with two separate health systems — The University of Kansas Health System at KU Medical Center in Kansas City, and LMH Health in Lawrence. Cases may include health law, family law, housing law, elder law, public benefits law, disability law, and immigration law. Students enroll through the Field Placement Program.

• In the Paul E. Wilson Project for Innocence and Post-Conviction Remedies, students counsel and represent state and federal prisoners in appellate and post-conviction litigation in state and federal courts.

• In the Tribal Judicial Support Clinic, students provide research assistance in an array of projects ranging from tribal code development to drafting memoranda and orders.

**International Study**

The law school sponsors several study abroad programs for its students. They include:

1. A summer program in Limerick and Dublin, Ireland, in collaboration with the University of Limerick; and
2. A summer program in Istanbul, Turkey, in collaboration with Bahcesehir University.

All have been approved by the American Bar Association. In addition, KU history and law faculty members collaborate to sponsor a summer program in Cambridge, England, focusing on legal history. This program is open to undergraduates and to entering law students before they begin their studies in the fall term of their first year. KU law students also may choose from numerous other ABA-approved summer study abroad programs.

**Accelerated Program**

The School of Law offers a summer program (https://law.ku.edu/admissions/summer-start/) that is fully integrated with the curriculum of the fall and spring semesters. First-year students may begin their studies in either the summer session or the fall semester. Students beginning law studies in the summer session may, but are not required to, complete their law degrees in 27 months by being enrolled continuously in two academic years and three contiguous summer sessions. About 20-25 students in each year’s entering class begin their studies in the summer.

The summer program consists of two consecutive, five-week sessions that begin in mid-May and conclude at the end of July. Each course offered during the summer meets approximately 80 minutes a day, five days a week.

A first-year student takes two required first-year courses in each session. At the end of the second session, the student has accumulated 8 of the 90 hours required for graduation.

In addition to first-year courses, several upper-level courses usually are offered in the summer. There are opportunities to participate in Legal Aid Clinic, Project for Innocence and Post-Conviction Remedies, Field Placement Program, and Judicial Field Placement Program during both summer sessions. Almost all summer session courses (including the clinics) carry 2 to 2.5 credit hours a session. Upper-level students may take two courses each session. Enrollment in more than 10 hours must be approved by the associate dean for academic affairs.

**Certificates**

**Certificate Programs**

The law school offers eight certificate programs (https://law.ku.edu/academics/certificates/):

1. Advocacy Skills
2. Business and Commercial Law
3. Environmental and Natural Resources Law
4. International Trade and Finance
5. Media, Law, and Technology
6. Social Justice
7. Tax Law
8. Tribal Lawyer

Each allows students to focus on an area of law and develop expertise in it. The requirements for each program are in the Certificates (https://law.ku.edu/academics/certificates/) section of the law school’s website. During their first year of law school, students should notify the associate dean for academic affairs of their intention to meet certificate requirements.

**Advocacy Skills Certificate**

Effective advocacy requires a solid grounding in all aspects of litigation — planning the lawsuit, pretrial practices and procedures, trial advocacy, and post-trial matters — and in alternative forms of dispute resolution. This certificate program provides the means for students to develop basic knowledge and skills in effective advocacy.

**Business and Commercial Law Certificate**

The certificate program in business and commercial law is a response to the longstanding demand for attorneys with expertise in the field.
Completion of the certificate requirements allows a student to develop the knowledge and skills needed to begin a successful career as a business lawyer. A student who obtains the certificate receives a solid grounding in the basic principles of business and commercial law and is familiar with many of the transactions that business and commercial lawyers commonly encounter in practice.

**Environment, Energy and Natural Resources Law Certificate**

The Environment, Energy and Natural Resources Law Certificate exposes students to the basics of a constantly changing area of practice. At the end of the program, students can address environmental and natural resources law issues wherever they arise.

**International Trade and Finance Certificate**

The International Trade and Finance Certificate permits KU Law students to specialize their studies in the areas of international trade, international business and international finance, and to obtain a certificate reflecting that specialization.

**Media, Law, and Technology Certificate**

The Media, Law and Technology Certificate focuses on legislative challenges, judicial decision-making and administrative policy in an era increasingly shaped by information technology, global networks and the media. The certificate program gives students an opportunity to advance their knowledge and skill in the diverse legal subjects that are of concern in media law practice. Through the certificate program, students also have an opportunity to study how both traditional and new media affect the relationship between law and society. The program’s requirements include completion of the First Amendment Advocacy simulation course or an approved alternate.

**Social Justice Certificate**

Social justice lawyers give voice in the legal system to underrepresented clients and causes. The Social Justice Certificate is ideal for students interested in societal inequality and power differentials, particularly as these relate to class and economics, identity and rights, and the political process. The certificate program allows students to deepen their knowledge and expand expertise in areas that intersect with social justice and prepares students for a career that aligns with their values. Hands-on work is an important component of the certificate program.

**Tax Law Certificate**

Demand for attorneys with expertise in the tax field continues to grow. Completion of the tax law certificate requirements allows students to develop the practical and technical skills needed to build successful careers. Certification also assures employers that the student not only has a mastery of basic principles of individual and entity taxation but also is familiar with many of the intricacies of tax law and practice. One of the program’s requirements is a minimum of 20 hours of participation in an Internal Revenue Service-sponsored Voluntary Income Tax Assistance program or a similar nonprofit tax assistance program.

**Tribal Lawyer Certificate**

Effectively representing Indian nations and tribes requires an understanding of the extremely complicated body of federal, state, and tribal law that affects every aspect of indigenous societies. The Tribal Lawyer Certificate program ensures that law students who plan careers representing indigenous nations have the skills necessary to appreciate and strengthen the unique nature of tribal legal systems and governments. Among the program’s requirements is an internship with a tribal legal department or a private or public interest law firm specializing in Indian law or participation in the Tribal Judicial Support Clinic.

**Joint Degree Programs**

The law school offers 11 joint degree (https://law.ku.edu/academics/degrees/joint-degrees/) programs:

1. Business
2. East Asian Languages and Cultures
3. Economics
4. Health Services Administration
5. Indigenous Studies
6. Journalism
7. Philosophy
8. Political Science
9. Public Administration
10. Social Welfare
11. Urban Planning

These programs permit a student to receive a master’s degree and a Juris Doctor degree in less time than it would take if the programs were pursued separately. In all cases, a student must be admitted separately to the law school and the other school or department. In the case of the joint law and business program, an applicant must take the Graduate Management Admission Test as well as the Law School Admission Test.

The Juris Doctor is awarded concurrently after completion of the joint degree program requirements for each of the joint degree programs. The academic affairs committee will grant exceptions to the concurrent-graduation requirement only for exigent circumstances. Higher likelihood of bar exam success is not an exigent circumstance. All ad-hoc joint degree programs are subject to the concurrent-graduation requirement. This includes joint Ph.D. programs. Ad-hoc joint degrees are defined as any dual degree program in which the student is credited toward their J.D. for more than 6 credit hours earned in a companion graduate degree.

For more information on the joint degree programs and the requirements for each program, see the Joint Degrees (https://law.ku.edu/academics/degrees/joint-degrees/) section of the law school’s website.

**J.D. Degree Requirements**

The degree Juris Doctor (J.D.) is conferred on candidates who have:

- Completed a minimum of 90 credit hours;
- Achieved a minimum cumulative grade-point average of 2.0 (C);
- Taken and completed all required courses;
- Satisfied the “in residence” requirement;
- Satisfied the writing-intensive course requirements;
- Satisfied the experiential course requirements; and
- Completed all requirements within 5 years of initial enrollment (see Withdrawal and Readmission Following Withdrawal (p. 720) in the Regulations section of the law school’s website).
Credit-Hour Requirement

Each student must complete a minimum of 90 credit hours. Course work in areas other than law is subject to the limitation described under Course Work Outside the School of Law, below.

Grade-Point Average Requirement

During the semester in which the student attains 90 credit hours, he or she must have achieved a minimum cumulative grade-point average of 2.0 (C) in all law school work. Grades for courses taken in areas other than law are not computed in the School of Law cumulative grade-point average.

Required Courses

To qualify for the J.D. degree, a student must have completed satisfactorily the following:

• All first-year courses listed below
• Three courses from among Business Organizations, Conflict of Laws, Criminal Procedure, Evidence, Family Law, Jurisdiction, Commercial Law: Secured Transactions, and Trusts & Estates
• Professional Responsibility

Professional Responsibility must be completed by the time the student finishes 60 hours of law school credit.

Upper-level required courses should be taken in the second year of law school. Waiting to take these courses until the third year may cause class conflicts between these required courses and courses traditionally taken by third-year law students.

First-Year Courses

Required First-Year Courses

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<th>Code</th>
<th>Title</th>
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<td>LAW 804</td>
<td>Civil Procedure</td>
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<td>LAW 809</td>
<td>Contracts</td>
<td>4</td>
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<td>LAW 814</td>
<td>Criminal Law</td>
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<td>LAW 806</td>
<td>Introduction to Constitutional Law</td>
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<td>LAW 820</td>
<td>Lawyering Skills I</td>
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<td>Lawyering Skills II</td>
<td>3</td>
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<tr>
<td>LAW 831</td>
<td>Torts I</td>
<td>2-4</td>
</tr>
</tbody>
</table>

“In Residence” Requirement

The 90 credit hours required for the J.D. degree must be earned during a course of study in residence at the School of Law extending over a period of not less than 24 months. For more details, see Maximum and Minimum Load in the Regulations section.

Upper-Level Writing-Intensive Course Requirements

Each student must satisfy the Professional Writing-Intensive course requirement by successfully completing at least 2 professional writing courses that require students to submit a written work product directed to the lawyer’s professional role. Such writing includes, but is not limited to, document drafting, written advocacy, correspondence, memoranda, judicial and quasi-judicial opinions, legislation, regulations, and policy analyses.

Each student must satisfy the third required writing course by either taking a third professional writing-intensive course, or by meeting the Scholarly Writing-Intensive course requirement by successfully completing a course that satisfies the Scholarly requirement.

All written work must be of at least C quality.

Experiential Skills Requirements

Each student must satisfy the experiential course requirement by successfully completing courses totaling at least 6 credit hours from a list of courses identified by the Academic Committee as experiential.

To satisfy the experiential skills requirement, the student must obtain a grade of C or better in graded courses and a grade of CR in courses graded Credit/No Credit.

The law school website includes a list of all of the courses that satisfy the experiential skills requirement (http://law.ku.edu/requiredcourses/).

Course Work Outside the School of Law

A student who is not enrolled in a joint degree program may take up to 6 hours of graduate-level courses outside the School of Law for credit toward a law degree, provided the associate dean for academic affairs approves the course work in advance as relevant to the student’s education as a lawyer. A student seeking credit toward a law degree for more than 6 hours of courses outside the School of Law must petition the academic affairs committee for approval. In such instances, the entire group of courses from outside the School of Law must be relevant to the student’s education as a lawyer. A student must receive a grade of B or better to receive J.D. credit for any such graduate-level nonlaw courses. However, grades for such courses are not computed in the School of Law cumulative grade-point average.

A student in good standing may, with the advance approval of the associate dean for academic affairs, take law courses at another law school accredited by the American Bar Association. If the student successfully completes such courses, not more than 30 credit hours will be transferred and counted toward the 90 credit hours required for the J.D. Time spent at another institution will count as study in residence for the purpose of the “in residence” requirement, but grades in courses taken at the other institution will not be computed in the KU law school cumulative grade-point average.

A student at another law school accredited by the American Bar Association may apply for admission with advanced standing. If admitted, such a student may transfer not more than 30 credit hours of law course work completed successfully at the other law school toward the 90 credit hours required for the J.D. degree. Grades for course work completed at the other law school are not computed in the KU law school cumulative grade-point average.

For purposes of the two preceding paragraphs, a grade of C (or equivalent) or better is necessary in each course for which transfer credit is sought. In no event may a student count more than 30 credit hours earned at other law schools toward the 90 hours required for the J.D. degree.
Advocacy Skills Certificate

Students who want to hone their skills in trial settings can earn the Advocacy Skills Certificate. By completing the certificate requirements, students gain a solid grounding in all aspects of litigation, while gaining hands-on experience through a related clinic or field placement.

Effective advocacy requires a solid grounding in all aspects of litigation — planning the lawsuit, pretrial practices and procedures, trial advocacy, and post-trial matters — and in alternative forms of dispute resolution. This certificate program provides the means for students to develop basic knowledge and skills in effective advocacy.

Required Courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 992</td>
<td>Trial Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 908</td>
<td>Evidence</td>
<td>3</td>
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</tbody>
</table>

Elective Courses (five of the following):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 850</td>
<td>Administrative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 852</td>
<td>Advanced Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>LAW 857</td>
<td>Advanced Litigation</td>
<td>3</td>
</tr>
<tr>
<td>LAW 860</td>
<td>Alternative Dispute Resolution</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 871</td>
<td>Capital Punishment</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 886</td>
<td>Civil Rights Actions</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 872</td>
<td>Commercial Arbitration</td>
<td>3</td>
</tr>
<tr>
<td>LAW 881</td>
<td>Conflict of Laws</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 838</td>
<td>Criminal Practice in Kansas</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 878</td>
<td>Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>LAW 859</td>
<td>Deposition Skills Workshop</td>
<td>2</td>
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<td>LAW 910</td>
<td>Federal Courts and the Federal System</td>
<td>3</td>
</tr>
<tr>
<td>LAW 929</td>
<td>International Law Moot Court Competition</td>
<td>2</td>
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<tr>
<td>LAW 964</td>
<td>National/International Moot Court Competitions</td>
<td>1-2</td>
</tr>
<tr>
<td>LAW 845</td>
<td>Jurisdiction</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 935</td>
<td>Juvenile Law</td>
<td>2</td>
</tr>
<tr>
<td>LAW 840</td>
<td>Kansas Supreme Court Research Practicum</td>
<td>3</td>
</tr>
<tr>
<td>LAW 949</td>
<td>Mock Trial Competition</td>
<td>1</td>
</tr>
<tr>
<td>LAW 962</td>
<td>Mock Trial Council</td>
<td>1-3</td>
</tr>
<tr>
<td>LAW 960</td>
<td>Moot Court Competition</td>
<td>1</td>
</tr>
<tr>
<td>LAW 970</td>
<td>Pretrial Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 928</td>
<td>Remedies</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 969</td>
<td>State Court Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Clinical/Field Placement Requirement (one of the following):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 890</td>
<td>Criminal Prosecution Field Placement Program</td>
<td>1-6</td>
</tr>
<tr>
<td>LAW 901</td>
<td>Elder Law Field Placement Program</td>
<td>2-6</td>
</tr>
<tr>
<td>LAW 894</td>
<td>Field Placement Program</td>
<td>1-6</td>
</tr>
<tr>
<td>LAW 933</td>
<td>Judicial Field Placement Program</td>
<td>3</td>
</tr>
<tr>
<td>LAW 952</td>
<td>Legal Aid Clinic</td>
<td>2.5-6</td>
</tr>
</tbody>
</table>

Business and Commercial Law Certificate

The Business and Commercial Law Certificate is a response to the longstanding demand for attorneys with expertise in the field. Completion of the certificate requirements allows a student to develop the knowledge and skills needed to begin a successful career as a business lawyer.

A student who obtains the certificate receives a solid grounding in the basic principles of business and commercial law and is familiar with many of the transactions that business and commercial lawyers commonly encounter in practice. The certificate program in business and commercial law is a response to the longstanding demand for attorneys with expertise in the field. Completion of the certificate requirements allows a student to develop the knowledge and skills needed to begin a successful career as a business lawyer.

The certificate program in business and commercial law is a response to the longstanding demand for attorneys with expertise in the field. Completion of the certificate requirements allows a student to develop the knowledge and skills needed to begin a successful career as a business lawyer.

A student who obtains the certificate receives a solid grounding in the basic principles of business and commercial law and is familiar with many of the transactions that business and commercial lawyers commonly encounter in practice. Courses available to students include Business Associations, Commercial Law, Bankruptcy, Securities Regulation, Taxation of Business Enterprises, and Real Estate Finance. Required Course:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 892</td>
<td>Business Organizations</td>
<td>3-4</td>
</tr>
</tbody>
</table>

Electives (three of the following):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 911</td>
<td>Accounting for Lawyers</td>
<td>1-2</td>
</tr>
<tr>
<td>LAW 863</td>
<td>Antitrust Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 872</td>
<td>Commercial Arbitration</td>
<td>3</td>
</tr>
<tr>
<td>LAW 873</td>
<td>Commercial Law: Secured Transactions</td>
<td>3</td>
</tr>
<tr>
<td>LAW 877</td>
<td>Corporate Governance</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 945</td>
<td>International Commerce and Investment</td>
<td>3</td>
</tr>
<tr>
<td>LAW 985</td>
<td>Real Estate Finance</td>
<td>1-2</td>
</tr>
<tr>
<td>LAW 855</td>
<td>Taxation of Business Enterprises</td>
<td>2-3</td>
</tr>
</tbody>
</table>

Electives (two of the following):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>LAW 889</td>
<td>Bankruptcy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 868</td>
<td>Business Planning Seminar</td>
<td>3</td>
</tr>
<tr>
<td>LAW 869</td>
<td>Contract Drafting</td>
<td>3</td>
</tr>
<tr>
<td>LAW 930</td>
<td>Corporate Finance</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 828</td>
<td>Deals</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 835</td>
<td>Due Diligence in Business Transactions</td>
<td>2</td>
</tr>
<tr>
<td>LAW 924</td>
<td>Independent Research</td>
<td>1-2</td>
</tr>
<tr>
<td>LAW 947</td>
<td>Mergers and Acquisitions</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 986</td>
<td>Securities Regulation</td>
<td>3-5</td>
</tr>
<tr>
<td>LAW 948</td>
<td>Transactional Law Competition</td>
<td>1-3</td>
</tr>
</tbody>
</table>

A student must have a cumulative grade point average of at least 3.0 in the courses that count toward the certificate.
*If Independent Research is selected, it must be for 2 credits; the topic must be certified in advance by the director of the certificate program as involving advanced study of business or commercial law; and the resulting paper must satisfy the standards of the upper-level writing requirement.

Environment, Energy, and Natural Resources Law Certificate

The Environment, Energy and Natural Resources Law Certificate exposes students to the basics of a constantly changing area of practice. At the end of the program, students can address environmental and natural resources law issues wherever they arise.

Since the inception of modern environmental and natural resources law in the late 1960s and 1970s, the field has become increasingly important, both in its own right and as a result of the frequency with which environmental and natural resources law issues intrude into other, more traditional fields of practice such as real estate, insurance, and corporate law. The Environmental and Natural Resources Law Certificate introduces students to the basics of this constantly changing area of practice so that they become competent to address environmental and natural resources law issues in whatever contexts they arise.

Required Courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 850</td>
<td>Administrative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 905</td>
<td>Environmental Law</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following field placement or writing experiences on an environmental, energy, or natural resources law topic approved by certificate director:

- Field Placement focused on environmental, energy, or natural resources law, such as with the U.S. EPA, Kansas Department of Health and Environment, a nonprofit organization, or other appropriate agency or organization.
- Kansas Law Review or Kansas Journal of Law & Public Policy (with a note or comment on an environmental, energy, or natural resources law topic).
- Preparation of a 2-credit Independent Research paper on an environmental, energy or natural resources law topic.
- National Environmental Moot Court Competition or other moot competition, or other moot court competition focused on environmental, energy or natural resources law approved by the certificate director.

Four electives in the subject area. Choose all four from among the following electives, or combine three from this list with one from the secondary list below:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 963</td>
<td>Energy Law and Policy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 904</td>
<td>Environmental Law Seminar</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 824</td>
<td>Global Challenges in Law, Agriculture, Development, and Ecology</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 966</td>
<td>Oil and Gas</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 984</td>
<td>Renewable Energy Law Practice</td>
<td>2</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 956</td>
<td>Local Government Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 974</td>
<td>Public International Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 994</td>
<td>Special Topics: _____ (with approval of certificate director)</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Up to one course of the required four may come from among the following electives:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 945</td>
<td>International Commerce and Investment</td>
<td>3</td>
</tr>
<tr>
<td>LAW 944</td>
<td>International Trade Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 864</td>
<td>Advanced International Trade Law</td>
<td>3-4</td>
</tr>
</tbody>
</table>

International Trade and Finance Certificate

The International Trade and Finance Certificate permits KU Law students to specialize their studies in the areas of international trade, international business and international finance, and to obtain a certificate reflecting that specialization.

The International Trade and Finance Certificate is designed to serve the following purposes:

1. to assist KU Law students in preparing for the increasingly global practice of law, and in particular to emphasize the business nature of that practice; and
2. to give KU Law graduates a competitive advantage in the employment market.

Legal practice is global in character. As part of its International and Comparative Law Program, the law school provides students an opportunity to undertake special preparation for such practice-and in particular to study the business nature of that practice by earning a Certificate in International Trade and Finance.

Required Courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 911</td>
<td>Accounting for Lawyers</td>
<td>1-2</td>
</tr>
<tr>
<td>LAW 868</td>
<td>Business Planning Seminar</td>
<td>3</td>
</tr>
<tr>
<td>LAW 930</td>
<td>Corporate Finance</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 947</td>
<td>Mergers and Acquisitions</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 985</td>
<td>Real Estate Finance</td>
<td>1-2</td>
</tr>
<tr>
<td>LAW 986</td>
<td>Securities Regulation</td>
<td>2-5</td>
</tr>
<tr>
<td>LAW 855</td>
<td>Taxation of Business Enterprises</td>
<td>2-3</td>
</tr>
</tbody>
</table>

International Finance and Economics Courses:

- Or a course in International Finance, Portfolio Management, International Tax, Financial Law, International Banking Law or International Securities Regulation offered by the School of Business or the Department of Economics, with directors approval.
A Business Sector Course:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>LAW 863</td>
<td>Antitrust Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 870</td>
<td>Biolaw</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 888</td>
<td>Copyright Law in a Digital Age</td>
<td>3</td>
</tr>
<tr>
<td>LAW 891</td>
<td>Elections and Campaign Finance</td>
<td>3</td>
</tr>
<tr>
<td>LAW 963</td>
<td>Energy Law and Policy</td>
<td>3</td>
</tr>
<tr>
<td>LAW 920</td>
<td>Health Law and Policy</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 922</td>
<td>Higher Education and the Law Seminar</td>
<td>3</td>
</tr>
<tr>
<td>LAW 968</td>
<td>Intellectual Property</td>
<td>3-4</td>
</tr>
<tr>
<td>LAW 958</td>
<td>Media and the First Amendment</td>
<td>3</td>
</tr>
<tr>
<td>LAW 966</td>
<td>Oil and Gas</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 977</td>
<td>Patent Law</td>
<td>3-4</td>
</tr>
<tr>
<td>LAW 994</td>
<td>Special Topics: _____ (as approved by certificate director)</td>
<td>1-4</td>
</tr>
<tr>
<td>LAW 995</td>
<td>Water Law</td>
<td>2-3</td>
</tr>
</tbody>
</table>

Comparative and Public International Law Course:

A minimum of one course for 3 credits in comparative or international law.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 879</td>
<td>Comparative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 914</td>
<td>Federal Indian Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 923</td>
<td>Immigration Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 827</td>
<td>International Law and Literature</td>
<td>3</td>
</tr>
<tr>
<td>LAW 918</td>
<td>Islamic Law</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 974</td>
<td>Public International Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 843</td>
<td>The Law of War: History, Principles, and Practice</td>
<td>2-3</td>
</tr>
</tbody>
</table>

Any other course focusing on a comparative dimension of a field of law, including Comparative Constitutional Law, Tax Law or the legal system of another country, culture or religion with permission of the director. Courses from ABA approved summer programs can be submitted for approval.

**Media, Law, and Technology Certificate**

The Media, Law and Technology Certificate focuses on legislative challenges, judicial decision-making and administrative policy in an era increasingly shaped by information technologies, global networks, and the media.

The certificate program gives students an opportunity to advance their knowledge and skill in the diverse legal subjects that are of concern in media law practice. Through the certificate program, students also have an opportunity to study how both traditional and new media affect the relationship between law and society.

In news, advertising, film, literature and other forms of expression, the media have illuminated or scrutinized the work of lawyers, judges and legislators. By completing certificate requirements, students gain insight into media effects on legal practice, the judicial process, legislation, public policy, governmental affairs, and business and commerce.

Private enterprise and governmental institutions increasingly depend on, and are affected by, communications media. As a result, legal representation in both the private and public sectors is enhanced by an understanding of media influence on the development and administration of law and public policy. The Media, Law, and Technology Certificate focuses on legislative challenges, judicial decision-making, and administrative policy in an era increasingly shaped by information technologies, global networks, and the media. The program’s requirements include completion of the First Amendment Advocacy simulation course or an approved alternate.

**Required Courses:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 951</td>
<td>Global Data Protection Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 968</td>
<td>Intellectual Property</td>
<td>3-4</td>
</tr>
<tr>
<td>LAW 958</td>
<td>Media and the First Amendment</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required (two of the following):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>LAW 888</td>
<td>Copyright Law in a Digital Age</td>
<td>3</td>
</tr>
<tr>
<td>LAW 891</td>
<td>Elections and Campaign Finance</td>
<td>3</td>
</tr>
<tr>
<td>LAW 977</td>
<td>Patent Law</td>
<td>3-4</td>
</tr>
<tr>
<td>LAW 979</td>
<td>Patent Practice</td>
<td>3</td>
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</tbody>
</table>

**Experiential:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 959</td>
<td>First Amendment Advocacy (or an approved alternate)</td>
<td>3</td>
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</table>

**Interest Area Courses- two of the following:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 850</td>
<td>Administrative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 902</td>
<td>Complex Litigation (Non-Writing)</td>
<td>3</td>
</tr>
<tr>
<td>LAW 886</td>
<td>Civil Rights Actions</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 882</td>
<td>Consumer Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 925</td>
<td>Employment Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 910</td>
<td>Federal Courts and the Federal System</td>
<td>3</td>
</tr>
<tr>
<td>LAW 954</td>
<td>Legislation and Statutory Interpretation</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 956</td>
<td>Local Government Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 994</td>
<td>Special Topics: _____ (State Constitutional Law)</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Social Justice Certificate**

Social justice lawyers give voice in the legal system to underrepresented clients and causes. The Social Justice Certificate is ideal for students interested in societal inequality and power differentials, particularly as these relate to class and economics, identity and rights, and the political process.

The certificate program allows students to deepen their knowledge and expand expertise in areas that intersect with social justice and prepares students for a career that aligns with their values. Hands-on work is an important component of the certificate program.

**Experiential Component:** Every student in the concentration must complete one of the following experiential courses:
Tribal Lawyer Certificate

The Tribal Lawyer Certificate is designed to ensure that law students aspiring to a career representing Indian nations have the skills necessary to appreciate and strengthen the unique nature of Indigenous tribal legal systems.

Effectively representing Indian nations and tribes requires an understanding of the laws, history and policies that affect them. For more than 200 years, the United States has pursued conflicting policies for dealing with the Indigenous peoples located within its borders. As a result, there exists an extremely complicated body of federal, state and tribal law that affects every aspect of Indigenous life.

The complexity of “Indian law,” and the lack of specific programs designed to educate graduates as to the unique legal and cultural needs of Indian people, has created a situation in which lawyers representing Indian tribes place too great an emphasis on state law and federal law when dealing with Indian nations. As a result, these lawyers may unconsciously be contributing to the weakening of unique tribal legal and governance traditions by recommending the adoption of tribal laws and policies founded upon the Anglo-American legal and political traditions rather than the unique traditions of their tribal clients.

Effectively representing Indian nations and tribes requires an understanding of the extremely complicated body of federal, state, and tribal law that affects every aspect of Indigenous societies. The Tribal Lawyer Certificate program ensures that law students who plan careers representing indigenous nations have the skills necessary to appreciate and strengthen the unique nature of tribal legal systems and governments. Among the program’s requirements is an internship with a tribal legal department or a private or public interest law firm specializing in Indian law or participation in the Tribal Judicial Support Clinic.

Required Courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 914</td>
<td>Federal Indian Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 998</td>
<td>Tribal Judicial Support Clinic (or approved internship)</td>
<td>3</td>
</tr>
</tbody>
</table>

Core Courses (three of the following):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 914</td>
<td>Federal Indian Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 998</td>
<td>Tribal Judicial Support Clinic (or approved internship)</td>
<td>3</td>
</tr>
</tbody>
</table>
Two-Year J.D. Program for Foreign-Trained Lawyers

The Two-Year J.D. for Foreign-Trained Lawyers ([https://law.ku.edu/academics/degrees/2yr-jd/](https://law.ku.edu/academics/degrees/2yr-jd/)) is for overseas students who already hold a foreign law degree and are prepared to complete a J.D. on an accelerated timetable. The program prepares attorneys who can compete in a global economy with full credentials in the United States and one or more additional jurisdictions. While on campus, students benefit from classes taught by distinguished faculty members; enjoy life in Lawrence; and meet other highly motivated colleagues from around the country and the world. From KU Law’s perspective, students with foreign law degrees bring valuable diversity and professionalism to the classroom and expand the school’s global professional network of students and graduates.

Program Structure

Your route to completing the Two-Year J.D. ([https://law.ku.edu/academics/degrees/2yr-jd/](https://law.ku.edu/academics/degrees/2yr-jd/)) for international attorneys depends on whether you obtained a foreign law degree in a common law jurisdiction. Common law students do not need to follow the first-year curriculum, and will spend both of their years in the Two-Year J.D. Program taking upper-level courses.

Students who did not obtain a degree in a common law jurisdiction will begin the program with the standard first-year curriculum. During the second year of study, these students are eligible for any second- or third-year course available to all other J.D. students and will need to complete the same required coursework.

Students in the Two-Year J.D. Program are subject to the same grading system that applies to other J.D. candidates. All other law school and university rules apply, as appropriate, to students in the Two-Year J.D. Program. These include rules governing credits from outside the law school and cross-listing of courses.

The Two-Year J.D. Program is not limited to foreign citizens. American citizens who have foreign law degrees are also eligible, whether they were born or raised overseas, or elected to complete their education abroad after high school.

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**Elective Courses (three of the following):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 860</td>
<td>Alternative Dispute Resolution</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 879</td>
<td>Comparative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 881</td>
<td>Conflict of Laws</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 930</td>
<td>Corporate Finance</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 925</td>
<td>Employment Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 910</td>
<td>Federal Courts and the Federal System</td>
<td>3</td>
</tr>
<tr>
<td>LAW 913</td>
<td>Federal Income Taxation</td>
<td>3</td>
</tr>
<tr>
<td>LAW 939</td>
<td>Labor Law</td>
<td>3-5</td>
</tr>
<tr>
<td>LAW 954</td>
<td>Legislation and Statutory Interpretation</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 955</td>
<td>Legislative Simulation and Study</td>
<td>3</td>
</tr>
<tr>
<td>LAW 956</td>
<td>Local Government Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 974</td>
<td>Public International Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 928</td>
<td>Remedies</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 994</td>
<td>Special Topics: _____ (with approval of certificate director)</td>
<td>1-4</td>
</tr>
</tbody>
</table>

---

**Master of Laws in American Legal Studies**

**Requirements**

The LL.M. in American Legal Studies ([https://law.ku.edu/academics/degrees/llm-international/](https://law.ku.edu/academics/degrees/llm-international/)) provides students who already hold a law degree with an introduction to the breadth of American law. Students who complete the LL.M. program are ready for the further study of law in the United States, select bar examinations, and the practice of law internationally. Candidates must hold a basic law degree (LL.B. or equivalent) from an accredited foreign college or university, or a J.D. from an accredited American law school.

**Curriculum**

The KU Law LL.M. in American Legal Studies will prepare you to take the New York Bar Examination. The curriculum, tied to the requirements set by the New York Bar Examiners, consists of the following:

**Course Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 972</td>
<td>Professional Responsibility</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 820</td>
<td>Lawyering Skills I</td>
<td>2</td>
</tr>
<tr>
<td>LAW 806</td>
<td>Introduction to Constitutional Law</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Select a minimum of 6 credits from the following:</td>
<td>6</td>
</tr>
<tr>
<td>LAW 892</td>
<td>Business Organizations</td>
<td>3-4</td>
</tr>
<tr>
<td>LAW 881</td>
<td>Conflict of Laws</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 809</td>
<td>Contracts</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 814</td>
<td>Criminal Law</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 873</td>
<td>Commercial Law: Secured Transactions</td>
<td>3</td>
</tr>
<tr>
<td>LAW 878</td>
<td>Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>LAW 879</td>
<td>Comparative Law</td>
<td>3</td>
</tr>
<tr>
<td>LAW 908</td>
<td>Evidence</td>
<td>3</td>
</tr>
<tr>
<td>LAW 909</td>
<td>Family Law</td>
<td>2-3</td>
</tr>
<tr>
<td>LAW 826</td>
<td>Property</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 831</td>
<td>Torts I</td>
<td>2-4</td>
</tr>
<tr>
<td>LAW 996</td>
<td>Trusts and Estates</td>
<td>3-4</td>
</tr>
<tr>
<td>Electives: Students may take 10 credit hours in any course offered by KU Law, subject to relevant prerequisites.</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
Students seeking a more specialized curriculum may request approval from the Associate Dean for International and Comparative Law to waive one or more course requirements.

**Grading System**

An LL.M. student whose cumulative GPA falls below a 2.0 at the end of any regular semester is on probation. A student on probation is not in good standing for purposes of the rules of withdrawal or any other rules that require good standing.

All LL.M. students must achieve a cumulative GPA of 2.0 during the semester in which they complete 24 credit hours, or they will not be awarded the degree nor will they be permitted to continue in school. There is no appeal within this law school from this requirement.

LL.M. students are not subject to the mandatory grading guidelines applicable to students seeking a J.D. degree.

Students must complete all requirements for the degree within three years of initial enrollment.

**Doctor of Juridical Science Program**

**S.J.D. Program**

Future academic leaders, government leaders, judges, and others with a strong interest in the interplay of legal scholarship and practice may be interested in the Doctor of Juridical Science (https://law.ku.edu/academics/degrees/sjd/) Program. Candidates for the S.J.D. conduct in-depth legal scholarship and must hold both a basic law degree (LL.B.) and a master’s degree (LL.M.) or a J.D.; show an accomplished academic record; and compose an original, thoughtful dissertation proposal that introduces the research topic the candidate intends to pursue, explains its importance and presents an initial argument that the candidate plans to develop in the S.J.D. program.

**Summary of S.J.D. Program Structure**

<table>
<thead>
<tr>
<th>Year and Semester</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year - Fall¹</td>
<td>Coursework related to dissertation research for a total of 8 credit hours</td>
</tr>
<tr>
<td></td>
<td>6 credit hours of coursework</td>
</tr>
<tr>
<td></td>
<td>1 credit hour of S.J.D. Dissertation Seminar</td>
</tr>
<tr>
<td>1st Year - Spring¹</td>
<td>Begin research for dissertation</td>
</tr>
<tr>
<td></td>
<td>Coursework related to dissertation research for a total of 8 credit hours</td>
</tr>
<tr>
<td></td>
<td>6 credit hours of coursework</td>
</tr>
<tr>
<td></td>
<td>1 credit hour of S.J.D. Dissertation Seminar</td>
</tr>
<tr>
<td></td>
<td>1 credit hour of S.J.D. First-Year Seminar</td>
</tr>
<tr>
<td>1st Summer</td>
<td>Continue research/write Dissertation Proposal²</td>
</tr>
<tr>
<td>1st Summer</td>
<td>Complete Interim Review (details below)</td>
</tr>
<tr>
<td>2nd Year - Fall¹</td>
<td>1 credit hour of Advanced S.J.D. Seminar</td>
</tr>
</tbody>
</table>

¹ 1st and 2nd Year must be in residence at the University of Kansas School of Law
² The Dissertation Proposal includes a complete working outline of the dissertation; a clear thesis statement; a 1-2 page abstract; a working bibliography; and one draft chapter of the dissertation.

**Dissertation & Academic Requirements**

**Dissertation Passage Requirements**

- Successful completion of all required courses with a grade of C or better.
- Successful completion of the Interim Review after the end of the first year.
- Production of a dissertation that is between 150 - 200 single-spaced pages, including front material, footnotes, and bibliography. Paper type, font, margins, and other format and style matters must conform to KU's Graduate School Instructions to Candidates for Doctoral Degrees in order for the dissertation to be deposited in the KU Libraries.
- Evidence that the candidate has identified a legal issue of relevance; constructed an original argument about that legal issue; defended that argument in a manner that is clear, organized, well-written and well-reasoned; and produced a work that would be publishable as a book, extended law review article, or linked series of law review articles.
- Successful, public defense of the dissertation to committee.

**Interim Review**

By no later than July 15 of the summer semester of the SJD candidate’s first year in the program, the candidate must submit to his or her chairperson and to the SJD seminar instructor a Dissertation Proposal that satisfies the Dissertation Proposal requirements set forth below. No later than Aug. 15 prior to the start of the candidate’s second year, the chairperson and the SJD seminar instructor must certify whether the dissertation proposal is acceptable and the candidate is otherwise in good standing (i.e. has a GPA of 2.0 or above). If the candidate fails to obtain certification of the dissertation proposal, they may seek an extension of no more than one semester from the chairperson and the SJD seminar instructor to revise and resubmit the dissertation proposal for certification. Denial of certification will result in the candidate’s dismissal from the SJD program. The candidate may appeal the denial of certification or any denial of a request for extension to the Graduate & International Programs Committee by petition to the associate dean for international and comparative law.

**Dissertation Proposal**

The Dissertation Proposal must include:
1. a complete working outline of the dissertation
2. a clear thesis statement
3. a 1-2 page abstract
4. a working bibliography
5. one draft chapter of the dissertation

Remote Defense Policy

S.J.D. candidates are required to defend their dissertation at the law school. However, in exceptional circumstances, candidates may request an exemption from this requirement in order to defend their dissertation remotely via videoconference, upon prior approval of the Associate Dean for International & Comparative Law, in consultation with their chairperson. To request an exemption, candidates must:

1. have demonstrated the ability to complete their dissertation and schedule the defense within the timeframe approved by their chairperson.
2. be in compliance with any degree completion plan established by their chair.
3. submit a request to both their chairperson indicating (A) the reason for the requested exemption; (B) where and how they propose to set up the videoconference necessary for a remote defense; and (C) the feasibility for a remote defense in light of the needs of their external committee member, the nature of their project, the technology described in (D) and any other relevant considerations. Candidates are encouraged to submit this request as early as possible and must do so no later than two (2) weeks prior to their departure from the United States.

Candidiates who have been approved to defend their dissertation remotely must provide electronic copies of any slides or handouts they intend to use to their committee members in advance and will be required to test the proposed technology thoroughly with KU staff in advance of their defense.

IMPORTANT NOTICE: If technological or other reasons not within the control of the candidate’s chair, committee or the law school prevent the remote defense from occurring, the candidate will be required to defend their dissertation at the law school within a reasonable time period established by the chair. Candidates should be aware that this may delay their graduation and require them to enroll for an additional semester if the defense cannot be rescheduled within the same semester, as candidates must be enrolled in the semester they graduate.

Doctoral Degree Time Limits

SJD candidates have a total of 5 calendar years to complete the SJD from the date of initial enrollment. Exceptions to this policy will be granted only in extraordinary circumstances. Requests for a one-year extension must be made no later than 30 days prior to the end of the 5-year period to the chairperson and the associate dean for international and comparative law and must be accompanied by a degree completion agreement agreed upon by the candidate and the chairperson that establishes the expectations regarding the candidate’s progress, the expected degree completion date, and appropriate consequences for a student’s failure to defend by the expected completion date. Any subsequent request for extension must be accompanied by a revised degree completion agreement.

Withdrawal and Readmission Following Withdrawal

SJD candidates considering withdrawing are strongly encouraged to confer with their chairperson and with the associate dean for international and comparative law as soon as possible and to indicate whether they intend to seek re-admission to the program. Failure to enroll in any semester before the degree is completed is considered a withdrawal from the program. Note that SJD students enroll the entire calendar year (spring, summer, fall semesters).

Any candidate who has completed at least 16 credit hours in the SJD program and is in good standing may withdraw from all law school courses in which he or she is enrolled if the candidate completes all required administrative steps for withdrawal no later than the last day of classes for the semester. Candidates who wish to withdraw after the last day of classes for the semester must obtain permission from the Graduate & International Programs Committee. A candidate who had completed at least 16 credit hours in the SJD program at the time of withdrawal may re-enroll in a subsequent semester without reapplying for admission upon permission from the chairperson of their doctoral committee.

Evidence of progress towards the degree and documentation of the reasons for the candidate’s withdrawal will be determining factors in the decision to grant re-admission. Candidates considering a temporary withdrawal from the SJD program due to extraordinary circumstances (i.e. illness, emergency, financial hardship, or military leave), family responsibilities, or pursuit of full-time activities related to long-term professional goals are strongly encouraged to develop a degree completion plan with their chairperson and the associate dean for international and comparative law in anticipation of a re-admission application.

Any candidate who withdraws before completing 16 credit hours must reapply for admission. There are no exceptions to this rule. Any candidate who has completed at least 16 credit hours and who is not in good standing must have the permission of the chairperson of their doctoral committee and the associate dean for international and comparative law to withdraw if the candidate wishes to be readmitted in a subsequent semester. A candidate who fails to secure such permission may petition the Graduate & International Programs Committee for readmission.

Maximum Time for Publication of the Dissertation

Upon successful completion of the dissertation defense, the SJD candidate must make any required revisions to the dissertation manuscript. Upon the approval of the chairperson of the final manuscript, the candidate must submit the signed electronic release form to the library staff to file the dissertation manuscript electronically to UMI/Proquest within 2 weeks of the date of the chairperson’s approval. The candidate must file the dissertation manuscript in order to be certified by the chairperson to graduate. The candidate should also provide a copy of the signed electronic release form to the registrar as confirmation that this has been completed.

Master of Science in Homeland Security: Law & Policy

Homeland security professionals work in an increasingly complex environment requiring high-level critical and creative thinking. Whether you’re a military officer or a government or private sector employee responsible for security operations and disaster preparedness, the M.S. in Homeland Security: Law & Policy (https://law.ku.edu/academics/degrees/
ms-homeland-security/) degree will advance your technical expertise and enhance your value to your organization. Through a culminating simulation course, you will prove your readiness to manage an intensive homeland security crisis, providing front-line leadership in the following sectors:

- Defense
- Emergency Management
- Immigration
- Law Enforcement
- Public Health
- Public Works
- Transportation

Students must meet the university’s minimum criteria for graduate admission (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/?num1_1=).

The Homeland Security curriculum provides a basic grounding in law and policy related to homeland security and advanced knowledge of specific homeland security fields.

The degree will require 33 hours for completion which will be comprised of 12 core hours (3 courses) and 21 elective hours (7 courses). None of the courses required for the degree require prerequisites.

### Core courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 815</td>
<td>International Aspects of Homeland Security</td>
<td>3</td>
</tr>
<tr>
<td>LAW 816</td>
<td>Domestic Aspects of Homeland Security</td>
<td>3</td>
</tr>
<tr>
<td>LAW 817</td>
<td>Homeland Security Practicum</td>
<td>6</td>
</tr>
</tbody>
</table>

### Elective courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>LAW 849</td>
<td>Cybercrimes</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 862</td>
<td>Emergency Management in the United States: Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>LAW 924</td>
<td>Independent Research</td>
<td>1-2</td>
</tr>
<tr>
<td>JOUR 840</td>
<td>Seminar in: _____ (Crisis Communication)</td>
<td>3</td>
</tr>
<tr>
<td>LAW 994</td>
<td>Special Topics: _____ (Courses: Central Challenges: The Balance of Liberty and Security; Cyberlaw and Policy; Terrorism Finance)</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 720</td>
<td>Topics in Environmental Studies: _____ (Biosecurity in the 21st Century)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Graduate Certificate in Homeland Security: Law and Policy**

Students interested in supplementing their education with an additional level of expertise in homeland security and cyber law can earn the online Graduate Certificate in Homeland Security: Law & Policy (https://law.ku.edu/academics/degrees/graduate-certificate-homeland-security/).

The 12-credit hour certificate provides a foundation in the international and domestic aspects of homeland security law, with elective options in biosecurity, cyber law and other topics. Students pursuing the graduate certificate are required to complete two of the three core courses required for the M.S. degree. Those core courses, coupled with two elective courses, offer a broad approach to homeland security law and the opportunity to study an area of special interest.

The certificate will require 12 credit hours for completion: 6 required credit hours (two courses) and 6 elective credit hours (two courses).

The certificate will require 12 credit hours for completion, which will be comprised of 6 required hours (2 courses) and 6 elective hours (2 courses).

### Required:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 815</td>
<td>International Aspects of Homeland Security</td>
<td>3</td>
</tr>
<tr>
<td>LAW 816</td>
<td>Domestic Aspects of Homeland Security</td>
<td>3</td>
</tr>
</tbody>
</table>

### Electives menu (choose two 3-hour courses):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW 849</td>
<td>Cybercrimes</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 862</td>
<td>Emergency Management in the United States: Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>LAW 924</td>
<td>Independent Research</td>
<td>1-2</td>
</tr>
<tr>
<td>JOUR 840</td>
<td>Seminar in: _____ (Crisis Communication)</td>
<td>3</td>
</tr>
<tr>
<td>LAW 994</td>
<td>Special Topics: _____ (Cyber Law and Policy; Terrorism Finance)</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 720</td>
<td>Topics in Environmental Studies: _____ (Biosecurity in the 21st Century)</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students must meet the university’s minimum criteria for graduate admission (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/?num1_1=).

The Graduate Certificate in Homeland Security: Law & Policy (https://law.ku.edu/academics/degrees/graduate-certificate-homeland-security/) provides a foundation in the international and domestic aspects of homeland security law, with elective options in biosecurity, cyber law and other topics.

The 12-credit hour, online certificate curriculum includes courses from the law school’s M.S. in Homeland Security: Law & Policy (https://law.ku.edu/academics/degrees/ms-homeland-security/) program. Students pursuing the graduate certificate are required to complete two of the three core courses required for the M.S. degree. Those core courses, coupled with two elective courses, offer a broad approach to homeland security law and the opportunity to study an area of special interest.

The certificate will require 12 credit hours for completion: 6 required credit hours (two courses) and 6 elective credit hours (two courses).

The certificate will require 12 credit hours for completion, which will be comprised of 6 required hours (2 courses) and 6 elective hours (2 courses).
Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years’ catalogs (http://catalog.ku.edu/archives/)»

I’m looking for

<table>
<thead>
<tr>
<th>Subject</th>
<th>Program Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology (p. 1089)</td>
<td>Bachelor of Arts and Bachelor of General Studies in Anthropology (p. 1100) Minor in Anthropology (p. 1104) Master of Arts in Anthropology (p. 1105) Doctor of Philosophy in Anthropology (p. 1107)</td>
</tr>
<tr>
<td>Biology (p. 1150)</td>
<td>Bachelor of Arts in Biochemistry (p. 1162) Bachelor of Arts in Biology (p. 1165) Bachelor of Arts in Ecology, Evolution, and Organismal Biology (p. 1168) Bachelor of Arts in Human Biology (p. 1170) Bachelor of Arts in Microbiology (p. 1181) Bachelor of Arts in Molecular, Cellular, and Developmental Biology (p. 1184) Bachelor of Science in Biochemistry (p. 1186) Bachelor of Science in Ecology, Evolution, and Organismal Biology (p. 1189) Bachelor of Science in Microbiology (p. 1191) Bachelor of Science in Molecular, Cellular, and Developmental Biology (p. 1194)</td>
</tr>
<tr>
<td>Chemistry (p. 1196)</td>
<td>Bachelor of Arts in Chemistry (p. 1202) Bachelor of Science in Chemistry (p. 1206) Minor in Chemistry (p. 1213) Master of Science in Chemistry (p. 1214) Doctor of Philosophy in Chemistry (p. 1215)</td>
</tr>
<tr>
<td>Child Language (p. 1216)</td>
<td>Doctor of Philosophy in Child Language (p. 1218)</td>
</tr>
<tr>
<td>Classics (p. 1219)</td>
<td>Bachelor of Arts and Bachelor of General Studies in Classics (p. 1227) Minor in Classical Antiquity (p. 1242) Minor in Classical Languages (p. 1243) Master of Arts in Classics (p. 1244) Accelerated Masters of Arts in Classics (p. 1244)</td>
</tr>
<tr>
<td>Field</td>
<td>Programs</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Clinical Child Psychology (p. 1247)</td>
<td>Doctor of Philosophy in Clinical Child Psychology (p. 1247)</td>
</tr>
<tr>
<td>Communication Studies (p. 1250)</td>
<td>Bachelor of Arts and Bachelor of General Studies in Communication Studies (p. 1256)</td>
</tr>
<tr>
<td></td>
<td>Minor in Communication Studies (p. 1259)</td>
</tr>
<tr>
<td></td>
<td>Undergraduate Certificate in Professional Communication (p. 1260)</td>
</tr>
<tr>
<td></td>
<td>Master of Arts in Communication Studies (p. 1260)</td>
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<tr>
<td></td>
<td>Doctor of Philosophy in Communication Studies (p. 1261)</td>
</tr>
<tr>
<td>Computational Biology (p. 1263)</td>
<td>Doctor of Philosophy in Computational Biology (p. 1264)</td>
</tr>
<tr>
<td>East Asian Languages and Cultures (p. 1264)</td>
<td>Bachelor of Arts in East Asian Languages and Cultures (p. 1275)</td>
</tr>
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<td></td>
<td>Minor in East Asian Languages and Cultures (p. 1291)</td>
</tr>
<tr>
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<td>Master of Arts in East Asian Languages and Cultures (p. 1295)</td>
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<td></td>
<td>Dual Degree Program in Law and East Asian Languages and Culture (p. 1297)</td>
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<tr>
<td></td>
<td>Graduate Certificate in East Asian Cultures (p. 1298)</td>
</tr>
<tr>
<td>Ecology and Evolutionary Biology (p. 1299)</td>
<td>Master of Arts in Ecology and Evolutionary Biology (p. 1311)</td>
</tr>
<tr>
<td></td>
<td>Doctor of Philosophy in Ecology and Evolutionary Biology (p. 1312)</td>
</tr>
<tr>
<td>Economics (p. 1315)</td>
<td>Bachelor of Arts and Bachelor of General Studies in Economics (p. 1321)</td>
</tr>
<tr>
<td></td>
<td>Bachelor of Science in Economics (p. 1324)</td>
</tr>
<tr>
<td></td>
<td>Minor in Economics (p. 1326)</td>
</tr>
<tr>
<td></td>
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**The College of Liberal Arts and Sciences Aims**

The College of Liberal Arts and Sciences (called the College) is KU's largest academic unit with more than 50 departments and programs. The liberal arts and sciences include disciplines in the arts and humanities, social and behavioral sciences, and natural and mathematical sciences, as well as international and interdisciplinary studies options. Each department lends a unique perspective on the world. Look at each department's overview page to begin to understand their contribution to your education.

Liberal education at the undergraduate level is typically broad rather than specialized. Its aim is to develop a citizenry that is broadly informed and capable of critical appraisal and to provide fundamental knowledge in many fields. The mission of the College, as reflected in KU's bachelor's degree requirements, is to provide such an education. The College takes full advantage of KU's role as a research institution to ensure that the knowledge imparted to students is current and that they learn the skills of inquiry and critical evaluation.
Undergraduate Programs

In partnership with their advisor, it is the students’ responsibility to become thoroughly acquainted with all requirements for the degree programs in which they plan to participate. These include all university requirements, as well as the requirements of the College outlined in this section of the catalog. Students are also responsible for understanding the requirements that are unique to individual programs. By taking an active role in their undergraduate education, students maximize the value of their KU experience.

In general, the student is subject to the requirements in place at the time of admission to KU as a degree-seeking student.

CLAS Baccalaureate Degrees

The College of Liberal Arts and Sciences offers 3 degrees at the baccalaureate level:

- Bachelor of Arts (B.A.),
- Bachelor of General Studies (B.G.S.)
- Bachelor of Science (B.S.).

The majority of students in the College earn a B.A. degree. The B.A. degree may be earned with a major in all departments and programs in the College except atmospheric science. The B.A. is the traditional baccalaureate degree, structured to ensure both breadth and depth of knowledge through completion of the KU Core, degree specific requirements in writing, quantitative literacy, foreign language, and laboratory science, as well as course work in the major.

The B.G.S. degree is an option for some majors, allowing intentional breadth, consisting of the completion of the KU Core and one of two options for degree completion. For Option B, note - Students completing the B.G.S. Liberal Arts and Sciences, Option B cannot pursue a major or minor. However, undergraduate certificates may be pursued/completed.

The B.S. degree is offered by all natural science areas except human biology, as well as economics and behavioral neuroscience. In addition to the KU Core, students complete general education degree and major requirements determined by each program offering the degree and may be different for each B.S. degree in the College. With fewer required non-science general education degree requirements, the B.S. permits more depth in the major. It requires additional work in supporting science areas.

View the list of College of Liberal Arts and Sciences Departments & Programs (p. 748).

Two Degrees

Double Degrees in the College of Liberal Arts and Sciences

The following combinations of degrees are allowable within the College, subject to restrictions placed by departments or programs on the allowable course overlap:

- Two (2) or more Bachelor of Science (B.S.) degrees. These must be different B.S. degrees, not different concentrations within the same B.S. degree, and must conform to any restrictions placed by awarding departments or programs on the allowable course overlap.
- Bachelor of Arts (B.A.) and B.S. degrees as long as the degrees are in different majors. Students may not, for example, earn both a B.A. and a B.S. in mathematics. Allowable course overlap between the two degrees is determined by each department or program.
- Bachelor of General Studies (B.G.S.) and B.S. degrees as long as the degrees are in different majors. Students may not, for example, earn both a B.G.S. and a B.S. in economics. Allowable course overlap between the two degrees is determined by each department or program. Students pursuing the B.G.S. in Liberal Arts & Sciences are also permitted to pursue a B.S. degree in another area of study.
- Students may complete the requirements for more than one emphasis area or concentration in a major or degree program but should be aware that they are not completing a second degree or major. The following example illustrates this point: A student who completes all requirements for both the traditional English option and the creative-writing option is earning one degree, either the B.A. in English or the B.G.S. in English.
- Students may earn a B.A. or a B.G.S. with more than one major but not more than one B.A. or B.G.S. degree from the College. The B.G.S. in Liberal Arts and Sciences may not be earned in combination with another major or minor. Allowable course overlap between the two majors is determined by each department or program.
- Students normally may not earn a B.A. degree and a B.G.S. degree.
- Exclusions or Special Circumstances:

  Requests for exceptions must be discussed with the Assistant Dean of College Advising & Student Services on behalf of College Governance, and all petitions are vetted through the Committee on Undergraduate Studies and Advising (CUSA). Exceptions to this policy must be approved by the Committee on Undergraduate Studies and Advising (CUSA).

Double Degrees in the College and a Professional School

Students who wish to work simultaneously toward earning a degree from the College and a degree from one of the professional schools may do so, with the expectation that all general education requirements are met for both degrees.

The College of Liberal Arts & Sciences Online Programs

For students who are unable to take their coursework on the Lawrence or Edwards campuses, the College Online offers the Bachelor of General Studies in Communication Studies, Liberal Arts & Sciences, and Psychology fully online. Undergraduate certificates and minors are also available online. For more information visit the College Online website (http://collegeonline.ku.edu/major/programs-offered/), or contact us directly at thecollegeonline@ku.edu.

KU Edwards Campus Undergraduate Programs

Students who would like to complete a bachelor’s degree in the Kansas City area may choose from 5 CLAS undergraduate majors offered on the KU Edwards Campus (http://edwardscampus.ku.edu/) in Overland Park. Contact the appropriate program advisor at Edwards (http://edwardscampus.ku.edu/program-advisors/) for more information.

- Law and Society
  - B.A. and B.G.S. degrees are offered. See requirements under Law and Society (p. 1985).
- Literature, Language, and Writing
B.A. and B.G.S. degrees are offered. See requirements for the major under English (p. 1354).

- **Molecular Biosciences**
The B.S. degree is offered. See requirements for the major under Biology Undergraduate Program (http://catalog.ku.edu/liberal-arts-sciences/biology/bs-molecular-biosciences/).

- **Psychology**
  B.A. and B.G.S. degrees are offered. See requirements for the major under Psychology (http://catalog.ku.edu/liberal-arts-sciences/psychology/ba-bgs-psychology/).

- **Public Administration**
  B.A. and B.G.S. degrees are offered. See requirements for the major under Public Administration (p. 1988).

**Degree Requirements**

**Early and Continuous Enrollment in English and Math (All Undergraduate Degrees)**

Undergraduate students enrolled in the College of Liberal Arts and Sciences are expected to make timely progress towards completing their degree requirements. In an effort to have students remain compliant with the requirements of the KU Core and the College, students should complete the Written Communication requirements of both the KU Core and their degree within the first academic year of their enrollment and to complete the Quantitative Literacy requirements of both the KU Core and the College by the end of their third full semester.

To ensure compliance with this policy, students may be administratively registered for courses if, after the first semester, the College determines that they are not on track to meet the requirement. The College also may place administrative holds on records of students not in compliance with this policy.

Students should pay close attention to the requirements specific to their degree and major. Some degrees and majors require specific Goal 1, Learning Outcome 2 courses to meet the requirements of the KU Core, their degree and their major or minor.

**Written Communication**

Students are expected to enroll in two courses that meet Goal 2, Learning Outcome 1 of the KU Core in their first academic year of enrollment. Students should pay close attention to their degree specific requirements (such as for the Bachelor of Arts) given that certain degrees require specific Goal 2, Learning Outcome 1 courses despite advanced standing in writing courses due to examination scores.

**Quantitative Literacy**

Students are expected to meet the requirement of Goal 1, Learning Outcome 2 of the KU Core and the requirements in the College by the end of their third full semester of enrollment. Students should pay close attention to their degree specific requirements (such as for the Bachelor of Arts) given that certain degrees require specific Goal 1, Learning Outcome 2 courses to meet both KU Core and degree specific requirements.

**Requirements for Graduation (All Undergraduate Degrees)**

**Grade-Point Average Required for Graduation**

To be eligible to graduate from the College of Liberal Arts and Sciences with any of the baccalaureate degrees offered, a student must earn at least a 2.0 grade-point average in courses taken at KU and at least a 2.0 in KU junior/senior courses (courses numbered 300 and above) in the major. All junior/senior level major-eligible courses attempted at KU will be included in the junior/senior major GPA calculation.

**Hours Required for Graduation**

To be eligible to graduate from the College of Liberal Arts and Sciences with any of the baccalaureate degrees, a student must successfully complete at least 120 credit hours, 45 of which must be junior/senior hours (courses numbered 300 and above). The required 120 hours are divided into 4 categories: the KU Core, College specific degree requirements, major, and elective requirements. The following courses do not count toward completion of requirements: MATH 2 or any developmental course numbered below 100. The following limits toward completion of total hours include: 64 hours of community college credit, 4 hours in physical education activity courses, 6 hours in music organization courses, and any repeated courses for which a student has already received credit.

**Minimum and Maximum Hour and Grade-Point Average Requirements for All CLAS Degrees (B.A., B.G.S., B.S.)**

**Minimums**

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<thead>
<tr>
<th>Requirement</th>
<th>Minimum Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours</td>
<td>120</td>
</tr>
<tr>
<td>Junior/senior hours (courses numbered 300 or above)</td>
<td>45</td>
</tr>
<tr>
<td>Hours in residence at KU (all must be taken at the junior/senior level)</td>
<td>30</td>
</tr>
<tr>
<td>KU cumulative grade-point average</td>
<td>2.0</td>
</tr>
<tr>
<td>Grade-point average in KU junior/senior hours in the major</td>
<td>2.0</td>
</tr>
<tr>
<td>Grade-point average in KU hours in the minor</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Maximums**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Maximum Hours</th>
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<tbody>
<tr>
<td>Hours from community colleges</td>
<td>64</td>
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<tr>
<td>Hours in physical education activity courses</td>
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<td>Hours in music organization courses</td>
<td>6</td>
</tr>
</tbody>
</table>

**Note:** Courses numbered below 100 do not count toward a degree but are included in the grade-point average.

**General Education Degree Requirements**

All degrees require courses that reflect the breadth of the disciplines in the College.

All undergraduate degrees from the University of Kansas require completion of the KU Core Curriculum (http://kucore.ku.edu/). In addition to the KU Core, students must satisfy the degree specific and major requirements of the degree they are pursuing. Below are the degree specific requirements of the various degrees of the College. Major requirements may be found on the specific departmental pages in this catalog.

**BA Degree Specific Requirements for Graduation**

The Bachelor of Arts degree requires:

- **Quantitative Reasoning.** 3 credits. This course must be approved by CUSA and be offered by a department/program within the College
of Liberal Arts & Sciences. The course should enable students to define a problem, analyze numerical or symbolic information, apply mathematical or logical principles, and integrate quantitative or formal methods into problem solving. A single course cannot count for both the BA Quantitative Reasoning requirement and the KU Core Goal 1.2 requirement. A list of currently approved courses can be found here (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/).

**Laboratory or Field Experience.** Variable credits. Students will complete a laboratory or field experience in the natural, social, or behavioral sciences, meeting this requirement by taking either: i) a laboratory course or field experience of at least one credit hour; ii) a combined lecture/laboratory course containing at least one credit hour of laboratory or field work activity; or iii) an approved independent study of at least one credit hour. A laboratory or field experience should involve: 1) Analysis and interpretation of data obtained through observation and/or measurement using appropriate scientific methods; 2) The use of established scientific theories and models to develop and critically evaluate conclusions drawn from data analysis; 3) Understanding and identifying sources of error and uncertainty in experimental results. Such experiences could be hypothesis-driven, aim to fill a gap in knowledge, or serve to reinforce understanding of a scientific phenomenon or theory in the subject area. Courses that fulfill this requirement will contain the code "LFE" and may be found in the Schedule of Classes.

**Writing.** 6 credits. Students must complete six credit hours (two courses) of collegiate writing-level instruction. The specific courses depend on initial placement. A student whose initial placement is ENGL 101 (Composition) must take ENGL 101 and ENGL 102 (Critical Reading and Writing). A student whose initial placement is in ENGL 102 or ENGL 105 (and who does not have credit for ENGL 101) must take ENGL 102 or ENGL 105 and an additional Goal 2 Outcome 1 course of the KU Core.

**Non-English Language Proficiency**

Variable credits. Students must demonstrate fourth semester proficiency in a single non-English language, or third semester proficiency in a first non-English language and first semester proficiency in a second non-English language. This requirement may be met through coursework or examination by the appropriate language department.

**BGS Degree Specific Requirements for Graduation**

A Bachelor of General Studies is a broad-based liberal arts and science degree that offers elements of both breadth and depth, while preserving educational rigor. This degree prepares students for the workforce with intellectual flexibility and expertise in a variety of areas. The Bachelor of General Studies degree has two distinct options for completion and requires either:

- **Option A.** Completion of the requirements of a single B.G.S. major AND a secondary field of academic study (a second degree offered by CLAS or other school, a second CLAS major or co-major, a minor offered by CLAS or another school, or two certificates offered by CLAS or another school/unit);
- Completion of an approved career preparation course, or a combination of approved courses (minimum 3 credit hours total). Eligible courses can include both department specific experiential courses or traditional classroom instruction. In both cases, a career preparation class will emphasize and develop students’ ability to select and secure a career, succeed in the workplace, and pursue professional development. A list of currently approved courses can be found here (https://collegeadvising.ku.edu/bgs-career-preparation-courses/).

**OR**

- **Option B.** Completion of the B.G.S. in Liberal Arts and Sciences. This degree program requires:
  - Liberal Arts and Sciences Breadth Requirement. Satisfied by the completion of a course (with a minimum of 2 credit hours) in 15 unique departments/programs within the College or School of the Arts (as determined by course prefix). Courses fulfilling this requirement may also contribute to the KU Core and other requirements.
  - World Language and Culture.
    - 2 courses (each with 3 credit hours or more) in a single world language, or proof of two-semester proficiency in a language other than English.

**OR**

Completion of 3 courses beyond the KU Core requirements (each with 3 credit hours or more) in world, non-Western culture (W or NW designated courses), or language areas. This may include a variety of areas, languages, and cultures.

- **Additional Natural Sciences and Mathematics.** Satisfied by the completion of two additional courses from the natural sciences (requirement code N) and/or mathematics (MATH prefix courses) beyond the KU Core.

The Bachelor of Science degree:

- All Bachelor of Science degree requirements are listed on their respective academic department pages within this catalog.

Each degree allows a certain number of elective hours. In addition to general education degree and major requirements, students may choose elective courses to bring the total credit hours to 120. In choosing electives, students should be aware of limits in certain areas listed under Hours Required for Graduation.

**Junior/Senior Hours Required for Graduation**

KU requires all students pursuing bachelor’s degrees to complete a minimum of 45 credit hours at the junior/senior level (courses numbered 300 and above at KU).

**Majors and Minors**

**Major Requirements**

Students must complete a major to graduate with a degree in the College. Students pursuing the B.G.S. in Liberal Arts and Sciences, Option B may not choose a secondary field of study.

A major requires the student to study at least one discipline in depth. The average number of required credit hours in the major for the B.A. degree is 30 hours. The Board of Regents requires a major to be at least 24 credit hours. See the individual major listings for specific minimum requirements. View a current list of all CLAS majors and minors (p. 748).
Degree requirements and course descriptions are subject to change. Check with department offices or College Advising & Student Services (https://collegeadvising.ku.edu/) for current information.

Declaration of Major
The College expects that every student declare a major or be admitted to a professional school no later than the semester of completion of 60 credit hours. Students should contact College Advising & Student Services to indicate major choice(s).

Departments may reserve enrollment in courses in the department for declared majors.

Changing majors late in the academic career may delay graduation. Consult a graduation advisor in the College Advising & Student Services office, 109 Strong Hall for further information regarding a change in major.

Students are encouraged to explore different disciplines before choosing their majors. Help with choosing a major can be obtained at the Undergraduate Advising Center (http://advising.ku.edu/), College Advising & Student Services (https://collegeadvising.ku.edu/) (109 Strong Hall), and the University Career Center (https://career.ku.edu/).

Hours in the Major: Maximums and Minimums
There is no limit on hours taken in the major for the B.A., B.G.S., or B.S. degree. Departments may not require more than 40 hours in the major for the B.A. or more than 50 hours in the major for the B.S. Some skills courses and supporting science courses are not included in this maximum limit. A minimum of 12 hours in the major must be in courses numbered 300 or above. At least 15 hours in the major must be taken in residence at KU.

Major Grade-Point Average Graduation Requirement
A student must earn a grade-point average of at least 2.0 in KU junior/senior courses (numbered 300 and above) completed in the major. All junior/senior level major-eligible courses attempted at KU will be included in the GPA calculation.

The Credit/No Credit option is not available for any course that may satisfy major requirements. If a student has mistakenly requested the Credit/No Credit option for a course in the major, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the major grade-point average for certification purposes. A department may determine that any minor course taken with the CR/NC option must be repeated.

Major Grade-Point Average Graduation Requirement
A student must earn a grade-point average of at least 2.0 in KU junior/senior courses (numbered 300 and above) completed in the major. All junior/senior level major-eligible courses attempted at KU will be included in the GPA calculation.

The Credit/No Credit option is not available for any course that may satisfy major requirements. If a student has mistakenly requested the Credit/No Credit option for a course in the major, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the major grade-point average for certification purposes. A department may determine that any minor course taken with the CR/NC option must be repeated.

Double Major
A student may earn a double major if he or she satisfies the requirements of both majors in consultation with advisors in each department, as awarding departments and programs may place restrictions on the allowable course overlap.

Minors
The College offers more than 40 approved minors. These are open to all students in the College regardless of the degree they are pursuing. The schools of Architecture and Design (http://ardc.ku.edu/); Business (https://business.ku.edu/); Education and Human Sciences (http://www.soe.ku.edu/); Engineering (http://www.engr.ku.edu/); Journalism and Mass Communications (http://www.journalism.ku.edu/); Music (http://music.ku.edu/); Nursing (http://nursing.kumc.edu/); and Social Welfare (http://www.socwel.ku.edu/) permit their students to earn College minors.

Requirements for the minor vary, but all must be at least 18 hours including 12 hours at the junior/senior level. Nine of the junior/senior-level hours must be taken in residence at KU. Students may not earn a major and a minor in the same field (ex. a major and a minor in English). Students may not earn a minor unless they have completed a major and have completed at least one course for the minor after the date the minor was approved by College Assembly. Successful completion of a minor requires a minimum KU grade-point average of 2.0 in all courses taken for the minor. For requirements for each minor, see the programs listed on the Departments & Programs (p. 748) page.

The Credit/No Credit option is not available for any course that may satisfy minor requirements. If a student has mistakenly requested the CR/NC option for a course in the minor, 1.7 grade points for any CR grade recorded and 0.0 points for any NC grade recorded are calculated into the major grade-point average for certification purposes. A department may determine that any minor course taken with the CR/NC option must be repeated.

View a current list of all College majors and minors (p. 748).

CERTIFICATES
Undergraduate certificates in the College provide students with the opportunity to organize their elective courses in concentrated areas of expertise to develop depth and breadth in professional or interdisciplinary knowledge. Students may use the certificate program to add new skill sets, add depth and application to existing knowledge, explore minor options in various departments, and/or learn about various areas of interests from diverse disciplinary standpoints.

Students majoring within departments and those seeking experiences in areas outside of their departments have the opportunity to explore interdisciplinary approaches to scholarship and to increase the value of their degrees in the global marketplace by focusing on application of their skills.

Certificate proposals should meet the following criteria. Variations from these criteria will be considered by CUSA with appropriate justification.

Criteria:
• Certificates must contain a thematic goal and clarification as to how that goal is completed through the curriculum. Certificates must also demonstrate how the coursework addresses a common theme through multiple disciplines or that it develops specialized expertise that will benefit students in graduate or professional studies or careers.

• Minimum of 12 hours with no more than 14 required hours. (Courses in the certificate program may have prerequisites that are not part of the certificate)

• 6 hours must be at the JR/SR level

• All certificate coursework must be completed at KU. Students who complete certificate requirements at other institutions may substitute one course only in the instance that the course is a direct transfer articulation equivalent to KU. Exceptions to this are reviewed by CUSA on a case by case basis and must contain department endorsement.

• Minimum 2.00 KU GPA in coursework which may apply to the certificate (departments may propose a higher GPA).

• One course may be taken from a Professional School.
The KU Core curriculum, coupled with degree and major requirements in the College, ensure a balance of breadth and depth of knowledge critical in today's world.

See the General Education Degree Requirements section above for details regarding College-specific requirements.

Bachelor of Science Degree Requirements

All general education degree, major, and supporting requirements for each B.S. program are specified by department faculty, with approval of the College Assembly. They are listed under the department or program on the Departments & Programs (p. 748) page. B.S. candidates are held to a more prescribed program with fewer electives than B.A. candidates. Students pursuing the B.S. may complete an approved minor.

Overlap Between Requirements

A course may be used to fulfill a KU Core or College degree-specific requirement and a minor or major requirement.

A student may earn more than one major/minor if they satisfy the requirements of all majors/minors. Course overlap is generally allowed between two majors, a major and a minor, or between two minors, but is subject to restrictions set by awarding departments or programs with reference to specific combinations of majors and minors. Any restrictions set by departments or programs are communicated as a part of the approved major and minor requirements.

Graduate Programs

The College of Liberal Arts and Sciences (called the College) is KU's largest academic unit with more than 50 departments and programs. Graduate programs in the liberal arts and sciences include disciplines in the arts, humanities, social and behavioral sciences, and natural and mathematical sciences, as well as many interdisciplinary degree programs where disciplines come together to offer students a unique graduate experience. Each graduate program's page contains program-specific information about admission, course curriculum, and advising.

The College's participation in graduate education reflects a long and distinguished commitment to higher learning and research across the liberal arts and sciences. The College takes full advantage of KU's role as an international research institution to ensure that the knowledge imparted to students is current and that they learn the skills of inquiry and critical evaluation. Graduate students are central to the research and teaching missions of the College. They are also the next generation of scholars, artists, and skilled professionals who will make contributions to our communities and the production of knowledge for many years to come.

Graduate Degrees in the College

The College offers Doctor of Philosophy (Ph.D.) degrees in 36 fields, including 2 fields within the School of the Arts and 1 within the School of Public Affairs and Administration. Master of Arts (M.A.) or Master of Science (M.S.) degrees can be earned in more than 40 disciplines and the Master of Fine Arts (M.F.A.) degree is offered in creative writing, visual art, and theatre design with a concentration in scenography. Professional degrees are offered at the master's level in the Master of Public Administration (M.P.A.) program, the Master of Urban Planning (MUP), and the Professional Science Master's (PSM) program.

The College also offers Accelerated Master's degree options in the following fields:

- Classics
- Economics
- English
- Environmental Studies/Environmental Assessment
- Environmental Studies/Urban Planning
- History of Art
- Latin American & Caribbean Studies
- Philosophy
- Speech Language Pathology
- Urban Planning

For students whose academic and professional goals can best be achieved through investigations at the interface of 2 or more disciplines, the College offers master's and doctoral degree programs in Interdisciplinary Studies. Please see the policy governing graduate degrees in Interdisciplinary Studies section of the online catalog.

The College offers more than 30 Graduate Certificates, with additional certificate programs in development.

View the College's Departments & Programs (p. 748) section of the online catalog for more information on specific fields of study.

KU Edwards Campus Graduate Programs

Students who would like to complete a graduate degree in the Kansas City area may choose from a variety of master's degrees and graduate certificates that are offered on the KU Edwards Campus (http://edwardscampus.ku.edu/) in Overland Park. Information about program requirements, facilities, tuition, and fees is available on the Edwards Campus website (http://edwardscampus.ku.edu/). Residents of Kansas City metro area counties admitted as degree-seeking students to one of these programs may qualify for the MetroKC tuition rate for Edwards Campus courses. For more information, contact the College's Graduate Advisor at the Edwards Campus at (913) 897-8400.

Ceremonies

At the end of each Spring semester, the College holds a master's hooding ceremony for graduates in the College and the Office of Graduate Studies organizes the annual campus-wide doctoral hooding ceremony. The School of the Arts also hosts a ceremony for SOTA graduates. University Commencement information is available in the KU Commencement section of the KU website.

Attendance at these ceremonies is optional. Please consult the Graduate Studies (http://graduate.ku.edu/) and COGA website (http://coga.ku.edu/) for more information.

Undergraduate Advising

Academic advising helps undergraduate students develop educational plans, clarify career and life goals, and appreciate the values of a liberal arts education. College Advising & Student Services, in partnership with our faculty and staff across the University, is dedicated to helping undergraduate students achieve their educational and personal goals, and to maintaining the academic integrity of our degree programs. We welcome students, encourage them to be active participants in their educational experience, and celebrate their milestones.
The College encourages students to consult frequently with advisors, and to declare their majors as soon as possible in order to get connected with all resources in their chosen area of study. Academic advisors serve as guides, helping students explore options and make decisions. They work closely in partnership with faculty to connect students and provide a comprehensive advising experience during their academic journey.

Advising questions may be directed to, and advising appointments made through the College Advising & Student Services office (https://collegeadvising.ku.edu/schedule-appointment/), 109 Strong Hall, 785-864-3500.

Degree Progress Report

The Degree Progress Report (DPR) is a computerized advising and degree-audit system, used to assist students and advisors in tracking progress toward completion of general education degree and major requirements. Students should review their DPR each semester and be prepared to review and discuss information contained in the DPR at all advising appointments. The DPR can be accessed through the student’s account in the MyKU Portal. Although the DPR provides a list of courses taken and grades earned, it is not an official transcript and can be used only for internal advising. Students must obtain all official transcripts from the Office of the University Registrar (http://www.registrar.ku.edu/), KU Visitor Center.

4-Year Graduation Plans

With careful planning and commitment to a full-time course load, students can graduate in 4 years. Degree Plans for all degrees are available through the catalog “degree plan” tab.

Graduate Advising & Mentoring Overview

Advising of graduate students is primarily conducted within the graduate programs by program staff members and the individual faculty members who act as mentors and advisors.

A faculty member in the academic unit, typically with the title of Director of Graduate Studies (DGS), has primary responsibility for the regular assessment of students’ progress towards degree, as well as for the development and oversight of broad scale graduate initiatives. In many units, the DGS has primary oversight of department graduate committees and processes related to recruitment, admissions, new program development or program changes, graduate student annual evaluations, and graduate student petitions. Students are encouraged to work with the DGS regarding course selections and individual program requirements to ensure that all program milestones are reached as expected by the academic unit.

The majority of academic units in the College also receive advising support from a professional staff member called their graduate program coordinator. CLAS graduate program coordinators (https://coga.ku.edu/people/staff/) are team members of the College Office of Graduate Affairs (COGA) that are assigned to a specific CLAS unit(s) to advise graduate students and faculty on policies and processes related to graduate education at KU. Students are encouraged to work closely with their graduate program coordinator to ensure that all University and College requirements are met as expected. Graduate program coordinators also work closely with faculty in their assigned academic units(s), the COGA office, and other campus partners to collaborate on key initiatives related to graduate education and to connect students to services and opportunities to facilitate successful progression throughout their graduate career. Students in units without an assigned graduate program coordinator from COGA should contact the DGS regarding University and College policies and procedures.

Mentoring Best Practices

Graduate mentors, including a student’s graduate advisor(s), others at the university, and external professionals, provide professional and general insights, advice, and assistance to graduate students. Good graduate mentoring makes a vital contribution to the academic and professional success of individual students, advances the disciplines represented in the College, and contributes to the mission of the College as a whole. A positive mentoring relationship depends on the cooperation of both mentor and mentee; both should therefore work together in creating appropriate expectations for their mentoring relationship and in implementing those expectations in practice. (See here (https://www.ithinkwell.com.au/for-research-supervisors/) and here (https://coga.ku.edu/mentoring-and-advising/) for help with this.) With this in mind, here are best practices for graduate mentors and mentees in the College:

Mentors:

1. Graduate mentors should conscientiously supervise, encourage, and support students in their academic endeavors and assist them in securing research support.
2. Graduate mentors should respond effectively, respectfully, and in a timely manner to requests for guidance and support from mentees.
3. Graduate mentors should advise students concerning professional ethics, encourage the practice of research and publication consistent with ethical standards, and help students avoid ethically questionable situations.
4. Graduate mentors should strive to enhance the educational value of teaching and research assistantships of the students under their supervision. To do so they should provide discipline-specific guidance for new and experienced GTA sand GRAs.
5. Graduate mentors should be objective in the evaluation of research and academic performance and communicate that evaluation fully and honestly to their students. Graduate mentors should report accurately on the competence of students to other professionals who require such evaluations.
6. When engaged in teaching, research, or supervision, graduate mentors should recognize the power they hold and should avoid engaging in conduct that exploits or demeans students or that could be construed as an abuse of that power.
7. Graduate mentors should not permit personal animosities or intellectual differences with colleagues to impede student access to those colleagues or interfere with students’ research or progress toward a degree.
8. Graduate mentors should aid and advise graduate students in seeking professional employment inside and outside of academia, taking into account the current state of the job market and the particular situation of the student. This includes directing students towards appropriate resources (see for example here (http://cogaprofessional.ku.edu/getting-started-0/) and advising students about career opportunities and implications associated with their participation in particular research projects or degree programs.
9. Graduate mentors should be sensitive to the specific challenges faced by international students and students who identify as members of one or more underrepresented group. This may include directing students toward appropriate resources, including the following: Office

...

Mentees:
1. Graduate students should be open and willing to discuss their professional goals, aspirations, and areas where they need guidance with their mentor.
2. Graduate students should be open to guidance and criticism from their mentors.
3. Graduate students should respond effectively, respectfully, and in a timely manner to communication and guidance from mentors.
4. Graduate students should come to scheduled meetings prepared and on time. Templates are available here (https://www.ithinkwell.com.au/resources/meeting-agenda/) for students to prepare for meetings.
5. Graduate students are strongly encouraged to establish and maintain multiple mentoring relationships or develop a network of mentors that can provide support and guidance throughout their graduate career and beyond. Graduate students are encouraged to include, as part of this network, colleagues, faculty beyond their department, university staff, alumni, and external professionals.
6. Graduate students are strongly encouraged to take advantage of resources across campus to develop short-term and long-term academic, research, and other professional goals and be willing to discuss these with their mentor.

Change of Advisor
Graduate mentoring relationships can break down. If so, the formation of new mentoring relationships should be encouraged without prejudice. (For more information about what to do when a mentoring relationship breaks down, see Chapter 6 of the University of Michigan’s How to Get the Mentoring You Want: A Guide for Graduate Students (https://rackham.umich.edu/wp-content/uploads/2018/11/mentoring.pdf)).

All departments in the College are required to have a policy in place to govern the process of switching advisors. Please see your department’s graduate student handbook or consult with the Director of Graduate Studies for more information.

Students seeking information on specific policy or procedures should review the relevant content in the KU Policy Library (http://policy.ku.edu/) as well as the College and Graduate Studies (p. 2408) sections and the relevant Department or Program section of the online catalog. The College Office of Graduate Affairs (https://coga.ku.edu/), 102 Strong Hall, coga@ku.edu, is also available for assistance.

Students who have completed all degree requirements and are preparing to graduate should refer to the graduation checklists available on the COGA website (http://coga.ku.edu). Graduating students are also welcome to schedule a Graduation Appointment with the College Office of Graduate Affairs.

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

Academic Integrity
The College of Liberal Arts and Sciences strictly enforces KU and College policies on academic misconduct. Academic integrity requires honest performance of academic responsibilities by students. These include preparation of assignments, reports and research papers, taking examinations, completing administrative requirements, and a sincere and conscientious effort by students to abide by the policies set forth by instructors.

Academic Standing
Good Standing
Students with a KU cumulative GPA of a 2.00 or higher are in good academic standing.

Notice
Students who fall below a 2.00 KU cumulative GPA for the first time will be placed on notice. During the notice semester students are required to participate in all programming. Students failing to return to good academic standing at the end of the notice semester will be placed on probation. Students will only receive one notice semester. Students who have previously returned to good academic standing will be placed on probation should their KU cumulative GPA fall below a 2.00.

Probation
Students on probation must meet their required KU Term GPA (see chart below) every semester until their KU cumulative GPA reaches or exceeds a 2.00. Students are allowed to continue on probation provided they meet their KU term GPA every fall and spring semester until their KU cumulative GPA reaches or exceeds a 2.00. While on probation students are required to participate in all programming. The required KU term GPA increases to a 2.50 after attempting 45 or more hours at KU to help students on probation return to good academic standing before they are at risk of being unable to raise their KU cumulative GPA in time for graduation. Failure to meet the required KU Term GPA during a fall or spring semester will result in academic dismissal.

Academic Dismissal
Students on probation who fail to meet their probation requirements during a fall or spring semester will be academically dismissed and are not allowed to continue in the College of Liberal & Sciences until they meet their readmission after dismissal requirements. Students are not dismissed at the end of summer.

Readmission after Dismissal
Students can be readmitted back to KU after a first and a second dismissal but they must complete their readmission requirement. If all requirements for the KU Core 1 – 5 goals are completed, no coursework is required.
Students with a KU cumulative GPA of 2.00 or higher (or in their first semester) can fill out a Change of School Form requesting to be admitted to the College of Liberal Arts and Sciences and/or School of the Arts, from a KU professional school, through the last day of class for the current semester. Requests made after that will be for admission in the upcoming semester. This process is for active KU students. Students not admitted to KU follow the University’s admission policy.

Students with a KU cumulative GPA of less than 2.00 will be evaluated according to the College’s academic standing policy and may not be admissible based on past academic performance at KU. Students who have been dismissed from another KU School will need to submit a change of school request one week or earlier prior to classes starting. Non-dismissed students may request to change schools through the 20th day of the current semester; after that date requests will be considered for the next semester.

• Change of school requests will not be reviewed until current semester grades are posted.
• Students admitted to the College on probation will need to meet the College’s academic probation requirements during the semester they are admitted or face an academic dismissal.
• The College reserves the right to deny admission to students who have had consecutive semesters of failing grades (or multiple semester withdrawals) regardless of their KU cumulative GPA in previous semesters.
• Students dismissed from another school at KU and are found to be inadmissible to the College can follow our readmission after dismissal policy to return to KU for a future semester.
• Students admitted to the College via a Change of School request will go by the requirement term of their original matriculation to the University of Kansas. A student may petition the College of Liberal Arts & Sciences to request to change to the term requirements based on the term they requested entry into the College. This should be considered in consultation with their academic advisor, and a petition should be submitted to College Advising & Student Services.

To change from one school to another, a student must submit a Change of School form in the dean’s office of the school they plan to enter or in College Advising & Student Services (https://collegeadvising.ku.edu/) if they plan to enter the College. Deadlines are included on the form. See the school’s requirements for admission.

Students applying for admission to the College from other schools in the university must meet the same minimum grade-point average requirements in KU attempted course work as continuing College students. Consult College Advising & Student Services, Strong Hall, 1450 Jayhawk Blvd., Room 109, Lawrence, KS 66045-7518, 785-864-3500.

Credit/No Credit
A Credit/No Credit option is available to all degree-seeking undergraduates. A student may enroll in 1 course a semester under the option, if the course is not in their major or minor. To exercise the option, the student must fill out the online form via the Registrar’s website during the fifth and sixth weeks of the semester (or the third week of summer session and 8-week courses). See the Academic Calendar (http://registrar.ku.edu/calendar/) for current dates for electing this option. After the close of the option period, the choice cannot be changed. Under the option, a grade of Credit is recorded for grades of A, B, or C; No Credit is recorded for grades of D or F. Courses graded Credit or No Credit do not count in computing the grade-point average. Courses graded Credit are included in the total hours counted toward graduation. Courses graded No Credit do not count toward graduation. For more information, visit the KU Policy Library (http://policy.ku.edu/).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

The university-established timeline for exercising this option is strictly enforced.

Enrollment
See the Enrollment Guide (http://www.registrar.ku.edu/enrollment/) for complete enrollment information.

New and Readmitted Student Enrollment
Immediately before the beginning of classes each term, an enrollment session is scheduled for new students. New students admitted for summer or fall term have an additional option of enrolling in fall courses during one of several summer orientation sessions. Invitations to orientation are sent automatically to newly admitted and readmitted students who applied for the spring, summer, or fall terms (except non-degree-seeking students). Readmitted students may attend a special abbreviated orientation session, may enroll during continuing enrollment, or may attend the enrollment sessions immediately before the start of the semester. Readmitted students whose readmission applications are completed by a designated date also may enroll during continuing enrollment, after meeting with an advisor. All students must preregister for orientation and enrollment sessions.

International students must complete the required check-in processes before enrollment and are encouraged to attend International Student Orientation, which includes advising and enrollment sessions.

Continuing Enrollment
This enrollment allows students who are currently enrolled during one term to enroll for the next term. Spring-enrolled students enroll in April for the following summer session or fall semester or both. Fall-enrolled students enroll in October or November for the following spring semester.

Late Enrollment
Each semester, the Academic Calendar (http://registrar.ku.edu/calendar/) announces dates for late enrollment and the last day to submit
Grading

The letters A, B, C, D, S (satisfactory), and Credit indicate passing work. The letters F and U (unsatisfactory) and No Credit indicate that the quality of work was such that, to obtain credit, the student must repeat regular course work. P represents satisfactory progress (an interim grade pending completion of a subsequent term’s course work). See the KU Policy Library (http://policy.ku.edu/) for more information.

Graduation with Honors

Undergraduates may earn honors upon graduation in 3 ways. The student may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program (http://www.honors.ku.edu/). It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

Graduation with Distinction or Highest Distinction

The top 10 percent of each year’s graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction.

Students must have completed at least 60 hours graded A through F in residence at KU (including the hours in which they are enrolled during the semester of graduation). Awards of distinction and highest distinction are based solely on the grade-point average determined by KU residence credit hours unless the overall grade-point average (including transfer hours) is lower than the residence grade-point average. In this case, the award is determined by the overall grade-point average. Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction.

Potential candidates are determined in mid-April and invited to a recognition ceremony during Commencement weekend in May. Final designation is determined in mid-July.

Graduation with Departmental Honors

Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental honors is awarded in recognition of exceptional performance in the major, completion of a program of independent research or an alternative project, and a strong overall academic record.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on undergraduate studies and advising), the College requires the following for graduation with departmental honors:

1. Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s). Copies of the intent form should be returned to College Advising and Student Services.

2. At the end of the final undergraduate semester, the candidate must have achieved a grade-point average of at least 3.5 in the major, and some departments may also require an additional overall minimum GPA. This includes work completed at other institutions, as well as at KU. No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.

3. Each candidate’s departmental honors work must include independent research or an acceptable alternative project. The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

Petitions

A department or program may petition to award graduation with departmental honors or deserving students who, for good reason, do not meet every College and departmental requirement. Send petitions to the committee on undergraduate studies and advising, College Advising & Student Services (https://collegeadvising.ku.edu/).

Late Completion of Honors Requirement

Requirements for graduation with honors may be completed after the date on which certifications are requested from departments, and in some cases, requirements, if not needed for graduation, may be completed after a student has graduated. However, the Incomplete policy does apply and grades would lapse at the time of graduation. When a candidate finishes all requirements, departments must notify College Advising & Student Services (https://collegeadvising.ku.edu/) in writing.

Honor Roll

Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Honors Program

The University Honors Program (http://www.honors.ku.edu/) provides opportunities for outstanding and creative undergraduates in all schools at KU to develop their full potential during their undergraduate years. See Honors in this section of the online catalog for further information.

Incompletes

The letter I indicates incomplete work, such as may be completed without re-enrollment in the course. The letter I should not be used when a definite grade can be assigned for the work done. It is not given for the work of a student in any course except to indicate that some part of the work has, for reasons beyond the student’s control, not been done, while the rest has been satisfactorily completed. At the time an I is reported on the electronic roster, the character and amount of work needed, as well
as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed 1 calendar year, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule automatically converts to a grade of F or U, or the lapse grade assigned by the course instructor, and appears on the student’s record.

Extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable, prior to the expiration of the Incomplete. After the I grade is converted to a grade of F or U, the grade may only be changed in accordance with USRR Article II, Section 3. ([http://policy.ku.edu/governance/USRR/](http://policy.ku.edu/governance/USRR/))

**Maximum and Minimum Undergraduate Semester Enrollment**

No undergraduate may enroll for more than 20 hours a semester except by permission of the Director of College Advising & Student Services. Summer enrollment is limited to 10 hours. Permission is not considered unless the student has demonstrated high levels of academic ability in previous semesters.

**Prerequisites and Co-requisites**

Students are advised to enroll according to prerequisites and co-requisites noted in individual course descriptions. These prerequisites are enforced in a variety of ways including blocking enrollment, administrative drops without notice, etc.

**Required Undergraduate Work in Residence**

**Junior/Senior Hours Required for Graduation**

KU requires all students pursuing bachelor’s degrees to complete a minimum of 45 credit hours at the junior/senior level (courses numbered 300 and above). The College of Liberal Arts and Sciences requires that 30 of these 45 credit hours be completed in residence.

**Hours in the Major: Maximums and Minimums**

There is no limit on hours taken in the major for the B.A., B.G.S., or B.S. degree. Departments are not allowed to require more than 40 hours in the major for the B.A. or more than 50 hours in the major for the B.S. Some skills courses and supporting science courses are not included in this maximum limit. A minimum of 12 hours in the major must be in courses numbered 300 or above. At least 15 hours in each major(s) must be taken in residence at KU.

**Time Limits**

Undergraduates are strongly encouraged to complete the bachelor’s degree within 4 academic years. Students should complete a minimum of 30 credit hours each year. If a student is unable to complete 30 hours in the fall and spring terms, summer enrollment and/or winter session enrollment should be strongly considered.

Students have a maximum of ten years to complete their undergraduate work in the College of Liberal Arts and Sciences under degree requirements in effect at the initial term of matriculation. Students experiencing a break in enrollment during these ten years will follow their curricular requirements at the point of matriculation provided that the break in enrollment does not exceed two calendar years. Students readmitted after two years are held to the curricular requirements in place at the term of readmission.

Students readmitted after a break in attendance of less than two years may petition the College of Liberal Arts & Sciences to request to change to the term requirements based on their readmission term. This should be considered in consultation with their academic advisor, and a petition should be submitted to College Advising & Student Services.

Students maintaining continuous enrollment but who do not complete their degree requirements within ten years, may petition the College to complete their degree requirements under the curricular requirements in effect during the term of admission.

**Transfer of Credit**

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

Only transfer grades of C or higher contribute to total hours earned for students entering KU in spring 1990 or after, and for courses taken in spring 1990 or after by all students. For questions about transfer work fulfilling College requirements, contact College Advising & Student Services ([https://collegeadvising.ku.edu/](https://collegeadvising.ku.edu/)), 109 Strong Hall.

**Graduate Regulations**

It is the students’ responsibility to comply with all requirements for the degree programs in which they plan to participate. These include the university requirements for graduate study at KU outlined in the College and Graduate Studies sections of the KU Policy Library ([http://www.policy.ku.edu/](http://www.policy.ku.edu/)), the University Senate Rules and Regulations ([http://catalog.ku.edu/regulations/](http://catalog.ku.edu/regulations/)), the Graduate Studies (p. 2408) sections of the online catalog, as well as the requirements of the College outlined in this catalog section. Additionally, students are responsible for understanding the requirements that are unique to individual graduate programs outlined in the graduate handbooks of individual academic units and the Departments & Programs (p. 748) sections of the online catalog.

In general, the student is subject to the regulations in place at the time of matriculation as a degree-seeking student. If degree requirements change, the student may opt to follow the new requirements or to continue under the regulations in place at the time of admission. Any student readmitted 10 years or more after his or her initial term as a degree-seeking student must fulfill the requirements in effect on the date of readmission to the graduate program.

Information presented on this page is limited to the most frequently consulted policies and key milestones in the graduate career. Students should also consult the academic unit’s handbook, Graduate Studies and College sections of the KU Policy Library, and the Graduate Studies and University of Kansas Regulations sections of the online catalog.

**Degree Requirements**

Requirements for the completion of master’s and doctoral degrees in the College are governed by department- or program-specific policy, College
Master's Degree Requirements

Coursework
At least 50% of required coursework for a master’s program must be numbered 700 or above. Specific coursework requirements for the Master’s degree are established and tracked by the department or program. The College then verifies that completed coursework meets all College and University requirements for master’s students. Please consult with your advisor, the academic unit’s graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

Thesis
Master’s students complete either a thesis or an equivalent enrollment in research, capstone/portfolio, independent investigation, or seminar. Students earning a master's degree must have completed at least 1 hour of thesis enrollment. General rules for the preparation of a thesis are available on the Graduate Studies website (https://graduate.ku.edu/electronic-thesis-and-dissertation/).

Final Examination
A final general examination or thesis defense in the major subject is required for MA and MS degrees. The examination, which may be oral, written, or both, is held during the semester of the student’s final enrollment in coursework and, in the case of thesis students, when the thesis has been substantially completed. All master’s exams must be preapproved by the College in advance of the scheduled exam date. See also Master’s Degree Requirements (https://catalog.ku.edu/graduate-studies/#programtext) and M.A. and M.S. Degrees (https://catalog.ku.edu/graduate-studies/#programtext) in the Graduate Studies section of the online catalog.

Doctor of Philosophy Degree Requirements

Coursework
Coursework requirements for the doctoral degree are established and tracked by the department or program. The College then verifies that completed coursework meets all University and College requirements for doctoral students. Please consult with your advisor, the academic unit’s graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

Research Skills and Responsible Scholarship
Graduate Studies requires that all doctoral students meet the Research Skills and Responsible Scholarship requirement before proceeding to the Comprehensive Exam. Specific requirements are determined by each department or program in consultation with Graduate Studies. Information on these requirements is contained in the department or program’s approved research skills requirement plan. Consult with your advisor and the Departments & Programs section of the online catalog for further information.

Enrollment Requirement
Prior to the comprehensive oral exam, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by the Full-Time Enrollment for Graduate Students policy in the Graduate Studies section of the KU Policy Library. (http://policy.ku.edu/)
- At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Please see the Engagement and Enrollment in Doctoral Programs policy in the Graduate Studies section (https://catalog.ku.edu/graduate-studies/#programtext) of the online catalog and the KU Policy Library (https://policy.ku.edu/) for more information about this requirement.

Comprehensive Oral Examination
The comprehensive oral examination covers the major field and any additional content for which the academic unit wishes to hold the student responsible. The examination is expected to be broader than a mere defense of the dissertation proposal. Exam dates must be approved by the College in advance of the scheduled exam date.

The student must be enrolled the semester or summer session in which he or she completes the comprehensive oral examination. This enrollment may count toward the post-comprehensive enrollment requirements as described in Graduate Studies’ Doctoral Candidacy (http://policy.ku.edu/graduate-studies/doctoral-candidacy/) policy. If more than 5 years elapses between the completion of the comprehensive exam and degree completion, the student may be required to retake the exam.

More information about comprehensive exam requirements may be found in the Graduate Studies section (https://catalog.ku.edu/graduate-studies/#programtext) of the online catalog.

Dissertation and Final Exam
Completion of the dissertation is the culminating phase of a doctoral program, marked by the final oral examination and defense of the dissertation. In all but the rarest cases, tentative approval of the dissertation is followed promptly by the final oral examination. The exam must be approved by the College in advance of the scheduled exam date. Refer to the Graduate Studies section (https://catalog.ku.edu/graduate-studies/) of the online catalog for further information on the regulations governing the final oral examination, including committee composition and attendance regulations.

Guidelines for preparing and submitting the final copies of the dissertation are available on the KU Libraries’ ETD website (https://guides.lib.ku.edu/etd/).

Enrollment

Full-time, Half-Time and Part-Time Enrollment
There are multiple definitions for what constitutes full-time enrollment for graduate students at KU, including variations for doctoral candidates enrolled in dissertation hours, students with GTA/GRA/GA appointments, and active duty military. Please see the Full-time Enrollment policy in the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for the definitions of full-time, half-time, and part-time enrollment.

Maximum enrollment for graduate students in the College of Liberal Arts & Sciences, except in rare instances, is 16 hours in Fall or Spring semester and 9 hours in the summer session.

At a minimum, all graduate students must be continuously enrolled in the Fall and Spring semesters while completing the requirements for
fulfillment of their degree. Please consult the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for other enrollment regulations.

**Continuous Enrollment for Master’s Students**

The College requires that all master’s students who have completed the required coursework for their degrees must be continuously enrolled in the Fall and Spring semesters until all remaining requirements for the degree, including the thesis when applicable, are completed. No enrollment is required during the summer session unless it is the semester during which the student will graduate, in which case enrollment is required. Certain academic units have additional rules governing summer enrollment.

**Post-Comprehensive Enrollment for Doctoral Students**

After passing the Comprehensive Oral Exam, doctoral candidates must be continuously enrolled. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester (Fall and Spring). At least one of these hours each semester must be in dissertation or approved dissertation-equivalent coursework.

Upon completion of the 18-hour requirement, a student’s level of enrollment should reflect, as accurately as possible, the faculty time he or she utilizes. This may be as little as one dissertation (or approved equivalent) hour per semester.

In addition, Graduate Studies requires a period of at least 1 month to elapse between the comprehensive oral exam and the final exam. Students that have completed all degree requirements before completing 18 hours are still required to continue enrollment until this 1-month requirement has been met.

Special enrollment requirements apply to those with GTA/GRA/GA appointments. Please consult the Graduate Studies (p. 2408) section of the online catalog and the KU Policy Library (http://policy.ku.edu/).

**Lapses in Enrollment**

Generally, no student is allowed to enroll in full term courses with an established meeting time after the first 4 weeks of a semester or the first 2 weeks of a summer session. Non-standard dated courses, or "short courses," as well as research or independent study courses with a “by appointment only” meeting time have different deadlines.

Students should consult the academic calendar (https://registrar.ku.edu/calendar/) and the short courses listing (https://registrar.ku.edu/short-courses/) for deadlines.

If a student does not intend to enroll, he or she must determine the appropriate course of action in consultation with the department or program. The student may elect to Voluntarily Discontinue from the program, and must inform the department or program in writing of this decision. The department will submit the necessary forms to the College. This option requires the student to seek re-admission to the program if they choose to return at a future date. They also remain eligible to seek admission to another department or program in the College.

The student may also petition for a Leave of Absence of up to one calendar year. If granted, the Leave of Absence maintains the student’s place in the program. Leave of Absence petitions must be submitted by the department or program and provide evidence of the department or program’s endorsement of the student’s petition. Students interested in this option should begin by consulting with their advisor.

The time spent on Leave of Absence does not count against the student’s time to degree, and therefore does not shorten the time available to complete their degree requirements. Similarly, if a student that has elected to Voluntarily Discontinue subsequently returns to the program, the time that has elapsed since his or her discontinuance does not count against the time to degree.

Students who fail to enroll without completing the Voluntary Discontinuance process or without being granted a Leave of Absence are reviewed by the College Office of Graduate Affairs and the students’ academic units for possible dismissal. Time that accrues during these lapses of enrollment in which the student does not occupy any approved enrollment category (i.e., Enrolled, Voluntarily Discontinued, or Leave of Absence) is counted against the time to degree.

International students seeking a Leave of Absence must consult with the International Support Services office prior to any change in enrollment status to determine how the change may affect their legal status.

Please see Graduate Studies policies governing Leave of Absence and Voluntary Discontinuance in the Graduate Studies (p. 2408) section of the online catalog and in the KU Policy Library (http://policy.ku.edu/).

**Dual Enrollments**

Students enrolled in two schools or working on two degrees at the same time must complete the work for both degrees. Courses may not be counted toward both degrees, except in the joint degree programs that have been established (e.g., M.P.A./J.D., M.A. in Economics/J.D., M.B.A./M.A. in Area Studies, etc.). Please refer to the Combined Degrees information in the Graduate Studies (p. 2408) section of the online catalog for a complete list of approved joint degree programs.

**University Regulations on Grading**

Article II of the University Senate Rules and Regulations provides detailed information on regulations governing the grading of graduate coursework. Students should also consult the Graduate Studies (p. 2408) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for more information on the Grading Policy.

The following are of particular relevance for graduate students in the College:

**Passing Grades for Graduate Coursework**

Only courses graded C or above are considered passing and may be counted for graduate credit. Courses graded C-, D or F may not be used to fulfill degree requirements.

**Incomplete (I) and Waiting Grades (WG)**

Incomplete (I) grades are used to note, temporarily, that a student’s work has been satisfactory to date, but that they have been unable to complete a portion of the required course work during that semester due to circumstances beyond their control. Incomplete work must be completed within the time period prescribed by the course instructor, at which point a permanent grade will be assigned. After one calendar year from the original grade due date, an Incomplete (I) grade will automatically convert to a grade of F or U, or the lapse-to grade assigned by the course instructor.

The I grade is not appropriate for enrollments in thesis, dissertation, or research hours or the first semester of a two-semester sequence.

Waiting Grades (WG) are placeholders and should only be used in rare instances when, for reasons beyond his or her control, an instructor is not
able to assign a course grade by the deadline. WG should not be used to delay evaluation of thesis or dissertation hour enrollments. This practice often leads to difficulties with timely graduation processing. WG is also not appropriate for students who are unable to submit their completed work by the grade deadline. In these cases an Incomplete may be more appropriate. Instructors should follow their unit’s internal guidelines for use of Incomplete.

In accordance with USRR 2.2.3.4, any incomplete (I) or waiting grade (WG) on the student’s transcript must be resolved before the College will preapprove the doctoral oral comprehensive exam. Additionally, the College will not approve an application for graduation if a waiting grade (WG) or an incomplete (I) grade remains on the student’s transcript.

Credit/No Credit (CR/NC)
The University establishes a time period each term during which students may elect a Credit/No Credit grading option for an individual course. Graduate students may elect the CR/NC option only for those courses that do not fulfill a degree requirement. Degree requirements include those courses used to fulfill the Research Skills and Responsible Scholarship requirement. CR/NC is elected via the Registrar’s electronic form (https://registrar.ku.edu/creditno-credit/). Students should consult with their advisor prior to electing the CR/NC option.

College-Specific Grading Policy
A-F Plus/Minus (+/-) Grades
Plus/minus (+/-) grades may be used in the College. The plus or minus sign describes intermediate levels of performance between a maximum of A and a minimum of F. Intermediate grades are calculated as 0.3 units above or below the corresponding letter grade.

Participation (P) Grades
Use of the Participation (P) grade is restricted in the College. It is only approved for a limited number of courses for which special permission has been sought. When permission is granted, P is only used to indicate participation in thesis, dissertation, or research enrollments (related to thesis or dissertation), or in the first semester enrollment of a two-semester sequence course. In any semester when evidence about performance is available, the instructor may elect to assign a letter grade of A, B, C, D, or F. A letter grade (A, B, C, D, or F) must be assigned in the last semester of enrollment to characterize the quality of the final product.

If a department or program has a course for which the P grading system may be more appropriate than the A-F or S/U grading system, it must seek special approval from the College.

Grading of Thesis and Dissertation Hours (and Approved Equivalents)
The SP/LP/NP grading scale is restricted to thesis and dissertation hours, as well as those research courses approved by Graduate Studies as equivalents. It is the preferred scale for the grading of these courses in the College and is applied in the following manner:

SP - Satisfactory Progress. Progress is consistent with the goals for the semester as agreed upon with the advisor; supports timely completion of the degree.

LP - Limited Progress. Progress is less than what was agreed upon with the advisor; may cause delays in timely degree completion. Academic probation may be warranted.

NP - No Progress. The student has provided no evidence of progress on the thesis or dissertation work, or work completed was insufficient to move the thesis or dissertation project forward. Probation is strongly encouraged and dismissal may be warranted.

To be eligible for graduation, the final semester of dissertation/thesis enrollment must be graded SP.

The College strongly encourages the use of the SP/LP/NP grading scale for thesis and dissertation courses. However, programs may elect to use any A-F scale. In no case is the S/U scale to be used for thesis or dissertation hours or their equivalents. Per Graduate Studies policy, no more than 6 credit hours graded S/U may count toward a graduate degree.

College-specific Admission Policy
Program Admission Deadlines
For all graduate programs in the College of Liberal Arts & Sciences, no deadlines for the submission of applications for graduate study may fall on a weekend or a University-observed holiday.

During calendar years when an established admission deadline falls during one of these times, CLAS graduate programs must either:

- Allow the online application to remain open and applications to be accepted through the end of the first business day following the established deadline; or,
- Adjust the department’s established deadline for those years.

Probation and Dismissal Guidelines in the College
To be in good standing, a student must maintain a 3.0 cumulative grade-point average and be making satisfactory progress toward the degree, as determined by Graduate Studies’ Good Academic Standing policy and the department or program’s internal guidelines. The Good Academic Standing policy may be found in the Graduate Studies (p. 2408) section of the online catalog and the KU Policy Library. (http://policy.ku.edu/)

Probation Due to GPA
In any semester, a student whose cumulative GPA has fallen below a 3.0 is automatically placed on academic probation for the following semester (Fall or Spring). Students are notified by the College of their probationary status. The student has one semester (not including the summer term) in which to raise the cumulative GPA to a 3.0 or the College will dismiss the student. Refer to the Graduate Studies’ Academic Probation policy for more details. Departments may petition the College for the student to be granted a one-semester extension of the probation.

If a student’s cumulative GPA falls below a 2.5 as a result of the second or a subsequent semester of enrollment, the College will dismiss the student without eligibility for probation. Students whose GPA falls below 2.5 in the first semester of enrollment are eligible for probation with department recommendation. In the absence of this recommendation, the College will dismiss the student.

Probation Due to Unsatisfactory Progress
Upon recommendation of the department or program, a student may be placed on probation for failing to make satisfactory progress toward the degree. This may include, but is not limited to, failed exams or failure to make adequate and timely progress on the dissertation or thesis. See the Good Academic Standing policy in the Graduate Studies
Dismissal

It is the academic unit’s responsibility to ensure that students who are not demonstrating academic achievement sufficient to meet the requirements of a College graduate degree or who are failing to make timely progress to the degree are dismissed from their programs. This typically occurs when a student fails to meet the terms of the probationary period. Academic dismissal should occur immediately following a student’s failure to meet the terms of the probationary period. If dismissal occurs during the semester, the dismissal is effective immediately and the student is administratively withdrawn from coursework. The department or program will notify the student in writing of the reasons for their dismissal. This will be followed by a letter from the College confirming the student’s dismissal from graduate study at KU.

A student who has been dismissed from a graduate program at KU is not eligible for readmission to graduate study in any department or program at the University of Kansas. A student may petition for an exception. The petition must be approved by the department to which the student intends to apply, the graduate division of the College, and the Dean of Graduate Studies. Such petitions are rarely approved.

Time Limits

The University and the College have established time limits governing various stages of the graduate student career.

Maximum Time to Count Required Course Work

Courses completed at the University of Kansas, or transfer credits from another university, are valid for a period of 10 years. Courses that were completed more than 10 years before the scheduling of the final defense may not be used to fulfill graduate degree requirements in the College of Liberal Arts and Sciences.

With the endorsement of their graduate programs, students may petition the College to accept out-of-date course work to fulfill the requirements for their graduate degrees, provided they are able to justify why this course work meets the current standards of scholarship in the discipline.

Maximum Time to Submit Thesis or Dissertation

The College requires that students make all final revisions and complete electronic submission of the final version of the thesis or dissertation manuscript to UMI within 6 months of the date of final presentation and/or defense of the thesis or dissertation work. Until the final manuscript of a thesis or dissertation is submitted, the student must be enrolled in accordance with enrollment policy. Graduate students in the College who do not file the final manuscript within the 6-month time limit must enroll in 3 hours a semester until the thesis or dissertation is completed and submitted.

Maximum Time to Complete the Degree

Graduate Studies has established time limits on master’s and doctoral degree completion. Please see Graduate Studies policies on Engagement and Enrollment in Doctoral Programs and Master's Program Time Constraints in the Graduate Studies (p. 2408) sections of the online catalog and in the KU Policy Library (http://policy.ku.edu/) for full details.

Master’s degree students have a total of seven calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, in which to complete the work for a master’s degree.

Doctoral degree students have a total of 8 calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, to complete the Ph.D. This includes students who enter with a master’s degree from an institution other than KU and bachelor’s degree holders who bypass the master’s and are admitted directly to a Ph.D. program.

Students who complete a master’s and doctoral degree within the same academic unit at KU have 10 years to complete both degrees.

A time limit extension may be granted by the College. All extension petitions require the student and department to prepare and submit a Graduate Degree Completion Agreement, which must then be approved by a designated subcommittee of the Committee on Graduate Studies. Per Graduate Studies policy, extensions may be granted for up to 1 year. However, additional time may be requested in the Completion Agreement. If a Completion Agreement with a timeline greater than one year is approved, the department must submit a renewal petition annually after the first year until the Completion Agreement has ended. Renewal petitions must indicate the student's progress on the Completion Agreement and will receive expedited review.

Academic units may set their own, more rigorous time limits. Consult with your advisor and review your academic unit’s handbook and the relevant Departments and Programs section of the online catalog for program-specific information, requirements, and restrictions.

Academic and Research Integrity

The College of Liberal Arts and Sciences strictly enforces KU and College policies on academic and scholarly misconduct. Academic integrity requires honest performance of academic and research responsibilities by students. These include, but are not limited to, ethical preparation of assignments, reports, and research papers; completion of examinations; ethical treatment of human and animal subjects; execution of administrative requirements; and a sincere and conscientious effort by students to abide by the policies set forth by instructors and research advisors.

Graduation

All graduate students must be enrolled the semester they complete all degree requirements.

Graduate Studies establishes an early deadline for degree completion for each semester and summer session, usually occurring at the end of the first 2 weeks of a semester or the end of the first week of summer session. If the student was enrolled the previous semester and meets all degree requirements including the submission of all required documentation by this early deadline, they are not required to enroll for that semester.

The final Graduate Application for Graduation Deadline is set by the Registrar for each semester. Please consult the official Academic Calendar for specific dates. To be eligible for graduation, an application for degree must be submitted and all degree requirements met by this deadline. This includes the submission of all required documentation to the College Office of Graduate Affairs. See the Graduation section of the COGA (https://coga.ku.edu/graduation/preparing-to-graduate/) website for more information.
Undergraduate Awards

Graduation with Honors

Undergraduates may earn honors upon graduation in 3 ways, in addition to making the honor roll each semester. Students may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program. It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

Graduation with Distinction or Highest Distinction

The top 10 percent of each year’s graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction. To be eligible, students must have completed at least 60 credit hours, graded A through F, in residence at KU (including the hours in which they are enrolled during the semester of graduation). Awards of distinction and highest distinction are based solely on the grade-point average determined by KU residence credit hours unless the overall grade-point average (including transfer hours) is lower than the residence grade-point average. In this case, the award is determined by the overall grade-point average.

Graduation with Departmental Honors

Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental honors is awarded in recognition of exceptional performance in the major and completion of a program of independent research or an alternative project.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on Undergraduate Studies and Advising - CUSA), the College requires the following for graduation with departmental honors:

1. Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s). The intent form should be submitted to College Advising & Student Services.
2. At the end of the final undergraduate semester, the candidate must have achieved a grade-point average of at least 3.5 in the major, including work completed at other institutions, as well as at KU. No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.
3. Each candidate’s departmental honors work must include independent research or an acceptable alternative project. The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

Petsitions

A department or program may petition to award graduation with departmental honors to deserving students who, for good reason, do not meet every College requirement. Petitions for exceptions should be submitted to the Committee on Undergraduate Studies and Advising (CUSA), via College Advising & Student Services (http://collegeadvising.ku.edu/).

Late Completion of Honors Requirement

Requirements for graduation with honors may be completed after the date on which certifications are requested from departments, and in some cases, requirements, if not needed for graduation, may be completed after a student has graduated. However, the Incomplete policy does apply and grades would lapse at the time of graduation. When a candidate finishes all requirements, departments must notify College Advising and Student Services in writing.

Honor Roll

Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Honors Program

The University Honors Program provides opportunities for outstanding and creative undergraduates in all schools at KU to develop their full potential during their undergraduate years. See Honors in this section of the online catalog for further information.

Graduate Awards

The College of Liberal Arts and Sciences offers several awards to recruit, support, and recognize outstanding graduate students, and to recognize faculty service, teaching excellence, and exemplary advising. Below, you will find a brief description of each award. More specific information about eligibility and the call for nominations each year can be found on the College’s website under Awards & Opportunities (https://coga.ku.edu/awards-funding/).

Graduate Student Awards

Chancellor’s Doctoral Fellowship

Each year selected doctoral programs in the College award a Chancellor’s Doctoral Fellowship to an incoming doctoral student of exceptional promise. Fellows receive five years of fellowship support for their doctoral work, including a $25,000 stipend plus resident rate tuition and required fees.

Dean’s Doctoral Fellowship

Each year selected doctoral programs in the College award a Dean’s Doctoral Fellowship to an incoming doctoral student of exceptional promise. Fellows receive up to five years of fellowship support for their doctoral work, including a stipend ranging from $20,000-22,000 plus resident rate tuition and required fees. Fellows must submit an application for external funding to be eligible for a fifth year of support.

Allen S. Wilber Scholarship

Selected departments may nominate one student each year for this award, which provides one-time funding of up to $10,000 for the study of
social sciences or modern languages and literatures at the graduate level.
The award is limited to those who completed an undergraduate degree
at KU.

Outstanding Thesis/Research Project Award
The Committee on Graduate Studies in the College has established this
award for students receiving a master's degree. The bi-annual award
carries a $500 stipend, and either a thesis or research project awardee
is selected in each cycle. Students are nominated for the award by their
advisors.

Graduate Faculty Awards
Byron A. Alexander/John C. Wright Graduate Mentor Awards
Graduate students may nominate any tenured or tenure-track faculty
member in the College of Liberal Arts and Sciences who has served as an
outstanding mentor. The award amounts are up to $1,000.

Career Achievement Teaching Award
This annual award recognizes a retired faculty member in the College of
Liberal Arts and Sciences who has made a significant contribution to the
teaching of College students at either the undergraduate or graduate level
and who has distinguished him/herself through excellence in teaching.
The award amount is $1,000.

African & African-American St Courses
AAAS 102. Arabic and Islamic Studies. 3 Credits. SC W
An introduction to the study of Islam and the Arabic language in relation
to Islamic cultures in Africa, the Mediterranean region, and beyond.
Topics covered include the historical origins of Islam in relation to
the Arabic language and its cultures of origin. This course is interdisciplinary,
including attention to the topic from the perspectives of historical unfolding
of both the language and religion, geographic and cultural perspectives,
political and economic concerns, and aesthetic perspectives, including
literature and the arts.

AAAS 103. Introduction to Africa. 3 Credits. NW/SC S/W
An introduction to the interdisciplinary study of African cultures and
societies focusing on contemporary life on the continent. Topics to be
covered include the geography, history, politics, and economics of the
continent, as well as the religion, languages and literatures, music, and
the arts. The interdisciplinary perspective will provide students with a
sound basis for understanding contemporary African societies.

AAAS 104. Introduction to African-American Studies. 3 Credits. SC U
Interdisciplinary introduction to the basic concepts and literature in the
disciplines covered in African American Studies. Includes the social
sciences, and humanities (including history, religion, and literature) as well
as conceptual framework for investigation and analysis of Black history
and culture and society.

AAAS 105. Introduction to African History. 3 Credits. NW H/W
An introduction to important historical developments in Africa. Topics
include empires, kingdoms, the slave trade, European colonialism,
liberation movements, national identities, and a return to independence.
(See as HIST 104.)

AAAS 106. The Black Experience in the Americas. 3 Credits. HT H/ W
An interdisciplinary study of the history of the African peoples of the New
World, relating their cultures and institutions to the African background
and to their peculiar New World experiences up to and including the
nineteenth century. While the main emphasis is on the U.S.A., attention
is also paid to the Caribbean and Latin America. Approaches include
demography, economics, social and political developments, literature, and
music. (See as HIST 109.)

AAAS 115. Introduction to African History, Honors. 3 Credits. NW H/W
An intensive version of AAAS 105/HIST 104. An introduction to important
historical developments in Africa, mainly south of the Sahara. Topics
include early history, empires, kingdoms and city-states, the slave trade,
southern Africa, partition and colonialism, the independence era, military
and civilian governments, and liberation movements. Approaches include
literature, the visual arts, politics, economics, and geography. Open only
to students in the University Honors Program or by consent of instructor.
(See as HIST 111.)

AAAS 116. The Black Experience in the Americas, Honors. 3 Credits. HT H
An intensive version of AAAS 106. Open only to students on Dean's
Honor Roll or enrolled in Honors Program, or consent of instructor.

AAAS 160. Introduction to West African History. 3 Credits. W
This course treats West African history through the first part of the
twenty-first century. The student is provided with a perspective on the major
historical patterns that gave rise to West Africa's development as an
integral part of world history. Special attention is paid to anthropological,
geographical, and technological developments that influenced West
African political and socioeconomic changes. (See as HIST 160.)

AAAS 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in African & African-American Studies. Course is designed
to meet the critical thinking learning outcome of the KU Core. First-Year
Seminar topics are coordinated and approved by the Office of First-Year
Experience. Prerequisite: First-time freshman status.

AAAS 200. Directed Studies. 3 Credits. U
This course is designed for the study of special topics related to Africana
at the freshman/sophomore level. It prepares students for continued
practice in cultural reading and writing and for the academic rigor that
awaits them at the upper levels. Prerequisite: Consent of department.

AAAS 203. Culture and Health. 3 Credits. H/W
This course offers a holistic, interdisciplinary approach to understandings
of health, well-being, and disease within and across cultures. It draws
upon the subfields of anthropology, as well as the humanities, natural
sciences, and social sciences. This course should be of special interest to
premedical students and majors in the allied health professions. (See as
GEOG 201 and GIST 210.)

AAAS 204. Culture and Health, Honors. 3 Credits. H/W
Honors version of AAAS 203, GEOG 201 and GIST 210. This course
offers a holistic, interdisciplinary approach to understandings of health,
well-being, and disease within and across cultures. It draws upon the
subfields of anthropology, as well as the humanities, natural sciences,
and social sciences. This course should be of special interest to premedical
students and majors in the allied health professions. (See as GEOG 202
and GIST 211.)

AAAS 250. Introduction to Translation and Translation Theory. 3 Credits. H
This course provides an introduction to the concepts of applied translation
as well as an overview of translation theory. Translation is a severely
misunderstood activity and profession, and mechanical translation has
been justifiably downgraded in communicative foreign language teaching.
This course is intended for students of any foreign language (classical or
modern) who are interested in the field and profession of literary and non-literate translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as GERM 240, LING 250, SLAV 250 and SPAN 202.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

AAAS 300. African Traditional Religion and Thought. 3 Credits. NW H/W
A study of African traditional religious beliefs, systems and practices and how these have conditioned spiritual, moral and social values, attitudes, social relationships and institutions, art, literature and music. Topics covered include the African world-view, concepts of birth, life, marriage, death and reincarnation; the concurrent practice or monotheism, polytheism and the cult of the ancestors; and the extent of relevance to Black societies in the New World. Prerequisite: AAAS 103 or AAAS 105 or AAAS 106 or consent of instructor.

AAAS 301. Haiti: Culture and Identity. 3 Credits. NW/SC H/W
This course examines Haiti's identity and culture through historical, social, political, economic, linguistic and religious lenses. Through the study of texts, films and articles, it analyzes Haiti's place and influence in history as the first Black Republic and the second independent nation in the Western hemisphere. It also highlights Haiti's connections to the United States as well as other Latin American countries. No knowledge of Haitian or French required. Students may not receive credit for both HAFT 200 and AAAS 301.

AAAS 302. Contemporary Haiti. 3 Credits. NW
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as HAFT 300.) Prerequisite: AAAS 301/HAFT 200, or consent of instructor.

AAAS 303. Peoples and Cultures of North Africa and the Middle East. 3 Credits. NW S
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence, secularism, democratization, and gender, are also explored. (Same as ANTH 303.)

AAAS 305. Modern Africa. 3 Credits. NW H/W
A survey of social, political, and economic developments during the colonial era and independence struggles. Themes may include resistance, liberation, nationalism, gender issues, agriculture, genocide, and human rights. (Same as HIST 300.)

AAAS 306. The Black Experience in the U.S. Since Emancipation. 3 Credits. H
An interdisciplinary study of the history and culture of Black people in America from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde cultural changes. (Same as HIST 359.)

AAAS 307. Modern Africa, Honors. 3 Credits. NW H
An intensive version of HIST 300. A survey of social, political, and economic developments during the colonial era and independence struggles. Themes may include resistance, liberation, nationalism, gender issues, agriculture, genocide, and human rights. (Same as HIST 307.) Prerequisite: Open only to students admitted to the University Honors Program, or by consent of the instructor.

AAAS 310. Introduction to Black Education in the U.S. 3 Credits.
This course examines the educational experiences of African American children from Emancipation through more contemporary periods today. The class explores topics including intersectionality, schools and inequality, hip-hop education, post-Reconstruction, and race. The course centers education studies, children and youth studies, gender, history, social sciences, Black studies, policy, and law. The class is interdisciplinary and supports different fields of study across multiple degree programs.

AAAS 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Credits. H
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AMS 316 and HIST 316.)

AAAS 320. African Studies In: _____ 3 Credits. NW H/W
Lecture and discussion course in African area of current interest. May be repeated for credit toward the major.

AAAS 321. African Studies In, Honors: _____ 3 Credits. H/W
Lecture and discussion course in African area of current interest. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor.

AAAS 322. Legal Issues and the African American. 3 Credits. H
This course examines civil issues in African-American communities and populations, and their legal ramifications. Topics such as the penal system, court sentencing, death penalty, cultural norms, law enforcement and civil liberties are critically examined within social and humanistic theories.

AAAS 323. African-American Studies In: _____ 3 Credits. H
Lecture and discussion course in African-American area of current interest. May be repeated for credit toward the major.

AAAS 325. Popular Black Music. 3 Credits. H
This is a comparative study of popular music produced in Africa, and the African Diaspora. The praxis, theories, histories, forms, artists and audiences are discussed.

AAAS 327. African American Culture. 3 Credits.
This course examines the educational experiences of African American children from Emancipation through more contemporary periods today. The class explores topics including intersectionality, schools and inequality, hip-hop education, post-Reconstruction, and race. The course centers education studies, children and youth studies, gender, history, social sciences, Black studies, policy, and law. The class is interdisciplinary and supports different fields of study across multiple degree programs.

AAAS 330. Black Leadership. 3 Credits. H
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful Black leaders will be invited to visit the class from time to time. (Same as AMS 340.)

AAAS 332. Introduction to African Literature. 3 Credits. NW H/W
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention is paid to historical development and to traditional literature. (Same as ENGL 326.)
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

AAAS 333. Introduction to Caribbean Literature. 3 Credits. H/W
Reading, analysis, and discussion of fiction, poetry, and drama from the Caribbean, including a small selection of Spanish, French, and Dutch Antillean works in translation. (Same as ENGL 339.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

AAAS 334. Introduction to African Dance Theatre. 2 Credits. NW U
An introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary will be supplemented by lectures on the "text" of performance. (Same as DANC 334 and THR 334.)

AAAS 336. Introduction to African Literature, Honors. 3 Credits. NW H/W
Reading, analysis and discussion of contemporary fiction, poetry, and drama from Africa. Brief attention is paid to historical development and to traditional literature. Prerequisite: Open only to students admitted to the University Honors Program or with consent of instructor. Not open to students who have taken AAAS 332.

AAAS 340. Women in Contemporary African Literature. 3 Credits. NW H
A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as WGSS 330.)

AAAS 344. Black Feminist Theory. 3 Credits. HL H
This course will study the critical discourse produced by black female intellectuals, writers, and activists about their race, gender, sexual, and class identities. Students will explore black women's distinct positionality through an examination of their theory as well as their praxis from the nineteenth century to the contemporary moment. By tracing the evolution of black feminist thought, the class will explore black women's initiation of and engagement with political, social, and artistic conversations in various fields of scholarly inquiry including but not limited to literature, history, sociology, political science, and the law. (Same as ENGL 344 and WGSS 344.) Prerequisite: WGSS 101, AAAS 104, or prior completion of one 200-level English course.

AAAS 349. Islam. 3 Credits. NW H/W
Islam's Origins, the prophet Muhammad, the Holy Koran, religious symbols and moral mandates, and historical developments. (Same as REL 350.)

AAAS 351. Africa's Human Geographies. 3 Credits. NW S/W
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as GEOG 351.)

AAAS 353. Modern and Contemporary African Art. 3 Credits. H
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. Not open to students with credit in AAAS 569/HA 569. (Same as HA 353.)

AAAS 355. African Theatre and Drama. 3 Credits. NW H/W
A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as THR 326.)

AAAS 356. African-American Theatre and Drama. 3 Credits. H
A historical study of Black theatre in the U.S.A. from its African genesis to its contemporary Americanness. Epochs in African-American dramaturgy will be critically examined. (Same as THR 327)

AAAS 370. Introduction to the Languages of Africa. 3 Credits. NW H/W
A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g., Fula, Hausa, Maninka, Swahili, Yoruba). (Same as LING 370.)

AAAS 372. Religion, Power, and Sexuality in Arab Societies. 3 Credits. NW S
This course examines theories of religion, discourse, power, gender and sexualities in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as ANTH 372.)

AAAS 377. African Design. 3 Credits. H/W
This course examines the conceptualization of the "decorative" arts in Africa, including textiles, metals, ceramics, wall decoration, and jewelry, and investigates the relation of this art historical category to modernism. How did such a wide range of artistic practices come to be grouped together? Are terms such as "decorative art" and "craft" still operative, and how do they reflect ideas about race and gender? How have African artists approached "traditional" design? What social factors influenced artistic processes and what is the historical symbolism of medium? To address these questions, we will consider artists' writings, art schools and apprenticeships, gender dynamics, transnational artistic exchanges, the concept of the artist-artisan, and the meaning of material and process. Our discussions will span historical and contemporary contexts, and also will examine colonial systems of classification, gender norms and laws, practices of appropriation, and tourism. Not open to students with credit in AAAS 677/HA 677. (Same as HA 377.) Prerequisite: An Art History course 100 level or above, or consent of instructor.

AAAS 380. African Art and Gender. 3 Credits. HL H
How does the rich relationship between art and gender provide an organizing metaphor for African artists across space and time? How do artists shape understandings of gender? In this course, we will examine gender in artistic practice alongside cultural binaries and consider how gender historically operated to define distinct roles for artists. We will study how formulations of gender and race intersected to impact artistic production and classification during the colonial and postcolonial periods. We will analyze materiality and the metaphor of childbirth, gender and Islamic textiles, and the concept of "craft." (Same as WGSS 380.)

AAAS 388. The Black Woman. 3 Credits. S/W
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Prerequisite: One course in the social sciences and/or humanities or consent of instructor.

**AAAS 400. Readings in_____** 3 Credits. U
Investigation of a subject selected by a student in consultation with a departmental adviser and conducted under supervision. Individual reports and conferences. Open only to students who have completed at least six credit hours in African and African-American studies. Cannot be repeated for credit. Prerequisite: Consent of instructor.

**AAAS 415. Women and Islam.** 3 Credits. H/W
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women’s social roles. Focusing principally on social change in the 20th century, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th century life mediated? The course will draw on texts from history, sociology, and literature. Prerequisite: REL 107 or AAAS 349/REL 350 or consent of instructor.

**AAAS 420. Intercultural Communication: The Afro-American.** 3 Credits. H/W
An examination of the barriers to effective communication between black Americans and non-black Americans. (Same as COMS 447.) Prerequisite: COMS 130 or COMS 230.

**AAAS 429. Postcolonial Theatre and Drama.** 3 Credits. NW H
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre within theatre by exploring how the "colonial project" has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as THR 429.)

**AAAS 432. Francophone African Literature.** 3 Credits. NW H/W
This course is an introduction to 20th century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as FREN 432.) Prerequisite: ENGL 102 and a 200-level English course.

**AAAS 433. Islamic Literature.** 3 Credits. NW H/W
This course focuses on literature that reflects Islamic culture from its inception to contemporary times. Beginning with attention to the importance of the spoken word in the establishment of Islam, course readings and lectures follow the place of literary works in confirming Islamic perspectives. Readings include selections from the Qur'an, classical works of poetry and narrative, and contemporary autobiography. Authors are from Africa and the region of the Golden Age of Islam, including the best known: al-Ghazali (d.1111 C.E.), Attar (d. circa 1193-1235), Ibn Arabî (d. 1240 C.E.), Rumi (d. 1273), Saâdi (1291), Hafiz (d. 1389 C.E.), and Shah (contemporary), as well as readings by and about less well known Muslim women scholars and Sufis in all historical periods. Readings are all in English translations.

**AAAS 434. African Women Writers.** 3 Credits. NW H/W
This course focuses on four decades of African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks.

**AAAS 435. Muslim Women's Autobiography.** 3 Credits. NW H/W
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover the nineteenth and twentieth centuries.

**AAAS 437. Global Ethnic and Racial Relations.** 3 Credits. W
This course uses written and visual materials to examine race, ethnicity, and nationalism around the world. Emphasis is on ways in which social forces, gender roles, sexual practices, cultural patterns, and political organization work together to construct and reinforce ethnic, racial, and national identities, boundaries, movements, and conflicts. Historical and contemporary comparisons are made between the U.S. and countries in Africa, Asia, the Americas, the Caribbean, Europe, the Pacific Islands, and the Middle East. (Same as AMS 437 and SOC 437.)

**AAAS 442. The Politics of Racial Injustice in the United States.** 3 Credits.
In this course, students will examine, in detail, four historical eras in which the American people struggled over anti-Black racial injustice in the United States. While the role and efficacy of social change movements and grassroots activism in that struggle will be analyzed, the course will emphasize political, policy, and institutional responses and remedies to the problem of American racism. In particular, discussions, readings, and assignments will evaluate the successes and failures of specific legislative, judicial, administrative, and organizational interventions. How and why these responses developed and fared as they did as well as the debates over their efficacy will be the focal point of this course. (Same as HIST 442.)

**AAAS 445. Arab Thought and Identity.** 3 Credits. NW N/W
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (assala) and specificity (Khususiyya) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. It is designed for any student interested in this ethnic group.

**AAAS 450. Popular Culture in the Muslim World.** 3 Credits. NW H
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims’ sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as REL 450.)

**AAAS 460. Topics and Problems in African and African-American Studies.** 1-3 Credits. H/W
Individual investigation of special topics in African and African-American studies. May not be repeated for credit toward the major. Prerequisite: Six hours in African and African-American studies or consent of instructor.

**AAAS 470. Language and Society in Africa.** 3 Credits. NW H/W
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning; writing and standardization of indigenous languages;
Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing.

AAAS 524. African-American Studies in, Honors: ______. 3 Credits. H

Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/senior in good standing.

AAAS 527. Popular Culture in Africa. 3 Credits. S/W

This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theater, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa.

AAAS 532. Studies in Islam. 3 Credits. H

Study of religious thought, practice, and institutions of Islam with an emphasis on the examination of primary documents.

AAAS 534. The Rhetoric of Black Americans. 3 Credits. H

A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. Prerequisite: COMS 130. Skills in basic composition essential.

AAAS 536. Islamic Art and Architecture in Africa. 3 Credits. N

Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamicized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade and commerce, ritual and political power, and contemporary expression. (Same as HA 150; or permission of instructor. Prerequisite: AAAS 102, AAAS 103, HA 100, or HA 150; or permission of instructor.

AAAS 542. The History of Islam in Africa. 3 Credits. NW H/W

A study of the history and institutions of Islam in Africa. Emphasis will be placed on the impact of Islam on African traditional religions and African civilizations in general; the historiographical traditions of Islam in Africa. Prerequisite: Five hours of distribution courses in the humanities.

AAAS 543. Language and Culture in Arabic-Speaking Communities. 3 Credits. W

The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as LING 543.)

AAAS 545. Unveiling the Veil. 3 Credits. NW H

This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance
and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery.

AAAS 550. Senior Seminar in: ______. 3 Credits. H/W
Small discussion groups, each designed to consider a specific, clearly defined topic, using an interdisciplinary approach and requiring the demonstration of a comprehensive knowledge of the fundamentals in the field as appropriate to the topic. Class discussion based on student presentations. Prerequisite: Senior majors; special departmental permission for other seniors.

AAAS 551. Environmental Issues in Africa. 3 Credits. S
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as GEOG 550.) Prerequisite: GEOG 104 or permission of instructor.

AAAS 552. Classical Islamic Literature. 3 Credits. NW H
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them.

AAAS 553. Geography of African Development. 3 Credits. W
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as GEOG 553.)

AAAS 554. Contemporary Health Issues in Africa. 3 Credits. S
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected per semester to examine in detail the full array of epidemiological factors contributing to patterns of specific diseases. AIDS, childhood diseases, and reproductive health of African women are among possible topics. Course material will be selected from scholarly and medical publications, as well as coverage in the popular media. The use of a variety of sources will enhance understanding of the biological and cultural issues involved, and will help students identify possible bias and misinformation in popular coverage of events such as famine or epidemic in African settings. (Same as ANTH 545.) Prerequisite: An introductory course in either Anthropology or African Studies.

AAAS 555. African Film. 3 Credits. W
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as FMS 544.)

AAAS 560. Race, Gender and Empire. 3 Credits. NW
This course considers how colonialism has shaped race and gender, historically and today. It explores how Europeans justified colonial rule through sexist beliefs about Native peoples and how sexual exploitation was built into colonial occupation. Film, literature, and political essays help us examine the lasting legacies of these ideas and resistance against them - a field known as postcolonial studies. We use this lens to trace historical attitudes about the white man's burden into contemporary issues in international politics, asking how human rights programs and military intervention maintain global inequality and produce new kinds of empires. (Same as WGSS 560.) Prerequisite: Any WGSS or AAAS course, or permission of the instructor.

AAAS 561. Liberation in Southern Africa. 3 Credits. W
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as HIST 561 and POLS 561.)

AAAS 569. Modern and Contemporary African Art. 3 Credits. H
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. Not open to students with credit in AAAS 353/HA 353. (Same as HA 569.) Prerequisite: Junior/Senior standing and at least one course at the 100-level or above in AAAS or HA.

AAAS 574. Slavery in the New World. 3 Credits. H/W
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. (Same as HIST 574.)

AAAS 583. Migration, Diasporas and Development. 3 Credits. S
This course introduces students to key concepts in global migration and its implications on development in migrant sending states particularly those on the African continent. It will explore the various migration patterns from Africa (e.g. migration between North Africa and Europe in the aftermath of the Arab Spring), South-South migration, the ‘brain drain' of skilled professionals and its implications for development, and the role of diasporas in development. The course will also assess the integration of migrants in major migrant destination regions. Finally, the course will provide students with an opportunity to critically examine the relationship between migration and development in a particular national context of their choice. (Same as GEOG 583.) Prerequisite: GEOG 102 or consent of instructor.

AAAS 584. Black American Literature. 3 Credits. H
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as an analysis of major autobiographical, poetic, and fictional works.

AAAS 598. Sexuality and Gender in African History. 3 Credits. W
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on sex and gender will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African
AAAS 600. Politics in Africa. 3 Credits. W
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as POLS 665.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor.

AAAS 611. History of the Black Power Movement. 3 Credits. H
Examines the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the African American Freedom Movement of the 1960s; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. The course also examines the Black Arts Movement and its influence on the Black Power Movement and vice versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Prerequisite: AAAS 511 not required but recommended.

AAAS 630. The Life and Intellectual Thought of W.E.B. Du Bois. 3 Credits. H
A critical examination of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer. Moreover, the course deals with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as, Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall.

AAAS 657. Women and Gender in Islam. 3 Credits. W
Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. Also examines how Muslim women have impacted those developments. (Not open to students who have taken REL 357.) (Same as REL 657.) Prerequisite: AAAS 349/REL 350, graduate standing, or permission of instructor.

AAAS 662. Gender and Politics in Africa. 3 Credits. S
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women's health, gender and militarism. We also explore women's roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as POLS 662 and WGSS 662.) Prerequisite: Sophomore level or consent of instructor.

AAAS 677. African Design. 3 Credits. NW H/W
This course examines the conceptualization of the "decorative" arts in Africa, including textiles, metals, ceramics, wall decoration, and jewelry, and investigates the relation of this art historical category to modernism. How did such a wide range of artistic practices come to be grouped together? Are terms such as "decorative art" and "craft" still operative, and how do they reflect ideas about race and gender? How have African artists approached "traditional" design? What social factors influenced artistic processes and what is the historical symbolism of medium? To address these questions, we will consider artists' writings, art schools and apprenticeships, gender dynamics, transnational artistic exchanges, the concept of the artist-artisan, and the meaning of material and process. Our discussions will span historical and contemporary contexts, and also will examine colonial systems of classification, gender norms and laws, practices of appropriation, and tourism. Not open to students with credit in AAAS 377/HA 377. (Same as HA 677.) Prerequisite: An Art History course 100 level or above, or consent of instructor.

AAAS 680. Introduction to Modern Africa. 3 Credits. H/W
An interdisciplinary approach to cross-cultural understanding of Africa's place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Prerequisite: Consent of instructor.

AAAS 690. Investigation and Conference. 1-3 Credits. H/W
Individual and supervised readings in selected areas of African and African-American studies which will be an investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Prerequisite: Seniors and consent of department.

AAAS 695. Honors Project in: _____ 3 Credits. H
An individual research project in African-American or African studies under the direction of a specialist in the area of the student's interest, the results of the project to be presented in written form and to be defended before a committee of three faculty members as provided for under the requirements for Honors. Majors only and permission of instructor.

AAAS 700. Africa in World Politics. 3 Credits.
A 20th-century and 21st-century study of the combined internal and external forces that precipitated the rise of Africa, the major African issues in international relations, and Africa's impact on the modern world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 701. Politics in Africa. 3 Credits.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 715. Seminar in African Art. 3 Credits.
A concentrated study of a special topic relating to African Art studies. Different topics are offered in different semesters. Prerequisite: Nine hours of Art History and/or consent of instructor.

AAAS 716. Women in Islam. 3 Credits.
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women's social roles. Focusing principally on contemporary social change, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th-century and early 21st-century life mediated? The course will draw on texts from history, sociology, and literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.
AAAS 720. Intercultural Communication: The Afro-American. 3 Credits.
A course examination of the barriers to effective communication between Black Americans and non-Black Americans. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 723. Special Topics in Africana Studies: _____ 3 Credits.
Seminar in an area of current interest in African and African-American Studies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 727. African-American Culture. 3 Credits.
This course defines African American culture and identifies ways in which it is distinct. The course identifies the roots of African American culture, as well as the transformations occurring over time. The course covers identity issues and considers the possibility of complex, multi-identity structures. The course addresses the issues of whether there is a common narrative or a common root metaphor for African American culture, how this is known epistemologically, internally and externally, and how epistemological "knowledge" is appropriated. Course pedagogy includes text readings, case studies, performance events, and media events.

AAAS 730. Black Leadership. 3 Credits.
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful Black leaders will be invited to visit the class from time to time. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 731. African Literature. 3 Credits.
Introduction to African literature. Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 732. Francophone African Literature. 3 Credits.
This course is an introduction to 20th-century and modern Francophone African literature covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 733. Islamic Literature. 3 Credits.
Contemporary literature that is set in the context of Muslim cultures provides an examination of Muslim identity on its own terms. This course focuses on the literary examination of works by Muslim authors from Egypt, Sudan, Senegal, Guinea, Mali, Morocco, Nigeria, and Niger. From the perspective of both male and female authors, the issue of what it means to be a Muslim is considered through fictional accounts set in contemporary contexts. Some works will be read in translation from Arabic or French; others are written originally in English. Cultures considered in this course vary widely in their origins and customs, which allows for a focus on the one pervasive element they share in common: Islam as it shapes people's lives. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 734. African Women Writers. 3 Credits.
This course focuses on African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 735. Muslim Women's Autobiography. 3 Credits.
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover from the 19th-century to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 745. Arab Thought and Identity. 3 Credits.
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (assala) and specificity (Khususiyia) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 749. Islam. 3 Credits.
Islam's origins, the prophet Muhammad, the Holy Koran, religious symbols and moral mandates, and historical developments. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 750. Popular Culture in the Muslim World. 3 Credits.
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day.

AAAS 760. Topics and Problems in African and African-American Studies. 3 Credits.
Individual investigation of special topics in African and African-American studies. Many not be repeated for credit. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 770. Language and Society in Africa. 3 Credits.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning, writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 774. Topics in Literatures of Africa and the African Diaspora: _____ 3 Credits.
An intensive study of the literatures of Africa and/or African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian,
African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as ENGL 774.)

AAAS 788. The Black Woman. 3 Credits. An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 801. Introduction to Africana Studies: African-American. 3 Credits. An introduction to, and overview of, the historical, intellectual, and professional foundations of African-American Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 802. Introduction to Africana Studies: African. 3 Credits. An introduction to, and overview of, the historical, intellectual, and professional foundations of African Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 803. Research Methods in Africana Studies. 3 Credits. A multidisciplinary introduction to the range of research methods employed to examine African and African-American history, cultures, and societies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 804. Seminar in Africana Studies. 3 Credits. An interdisciplinary, comparative exploration of the histories, cultures, and societies of Africans and peoples of African descent. Students will be required to utilize the skills gained in AAAS 801 and AAAS 802 to design and implement a project that will be critically assessed in the seminar. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. Prerequisite: AAAS 801 and AAAS 802 or consent of instructor.

AAAS 810. Comparative Racial and Ethnic Relations. 3 Credits. An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 811. The Civil Rights Movement. 3 Credits. An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 812. The Black Power Movement. 3 Credits. This course will examine the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the Afro-American freedom movement of 1960's; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. There will also be some examination of the Black Arts Movement and its influence on the Black Power Movement and vice versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 827. Popular Culture in Africa. 3 Credits. This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theatre, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 830. The Life and Times of W.E.B. Du Bois. 3 Credits. A critical examination of the life and thought of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer, taking into account his often shifting views on art and culture, politics, leadership, civil rights and the color line, trade unionism, Pan-Africanism, socialism, internationalism, and, of course, double consciousness, among other issues. Moreover, the course will deal with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 832. Comparative Black Literature. 3 Credits. Reading, analysis, and discussion of contemporary fiction, poetry, and drama from Africa, the Caribbean, and the United States. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 834. The Rhetoric of Black Americans. 3 Credits. A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 843. Language and Culture in Arabic-Speaking Communities. 3 Credits. The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. Additional advanced-level coursework is required for
students in this course beyond lower-level courses of the same name and/or description.

AAAS 845. Unveiling the Veil. 3 Credits.
This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 851. Environmental Issues in Africa. 3 Credits.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 852. Classical Islamic Literature. 3 Credits.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 853. Geography of African Development. 3 Credits.
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 855. African Film and Video. 3 Credits.
A critical study of Africa and its peoples as depicted in films and videos. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films and videos will be examined. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 874. Slavery in the New World. 3 Credits.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 880. Introduction to Modern Africa. 3 Credits.
An interdisciplinary approach to cross-cultural understanding of Africa's place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 884. Black American Literature. 3 Credits.
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 885. Race and the American Theatre. 3 Credits.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre.

AAAS 889. The Rise and Fall of Apartheid. 3 Credits.
This course will deal with the fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 890. Sexuality and Gender in African History. 3 Credits.
An examination of the history of sexuality and gender in Africa focused on the 19th-century to the present. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 899. Thesis. 1-6 Credits.
Investigation and research of a topic for a master's thesis. A maximum of 6 thesis hours may be counted toward the 33 hours required for the degree.

African & African-American St Courses

AMHR 110. Elementary Amharic I. 5 Credits. U F1
Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Amharic.

AMHR 120. Elementary Amharic II. 5 Credits. U F2
A continuation of AMHR 110. Readings in cultural texts. Prerequisite: AMHR 110.

AMHR 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Amharic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

AMHR 210. Intermediate Amharic I. 3 Credits. U F3
Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Amharic texts and discussion in Amharic. Prerequisite: AMHR 120.

AMHR 220. Intermediate Amharic II. 3 Credits. U F4
African & African-American St Courses

ARAB 101. Introduction to Modern Standard Arabic. 3 Credits. NW
The goal of this course is to begin developing reading, speaking, listening, writing, and the essentials of Modern Standard Arabic grammar. This course will also provide an introduction to the culture of the Arabic speaking world. Three hours of class per week delivered face-to-face plus outside use of recorded text materials. This course does not satisfy any KU language requirement. Prerequisite: Instructor permission required

ARAB 102. Introduction to Modern Standard Arabic II. 3 Credits. NW
Continuation of ARAB 101. Further development of basic familiarity with the Modern Standard Arabic language, focusing on speaking, listening, reading, writing, and the essentials of Arabic grammar. Continued exploration of the culture of the Arab-speaking world. Three hours of class per week delivered face-to-face plus outside use of recorded text materials. This course does not satisfy any KU language requirement. Prerequisite: ARAB 101.

ARAB 110. Elementary Arabic I. 5 Credits. U F1
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Arabic.

ARAB 120. Elementary Arabic II. 5 Credits. U F2
Five hours of class per week. A continuation of ARAB 110. Readings in cultural texts. Prerequisite: ARAB 110.

ARAB 177. First Year Seminar: _______ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Arabic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ARAB 210. Intermediate Arabic I. 3 Credits. U F3
Three hours of class conducted in Arabic. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Arabic texts and discussion in Arabic. Prerequisite: ARAB 120.

ARAB 220. Intermediate Arabic II. 3 Credits. U F4
Three hours of class conducted in Arabic. Continuation of ARAB 210. Discussion in Arabic of texts studied. Prerequisite: ARAB 210.

ARAB 310. Advanced Arabic I. 3 Credits. U FP
A practical Arabic language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Arabic. Designed for students who have had two or more years of Arabic study. Open to native speakers. Prerequisite: ARAB 220 or consent of instructor.

ARAB 320. Advanced Arabic II. 3 Credits. FP
A continuation of ARAB 310. Prerequisite: Satisfactory completion of ARAB 310 or consent of instructor.

ARAB 401. Readings in Arabic I. 3 Credits. U FP
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

ARAB 402. Readings in Arabic II. 3 Credits. U FP
Continuation of ARAB 401.

African & African-American St Courses

HAIT 110. Elementary Haitian I. 3 Credits. U F1
Beginning course in the vernacular language of Haiti, Martinique, Guadeloupe and other areas of the Caribbean and the Indian Ocean. Conversational approach, with essentials of grammar. Reading of basic texts. Special attention to folk culture as expressed by language. No previous knowledge of another foreign language is required.

HAIT 120. Elementary Haitian II. 3 Credits. U F2
Continuation of HAIT 110, with further readings in Haitian literature. Prerequisite: HAIT 110 or consent of instructor.

HAIT 177. First Year Seminar: _______ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Haitian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HAIT 230. Intermediate Haitian I. 3 Credits. U F3
Continued practice in conversation and composition; intensive and extensive readings from contemporary press, short story, poetry, and folk tales. Prerequisite: HAIT 120 or consent of instructor.

HAIT 240. Intermediate Haitian II. 3 Credits. U F4
Continuation of HAIT 230, with additional readings from theatre, novel, and historical texts. Prerequisite: HAIT 230 or consent of instructor.

HAIT 300. Contemporary Haiti. 3 Credits. NW H
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as AAAS 302.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor.

HAIT 350. Advanced Haitian I. 3 Credits. U FP
Course objective is a sophisticated command of understanding, speaking, and writing Haitian. Texts include newspapers and other Haitian publications as well as spoken material produced essentially for native speakers. Conversation and oral presentations. Keeping of personal journal in Haitian.

HAIT 360. Advanced Haitian II. 3 Credits. U FP
Continuation of HAIT 350, plus advanced readings from Haitian authors such as Carrie Paultre, Frank Etienne, Lyonel Desmarattes, and Michel-Rolph Trouillot.

HAIT 497. Directed Studies in Haitian. 1-15 Credits. U FP
May be taken more than once, total credit not to exceed fifteen hours. Material not covered by course work, and/or in field of student's special interest. Conferences. Course taken for one hour of credit may not be used to fulfill College's humanities distribution requirement. Prerequisite: Six hours of Haitian Creole and consent of instructor.

HAIT 500. Directed Studies in Haitian Language and Literature. 1-15 Credits. U FP
Advanced work in either language or literature or both. May be taken more than once, total credit not to exceed fifteen hours. Conferences. As a three-credit-hour course, it may count toward a major in African and African-American studies. Prerequisite: Four semesters of Haitian Creole or equivalent and consent of instructor.

Advanced work in Haitian culture. May be taken more than once, total credit not to exceed fifteen hours. Conferences. As a three-credit-hour course, it may count toward a major in African and African-American studies. No knowledge of Haitian or French is required. Prerequisite: AAAS 301 or HAIT 200, or consent of instructor.
HAIT 700. Investigation and Conference. 1-6 Credits.
Supervised individual readings in selected areas of Haitian language, literature, and culture. Individual reports and conferences. Prerequisite: Consent of instructor.

African & African-American St Courses

HAUS 110. Elementary Hausa I. 5 Credits. U F1
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Hausa.

HAUS 120. Elementary Hausa II. 5 Credits. U F2
Five hours of class per week. A continuation of HAUS 110. Readings in cultural texts. Prerequisite: HAUS 110.

HAUS 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hausa. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HAUS 210. Intermediate Hausa I. 3 Credits. U F3
Three hours of class conducted in Hausa. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Hausa texts and discussion in Hausa. Prerequisite: HAUS 120.

HAUS 220. Intermediate Hausa II. 3 Credits. U F4
Three hours of class conducted in Hausa. Continuation of HAUS 210. Discussion in Hausa of texts studied. Prerequisite: HAUS 210.

HAUS 310. Advanced Hausa I. 3 Credits. U FP
A practical Hausa language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Hausa. Designed for students who have had two or more years of Hausa study. Open to native speakers. Prerequisite: HAUS 220 or consent of instructor.

HAUS 320. Advanced Hausa II. 3 Credits. U FP
A continuation of HAUS 310. Prerequisite: Satisfactory completion of HAUS 310 or consent of instructor.

HAUS 401. Readings in Hausa I. 3 Credits. U FP
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

HAUS 402. Readings in Hausa II. 3 Credits. U FP
Continuation of HAUS 401.

African & African-American St Courses

KISW 110. Elementary KiSwahili I. 5 Credits. U F1
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of KiSwahili.

KISW 120. Elementary KiSwahili II. 5 Credits. U F2
Five hours of class per week. A continuation of KISW 110. Readings in cultural texts. Prerequisite: KISW 110.

KISW 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in KiSwahili. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

KISW 210. Intermediate KiSwahili I. 3 Credits. U F3
Three hours of class conducted in KiSwahili. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern KiSwahili texts and discussion in KiSwahili. Prerequisite: KISW 120.

KISW 220. Intermediate KiSwahili II. 3 Credits. U F4

KISW 310. Advanced KiSwahili I. 3 Credits. U FP
A practical KiSwahili language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in KiSwahili. Designed for students who have had two or more years of KiSwahili study. Open to native speakers. Prerequisite: KISW 220 or consent of instructor.

KISW 320. Advanced KiSwahili II. 3 Credits. U FP
A continuation of KISW 310. Prerequisite: Satisfactory completion of KISW 310 or consent of instructor.

KISW 401. Readings in KiSwahili I. 3 Credits. U FP
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

KISW 402. Readings in KiSwahili II. 3 Credits. U FP
Continuation of KISW 401.

KISW 410. Advanced KiSwahili. 3 Credits. U
The course objective is a sophisticated command of speaking, listening, reading, and writing in KiSwahili. Texts used include newspapers and other KiSwahili publications not expressly for language learners, and spoken material intended for native speakers is introduced. Conversation and oral presentations. Advanced grammar. Available for elective credit in the major. Prerequisite: Native, near-native or second language competence or satisfactory completion of fourth level language proficiency.

African & African-American St Courses

SOMI 110. Elementary Somali I. 5 Credits. U F1
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Somali.

SOMI 120. Elementary Somali II. 5 Credits. U F2
Five hours of class per week. A continuation of SOMI 110. Readings in cultural texts. Prerequisite: SOMI 110.

SOMI 210. Intermediate Somali I. 3 Credits. U FP
Three hours of class conducted in Somali. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Somali texts and discussion in Somali. Prerequisite: SOMI 120.

SOMI 220. Intermediate Somali II. 3 Credits. U FP

SOMI 310. Advanced Somali I. 3 Credits. U
A practical Somali language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Somali. Designed for students who have had two or more years of Somali study. Open to native speakers. Prerequisite: SOMI 220 or consent of instructor.

SOMI 320. Advanced Somali II. 3 Credits. U
A continuation of SOMI 310. Prerequisite: Satisfactory completion of SOMI 310 or consent of instructor.

SOMI 410. Advanced Somali. 3 Credits. U
The course objective is a sophisticated command of speaking, listening, reading, and writing in Somali. Texts used include newspapers and other Somali publications not expressly for language learners, and spoken material intended for native speakers is introduced. Conversation and oral presentations. Advanced grammar. Available for elective credit in the major. Prerequisite: Native, near-native or second language competence or satisfactory completion of fourth level language proficiency.

African & African-American St Courses

WOLO 110. Elementary Wolof I. 5 Credits. H F1
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Wolof.

WOLO 120. Elementary Wolof II. 5 Credits. U F2
American Studies Courses

**AMS 100. Introduction to American Studies. 3 Credits. HT H**
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 101.

**AMS 101. Introduction to American Studies, Honors. 3 Credits. HT H**
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 100. Prerequisite: Membership in the University Honors Program or approval by the American Studies Program.

**AMS 110. American Identities. 3 Credits. SC S**
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 112.

**AMS 112. American Identities, Honors. 3 Credits. SC S**
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 110. Prerequisite: Membership in the University Honors Program or approval by the American Studies Program.

**AMS 177. First Year Seminar: _____. 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Wolof. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**WOLO 210. Intermediate Wolof I. 3 Credits. U F3**
Three hours of class conducted in Wolof. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Wolof texts and discussion in Wolof. Prerequisite: WOLO 120.

**WOLO 220. Intermediate Wolof II. 3 Credits. U F4**

**WOLO 310. Advanced Wolof I. 3 Credits. U FP**
A practical Wolof language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Wolof. Designed for students who have had two or more years of Wolof study. Open to native speakers. Prerequisite: WOLO 220 or consent of instructor.

**WOLO 320. Advanced Wolof II. 3 Credits. U FP**
A continuation of WOLO 310. Prerequisite: Satisfactory completion of WOLO 310 or consent of instructor.

**WOLO 401. Readings in Wolof I. 3 Credits. U FP**
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

**WOLO 402. Readings in Wolof II. 3 Credits. U FP**
Continuation of WOLO 401.

**WOLO 420. Advanced Wolof II. 3 Credits. U**
Aspects of Wolof literature are examined at an advanced level, including differences between oral and written narrative, oral and poetic modes, varieties of registers as determined by gender and socio-economic level, and the effect of medium on literary style. Prerequisite: Native, near-native or second language competence, or satisfactory completion of fourth level language proficiency.

**American Identities, Honors. 3 Credits. SC S**
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 112.

**AMS 260. America's Latinos/Latinas. 3 Credits. U**
An introduction to the Latino/a population (Mexican-Americans, Puerto Ricans, Cuban-Americans, Dominican-Americans, and Central and South Americans) in the US. Students discuss how US and Latin American societies have shaped Latino incorporation into the United States. We also discuss contemporary political, cultural and social issues that pertain to Latinos/as in the US.

**AMS 290. Religion in American Society. 3 Credits. HR H**
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodox, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. (Same as REL 171.)

**AMS 312. American Culture, 1877 to the Present. 3 Credits. H**
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from 1877 to the present. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as HIST 312.)

**AMS 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Credits. H**
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and HIST 316.)

**AMS 320. Border Patrolled States. 3 Credits. H**
Examines the politics of immigrant, citizenship and space through official, intellectual and popular responses to the growth of Latino/a populations in the U.S. and to international migration to and from Mexico and Central America. Topics include consideration of how responses to immigration articulate racialized and culturally specific (including linguistic and religious) concepts of the nation, and how questions of citizenship and residency dovetail with issues of community "voice", public space, and diverse notions of "security".

**AMS 323. Sex in History. 3 Credits. HT H**
This course offers a survey of the history of human sexuality in the Western world; the second half of the semester emphasizes
the American experience. Topics for consideration may include: masturbation, pornography, sex work, homosexuality, bisexuality, “perversions” (paraphilias), sex and marriage, racialized sexualities, sexual violence, trans* identities and experiences, sexuality and national identities, and colonized sexualities. The course demonstrates the various ways in which sex, specifically the social and political meanings attributed to physical acts, changes over time and shapes human experiences and interactions far beyond the bedroom. (Same as HUM 332, HIST 332 and WGSS 311.)

AMS 324. Being Deviant in America. 3 Credits. S
In this course students will study traits, conditions, actions, and behaviors that violate social norms and elicit negative societal reactions. This includes the social, cultural, and individual factors that explain deviance; motivations behind deviant behavior; and efforts by society to control deviants. In short, you will undertake a sociological examination of those on the margins of society and societal efforts to “deal with” them. (Same as SOC 324.)

AMS 330. American Society. 3 Credits. H
The social structure and organization of American society with special reference to recent social changes. (Same as SOC 330.) Prerequisite: An introductory course in sociology or American studies.

AMS 332. The United States in Global Context. 3 Credits. S
Examines the influence abroad of US culture, policies and practices and the impact of other countries on US culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as SOC 332.)

AMS 340. Black Leadership. 3 Credits. H/W
The course focuses on the concept of leadership and on black leadership in the United States; an in-depth analysis of selected case studies on black leaders, both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful black leaders will be invited to visit the class from time to time. (Same as AAAS 330.)

AMS 344. Case Study in American Studies: ______. 3 Credits. H
This course examines in depth a specific American studies or theme.

AMS 360. Theory and Method. 3 Credits. H
An introduction through a topical theme to theories and methods currently used in American Studies. Prerequisite: AMS 100, AMS 110 and AMS 332 or their equivalent, or consent of instructor.

AMS 365. Angry White Male Studies. 3 Credits. H
This course charts the rise of the “angry white male” in America and Britain since the 1950s, exploring the deeper sources of this emotional state while evaluating recent manifestations of male anger. Employing interdisciplinary perspectives this course examines how both dominant and subordinate masculinities are represented and experienced in cultures undergoing periods of rapid change connected to modernity as well as to rights-based movements of women, people of color, homosexuals and trans individuals. (Same as HIST 364, HUM 365 and WGSS 365.)

AMS 390. Geography of the United States and Canada. 3 Credits. S
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as GEOG 390.)

Prerequisite: An introductory geography course, or background in United States or Canadian history, social science, or culture, or consent of instructor.

AMS 436. Ethnicity in the United States: ______. 3 Credits. S
An examination of the history, sociology, and culture of U.S. ethnic categories (e.g., American Indians, Latinos, Asian Americans, Jewish Americans, Irish Americans). The specific group studied varies from semester to semester. Course may be repeated for credit with different topics. (Same as SOC 436.)

AMS 437. Global Ethnic and Racial Relations. 3 Credits. W
This course uses written and visual materials to examine race, ethnicity, and nationalism around the world. Emphasis is on ways in which social forces, gender roles, sexual practices, cultural patterns, and political organization work together to construct and reinforce ethnic, racial, and national identities, boundaries, movements, and conflicts. Historical and contemporary comparisons are made between the U.S. and countries in Africa, Asia, the Americas, the Caribbean, Europe, the Pacific Islands, and the Middle East. (Same as AAAS 437 and SOC 437.)

AMS 494. Topics in: ______. 1-4 Credits. H
Interdisciplinary study of selected aspects of American society or culture or of the American experience.

AMS 496. Social Justice Perspectives and Experiences. 3 Credits. S
An experiential learning course in which students select and participate in public/civic engagement activities in a selected area undertaken in consultation with and under the direction of a faculty member. Students meet regularly to discuss and evaluate their field experiences and to collectively problem solve identified challenges to the justice work with which they are engaged. Students produce a final project on the experience that integrates the engagement experience and academic materials. Prerequisite: AMS 100 and AMS 110.

AMS 510. History of American Women--Colonial Times to 1870. 3 Credits. H
A survey of women’s roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial, and early industrial America. (Same as HIST 530 and WGSS 510.)

AMS 511. History of American Women--1870 to Present. 3 Credits. H
A survey of women’s history in the United States that will include radical and reform movements, the impact of war and depression, professionalization, immigration, women’s work and the biographies of leading figures in women’s history. (Same as HIST 531 and WGSS 511.)

AMS 518. Capitalism and the Black Experience. 3 Credits. H
This is an upper level course designed to analyze the experiences that define the African American relationship to the American economy. The course begins with the slave trade and ends in the present. It explores and explains how African American economic development intimately intertwined with the movement for freedom. Students will learn how African Americans addressed issues around slavery, housing, banking, capitalism/socialism, underground economy, and gentrification. This course is chronological in nature with thematic elements. Lectures will provide brief histories and conceptual framework for readings. This background will help students understand and explore how black identity, culture, and politics interact with economy. However, the bulk of the course will operate as a seminar. By the end of the course, students will be able to summarize African American past experiences with capitalism and its relevance to contemporary economic issues affecting African American people today. (Same as HIST 518.) Prerequisite: Any American Studies or History Courses on American History.
AMS 550. Research Seminar in:______. 3 Credits. H
A seminar exploring a specific American studies theme. A research paper or equivalent project is required. Prerequisite: AMS 360 (a grade of C or better is recommended) or consent of instructor. Cannot be taken concurrently with AMS 551, AMS 552 or AMS 553.

AMS 551. Research Project in American Studies. 3 Credits. H
Independent research on a selected topic under the direction of a faculty member. Students write an original research paper or complete an equivalent project in another medium, grounded in primary as well as secondary sources. Prerequisite: AMS 550 or consent of instructor.

AMS 552. Public Service in American Studies. 3 Credits. H
Independent public service in a selected area undertaken in consultation with and under the direction of a faculty member. Students produce a final written project on the experience that integrates the public service experience and academic materials, or complete an equivalent project in another medium. Prerequisite: AMS 550 or consent of instructor.

AMS 553. Honors in American Studies. 3 Credits. H
Honors equivalent of AMS 551. May be taken twice for credit. Three hours of AMS 553 may be substituted for a course in an appropriate category in the American Studies major. Prerequisite: AMS 550, eligibility for departmental honors, or consent of instructor.

AMS 650. Jazz and American Culture. 3 Credits. H
This course considers cultural and social histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americanness, and globalization in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as WGSS 652.)

AMS 694. Directed Readings. 1-4 Credits. H
Consent of instructor is required.

AMS 696. Studies in:______. 3 Credits. H
Interdisciplinary study of different aspects of the American experience in different semesters.

AMS 700. Introduction to Museum Exhibits. 3 Credits.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first-hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as BIOL 787, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 714. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as BIOL 700, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 730. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, BIOL 798, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 731. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as BIOL 785, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 737. Music in America. 3 Credits.
A survey of historical developments from the Pilgrims to the present. (Same as MUSC 759.) Prerequisite: One course in the field of music history and literature or consent of instructor.

AMS 767. Multidisciplinary Perspectives on Gerontology and Aging. 3 Credits.
A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, COMS 787, PSYC 787, and SOC 767.)

AMS 797. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as BIOL 784, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 799. Museum Internship. 1-6 Credits.
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. Graded on a satisfactory/unsatisfactory basis. (Same as ANTH 799, GEOL 723, and MUSE 799.)

AMS 801. Introduction to American Studies. 3 Credits.
An introduction to the field of American Studies through an examination of some of the classic and innovative works, issues, debates, and controversies in the history and the literature of American Studies.

AMS 802. Theorizing America. 3 Credits.
Drawing from a broad range of perspectives (e.g., cultural theory, social theory, literary theory, etc.), this course will introduce students to current theoretical debates in American studies and the concepts that inform them.

AMS 803. Research Methods in American Studies. 3 Credits.
An introduction to the range of interdisciplinary research methods in American studies. Emphasis will be placed on an examination of the assumptions, logics, and procedures involved in various approaches to understanding American society and culture.

**AMS 804. Research Seminar. 3 Credits.**
An intensive application of theoretical and methodological issues to the development of specific substantive research problems. Students will be expected to design and implement a study that will be critically assessed in the seminar.

**AMS 805. American Pluralism: Race, Ethnicity, and Religion in American Life. 3 Credits.**
Analysis of the dynamics of intercultural and intergroup relations in America with special emphasis on the examination of major conceptual perspectives that have characterized the study of race, ethnicity, and religion in American life.

**AMS 808. Studies in: ______. 3 Credits.**
Interdisciplinary study of different aspects of the American experiences in different semesters.

**AMS 835. Colloquium in the History of Gender. 3 Credits.**
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as HIST 895 and WGSS 835.)

**AMS 896. Examination Preparation. 1-6 Credits.**
Directed and independent study in preparation for the M.A. examination. May be repeated.

**AMS 899. Thesis. 1-6 Credits.**
Investigation of a topic for master's thesis. Total enrollment in this course may not exceed six hours of credit. Graded on a satisfactory progress/limited progress/no progress basis.

**AMS 900. Teaching Seminar. 1-6 Credits.**
This seminar is designed to assist students in the preparation, presentation, and evaluation of teaching in American Studies. Graded on a satisfactory/unsatisfactory basis.

**AMS 996. Examination Preparation. 1-9 Credits.**
Directed and independent study in preparation for the doctoral comprehensive examinations. May be repeated.

**AMS 997. Directed Readings. 1-4 Credits.**
Directed reading in an area of American culture in which there is no appropriate course in the offerings of the American Studies program or of the cooperating departments, but in which there is a member of the graduate faculty competent and willing to direct a program of study.

**AMS 998. Seminar in: ______. 3 Credits.**
Topics vary from semester to semester. Graduate students are consulted in selecting topics.

**AMS 999. Dissertation. 1-12 Credits.**
Dissertation Credit. Graded on a satisfactory progress/limited progress/no progress basis.

**Anthropology Courses**

**ANTH 100. General Anthropology. 3 Credits. SC S**
This course is an introduction to the discipline of Anthropology. Our goal is to understand human diversity in the past, present, and future through the lenses of the four primary fields of Anthropology: Archaeology, Biological Anthropology, Linguistic Anthropology, and Sociocultural Anthropology. Students will be introduced to major concepts, research approaches, important findings, and critical controversies within the discipline as a whole. We will investigate such questions as: How did humans evolve?

How have human cultures and languages developed? What tools, technologies, and new kinds of knowledge and expertise emerge in the face of global environmental, social, political, and economic change?

**ANTH 102. Succeeding in Anthropology. 1 Credits. S**
This course is designed to enhance students' chances for success in anthropology major and life after college. Students will learn how to maximize their possibilities for gaining academic assistance, grants, and career building, as well as design strategies for winning jobs, entry into graduate programs, and paid internships at home and abroad. Graded on a satisfactory/unsatisfactory basis.

**ANTH 106. Introductory Linguistics. 3 Credits. SC S**
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as LING 106.)

**ANTH 107. Introductory Linguistics, Honors. 3 Credits. SC S**
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as LING 107.)

**ANTH 108. Introduction to Cultural Anthropology. 3-4 Credits. SC S**
An introduction to the nature of culture, language, society, and personality. Included in this survey are some of the major principles, concerns, and themes of cultural anthropology. The variety of ways in which people structure their social, economic, political, and personal lives. Emphasized are the implications of overpopulation, procreative strategies, progress and growth of cultural complexity, developments in the Third World, and cultural dynamics in Western as well as in non-Western societies.

**ANTH 109. Introduction to Cultural Anthropology, Honors. 3-4 Credits. SC S**
An honors section of ANTH 108 for students with superior academic records.

**ANTH 110. Introduction to Archaeology. 3-4 Credits. HT H**
A general introduction to the history methods, theories, and principles of the study of archaeology. Lectures, and discussions sections cover the essential archaeological approaches, methods and practice: what is the material evidence that archaeologists collect, and how they collect and analyze it in order to understand humans of the past, their social organization, economy, subsistence, diet, technology, trade, exchange, symbol systems; how geological, palaeoenvironmental, paleontological, and genetic evidence contribute to archaeology and how what was the effect of environmental and climate change on human evolution and global dispersal; what is the role of knowing the past, public archaeology, culture heritage preservation, and archaeological ethics in the modern world. Discussion sections will be used to examine material covered in lectures and in readings related to specific topics, and to explore relevant visual materials - archaeological artifacts, collections, and media sources.

**ANTH 111. Introduction to Archaeology, Honors. 3-4 Credits. HT H**
An honors section of ANTH 110 for students with superior academic records.
ANTH 115. World Prehistory. 3 Credits.
A general introduction to the evolution of human culture around the world from the Lower Paleolithc to the emergence of complex societies. This course covers what archaeology has revealed about the experience of humankind from the origins of stone tool use to the earliest urban settlements in the Middle East, Africa, Asia, Europe, and the Americas.

ANTH 150. Becoming Human. 3 Credits. N
This course examines the biological evolution and archaeological record of humanity from the earliest human origins to the origins of civilization, and asks: Where did we come from? What makes us human? Where are we going? By unraveling the fundamental connections between biological evolution and culture, our goal is to help students appreciate how knowledge of the human past is relevant to our modern lives, whether as a KU student today, or as a future parent, medical patient, consumer, or citizen. Not open to students that have taken ANTH 309.

ANTH 151. Becoming Human, Honors. 3 Credits. N
An honors section of ANTH 150 for students with superior academic records. Not open to students who have had ANTH 150. Prerequisite: Enrollment in the Honors Program.

ANTH 160. The Varieties of Human Experience. 3 Credits. NW S/W
An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world, for the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 360.

ANTH 162. The Varieties of Human Experience, Honors. 3 Credits. NW S/W
An honors section of ANTH 160 for students with superior academic records. Not open to students who have had ANTH 160 or ANTH 360.

ANTH 177. First Year Seminar; _____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Anthropology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ANTH 210. Archaeology's Greatest Hits. 3 Credits. S/W
This course is a broad survey of the most spectacular archaeological discoveries of our time. It tells the story of pioneers and scientist-adventurers in their quest for knowledge of human prehistory. These discoveries became historically significant because they embodied major theoretical advances and evolutionary leaps in our understanding of the past. While reviewing archaeology's greatest discoveries, this course will investigate many of the major events, such as the critical evaluation of evidence or the development of appropriate scientific techniques, that eventually established archaeology as a scientific endeavor.

ANTH 212. Archaeological Myths and Realities. 3 Credits. S
Archaeology is concerned with explaining mysteries of the human past ranging from the origins of human beings to the rise and fall of civilizations. This course is designed to guide students in investigations of mysteries that capture the popular imagination, but which many scientists do not wish to discuss. What is the scientific evidence for the Biblical account of Creation, the Great Flood, or the Tower of Babel? Was the Great Pyramid encoded with lost knowledge or predictions of the future? Did Chinese, Africans, Celts, or Vikings visit the Americas before Columbus? Is Stonehenge an astronomical observatory? Who built the giant statues on Easter Island? Where are the lost continents of Atlantis and Lemuria? The methods and theories of archaeology and anthropology will be used to address these and other questions.

We will develop methods of evaluating information available from various published and online sources to judge when a claim represents a revolutionary new idea or a strategy for extracting money from the uninformed? Students will learn to be critical consumers of scientific and non-scientific information, and our goal will be to identify ways to be skeptical while maintaining an open mind when confronted with conflicting claims.

ANTH 291. Study Abroad Topics in: _____. 1-5 Credits. S
A course designed to enhance international experience in topic areas related to anthropology at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

ANTH 293. Myth, Legend, and Folk Beliefs in East Asia. 3 Credits. NW H/W
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the traditional world view of the peoples of East Asia. (Same as EALC 130, REL 130.)

ANTH 301. Anthropology Through Films. 3 Credits. S
An exploration of the human ways through films. Cross-cultural interpretations by filmed records of varieties of interpersonal relations seen through such aspects of culture as hunting, war, marriage, religion, sex, kinship, and death. Patterns of interactions are analyzed by examples from cultures around the world, primarily the non-Western world.

ANTH 303. Peoples and Cultures of North Africa and the Middle East. 3 Credits. NW S
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence, secularism, democratization, and gender, are also explored. (Same as AAAS 303.)

ANTH 304. Fundamentals of Biological Anthropology. 3 Credits. NB N
Biological anthropology is an exciting discipline concerned with humans as biological beings living in cultural and natural settings. We are interested in questions pertinent and important to the scientific, social, and political agendas of the world. Material covered in this class will encourage you to pursue questions about the relationship of humans to the rest of the animal kingdom, the origin, maintenance, patterning, and significance of human biological variation, the nature of heredity, and human evolution. We will discuss the human and primate fossil records, human variation, race, and genetics. Students can expect a strong emphasis on scientific literacy, that is, how the process of scientific inquiry works. When you finish this course, you will have the tools to distinguish between reliable and unreliable sources of scientific information and a solid grounding in the fundamentals of biological anthropology.

ANTH 308. Fundamentals of Cultural Anthropology. 3 Credits. SC S
This course covers the fundamental concepts, theories, and practices of cultural anthropology. It teaches students how to think anthropologically through a survey of classic and contemporary ethnographic texts, spanning a range of geographic and cultural areas. Applying a holistic lens, students will critically analyze inequality, globalization, and human cultural differences across time and space. Topics will include: fieldwork...
and ethnography; racism; ethnicity and nationalism; gender, sexuality, and kinship; socioeconomic class; the global economy; politics and power; religion; health and development; and art and media. This course logically follows ANTH 160/ANTH 162/ANTH 360. Not open to students who have taken ANTH 108 or ANTH 109.

**ANTH 309. Becoming Human. 3 Credits.**
A more intensive treatment of ANTH 150. This course examines the biological evolution and archaeological record of humanity from the earliest human origins to the origins of civilization, and asks: Where did we come from? What makes us human? Where are we going? By unraveling the fundamental connections between biological evolution and culture, our goal is to help students appreciate how knowledge of the human past is relevant to our modern lives, whether as a KU student today, or as a future parent, medical patient, consumer, or citizen. Not open to students that have taken ANTH 150.

**ANTH 310. Fundamentals of Archaeology. 3 Credits.**
An introduction to the history, methods, theories, and principles of archaeology. This course covers essential archaeological approaches, methods and practices to answer such questions as: What is the material evidence that archaeologists collect and how do they analyze it in order to understand humans of the past, their social organization, economy, subsistence, diet, technology, trade, exchange, and symbol systems? How do geological, palaeoenvironmental, paleontological, and genetic evidence contribute to archaeological understandings of human biological and social evolution? What was the effect of environmental and climate change on human evolution and global dispersal? How are knowledge of the past, public archaeology, culture heritage preservation, and archaeological ethics used in the modern world? Prerequisite: ANTH 150 or permission of instructor.

**ANTH 315. The Prehistory of Art. 3 Credits.**
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as HA 315.)

**ANTH 317. Prehistory of Europe. 3 Credits.**
A survey of one million years of prehistory from the peopling of the European continent to the Roman Empire. The course will focus on the growth of culture, considering economy and technology, art and architecture. Topics will include the Neanderthals, the big game hunters of the Ice Age, the megalith builders, the Celts. Prerequisite: An introductory course in anthropology, history, or cultural geography.

**ANTH 318. Peoples of the Great Plains. 3 Credits.**
A survey of the diverse and changing lifeways of Native Americans in the Great Plains region from the time of the earliest inhabitants more than 13,000 years ago to the modern era. Collections of prehistoric and historic Native American material culture will be used to illustrate the diversity of technologies and artistry of indigenous Great Plains peoples.

**ANTH 320. Language in Culture and Society. 3 Credits.**
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as LING 320.)

**ANTH 321. Language in Culture and Society, Honors. 3 Credits.**
An honors section of ANTH 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as LING 321.) Prerequisite: Membership in the University Honors Program or consent of instructor.

**ANTH 323. Environmental Dynamics in India. 3 Credits.**
This course introduces students to the relationships the people of India have had with their landscape from ancient times to the present. Students will learn about diverse ecosystems and the indigenous peoples they have harbored from the high Himalayas altitudes to the coastal regions, from the desolate arid deserts to the rain forests of India. The class will discuss how the very nature of the relationship of the people with their land has changed over the long course history of South Asia with specific case studies of environmental challenges, failures and successes. Examples of possible cases include: the Chipko movement led by the women of the Himalayas to save their forests from loggers; the traditions of creating lakes and water conservation lifestyles in the arid region of Rajasthan; and nature worship and cases of leopards and tigers receiving protection by the very villages they terrorize. (Same as GIST 323.)

**ANTH 325. Language, Gender, and Sexuality. 3 Credits.**
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; and binary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as GIST 303, JWSH 305, SLAV 305 and WGSS 325.)

**ANTH 330. Forensic Anthropology. 3 Credits.**
This course focuses on the study of forensic anthropology as related to medicolegal death investigation. It includes overview of the Coroner's System, death scene investigation techniques, DNA and Geoscience applications, statutes and laws, review of injuries and interpretations, child death investigation and its uniqueness, identification of the body, coordination with law enforcement and the legal world, how to obtain the necessary information in order to complete a case, cause vs. manner of death, types of death and how to identify, how to deal with families and the public, and social responsibilities associated with forensic science.

**ANTH 340. Human Variation and Evolution. 3 Credits.**
An examination of biochemical and physical variability in contemporary human populations. Topics include: genetic basis of human diversity, evolutionary theory, population genetics, blood groups, biochemical variations, body size and shape, pigmentation, and other morphological characteristics. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

**ANTH 341. Human Evolution. 3 Credits.**
The evolutionary processes and events leading to the development of humans and the humanlike forms from primate ancestors; fossil hominids and the origin of modern Homo Sapiens. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

**ANTH 343. Food, Nutrition and Culture. 3 Credits.**
The course is a cross-cultural survey of human dietary practices (foodways). Students are introduced to the concepts of nutrition, diet and cuisine. Evolutionary and adaptive aspects of human diets and cuisines are considered. Nutritional, environmental/technological, social and ideological aspects of regional and ethnic foodways are examined. Invited lecturers from different cultural traditions offer indigenous perspectives on their foodways.

ANTH 345. Introduction to Human Evolutionary Biology. 4 Credits. NW
This course takes students on the evolutionary journey of the human species: from the origin of the primate order to modern human population diversity. It examines human adaptations to extreme environments, nutrition and the role of the microbiome in human health, and human evolutionary genomics in the foundations of immunity and their intersection with public health. It evaluates our Neandertal ancestry, and tracks major human migrations and dispersals in the peopling of the world. All topics are examined through the lens of molecular evolutionary approaches to the study of human diversity. An introduction to biology or biological anthropology course is recommended.

ANTH 352. Controversies on the Living and the Dead. 3 Credits. N
A critical analysis of conflicting perspectives on scientific and anthropological research, past and present. Topics considered include the nature of science, colonialism in anthropology and biology, origin stories and human evolution, the ethics of research in ancient and contemporary populations, eugenics, biological race, and the relationship between humans and our extinct hominin relatives. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

ANTH 359. Anthropology of Sex. 3 Credits. N
An evolutionary perspective on the behavior and biology of males and females in human society. Topics will include the evolution of sexual dimorphism, social and biological issues in human reproduction, primate social patterns, human sexual behavior and taboos, sex and social structure, and the sociobiology of sex.

ANTH 360. The Varieties of Human Experience. 3 Credits. NW S/W
A more intensive treatment of ANTH 160. An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world, for the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 160.

ANTH 367. Introduction to Economic Anthropology. 3 Credits. S
This course uses ethnographic case materials to explore the ways humans provision themselves under different social and environmental conditions. It introduces the basic theories, concepts, and debates of economic anthropology and provides a foundation for more advanced courses in this subdiscipline. Prerequisite: ANTH 108 or ANTH 160/ANTH 162 or ANTH 308 or ANTH 360 or permission of instructor.

ANTH 368. The Peoples of China. 3 Credits. NW S/W
An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as EALC 368.)

ANTH 372. Religion, Power, and Sexuality in Arab Societies. 3 Credits. NW S
This course examines theories of religion, discourse, power, gender and sexuality in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as AAAS 372.)

ANTH 379. Indigenous Traditions of Latin America. 3 Credits. NW S/W
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAC 634. (Same as LAC 334.)

ANTH 380. Peoples of South America. 3 Credits. NW S/W
A survey of native peoples and cultures of South America from the time of initial Western contacts to the present day.

ANTH 382. People and the Rain Forest. 3 Credits. S
An analysis of the cultural origin, diversity, and unity of the peoples of the neotropics. Emphasizing the peoples of Amazonia, the course introduces students to topics associated with the economic, political, and cultural dimensions of social life in rain forest communities.

ANTH 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Credits. NW W
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Japanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, biological anthropologists, and sociocultural anthropologists. (Same as WGSS 389.)

ANTH 391. Topics in Anthropology: _____, 3 Credits. S
This course offers students an opportunity to study classical and emerging topics in the four primary fields of Anthropology: Biological Anthropology, Linguistics, Sociocultural Anthropology, and Archaeology. Concepts and approaches to each field will used to investigate past and present examples from around the world. Topics will be examined with an emphasis on the unity of the anthropological approach.

ANTH 397. Museum Anthropology. 3 Credits. S
An introduction to the historical background, practice, and ethical issues involved in the creation, presentation, and dissemination of anthropological information in a museum setting. Students participate in the study of a collection of material culture (artifacts) from the Museum of Anthropology, culminating in development of a script for an exhibit.

ANTH 400. Topics in Anthropology, Honors: _____, 3 Credits. H
Selected issues and theories in contemporary anthropology (cultural, linguistic, biological, archaeological) for honors students. Topic for semester to be announced. May be repeated for credit if content varies. Prerequisite: Admission to University Honors Program or permission of instructor.

ANTH 401. Integrating Anthropology. 3 Credits. S
Capstone course that integrates the primary fields of anthropology. Students apply concepts and approaches from each field to a particular topic in preparation for and presentation of a cross-disciplinary and integrative final project. Prerequisite: Completion of ANTH 150/ANTH 151 or ANTH 160/ANTH 162/ANTH 360 and any two other anthropology courses.

ANTH 406. Archaeological Research Methods. 3 Credits. S LFE
A survey of basic field methods and laboratory procedures associated with specimen acquisition, preparation, analysis, classification, and measurement of archaeological materials. In this course students will apply archaeological methods to the study of stone tools, ceramics, and animal bone, learn which field and lab methods to use in a range of research scenarios, interpret human behavior on the basis of artifacts and features recovered from archaeological sites, use introductory flintknapping techniques to produce a stone tool, study the major dating and chronological methods used in archaeology, and complete labs and projects that require analysis and interpretation of archaeological materials. Prerequisite: ANTH 110/ANTH 111 or ANTH 150/ANTH 151 or ANTH 310 or permission of instructor.

ANTH 418. Summer Archaeological Field Work. 1-8 Credits. S
Under the direction of a professional archaeologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research. Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged.

ANTH 419. Training in Archaeological Field Work. 1-6 Credits. S
Undergraduate and graduate students are taught techniques of archaeological field work, including survey and excavation, as well as laboratory procedures, including artifact classification and curation.

ANTH 430. Linguistics in Anthropology. 3 Credits. S
The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as LING 430.)

ANTH 431. Constructed Languages. 3 Credits. S
Constructed languages are devised by individuals to facilitate international communication (Esperanto) or to enhance fictional or fantasy worlds (Lapine, Newspay, Klingon, Elvish, Navii, the Common Tongue, Valyrian). Invented or constructed languages provide a means to study both the universals of linguistic expression (grammar) and the cultural contexts from which they emerge. Students will construct languages and evaluate the cultural motivations of existing ConLangs. Prerequisite: ANTH 106 or ANTH 107 recommended.

ANTH 442. Anthropological Genetics. 3 Credits. N
Principles of human genetics involved in biological anthropology. The genetics of non-Western populations considered within an evolutionary framework. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

ANTH 445. Topics in Biological Anthropology: ______. 3 Credits. N
Seminar concentrating on selected problems and issues in contemporary biological anthropology. Topic for semester to be announced. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

ANTH 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N
This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as BIOL 449, SPLH 449, and PSYC 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

ANTH 459. Anthropology of Sex, Honors. 3 Credits. S
The course is an introduction to the evolutionary study of human sexual behavior. Using an explicitly Darwinian framework, it examines the biological basis for human mate selection, male and female mating strategies, child-birth and child-care practices, parental care, marriage, and family structure. The power of Darwinian theory to predict human sexual behavior is tested in anthropological field studies, designed and carried out by students in the class. Class time is allocated for discussion of students’ research as it progresses through each stage, and results are presented in the last weeks of the semester. Prerequisite: An introductory course in biology or biological anthropology. Admission to the University Honors Program or permission of instructor.

ANTH 462. Field Methods in Cultural Anthropology. 3 Credits. S
This course introduces students to ethical considerations, methods used in ethnographic fieldwork, field notes, coding data, analysis, and write-up. Students design and carry out research projects. Prerequisite: ANTH 108 or ANTH 160 or ANTH 162 or ANTH 308 or ANTH 360 or permission of instructor.

ANTH 465. Genocide and Ethnocide. 3 Credits. S
This course provides students with a conceptual and historical synopsis of genocide and ethnocide from an anthropological perspective. Taking its lead from a human rights orientation, the course assesses why such atrocities must be confronted. This includes grappling with ethical, legal and definitional ambiguities surrounding the concepts of genocide and ethnocide. We will explore a range of cases in the 20th and 21st centuries, while focusing on diverse conditions leading to genocide, ethnocide, population displacements, human trafficking and the modern phenomena of refugee camps. The course will analyze the role of the modern state, colonialism, political ideologies, ethnicity and nationalism as major forces underpinning ethnocide and genocidal campaigns. Based primarily on a select review of cases of ethnocide and genocide, the class examines how to spread global awareness and communal engagement by actively protecting human rights. (Same as GIST 465.)

ANTH 474. Applied Cultural Anthropology. 3 Credits. S
Applications of anthropological theory, methods, and findings in programs of community and national development, public health, international aid, and military assistance. Examination of the role of the anthropologist, of ethics and values in intervention schemes, and of the organization of planned change in applied programs. Intensive analysis of selected case studies.

ANTH 484. Magic, Science, and Religion. 3 Credits. NW S/W
A comparative study of religion and systems of value and belief in non-Western cultures.

ANTH 491. Study Abroad Topics in: ______. 1-5 Credits. SC S
A course designed to enhance international experience in topic areas related to topics in anthropology at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

ANTH 496. Reading and Research. 1-6 Credits. S
Individual investigation of special problems in anthropology. A maximum of three credit hours in any one semester. Prerequisite: Permission of instructor.

ANTH 497. Field Experience. 1-6 Credits. S
A supervised field or laboratory-based experience in the United States or abroad. Students may receive this credit for an independent or collaborative research project or in conjunction with field school participation. Students may also acquire credit for supervised placements in organizations, agencies, museums or other settings in which they apply anthropological knowledge to real-life situations and actively participate in organized work within a community. The field experience should not duplicate any other regularly available course. A contract between mentor and student is required at the beginning of the experience, and a reflection paper is required at the end of the experience. Students are strongly recommended to have completed at least one anthropology methods course prior to enrolling in Field Experience. Prerequisite: Permission and supervision by anthropology instructor required.

ANTH 499. Senior Honors Research. 3-6 Credits. S
Individual research under the direction of one or more instructors in the department. Minimum of three credit (maximum of six credit) hours in any one semester. Prerequisite: A grade-point average of 3.50 in anthropology and 3.25 in all courses, and permission of instructor.

ANTH 500. Topics in Archaeology: _____. 3 Credits. S
Seminar concentrating on selected problems and issues in contemporary archaeology. Topic for semester to be announced. Course may be repeated for a maximum of nine hours of credit. Prerequisite: Successful completion of a course in archaeology at any level, or by permission of instructor.

ANTH 501. Topics in Sociocultural Anthropology: _____. 3 Credits. S
Course concentrating on selected problems, theories, and issues in contemporary sociocultural anthropology. Topic for semester to be announced.

ANTH 502. Topics in Anthropological Linguistics: _____. 3 Credits. S
Course concentrating on selected problems, theories, and issues in contemporary anthropological linguistics. Topic for semester to be announced.

ANTH 503. Topics in Biological Anthropology: _____. 3 Credits. S
Course concentrating on selected problems, theories, and issues in contemporary biological anthropology. Topic for semester to be announced.

ANTH 504. North American Archaeology. 3 Credits. S
A general survey of the archaeology of North America. Detailed coverage of selected problems.

ANTH 505. Prehistory of Eastern North America. 3 Credits. S
A survey of the archaeological record of eastern North America from the late Pleistocene to the time of European contact. The diverse environments of eastern North America are considered in conjunction with the dynamic climatic and ecological changes which have occurred during the past 20,000 years to provide a background for study of the prehistoric groups who occupied the region. Topics will include the change in economies, technologies, and organization from the earliest hunter-gatherers through the development of pre-Colombian complex societies. Prerequisite: ANTH 110 or ANTH 150 or ANTH 151 or ANTH 310 or permission of instructor.

ANTH 506. Pre-Hispanic Mexico and Central America. 3 Credits. NW S/W
A survey of indigenous, Pre-Hispanic cultures of Mexico and Central America, including Olmecs, Teotihuacan, Mayas, Zapotecs, Toltecs, and Aztecs. This course teaches how to interpret art, architecture, artifacts, and culture change in the context of iconography and symbols, metaphysical beliefs and ritual practices, crafts and technologies, trade and exchange, social inequality and conflict resolution, and the relationships among these cultures and their environments. (Same as HIST 571 and LAC 556.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, Indigenous Studies, History, or permission of instructor.

ANTH 507. The Ancient Maya. 3 Credits. S/W
An intensive examination of current scholarship on the ancient Maya civilization of Mexico and Central America. The course will consider Maya culture from its roots in early villages of the Preclassic period to the warring city-states of the Postclassic period. Topics will include settlement and subsistence systems, sociopolitical evolution, art and architecture, myth and symbolism, and Maya hieroglyphic writing. An important theme of the course will be the relevance of the Pre Columbian Maya for understanding complex societies and contemporary Latin American Culture. (Same as LAC 557.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, or Indigenous Studies, or permission of instructor.

ANTH 508. Ancient American Civilizations: The Central Andes. 3 Credits. W
An archaeological survey of the ancient peoples of Peru and neighboring countries in South America. The origins of complex societies on the coast and in the Andean highlands will be reviewed with special consideration of the role of "vertical" environments in the development of Andean social and economic systems. Cultures such as Chavin, Moche, Nazca, Huari, Tiahuanaco, Chimú, and the rise of the imperial Inca state will be examined through artifacts, architectural remains, and ethnohistoric documents. (Same as HIST 572 and LAC 558.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, or permission of instructor.

ANTH 509. Ancient Central America. 3 Credits. NW S
This course will examine the Precolumbian cultures of the region situated between Mesoamerica to the north and the Central Andes to the south, focusing principally on the countries of Honduras, Nicaragua, Costa Rica, Panama, and Colombia. Once regarded as an "Intermediate Area" on the peripheries of the ancient civilizations to the north and south, the area of southern Central America and northern South America is now recognized as a center of innovation from very remote times up until the Spanish Conquest. The archaeological remains of stone tools, pottery, jade carvings, gold and copper ornaments, and a wide variety of structures will be interpreted within the context of information on subsistence, settlement patterns, social organization and religious ideology. Issues of the relationships between populations of regions in major culture areas to the north and south will also be considered in detail. (Same as LAC 559.) Prerequisite: ANTH 110 or ANTH 115.

ANTH 511. Archeology of Inequality. 3 Credits. S
Archaeological record of funerary rites, architecture, ceremonial objects and nutritional indicators is often the sole evidence of inequality in the past, especially in the absence of written sources or unbiased historical observations. Case studies describing past small-scale and emergent complex societies worldwide are chosen to help understand the interplay between individual status and rank (achieved or ascribed), group inequality and subordination (class, caste, gender, age, race), wealth (material, embodied, relational), and the role of power and resistance in shaping these societies. Egalitarianism as a leveling mechanism in many of the past societies is also explored. Prerequisite: Junior or Senior or Graduate status, or permission of the instructor.

ANTH 516. Hunters and Gatherers. 3 Credits. S
The diversity of hunter-gatherer cultures documented in the ethnographic and archaeological records is considered on a global scale, with particular
ATTENTION GIVEN TO THE RELATIONSHIPS BETWEEN ENVIRONMENT, TECHNOLOGY, AND ORGANIZATION. THE EVOLUTION OF HUNTER-GATHERERS FROM THE EARLIEST HOMINIDS UNTIL THEIR INTERACTION WITH MORE COMPLEX SOCIETIES IS CONSIDERED, WITH EMphasis GIVEN TO THE VARIATION AND NATURE OF CHANGE IN THESE SOCIETIES.

Prerequisite: ANTH 108 or ANTH 150/151 or ANTH 160 or ANTH 162 or ANTH 308 or ANTH 310 or permission of instructor.

ANTH 517. GEOARCHAEOLOGY. 3 Credits. N
APPLICATION OF THE CONCEPTS AND METHODS OF THE GEOSCIENCES TO INTERPRETATION OF THE ARCHAEOLOGICAL RECORD. THE COURSE WILL FOCUS PRIMARILY ON THE FIELD ASPECTS OF GEOARCHAEOLOGY (E.G., STRATIGRAPHY, SITE FORMATIONAL PROCESSES, AND LANDSCAPE RECONSTRUCTION), AND TO A LESSER EXTENT ON THE ARRAY OF LABORATORY APPROACHES AVAILABLE. (SAME AS GEOG 532.) PREREQUISITE: GEOG 104, ANTH 110, OR ANTH 310.

ANTH 519. LITHIC TECHNOLOGY. 3 Credits. S
AN INTRODUCTION TO THE ANALYSIS AND INTERPRETATION OF PREHISTORIC STONE INDUSTRIES. TOPICS DISCUSSED INCLUDE ORIGINS AND DEVELOPMENT OF LITHIC TECHNOLOGY, PRINCIPLES OF DESCRIPTION AND TYPOLOGY, USE AND FUNCTION OF STONE TOOLS; INTERPRETATION OF FLINT KNPANNING. PREREQUISITE: AN INTRODUCTORY COURSE IN ARCHAEOLOGY.

ANTH 520. ARCHAEOLOGICAL CERAMICS. 3 Credits. S
PRACTICUM IN THE METHOD AND THEORY OF POTTERY ANALYSIS IN ARCHAEOLOGY. TOPICS INCLUDE MANUFACTURING TECHNIQUES, CLASSIFICATION, AND COMPOSITIONAL ANALYSIS OF POTTERY ARTIFACTS, AS WELL AS STRATEGIES FOR INTERPRETING THE ROLE OF CERAMIC VESSELS IN FOOD PRODUCTION, STORAGE, AND CONSUMPTION; SOCIAL AND RITUAL ACTIVITIES; TRADE AND EXCHANGE; AND THE COMMUNICATION OF IDEAS. PREREQUISITE: ANTH 110 OR ANTH 150 OR ANTH 151 OR ANTH 310 OR PERMISSION OF INSTRUCTOR.

ANTH 521. ZOOARCHAEOLOGY. 3 Credits. S
THIS COURSE IS INTENDED TO COMPENENT FAUNAL IDENTIFICATION WITH PRACTICAL INVOLVEMENT IN ANALYSES AND INTERPRETATION OF ARCHAEOLOGICAL FAUNAL ASSEMBLAGES USING A VARIETY OF MODERN METHODS. STUDENTS WILL PARTICIPATE IN THE STUDY OF SPECIFIC ARCHAEOLOGICAL FAUNAL REMAINS, DEVELOPMENT OF COMPARATIVE ZOOARCHAEOLOGICAL COLLECTIONS, AND IN MIDDLE-RANGE RESEARCH TO DOCUMENT THE VARIETY OF AGENTS THAT AFFECT FAUNAL REMAINS. PREREQUISITE: ANTH 110 OR ANTH 150 OR ANTH 151 OR ANTH 310 OR PERMISSION OF INSTRUCTOR.

ANTH 523. GREAT PLAINS ARCHAEOLOGY. 3 Credits. S
A SURVEY IS PROVIDED OF THE ARCHAEOLOGICAL RECORD AND ITS INTERPRETATIONS FOR THE GREAT PLAINS AREA OF NORTH AMERICA. THE RECORDS FROM EARLIEST HUMAN OCCUPATION, VARIATION IN HUNTER AND GATHERER SOCIETIES, TO HORTICULTURAL AND FARMING SOCIETIES, AND THE HISTORIC PERIOD ARE REVIEWED. THE HISTORY OF ARCHAEOLOGICAL RESEARCH IN THE REGION, EXPLANATORY FRAMEWORKS AND MODELS, AND DISCUSSION OF CHANGES IN ECONOMY, TECHNOLOGY, MOBILITY, SOCIAL ORGANIZATION, AND POPULATION MOVEMENTS ARE AMONG THE TOPICS OF CONCERN. PREREQUISITE: ANTH 110, ANTH 310, OR PERMISSION OF INSTRUCTOR.

ANTH 544. ORIGINS OF NATIVE AMERICANS. 3 Credits. N
A SURVEY OF THE GENETIC, LINGUISTIC, HISTORIC, ARCHAEOLOGICAL, AND MORPHOLOGICAL EVIDENCE FOR THE ORIGINS OF INDIGENOUS POPULATIONS OF THE AMERICAS. PREREQUISITE: AN INTRODUCTORY COURSE IN PHYSICAL ANTHROPOLOGY, BIOLOGY, OR PERMISSION OF INSTRUCTOR.

ANTH 545. CONTEMPORARY HEALTH ISSUES IN AF RICA. 3 Credits. S
THE COURSE EXAMINES HEALTH AND NUTRITION IN AFRICAN COMMUNITIES, USING THE METHODS OF BIOLOGICAL AND MEDICAL ANTHROPOLOGY. FUNDAMENTAL TO THE APPROACH TAKEN IN THE COURSE IS THE UNDERSTANDING THAT THE HEALTH OF HUMAN GROUPS DEPENDS ON INTERACTIONS BETWEEN BIOLOGICAL AND CULTURAL PHENOMENA IN A PARTICULAR ECOLOGICAL CONTEXT. ONE TOPIC WILL BE SELECTED PER SEMESTER, TO EXAMINE IN DETAIL THE FULL ARRAY OF EPIDEMIOLOGICAL FACTORS CONTRIBUTING TO PATTERNS OF SPECIFIC DISEASES. AIDS, CHILDHOOD DISEASES, AND REPRODUCTIVE HEALTH OF AFRICAN WOMEN ARE AMONG POSSIBLE TOPICS. COURSE MATERIAL WILL BE SELECTED FROM SCHOLARLY AND MEDICAL PUBLICATIONS, AS WELL AS COVERAGE IN THE POPULAR MEDIA. THE USE OF A VARIETY OF SOURCES WILL ENHANCE UNDERSTANDING OF THE BIOLOGICAL AND CULTURAL ISSUES INVOLVED AND WILL HELP STUDENTS IDENTIFY POSSIBLE BIAS AND MISINFORMATION IN POPULAR COVERAGE OF EVENTS SUCH AS FAMINE OR EPIDEMIC IN AFRICAN SETTINGS. (SAME AS AAAS 554.) PREREQUISITE: AN INTRODUCTORY COURSE IN EITHER ANTHROPOLOGY OR AFRICAN STUDIES.

ANTH 561. INDIGENOUS DEVELOPMENT IN LATIN AMERICA. 3 Credits. S
SURVEYS THE HISTORY OF THE DEVELOPMENT ENTERPRISE SINCE WWII, EXAMINES THE MARGINALIZATION AND IMPOVERISHMENT OF LATIN AMERICA'S INDIGENOUS PEOPLES, AND PROVIDES TRAINING TO CARRY OUT PROJECTS FOR AND WITH THEM TO ENHANCE THEIR QUALITY OF LIFE. DEVELOPMENT IS UNDERSTOOD AS NOT MERELY TECHNOLOGICAL OR ECONOMIC, BUT ALSO SOCIAL, EMOTIONAL, AND EDUCATIONAL. STUDENTS WORK IN TEAMS TO DESIGN THEIR OWN MOCK DEVELOPMENT PROJECT. A 3-CREDIT NON-OBLIGATORY COMPANION COURSE, APPLIED ARCHAEOLOGICAL FIELD SCHOOL AMONG THE CH'ORTI' MAYA, WILL FOLLOW IN THE INTERSESSION AFTER EACH VERSION OF THIS COURSE. (SAME AS LAC 561.) PREREQUISITE: ANTH 100, ANTH 108, ANTH 160 OR LAC 100; OR CONSENT OF INSTRUCTOR.

ANTH 562. MEXAMERICA. 3 Credits. SC H

ANTH 564. THE PEOPLES OF AFRICA. 3 Credits. NW S/W
"PEOPLES OF AFRICA" EXAMINES THE ANTHROPOLOGY OF SUB-SAHARAN AFRICA THROUGH SELECTED CASE STUDIES OF PARTICULAR SOCIETIES AND ISSUES THAT HAVE WIDER COMPARATIVE RELEVANCE. NORMALILY TWO TO FOUR SOCIETIES ARE SELECTED FOR THE SEMESTER AND STUDIED THROUGH ETHNOGRAPHIC, HISTORICAL, AND LITERARY MONOGRAPHS. THESE CASE STUDIES ARE EXAMINED IN THEIR PRECOLUMIAL, COLONIAL, AND POSTCOLONIAL HISTORIES. LECTURES, READINGS, AND EXERCISES EMphasize THREE KINDS OF REASONING -- GEOGRAPHICAL, HISTORICAL, AND CULTURAL CONTEXT -- REQUIRED TO GRASP EVENTS AND ISSUES IN UNFAMILIAR SOCIETIES. THE COURSE ALSO FEATURES MAJOR ANTHROPOLOGICAL IDEAS THAT EMERGED IN THE STUDY OF AFRICAN SOCIETY, AND TRACKS HOW ANTHROPOLOGY HAS BEEN ADAPTED BY AFRICAN SCHOLARS, POLICY MAKERS, AND ACTIVISTS.

ANTH 559. CONTEMPORARY CENTRAL AMERICA AND MEXICO. 3 Credits. S
MEXICO AND CENTRAL AMERICA HAVE FORMED A CULTURAL INTERACTION ZONE FOR THOUSANDS OF YEARS, AND TODAY SHARE COMMON CHALLENGES, PARTICULARLY POLITICAL, ECONOMIC, AND SOCIAL ONES RELATED TO THE SPANISH COLONIAL LEGACY, U.S. INVOLVEMENT, AND THEIR PLACE IN THE GLOBAL ECONOMY. SOME OF THE ISSUES ADDRESSED INCLUDE RACISM, CIVIL WAR, MIGRATION, YOUTH GANS, NARCOTRAFFICKING, RESOURCE EXTRACTION, HOMELESS CHILDREN, THE TRANSITION FROM LOCAL SUBSISTENCE ECONOMIES TO LOW-INCOME WORK, AND STRUGGLES FOR INDIGENOUS RIGHTS. PREREQUISITE: ANTH 108 OR ANTH 160 OR ANTH 162 OR ANTH 308 OR ANTH 360 OR LAC 100 OR PERMISION OF INSTRUCTOR.

ANTH 570. ANTHROPOLOGY OF VIOLENCE. 3 Credits. S
INTRODUCES STUDENTS TO THE COMPARATIVE AND CROSS-CULTURAL STUDY OF VIOLENCE. THE COURSE BEGINS BY SURVEYING DIFFERENT ANTHROPOLOGICAL APPROACHES TO THE STUDY OF VIOLENCE, WITH SPECIAL ATTENTION PAID TO CLASSICAL SOCIAL THEORISTS AS WELL AS ETHNOGRAPHIC WORKS. TOPICS MAY INCLUDE (POST) COLONIALITY AND IDENTITY POLITICS, NATIONALISM, RACE, RELIGION, AND POLITICAL CULTURE; GEOGRAPHIC AREAS TO BE COVERED MAY INCLUDE AFRICA, EUROPE, LATIN AMERICA, THE MIDDLE EAST, AND SOUTH ASIA. (SAME AS
GIST 570.) Prerequisite: Junior standing or above or permission of instructor.

ANTH 581. Food Systems and Sustainability. 3 Credits. S
How shall we feed ourselves? In the face of unprecedented world population growth, humanity must meet the challenge of providing minimum caloric needs while preserving the health of ecosystems for future generations. In this course, students will explore different food cultures and production strategies developed by people in societies around the world. These include foraging, horticulture, pastoralism, intensified horticulture, and industrial agriculture. We will compare the social, economic, and environmental sustainability of various food systems and technologies and their impact on larger social and ecological systems. Prerequisite: ANTH 150 or ANTH 160.

ANTH 582. Ethnobotany. 3 Credits. S
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as EVRN 542 and ISP 542.) Prerequisite: EVRN 142, EVRN 145, EVRN 148, ANTH 150/151, ANTH 160/162/360 or permission of instructor.

ANTH 583. Love, Sex, and Globalization. 3 Credits. S
Escalating transnational flows of information, commodities, and people have created innumerable kinds of "intimate" contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotional/specifically cultural love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as WGSS 583.) Prerequisite: Any previous course in ANTH or WGSS.

ANTH 586. Visual Anthropology. 3 Credits. U
This course takes a hands-on approach to the study of theory, ethics, and methods in visual ethnographic representation. Students also read and consider historical dimensions in this subdiscipline and complete individual and team projects in photographic and videographic media. Prerequisite: An introductory course in cultural anthropology or permission of the instructor.

ANTH 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Credits. S
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as LAC 587.)

ANTH 595. The Colonial Experience. 3 Credits. NW S/W
An anthropological and historical examination of the processes and dynamics of the colonial experience. Cross-cultural psychosocial phenomena that have profoundly affected the values and social organizations of both colonizers and colonized will be emphasized. Specific examples will be chosen from the former American, Japanese, and European colonial empires with emphasis on Asia.

ANTH 603. Shamanism Past and Present. 3 Credits. S
This course explores shamanism, broadly defined as the practice of gaining insight through the use of ecstatic techniques (dance, drumming, trance, vision quests, and the use of psychotropic substances) for the purpose of interpreting existence and healing illnesses, through a consideration of theories and evidence for its practice from Upper Paleolithic times to the present day. Examples from the ancient cultures of Asia, Europe, Africa, Australia, and the Americas are used to explore current theoretical approaches in order to identify shamans and shamanism in the past. Issues of identifying shamans and shamanism in art and archaeological contexts are discussed. The course also explores the role that shamanism plays in a wide variety of cultures. The principal goal of the course is to provide a reasoned, critical interpretation of shamanism in the context of contemporary debates about its definition and active practice. Prerequisite: ANTH 108 or ANTH 110 or ANTH 150 or ANTH 151 or ANTH 160 or ANTH 162 or ANTH 308 or ANTH 310 or ANTH 360 or permission of instructor.

ANTH 604. The First Americans. 3 Credits. S/W
This class will review the ongoing scientific debate concerning the routes and chronologies of the earliest human migrations into the Americas. It surveys the history of the dispute over the antiquity of archaeological sites in North and South America, and investigates the paleontological, genetic, geological, and archaeological records for clues to the various peopling models and processes. As a counterpoint to the scientific approach, it also explores public arguments over the issue, to assess the socio-cultural and political repercussions of archaeological discoveries. Prerequisite: ANTH 150, ANTH 310, or permission of the instructor.

ANTH 605. Mortuary Practices in the Archaeological Record. 3 Credits. S
Students study theories and methods of burial practices in the archaeological record. They learn about past communities; attitudes toward death and burial and how social organization, complexity, ideology, power, gender and age roles contribute to mortuary practices. The course examines a variety of Old and New World examples from different chronological periods through class presentations, debates and written assignments. The course focuses on comparisons and evaluation of traditional and current methods and approaches. Prerequisite: ANTH 110 or ANTH 150 or ANTH 151 or ANTH 160 or ANTH 162 or ANTH 308 or ANTH 310 or ANTH 360 or permission of instructor.

ANTH 619. Field Concepts and Methods in Geoarchaeology. 3 Credits. S
A field course taught during the three week summer session. Involves all-day excursions to different regions in order to introduce students to a variety of archaeological landscapes and environments. Focuses on the application of geoscientific concepts and methods in archaeological field investigations, emphasizing natural processes such as erosion, deposition, weathering, and biological and human activity that create and modify the archaeological record, and on soil-stratigraphic and geophysical approaches to landscape and site investigations.

ANTH 648. Human Osteology. 4 Credits. N LFE
This course examines the structure and function of the human skeleton from an evolutionary and biomedical perspective. Students will learn to identify bones comprising the human skeleton and how osteological
information aids in reconstructing sex, age, race, stature, and health status. Major transformations of the human skeleton from hominoid precursors, and some of the biomedical consequences of these transformations, will be addressed. (Same as BIOL 548.) Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor.

ANTH 652. Population Dynamics. 3 Credits. N
Examination of possible interrelationships between the demographic structure of a population and the forces of evolution. Students are exposed to field methods and techniques of population studies. Prerequisite: An introductory course in anthropology, biology, or permission of instructor.

ANTH 671. The Culture of Consumption: (E.G. United States and Japan). 3 Credits. S
Examines the ideologies of capitalism and consumerism as they influence social institutions and daily life. Topics for consideration grow out of instructors' interests and may include areas such as class, religion, advertising, politics, gender, medicine, environment, childhood, and education. Prerequisite: ANTH 560 or permission of instructor.

ANTH 699. Anthropology in Museums. 3 Credits. S
The course reviews the history of archeological, ethnographic, physical anthropological and other types of collections. It also considers current issues facing anthropologists, such as: contested rights to collections and the stories that accompany them; representation and interpretation of cultures; art and artifact; conceptualization, design and building of exhibitions; and anthropological research and education in the museum. (Same as MUSE 699.) Prerequisite: ANTH 150 or ANTH 108 or consent of instructor.

ANTH 701. History of Anthropology. 3 Credits.
Development of the field of anthropology and its relations with intellectual history. Emphasis on method and theory in historical context. Prerequisite: Consent of instructor or graduate standing.

ANTH 702. Current Archaeology. 3 Credits.
An introduction to fundamental theoretical orientations and methodological approaches in world archaeology. Case studies illustrate data acquisition, dating methods, culture history, paleoenvironmental models, and culture processes. Prerequisite: Consent of instructor or graduate standing.

ANTH 703. Current Biological Anthropology. 3 Credits.
The fundamental issues, methods, and theories in contemporary biological anthropology. Prerequisite: Consent of instructor or graduate standing.

ANTH 704. Current Cultural Anthropology. 3 Credits.
The fundamental issues, methods, and theories in contemporary cultural anthropology and anthropological linguistics. Prerequisite: Consent of instructor or graduate standing.

ANTH 706. Current Linguistic Anthropology. 3 Credits.
This course will cover fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as LING 706.) Prerequisite: Graduate standing or consent of the instructor.

ANTH 707. Responsible Research and Scholarship in Anthropology. 3 Credits.
This course examines a range of issues critical to responsible research, scholarship, and practice in anthropology. Required for all doctoral students in Anthropology. Prerequisite: Graduate standing in anthropology or consent of instructor.

ANTH 730. Linguistics in Anthropology. 3 Credits.
The study of language as it concerns anthropology. Language systems in relation to culture, language taxonomy, semantics, and linguistic analysis as an ethnographic tool. (Same as LING 730.) Prerequisite: Graduate standing.

ANTH 732. Discourse Analysis. 3 Credits.
This course focuses on linguistic frameworks for the analysis of discourse. Discourse is a linguistic system larger than the sentence (utterance), which connects and contextualizes speech and written text. This course focuses on current issues and theoretical frameworks in the analysis of discourse. Using oral and written data, students will examine how contexts influence and shape linguistic form. Topics covered include transcription systems, the structure and organization of different genres of language, and the performance of social actions, including stancetaking, framing, and the construction of identity. Students will also have an opportunity to perform discourse analytic research on the data of their choice. (Same as LING 732.) Prerequisite: ANTH 706 or permission of the instructor.

ANTH 736. Linguistic Analysis. 3 Credits.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. (Same as LING 708.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308.

ANTH 740. Linguistic Data Processing. 3 Credits.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as LING 740.) Prerequisite: LING 700 or permission of instructor.

ANTH 741. Field Methods in Linguistic Description. 3 Credits.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as LING 741.) Prerequisite: LING 705 or permission of instructor.

ANTH 748. Language Contact. 3 Credits.
Theories and case studies of languages in contact. Areal and genetic linguisitics, genesis of pidgins and creoles, multilingualism. Social, political, economic, and geographic factors in language change. (Same as LING 748.) Prerequisite: A course in linguistics.

ANTH 766. Topics in Biological Anthropology: _____ 3 Credits.
Topic for semester to be announced. Students may repeat the course for different topics. Prerequisite: Consent of instructor.

ANTH 770. Research Methods in Physical Anthropology. 3 Credits.
A practical course in the use of special laboratory techniques of biological anthropological research and methods of data presentation. Prerequisite: Consent of instructor.

ANTH 775. Seminar in Cultural Anthropology: _____ 3-9 Credits.
Intensive consideration of special problems in cultural anthropology. Topic for semester to be announced.

ANTH 783. Doing Ethnography. 3 Credits.
Ethnography is both process and product. The product, a representation of a culture (or selected aspects of a culture), is based on fieldwork, the common term for the ethnographic process. This course explores how ethnographers prepare for the field, do their fieldwork, then report it.

ANTH 798. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as AMS 790, BIOL 798, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

**ANTH 799. Museum Internship. 1-6 Credits.**
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. Graded on a satisfactory/unsatisfactory basis. (Same as AMS 799, GEOL 723, and MUSE 799.)

**ANTH 801. Proseminar I in Anthropology. 3 Credits.**
This course is an introduction to graduate study in Anthropology at the University of Kansas. Students will be introduced to the history, theory, and current research in two subfields of Anthropology: archaeology and biological anthropology. Students will read foundational papers in these two fields in order to develop a framework for contextualizing more cutting-edge research by KU Anthropology faculty and other scholars. In addition, this course will provide professional development resources for graduate students with an overview of the resources available at KU to support their graduate studies, including internal and external funding sources, information about the design, ethics, and approval procedures for future research, peer review and advisor feedback on research proposals, integration into mentoring networks, and other activities focused on career and professional development. Graduate students will learn how to critically read academic papers, and begin to develop a proposal for their graduate research project.

**ANTH 802. Proseminar II in Anthropology. 3 Credits.**
This course continues graduate students' survey of the history and theory of each anthropological subfield with a focus on foundational readings in sociocultural and linguistic anthropology as well as current research by KU Anthropology faculty and scholars outside of the department. Students will continue to develop their professional skills by finishing their proposals for external funding, and presenting and critiquing each others' work. Students' finished proposals can form the foundation of their dissertation proposals, and all are encouraged to submit them for external funding.

**ANTH 849. Seminar in Archaeology: _____ 2-4 Credits.**
Subject matter of seminar to be announced for semester.

**ANTH 851. Data Analysis in Archaeology: _____ 1-6 Credits.**
A two-semester course designed to provide graduate students with basic principles in the analysis of archaeological data. Course content will include an introduction to archaeological systematics, analytical procedures, application of multivariate statistics, and computer applications. Topic for semester to be announced.

**ANTH 853. Theory and Current Problems in Archaeology. 3 Credits.**
Consideration of scientific methodology, basic assumptions of anthropological archaeology, relationship of archaeology and anthropology, and current theoretical and methodological trends in archaeology.

**ANTH 876. Advanced Medical Anthropology: _____ 3-6 Credits.**
This course provides advanced training in selected aspects of medical anthropology; the topic for a particular semester will reflect the current interests of the instructor. It is expected that the course content will alternate between theoretical and applied emphases. May be repeated for a total of six hours credit. Prerequisite: Consent of instructor.

**ANTH 889. Summer Archaeological Field Work. 1-8 Credits.**
Under the direction of a professional archaeologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research. Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged.

**ANTH 896. Graduate Research. 1-9 Credits.**
Individual investigation of special problems in anthropology. Limit of six hours credit for the M.A. degree.

**ANTH 897. Internship Research. 4-6 Credits.**
Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. Students design and implement an anthropological project under faculty supervision. Prerequisite: Graduate standing in Anthropology.

**ANTH 898. Internship Analysis. 1-6 Credits.**
Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. This course is a sequel to ANTH 897. Students finish up any remaining research and deliver their findings to the client. They also prepare a written report and a verbal presentation for the Department of Anthropology. Prerequisite: ANTH 897 and Graduate standing in Anthropology.

**ANTH 899. Master’s Thesis. 1-12 Credits.**
Limit of six hours credit for the M.A. degree. Graded on a satisfactory/limited progress/no progress basis.

**ANTH 996. Graduate Research. 1-9 Credits.**
Individual investigation of special problems in anthropology.

**ANTH 999. Doctoral Dissertation. 1-12 Credits.**
Dissertation hours. Graded on a satisfactory progress/limited progress/no progress basis.

### Applied Behavioral Science Courses

**ABSC 100. Introduction to Applied Behavioral Science. 3 Credits.**
An introduction to the principles of behavioral science and their application to problems facing contemporary societies (e.g., autism, public health, education, juvenile delinquency, substance abuse). Students will learn how behavioral scientists analyze human behavior and how these analyses are used to inform interventions. Students will also learn about careers in the behavioral sciences and how to pursue them. Course may be offered in lecture or online format.

**ABSC 101. Introduction to Applied Behavioral Science, Honors. 3 Credits.**
This course introduces students to the principles of scientific inquiry in applied behavioral science: objectivity, definitions, observation, reliability, validity, correlation and its limitations, causation, experimental design and analysis, and the interpretation of data. These principles are presented in the context of solving individual and societal problems across the lifespan, for example, in early childhood education, public health, developmental disabilities (e.g., autism), delinquency, independent living for people with disabilities, educational systems, and gerontology. Open only to students in the University Honors Program.

**ABSC 110. Applied Behavior Analysis for Practitioners. 3 Credits.**
Behavior analysis is the study of human and non-human behavior from a natural science perspective. More specifically, behavior analysis takes an observation-based approach to understanding behavior. This approach has yielded several technologies of behavior that offer hope for a variety of populations including individuals with disabilities, families, organizations, and communities. The services of qualified, nationally board-certified behavior analysts are in great demand. This course is based on the Registered Behavior Technician Task List, but is offered independent of the Behavior Analyst Certification Board (BACB). This course is designed to meet the 40-hour training requirement for the RBT credential and also includes additional material.

**ABSC 150. Community Leadership. 3 Credits. SF S**
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them.

**ABSC 151. Community Leadership, Honors. 3 Credits. SF S**
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them. Open only to students in the University Honors Program.

**ABSC 160. Introduction to Child Behavior and Development. 3 Credits. SF S**
An introduction to child behavior and development with an emphasis on the normal developmental range of growth, intelligence, cognition, emotion, language, and social skills from birth to adolescence.

**ABSC 177. First Year Seminar: ______. 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Applied Behavioral Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**ABSC 250. Human Development. 3 Credits. S**
This course examines the psychological, social, and physical development of humans across the lifespan from conception through infancy, childhood, adolescence, adulthood and death. The course will explore the broad array of factors that contribute to development including cognitive, emotional, social, neurological, physical, genetic, and environmental influences. (Same as PSYC 250.) Prerequisite: PSYC 104 or PSYC 105.

**ABSC 279. Study Abroad Topics in: ______. 1-5 Credits. S**
A course designed to enhance international experience in topic areas related to applied behavioral science at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

**ABSC 302. Behavioral Assessment. 3 Credits.**
The strategies, methods, and ethics of conducting behavioral assessment are presented to support the identification and selection of socially significant behavior change goals. The types of behavioral assessment including indirect, descriptive, and functional assessment approaches are reviewed to determine the appropriate conditions and context for assessment-based interventions. The selection and use of other assessment methods common in Applied Behavior Analysis including preference assessments is introduced. The collection, review and interpretation of assessment data are discussed within the context of identifying behavior change goals and behavior-analytic services. Prerequisite: ABSC 100 or ABSC 101 with a grade of C or better.

**ABSC 304. Principles and Procedures of Behavioral Interventions. 3 Credits. S**
An examination of the application of the principles and procedures of behavior analysis in interventions used to address problems in adolescent and family life, adult behavioral issues including addictions, childhood autism, community health, early childhood education, intellectual and developmental disabilities, language development, organizational behavior management, and physical disabilities. The course focuses on fundamental elements of behavior change and specific behavior-change procedures to increase and maintain appropriate behaviors and reduce inappropriate behaviors. Issues in design, implementation, measurement, and evaluation of the effects of behavioral interventions and the ethical implications of the use of these interventions are examined. Prerequisite: ABSC 100 or ABSC 101 with a grade of C or better.

**ABSC 308. Research Methods and Application. 4 Credits. S**
Examines research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group care facilities, and communities). Discusses research methods and concepts (e.g., prediction, experimental control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphical and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read primary and secondary sources, develop research questions, write and present research proposals, and assist in the conduct of research projects. Prerequisite: ABSC 100 or ABSC 101 and ABSC 304 with a grade of C or better in each course.

**ABSC 309. Child Life: Introduction to Theory and Practice. 3 Credits.**
Overview of theory and practice issues related to the Child Life Specialty, including history of the profession and its development, foundations of family centered care, scope of practice of a child life specialist, regulatory issues within the profession (e.g., ethical code, competencies, standards of practice), and historic and current perspectives on preparation of children for healthcare encounters and life-changing events.

**ABSC 310. Building Healthy Communities. 3 Credits. SF S**
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve.

**ABSC 311. Building Healthy Communities, Honors. 3 Credits. SF S**
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve. Prerequisite: Open only to students in the University Honors Program.

**ABSC 342. Adult Development and Aging. 3 Credits. S**
An overview of environmental, cultural, and biological influences of adult development and aging. Course material is organized in terms of topics, rather than presenting a chronological account. Prerequisite: ABSC 100 or ABSC 101, ABSC 150 or ABSC 151, or ABSC 160.
ABSC 349. Therapeutic Benefits of Play. 3 Credits. S
Overview of therapeutic play activities for children and adolescents with a range of health issues and needs, with particular attention to classical and contemporary theories on play, play as an essential element for children’s growth, development, and learning, and the influence of the environment on children’s play. Special emphasis will be placed on the design and implementation of therapeutic play activities in the healthcare setting. Prerequisite: ABSC 160 or PSYC 333.

ABSC 350. The Behavioral Treatment of Children with Autism. 3 Credits. S
Students learn about methods of teaching children with autism and about evaluating those methods. Topics include: basic methods of teaching as applied to imitation, productive and receptive language, self-help skills, and engagement in community activities, as well as observation and measurement of behavior in community settings and evaluating consumer satisfaction. The course consists of classroom lectures, discussions, demonstrations, examinations, and completion of laboratory and observation assignments. Enrollment priority is given to majors who intend to do practicum work with children with autism. Prerequisite: ABSC 304 or instructor permission.

ABSC 360. Drugs, Addiction, and Behavior. 3 Credits. S
This course offers an overview of the basic and applied research in behavioral pharmacology and addictions, as well as interventions. Among the topics it covers are a history of drugs, addiction, and behavior; basic principles of drug action (e.g., pharmacodynamics); behavioral pharmacology testing paradigms (e.g., self-administration); drug action and effects (e.g., alcohol, nicotine, designer drugs, anti-depressants); behavioral deficits associated with addictions (e.g., memory); addiction treatment and recovery (e.g., maturing, contingency management); and drugs and society. Prerequisite: ABSC 100. PSYC 104 is also recommended.

ABSC 410. Behavioral Approaches in Working with Adolescents. 3 Credits. S
Addresses some of the basic behavioral techniques used with juveniles who have problems in school, at home, or in the community: readings and role-playing sessions covering assessment of problems, relationship development, observing and defining behavior, teaching and contracting techniques, and counseling. Prerequisite: ABSC 100, consent of the instructor, and department chair.

ABSC 425. Teaching Apprenticeship in Applied Behavioral Science. 3 Credits. S
Students read new materials, become more fluent with ABSC 100 content, and acquire tutoring skills. Course may not be repeated. Prerequisite: ABSC 100 and consent of the instructor and department chair.

ABSC 437. Independent Living and People with Disabilities. 3 Credits. S
A multi-disciplinary seminar exploring theory, method, research, and practice in independent living. The course reviews personal and environmental factors as they relate to everyday problems affecting people with varying disabilities. It also contains service-learning activities in which students apply skills and knowledge gained in the classroom. Prerequisite: An introductory course in social sciences or consent of the instructor.

ABSC 441. Ethical, Legal and Professional Issues in Applied Behavioral Science. 3 Credits. S
The course covers ethical and legal issues in the responsible conduct of basic, applied, intervention and prevention research (e.g., informed consent and assent with typical and atypical populations); inclusion of underrepresented groups, participatory action research; bias, fraud, and plagiarism, conflict of interest; reporting misconduct; authorship conflict). It also covers professional issues in behavioral consultation and training, review of the Behavior Analysis Certification Board task list on basic behavior-analytic skills, client-centered responsibilities, and foundational knowledge. This course satisfies the Behavior Analysis Certification Board requirement for 15 classroom contact hours of coursework related to Ethical Considerations in Behavior Analysis needed to take the BACB examination. This course is taught at the 400 and 800 levels, with additional assignments at the 800-level. Prerequisite: ABSC 308.

ABSC 444. Curriculum Development for Young Children. 3 Credits. S
A survey of educational materials and activities appropriate for young children. Students explore several components of effective curriculum development (e.g., objectives, methods of activity presentation, teaching strategies) and learn to integrate them to construct curricula for a range of content and skill areas. By focusing on functional components of a curriculum, students learn to construct, critically evaluate, and modify curricula for typically and atypically developing children. Prerequisite: ABSC 304 or instructor permission.

ABSC 469. Special Topics in: ______. 1-3 Credits. S
A course designed for the study of special topics in applied behavioral science. Course content addresses major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

ABSC 470. Organizational Behavior Management. 3 Credits. S
This course offers detailed discussion of the organizational behavior management (OBM) literature including performance management, behavioral systems analysis, and behavior-based safety. This course also addresses empirically supported staff training procedures and research in implementation science. Prerequisite: ABSC 100.

ABSC 479. Study Abroad Topics in: ______. 1-5 Credits. S
A course designed to enhance international experience in topic areas related to topics in applied behavioral science at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

ABSC 486. Issues in Parenting. 3 Credits. S
Theoretical approaches to the study of parenting and parent-child relationships, techniques for analyzing common parenting problems, designing appropriate interventions, fostering effective communication skills, understanding issues of diversity, and promoting parent education programs. Professional collaboration and support of families and children are emphasized throughout. Students develop analytical skills through reading, discussion, and application of theoretical and empirical concepts. Prerequisite: ABSC 160 or equivalent knowledge of child development or child psychology.

ABSC 489. Directed Readings in: ______. 1-3 Credits. S
A course designed for directed readings in applied behavioral science. Readings address major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

ABSC 499. Directed Research in: ______. 1-3 Credits. S
Basic and applied research experience. The course provides training in research methods, measures, and designs, and the conduct of research, in the behavioral sciences. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

ABSC 509. Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations. 3 Credits. S
This course provides a survey of modern behavioral science and its applications. It reviews the field's history; integrates its sub-disciplines; situates it within the natural sciences, social sciences, and humanities; and compares and contrasts it with other perspectives. It covers recent advances in research, their implications for understanding human behavior, and their application to solving societal problems. And, it addresses the ethical implications of applied behavioral science. Prerequisite: ABSC 100 or ABSC 101 and ABSC 304 with a grade of C or better in each course.

**ABSC 519. Psychological Aspects of Death and Dying. 3 Credits.** Students will be exposed to the historical and current cultural, psychological, spiritual/religious, and practical/legal perspectives of death and dying, with particular attention to how mental health professionals interface with systems of care to address loss across multiple developmental levels. Additional topics include ambiguous loss, suicide, transitions, palliative care, self-awareness, and professional self-care. Prerequisite: Junior or Senior standing.

**ABSC 529. Pediatric Health and Health Promotion. 3 Credits.** An undergraduate seminar on the application of psychological theory and practice to pediatric illness and health promotion. Students will be exposed to key issues related to the health and health care of children and adolescents (and their families), with particular attention to how applied psychology interfaces with medicine and allied health to promote children's health and health care. Prerequisite: Junior or Senior standing.

**ABSC 535. Developmental Psychopathology. 3 Credits.** A review of contemporary psychological and developmental disorders of children and youth. Course presents current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention is given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, depression, chronic physical illness, and autism. (Same as PSYC 535.) Prerequisite: ABSC 160 or PSYC 333, or instructor permission.

**ABSC 560. The Juvenile Justice System: A Behavioral and Legal Perspective. 3 Credits.** An overview of the juvenile justice system, including the history, development, and current controversy over children’s rights in the legal system examined in light of relevant principles of behavioral science and behavioral systems of rehabilitation. Topics include delinquency, misconduct, status offenses, dependent-neglected children, child abuse, and juvenile court procedures and personnel (e.g., probation officers), and rehabilitative programs. Prerequisite: ABSC 100.

**ABSC 562. Behavioral Community Approaches to Addressing Social Issues. 3 Credits.** A seminar that provides an overview of the history and origin of behavioral community approaches to address social issues through the integration of applied behavior analysis with other disciplines including community psychology, prevention science, and public health. A multidisciplinary perspective is presented that provides a review of empirically-based behavioral interventions applied in community settings. The course is offered at the 500 and 800 levels with additional assignments required at the 800-level. Not open to students with credit in ABSC 862. Prerequisite: ABSC 100, or ABSC 150, or ABSC 310, or instructor permission.

**ABSC 599. Honors and Thesis in Applied Behavioral Science. 1-5 Credits.** A two-semester course combining small group discussions of selected, advanced topics in applied behavioral science with honors thesis supervision on a project of the student's own design. Students normally enroll for one or two hours in fall semester and three to five hours in spring semester. Prerequisite: ABSC 304, ABSC 308, and instructor permission.

**ABSC 606. Special Projects in the Community. 1-10 Credits.** Structured opportunities to develop and apply knowledge and skills (e.g., analyzing problems, strategic planning, intervention, evaluation) in a project that addresses a community problem or goal. Prerequisite: Instructor permission.

**ABSC 626. Adolescent Behavior and Development. 3 Credits.** Impact of factors of social environment and physical growth upon psychological development from puberty to young adulthood. (Same as PSYC 626.) Prerequisite: PSYC 104, PSYC 333, or ABSC 160.

**ABSC 632. Advanced Child Behavior and Development. 3 Credits.** An advanced course in child development that includes a survey of the field's principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development, cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Same as PSYC 632.) Prerequisite: ABSC 160, PSYC 333, or instructor permission, and senior or graduate status.

**ABSC 675. Practicum in Infant-Toddler Care and Early Intervention I. 3-5 Credits.** Experience in a classroom-based early intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children's skills. Prerequisite: ABSC 444 (or concurrent enrollment) and instructor permission.

**ABSC 676. Practicum in Infant-Toddler Care and Early Intervention II. 3-5 Credits.** An advanced practicum providing experience in classroom-based early-intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children's skills. Prerequisite: ABSC 444, ABSC 675, and instructor permission.

**ABSC 677. Practicum in Preschool Education and Intervention I. 3-5 Credits.** A one-semester practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. Prerequisite: ABSC 444 (or concurrent enrollment) and instructor permission. Must also meet special state requirements for child care employees and volunteers.

**ABSC 678. Practicum in Preschool Education and Intervention II. 3-5 Credits.** A one-semester advanced practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. Prerequisite: ABSC 444, ABSC 677, and instructor permission. Must also meet special state requirements for child care employees and volunteers.

**ABSC 679. Practicum in Behavior Analysis Research in Early Childhood Education. 1-6 Credits.**
A two-semester practicum providing opportunities for supervised training in one of several ongoing research projects in the field of behavior analysis, either basic or applied. Students assist in conducting research and participate in individual and group meetings to discuss and evaluate research and related methodological issues. Prerequisite: ABSC 308 and instructor permission.

**ABSC 680. Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism. 1-6 Credits. S**

Students participate in an intensive behavioral treatment program teaching language, social skills, self-help skills, and academic skills to young children with autism. Students learn: to develop and implement treatment programs; design and use of a system of data collection and analysis; and apply the principles and philosophy of community and school mainstreaming. Prerequisite: ABSC 350 and instructor permission.

**ABSC 682. Organizational Behavior Management Practicum. 1-5 Credits. S**

This practicum course is designed to provide training and support practice in addressing socially significant problems and goals of community-based organizations using behavior analysis to guide assessment and intervention. Additionally, this course promotes community-university partnerships to support change and improvement in organizations through service learning. All practicum students are required to have previously completed ABSC 100 and selected applied behavioral science as a major or minor.

**ABSC 685. Practicum in Community-based Residential or Day Treatment Programs for Disabled Adults. 3-6 Credits. S**

A one or two-semester practicum in which students are provided with the opportunity to work directly with developmentally disabled adults in either community-based residential or day treatment programs. Students are required to read relevant literature, carry out treatment programs, and participate in weekly meetings to discuss treatment goals and progress. Prerequisite: ABSC 304, ABSC 410, and instructor permission.

**ABSC 690. Practicum in Community Health and Development. 1-6 Credits. U**

A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). Prerequisite: ABSC 150, ABSC 310, and instructor permission.

**ABSC 691. Practicum in Community Health and Development, Honors. 1-6 Credits. U**

A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). Prerequisite: Open only to students in the University Honors Program; ABSC 151, ABSC 311 and instructor permission.

**ABSC 692. Practicum in Basic Research. 3 Credits. S**

Practical supervised training in the laboratory study of human and/or animal behavior. Students assist in conducting basic research, read and discuss research articles, attend lab meetings, and acquire data analysis and presentation skills. Prerequisite: ABSC 308 (or concurrent enrollment) and permission of the instructor.

**ABSC 693. Practicum in Historical and Conceptual Foundations. 3-6 Credits. S**

Practical supervised training in the historical and conceptual foundations of applied behavioral science (e.g., behavior analysis). Students research and read primary source literatures and write papers that advances our understanding of the field's foundations (e.g., empirical, theoretical). Prerequisite: ABSC 100/101, ABSC 304, ABSC 308, and ABSC 509 (or concurrent enrollment), and permission of instructor.

**ABSC 694. Practicum in Juvenile Problems. 3-6 Credits. S**

A one-semester practicum providing opportunities for students to aid professionals in the development and implementation of behavioral treatment plans with adolescents. Regularly scheduled individual and group meetings enable the evaluation of the practicum students' progress while working in the rehabilitative process for juveniles who have problems that can bring them into contact with the juvenile justice system. Prerequisite: ABSC 410, and instructor permission.

**ABSC 695. Special Practicum in: ____. 3-6 Credits. S**

A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Instructor permission.

**ABSC 696. Special Practicum in, Honors: ____. 3-6 Credits. S**

A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Open only to students in the University Honors Program and instructor permission.

**ABSC 698. Special Research Practicum in: ____. 3-6 Credits. S**

A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Instructor permission.

**ABSC 699. Special Research Practicum in, Honors: ____. 3-6 Credits. S**

A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor early in their junior year about the practicum and its prerequisites and requirements. Prerequisite: Open only to students in the University Honors Program and instructor permission.

**ABSC 702. Curriculum Development for Young Children. 3 Credits.**

A survey of educational materials and activities that are appropriate for young children (birth to age 8). Students explore several components of effective curriculum (e.g., objectives, effective methods of activity presentation, teaching strategies) and learn to combine them to construct curriculums for a range of content and skill areas. By focusing on the functional components of curriculums, students learn to construct, critically evaluate, and modify them for both typically developing children and children with special needs. A BACB® pre-approved course.
ABSC 704. Research Practicum in Clinical Child Psychology. 3 Credits.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare research for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as PSYC 704.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

ABSC 705. Pediatric Psychology. 3 Credits.
Discussion of behavior problems commonly encountered in the pediatric population, including reviews of data-based methodologies for remediation. Topics include general child rearing skills, bedtime problems, enuresis, encopresis, toilet training, self-injurious behavior, temper tantrums, behavior in community settings, child abuse, psychotropic drugs for children, adolescent behavior problems and selection of children's play materials. Prerequisite: ABSC 160 or ABSC 832.

ABSC 706. Special Topics in Clinical Child Psychology: _____. 3 Credits.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as PSYC 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

ABSC 710. Community Health and Development. 3 Credits.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Same as ISP 871.)

ABSC 716. Experimental Problems in Community Settings. 1-5 Credits.
Research in the experimental design and analysis of community settings. No more than 10 hours total. Prerequisite: Instructor permission.

ABSC 719. Experimental Field Work in Community Settings. 1-5 Credits.
Instruction in the methods and techniques of the experimental design and analysis of community settings through supervised participation in established research programs. Emphasizes the techniques of gathering original experimental data. No more than 10 hours total. Prerequisite: Instructor permission.

ABSC 725. Research Methods and Application. 3 Credits.
Surveys research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group-care facilities, and communities). Discusses research methods and concepts (e.g., prediction, control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphic and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read secondary and primary sources, develop research questions, write and present research proposals. Prerequisite: Instructor permission.

ABSC 735. Within Subjects Research Methodology and Direct Observation. 3 Credits.
A graduate level introduction to the logic of experimentation, direct observation strategies, and research conducted using individual (e.g., single subject) and time series experimental designs. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

ABSC 746. Introduction to Behavioral Science. 3 Credits.
This introductory course promotes knowledge and skill in analyzing behavioral problems across a range of societal issues. Special consideration is given to designing interventions, implementing, managing, and supervising applied projects. Topics include the identification and selection of problems and target populations, analysis of problems and goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research.

ABSC 765. Evaluating and Disseminating Scientific Material I. 1-3 Credits.
Intensive training in the evaluation and production of scientific critiques and reviews of current issues in the analysis of behavior, as disseminated through the media. May be repeated. Prerequisite: Instructor permission.

ABSC 770. Within Subjects Research Methodology and Direct Observation. 3 Credits.
A graduate level introduction to the logic of experimentation, direct observation strategies, and research conducted using individual (e.g., single subject) and time series experimental designs. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

ABSC 771. Introduction to Applied Behavioral Science. 3 Credits.
This introductory course promotes knowledge and skill in analyzing behavioral problems across a range of societal issues. Special consideration is given to designing interventions, implementing, managing, and supervising applied projects. Topics include the identification and selection of problems and target populations, analysis of problems and goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

ABSC 772. Conceptual Foundations of Behavior Analysis. 3 Credits.
An advanced Master's seminar on the theoretical, philosophical, and conceptual foundations of behavior analysis. It covers the field's history and purview (e.g., natural science, historical science, applied science); its philosophy of science (e.g., empiricism, pragmatism); the nature of its science (e.g., inductive, experimental, field-theoretic); the products of its science (e.g., principles, concepts, theories); its ethical systems (e.g., humanism, naturalized ethics, personal responsibility); its relations with other fields (e.g., biology, psychology, anthropology); its contrasts with folk psychology and folk psychology (e.g., mentalism, free will); and its comparisons with like-minded philosophies, psychologies, and cultural practices (e.g., embodied cognition, secular humanism, communitarianism.) Prerequisite: ABSC 854 or instructor permission.

ABSC 773. Applied Behavior Analysis in Complex Organizations. 3 Credits.
An examination of the theory, principles, and methods of behavior analysis and their applications to problems of human behavior in complex organizations such as businesses, industries, human service
organizations, and governments. Prerequisite: Graduate standing or instructor permission.

**ABSC 787. Multidisciplinary Perspectives on Gerontology and Aging. 3 Credits.**
A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as AMS 767, COMS 787, PSYC 787, and SOC 767.)

**ABSC 788. Designing Early Education Environments. 3 Credits.**
This course reviews empirically-supported strategies for designing effective and socially valid care and education environments for young children with and without disabilities. Topics will include: early educational theory, individualized curricula and goal selection strategies, various instructional typologies (e.g., direct instruction, embedded teaching), specific teaching tactics (e.g., prompting, time delay, differential reinforcement), preventive and assessment-based behavioral management strategies, current best practice recommendations for design of the social and physical environment, and methods for assessing children's, caregivers', and teachers' programmatic preferences. Prerequisite: ABSC 796.

**ABSC 797. Proseminar in Child Language. 2 Credits.**
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as CLDP 799, LING 799, PSYC 799 and SPLH 799.)

**ABSC 799. Experimental Analysis of Behavior. 3 Credits.**
This course provides an in-depth description of the basic principles of operant and respondent conditioning in the context of basic non-human and human subjects research. Students will learn various theoretical approaches to understanding effects of reinforcement and punishment. Special attention will be provided to the role of verbal processes in the learning of verbally competent individuals. Students will gain substantive experience with identifying laboratory derived principles present in the literature that are relevant to application through assigned projects.

**ABSC 800. Conceptual Foundations of Applied Behavioral Science. 3 Credits.**
A master's-level graduate seminar on the field's conceptual foundations, with special emphasis on behavior analysis and its application - applied behavior analysis. The course addresses the field's history, philosophy of science, and disciplinary purview; its advanced behavioral principles and processes; its analyses of various content domains in the behavioral, social, and cognitive sciences (e.g., emotion, language, cognition, culture); and its relation to other disciplines (e.g., biology, psychology, anthropology). It also considers professional issues in, for example, the ethical conduct of research and practice. Prerequisite: ABSC 799.

**ABSC 801. Design and Analysis of Community Development Methods. 1-6 Credits.**
An examination of principles and practices of community development and evaluation of methods used to promote community improvement. May be repeated if the content differs. Prerequisite: Instructor permission.

**ABSC 802. Behavior Analysis in Developmental Disabilities. 3 Credits.**
A graduate seminar that includes an overview of the behavioral characteristics of various developmental disabilities and examination of empirically-supported behavioral approaches to the study and treatment of developmental disabilities. Topics will include classification and etiology, motivation, methods for developing appropriate skills, assessment and treatment of behavior disorders, staff training, and legal and ethical issues related to treatment. Prerequisite: Instructor permission.

**ABSC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Credits.**
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as PSYC 803.) Prerequisite: Graduate student in clinical child psychology program.

**ABSC 804. Research in Community Health Promotion. 1-6 Credits.**
Supervised, original investigations of problems relevant to community health, such as the prevention of substance abuse or promotion of child outcomes. As appropriate, the course is focused on any combination of: literature research, research planning, and preparation conducting research, analyzing data, writing research reports, or preparing oral reports of completed research. Prerequisite: Instructor permission.

**ABSC 805. Functional Behavioral Assessment. 3 Credits.**
The strategies, tactics, and ethics of functional assessment are presented in the larger context of behavioral assessment (e.g., nomothetic and idiographic approaches). Research articles relevant to indirect, descriptive, and experimental functional assessment approaches and assessment-based interventions are carefully reviewed to determine the appropriate conditions for each type of assessment and intervention. Prerequisite: Instructor permission.

**ABSC 806. Functional Behavioral Assessment Practicum. 1-6 Credits.**
This course provides supervised experience in the use of functional behavioral assessment in home, clinic, or educational environments with young children presenting problem behaviors. Prerequisite: ABSC 805 and instructor permission.

**ABSC 807. Design and Evaluation of Community Health Promotion Methods. 1-6 Credits.**
An examination of the methods used to develop and evaluate community health promotion programs. The course addresses topics of interest to participants, such as substance abuse, adolescent pregnancy, or child outcomes. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

**ABSC 809. Professional Issues: Clinical Child Psychology. 1 Credits.**
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues, including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Same as PSYC 809.) Prerequisite: Graduate standing in clinical child psychology.

**ABSC 810. Introduction to Developmental Assessment. 3 Credits.**
A course covering the general principles of developmental assessment from birth through adulthood, with special emphasis on the history and nature of assessment instruments and the criteria for acceptance,
reliability, and stability of results. Selected assessment techniques for infants, preschool children, elementary school children, adolescents, and adults are reviewed and evaluated for their utility, limitations, and applications. A critical analysis of assessment in general and particular assessment tools is made.

ABSC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Credits.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPPSI. (Same as PSYC 811.) Prerequisite: Graduate student in clinical child psychology.

ABSC 812. Behavioral and Personality Assessment of Children. 3 Credits.
Lecture, laboratory, field work, and supervision. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Same as PSYC 812.) Prerequisite: Graduate standing in clinical child psychology.

ABSC 813. Behavioral Science Research Proseminar. 1-3 Credits.
A master's level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of six credits. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

ABSC 825. Social Development. 3 Credits.
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Same as PSYC 825.) Prerequisite: A course in child psychology or development.

ABSC 828. Research in Early Intervention with Children. 3 Credits.
A seminar on current issues in assessment and intervention for young children who are at risk for or who have special needs. Provides foundation for evaluating and understanding research in early intervention. Includes historical, conceptual and legislative underpinnings of early intervention, risk factors affecting development, methodological issues in early intervention research, best practice standards, and applications to social, language, and pre-academic domains.

ABSC 834. Directed Readings in Community Health Promotion. 1-5 Credits.
Supervised readings in topical areas of community health promotion, such as the prevention of substance abuse and promotion of child outcomes. A program of study, conferences, and reports is developed by the instructor and student.

ABSC 840. Theoretical Concepts of Human Development and Child Care Practice. 3 Credits.
Basic introduction to treatment concepts and procedures related to child development and child-care programs. The major goal is to provide a theoretical framework that is effective in dealing with various types of child deviancy. Prerequisite: Graduate standing or instructor permission.

ABSC 841. Ethical, Legal, and Professional Issues in Applied Behavioral Science. 3 Credits.
The course covers ethical and legal issues in (a) the responsible conduct of basic, applied, and intervention research (e.g., informed consent and assent with typical and atypical populations; inclusion of underrepresented groups; bias, fraud, and plagiarism in data collection and reporting; conflict of interest; reporting misconduct; authorship) and (b) professional issues in teaching, research, and service (e.g., written and presented scientific communication; grant preparation; the journal review process; cultural competence; teaching; vita preparation). The course will also include instruction in the preparation of editorial reviews for manuscripts submitted for publication to in peer-reviewed journals, in partial fulfillment of the department's doctoral requirement for preparing editorial reviews. Prerequisite: Graduate standing in applied behavioral science.

ABSC 846. Practicum in Clinical Child Psychology I. 1-3 Credits.
Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. May be taken in more than one semester. (Same as PSYC 846.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

ABSC 847. Practicum in Clinical Child Psychology II. 1-3 Credits.
Intermediate practicum experience for the Clinical Child Psychology Program. Development of specific competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire specific clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients’ presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as PSYC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

ABSC 850. Principles of Behavior Analysis. 3 Credits.
An advanced graduate course on the basic principles of behavior, and related procedures for producing behavioral change, with both human and nonhuman subjects. The principles and procedures are presented as fundamental elements of behavior change. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

ABSC 851. Ethical, Legal, and Professional Issues in Applied Behavioral Science. 3 Credits.
The course covers ethical and legal issues in (a) the responsible conduct of basic, applied, and intervention research (e.g., informed consent and assent with typical and atypical populations; inclusion of underrepresented groups; bias, fraud, and plagiarism in data collection and reporting; conflict of interest; reporting misconduct; authorship) and (b) professional issues in teaching, research, and service (e.g., written and presented scientific communication; grant preparation; the journal review process; cultural competence; teaching; vita preparation). The course will also include instruction in the preparation of editorial reviews for manuscripts submitted for publication to in peer-reviewed journals, in partial fulfillment of the department's doctoral requirement for preparing editorial reviews.
Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

**ABSC 852. Behavior Analysis in Developmental Disabilities.** 3 Credits.

A graduate seminar that includes an overview of the behavioral characteristics of various developmental disabilities and examination of empirically-supported behavioral approaches to the study and treatment of developmental disabilities. Topics will include classification and etiology, motivation, methods for developing appropriate skills, assessment and treatment of behavior disorders, staff training, and legal and ethical issues related to treatment. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

**ABSC 853. Behavioral Assessment.** 3 Credits.

The strategies, tactics, and ethics of functional assessment are presented in the larger context of behavioral assessment (e.g., nomothetic and idiographic approaches). Research articles relevant to indirect, descriptive, and experimental functional assessment approaches and assessment-based interventions are carefully reviewed to determine the appropriate conditions for each type of assessment and intervention. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

**ABSC 854. Experimental Analysis of Behavior.** 3 Credits.

This course provides an in-depth description of the basic principles of operant and respondent conditioning in the context of basic non-human and human subjects research. Students will learn various theoretical approaches to understanding effects of reinforcement and punishment. Special attention will be provided to the role of verbal processes in the learning of verbally competent individuals. Students will gain substantive experience with identifying laboratory derived principles present in the literature that are relevant to application through assigned projects.

**ABSC 855. An Interdisciplinary Approach to Intervention with the Handicapped.** 3 Credits.

This course surveys knowledge from various disciplines that address developmental disabilities across the life span. Its focus is on designing strategies for individual intervention and treatment programs by an interdisciplinary team. Designed for students in social work, speech pathology, psychology, nutrition, audiology, special education, physical therapy, nursing, child development, behavior analysis, and related fields. Prerequisite: A basic course in child development or instructor permission.

**ABSC 857. Biological Bases of Behavior.** 3 Credits.

This course will examine research and theory on the biological bases of normal and abnormal behavior, including central and peripheral nervous system mechanisms of behavioral and psychological functions, and the roles of genetic and epigenetic processes in regulating behavior. The course covers biological systems that support sensory processing, motor behavior, emotion, cognition and social behavior through analysis of animal model, healthy development and patient studies. The diverse methods used to assess these biological systems also will be surveyed, including behavioral testing of animal models, neuropsychological assessment, biosample analyses, and in vivo imaging approaches. Research on altered behavioral and psychological processes will be integrated with the aim of better understanding the potential of linking knowledge of the biological mechanisms of psychiatric disorders to current clinical practice, as well as critical limitations of current methods and knowledge. Prerequisite: Instructor permission.

**ABSC 861. Principles of Behavior Analysis.** 3 Credits.

An advanced graduate course on the basic principles of behavior, and related procedures for producing behavioral change, with both human and nonhuman subjects. The principles and procedures are presented as fundamental elements of behavior change.

**ABSC 862. Behavioral Community Approaches to Addressing Social Issues.** 3 Credits.

A seminar that provides an overview of the history and origin of behavioral community approaches to address social issues through the integration of applied behavior analysis with other disciplines including community psychology, prevention science, and public health. A multidisciplinary perspective is presented that provides a review of empirically-based behavioral interventions applied in community settings. The course is offered at the 500 and 800 levels with additional assignments required at the 800-level. Not open to students with credit in ABSC 562. Prerequisite: Graduate standing or instructor permission.

**ABSC 865. Applied Behavior Analysis in Complex Organizations.** 3 Credits.

An examination of the theory, principles, and methods of behavior analysis and their applications to problems of human behavior in complex organizations such as businesses, industries, human service organizations, and governments. Prerequisite: Graduate standing or instructor permission.

**ABSC 870. Practicum I in Behavioral Psychology.** 1-6 Credits.

Instruction and supervised laboratory or field work for master's students. Practica are offered by different instructors on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 871. Practicum I in Behavior Analysis: _____** 1-6 Credits.

Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 872. Practicum I in: _____** 1-6 Credits.

Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 873. Practicum in Educational Psychological/Rehabilitative Services: _____** 3-6 Credits.

This course is for students who wish to complete practicum experiences in services related to persons with retardation, autism, or physical disabilities in programs in various settings, such as the Ann Sullivan Center in Lima, Peru and the Algeria School in Paraguay. The course is designed to give interested students opportunities to work with professionals in these programs on a semester or summer basis. The course consists of participation in professional activities associated with the practicum program and a report of these activities to the instructor. Prerequisite: Instructor permission.

**ABSC 875. Practicum in Community Health Promotion.** 1-6 Credits.

A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community health promotion projects and their evaluation. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

**ABSC 876. Practicum in Community Development.** 1-6 Credits.

A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community
improvement projects and their evaluation. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

**ABSC 880. Early Childhood Practicum for Allied Professionals. 1-6 Credits.**
Professionals in fields such as journalism, social welfare, and psychology may have career interests that include work with or on behalf of young children. This practicum provides students with individualized opportunities to work with young children in a group setting in order to extend their professional skills. Prerequisite: Instructor permission.

**ABSC 881. Early Childhood Care and Intervention Practicum I. 1-6 Credits.**
A course covering the specification of learning goals and the implementation and evaluation of curriculum design management of groups of young children. May be repeated for no more than a total of six credit hours. Prerequisite: Instructor permission.

**ABSC 882. Early Childhood Care and Intervention Practicum II. 1-6 Credits.**
A course to assess and teach skills in diagnosis and evaluation of particular problems in the developmental process of young children (1-5 years of age), and to design and implement interventions. May be repeated for no more than a total of six credit hours. Prerequisite: ABSC 791 and instructor permission.

**ABSC 883. Early Childhood Administration Practicum. 1-6 Credits.**
Experiences in understanding and developing parent satisfaction with care arrangements for their child(ren), providing services to personnel responsible for care and development of young children, and/or maximizing use of available services for young children on their behalf. May be repeated for no more than a total of six credit hours. Prerequisite: ABSC 791 and instructor permission.

**ABSC 884. Early Childhood Early Intervention Practicum. 1-6 Credits.**
Laboratory teaching in an early childhood classroom that includes children who are developmentally delayed, demonstrate behavioral or learning difficulties, or have other developmental disabilities. Experience includes individualized programming for children with special needs, as well as group management and group curriculum planning. May be repeated for no more than a total of six credit hours. Prerequisite: ABSC 791 and instructor permission.

**ABSC 885. Early Childhood Teacher Training Practicum. 1-6 Credits.**
Experience in supervising staff who work in programs for young children. Supervision includes orienting, monitoring, and evaluating staff performance; opportunities for interaction with other professionals; experience in facilitating staff communication; and consulting on research projects. Prerequisite: ABSC 791 and instructor permission.

**ABSC 886. Developmental Assessment Practicum: _____ 1-6 Credits.**
This course provides direct experience in the developmental assessment of a selected age group, such as infants, preschool and elementary children, adolescents, or adults. It may be repeated providing the age group specification is not repeated. Prerequisite: ABSC 810 or an equivalent course.

**ABSC 887. Clinical Practicum in Pediatric Psychology. 1-6 Credits.**
Supervised experience with pediatric patients referred for behavior problems, including, for example, temper tantrums, enuresis, encopresis, and hyperactivity. Also includes evaluation and treatment of children with commonly encountered behavior problems. In addition, students observe pediatric staff performing appropriate physical exams and observe the interaction between the medical staff and the pediatric psychologist. Prerequisite: ABSC 705 and instructor permission.

**ABSC 888. Diversity Issues in Clinical Psychology. 3 Credits.**
Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as PSYC 888.) Prerequisite: Graduate status in clinical psychology, or consent of instructor.

**ABSC 890. Seminar in: _____ 3 Credits.**
A seminar for master's level students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 891. Research in: _____ 1-6 Credits.**
Supervised research investigations in basic or applied behavioral science for master's students. The course introduces observational measurement, research methods and designs, and the conduct of research in the behavioral sciences. May be repeated for credit if the content is different. Prerequisite: Graduate standing or instructor permission.

**ABSC 892. Readings in: _____ 1-3 Credits.**
An individual, supervised study of recent research and scholarship for master's students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission.

**ABSC 893. Special Topics in: _____ 1-3 Credits.**
A research and readings course for master's students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission.

**ABSC 894. Study Abroad Topics in: _____ 1-3 Credits.**
A course designed to enhance international experience in topic areas related to behavioral science for master's students. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission.

**ABSC 897. Master's Thesis in Clinical Child Psychology. 1-10 Credits.**
Supervised research experience completing thesis leading to master's degree. (Same as PSYC 897.)

**ABSC 899. Master's Thesis in Applied Behavioral Science. 1-9 Credits.**
Supervised research experience for the thesis leading to a master's degree in applied behavioral science. May be repeated. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 901. Analysis of Everyday Human Behavior. 3 Credits.**
An advanced graduate seminar on the analysis of everyday human behavior, grounded in behavior-analytic principles, concepts, and theory. It covers the process and products of, for example, biological and behavioral development; sensation and perception; motivation and emotion; personality and social behavior; language, cognition, and creativity; attitudes and beliefs, consciousness and unconsciousness, and purpose, will, and values. Prerequisite: ABSC 800 or instructor permission.

**ABSC 905. Psychopathology in Children. 3 Credits.**
Diagnosis and treatment of psychological problems in childhood and adolescence. Preference given to graduate students in child clinical psychology, school psychology, and counseling psychology. (Same as PSYC 905.) Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor.

**ABSC 913. Behavioral Science Research Proseminar. 1-3 Credits.**

A doctoral level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of eight credits. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 931. The Analysis of Verbal Behavior. 3 Credits.**

An advanced graduate seminar on verbal behavior, grounded in behavior-analytic principles, concepts, and theory. Although focused on the verbal behavior of the proficient speaker, it also covers verbal behavior's evolutionary and biological bases, the development and structure of verbal behavior, the training and remediation of verbal behavior, and critiques and rebuttals to the analysis (e.g., Chomsky's.) Prerequisite: ABSC 800, advanced coursework in psycholinguistics or linguistics, or instructor permission.

**ABSC 934. Directed Readings in Clinical Child Psychology. 3-5 Credits.**

Designed to meet the needs of advanced students whose study in clinical child psychology cannot be met with present courses or for whom advanced work is desired in a specialized area of study. Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**ABSC 936. Quantitative Analysis of Behavior. 3 Credits.**

Advanced experimental course (doctoral-level) that demonstrates the operations of principles of behavior, and the quantitative models that describe them, in the context of basic research. Specific review of the methods to obtain the data necessary to permit a quantitative analysis of behavior, along with the quantitative analyses themselves, will be discussed. Students will learn the advantages and disadvantages of quantitative analyses in the behavioral sciences, along with a behavioral perspective on quantitative models of behavior. Students will obtain hands-on experience selecting data for a quantitative analysis, reviewing whether the data and proposed model meet the requisite assumptions of EAB research on quantitative models, and analyzing behavioral data using quantitative models. Prerequisite: ABSC 799.

**ABSC 941. Teaching and Conference. 3-6 Credits.**

This course is used by graduate students fulfilling the doctoral program teaching requirement. Students assist in class preparation and organization, teaching, grading, and office hours or serve as discussion section leaders or laboratory course supervisors. They meet regularly with the faculty members they are assisting. Students enroll for 3 hours for the equivalent of a 25% assistantship and 6 hours for a 50% equivalent. Prerequisite: Instructor permission.

**ABSC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Credits.**

Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as PSYC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**ABSC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Credits.**

Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., integrated case presentation), and modeling of clinical competencies for junior students. Course requirements include the development of portfolios for demonstration of clinical competencies and application to clinical internships. May be taken in more than one semester. (Same as PSYC 944.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**ABSC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Credits.**

Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior students. May be taken in more than one semester. (Same as PSYC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**ABSC 961. Advanced Seminar in Applied Behavior Analysis. 1-3 Credits.**

An advanced seminar examining the literature and research methods in specialized areas of applied behavior analysis (e.g., developmental disabilities, community health, organizational development). May be repeated for credit if the content differs. An ABA-accredited and BACB® pre-approved course.

**ABSC 963. Clinical Child Psychology Internship. 1 Credits.**

Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Same as PSYC 963.) Prerequisite: Completion of Ph.D. comprehensive examinations, graduate standing in clinical child psychology, and permission of clinical child psychology faculty.

**ABSC 965. Evaluating and Disseminating Scientific Material II. 1-3 Credits.**

Intensive training in the evaluation and production of scientific critiques and reviews on current issues in the analysis of behavior, as disseminated through the media. May be repeated. Prerequisite: Instructor permission.

**ABSC 970. Practicum II in Behavioral Psychology. 1-6 Credits.**
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 870. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 971. Practicum II in Behavior Analysis: _____ 1-6 Credits.**
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 871. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 972. Practicum II in: _____ 1-6 Credits.**
Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 872. May be repeated for credit if the content differs. Topic and instructor are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 976. Therapeutic Interventions with Children. 3 Credits.**
Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. (Same as PSYC 976.) Prerequisite: Instructor permission.

**ABSC 981. History of Behavior Analysis. 3 Credits.**
An advanced graduate seminar on the history of behavior analysis from Greek naturalism to the 21st century. It covers the history and philosophy of science and psychology (e.g., evolution vs. revolutions, ontology, epistemology); the long past, short history, and recent origins of behavior analysis in cultural context (e.g., Social Progressivism); historical and conceptual relations between behavior analysis and other systems (e.g., behaviorism, psychoanalysis, phenomenalism, cognitivism); and historiographic issues and methods (e.g., great person vs. Zeitgeist history, presentism vs. historicism.) Prerequisite: ABSC 800 or instructor permission.

**ABSC 989. Methods of Obtaining External Research Funding. 1-3 Credits.**
The objective of this course is to demystify this process and prepare participants to submit their first independent research grant application. Participants learn about the characteristics of different funding mechanisms and agencies, the characteristics of successful and unsuccessful application strategies, how to turn an initial research idea into a competitive application, ethical issues that influence each stage of the development and submission process, and the nuts and bolts of grant development and management. Specific activities include critiquing an actual NIH grant application, participating in a mock review panel, and developing an actual grant application.

**ABSC 990. Advanced Seminar in: _____ 3 Credits.**
An advanced seminar for doctoral students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 991. Advanced Research in: _____ 1-9 Credits.**
Advanced, supervised research in basic or applied behavioral science for doctoral students. The course may focus on any combination of a literature review, research planning and preparation, conducting research, analyzing data, writing research reports, and preparing oral reports of completed research. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 992. Advanced Readings in: _____ 1-6 Credits.**
An advanced individual, supervised study of recent research and scholarship for doctoral students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 993. Advanced Special Topics in: _____ 1-3 Credits.**
An advanced research and readings course for doctoral students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 994. Advanced Study Abroad Topics in: _____ 1-6 Credits.**
An advanced course designed to enhance international experience in topic areas related to behavioral science for doctoral level students. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Credits.**
Research experience making original contribution to literature in clinical child psychology. (Same as PSYC 998.)

**ABSC 999. Doctoral Dissertation in Behavioral Psychology. 1-9 Credits.**
Advanced supervised research that makes an original, empirical contribution to the literature in applied behavioral science leading to a doctoral degree in behavioral psychology. May be repeated. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**Biology Courses**

**BIOL 100. Principles of Biology. 3 Credits. NB N**
Intended for non-science majors. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended.

**BIOL 101. Principles of Biology, Honors. 3 Credits. NB N**
Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 is recommended. BIOL 101 and BIOL 102 satisfy the College natural science with laboratory requirement. Prerequisite: Membership in the College Honors Program or consent of instructor.

**BIOL 102. Principles of Biology Laboratory. 1 Credits. U LFE**
Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). Prerequisite: Concurrent enrollment in BIOL 100 is recommended.

**BIOL 105. Biology Orientation Seminar. 1 Credits. N**
Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and
career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis.

**BIOL 116. Introduction to Evolutionary Biology. 3 Credits. N LFE**
An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism).

**BIOL 120. Insects in Your World. 3 Credits. NB N**
Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology, behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week.

**BIOL 150. Principles of Molecular and Cellular Biology. 3 Credits. NB N LFE**
A course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture per week. An honors section (BIOL 151) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170; or consent of instructor.

**BIOL 151. Principles of Molecular and Cellular Biology, Honors. 3 Credits. NB N LFE**
A course for students with superior academic records who are biology majors or who plan to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture per week. Prerequisite: Membership in the University Honors Program and concurrent or prior enrollment in CHEM 130, CHEM 190 and CHEM 191, CHEM 150, or CHEM 170; or consent of instructor.

**BIOL 152. Principles of Organismal Biology. 3 Credits. NB N LFE**
A course for biology majors and students who plan to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture per week. An honors section (BIOL 153) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170; or consent of instructor.

**BIOL 153. Principles of Organismal Biology, Honors. 3 Credits. NB N LFE**
A course for students with superior academic records who are biology majors or planning to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture per week. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170 and membership in the University Honors Program; or consent of instructor.

**BIOL 154. Introductory Biology Lab for STEM Majors. 2 Credits. N LFE**
A hybrid laboratory course for majors in STEM fields. This hybrid laboratory course will use online modules (~ 2 hours per week) to introduce students to key core competencies (e.g., critical thinking, quantitative reasoning, scientific communication, collaboration, etc.) that are applicable to all STEM fields. Two hours of face-to-face laboratory instruction will provide students hands-on opportunities to apply these core competencies and skills to research questions in the biological sciences. Students will apply research skills and engage in an authentic research activity during the second half of the course and will present the results to their peers in oral and written formats.

**BIOL 155. Principle Lab in: ____. 1-3 Credits. U LFE**
This introductory laboratory exposes the students to basic principles in biology and modern experimental techniques through an open-ended authentic research experience directed by a faculty member. Prerequisite: Consent of instructor.

**BIOL 177. First Year Seminar: ____. 3 Credits. NB**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in biology. Does not contribute to major requirements in biology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**BIOL 200. Basic Microbiology. 3 Credits. NB N**
Introduction to bacteria and viruses. Topics include historical development of microbiology, bacterial structure and growth, enzymes and energy production, disinfection, antibacterial drugs, gene transfer, viral replication, infection and immunity, with emphasis on infectious diseases. Can be substituted for BIOL 201 as a prerequisite for other microbiology courses by consent of department. Not open to those with credit in BIOL 400, or BIOL 401. Prerequisite: A course in high school biology and a course in high school chemistry. This course is not recommended for first semester freshmen.

**BIOL 203. Introductory Microbiology Laboratory. 2 Credits. U LFE**
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200. May be taken concurrently.

**BIOL 210. Introduction to Clinical Laboratory Sciences. 1 Credits. U**
An introductory overview of the professions of Clinical Laboratory Sciences including types of analyses performed, specialities, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in the Clinical Laboratory Sciences to have a clear definition of the professions. (Same as CLS 210.)

**BIOL 225. Evolution and the History of Life. 3 Credits. N**
This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species.

**BIOL 240. Fundamentals of Human Anatomy. 3 Credits. N**
Introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent.

**BIOL 241. Human Anatomy Observation Laboratory. 2 Credits. U LFE**
One of the two laboratories in gross anatomy designed to complement BIOL 240. Emphasizes the three-dimensional appearance and spatial
relationships of anatomical structures through supervised observations of pre-dissected human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy observation laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is required.

**BIOL 246. Principles of Human Physiology. 3 Credits. N**
An introduction to the physiological and biochemical processes and general physiological principles necessary to sustain life. Organ and organ system processes are emphasized. Intended for students majoring in allied health or sports related curricula who require a course in human physiology. Not intended for biology majors. Prerequisite: BIOL 100 or equivalent.

**BIOL 247. Principles of Human Physiology Laboratory. 2 Credits. U LFE**
Designed to complement BIOL 246. Uses experiments and simulations to demonstrate laboratory techniques and representative processes in areas of human physiology. Concurrent or prior enrollment in BIOL 246 required.

**BIOL 350. Principles of Genetics. 4 Credits. N**
Why are related individuals more similar than unrelated individuals and what is the basis for heritable traits? From Mendel's discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cytogenetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Not open to students with credit in BSCI 350. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195 and CHEM 196, with a grade of C- or higher and BIOL 150 or BIOL 151 with a grade of C- or higher and BIOL 152 or BIOL 153 with a grade of C- or higher; or consent of instructor.

**BIOL 360. Principles of Genetics, Honors. 4 Credits. N**
The science of genetics aims to explain why individuals differ from one another and how these differences are inherited. Honors Genetics covers all core topics in fundamental genetics: Mendelian inheritance, meiosis and recombination, mutation, molecular genetics, population genetics, quantitative genetics and genomics. Special attention given to the practice of genetics and the complex relationship between genotype, phenotype and environment. A broader goal of Honors Genetics is to provide students a framework for understanding recent advances in medical genetics and the modern era of personal genomics. Not open to students with credit in BSCI 350. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195 and CHEM 196, with a grade of C- or higher and BIOL 150 or BIOL 151 with a grade of C- or higher and BIOL 152 or BIOL 153 with a grade of C- or higher; or consent of instructor.

**BIOL 400. Fundamentals of Microbiology. 3 Credits. NB N**
Fundamental principles of microbiology with emphasis on physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics, pathogenesis and immunity, industrially important microorganisms. Not open to students with credit in BSCI 400. Prerequisite: BIOL 150 or BIOL 151 with a grade of C- or higher and two semesters of college chemistry with a grade of C- or higher, or consent of the instructor.

**BIOL 401. Fundamentals of Microbiology, Honors. 4 Credits. N**
Honors section of BIOL 400 and BIOL 612, by application and invitation. Not open to students with credit in BSCI 400. Prerequisite: BIOL 150 or BIOL 151, two semesters of college chemistry, and membership in the University Honors Program, or consent of the instructor.

**BIOL 402. Fundamentals of Microbiology Laboratory. 2 Credits. U LFE**
Laboratory exercises designed to complement BIOL 400 or BIOL 700. Not open to students with credit in BSCI 401. Prerequisite: BIOL 400 or BIOL 612, or BIOL 400 or BIOL 612 concurrently.

**BIOL 405. Laboratory in Genetics. 3 Credits. U LFE**
A laboratory course that provides hands-on experience with classical genetics and modern molecular genetics. Experiments involve Mendelian genetics (dominance/recessivity, complementation, segregation, independent assortment) in eukaryotic organisms; recombinant DNA; basic bacterial genetics; polymerase chain reaction; DNA sequencing; computational genetics; and genome editing. Not open to students with credit in BSCI 351. Prerequisite: Concurrent or prior enrollment in BIOL 350.

**BIOL 412. Evolutionary Biology. 4 Credits. N**
Introduction to the patterns and processes of organic evolution. Considered are the history of evolutionary thought, molecular evolution, genetics and microevolution, selection and adaptation, and speciation and macroevolution. Emphasis will be placed on how scientists study and document change over time in natural populations, methods for testing hypotheses about events in evolutionary history, and how discovering evolutionary mechanisms at one level of organization can help to explicate general processes in the natural world. Prerequisite: BIOL 152 and BIOL 350, or consent of the instructor.

**BIOL 413. History and Diversity of Organisms. 3 Credits. N LFE**
An integrated lecture and laboratory course presenting an overview of the variety and ancestry of life on earth. Using representatives from prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic reconstruction are illustrated and evolutionary trends in the life history features, functional morphology, and structural complexity of extant and extinct organisms are presented. Two hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

**BIOL 414. Principles of Ecology. 3 Credits. N**
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. (Same as EVRN 414.) Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

**BIOL 415. Field and Laboratory Methods in Ecology. 2 Credits. N**
This course complements BIOL 414 with field trips and laboratory exercises that illustrate the basic concepts of ecology. Topics covered include methodologies for quantitative sampling of terrestrial and aquatic systems, design of field studies, computer simulation and digital data analysis techniques, and scientific writing. Prerequisite: Concurrent or prior enrollment in BIOL 414. A statistics course is recommended.

**BIOL 416. Cell Structure and Function. 3 Credits. N**
Lecture survey of molecular cell biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Not open to students with credit in BSCI 416. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; and CHEM 135, or CHEM 175, or CHEM 195 and CHEM 196; or consent of the instructor.

**BIOL 417. Biology of Development. 3 Credits. N**
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by
the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating development, including classic embryology and modern molecular genetics. Not open to students with credit in BSCI 417. Prerequisite: BIOL 350 or BIOL 360 and BIOL 416 or consent of the instructor.

**BIOL 418. Laboratory in:_____** 1-3 Credits. U LFE
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption. Each section may have additional prerequisites to be determined by instructor.

**BIOL 419. Topics in:_____** 1-3 Credits. N LFE
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs.

**BIOL 420. Seminar:_____** 1-3 Credits. N
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Consent of the seminar, or consent of the instructor.

**BIOL 421. Non-laboratory Independent Study.** 1-9 Credits. N
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor.

**BIOL 422. Independent Study.** 1-9 Credits. N
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor.

**BIOL 425. Teaching Apprenticeship in Biology.** 1-9 Credits. N
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of the instructor.

**BIOL 426. Laboratory in Cell Biology.** 3 Credits. U LFE
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; concurrent or prior enrollment in BIOL 416 or BIOL 538; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended.

**BIOL 428. Introduction to Systematics.** 3 Credits. N
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systematics background.

**BIOL 430. Laboratory in Molecular Biology.** 3 Credits. U LFE
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or microbiology.

**BIOL 435. Introduction to Neurobiology.** 3 Credits. N
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Not open to students with credit in BSCI 435. Prerequisite: BIOL 350 or BIOL 360 and BIOL 416 or consent of the instructor.

**BIOL 442. Human Anatomy Dissection Laboratory.** 3 Credits. U LFE
Laboratory in gross anatomy designed to build on content from BIOL 240 and BIOL 241. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial disecting experience. Students perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy laboratory. Prerequisite: BIOL 240 and BIOL 241, and consent of the instructor.

**BIOL 449. Laboratory/Field Work in Human Biology.** 1-3 Credits. N LFE
This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

**BIOL 451. Ecosystems Stewardship.** 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship. centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 451 and GEOG 451.)

**BIOL 454. Brain Diseases and Neurological Disorders.** 3 Credits. N
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., are discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Prerequisite: BIOL 416 or BIOL 435 or BIOL 546, or consent of instructor.

**BIOL 477. Ecology and Global Change.** 3 Credits. N
Humans influence both natural and managed ecosystems. This course studies the effects of the greenhouse effect, species extinctions, human disease expansion, and the effects of global change on agricultural productivity. A combination of lectures and discussion address issues from a scientific
basis and link these ecological issues to our everyday lives and society as a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission of instructor.

BIOL 480. Medical Parasitology. 3 Credits. N
Introductory lecture course focused on parasites (protozoans and metazoans) causing disease in humans, including zoonotic diseases (diseases or infections that are naturally transmissible to humans from non-human vertebrates). Provides basic knowledge about the morphology, epidemiology, evolution, and ecology of parasites infecting humans globally (e.g., malaria, amoebas, hookworms, tapeworms). Emphasis is placed on life-cycles, course of infection, modes of reproduction, diagnosis, and pathology of human parasites; relevant parasites of veterinary importance are also discussed. Prerequisite: BIOL 152 or BIOL 153, or permission of instructor.

BIOL 481. Medical Parasitology Laboratory. 1 Credits. U LFE
Laboratory course in the study of parasites causing disease in humans, including zoonotic diseases (diseases or infections that are naturally transmissible to humans from non-human vertebrates), emphasizing their morphology and identification. One three-hour laboratory each week. Prerequisite: Concurrent or prior enrollment in BIOL 480.

BIOL 490. Internship and Practical Applications. 1-6 Credits. N
This course provides credit for supervised practical experiences in an occupational area of interest. In addition to the work-related activity, students will be expected to complete reading and writing assignments, participate in on-line discussions, and create a final summary of internship accomplishments. Hours of credit earned (1-6) are based on number of hours at internship site and agreement of instructor. Repeatable for up to 6 credit hours, provided the internship experiences are different. Prerequisite: Consent of Instructor.

BIOL 499. Introduction to Honors Research. 2 Credits. N
Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursuing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor.

BIOL 500. Biology of Insects. 3 Credits. N
Lectures and demonstrations providing an introduction to the study of insects, including general classification, structure, phylogeny, identification, development, physiology, behavior, ecology, and relations to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

BIOL 501. Physiological Adaptations of Plants to Extreme Environments. 3 Credits. N
Exploration of physiological adaptations of plants to bright sunlight & deep shade, drought & flooding, excess heat & subfreezing, excess elements and too few elements. Examples of adaptations include: red leaves, blue leaves, succulence, root "knees", moving leaves, frozen leaves, heavy metal plants, carnivorous plants, parasitic plants, epiphytes. Prerequisite: BIOL 150 or BIOL 152 or consent of instructor.

BIOL 502. Laboratory in Insect Biology and Diversity. 2 Credits. U LFE
Laboratory and field studies of insects, emphasizing their diversity, classification, ecological relationships, morphology, and behavior. Course provides practical application of principles covered in BIOL 500. Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent.

BIOL 503. Immunology. 3 Credits. N
Lectures on the nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; ontogeny and cellular basis of immune responsiveness, hypersensitivity; specific immunologic tolerance. Not open to students with credit in BSCI 503. Prerequisite: BIOL 400 or BIOL 401, or consent of instructor.

BIOL 504. Immunology Laboratory. 2 Credits. U LFE
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or BIOL 503 concurrently.

BIOL 506. Bacterial Infectious Diseases. 3 Credits. N
Explores bacterial infectious diseases from the perspective of how disease is established and the mechanisms that underlie disease, as well as how to treat and prevent infectious disease. Not open to freshmen or sophomores. Not open to students with credit in BSCI 506. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.

BIOL 507. Bacterial Infectious Diseases Laboratory. 2 Credits. U LFE
Laboratory to complement BIOL 506. Cultivation of pathogenic microorganisms, diagnostic procedures, and experiments to demonstrate various aspects of microbial pathogenicity and host responses. Prerequisite: BIOL 402 and BIOL 506 (or concurrent enrollment) or consent of instructor.

BIOL 509. Biology of Spiders. 3 Credits. N
An introduction to the evolution, anatomy, physiology, behavior, and ecology of spiders and other arachnids. Special topics include the action of spider venoms; the composition and uses of silk; courtship and mating; predation; social behavior; and the role of spiders in natural and agricultural ecosystems. Concurrent enrollment in BIOL 511 is encouraged. Prerequisite: BIOL 152, BIOL 153 or permission of instructor.

BIOL 511. Biology of Spiders Laboratory. 1 Credits. U LFE
Topics will include comparative biology of arachnid orders (spiders, scorpions, harvestmen, mites, and others), external and internal anatomy of spiders, identification of common spider families and genera, and spider behavior. Students will be required to make a small collection (collect, preserve, and identify specimens). Prerequisite: BIOL 509; concurrent enrollment is preferred.

BIOL 512. General Virology. 3 Credits. N
Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host cell-viral interactions; mode of replication of DNA and RNA viruses, tumor viruses. Not open to freshmen or sophomores. Not open to students with credit in BSCI 512. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.

BIOL 513. Virology Laboratory. 2 Credits. U LFE
Experiments involving cultivation, quantitation, and identification of animal viruses, continuous cell culture and primary chicken embryo culture techniques. Molecular biology techniques are used to demonstrate the steps in virus replication. The value of viruses as tools to understand normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor.

BIOL 518. Microbial Genetics. 3 Credits. N
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher or consent of instructor.
BIOL 519. Microbial Genetics Laboratory. 2 Credits. U LFE
A laboratory course on the genetic analysis of bacteria. Includes mutagenesis, cloning, agarose and polyacrylamide gel electrophoresis, PCR, regulation of gene expression, and computational analysis of DNA sequences and protein structures. Prerequisite: BIOL 350 or BIOL 360.

BIOL 520. Marine Biology. 3 Credits. N
This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor.

BIOL 524. Mammalian Paleontology. 3 Credits.
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as GEOL 524.) Prerequisite: One of the following: BIOL 225, BIOL 412, BIOL 413, GEOL 304, GEOL 521, or consent of the instructor.

BIOL 527. Primate Evolution and the Fossil Record. 3 Credits. N
This course exposes students to fundamental concepts of paleontology and evolutionary biology using the mammalian order Primates as a high-profile case study. Primates are interesting partly because humans are primates. Hence, scientific understanding of human origins and human evolution must be grounded in knowledge of our nearest relatives. This course places human origins within the broader framework of how primates have evolved over the course of the Cenozoic Era, often in response to radical changes in the Earth's physical environment. Prerequisite: BIOL 412 or BIOL 413, or consent of the instructor.

BIOL 530. Biodiversity Discovery and Assessment. 2 Credits. N
An integrated lecture and laboratory course designed to provide an overview of modern methods in biodiversity exploration and discovery. Lectures cover the theory and practice of planning fieldwork in remote locations, documenting species and their natural history, how museum collections are made, calculating and comparing species richness estimates, and the process of describing and naming new species. The laboratory component provides students experience in documenting species and their natural history, processing and curating samples of natural history specimens, and the statistical analysis of biodiversity data. (Same as EVRN 530.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

BIOL 531. Tropical Fieldwork in Biodiversity Discovery. 1 Credit. N
An introduction to modern field methods of assessing biodiversity. Fieldwork employs insects and various field methods to estimate and compare species diversity between different habitats and field sites. Taught at different sites in tropical South America over Spring Break. Contact Undergraduate Biology, or the Office of Study Abroad. (Same as EVRN 531.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. Concurrent or prior enrollment of BIOL 530 is strongly encouraged.

BIOL 533. Biology of Fungi. 4 Credits. N LFE
A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153.

BIOL 536. Cell Structure and Function (Honors). 3 Credits. N
BIOL 536 is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors program or by permission of instructor. Not open to students with credit in BSCI 416. Prerequisite: BIOL 350 or BIOL 360 or consent of instructor.

BIOL 540. General Invertebrate Zoology. 4 Credits. N LFE
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153.

BIOL 541. Biology of Freshwater Invertebrates. 3 Credits. N
A lecture and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in rivers, lakes, and wetlands. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 152 or BIOL 153; recommended BIOL 414 and/or BIOL 540.

BIOL 544. Comparative Animal Physiology. 3 Credits. N
An intermediate physiology course with lectures and discussions of the structures, functions, mechanisms, and interactions of vertebrate and invertebrate organ systems with a focus on the different ways in which animals adapt to their environments. Topics include digestion and nutrition, metabolism, gas exchange, circulation, excretion, neurophysiology, endocrinology, and muscle physiology. Prerequisite: BIOL 152 or BIOL 153, and CHEM 330, or consent of instructor. A college physics course is recommended but not required.

BIOL 545. Evolution of Development. 4 Credits. N
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent.

BIOL 546. Mammalian Physiology. 3 Credits. N
An intermediate course in the structures, functions, mechanisms, and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Not open to students with credit in BSCI 546. Prerequisite: BIOL 150; BIOL 152 or BIOL 240; and CHEM 330 or consent of instructor.

BIOL 547. Mammalian Physiology Laboratory. 2 Credits. U LFE
Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 546. Not open to students with credit in BIOL 247. Prerequisite: Corequisite: BIOL 546 or BIOL 646.

BIOL 548. Human Osteology. 4 Credits. N LFE
This course examines the structure and function of the human skeleton from an evolutionary and biomedical perspective. Students will learn to identify bones comprising the human skeleton and how osteological information aids in reconstructing sex, age, race, stature, and health status. Major transformations of the human skeleton from hominoid precursors, and some of the biomedical consequences of these transformations, will be addressed. (Same as ANTH 648.) Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor.

BIOL 555. General Plant Physiology. 3 Credits. N
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: BIOL 350 or BIOL 360.

BIOL 598. Research Methods. 3 Credits. N LFE
An introduction to the foundational concepts that underpin scientific inquiry and problem solving. Coursework is built around three student-designed inquiries, and topics considered within that context include experimental variables, basic principles of statistics, safety and ethics of investigation, professional communication techniques, and appropriate literature review. Enrollment priority will be given to students currently admitted to the UKanTeach program.

BIOL 599. Senior Seminar: _____ 1 Credits. N
A synthesis and discussion of current trends in a discipline or disciplines related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline's state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences.

*Note: Laboratories are not required for the programs.*
arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor.

BIOL 622. Paleontology. 3 Credits. N
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as GEOL 521.) Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304.

BIOL 623. Paleontology Laboratory. 1 Credits. U LFE
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.)

BIOL 625. Behavioral Ecology and Sociobiology. 3 Credits. N
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 152; either BIOL 350, BIOL 412 or BIOL 414 recommended; or consent of instructor.

BIOL 630. Conservation and Wildlife Biology. 3 Credits. N
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended.

BIOL 636. Biochemistry I. 4 Credits. N
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor.

BIOL 637. Introductory Biochemistry Laboratory. 2 Credits. U LFE
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment.

BIOL 638. Biochemistry II. 4 Credits. N
Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: CHEM 335 with a grade of C or higher and BIOL 636 with a grade of C or higher, or consent of instructor.

BIOL 639. Advanced Biochemistry Laboratory. 3 Credits. U LFE
The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and BIOL 638 (BIOL 638 may be taken concurrently).

BIOL 640. The Biology and Evolution of Fossil Plants. 3 Credits. N
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. Prerequisite: BIOL 413, or permission of instructor.

BIOL 641. Laboratory in Paleobotany. 1 Credits. U LFE
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. Prerequisite: BIOL 413 or permission of instructor.

BIOL 642. Biochemistry III: Machines on Genes. 4 Credits. N
This one-semester lecture course for biochemistry majors is designed to complement the topics covered in BIOL 636 and BIOL 638. Emphasis will be placed on the various molecular machines involved in the transmission and utilization of genetic information, providing a biochemical perspective of replication, transcription, and translation. Prerequisite: BIOL 636 and BIOL 638 with a grade of C or higher.

BIOL 648. Systematics and Macroevolution. 3 Credits. N
An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics. Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony, Maximum likelihood and Bayesian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent.

BIOL 650. Advanced Neurobiology. 3 Credits. N
The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor.

BIOL 652. Comparative Animal Behavior. 3 Credits. N
A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite.

BIOL 654. Comparative Animal Behavior, Laboratory. 1 Credits. U LFE
Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652.

BIOL 655. Behavioral Genetics. 3 Credits. N
A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor.

BIOL 660. Summer Field Ecology. 3 Credits. N
An introduction to research methods for environmental science. Similar to EVRN 460, formatted for summer term. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). Assignments and group work emphasize analysis and interpretation of field data. (Same as
EVRN 660.) Prerequisite: Junior, Senior, or graduate standing, completion of the natural sciences requirement of the KU Core (GE3N).

BIOL 661. Ecology of Rivers and Lakes. 3 Credits. N
Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended.

BIOL 667. Chemical Communication in Sex, Feeding, and Fighting. 3 Credits. N
The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor.

BIOL 668. Evolutionary Ecology. 3 Credits. N
Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor.

BIOL 672. Gene Expression. 3 Credits. N
The molecular biology of gene expression in eukaryotes: A study of the structure of genes and the molecular mechanisms used by cells to control and regulate gene expression. Emphasis on enzymatic mechanisms related to transcription, translation, post-transcriptional and post-translational modifications, and epigenetics. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in BIOL 772. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor. A course in biochemistry is recommended.

BIOL 680. Genomics. 3 Credits. N
Genomics is the study of the structure, function and evolution of the genome. High-throughput technologies have given us the ability to easily and quickly sequence genomes, and measure genomewide patterns of gene expression. These tools, and the vast amounts of genome-scale data they provide, have transformed biology and medicine. This course will cover the key technological and computational methods by which genomic DNA is sequenced, genomes are assembled, and how RNA and epigenetic patterns are measured. Subsequently, we will emphasize how these genomics tools and techniques have deepened our understanding of biology, covering questions from diverse fields to illustrate the impact of genomics on evolutionary biology, molecular and developmental genetics, human medical genetics and personalized, precision medicine. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor.

BIOL 688. The Molecular Biology of Cancer. 3 Credits. N
The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, tumor viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536; or consent of instructor.

BIOL 699. Biology Honors Research Colloquium. 1 Credits. U
Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor.

BIOL 700. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

BIOL 701. Topics in: 1-3 Credits.
Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests.

BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Credits.
An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences.

BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Credits.
An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 702, algebra and two semesters of either physics or chemistry.

BIOL 706. Natural Sciences Curation and Collections Management. 3 Credits.
This course explores collections in the KU Museum of Natural History through the eyes of their curators and collection managers. It addresses aspects of collecting, cataloguing, preserving, storing, managing, and digitally archiving different types of natural science collections. The course format consists of lectures, readings, workshops, and guided tours of the museum's paleontological, biological (flora and fauna) and archaeologica division collections, as well as the Spencer Museum of Art's ethnographic collections. Student projects will involve one of the museum's collections with the opportunity for hands-on experience. (Same as MUSE 710.)

BIOL 712. Evolutionary Biology - Graduate. 3 Credits.
A thorough survey of evolutionary biology. Topics include: the history of evolutionary thought, genetics and the nature of variation, adaptation, speciation, coevolution, macroevolution, the comparative method, and the history of life. Prerequisite: BIOL 350 or equivalent or consent of instructor.

BIOL 714. Graduate Ecology. 3 Credits.
A thorough survey of the discipline of ecology. Topics include elements in physiological, population, community and ecosystem ecology. Overarching themes are 1) pattern and process, 2) ecology and evolution, 3) hierarchical nature of ecology, 4) variation in space and time, and 5) human dimensions of ecology. Prerequisite: Graduate standing or consent of instructor.

BIOL 720. Scientific Illustration. 3 Credits.
Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral
and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor.

**BIOL 735. Scientific Communication. 3 Credits.**

Principles of English communication skills for the professional scientist. The course begins by exploring the role of narrative in all forms of scientific communication; it then applies the use of narrative tools to scientific writing, message honing and speaking. The course covers written and verbal communication of primary research. Students must have an independent research project on which to focus their communication assignments. (Same as EVRN 735.)

**BIOL 741. Biology of Freshwater Invertebrates. 3 Credits.**

A lecture and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in rivers, lakes, and wetlands. Major groups of benthic and planktontic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Graduate students will be expected to submit either an original collection of freshwater invertebrates or write a research essay on a topic mutually agreed upon with the professor. Not open to students who have taken BIOL 541. Prerequisite: Graduate standing; recommended: undergraduate invertebrate biology class.

**BIOL 743. Population Genetics. 3 Credits.**

Description and discussion of genetic variation in natural populations. The effects and interaction of selection, migration, mutation, mating systems, and finite population size on the maintenance of genetic variation. Discussion of the interface with evolution and population ecology. Prerequisite: BIOL 350 and BIOL 412 or equivalent.

**BIOL 750. Advanced Biochemistry. 3 Credits.**

The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: BIOL 807 and BIOL 808, a general biochemistry course, or permission of instructor.

**BIOL 752. Cell Biology. 3 Credits.**

A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: BIOL 807 and BIOL 808, or BIOL 416 or BIOL 536, or permission of instructor.

**BIOL 754. Brain Diseases and Neurological Disorders. 3 Credits.**

Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor.

**BIOL 755. Mechanisms of Development. 3 Credits.**

Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: BIOL 807 and BIOL 808 for graduate students; BIOL 417 or equivalent for undergraduate students; or permission of instructor.

**BIOL 757. Carcinogenesis and Cancer Biology. 3 Credits.**

This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in cancer and to design experiments which study cancer biology. Toward that end, the student should (at the conclusion of the course) be able to: define cancer, identify and discuss its causes; identify and discuss the genetic basis for cancer development and progression; discuss the theoretical basis for cancer therapy design and efficacy testing; discuss the biochemical, molecular and cellular events involved in the natural history of major human neoplasms. Prerequisite: Permission of instructor.

**BIOL 759. Ecosystems Stewardship. 3 Credits.**

This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 751 and GEOG 759.)

**BIOL 772. Gene Expression. 4 Credits.**

The molecular biology of gene expression in eukaryotes: a study of the structure of genes and the molecular mechanisms used by cells to control and regulate gene expression. Emphasis on enzymatic mechanisms related to transcription, translation, post-transcriptional and post- translational modifications, and epigenetics. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in BIOL 672. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor. A course in biochemistry is recommended.

**BIOL 782. Principles of Biogeography. 3 Credits.**

A synthesis of historical and ecological biogeography of plants and animals, treating vicariance, dispersal, and community patterns; lectures, readings, discussions. A course in systematics and a course in ecology are recommended.

**BIOL 784. Introduction to Museum Public Education. 3 Credits.**

Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 785. Museum Management. 3 Credits.**

Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 786. Fundamentals of Tropical Biology. 1-8 Credits.**

The tropical environment and biota; ecologic relations, communities and evolution in the tropics. Primarily a field course, taught in Costa Rica; two sessions per year, February-March, July-August.

**BIOL 787. Introduction to Museum Exhibits. 3 Credits.**

This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in
the major disciplines. (Same as AMS 700, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

BIOL 794. Mammalogy. 3 Credits.
A study of mammals, with emphasis on systematics, biogeography, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 100 or BIOL 413.

BIOL 798. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations of ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 700, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

BIOL 801. Topics in: ____. 1-3 Credits.
Advanced courses on special topics in biology, given as need arises. Lectures, discussing readings, laboratory or field work. Students may select sections according to their special interests.

BIOL 805. Scientific Integrity in Ecology and Evolutionary Biology. 1 Credits.
This course covers the responsible conduct of research to help students initiate research projects ethically. Topics covered include expectations of federal granting agencies and the university, best practices for data management and publishing, and professional development as a graduate student. Prerequisite: Admission to the graduate program in Ecology and Evolutionary Biology, or consent of instructor.

BIOL 807. Graduate Molecular Biosciences. 3 Credits.
An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, kinetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic genetic mechanisms, cell structure and function, signal transduction, basic and pathogenic bacteriology, immunology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor.

BIOL 809. Graduate Molecular Biosciences for Medicinal Chemists. 4 Credits.
An introduction to the advanced study of biochemistry, microbiology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor.

BIOL 811. Advanced Molecular and Cellular Immunology. 2 Credits.
Covers recent advances in immunochemistry and immunobiology. Topics include structure and function of antibodies, hybridoma systems, idiotypes, induction and regulation of the immune response through cell interactions and cytokine action, and the role of immune activity in disease states such as hypersensitivity, autoreactivity, and cancer. Prerequisite: BIOL 807 and BIOL 808, or an introductory course in immunology, or consent of instructor.

BIOL 812. Mechanisms of Host-Parasite Relationships. 2 Credits.
Emphasis is on virulence factors of microorganisms and the host response to infection. Topics will include pathogenesis of intracellular and extracellular parasites, bacterial adhesins, and toxins, and the role of innate and acquired immunity in host resistance and the response to infection. Prerequisite: BIOL 807 and BIOL 808, or a course in biochemistry, or consent of instructor.

BIOL 814. Advanced Molecular Virology. 2 Credits.
The course concentrates on evaluation of current literature concerning all aspects of molecular biology, biochemical characterization, and pathogenic mechanisms involved in host-virus interactions. Students will be expected to present articles and participate in discussions. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics and a course in virology, or consent of instructor.

BIOL 815. Advanced Molecular Genetics. 2 Credits.
A literature-based course that covers recent advances in microbial molecular genetics. Topics include transcription, translation, mutagenesis and repair, genetic exchange mechanisms, and regulation of gene expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics, or consent of instructor.

BIOL 816. Careers in the Biomedical Sciences. 1 Credits.
Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor.

BIOL 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.
This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion. (Same as CHEM 817/MDCM 817/PHCH 817.) Prerequisite: Graduate student.

BIOL 841. Biometry I. 5 Credits.
The application of statistical methods to data from various fields of biological research. Special emphasis is placed on practical computational procedures. Prerequisite: College algebra.

BIOL 848. Phylogenetic Methods. 4 Credits.
A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods. Computer lab will familiarize students with software that implements the analyses discussed in lecture. Intended for graduate students specializing in systematics. Prerequisite: BIOL 845 and BIOL 841 or consent of instructor.

BIOL 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as CHEM 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor.

BIOL 895. Human Genetics. 3 Credits.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: A course in genetics.

BIOL 899. Master’s Thesis. 1-10 Credits.
Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory progress/limited progress/no progress basis.

BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Credit.
Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission.

BIOL 905. Advanced Molecular Genetics. 1-3 Credits.
A review of current literature in molecular genetics.

BIOL 918. Modern Biochemical and Biophysical Methods. 4 Credits.
This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 817, or permission of instructor.

BIOL 925. Research Grant Proposal Preparation. 3 Credits.
This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantsmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor.

BIOL 943. Multivariate Data Analysis. 3 Credits.
Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: Knowledge of elementary matrix algebra.

BIOL 950. Evolutionary Mechanisms. 3 Credits.
Reading and discussions of evolutionary mechanisms from the genetic, ecological, and systematic viewpoints. Prerequisite: BIOL 412.

BIOL 952. Introduction to Molecular Modeling. 3 Credits.
Introduction to theory and practice of contemporary molecular modeling, including molecular mechanics, molecular dynamics, computer graphics, data analysis, use of structure and sequence databases, docking, and homology modeling. Weekly computer laboratory section aimed at allowing participants to pursue independent research projects that incorporate modeling aspects. Lectures, laboratory manuals, program descriptions, and technical notes are presented on course web page. Prerequisite: Graduate standing or consent of instructor.

BIOL 985. Advanced Study. 1-10 Credits.
Individual investigations; laboratory, field or museum; or reading assignments in specialized topics not ordinarily treated in other courses. Graded on a satisfactory/unsatisfactory basis.

BIOL 999. Doctoral Dissertation. 1-12 Credits.
Original research that is to be incorporated into a Ph.D. dissertation. Graded on a satisfactory progress/limited progress/no progress basis.

Global & International Studies Courses

CEAS 200. Topics in East Asian Studies: ___. 1-3 Credits. U
An introductory interdisciplinary topics course addressing contemporary issues related to one or more East Asian countries. Format and content will vary. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes.

CEAS 500. Seminar in East Asian Studies: ___. 1-3 Credits. U
An interdisciplinary seminar addressing contemporary issues related to one or more East Asian countries. Prerequisites to be determined by instructor(s) on the basis of course content. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes.

CEAS 610. Minorities in Japan. 3 Credits. S
This course offers a sociological and historical exploration of Japan's minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan's minorities, their historical experiences, current struggles, and future challenges. This course is taught at the 300 and 600-levels, with additional assignments required at the 600-level. (Same as EALC 610.) Prerequisite: An introductory East Asian Studies course or consent of the instructor.

CEAS 701. Professionalization Seminar in East Asian Studies. 3 Credits.
This graduate seminar's main objective is to prepare students to be professional scholars and educators in East Asian Studies and in global contexts. The course focuses on development of professional networks, co-development of ideas, and opportunities for collaboration with other professionals. Students will develop and refine a wide range of skills crucial to students' success in graduate school and their careers. Students will organize workshops to present their work and to generate materials for conferences, peer reviews, grant writing, CV preparation, job interviews, and much more. Graduate students with nonacademic as well as academic career goals are welcome in the seminar.

CEAS 704. Contemporary East Asia. 3 Credits.
This graduate seminar explores rapidly changing societies in contemporary East Asia, particularly China, Japan, and Korea. The course provides a critical overview of East Asia and its diversity and complexity using cross-cultural perspectives and interdisciplinary social science approaches, and situates East Asian societies in the context of globalization. (Same as EALC 704.)

CEAS 710. Research Design for International Area Studies. 3 Credits.
This course addresses the challenges for students engaged in graduate research projects and theses in an interdisciplinary and international context. The course will guide the students through the structure of research design processes for various epistemological approaches, and will assist students in formulating strong research questions, reviewing and situating their own work within the literature, working with the library and subject librarians, appropriating theory, and modeling writing conventions for research within their selected epistemological community. Students will also be exposed to a variety of research methods and will practice designing projects utilizing a select number of them. During the course of the semester, students will be working toward a plan for a substantial graduate research project. (Same as GIST 710 and LAC 710.) Prerequisite: Consent of instructor.
CHEM 149. Chemistry for Engineers Supplement. 2 Credits.
This course is intended for students in the School of Engineering who have credit for CHEM 130 but still need selected elements of second-semester general chemistry. Students will learn to describe phases of matter and quantify changes among them, and to analyze chemical equations and equilibria in the context of acid-base and redox chemistry. Prerequisite: Student in the School of Engineering and CHEM 130 or equivalent (or have Departmental consent). Credit in CHEM 135, CHEM 150, CHEM 175, or CHEM 195 precludes enrollment in and credit for CHEM 149.

CHEM 150. Chemistry for Engineers. 5 Credits. N LFE
This one semester course is designed for students in the School of Engineering who are not required to take additional chemistry courses at the college level. In this integrated lecture and laboratory course, students will learn to predict properties of substances based on their molecular structure, to describe phases of matter and quantify changes among them, and to analyze chemical equations and equilibria in the context of acid-base and redox chemistry. Technical communication and experimental design are also emphasized. Prerequisite: Must have completed a course in high school chemistry and be eligible for MATH 115 (or have Departmental consent). Students not admitted to the School of Engineering must receive permission from instructor. CHEM 110 and CHEM 150 cannot both be taken for credit.

CHEM 170. Chemistry for the Chemical Sciences I. 5 Credits. NP N LFE
The first course in a two-course sequence focused on the principles and applications of modern chemistry. This integrated lecture and laboratory course is designed for students pursuing or considering a major in one of the chemical sciences (such as chemistry, biochemistry, chemical engineering or petroleum engineering). The CHEM 170/CHEM 175 course sequence covers the same general topics as CHEM 130/CHEM 135, but with an increased emphasis on modern applications of chemistry. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Eligibility for MATH 115.

CHEM 175. Chemistry for the Chemical Sciences II. 5 Credits. N LFE
An integrated lecture and laboratory course which is a continuation of CHEM 170. Prerequisite: CHEM 130, CHEM 170, or CHEM 190 with a grade of C- or higher.

CHEM 177. First Year Seminar: _____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chemistry. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

CHEM 180. Seminar I. 0.5 Credits. U
Special topics for chemistry majors such as using the chemical literature, educational and professional perspectives, scientific ethics, and undergraduate research opportunities. It is recommended that students take this half-semester course in their freshman or sophomore year. Prerequisite: A declared major in chemistry or consent of instructor.

CHEM 190. Foundations of Chemistry I, Honors. 3 Credits. NP N LFE
CHEM 190, together with corequisite laboratory course CHEM 191, provides an integrated treatment of theoretical and experimental aspects of chemistry for qualified and highly motivated students. It is anticipated that students in CHEM 190 and CHEM 191 plan to take more than one year of chemistry at the college level. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: High school chemistry and calculus; at least one
of the following: (a) acceptance into the KU Honors Program, (b) an AP exam score in chemistry of 3 or higher, (c) a mathematics ACT score of 30 or higher, or permission of instructor. Corequisite: CHEM 191.

CHEM 191. Foundations of Chemistry I Laboratory, Honors. 2 Credits. NP N LFE
Laboratory course for students enrolled in CHEM 190. Prerequisite: Corequisite: CHEM 190.

CHEM 195. Foundations of Chemistry II, Honors. 3 Credits. NP N LFE
CHEM 195 and corequisite laboratory course CHEM 196 continue the integrated theoretical and experimental exploration of chemistry topics for qualified and highly motivated students. Prerequisite: CHEM 130, CHEM 170, or CHEM 190 and CHEM 191 with a grade of C- or better, and permission of the instructor. Corequisite: CHEM 196.

CHEM 196. Foundations of Chemistry II Laboratory, Honors. 2 Credits. NP N LFE
Laboratory course for students enrolled in CHEM 195. Prerequisite: CHEM 130, CHEM 170, or CHEM 190 and CHEM 191 with a grade of C- or better, and permission of the instructor. Corequisite: CHEM 195.

CHEM 201. Laboratory Safety in the Chemical Sciences. 1 Credits. U
A course for undergraduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies. Required for all B.S. majors, and for all B.A. majors participating in undergraduate research. Students with credit in CHEM 201 may not take CHEM 701 for credit. Prerequisite: CHEM 135, CHEM 175, or CHEM 195.

CHEM 250. Mathematical Methods for the Chemical Sciences. 3 Credits. NM
A one-semester course covering advanced mathematical methods necessary for upper-level physical and analytical chemistry courses. Topics include complex numbers and functions, ordinary and partial differential equations, linear algebra and probability and statistics with special emphasis on applications to problems in the chemical sciences. Prerequisite: Corequisite: MATH 127.

CHEM 330. Organic Chemistry I. 3 Credits. N
A study of the structure and reactivity of selected classes of organic compounds. CHEM 330 is the first course of a two-semester sequence. Prerequisite: CHEM 135, CHEM 175, or CHEM 195 with a grade of C- or higher.

CHEM 331. Organic Chemistry I Laboratory. 2 Credits. U LFE
Emphasis on basic techniques for the preparation, separation, and purification of organic compounds. Required for a major in chemistry and by those departments and programs specifying a complete undergraduate organic chemistry course. Prerequisite: CHEM 330 or CHEM 380 with a grade of C- or higher or concurrent enrollment in CHEM 330 or CHEM 380.

CHEM 335. Organic Chemistry II. 3 Credits. N
A continuation of CHEM 330, intended for students who want further training in organic chemistry. Prerequisite: CHEM 330 or CHEM 380 with a grade of C- or higher.

CHEM 336. Organic Chemistry II Laboratory. 2 Credits. U LFE
More advanced organic laboratory techniques with emphasis on modern spectroscopic methods for determining the structure and purity of organic compounds. Prerequisite: CHEM 331 and CHEM 335 or CHEM 385 with a grade of C- or higher or concurrent enrollment in CHEM 335 or CHEM 385.

CHEM 380. Organic Chemistry I, Honors. 3 Credits. N
This is the first half of a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses. Recommended for members of the University Honors Program and students majoring in chemistry or related fields. Prerequisite: CHEM 135, CHEM 175, or CHEM 195 with a grade of C- or higher and permission of the instructor.

CHEM 385. Organic Chemistry II, Honors. 3 Credits. N
This is the second course in a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses. Recommended for members of the University Honors Program and students majoring in chemistry or related fields. Prerequisite: CHEM 330 or CHEM 380 with a grade of C- or higher, and permission of the instructor.

CHEM 390. Topics in Chemistry, Honors: _____ 1-5 Credits. N
A course on special topics in chemistry, given as the need arises. Course content applies and expands upon general chemistry concepts, such as chemical thermodynamics, kinetics, and bonding. In this course, students gain knowledge in a topic of contemporary interest in chemistry, are challenged to examine the experimental and theoretical basis of this knowledge, and consider the broader impacts of this knowledge outside the discipline. Course may be repeated for different topics. Prerequisite: CHEM 135, CHEM 175 or CHEM 195 and membership in the University Honors Program; or permission of instructor. Each section may have additional prerequisites to be determined by the instructor.

CHEM 400. Analytical Chemistry. 3 Credits. N
Principles of analytical chemistry with emphasis on the fundamental methods used for chemical analysis. Topics include experimental error, statistical analysis, method development, sampling, calibration methods, spectrophotometry, chromatography, mass spectrometry, and electrochemistry. Prerequisite: One semester of organic chemistry and one semester of organic chemistry laboratory, or permission of instructor. Corequisite: CHEM 401.

CHEM 401. Analytical Chemistry Laboratory. 2 Credits. U
Experiments illustrate fundamental principles of chemical analysis methods. The course serves as an introduction to advanced instrumental methods of analysis. Prerequisite: One semester of organic chemistry and one semester of organic chemistry lab, or permission of instructor. Corequisite: CHEM 400.

CHEM 450. Directed Readings/Laboratory in Chemistry. 1-3 Credits. N
Individual and supervised study or laboratory work on special topics or problems in chemistry. Prerequisite: Ten hours of chemistry and a minimum overall grade-point average of 2.0 or consent of department.

CHEM 498. Undergraduate Research. 1-2 Credits. N
A research course for Chemistry majors, consisting of experimental or theoretical work in chemistry or a closely related field. A final report must be submitted to the instructor at the end of the semester. Prerequisite: CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training.

CHEM 510. Biological Physical Chemistry. 3 Credits. N
A one-semester course that explores the fundamentals of physical chemistry with specific application to biological systems. The basic principles of thermodynamics, chemical kinetics, quantum mechanics and spectroscopy will be introduced, and their application to aqueous solutions and biochemical systems will be emphasized. This class consists of lecture only. Students requiring laboratory experience should enroll in CHEM 520. Prerequisite: One semester of organic chemistry, two semesters of calculus, and two semesters of physics.
CHEM 520. Biological Physical Chemistry with Laboratory. 5 Credits. N
A one-semester integrated lecture and laboratory course that explores the fundamentals of physical chemistry with specific application to biological systems. The basic principles of thermodynamics, chemical kinetics, quantum mechanics and spectroscopy will be introduced, and their applications to aqueous solutions and biochemical systems will be emphasized. Students who do not wish to take the laboratory component should enroll in CHEM 510. Prerequisite: One semester of organic chemistry, two semesters of calculus and two semesters of physics.

CHEM 525. Physical Chemistry for Engineers. 4 Credits. N
An introduction to the basic principles of quantum mechanics, atomic and molecular structure, molecular rotations and vibrations, statistical mechanics, statistical thermodynamics and reaction dynamics. Prerequisite: Two semesters of general chemistry; PHSX 212; MATH 127, MATH 220 or MATH 320 and MATH 290 or consent of instructor.

CHEM 530. Physical Chemistry I. 4 Credits. N
An introduction to the basic principles of quantum mechanics, atomic and molecular structure, molecular rotations and vibrations, group theory, spectroscopy, and statistical mechanics. Prerequisite: Two semesters of general chemistry; PHSX 212; MATH 127; and CHEM 250 (or MATH 220 or MATH 320 and completion of, or concurrent enrollment in MATH 290) or consent of instructor.

CHEM 535. Physical Chemistry II. 3 Credits. N
Emphasizes the thermodynamics of molecular systems with application to the structure and properties of gases, liquids, solids, materials, statistical thermodynamics, chemical kinetics, and reaction dynamics. Prerequisite: CHEM 530 or consent of instructor.

CHEM 537. Physical Chemistry Laboratory. 3 Credits. U LFE
Experiments in physical chemistry, with emphasis on the fundamental principles of quantum mechanics, spectroscopy, thermodynamics and kinetics as applied to chemical systems. Prerequisite: CHEM 401 and CHEM 530 and concurrent enrollment in CHEM 535.

CHEM 598. Research Methods. 3 Credits. N LFE
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. (Same as PHSX 598.) Prerequisite: At least one course at the 100 level or above in CHEM, MATH, or PHSX.

CHEM 635. Instrumental Methods of Analysis. 2 Credits. U
Theory and application of instrumental methods to modern analytical problems. Topics covered include atomic and molecular spectroscopy, electrochemistry, mass spectrometry, and separations. Prerequisite: CHEM 400 and CHEM 401 and one semester of physical chemistry laboratory, or permission of instructor.

CHEM 636. Instrumental Methods of Analysis Laboratory. 3 Credits. U LFE
Theory and application of instrumental methods to modern analysis problems. Experiments covered in this capstone laboratory course include atomic and molecular spectroscopy, electrochemistry, and separation methods. Prerequisite: CHEM 400 and CHEM 401, and one semester of physical chemistry laboratory; or permission of instructor. Prerequisite or Corequisite: CHEM 635.

CHEM 660. Systematic Inorganic Chemistry. 3 Credits. N
A systematic study of the elements and their compounds, emphasizing the relationship between properties of substances and their atomic and molecular structures and the positions of the elements in the periodic systems. Prerequisite: CHEM 510, CHEM 520, or CHEM 530.

CHEM 661. Advanced Inorganic Laboratory. 2 Credits. U LFE
Experiments concerning the synthesis and characterization of inorganic compounds. Prerequisite: CHEM 660 or concurrent enrollment in CHEM 660.

CHEM 668. Topics in Chemistry: . 1-5 Credits. N
Courses on special topics in chemistry, given as the need arises. Course may be repeated for different topics. Prerequisite: 20 hours of Chemistry. Each section may have additional prerequisites to be determined by the instructor.

CHEM 695. Seminar II. 0.5 Credits. U
Special topics and presentations by students and faculty in areas of current interest such as recent advancements in chemistry, professional development, societal issues facing chemists, and reports of ongoing research. This half-semester course is recommended for seniors. Prerequisite: CHEM 180.

CHEM 696. Undergraduate Capstone Research. 1-2 Credits. N
An undergraduate capstone research experience in chemistry or a closely related field, consisting of experimental or theoretical work on a topic developed in consultation with the faculty research advisor. A total of 3 credit hours must be accumulated for the course to count toward KU Core Goal 6. Students will submit a final report to the Chemistry Department during the semester in which the third credit hour is completed, and also present their results in a public forum. Prerequisite: CHEM 201, or CHEM 201 concurrently (or documentation of appropriate laboratory safety training), CHEM 335 (or CHEM 385) and CHEM 336 with grades of C or higher, and permission of the Chemistry Department.

CHEM 699. Undergraduate Honors Research. 1-2 Credits. N
An undergraduate research experience in chemistry or a closely related field for students in the Chemistry Department Honors Program, consisting of experimental or theoretical work on a topic developed in consultation with the faculty research advisor. A minimum of 4 credit hours must be accumulated to satisfy Chemistry Department Honors requirements, and 3 of those credit hours will satisfy KU Core Goal 6. At the completion of the research, a written thesis, and an oral defense of the thesis, will be required. Prerequisite: Acceptance to the Chemistry Department Honors Program; CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training.

CHEM 700. Responsible Scholarship in the Chemical Sciences. 1 Credits.
A course for beginning graduate students with particular emphasis on scholarship issues relevant to the chemical sciences. Topics will include scientific ethics, codes of conduct, record keeping, authorship, and the responsibilities of a scientist. Group discussions, particularly centered around case studies, will be a significant component of the course.

CHEM 701. Laboratory Safety in the Chemical Sciences. 1 Credits.
A course for beginning graduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies.

CHEM 718. Mathematical Methods in Physical Sciences. 3 Credits.
Review of all complex variable theory; introduction to the partial differential equations of physics; Fourier analysis; and special functions of mathematical physics. (Same as PHSX 718.) Prerequisite: Two semesters of junior-senior mathematics.
CHEM 720. Fundamentals and Methods of Analytical Chemistry. 3 Credits.
An introductory graduate level course in analytical chemistry, in which the principles of electrochemistry, spectroscopy, and separation science are utilized to solve analytical problems in inorganic, organic and biochemistry. Prerequisite: An undergraduate course in analytical chemistry, a year of organic chemistry, and a year of physical chemistry.

CHEM 730. Coordination and Organometallic Chemistry. 3 Credits.
An examination of the basic foundations of coordination chemistry and organometallic chemistry including symmetry methods, bonding, magnetism, and reaction mechanisms. Prerequisite: Two semesters of organic chemistry and one semester of physical chemistry in which quantum chemistry is introduced. The latter course may be taken concurrently with CHEM 730.

CHEM 740. Principles of Organic Reactions. 3 Credits.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include acid and base properties of functional groups; qualitative aspects of strain, steric, inductive, resonance, and solvent effects on reactivity; stereo-chemistry and conformations; an introduction to orbital symmetry control; basic thermodynamic and kinetic concepts; and an overview of some important classes of mechanisms. Prerequisite: Two semesters of undergraduate organic and one semester of physical chemistry or concurrent enrollment.

CHEM 742. Spectroscopic Identification of Organic Compounds. 3 Credits.
The use of techniques such as infrared, nuclear magnetic resonance, and ultraviolet spectroscopy, and mass spectrometry for elucidating the structure of organic molecules. A lecture and workshop course. Prerequisite: CHEM 626 and CHEM 627.

CHEM 750. Introduction to Quantum Mechanics. 3 Credits.
An introduction to the basic principles of quantum theory relevant to atomic and molecular systems. Topics include operators and operator algebra, matrix theory, eigenvalue problems, postulates of quantum mechanics, the Schrodinger equation, angular momentum, electronic structure, molecular vibrations, approximation methods, group theory, and the foundations of spectroscopy. Prerequisite: Two semesters of physical chemistry.

CHEM 760. Introduction to Chemistry in Biology. 3 Credits.
A comprehensive introduction to the application of chemistry to address problems in biology at the molecular level. The fundamentals of biomolecules (nucleic acids, proteins, lipids and carbohydrates) and techniques of chemical biology research will be discussed.

CHEM 800. Research. 1-10 Credits.
Original investigation on the graduate level.

CHEM 810. Colloquium: _____ 1 Credits.
Colloquia on various topics of current interest are presented by students, faculty, and visiting scientists.

CHEM 816. Careers in the Biomedical Sciences. 1 Credits.
Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as BIOL 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor.

CHEM 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.
This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion. (Same as BIOL 817/MDCM 817/PHCH 817.) Prerequisite: Graduate student.

CHEM 820. Analytical Separations. 3 Credits.
An advanced treatment of analytical separations techniques. The theory of separation science will be augmented with discussion of practical aspects of instrumentation and experiment design. Prerequisite: CHEM 720.

CHEM 822. Electrochemical Analysis. 3 Credits.
An advanced treatment of selected electroanalytical techniques and methodology. Prerequisite: CHEM 720.

CHEM 824. Spectrochemical Methods of Analysis. 3 Credits.
General concepts of encoding chemical information as electromagnetic radiation; major instrumental systems for decoding, interpretation, and presentation of the radiation signals; atomic emission, absorption, and fluorescence; ultraviolet, visible, infrared, and microwave absorption; molecular luminescence; scattering methods; mass spectrometry; magnetic resonance; automated spectrometric systems. Prerequisite: CHEM 720.

CHEM 826. Mass Spectrometry. 3 Credits.
An introduction to mass spectrometry. The various ionization techniques and mass analyzers will be discussed, and many examples of different mass spectrometric applications will be introduced. Prerequisite: CHEM 720.

CHEM 828. Bioanalysis. 3 Credits.
A course covering important aspects in modern chemical measurement with particular emphasis placed on bioanalysis. This course will survey the modern analytical challenges associated with the ongoing efforts in genomics and proteomics and discuss future trends in methods in instrumentation. Prerequisite: CHEM 720.

CHEM 830. Structure, Bonding and Spectroscopic Methods in Inorganic Chemistry. 3 Credits.
An introduction of quantum and group theories in relation to bonding and physicochemical properties of inorganic substances. Topics include vibrational and electronic spectroscopies, magnetism, and inorganic photochemistry. Prerequisite: CHEM 730.

CHEM 832. Inorganic Reaction Mechanisms and Catalysis. 3 Credits.
Mechanistic aspects of transition metal chemistry including substitution reactions, electron transfer reactions, rearrangement reactions, ligand reactions and inorganic photochemistry. Principles and applications of heterogeneous and homogeneous catalytic processes emphasizing catalysis at transition metal centers. Prerequisite: CHEM 730.

CHEM 840. Physical Organic Chemistry. 3 Credits.
An examination of the methods used to probe the mechanisms of organic reactions and of the chemistry of some important reactive intermediates. Topics will include isotope effects, kinetics, linear free energy relationships, solvent effects, a continuing discussion of orbital symmetry, rearrangements, carbocations, carbanions, carbenes, radicals, excited states, and strained molecules. Prerequisite: CHEM 740.
CHEM 842. Organic Synthesis I. 3 Credits.
A discussion of fundamental reactions for the formation of carbon-carbon bonds, oxidation, reduction, and functional group interchange. Prerequisite: CHEM 740.

CHEM 844. Problem Solving in Organic Chemistry. 1 Credits.
A course designed to develop a student's ability to apply fundamental concepts of mechanistic organic and organometallic chemistry, physical organic chemistry, bioorganic chemistry, synthetic organic reactions and techniques for structure elucidation. Students will propose solutions to practice problems mimicking challenges that arise in contemporary research in organic chemistry. The format includes interactive problem-solving discussions led by faculty and peers and monthly written examinations. May be repeated up to three times until the student has passed at least four of the written exams. Graded on a satisfactory/unsatisfactory basis. Prerequisite: CHEM 740 or permission of instructor.

CHEM 850. Advanced Quantum Mechanics. 3 Credits.
The advanced mathematical and physical principles of quantum mechanics relevant to atomic and molecular systems. Topics may include abstract vector spaces and representations, time-dependent quantum dynamics, electronic structure theory, density matrices, second-quantization, advanced group theory, path integrals, and scattering theory. Prerequisite: CHEM 750 or its equivalent.

CHEM 852. Statistical Thermodynamics. 3 Credits.
Thermodynamics and introduction to equilibrium statistical mechanics with emphasis on problems of chemical interest. The course consists of two roughly equal parts: 1) An advanced overview of the laws and concepts of thermodynamics with application to specific problems in phase and chemical equilibria and 2) An introduction to equilibrium statistical mechanics for both classical and quantum systems. Prerequisite: CHEM 750 or its equivalent.

CHEM 854. Chemical Kinetics and Dynamics. 3 Credits.
A study of the rates, mechanisms, and dynamics of chemical reactions in gases and liquids. Topics include an advanced overview of classical kinetics, reaction rate theories (classical collision theory, transition-state theory and introductory scattering theory), potential energy surfaces, molecular beam reactions, photochemistry, Marcus electron transfer theory and other areas of current interest. Prerequisite: CHEM 750 or its equivalent.

CHEM 856. Molecular Spectroscopy. 3 Credits.
Quantitative molecular spectroscopy and its chemical applications. The basic principles of the molecular energy levels, selection rules and spectral transition intensities will be discussed and applied to rotational, vibrational, electronic, and nuclear magnetic spectroscopy. Linear and nonlinear spectroscopies will be addressed. Prerequisite: CHEM 750 or its equivalent.

CHEM 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor.

CHEM 899. Master's Thesis. 1-10 Credits.
Research work (either experimental or theoretical) in chemistry for students working toward the M.S. degree. Graded on a satisfactory/limited progress/no progress basis.

CHEM 900. Advanced Research. 1-10 Credits.
Original investigation in chemistry at the graduate level. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Advancement to doctoral candidacy.

CHEM 914. Computational Methods in Physical Sciences. 3 Credits.
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document computer programs to solve physical problems. (Same as ASTR 815 and PHSX 815.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above.

CHEM 930. Bioinorganic Chemistry. 3 Credits.
A survey of metalloproteins and metalloenzymes, their structures and functions, including recent advances in biomimetic modeling, small molecule activation in biological systems, and related physical methods. Prerequisite: CHEM 832.

CHEM 942. Organic Synthesis II. 3 Credits.
A survey of important techniques in organic chemistry with respect to scope, limitations, mechanism, and stereochemistry. Emphasis will be placed on new synthetic methods and application of such methods to the synthesis of structurally interesting compounds, particularly natural products. Prerequisite: CHEM 842.

CHEM 950. Advanced Statistical Mechanics. 3 Credits.
Advanced equilibrium statistical mechanics and introduction to nonequilibrium statistical mechanics. Topics include: the theory of liquids, critical phenomena linear response theory and time correlation functions, Langevin dynamics, and molecular hydrodynamics. (Same as PHSX 971.) Prerequisite: CHEM 909 or equivalent.

CHEM 980. Advanced Topics in Chemistry: ______. 2-3 Credits.
A course covering special advanced topics in chemistry not included in other graduate courses. One or more topics will be covered in a given semester and an announcement of the course content and prerequisites will be made at the end of the previous semester. This course may be taken more than once when the topic varies.

CHEM 999. Doctoral Dissertation. 1-10 Credits.
Research work (either experimental or theoretical) in chemistry for students working toward the Ph.D. degree. Graded on a satisfactory progress/limited progress/no progress basis.

Child Language Doctoral Program Courses

CLDP 709. First Language Acquisition I. 3 Credits.
Introduction to the study of language acquisition: the significant findings, the basic methodological procedures, and some of the more recent theoretical accounts. Not open to students who have taken LING 425. (Same as LING 709.) Prerequisite: Graduate standing or consent of instructor.

CLDP 739. First Language Acquisition II. 3 Credits.
A second semester course in child language which explores the acquisition of morphology, syntax and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. (Same as LING 739.) Prerequisite: LING 709 or permission of the instructor.

CLDP 782. Research Methods in Child Language. 3 Credits.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include:
diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as LING 782 and PSYC 782.)

**CLDP 799. Proseminar in Child Language. 2 Credits.**
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, LING 799, PSYC 799 and SPLH 799.)

**CLDP 822. Seminar in First Language Acquisition. 3 Credits.**
Critical examination of recent theoretical issues and empirical findings in the study of first language acquisition. (Same as LING 822.) Prerequisite: LING 709 or consent of instructor.

**CLDP 852. Concepts in Human Molecular Genetics. 3 Credits.**
This is a lecture course providing concepts in human genetics, fundamentals of gene pathways, Mendelian and non-Mendelian transmission of genetic diseases, gene regulation and expression, genotype/phenotype correlation, characteristics of human genome, Microarray and DNA cloning. The major goal is to introduce a breadth of genetic concepts to students and at the same time provide recent developments in human genetic research. Students are expected to actively participate in discussion of readings from text books, review articles and research papers. There will be at least 3 lab days to demonstrate methodologies like DNA purification from saliva, polymerase chain reaction and DNA electrophoresis. Prerequisite: Consent of instructor.

**CLDP 854. Principles for the Study of Genetic Disorders. 3 Credits.**
This course explores the fundamentals of disease gene identification methods and tools that are effective to explore the genetic components of inherited disorders. Fundamentals of pedigree based genetic analyses will be covered, along with Mendelian and non-Mendelian inheritance patterns, gene mapping methods, population allele frequencies, heterogeneity, microarray expression, DNA sequencing, recent development in disease gene identification, online human genomic databases, genetic variations, pathogenicity and bioinformatic tools. Recent topics like gene editing, personalized medicine, and pharmacogenetics will be discussed. There will be at least 3 lab days to demonstrate DNA quantification, polymorphism, Sanger sequencing and bioinformatic tools like oligo design, prediction of pathogenicity of protein coding SNPs, and browsing human genome databases. Prerequisite: Consent of instructor.

**CLDP 856. Epigenetics of Behavioral and Developmental Disorders. 3 Credits.**
This course will include discussion of the epigenetic mechanisms involved in behavioral and developmental disorders. The topics reviewed will be DNA methylation, histone modification, genomicking, neurogenesis, epigenetic control of gene expression, non-coding RNAs, prions, microbiota and epigenetics, influence of environment, life style, diet and exercise on gene regulation and cellular pathways. The topics of pharmacoeigenetics, personalized epigenetics and future perspectives of epigenetics in human health will be covered. Recent development in epigenetic research will be discussed. Prerequisite: Consent of instructor.

**CLDP 874. Research Practicum. 1-3 Credits.**
Master's level. Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation on topics related to child language acquisition and disorders, including quantitative methods. May be repeated for up to a maximum of 3 credits. Prerequisite: SPLH 660 or equivalent research methods course.

**CLDP 876. Independent Study in Problems of Child Language. 1-6 Credits.**
Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor.

**CLDP 880. Seminar in Child Language: Research Methods. 1-3 Credits.**
A seminar devoted to factors affecting children's language acquisition and language impairments, with some attention to theoretical formulations, causal pathways and mechanisms of change. Topics may vary. Prerequisite: Consent of instructor.

**CLDP 898. Investigation and Conference (Masters). 1-8 Credits.**
Directed research and experimentation for M.A. students in some phase of child language acquisition/disorders. Prerequisite: Consent of instructor.

**CLDP 899. Master's Thesis. 1-6 Credits.**
Development of Master's Thesis in the area of child language acquisition and/or disorders. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Consent of instructor.

**CLDP 944. Multilevel Models for Longitudinal and Repeated Measures Data. 3 Credits.**
Applications of the multilevel model (hierarchical linear model, general linear mixed model) for analyzing longitudinal and repeated measures data, including analysis of growth curves, within-person fluctuation, repeated measures research designs with crossed random effects, and simultaneous prediction of multiple sources of variation. Prerequisite: Instructor permission.

**CLDP 945. Advanced Multilevel Models. 3 Credits.**
Advanced applications of the multilevel model (hierarchical linear model, general linear mixed model) for examining multiple sources of variation, models for crossed sources of nesting, three levels of nesting, heterogeneous variances, multivariate outcomes, and non-linear outcomes. Prerequisite: Instructor permission.

**CLDP 948. Latent Trait Measurement and Structural Equation Models. 3 Credits.**
Contemporary measurement theory and latent variable models for scale construction and evaluation, including confirmatory factor analysis, item response modeling, diagnostic classification models, and structural equation modeling. (Same as EPSY 906.) Prerequisite: EPSY 905 and instructor permission.

**CLDP 964. Seminar in Child Language. 1-3 Credits.**
A seminar that considers advanced research problems in investigations of child language and language impairment, diagnosis, longitudinal development, change over time, and causal factors. Paper is required. Prerequisite: Consent of instructor.

**CLDP 974. Research Practicum. 3 Credits.**
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting a study related to child language acquisition or impairments, and analyzing outcomes. Prerequisite: Consent of instructor.

**CLDP 975. Directed Teaching: Child Language. 1-3 Credits.**
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. Prerequisite: Consent of instructor.

**CLDP 982. Issues in Scientific Conduct. 3 Credits.**
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings,
tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as PSYC 982 and SPLH 982.)

CLDX 998. Investigation and Conference. 1-8 Credits.
Directed research, experimentation, and/or quantitative analysis for Ph.D. students in topics related to child language acquisition, language impairment, diagnosis, causation, or treatment. Prerequisite: Consent of instructor.

CLDX 999. Doctoral Dissertation. 1-12 Credits.
Doctoral Dissertation in topics related to child language acquisition, language impairment, diagnosis, causation, or treatment. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Consent of instructor.

Classics Courses

CLSX 105. Introduction to Ancient Near Eastern and Greek History. 3 Credits. NW H/W
A general survey of the political, social, and economic developments of Mesopotamia, Egypt, Asia Minor, and Greece from Paleolithic times to 323 B.C. (Same as HIST 105.)

CLSX 106. Introduction to Roman History. 3 Credits. H/W
A general survey of the political, social, and economic developments of ancient Rome from 753 B.C. to 475 A.D. (Same as HIST 106.)

CLSX 148. Greek and Roman Mythology. 3 Credits. HL H/W
A systematic examination of the traditional cycles of Greek myth and their survival and metamorphosis in Latin literature. Some attention is given to the problems of comparative mythology and the related areas of archaeology and history. Slides and other illustrated materials. No knowledge of Latin or Greek is required.

CLSX 149. Greek and Roman Mythology Honors. 3 Credits. HL H/W
The study of Greek and Roman mythology through extensive readings in primary classical texts and secondary authors. Prerequisite: Admission to the Honors Program or consent of instructor.

CLSX 151. Introduction to Greek and Roman Archaeology. 3 Credits. HT H/W
An introduction to the history, methods, and excavation techniques of archaeology, with special emphasis on ancient Greece and Rome. Topics include stratigraphy, chronology, artifact analysis, the role of archaeology in our understanding of Greek and Roman society, and the treatment of archaeology in popular culture. Illustrated throughout with presentations of important archaeological sites of the ancient Mediterranean such as Athens and Pompeii, from the earliest times through late antiquity.

CLSX 168. Ancient Epic Tales. 3 Credits. HL H
This course provides a survey of ancient epic poetry, focusing on literature from the Greek, Roman, and Mediterranean world. All readings will be in English; no knowledge of any ancient languages is required. The works selected will be ancient epics primarily from Greece, Rome and the Mediterranean world (e.g. Epic of Gilgamesh, Homer, Apollonius, Vergil, Ovid, Status) though some ancient epics from other cultures may be used for comparative purposes (e.g. Beowulf, Popol Vuh, Mahabharata). Class discussion and assignments focus on understanding the ancient cultures and their relation to our own, evaluating the arguments of scholars, and creating well-reasoned written and oral arguments about ancient epics.

CLSX 169. Ancient Epic Tales, Honors. 3 Credits. HL H
Honors version of CLSX 168. This course provides a survey of ancient epic poetry, focusing on literature from the Greek, Roman, and Mediterranean world. All readings will be in English; no knowledge of any ancient languages is required.
CLSX 305. Greek and Roman Art. 3 Credits. H/W
An introduction to the history, methods of study, and forms of evidence for Greek and Roman art from Archaic Greece to Late Antiquity (600 B.C.E.-400 C.E.), mainly sculpture, painting, and crafted objects. Emphasized topics include: the diversity of approaches towards the study of ancient artifacts, cross-cultural exchange between the cultures of Greece and Rome, ancient vs. modern definitions of art and artists, patrons and audiences, and current debates about ancient art. Illustrated throughout with presentations of significant works and case studies. Use of the study collection in the Wilcox Classical Museum.

CLSX 310. Greek Rhetoric in Theory and Practice. 3 Credits. H
This course explores the theory and practice of ancient Greek rhetoric, with the aim of developing student's own rhetorical skills and habits. All readings are in translation; no knowledge of ancient Greek is required. Students study rhetoric in such authors as Homer, Demosthenes, Plato, and Lysias and discuss such topics as the role of public speaking in maintaining Greek democracy, the difference between rhetorical skill as a means and an end, the relationship between rhetorical style and civic identity, and the adaptability of rhetoric to various circumstances and audiences. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others.

CLSX 316. Ancient Magic and Witches. 3 Credits. H
This course provides a survey of magic and witchcraft in ancient Greece and Rome and interprets these practices through anthropological theories of magic and witchcraft. Emphasized topics may include magicians, witches, ghosts, spirits, demons, divination, and spells. This course considers issues such as how magic works, how people engage with the divine, the marginalization of magical practitioners, and the difference between magic, witchcraft and religion. All readings will be in English; no knowledge of any ancient languages is required. (Same as REL 316.)

CLSX 320. Roman Oratory in Theory and Practice. 3 Credits. H
This course explores the theory and practice of ancient Roman rhetoric, with the aim of developing student's own rhetorical skills and habits. All readings are in translation; no knowledge of Latin is required. Students will study rhetoric in such authors as Cicero, Quintilian, Caesar, and Seneca and discuss such topics as the role of rhetorical theory in Roman education; oratory as a hallmark of public service during the Republic, and its transition to a pastime in the Imperial age; the ways the Romans connected oratorical style with humor, the body, and gender identity; and the leeway given to speakers in constructing an argument. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others.

CLSX 322. Alexander the Great: Man and Myth. 3 Credits. HT H
This course explores the life, times, and legacy of Alexander the Great (356-323 B.C.E.). It covers the historical context of ancient Greece and Macedon from which Alexander emerged; his engagement with ancient Greek, Egyptian, and Persian cultures; his military campaigns; his aims in creating an empire; and the immediate aftermath of his conquests. In addition, the course considers the role of great men in history and historiographical problems in reconstructing the past. It also explores how the image of Alexander has been transmitted, interpreted, challenged, and reshaped from antiquity to the present. Topics may include: the use of the memory of Alexander by later Greeks and Romans; the medieval Alexander tradition; responses to Alexander in Middle Eastern and Indian thought and literature; the legacy of Alexanders conquests in the age of empires; his transformation in Hollywood; and his contested place in the modern political dispute between Greece and North Macedonia. (Same as HIST 387.)

CLSX 323. Julius Caesar: Man and Myth. 3 Credits. HT H
This course explores the life, times, and legacy of Julius Caesar (c. 100-44 B.C.E.). It covers Caesars early political career, his military campaigns, and his rise to power through civil war, with special attention paid to his aims, political reforms, and the institutions that enabled his rise to power. In addition, it considers the role of great men in history and historiographical problems in reconstructing the past. It also explores how the image of Caesar has been transmitted, interpreted, challenged, and reshaped from antiquity to the present. Topics may include: the impact of Julius Caesar in Rome with the creation of an empire ruled by Caesars; Medieval responses to Caesar as tyrant, king, and emperor; Caesar as a paradigm of populist tyranny from the Renaissance to the present; the legacy of his literary output and the Romantic image of Caesar as a genius; his impact on the modern age of empires; and re-imaginings of Caesar in film, TV, and video games. (Same as HIST 388.)

CLSX 325. Aegean Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaeans, Minoans, and Cycladic islands, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 525 or HA 525. No knowledge of Greek or Latin is required. (Same as HA 325.)

CLSX 326. Greek Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 526 or HA 526. No knowledge of Greek or Latin is required. (Same as HA 326.)

CLSX 327. Roman Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 527 or HA 527. No knowledge of Greek or Latin is required. (Same as HA 327.)

CLSX 330. Greek Culture and Civilization, Honors. 3 Credits. H/W
Honors version of CLSX 230. This course introduces the world of the ancient Greeks, with a focus on Greek cultural beliefs, values, and social structures. Topics covered include: religious beliefs and practices; athletics and competition; oral performance; gender and sexuality; class, status, and slavery. The course surveys a wide variety of sources, including major literary works, inscriptions, legal texts, and personal letters, as well as ancient art and archaeology. No knowledge of Greek is required; all readings will be in English. Prerequisite: Membership in the University Honors Program or consent of instructor.

CLSX 332. Medical Terminology: Greek and Latin Roots. 3 Credits. HL H
A comprehensive study of the Greek and Latin elements in medical terminology. Students will learn word roots and how to combine them, as well as become acquainted with their relationship to mythology and the influence of ancient ideas about health and the body on modern healthcare. This class is useful for anyone going into the health field including management, clinical areas, insurance, and technical fields. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332.

CLSX 340. Roman Culture and Civilization, Honors. 3 Credits. HL H

Honors version of CLSX 240. This course introduces the world of ancient Rome, with a focus on Roman cultural beliefs, values, and social structures. Topics covered include: religious beliefs and practices; politics and empire; games and gladiators; gender and sexuality; class, status, and slavery. The course surveys a wide variety of sources, including literary works, inscriptions, legal texts, and personal letters, as well as ancient art and archaeology. All readings will be in English; no knowledge of any ancient languages is required. Prerequisite: Membership in the University Honors Program or consent of instructor.

CLSX 350. Modern Themes, Ancient Models: ______. 3 Credits. H

The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as HUM 380.)

CLSX 351. Introduction to Greek and Roman Archaeology, Honors. 3 Credits. HT H/W

Honors version of CLSX 151, with the focus towards critical approaches and research. Special attention is paid to recent methodological, theoretical, and ethical debates within the profession of Classical archaeology. Assignments and activities may include position papers on contentious issues of the day, research assignments, and/or field trips to museums and related institutions. Prerequisite: Admission to the Honors Program or consent of instructor.

CLSX 355. Ancient Greece and Rome in Film. 3 Credits. H

This course explores the reception of the cultures of ancient Greece and Rome in film. Students in this course learn about the cultures of ancient Greece and Rome through primary sources, and analyze several films from the 20th and 21st centuries for which these sources are relevant. The course considers the relationship between historical accuracy and artistic license in the films selected for the course, how each film reflects the concerns of the modern cultural context in which it was made, the common visual and thematic elements that link films set in ancient Greece or Rome, and the reuse of elements from Greek and Roman mythology and history in films set in the modern world. No knowledge of Greek or Latin is required.

CLSX 360. Ancient Roots of Modern Politics. 3 Credits. S

This course examines the political thought and practice of Ancient Greece and Rome, and the enduring impact of these cultures upon contemporary political institutions. Students will consider topics such as origins of democracy in Ancient Athens; the Roman Republic as a model for the constitution of the United States; and the causes and results of Rome’s transition from Republic to monarchy. The course will also introduce students to key perspectives in the analysis of ancient and modern politics, for example constitutional theory, political psychology, and source criticism. All readings will be in English; no knowledge of any ancient languages is required. (Same as POLS 360.)

CLSX 365. Ancient Rome, Monuments, and Memory. 3 Credits. H

This course explores the monuments and historical topography of the city of Rome, Italy across the Ancient, Medieval, Renaissance, Baroque, and Modern periods. Focusing on a series of case studies, monuments, and urban spaces such as the Pantheon, the Colosseum, and the imperial forums, this course explores how public spaces change in their usage and meaning over time. The course emphasizes Romans illustrious architects and artists, such as Michelangelo and Bernini, who attempted to modernize the eternal city by drawing on its ancient origins with such endeavors as New St. Peters Basilica. Throughout the course, students are challenged to compare the city of Rome to modern urban environments, and even to Lawrence, Kansas. All readings are in English; no prerequisites required.

CLSX 371. Archaeology of Ancient Israel. 3 Credits. H

Archaeology and art, sites and monuments of ancient Israel from the Neolithic period to Late Roman. Special topics will include the peoples of the region, nomadism and urbanization, the kingdoms of Israel, Second Temple Period, Qumran, Roman Jerusalem, and the creation and development of the synagogue. (Same as JWSH 371.)

CLSX 375. Studies in: ______. 1-3 Credits. H/W

Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor.

CLSX 378. Food and Drink in the Ancient Mediterranean. 3 Credits. H

This course examines the means of production and preparation, as well as the social role, of food and drink in Greek and Roman antiquity. The course will introduce students to different methodologies from anthropology and sociology of food for studying patterns of production and consumption, and class discussions and assignments will ask students to consider how the attitudes to and experience of food and drink in the ancient world differed from our own. All readings will be in English; no knowledge of any ancient languages is required.

CLSX 380. Ancient Greek Athletics and the Olympic Games. 3 Credits. H/W

This course studies ancient Greek athletics and the Olympic games. Students use historical, literary, and archaeological approaches to study how the Greeks celebrated and memorialized their athletes; how athletic prowess was connected to moral and civic virtue; the technologies by which the Greeks measured athletic performance; and the ways fans and spectators responded to competitions. Special emphasis will be given to the development of the Olympic games and their social, political, and religious function in Greek society and in their modern instantiation. All readings are in English; no knowledge of Greek is required.

CLSX 381. Ancient Roman Gladiators and Spectacle. 3 Credits. W

This course studies ancient Roman gladiators and spectacle—public entertainment that included staged beast hunts, mock naval battles, chariot races, and the punishment of criminals. Students use historical, literary, and archaeological approaches to study the development of gladiatorial combat and its reception in later periods. Emphasized topics may include: slavery in ancient Rome, the relationship between politics and spectacle, the architecture and engineering of the Colosseum, the representation of gladiators in modern film and video games, and the intersection of violence and entertainment in ancient Roman and modern American culture. All readings are in English; no knowledge of Latin is required.

CLSX 382. Jerusalem Through the Ages. 3 Credits. H
As a prominent site in the religious and cultural histories of Judaism, Christianity, and Islam, Jerusalem is uniquely situated as one of the world’s most sacred cities. For more than 3,000 years, this city has been a focal point of religious and political activity. Through the critical reading of historical and religious texts, and archaeological data, this course will explore the historical development of Jerusalem as a sacred place in Judaism, Christianity, and Islam. (Same as HIST 382, JWSH 382 and REL 382.)

CLSX 384. Ethics in Greek Tragedy. 3 Credits. HL H
This course provides an introductory survey of theories of morality and uses Greek tragedy as case studies for understanding ethical problems. Students will read passages from ethical theorists alongside plays by Aeschylus, Sophocles, and Euripides, giving particular attention to identifying the ethical dilemmas the characters face, the criteria by which these characters make their decisions, ethical assessment of their decisions by their own standards and by those of ethical theories, and the role of cultural context in understanding the ethical dimensions of the plays. No knowledge of Greek is required.

CLSX 402. War and Society in Greece and Rome. 3 Credits. H/W
This course explores the military history of the ancient world, with a focus on the connections between warfare and political, social, and cultural developments. Through extensive reading, analysis, and discussion of a wide variety of ancient sources (literary, epigraphic, archaeological) and contemporary scholarship, this class will survey both the major developments in warfare in Greece and Rome, while at the same time investigating the relationship of military institutions, technologies, tactics, and strategies to the key political and economic changes, social structures, and value systems of antiquity. Beyond exploring famous and influential campaigns and battles (Persian Wars; Peloponnesian War; rise of Macedonia; Punic Wars; Roman civil wars; barbarian invasions), topics will include: hoplite warfare and the emergence of Sparta and Athens; sea-power, democracy, and imperialism; citizen militia and professionalization in Rome; trauma, triumph, and memorialization; gender roles and ethnic identity. (Same as HIST 402.)

CLSX 480. Classical Museum in Context. 3 Credits. H
This seminar is about the Wilcox Classical Museum, KU's first and oldest museum collection, founded in 1888. It introduces collecting and curation practices of universities during the nineteenth and early twentieth centuries, explores the culture of the reception of classical antiquity in KU's early history from the period of 1880-1910, and provides hands-on experience with objects in the Wilcox Collection. Emphasized topics include: the diversity of approaches in the study and interpretation of ancient artifacts, the controversial history of the usage of plaster casts of Greek and Roman sculptures in museum displays, and the future of the Wilcox Classical Museum. Students learn visual literacy skills, conduct original research on objects in the museum's collection, and become familiar with digital methods in the documentation, cataloguing, and display of museum objects. Prepares students for upper-level classes and graduate work in Greek and Roman Archaeology, Art History, and Museum Studies.

CLSX 496. Honors Essay in Classical Antiquity. 3 Credits. H/W
Individual directed research and preparation of an essay on a topic in Classical literature, culture, or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor.

CLSX 502. The Age of Heroes: Early Greece. 3 Credits. H/W
This course explores the Greek Bronze and Dark Ages and in particular the relationship of the Iliad and the Odyssey to early Greek history. The course is organized around current methods, problems, and debates in the fields of Greek history, archaeology, and Classics. Topics include the rise and fall of the Minoan and Mycenaeans worlds, the historicity of the Trojan War, and social, religious, and political institutions of the Dark Ages. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 502.) Prerequisite: Any CLSX or HIST course.

CLSX 504. Rise of Athens and Sparta. 3 Credits. H/W
This course explores the history of Archaic and Classical Greece, focusing on the rise and fall of the rival states of Sparta and Athens. The course is organized around current methods, problems, and debates in the fields of Greek history and Classics. Topics include the emergence of the Greek polis; Greek colonization; developments in political, religious, and social institutions, including the Spartan constitution and the rise of Athenian democracy; the changing definitions of personal, cultural, and national identities; cultural, political, and economic tensions between rival Greek city-states and neighboring cultures, especially Persia and Macedon. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 504.) Prerequisite: Any CLSX or HIST course.

CLSX 505. Roman Republic. 3 Credits. H
This course investigates the origins, development, and eventual crisis of the Roman Republic, from its foundation in the eighth century BC to Civil War in the first century BC. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include the contexts and causes for the rise of Rome, the growth, development, and eventual collapse of the Roman republican constitution, and the impact of empire on Roman society, culture, religion, economy, and identity. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 506.) Prerequisite: Any CLSX or HIST course.

CLSX 507. Early Roman Empire. 3 Credits. H
This course investigates the establishment and development of the Roman Empire, from the rise of Augustus to the peak of Roman power and prosperity in the second century AD. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include the creation of the imperial system; developments in the role of the emperor and the Roman government; continuity and transformation in society, culture, religion, economy, and identity with the shift from republic to empire; daily life across the empire and in the army. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 507.) Prerequisite: Any CLSX or HIST course.

CLSX 508. Late Roman Empire (284-527). 3 Credits. H
This course investigates the history of the later Roman Empire, from the height of its power in the second century AD to the fall of the Western Roman Empire in the fifth century AD. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include continuity and change in Roman culture, identity, and institutions; the Christianization of the empire; contacts and conflict between Romans and the “barbarians”; political decline and daily life across the empire. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of
contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 508.) Prerequisite: Any CLSX or HIST course.

CLSX 510. Love, Lust, and Laughter in Ancient Literature. 3 Credits. H
This course moves beyond ancient epic and tragedy to introduce students to less familiar genres from Greek and Roman literature. Texts studied may include the romantic novels of Heliodorus and Apuleius; the erotic poetry of Sappho and Catullus; the comedies of Aristophanes and Plautus; the proto-science fiction of Lucian; or the satires of Horace and Persius. Attention will be given to theories, approaches, and questions in contemporary criticism of ancient literature, and assessment will include a final paper or creative project that integrates these perspectives. All readings will be in English; no knowledge of any ancient languages is required. Prerequisite: Any CLSX course.

CLSX 515. Gender and Sexuality in Greek Culture. 3 Credits. H
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as WGSS 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

CLSX 516. Gender and Sexuality in Roman Culture. 3 Credits. HL H
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as WGSS 516.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

CLSX 525. Aegean Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaean, Minoans, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 325 or CLSX 327. No knowledge of Greek or Latin is required. (Same as WGSS 515.)

CLSX 526. Greek Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of the ancient Greek world from the Protopotamian period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. For advanced undergraduates with backgrounds in the humanities; and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 327 or CLSX 326. No knowledge of Greek or Latin is required. (Same as WGSS 515.)

CLSX 538. Pompeii and Herculaneum. 3 Credits. H
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mount Vesuvius. Includes lectures with slides and discussion. (Same as HA 538.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

CLSX 550. Capstone in Classics. 1-3 Credits. H
This capstone seminar synthesizes various aspects in the discipline of Classics by focusing on recent award-winning scholarship or creative work in the field. Specific assignments and additional readings vary from one semester to another and will be stated on the instructor's syllabus. Introductory knowledge of Greek or Latin is required. Prerequisite: 15 hours in CLSX/LAT/GRK at the 200 level or above, or status as a senior major in the department, or permission of the instructor.

CLSX 570. Study Abroad Topics in Greek and Roman Culture: _____ 1-3 Credits. H
This course is designed for the study of special topics in Classics at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

CLSX 575. Readings in: _____ 1-3 Credits.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit if topic varies. Only six hours may count toward the major. Prerequisite: Consent of instructor.

CLSX 577. Topics in the Archaeology and Art of the Ancient Mediterranean: _____ 3 Credits. H
Lecture and discussion course focusing on a theme, medium, region, or period in the archaeology and art of the ancient Near Eastern and classical world. May be repeated for credit if topic varies. Only 6 hours may count toward the major.

CLSX 675. Studies in: _____ 1-3 Credits. H/W
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor.

CLSX 790. Practicum in the Teaching of Classics. 0.5 Credits.
Required of all assistant instructors and teaching assistants in the teaching of Classics courses. May be repeated up to three semester hours credit in total.

**CLSX 899.** Thesis. 1-6 Credits.
Thesis hours. Graded on a satisfactory progress/limited progress/no progress basis.

**Classics Courses**

**GRK 104.** Elementary Ancient Greek. 5 Credits. U F1
The essentials of ancient Greek grammar, with readings.

**GRK 105.** Elementary Ancient Greek, Honors. 5 Credits. U F1
The essentials of ancient Greek grammar, with readings. Prerequisite: Membership in the University Honors Program or permission of instructor.

**GRK 108.** Ancient Greek Readings and Grammar. 5 Credits. U F2
A continuation of Greek 104, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or GRK 105.

**GRK 109.** Ancient Greek Readings and Grammar, Honors. 5 Credits. U F2
A continuation of GRK 105, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or 105; and membership in the University Honors Program or permission of instructor.

**GRK 177.** First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Greek. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**GRK 301.** Philosophy and Oratory. 3 Credits. H/W F3
Systematic grammar review in conjunction with readings selected from Plato, Aristotle and the Attic orators, with attention to issues of interpretation and social and cultural history. Prerequisite: GRK 108 or GRK 109.

**GRK 302.** Drama and Lyric Poetry. 3 Credits. H/W F3
Systematic grammar review in conjunction with readings selected from Aeschylus, Sophocles, Euripides, and the lyric poets, with attention to issues of literary interpretation and cultural history. Prerequisite: GRK 108 or GRK 109.

**GRK 303.** Greek Narrative Prose. 3 Credits. H/W F3
Systematic grammar review in conjunction with readings selected from the historians Herodotus, Thucydides, and Xenophon, as well as from the Greek novels and the New Testament. Attention will be given to issues of interpretation and cultural history. Prerequisite: GRK 108 or GRK 109.

**GRK 310.** Homer's Odyssey. 3 Credits. H/W F4
Selections from Homer's Odyssey, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303.

**GRK 312.** Homer's Iliad. 3 Credits. H/W F4
Selections from Homer's Iliad, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303.

**GRK 315.** Biblical and Imperial Greek. 3 Credits. W
This course surveys the post-classical development of Greek in the Hellenistic and Roman periods, with special attention given to the languages of the Bible. The course will focus on extending linguistic knowledge and developing an understanding of the historical development of Greek through close readings of selections from the Septuagint, New Testament, and Greek authors of the Roman Empire, such as Lucian. We will examine how and why koine ("common") Greek differs from Classical Greek, and we will interpret these texts in light of the contact and conflict between different political, linguistic, ethnic, and religious communities that characterized the Hellenistic and Roman worlds. This course will be indispensable both for those interested in the history and culture of Greece and Rome beyond the fifth century B.C., and for those interested in reading the Bible and early Christian writers. Prerequisite: GRK 108 or GRK 109.

**GRK 375.** Readings in: ______. 1-3 Credits. H/W F3
Readings in classical Greek texts. May be repeated for up to twelve hours. Prerequisite: GRK 108 or the equivalent.

**GRK 496.** Honors Essay in Greek. 3 Credits. H/W FP
Individual directed research and preparation of an essay on a topic in Greek literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor.

**GRK 508.** Early Greek Philosophy. 3 Credits. H/W FP
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers with some attention paid to the Sophists and the Hippocratic Corpus. (Same as PHIL 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor.

**GRK 701.** Archaic Poetry. 3 Credits.
Close reading of texts from Homer, Hesiod, Pindar, the lyric poets.

**GRK 702.** Drama. 3 Credits.
Close reading of texts from Aeschylus, Sophocles, Euripides, Aristophanes.

**GRK 703.** History and Oratory. 3 Credits.
Close reading of texts from Herodotus, Thucydides, Xenophon, Attic orators.

**GRK 704.** Philosophy. 3 Credits.
Close reading of texts from Plato, Aristotle, the Pre-Socratics.

**GRK 705.** Readings in Classical Greek. 3 Credits.
Extensive reading in a variety of Greek authors.

**GRK 790.** Practicum in the Teaching of Greek. 0.5 Credits.
Required of all assistant instructors and teaching assistants in the teaching of Greek. May be repeated up to three semester hours credit in total.

**GRK 798.** Studies in: ______. 1-3 Credits.
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Greek or equivalent.

**GRK 899.** Thesis. 1-6 Credits.
Thesis credit. Graded on a satisfactory progress/limited progress/no progress basis.

**Classics Courses**

**LAT 104.** Elementary Latin I. 5 Credits. U F1
An introduction to the Latin language.

**LAT 105.** Elementary Latin I, Honors. 5 Credits. U F1
Integrates study of elementary Latin with study of Roman culture. Prerequisite: Admission to Honors Program or permission of department.

**LAT 108.** Elementary Latin II. 5 Credits. U F2
Latin grammar concluded with selected readings. Prerequisite: LAT 104 or LAT 105, or permission of department.

**LAT 109.** Elementary Latin II, Honors. 5 Credits. U F2
Latin grammar concluded with selected readings, integrated with study of Roman culture. Prerequisite: LAT 105 or permission of department.

LAT 112. Readings in Latin Literature. 3 Credits. U F3
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Attention to literary history and historical context. Prerequisite: LAT 108 or LAT 109, or permission of department.

LAT 113. Readings in Latin Literature, Honors. 3 Credits. U F3
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Exercises in literary analysis and/or prose composition. Prerequisite: LAT 109 or permission of department.

LAT 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

LAT 300. Intermediate Latin Composition. 3 Credits. H/W FP
Composition in Latin prose, stressing the basic principles of Latin syntax and style. Recommended for majors and minors. Prerequisite: LAT 112 or LAT 113 or permission of the department.

LAT 301. Prose Fiction and Epistolography. 3 Credits. H/W FP
Selected readings from such authors as Cicero, Seneca, Petronius, Pliny, and Apuleius, with attention to literary interpretation and historical context. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 302. Hexameter Poetry. 3 Credits. H/W FP
Selected readings from such authors as Lucretius, Vergil, Ovid, and the satirists, with attention to literary interpretation and historical context. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 303. Roman Historians. 3 Credits. H/W FP
Selected readings from such authors as Caesar, Livy, and Tacitus, with attention to issues in Roman history and historiography. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 304. Lyric and Elegiac Poetry. 3 Credits. H/W FP
Selected readings from such authors as Catullus, Horace, Tibullus, Propertius, Sulpicia, Ovid, and Martial, with attention to literary interpretation and historical context. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 305. Roman Drama. 3 Credits. H/W FP
Selected readings from such authors as Plautus, Terence, and Seneca, with attention to literary interpretation, theater history, and performance. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 310. Vergil's Aeneid. 3 Credits. H/W
In this course students read selections from Vergil's Aeneid through various interpretive lenses such as literary history (including its relationship to epic and tragedy), socio-cultural and political context, and reception. Attention will be paid throughout to Vergil's poetic style, syntax, and lexicon. Prerequisite: LAT 112 or LAT 113 or permission of department.

LAT 375. Readings in: ______. 1-3 Credits. H/W FP
Readings in Latin literature, selected in consultation with the instructor. May be repeated for up to twelve hours. Prerequisite: LAT 112 or LAT 113, or consent of instructor.

LAT 496. Honors Essay in Latin. 3 Credits. H/W FP
Individual directed research and preparation of an essay on a topic in Latin literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor.

LAT 700. Advanced Latin Prose Composition. 3 Credits.
An examination of the grammar, syntax, and style of the Latin language through exercises in composition. Prerequisite: Consent of instructor.

LAT 701. Hexameter Poetry. 3 Credits.
Close reading of texts from authors such as Lucretius, Vergil, Ovid, Statius. Prerequisite: Consent of instructor.

LAT 702. Lyric and Elegy Poetry. 3 Credits.
Close reading of texts from authors such as Catullus, Horace, Propertius, Tibullus, Sulpicia, Ovid, Martial. Prerequisite: Consent of instructor.

LAT 703. History, Oratory, Philosophy. 3 Credits.
Close reading of texts from authors such as Cicero, Livy, Seneca, Tacitus, Augustine. Prerequisite: Consent of instructor.

LAT 704. Drama, Satire, and Novel. 3 Credits.
Close reading of texts from Plautus, Terence, Horace, Petronius, Seneca, Juvenal, Apuleius.

LAT 705. Readings in Classical Latin. 3 Credits.
Extensive reading in a variety of Latin authors.

LAT 790. Practicum in the Teaching of Latin. 0.5 Credits.
Required of all assistant instructors and teaching assistants in the teaching of Latin. May be repeated up to three semester hours credit in total.

LAT 798. Studies in: ______. 1-3 Credits.
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Latin or equivalent.

LAT 899. Thesis. 1-6 Credits.
Thesis credit. Graded on a satisfactory progress/limited progress/no progress basis.

Communication Studies Courses

COMS 104. Introduction to Communication Studies. 3 Credits. H
Survey of the major areas of the Communication Studies field. Provides an overview of communication theory and research methods, and introduces key topics, approaches, and applications in core areas such as rhetoric, organizational communication, interpersonal communication, intercultural communication, and communication technology.

COMS 130. Speaker-Audience Communication. 3 Credits. U
Study of rhetorical theory and its application to the preparation, presentation, and criticism of oral discourse in audience situations. Special consideration of listening behavior and of the ethical conduct of speech in a free society. This course fulfills the College argument and reason requirement.

COMS 131. Speaker-Audience Communication, Honors. 3 Credits. U
The study of rhetorical theory and its application to the preparation, presentation, and criticism of oral discourse in audience situations. Special consideration of listening behavior and of the ethical conduct of speech in a free society. This course fulfills the College argument and reason requirement. This is an honors section of COMS 130 open only to students in the Honors Program.

COMS 132. Speaker-Audience Communication for the Professional Schools. 3 Credits. H
This course focuses on the study of oral communication: the application, preparation, presentation and criticism of messages appropriate in the
business or organizational setting. Special consideration is given to speaker confidence, working in teams, listening behaviors and application of communication theories to the audience and rhetorical situation. Prerequisite: Open only to students in the professional schools.

COMS 133. Speaker-Audience Communication for the Professional Schools, Honors. 3 Credits. H
This course focuses on the study of oral communication and the application, preparation, presentation and criticism of messages appropriate in the business or organizational setting. Special consideration is given to speaker confidence, working in teams, listening behaviors and application of communication theories to the audience and rhetorical situation. Prerequisite: Open only to students in the professional schools who are members of the University Honors Program.

COMS 177. First Year Seminar: _____ . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Communication Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

COMS 207. Introduction to Political Communication. 3 Credits. S
This class addresses the different ways in which the three main players in political communication processes (leaders, the media and citizens) affect the political behavior, attitudes or cognitions of individuals; or have outcomes that influence public policy at different levels. The contents of the course are organized into three areas: Foundations of political communication, central questions and theories in political communication, and political campaigning and advertising. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 210. Introduction to Organizational and Professional Communication. 3 Credits. S
Introduces foundational concepts in organizational communication, focusing on topics such as superior-subordinate relationships, information- and feedback-seeking, relationships with stakeholders, and dealing with organizational change. The course emphasizes individual communication practices and responsibilities that contribute to organizational outcomes and personal success in organizations. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 230. Fundamentals of Debate. 3 Credits. U
Introduction to the principles of debating. Emphasis on debating techniques, analysis of the question, methods of using evidence, refutation, and brief making. This course fulfills the College argument and reason requirement.

COMS 231. Practicum in Forensics. 1 Credits. U
For students selected by faculty supervisor for work on university debate squad. Students to enroll at time of their selection. Recurring enrollments permitted.

COMS 232. Introduction to Rhetoric. 3 Credits. HR H
Historical survey of theories of communication and persuasion, the people who produced them, and the philosophical assumptions upon which they rest. Beginning with the Greeks, especially Plato and Aristotle, and ending with selections from Kenneth Burke and other contemporary figures, the course focuses on changing concepts of rhetoric throughout a time span of some 2000 years. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 235. Introduction to Rhetoric and Social Influence. 3 Credits. HL H
This course examines in detail the texts of speeches and essays on controversial issues in order to illustrate the varied forms of rhetorical action and the diverse modes of analysis and evaluation that can be applied to them. Examples are drawn from the rhetorical literature of contemporary U.S. speakers and prose writers. Prerequisite: COMS 130, or COMS 230.

COMS 236. Introduction to Rhetoric and Social Influence, Honors. 3 Credits. H
This course examines in detail the texts of speeches and essays on controversial issues in order to illustrate the varied forms of rhetorical action and the diverse modes of analysis and evaluation that can be applied to them. Examples are drawn from the rhetorical literature of contemporary U.S. speakers and prose writers. Prerequisite: COMS 130 or COMS 230. Open only to students admitted to the University Honors Program, or by consent of the instructor.

COMS 238. Cases in Persuasion. 3 Credits. H
An exploration of basic principles that explain the effect and effectiveness of the arts of persuasion currently practiced in American society. Class discussions of incidents leading to the discovery of principles and theories that explain them. Continuing emphasis on issues concerning the ethical character of persuasion in contemporary life. Prerequisite: COMS 130 or COMS 230.

COMS 244. Introduction to Interpersonal Communication Theory. 3 Credits. SI S
Examines basic theoretical perspectives and research on verbal and nonverbal communication elements affecting communication between individuals in a variety of contexts. Topics include communication competence, developmental aspects of interpersonal communication, and interpersonal influence. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 246. Introduction to Intercultural Communication. 3 Credits. S
This course attempts to provide an understanding of communication as it affects culture and as it is affected by culture. Special emphasis will be placed on the principle of similarity and differences as it relates to the roles of verbal and non-verbal symbols, codes, and cues, stereotypes, prejudices and value and thought patterning systems between and among cultures. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 310. Advanced Organizational and Professional Communication. 3 Credits. SC S
This course provides a foundation for the study of communication in organizational contexts. It introduces students to various organizational theories including classical, human relations, systems, and cultural approaches and examines the role of communication in each. Information flow, communication climate, communication networks, work relationships and managerial communication are discussed as well as organizational symbolism, conflict resolution, rituals and ethics. The course is designed to heighten students' awareness of the role of communication in the organizing process and to develop their abilities to diagnose and prevent communication-related problems. Prerequisite: COMS 130.

COMS 320. Communication on the Internet. 3 Credits. S
This course introduces social and communication issues in the context of online interaction. Surveys a range of social internet technologies (e.g., newsgroups, chat, MUDs, etc.). Focus is on the interpersonal topics, including the establishment and maintenance of individual and cultural identities, personal relationships, the emergence of online communities, power and conflict in online groups, language use in online contexts, and how online groups are used to enhance or alter civic and global cultures.

COMS 322. Audience Centered Public Speaking in the Workplace. 3 Credits. S
In this course, students develop and present their ideas by applying communication theories to organizational audiences in various
presentation situations. Specifically, this course focuses on presentation development, preparation, presentation and critique of messages appropriate in the business or organization setting. Special attention is given to speaking with confidence, presenting and working effectively in teams, reflecting and improving on presentations skills, and listening and speaking ethically in an increasingly diverse work world. Prerequisite: Not intended for Communication Studies Majors. Does not count toward Communication Studies Major or Minor requirements. Must have completed at least 15 credit hours at KU to enroll.

**COMS 330. Effective Business Communication. 3 Credits. S**

The purpose of this course is to develop the student's written, spoken and electronically mediated business communication skills to prepare to enter a career field. Focus is placed on job search preparation including the development of cover letters, resumes, online applications, and interviewing skills. Students are also engaged with business communication by expanding their current writing skills to meet the needs of a business, exposure to common business writing situations, and developing professional presentations. Prerequisite: COMS 130 or COMS 230.

**COMS 331. Persuasive Speaking. 3 Credits. H**

Guided experiences in the preparation and presentation of discourse intended to influence outcomes of human interactions in various speaker-audience situations, including television. Special emphasis on speech styles in influencing thought, attitudes, and behavior. Prerequisite: COMS 130 or COMS 230.

**COMS 335. Mass Media and Politics. 3 Credits. H**

The primary goal of this course is to critically examine the role of mass media in U.S. politics. Students learn how information makes it into news coverage, as well as how media content affects individuals, political campaigns, and governing decisions. The course covers media effects on theories, news bias and polarization, political entertainment, and other topics. Although the primary focus of the course is politics, students interested in public relations and strategic communication also benefit from learning about U.S. journalism. By the end of the semester, students will be able to critically evaluate political and media systems in the U.S. (Same as POLS 521.) Prerequisite: COMS 130.

**COMS 342. Problem-Solving in Teams and Groups. 3 Credits. S**

This course introduces basic concepts important to leading and/or participating in problem-solving work teams. Problem identification and analysis and leadership are emphasized and practiced. Teamwork variables are discussed and promoted. Lecture, demonstrations, exercises in class are structure for students to analyze groups outside of class. Prerequisite: COMS 130 or COMS 230.

**COMS 350. Communication in a Diverse World. 3 Credits. S**

In a diverse world, communication plays a central role in both creating and sustaining cultural norms, values, and beliefs. However, diversity is not universally valued, and difference leads to unequal institutions, systems, and policies, including discrimination, oppression, and ethnocentrism. In this course, students will reflect on current cultural diversity topics and critically interrogate communication's role in structuring identities and difference across socio-cultural contexts.

**COMS 355. Introduction to Behavioral Research Methods in Communication. 3 Credits. S**

An introduction to the nature of theory and theory building in the study of human communication. Research methods include experimentation, survey, content analysis, and field description. An introduction to statistics and statistical tests is included as well. Prerequisite: MATH 101 and admission to the Communication Studies major or consent of instructor.

**COMS 405. Speech Writing. 3 Credits. H**

Emphasis is on actual practice in preparing speech manuscripts for oneself and others. Model speeches are examined to better understand language, evidence, and stylistic choices available to speech writers. The ethical dimensions of writing for others in corporate and political positions are stressed. Students are required to prepare a variety of speeches and analyses of others' speeches. Prerequisite: COMS 130, COMS 150, or COMS 230.

**COMS 410. Micro-Level Organizational Communication. 3 Credits. S**

An examination of dyadic level communication in organizations, with emphasis on contexts of superior-subordinate and peer communication. The course also addresses contexts of organizational entry and exit, perception and judgment, information seeking, feedback, and organizational attachment. This course also explores social identities (gender, race, social class, sexuality, ability, and age) and the way they are relevant to communication in contemporary workplaces. Prerequisite: COMS 310.

**COMS 415. Communication, Leadership, and Conflict Management. 3 Credits. S**

This course introduces students to theories of conflict management from a variety of academic perspectives and the role leadership plays in managing conflict across multiple contexts. Students will learn how to successfully assess and command situations and effectively resolve interpersonal, organizational, and systemic conflict while doing the work of leadership. (Same as LDST 420.)

**COMS 420. Communication, Technology and Globalization. 3 Credits. H**

Examines the social, cultural, and economic challenges and opportunities advanced communication technologies and globalization pose to processes such as democratic deliberation, urban governance, and environmental sustainability. Prerequisite: COMS 130.

**COMS 425. Communication and the American Presidency. 3 Credits. H**

Examination of the ways in which American presidents communicate with the American people and how such communication influences the public. Emphasis is on a number of approaches to better understanding presidential communication, including rhetorical, historical, and content analysis. Prerequisite: COMS 130 or COMS 230.

**COMS 440. Communication and Gender. 3 Credits. S**

Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as WGSS 440.) Prerequisite: COMS 130, or COMS 230.

**COMS 447. Intercultural Communication: The Afro-American. 3 Credits. H/W**

An examination of the barriers to effective communication between black Americans and non-black Americans. (Same as AAAS 420.) Prerequisite: COMS 130 or COMS 230.

**COMS 450. Ethical Issues in Political Communication. 3 Credits. H**

Application of ethical standards to the evaluation of political communication. Examination of value questions related to advocacy in modern society (propaganda, demagoguery, credibility). Analysis of First Amendment rights and other issues pertaining to censorship and freedom of speech (defamation, dissent, incitement, public morals, privacy). Prerequisite: COMS 130 or COMS 230.

**COMS 454. Rhetoric of Popular Culture. 3 Credits. H**
A study of the social and cultural importance of popular culture. Emphasis is on using rhetorical analysis and a number of important theoretical perspectives to help examine popular culture's often unnoticed influence. Prerequisite: COMS 130 or COMS 230.

COMS 460. Undergraduate Seminar in: ______. 1-3 Credits. S
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two or three hour enrollments only.)

COMS 496. Capstone in: ______. 3 Credits. S
In the capstone course students synthesize and apply knowledge and skills gained through the major. Capstone coursework requires students to integrate practices and theories learned in their areas of concentration. Topics within each concentration change as needs and resources develop. Prerequisite: Senior standing, COMS 130 or COMS 131, and completion of COMS 235 and COMS 356.

COMS 498. Honors Thesis. 2-6 Credits. H
(Six hours maximum credit, which may be distributed through two semesters.) Study should include readings directed toward original research, i.e., an intensive investigation of a specific problem in this field. Prerequisite: Consent of the Department Honors Committee.

COMS 499. Directed Study in Communication Studies. 1-3 Credits. H
(A maximum of six hours of credit may be counted, with no more than four in a single area of study.) Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading, or special research, individual reports and conferences. (Distribution credit given for two-three hours only.) Prerequisite: At least seven hours of credit in the department and consent of instructor.

COMS 503. Post-Soviet Communication. 3 Credits. H
This course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as SLAV 503).

COMS 530. Internship in Communication Studies. 1-3 Credits. S
Students do communication-centered fieldwork in an organization related to their career goals. Criteria for the organizations and work assignments suitable for internship credit are in an information brochure available at the COMS Department office and website. The internship plan is developed with field supervisor and internship faculty adviser. Reports and meetings are required. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of instructor, admission to COMS major.

COMS 535. American Public Address, Puritans to 1900. 3 Credits. H
A history of American public address from the Puritans to about 1900. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235.

COMS 536. American Public Address, 1900-Present. 3 Credits. H
A history of American public address from 1900 to the present. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235.

COMS 537. Communication in Conflict Resolution. 3 Credits. S
An examination of conflict situations and the manner in which communication can serve as a vehicle for their intensification or resolution. The focus is on the theory of games as it applies to conflict within interpersonal situations; implications will be drawn for larger social systems. Prerequisite: COMS 130 or COMS 230.

COMS 538. Persuasion Theory and Research. 3 Credits. S
This course focuses on the social scientific study of persuasion. Traditional theories of attitude change and persuasion research are studied along with techniques of measuring attitudes. Attention is also given to the attitude-behavior relationship and the production of compliance-gaining messages. Prerequisite: COMS 130 or COMS 230.

COMS 539. Argumentation. 3 Credits. S
Analysis of the theory and techniques of argumentation in historical and contemporary writings, with special emphasis on the works of Aristotle, John Stuart Mill, Richard Whately, and Stephen Toulmin. Application of argumentation theory to political and legal discourse. Opportunity for student performances in the preparation and criticism of argument. Prerequisite: Four hours in the department.

COMS 544. Advanced Interpersonal Communication: Theories and Research. 3 Credits. S
Intensive exploration of contemporary theories and research in the field of interpersonal communication; emphasis on an array of theoretical models and research exemplars; comparative analysis of major theoretical and research paradigms. Prerequisite: COMS 244 or instructor consent.

COMS 547. Communication and Culture. 3 Credits. S
A study of the systematic relationship between communication and culture. Emphasis is on culture as a variable in communicative situations: cultural aspects of attitude and cognition, language interchange, cultural differences in extra-verbal behavior, interaction between oral traditions and mass media. Prerequisite: COMS 130, COMS 230, or an introduction course in anthropology.

COMS 548. Advanced Interviewing Skills and Strategies. 3 Credits. S
Comprehensive study of communication processes in dyadic, face-to-face situations commonly encountered in organizations and professional environments. Intensive analysis of simulated and real-life interviews. Prerequisite: COMS 130 and COMS 330.

COMS 552. The Rhetoric of Women's Rights. 3 Credits. H
An analysis of the themes and rhetorical strategies of the women's rights movement in America. The course will view the struggle for women's rights from a historical perspective and will conclude with contemporary issues concerning the role of women in society. (Same as WGSS 552.) Prerequisite: COMS 130 or COMS 230.

COMS 555. Family Communication. 3 Credits. S
An examination of trends and theory related to the scientific study of the family, with a focus on issues related to family interaction, functioning, relationships, and communication. Research and theories from communication, sociological, and psychological perspectives are employed to examine topics such as family violence, mental health problems, marital satisfaction, divorce, courtship, and the impact of the family on its children (and vice versa). Prerequisite: COMS 130 or COMS 230.

COMS 557. East Asian Communication. 3 Credits. S
Explores the major communication theories and research in the East Asian cultural contexts by focusing on the Chinese, Japanese, and Korean cultures. Examines, from a broader perspective, certain cultural values (e.g. harmony, hierarchy, conservatism, and modernism) upheld in East Asian cultures and their influences on people's communicative
behaviors in an age of globalization. Students explore issues of history, identity, verbal and non-verbal symbols, stereotypes, prejudice, values and thought patterning systems in the East Asian cultural context from a communicative perspective. This course is designed as a bridge course and meets with a graduate level section of the same title. Prerequisite: COMS 130.

COMS 560. Seminar in: ______. 3 Credits. S
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (May be repeated for credit if content varies).

COMS 590. Nonverbal Communication. 3 Credits. S
Examination of non-linguistic behavior in human communication, including proxemics (spacing), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as PSYC 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211.

COMS 607. Political Campaigns. 3 Credits. H
This course will examine the communication involved in political campaigns. Students will be exposed to theories and ideas related to campaigns and will apply this knowledge to current political activity. Although the primary focus of the course is politics, students interested in public relations and strategic communication also benefit from learning and practicing media relations strategies. The mediated nature of modern political communication, as well as the communication strategies of campaigns and journalists, will be examined in a semester-long simulated campaign. By the end of the semester, students will become more informed users and consumers of political campaign messages. (Same as POLS 520.) Prerequisite: COMS 130.

COMS 620. Communication and New Technology. 3 Credits. S
This course explores the impact of new communication technology on individuals and groups in various contexts. Topics include: The development of computer-mediated communication, social and psychological impacts of new communication technology, the evolution of telework and advances in interactive telecommunications.

COMS 639. Legal Communication. 3 Credits. S
An analysis of how communication principles and theories operate within the context of the legal system. Topics covered will include the lawyer/client interview, depositions and pre-trial discovery, settlement negotiation, jury selection, opening and closing statements, and witness testimony. Prerequisite: COMS 130.

COMS 647. Issues in Intercultural Communication. 3 Credits. S
Examination of the processes and factors affecting communication in an intercultural context, and of methods of training for intercultural communication roles. Prerequisite: COMS 547 and an introductory course in anthropology, or consent of instructor.

COMS 656. Mass Media: Social Science Applications. 3 Credits. S
This course introduces students to the major theories of and prominent research in mass communication. The aim is to stimulate critical thinking about the content and effects of mass communication, develop critical consumption skills, and enhance awareness of public policy issues relating to the media. Students are required to read a variety of chapters and articles on mass communication, promoting independent investigation into specific areas of interest. This course is a bridge course and meets with a graduate level section of the same title. Prerequisite: COMS 356.

COMS 667. Interpersonal Communication in Multinational Organizations. 3 Credits.
A study of interpersonal communication in management and professional development in intercultural situations. Focus on preparation of the global manager or professional in the organizational environment. Special attention to the problems and challenges of intercultural interactions in the context of multinational organizations.

COMS 741. Special Topics in Communication Studies: ______. 2-3 Credits.
Examination of special topics in Communication Studies. Prerequisite: Instructor consent.

COMS 787. Multidisciplinary Perspectives on Gerontology and Aging. 3 Credits.
A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 787, PSYC 787, and SOC 787.)

COMS 810. Organizational Communication: Theory and Research. 3 Credits.
This course examines the theoretical and philosophical underpinnings of organizational communication research. Course topics cover variable analytic traditions and systems theory, as well as cultural, critical, and various interpretive approaches to understanding communication in organizational contexts.

COMS 835. Impression Formation and Interpersonal Behavior. 3 Credits.
Intensive investigation of the processes involved in impression formation and of the effects of established impressions upon interpersonal communication. (Same as PSYC 845.) Prerequisite: COMS 535 or PSYC 670.

COMS 844. Seminar in Interpersonal Communication. 3 Credits.
This class will address current theory and research in interpersonal communication. Issues addressed may include verbal or nonverbal communication in families, close relationships, initial interactions, and the like.

COMS 846. Communication and Aging. 3 Credits.
Examination of the interrelationship between communication and the aging process. The course will include current research and theory on such topics as intergenerational communication, language and age identity, age-stereotyping and communication, mass media and aging, age and health communication, and others of current interest in the field.

COMS 851. Communication Research: Historical and Descriptive. 3 Credits.
An introduction to types of historical and descriptive research in human communication. Library resources and methods of research will be covered. Emphasis will be placed upon preparing a research prospectus and upon writing the research report.

COMS 852. Communication Research: Behavioral and Social Science. 3 Credits.
An introduction to the process of research in communication studies, including consideration of basic principles in research design, methods of observation and measurement, and the application of appropriate statistical techniques.

COMS 855. Qualitative Research Methods in Communication Studies. 3 Credits.
Study of strategies for describing communication behavior in particular contexts, emphasizing ethnography and specific observational and interview data gathering and analysis methods. Prerequisite: COMS 755 or equivalent.

COMS 856. Communication Research: Quantitative Analysis. 3 Credits.
An intermediate overview of statistical techniques commonly used in communication research. Content will include a review of univariate statistical tests such as t-test, correlation, chi-square, and other nonparametric techniques of data analysis. Additionally, factorial analysis of variance, multiple regression, and factor analysis will be covered, along with the application of appropriate statistical techniques. Prerequisite: An introductory course in statistics.

COMS 859. Proseminar in Communication Studies. 3 Credits.
An overview and integration of communication studies based upon an examination of selected basic writings in the discipline.

COMS 898. Investigation and Conference (For Master's Candidates). 1-8 Credits.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science or the teaching of speech and drama.

COMS 899. Master's Thesis. 1-6 Credits.
Thesis Hours. Graded on a satisfactory progress/limited progress/no progress basis.

COMS 907. Seminar in Political Communication. 3 Credits.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, communication strategies in Congressional and bureaucratic decision-making, the rhetorical presidency, the dissemination of political information, political narrative, and political campaigns.

COMS 910. Organizing Identity, Identification, and Stigma. 3 Credits.
Students who take this course will: 1) deepen their knowledge about communicating with diverse populations, 2) enhance their understanding of gender, race, social class, sexuality, ability, and age, and 3) apply and advance their critical thinking, research, analysis, and writing skills. This course explores ideas and implications about identity, identification, and stigma within organized contexts like school, work, and nonprofit organizations. This seminar will focus on theoretical and practical issues relevant to identity and communication in contemporary organizations. Whether we realize it or not, we spend the majority of our lives in organizations like educational institutions and the workforce where we are continually interacting with diverse groups of people. Yet, many identities are stigmatized in organizational settings and those individuals often experience ostracism, stereotyping, and marginalization. The purpose of this course is to explore the power of communication to construct, reproduce, and transform social identities for ourselves and for others, within organizational contexts and acts of organizing.

COMS 920. Introduction to Teaching Oral Communication. 3 Credits.
This seminar prepares new graduate teaching assistants for their first teaching experience. Students will develop course materials including lectures, discussion prompts, assignments, exams based on pedagogical best practices. Students will apply theoretical concepts related to teaching, learning and assessment, and apply those theories to their own classrooms.

COMS 930. Seminar in Speech: _____ 1-4 Credits.

Special problems in speech.

COMS 932. Theories of Rhetoric: Classical. 3 Credits.
An intensive study of the rhetorical theories of classical writers from 466 B.C. to the decline of Roman oratory. Principal emphasis will be on Isocrates, Plato, Aristotle, Quintilian, Cicero, and Longinus.

COMS 933. Theories of Rhetoric: Neo-Classical. 2-3 Credits.
A study of the development of rhetorical theory from 325 A.D. to the twentieth century. Notable departures from the classical tradition will be examined. Special concentration on the writings of Augustine and the tradition of medieval preaching. Alcuin, Ramus, Bacon, Campbell, Whately, Blair, John Quincy Adams, and the elocutionary movement.

COMS 936. Seminar in Language and Discourse. 3 Credits.
This seminar uses interdisciplinary readings to examine central theoretical questions regarding language and communication. The course moves from considering major theoretical positions to current research in communication on discourse. Methodological issues in the study of language and discourse are also addressed.

COMS 939. Seminar in Argumentation. 2-3 Credits.
Examination of special problems in argumentation, with emphasis on the relationship of systems of argumentation to their philosophic presuppositions. Discussion of the writings of Toulmin, Natason, Johnstone, Perelman, Dewey. Prerequisite: COMS 539 or equivalent.

COMS 945. Seminar in Social Support. 3 Credits.
This course is a survey of the many disciplines of the fundamental form of communication known as social or emotional support or comforting. Emphasizes include message-, receiver-, and interactionally-oriented approaches, as well as support contexts, dilemmas, structures, features, and positive effects on physical and mental health.

COMS 946. Seminar in Communication and Intergroup Relations. 3 Credits.
Conceptual and theoretical frameworks for exploring and understanding relations between individuals from different societal groups (e.g., cultural/ethnic, gender, age). Focus on issues of identity, power relations as manifested in interpersonal, mass media, and organizational contexts. The course will include methodological and applied implications for studying different groups, both within the USA and around the world.

COMS 948. Seminar in Organizational Communication. 2-3 Credits.
Analysis of speech communication functions in the organizational structures of business, industry, labor, military, education, government, and professional agencies. Development of conceptual schemes for conducting research and training programs on speech systems which characterize the operation of organized groups.

COMS 951. Seminar in Movement Theory and Genre Criticism. 3 Credits.
This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on social movements and rhetorical genres. It will review existing theory on these topics, develop a methodological approach to both forms of critical analysis, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor.

COMS 952. Seminar in Mythic and Narrative Approaches to Rhetorical Criticism. 3 Credits.
This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on narrative rhetoric, with a special emphasis on myth as a type of narrative. It will review existing theory on these topics, consider a number of alternative methodological
approaches, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor.

**COMS 953. Seminar in Organizational Rhetoric. 3 Credits.**
This course focuses on theoretical and methodological materials related to the use of rhetoric in an organizational setting. It will review existing theory and methodological development on this topic, paying special attention to the distinction between rhetoric used within an organization and rhetoric focused on audiences external to the organization. Multiple case-studies will be considered to illuminate the functioning of both internal and external organizational rhetoric. Prerequisite: COMS 755 or consent of instructor.

**COMS 955. Seminar in Rhetorical Criticism. 3 Credits.**
A study of contemporary and historical writings on rhetorical criticism. Emphasis is placed upon the development of critical methodology for future research and writing. Prerequisite: COMS 755.

**COMS 958. Comparative Theories of Speech Communication. 3 Credits.**
A descriptive and comparative analysis of theories of communication applicable to speech behavior. Prerequisite: COMS 859 or equivalent.

**COMS 959. Theories of Rhetoric: Contemporary. 3 Credits.**
A study of the writings on rhetorical theory in the twentieth century. Principal emphasis will be on the psychological treatment of rhetoric. I.A. Richards and Kenneth Burke, and the relationship in the twentieth century between rhetoric and dialectic, rhetoric and poetic. Prerequisite: COMS 859 or equivalent.

**COMS 997. Research in: _____, 1-6 Credits.**
Supervised research under the direction of a faculty member on a topic of mutual interest to the faculty and graduate student.

**COMS 998. Investigation and Conference (For Doctoral Candidates). 1-8 Credits.**
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science or the teaching of speech and drama.

**COMS 999. Doctoral Dissertation. 1-12 Credits.**
Dissertation Hours. Graded on a satisfactory progress/limited progress/no progress basis.

**Computational Biology Courses**

**BINF 701. Computational Biology I. 5 Credits.**
First semester of a two-semester course in bioinformatics and computational biology. Topics include basic concepts of bioinformatics and molecular modeling, bioinformatics databases, computational tools and modeling methods, protein sequence and structure alignment, conformational analysis, secondary structure determination, tertiary structure modeling (homology, threading, ab initio, protein folding and dynamics), networks, data mining and machine learning, as well as student presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Students will also learn responsible scholarship, including allocation of credit, treatment of data, scientific misconduct, collaborative research, and mentor/trainee responsibilities. Prerequisite: College introductory biochemistry (no requirement for specific courses), math, and computer courses or concurrent enrollment in such courses and consent of instructor.

**BINF 702. Computational Biology II. 5 Credits.**
Second semester of a two-semester course in bioinformatics and computational biology. Topics include protein quaternary structure modeling (protein-protein/DNA/small ligand docking, binding, computer-aided drug design), protein structure-function relationships, modeling of genome-wide protein interaction networks based on structure, systems biology, mathematical and computational modeling of complex systems, synthetic biology and dynamics of chemical reaction networks as well as student presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Students will also learn responsible scholarship, including allocation of credit, treatment of data, scientific misconduct, collaborative research, and mentor/trainee responsibilities. Prerequisite: BINF 701.

**BINF 703. Advanced Computational Biology I. 5 Credits.**
This is the first semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 701 and BINF 702, or consent of instructor.

**BINF 704. Advanced Computational Biology II. 5 Credits.**
This is the second semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 703.

**BINF 709. Topics in: _____, 1-3 Credits.**
Advanced courses on special topics in Bioinformatics, given as need arises, including lectures, discussions, readings, or laboratory. Students may select sections according to their special interests.

**BINF 999. Doctoral Dissertation. 1-12 Credits.**
Original research that is to be incorporated into a PhD dissertation.

**East Asian Languages & Cultures Courses**

**CHIN 100. Elementary Conversational Chinese I. 3 Credits.**
Three hours of class per week plus outside use of recorded text materials. Basic spoken language instruction intended primarily for beginners planning travel or work in China and Taiwan. Introduction to basic written characters. Does not fulfill College of Liberal Arts and Sciences foreign language distribution requirements or department major and minor requirements.

**CHIN 101. Elementary Conversational Chinese II. 3 Credits.**
Continuation of CHIN 100. Prerequisite: CHIN 100 or equivalent.

**CHIN 102. Beginning Chinese I. 4 Credits.**
Taught mainly in the summer, this course covers about 75% of the material in CHIN 104, upon which this course is modeled.

**CHIN 104. Elementary Chinese I. 5 Credits.**
Three hours of lecture and three hours of spoken drill each week. An introduction to spoken and written modern standard Chinese (Mandarin). Not open to students with native ability in Mandarin or Chinese dialect. Students who have any previous knowledge of Chinese must take a placement exam before enrolling in Chinese classes at K.U. Consult Department of East Asian Languages and Cultures for details.

**CHIN 106. Elementary Chinese for Advanced Beginners. 3 Credits.**
This course is designed for students who have already acquired some elementary Chinese language abilities (in high school or from family), but cannot be placed in CHIN 108, Elementary Chinese II. The course focuses on perfecting listening, speaking, reading and writing skills, and
prepares students for CHIN 108. For admission to the class, students must take the EALC Chinese placement exam, be interviewed by designated instructors, and approved.

CHIN 108. Elementary Chinese II. 5 Credits. U F2
Continuation of CHIN 104. Prerequisite: CHIN 101, CHIN 104, or equivalent.

CHIN 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chinese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

CHIN 204. Intermediate Chinese I. 5 Credits. U F3
Continuation of CHIN 108. Three hours of lecture and three hours of spoken drill. Prerequisite: CHIN 108 or equivalent.

CHIN 206. Intermediate Chinese Conversation. 2 Credits. U
Practice in speaking, presentation of prepared talks, and guided discussions. This course is primarily used to award transfer credit and does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: CHIN 204 or equivalent.

CHIN 208. Intermediate Chinese II. 5 Credits. U F4
Continuation of CHIN 204. Prerequisite: CHIN 204.

CHIN 251. Reading and Writing Chinese I. 3 Credits. H
Designed for students, Chinese heritage speakers as well as second-language Chinese learners, who wish to learn or improve their abilities in reading and writing Chinese characters. Focuses on the 500 most commonly used Chinese characters and the major concepts essential for learning to read and write Chinese characters. Chinese culture, customs and history that are reflected in Chinese characters will also be introduced.

CHIN 252. Reading and Writing Chinese II. 3 Credits. H
Continuation of CHIN 251. Focuses on another 500 most commonly used Chinese characters and the major concepts essential for learning to read and write Chinese characters, preparing students for possible entry into advanced courses in Chinese, e.g. CHIN 504 (Advanced Modern Chinese I), or, after appropriate testing, for possible exemption from the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: CHIN 251 or permission of the instructor.

CHIN 290. Accelerated Chinese. 3 Credits. U
Instruction in reading and writing Chinese for students who already possess a degree of oral/aural proficiency. This course will prepare students for enrollment in CHIN 504, Advanced Modern Chinese I. No prerequisites. Consent of instructor required.

CHIN 342. Introduction to Classical Chinese. 3 Credits. H/W FP
An introduction to Classical Chinese through detailed analysis of short original passages from a variety of early Chinese texts. Students gain a foundation in the grammar and vocabulary of Classical Chinese, preparing them for CHIN 544. The course is offered at the 300 and 500 levels, with additional requirements for students taking CHIN 542. Prerequisite: A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108) and consent of instructor, or CHIN 208 or JPN 208. Not open to students who have completed CHIN 342.

CHIN 386. Advanced Chinese Conversation. 2 Credits. U FP
Guided discussions designed to increase fluency and further improve pronunciation. Prerequisite: CHIN 504 or equivalent.

CHIN 498. Directed Readings in Chinese. 1-4 Credits. H/W FP
Readings in Chinese on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor.

CHIN 504. Advanced Modern Chinese I. 5 Credits. H/W FP
Five hours of class and two of drill. Readings in selected modern Chinese literary texts and discussion in Chinese of recordings of stories and dramas. Prerequisite: CHIN 208 or equivalent.

CHIN 508. Advanced Modern Chinese II. 5 Credits. H/W FP
Continuation of CHIN 504. Prerequisite: CHIN 504 or equivalent.

CHIN 512. Advanced Chinese I. 2 Credits. H/W FP
Readings in modern Chinese texts on a variety of subjects and discussion in Chinese. Prerequisite: CHIN 218 or equivalent.

CHIN 513. Advanced Chinese II. 2 Credits. H/W FP
Continuation of CHIN 512. Prerequisite: CHIN 512 or equivalent.

CHIN 542. Introduction to Classical Chinese. 3 Credits. H/W FP
An introduction to Classical Chinese through detailed analysis of short original passages from a variety of early Chinese texts. Students gain a foundation in the grammar and vocabulary of Classical Chinese, preparing them for CHIN 544. The course is offered at the 300 and 500 levels, with additional requirements for students taking CHIN 542. Prerequisite: A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108) and consent of instructor, or CHIN 208 or JPN 208. Not open to students who have completed CHIN 342.

CHIN 544. Readings in Classical Chinese: _____ 3 Credits. H/W FP
Classical Chinese is the language of the most famous works of Chinese philosophy, and most Chinese literature before the twentieth century. This topics course introduces readings on a specific theme or genre, for example: Early Chinese Philosophy, Poetry, Religion, Confucian Philosophical Texts, Daoist Philosophical Texts, etc. Primary-text readings are in original Classical Chinese while secondary readings are in English. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in CHIN 744. Prerequisite: CHIN 342 or CHIN 542 or consent of the instructor. May be repeated for credit if content varies.

CHIN 562. Modern Chinese Texts I. 3 Credits. NW H/W FP
Readings and interpretation of varied modern Chinese texts. Continued study of the language in the form of oral discussion and written reports. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in CHIN 762. Prerequisite: CHIN 504 or equivalent.

CHIN 564. Modern Chinese Texts II. 3 Credits. H/W FP
A continuation of CHIN 562 with materials of increasing difficulty. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in CHIN 764. Prerequisite: CHIN 562.

CHIN 598. Readings in: _____ 1-3 Credits. H/W FP
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: CHIN 564 or permission of instructor.

CHIN 744. Readings in Classical Chinese: _____ 3 Credits.
Classical Chinese is the language of the most famous works of Chinese philosophy, and most Chinese literature before the twentieth century. This topics course introduces readings on a specific theme or genre, for example: Early Chinese Philosophy, Poetry, Religion, Confucian Philosophical Texts, Daoist Philosophical Texts, etc. Primary-text readings are in original Classical Chinese while secondary readings are in English. This course is offered at the 500 and 700 level with
additional assignments at the 700 level. Not open to students with credit in
CHIN 544. May be repeated for credit if topic varies. Prerequisite:
CHIN 342 or CHIN 542 or consent of the instructor.

CHIN 762. Modern Chinese Texts I. 3 Credits.
Readings and interpretation of varied modern Chinese texts. Continued
study of the language in the form of oral discussion and written
reports. This course is offered at the 500 and 700 level with additional
assignments at the 700 level. Not open to students with credit in
CHIN 562. Prerequisite: CHIN 504 or equivalent.

CHIN 764. Modern Chinese Texts II. 3 Credits.
A continuation of CHIN 762 with materials of increasing difficulty. This
course is offered at the 500 and 700 level with additional assignments at
the 700 level. Not open to students with credit in CHIN 564. Prerequisite:
CHIN 762.

CHIN 801. Directed Readings and Research in Chinese. 1-4 Credits.
FP
Advanced language training for the study of Chinese sources in the
humanities or social science field of the student. Prerequisite: Consent of
instructor.

East Asian Languages & Cultures Courses

EALC 105. Asian Religions. 3 Credits. HR/NW H/W
A basic introduction to religion in India, China, and Japan with emphasis
upon religions that affect the modern period. (Same as REL 106.)

EALC 121. Introduction to Contemporary China. 3 Credits. NW H/W
An overview of contemporary Chinese culture and society since the
economic reforms and opening up launched in 1978, through the study of
changes in politics, the economy, society, culture and everyday life in
China. The course is taught in English. No prior knowledge of Chinese
language is required.

EALC 130. Myth, Legend, and Folk Beliefs in East Asia. 3 Credits.
NW H/W
A survey of the commonly held ideas about the beginning of the world, the
role of gods and spirits in daily life, and the celebrations and rituals proper
to each season of the year. The purpose of the course is to present the
traditional world view of the peoples of East Asia. (Same as ANTH 293,
REL 130.)

EALC 142. Ethics in Chinese Philosophy. 3 Credits. H
How can ethical codes help us lead a better life? What principles of
government will ensure an ordered and harmonious society? What
responsibilities do we have to others and to the natural world? Thinkers
in early China asked these questions and came to a variety of different
conclusions, ranging from a goal of spontaneous harmony, to a rigid law-
and-order ethic. Their ideas are still relevant today and in this course we
will both survey these different ethical perspectives and also apply them to
contemporary social, political, and environmental issues.

EALC 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in East Asian Languages and Cultures. Course is designed
to meet the critical thinking learning outcome of the KU Core. First-Year
Seminar topics are coordinated and approved by the Office of First-Year
Experience. Prerequisite: First-time freshman status.

EALC 198. Studies in: ______. 1-5 Credits. H
Special purpose subject in East Asia and contiguous regions.

EALC 231. Introduction to: ______. 1-3 Credits. NW H/W
Topics are various aspects of Chinese and Japanese cultures.

EALC 298. Studies in: ______. 1-5 Credits. H
Special purpose subject in East Asia and contiguous regions.

EALC 308. Music in East Asia. 3 Credits.
Study of musical cultures in China, Korea, and Mongolia, with a special
focus on court music, musical theater, popular music, and the influence
of East Asian music on the Western art music and vice-versa. (Same as MUSC 308.)

EALC 312. Japan’s Literary Legacy. 3 Credits. H/W
A survey of the major works of Japan’s long literary heritage. Readings
from such classics as the Tale of Genji, the world’s first novel, No drama,
and poetry will acquaint the student with one of the world’s great literary
traditions.

EALC 315. Survey of Japanese Film. 3 Credits. NW H
This course surveys the major developments in and critical approaches to
twentieth-century Japanese film. Focusing mostly on narrative films, the
course introduces students to basic methodological issues in Japanese
film history, especially questions of narrative, genre, stardom, and
authorship. We examine Japanese cinema as an institution located within
specific contexts focusing on the ways in which this institution shapes
gender, race, class, ethnic and national identities. This course examines
how patterns of distribution, exhibition, and reception have influenced
film aesthetics and film style over the last century. Through secondary
readings, lectures, and discussions students critically examine how
Japanese cinema as an institution both responds to and intervenes in
the social, cultural, and political history of twentieth century Japan. The
course is offered at the 300 and 700 levels, with additional assignments at
the 700 level. (Same as FMS 315.)

EALC 316. Modern Japanese Fiction and Film. 3 Credits. H/W
A survey of major works of fiction and film in modern Japan. Topics
include the social and spiritual challenges of modernization, urbanization,
and the issues of race and national identity. Works by Akutagawa,
Kawabata, Kurosawa, Ogai, Ozu, Soseki and Tanizaki and others are
covered. Lectures, discussion, readings, and films in English. Knowledge
of Japanese language is not required. This course is offered at the 300
and 700 levels, with additional assignments at the 700 level. Not open
to students who have completed EALC 716.

EALC 317. Contemporary Japanese Fiction and Film. 3 Credits. HL
H/W
A survey of major literary and cinematic works of Japan’s post-war and
contemporary eras. Topics include life during and after the war, the
experience of the atomic bomb, and the postmodern landscape. Novels
by Dazai Osamu, Mishima Yukio, Oe Kenzaburo, Murakami Haruki
and Yoshimoto Banana and films by Imamura Shohei, Ozu Yasujiro,
Teshigahara Hiroshi and others will be covered. Course format is a
combination of lecture and discussion. The course is offered at the 300
and 700 levels, with additional assignments at the 700 level. Not open
to students who have completed EALC 717.

EALC 318. Modern Chinese Fiction and Film. 2-3 Credits. H/W
A general survey of important Chinese fiction and film of the 20th century.
Lectures, readings, and discussions in English. Knowledge of Chinese is
not required. Not open to students with credit in EALC 518. This course is
taught at the 300 and 500 levels with additional assignments at the 500-
level.

EALC 319. Contemporary Chinese Fiction and Film. 3 Credits. H
A general survey of important Chinese fiction and film from the late 20th
century to the present. Lectures, readings, and discussions in English. A
knowledge of Chinese is not required. (Not open to students with credit in
EALC 519.)

EALC 320. Modern East Asia: Multiple Perspectives. 3 Credits. NW H
A survey of the major political changes in China, Japan, Korea and Tibet in the 20th century. Students will learn about the changes that swept through East Asia as it rapidly modernized via documentary films and lectures and will study the impact of these changes on individuals by reading autobiographies.

EALC 325. Minorities in Japan. 3 Credits. S
This course offers a sociological and historical exploration of Japan's minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan's minorities, their historical experiences, current struggles, and future challenges. This course is taught at the 300 and 600-levels with additional assignments required at the 600-level.

EALC 330. China's Cultural Legacy. 3 Credits. HL/NW H/W
An examination of Chinese literature and culture from earliest times to the modern period. Not open to students who have taken EALC 530. This course is taught at the 300 and 500 levels with additional assignments at the 500-level.

EALC 331. Studies In: _____ 1-3 Credits. H/W
Topics in the Chinese and Japanese cultures.

EALC 332. Asian Literature in Translation: _____ 3 Credits. NW H/W
Introduction to Asian culture and society through close reading and analysis of important works of Asian literature. Themes and issues to be focused upon will vary (e.g., traditional or modern literature of China, Japan, or Korea, and special topics of interest). Lecture and discussion format. Knowledge of Asian languages is not required.

EALC 333. Asian Literature in Translation, Honors: _____ 3 Credits. NW H/W
An honors course that may be cross-listed with an existing EALC literature course. Students are required to do additional work. Open only to students in the University Honors Program or by permission of instructor.

EALC 344. Manga: Histories and Theories. 3 Credits. H
Manga (Japanese comics) have long been an extremely popular and influential medium in Japan and internationally. Manga offer engaging narratives and visual imagery revealing central concerns not only of Japanese culture, history, society and politics, but also of the global cultural industry. The medium has been studied through various disciplinary lenses ranging from art history to visual culture and media studies, literature, sociology, and anthropology. Through the examination of several manga artists and works from the late 19th century to the present as well as reading a broad range of scholarship, this course explores the major issues addressed and theoretical approaches used in the interdisciplinary study of manga. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 544. (Same as HA 344.)

EALC 353. Language and Society in East Asia. 3 Credits. NW/SC S
This course examines the cultures of East Asian countries through the lens of language. We will discuss the interactions of language and ideology, government policies, gender and education in East Asia. The course will be relevant for students interested in East Asian anthropology, politics, religion, philosophy, linguistics and language learning. The class has no prerequisites and requires no prior knowledge of East Asian languages or cultures. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students who have earned credit in EALC 553.

EALC 354. Japanese Prints. 3 Credits. NW H/W
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. (Same as HA 354.)

EALC 360. Buddhist Art of Korea. 3 Credits. H
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 561 or REL 511. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as HA 361.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

EALC 361. Colonial Korea. 3 Credits. H
This course examines the history, society, and culture of Korea from the end of Choson dynasty through the Colonial period (1910-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Not open to students with credit in EALC 561.

EALC 362. Post-Colonial Korea. 3 Credits. H
This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in EALC 562.

EALC 367. Art and Culture of Japan. 3 Credits. NW H/W
The history of Japanese art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions with different countries, and the roots of modernism in Japanese art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art. (Same as HA 367.)

EALC 368. The Peoples of China. 3 Credits. NW S/W
An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as ANTH 368.)

EALC 369. Art and Culture of Korea. 3 Credits. NW H/W
The history of Korean art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions with different countries, and the roots of modernism in Korean art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art.

EALC 372. Ceramics of Korea. 3 Credits. H
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students
who have taken HA 562. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as HA 362.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

EALC 373. Modern Korean Art and Culture. 3 Credits. H
This course is a thematic introduction to Korean art and culture with an emphasis on modern and contemporary Korea. Pre-modern works are contextualized with respect to contemporary issues. Students learn how to conduct a comprehensive analysis of an artwork by considering the political, historical and social conditions of its time within a broader East Asian cultural framework. (Same as HA 363.) Prerequisite: An introductory course in art history at the college level, or consent of instructor.

EALC 375. Love, Sexuality and Gender in Japanese Literature. 3 Credits. HL H
An examination of Japanese attitudes toward love, sexuality and gender differences as revealed in literature from the tenth century to the present. Discussion format. Not open to students who have taken EALC 575/ WGSS 576. (Same as WGSS 376.)

EALC 378. Art and Culture of China. 3 Credits. NW H/W
The history of Chinese art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions between different ethnic groups, and the roots of modernism in Chinese art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art. (Same as HA 368.)

EALC 380. Popular Cultures of East Asia. 3 Credits. NW H
This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. Not open to students who have taken EALC 580.

EALC 385. The Art of Buddhism. 3 Credits. H/W
A survey of Buddhist visual arts (architecture, sculpture, and painting) of India, China, Japan, and Korea. Through an examination of the history of Buddhist art interpreted from visual, historical, social, and political perspectives, the course enables students to analyze a wide range of Buddhist art forms within their regional contexts. Students will also consider how Buddhist-related material functions within museums and engage with local collections. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 585. (Same as HA 385.)

EALC 388. Modern and Contemporary Visual Arts of Japan. 3 Credits. H
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 588. (Same as HA 388.)

EALC 418. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Credits. NW H
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1191. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. Recommended: A course in East Asian studies. Not open to students who have taken EALC 618. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. (Same as WGSS 418.) Prerequisite: One course in EALC or WGSS.

EALC 420. Daily Life in China From the Opium War to 1911. 3 Credits. NW H/W
This course examines everyday life in China from the mid-19th century to the end of the last dynasty in 1911. The focus is on living conditions, social customs, and gender relations of people of all social levels, from emperors and empresses to servants, prostitutes, and concubines. Other topics include: the culture of drugs in the form of opium smoking, including how opium served as a key point of contact between China and the Euro-west; sexual culture, especially in the form of the history of prostitution and gender roles and values in China on the verge of modernity; interactions in daily life between Chinese and Westerners in China; and the experience of China's last imperial rulers. These topics are weighed against the backdrop of the decline of China's last dynasty and the concurrent impact of modernity in the form of social, political and technological change, especially as effected by the intrusion of the Euro-west. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EALC 720.

EALC 431. Studies in: _____. 1-3 Credits. H/W
Topics in the Chinese and Japanese traditions.

EALC 498. Directed Readings in East Asian Languages and Cultures. 1-4 Credits. H/W
Readings in English on an East Asian subject, selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: ECIV 104 or ECIV 304 and consent of instructor.

EALC 499. Honors Thesis. 3 Credits. H/W
Required of all students working for a degree with honors. May be repeated for a total of nine semester hours.

EALC 509. Religion in Japan. 3 Credits. NW H/W
Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as REL 509.)

EALC 518. Modern Chinese Fiction & Film. 3 Credits. H
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 318. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor.

EALC 519. Contemporary Chinese Fiction and Film. 3 Credits. H
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304.
or EALC 105; or consent of instructor. (Not open to students with credit in EALC 319.)

**EALC 530. China's Cultural Legacy. 3 Credits. NW H/W**

An examination of Chinese literature and culture from earliest times to the modern period. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304 or EALC 105; or consent of the instructor. Not open to students with credit in EALC 330.

**EALC 543. Contemporary Japanese Film. 3 Credits. NW H**

Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 543.) Prerequisite: Junior status.

**EALC 544. Manga: Histories and Theories. 3 Credits. H**

Manga (Japanese comics) have long been an extremely popular and influential medium in Japan and internationally. Manga offer engaging narratives and visual imagery revealing central concerns not only of Japanese culture, history, society and politics, but also of the global cultural industry. The medium has been studied through various disciplinary lenses ranging from art history to visual culture and media studies, literature, sociology, and anthropology. Through the examination of several manga artists and works from the late 19th century to the present as well as reading a broad range of scholarship, this course explores the major issues addressed and theoretical approaches used in the interdisciplinary study of manga. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 344. (Same as HA 544.) Prerequisite: A college level introduction to Asian art history or Asian studies, or consent of instructor.

**EALC 553. Language and Society in East Asia. 3 Credits. NW/SC S**

This course examines the cultures of East Asian countries through the lens of language. We will discuss the interactions of language and ideology, government policies, gender and education in East Asia. The course will be relevant for students interested in East Asian anthropology, politics, religion, philosophy, linguistics and language learning. The class has no prerequisites and requires no prior knowledge of East Asian languages or cultures. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students who have earned credit in EALC 353. Prerequisite: Any EALC course, or any CHIN, JPN, KOR language course, or any Linguistics course.

**EALC 561. Colonial Korea. 3 Credits. H**

This course examines the history, society, and culture of Korea from the end of the Choson dynasty through the colonial period (1920-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature and film. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304, or EALC 105; or consent of instructor. There are additional readings and more extensive writing assignments than in EALC 361. Not open to students with credit in EALC 361.

**EALC 562. Post-Colonial Korea. 3 Credits. H**

This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in EALC 362. Prerequisite: One course on Korea or East Asia.

**EALC 563. Cultural History of Korea. 3 Credits. H**

This course examines the cultural history of Korea in periods prior to the 19th Century. Special attention is given to varying constructions of cultural value, heritage, and identity, together with the historically specific factors that engendered them.

**EALC 570. The Structure of Japanese. 3 Credits. H**

A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 570.)

**EALC 572. The Structure of Chinese. 3 Credits. H**

A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 572.)

**EALC 575. Love, Sexuality and Gender in Japanese Literature. 3 Credits. HL H**

An examination of Japanese attitudes toward love, sexuality, and gender differences as revealed in literature from the tenth century to the present. Discussion format. Not open to students with credit in EALC 375/ WGSS 376. (Same as WGSS 576.) Prerequisite: One course in EALC or WGSS.

**EALC 580. Popular Cultures of East Asia. 3 Credits. NW H**

This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. More extensive writing requirements than 380. Not open to students who have taken EALC 380.

**EALC 583. Imperial China. 3 Credits. NW H/W**

An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as HIST 583.)

**EALC 584. Modern China. 3 Credits. NW H/W**

An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as HIST 584.)

**EALC 585. Reform in Contemporary China. 3 Credits. NW H/W**

Examines the epochal changes that have occurred in China from Deng Xiaoping's rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that spawned the 1989 "pro-democracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and economic decentralization, and leadership succession. A previous course on China is helpful, but not mandatory. (Same as POLS 668.)

**EALC 587. Age of Shoguns: Early Modern Japan. 3 Credits. NW H/W**
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as HIST 587.) Prerequisite: An earlier course in history or East Asian languages and cultures, or permission of the instructor.

**EALC 588. Japan, 1853-1945. 3 Credits. NW H/W**
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as HIST 588.)

**EALC 589. Japan Since 1945. 3 Credits. NW H/W**
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic "miracle," popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as HIST 589.)

**EALC 590. Topics in East Asian Languages and Cultures:_____. 1-9 Credits. H/W**
Specific topical courses will be offered every year covering a number of disciplines. Credit, description, and prerequisites will vary. Note: May be repeated for credit up to the stated limit.

**EALC 591. Topics in East Asian Languages and Cultures:_____. 1-9 Credits. S/W**
Specific topical courses will be offered every year covering a number of disciplines. Credit, descriptions, and prerequisites will vary. Note: May be repeated for credit up to the stated limit.

**EALC 610. Minorities in Japan. 3 Credits. S**
This course offers a sociological and historical exploration of Japan's minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan's minorities, their historical experiences, current struggles, and future challenges. This course is taught at the 300 and 600-levels, with additional assignments required at the 600-level. (Same as CEAS 610.) Prerequisite: An introductory East Asian Studies course or consent of the instructor.

**EALC 618. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Credits. NW H**
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. (Same as WGSS 618.) Prerequisite: A course in East Asian studies. Not open to students who have taken EALC 418. This course is taught at the 400 and 600 levels with additional assignments at the 600-level.

**EALC 642. Chinese Thought. 3 Credits. NW H/W**
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as HUM 524 and PHIL 506.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy.

**EALC 656. Government and Politics of East Asia. 3 Credits. NW S/W**
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as POLS 656.) Prerequisite: Junior level or consent of the instructor.

**EALC 666. Political Economy of East Asia. 3 Credits. S**
This course provides basic understanding of fiscal, monetarist, and trade policies; how governments in East Asia use them to pursue growth; the extent to which these governments follow or controvert economics to pursue growth; and how the performances of economies in East Asia relate to the US and global economies. (Same as POLS 666.) Prerequisite: POLS 150.

**EALC 676. International Relations of Asia. 3 Credits. S/W**
An intensive study of the problems of ideological conflict, diplomatic relations, strategic arrangements, economic cooperation, and cultural exchange in East and Southeast Asia with special emphasis upon the roles of major world powers. (Same as POLS 676.) Prerequisite: Sophomore level or consent of the instructor.

**EALC 678. Chinese Foreign Policy. 3 Credits. S/W**
In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as GIST 678 and POLS 678.) Prerequisite: Sophomore level or consent of the instructor.

**EALC 701. Practicum in Teaching Chinese. 1 Credits.**
This course is required every semester for graduate teaching assistants in the Chinese language program in EALC. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Chinese classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department.

**EALC 702. Practicum in Teaching Japanese. 1 Credits.**
This course is required every semester for graduate teaching assistants in the Japanese language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Japanese language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department.

**EALC 703. Practicum in Teaching Korean. 1 Credits.**
This course is required every semester for graduate teaching assistants in the Korean language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Korean language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department.

**EALC 704. Contemporary East Asia. 3 Credits.**
This graduate seminar explores rapidly changing societies in contemporary East Asia, particularly China, Japan, and Korea. The course provides a critical overview of East Asia and its diversity and complexity using cross-cultural perspectives and interdisciplinary social science approaches, and situates East Asian societies in the context of globalization. (Same as CEAS 704.)

**EALC 715. Survey of Japanese Film. 3 Credits.**
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions, students will examine how Japanese cinema as an institution responds to and intervenes in the social, cultural, and political history of twentieth-century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 743.)

**EALC 790. Topics in East Asian Languages and Cultures:**
_____. 1-3 Credits.
Special topical courses covering a number of disciplines. Credit descriptions and prerequisites will vary. NOTE: May be repeated for up to 12 total credits.

**EALC 801. Directed Readings. 1-5 Credits.**
Designed to meet the needs of advanced students whose study in East Asian studies cannot be met with regular courses. Prerequisite: Consent of instructor.

**EALC 841. Asian Film. 3 Credits.**
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic, and political issues on each film industry. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level.

**EALC 899. Thesis. 1-6 Credits.**
An inquiry into the source material upon a specific subject.

### East Asian Languages & Cultures Courses

**ECIV 104. Eastern Civilizations. 3 Credits. HL/NW H/W**
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Does not complete major requirement. Not open to students with credit in ECIV 304.

**ECIV 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Eastern Civilization. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**ECIV 304. Eastern Civilizations. 3 Credits. HL/NW H/W**
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Not open to students with credit in ECIV 104. If majoring in EALC and have completed ECIV 104, see major advisor about completing the ECIV 304 major requirement.

**ECIV 305. Eastern Civilizations Honors. 3 Credits. HL/NW H/W**
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia. By reading translations of original source materials, the student is able to see the interaction among the various cultures as well as their essential continuity. The course is most appropriate for students without any background in Asian culture. Similar to ECIV 304, but reading and writing assignments reflect the fact that this is an honors course. Open only to students in the University Honors Program or by permission of instructor.

### East Asian Languages & Cultures Courses

**HNDI 110. Beginning Hindi I. 5 Credits. U F1**
An introduction to modern standard Hindi that emphasizes acquisition of basic language skills (speaking, comprehension, reading and writing) through a combination of lecture, drill, and work with the Devanagari script.

**HNDI 120. Beginning Hindi II. 5 Credits. U F2**
A continuation of Beginning Hindi I that builds on basic skills of speaking and comprehension, and the writing and reading of the Devanagari script developed in Beginning Hindi I. Prerequisite: HNDI 110 or placement exam that establishes a level of proficiency in Hindi suited to Beginning Hindi II.

**HNDI 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hungarian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**HNDI 210. Intermediate Hindi I. 3 Credits. U F3**
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 120 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi I.

**HNDI 220. Intermediate Hindi II. 3 Credits. U F4**
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 210 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi II.

**HNDI 301. Topics in Hindi Culture, Language and Literature: _____ 3 Credits. U**
Investigation of special topics on Hindi culture, language and literature at the undergraduate level. May be repeated for credit when topic varies.

**HNDI 310. Advanced Hindi I. 3 Credits. U FP**
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 220 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi I.

**HNDI 320. Advanced Hindi II. 3 Credits. U FP**
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 310 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi II.

**HNDI 593. Directed Study in Hindi Culture and Literature: _____ 1-3 Credits. H**
This course is designed for students seeking proficiency in Hindi beyond HNDI 320. Instructor will direct the student through readings and materials in Hindi that will add to the students substantive knowledge of India and culture in the Hindi language. May be taken multiple semesters for credit with varying content. Prerequisite: HNDI 320, and consent of instructor.

**East Asian Languages & Cultures Courses**

**JPN 100. Beginning Japanese I. 3 Credits. U**
An introduction to Japanese. Familiarity with the basic structural patterns of the language through conversation is stressed. The hiragana and katakana syllabaries are introduced and a few characters are learned. Usually offered as part of a Summer Study Abroad Program.

**JPN 101. Beginning Japanese II. 3 Credits. U**
Continuation of JPN 100. Available to students who took JPN 100 as part of the Summer Study Abroad Program. Not available for credit for students who have previously completed JPN 104. Prerequisite: JPN 100 or equivalent.

**JPN 104. Elementary Japanese I. 5 Credits. U F1**
Three hours of lecture, three hours of drill per week. Acquisition of basic language skills (listening, speaking, reading, writing). Not available for credit for students who have previously completed JPN 101.

**JPN 106. Elementary Japanese II. 5 Credits. U F2**
Continuation of JPN 104. Prerequisite: JPN 101, JPN 104, or equivalent.

**JPN 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Japanese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**JPN 204. Intermediate Japanese I. 5 Credits. U F3**
Three hours of lecture, three hours of drill. Prerequisite: JPN 108 or equivalent.

**JPN 206. Intermediate Japanese Conversation. 2-4 Credits. U**
Enhancement of conversational ability at the intermediate level. Used primarily to accommodate transfer credits. Prerequisite: JPN 204 or equivalent.

**JPN 208. Intermediate Japanese II. 5 Credits. U F4**
Continuation of JPN 204. Prerequisite: JPN 204.

**JPN 226. Japanese in Context - Intermediate. 3 Credits. U**
Supervised and individualized study and practice of language skills through direct experience in interviews and guided practical applications in various public settings in Japan. Some conventional classroom instruction in grammar included. Offered only during the Summer Institute in Hiratsuka, Japan. Prerequisite: Two semesters or the equivalent of Japanese language study.

**JPN 233. Special Skills in Japanese: _____ 1-4 Credits. U**
Instruction in special skills in Japanese, such as pronunciation, recognition of Chinese characters, comprehension of broadcast media, etc. at the freshman/sophomore level. Course work must be arranged through the advice and direction of the instructor. Individual meetings and reports are coordinated and approved by the Office of First-Year Experience. May be repeated for credit if content varies.

**JPN 333. Special Skills in Japanese: _____ 1-4 Credits. U**
Instruction in special skills in Japanese, such as recognition and writing of Chinese characters, comprehension of broadcast media, etc. at the junior/senior level. If part of a Study Abroad program, approval by the Department of East Asian Languages and Cultures is required. May be repeated for credit if content varies.

**JPN 386. Advanced Japanese Conversation III. 1-3 Credits. U FP**
Instruction in discussion in formal contexts and speech making. Prerequisite: JPN 504 or equivalent.

**JPN 498. Directed Readings in Japanese. 1-4 Credits. H/W FP**
Readings in Japanese on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor.

**JPN 504. Advanced Modern Japanese I. 5 Credits. H/W FP**
Readings in selected modern Japanese texts on various topics: history, education, society, and business. Includes oral discussion and written short essays. Meets five hours per week. Prerequisite: JPN 208 or equivalent.
JPN 508. Advanced Modern Japanese II. 3 Credits. H/W FP
Continuation of JPN 504. Prerequisite: JPN 504 or equivalent.

JPN 562. Modern Japanese Texts I. 3 Credits. H/W FP
Readings and interpretation of modern Japanese texts from various fields. Continued study of the language in the form of oral discussion and written reports. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in JPN 762. Prerequisite: JPN 508.

JPN 564. Modern Japanese Texts II. 3 Credits. H/W FP
A continuation of JPN 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in JPN 764. Prerequisite: JPN 562 or equivalent.

JPN 598. Readings in: ____. 1-3 Credits. H/W FP
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: JPN 564 or permission of instructor.

JPN 690. Seminar in: _____. 1-3 Credits. H/W FP
Varying topics with varying prerequisites.

JPN 762. Modern Japanese Texts I. 3 Credits.
Readings and interpretation of modern Japanese texts from various fields. Continued study of the language in the form of oral discussion and written reports. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in JPN 762. Prerequisite: JPN 508.

JPN 764. Modern Japanese Texts II. 3 Credits.
A continuation of JPN 762. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in JPN 764. Prerequisite: JPN 564 or equivalent.

JPN 801. Directed Readings and Research in Japanese. 1-4 Credits. FP
Advanced language training for the study of Japanese sources in the humanities or social science field of the student. Prerequisite: JPN 564 or consent of instructor.

East Asian Languages & Cultures Courses

KOR 100. Beginning Korean I. 3 Credits. U
Introduction to basic communication skills in Korean and Korean culture; Korean alphabet, survival Korean expressions, cultural etiquette and norms; speaking, listening, reading, and writing in basic Korean. Does not fulfill College of Liberal Arts and Sciences foreign language requirements or department major and minor requirements.

KOR 101. Beginning Korean II. 3 Credits. U
Continuation of KOR 100. Basic communicative skills in Korean. Speaking, listening, reading, writing, and culture are equally emphasized throughout the course. Does not fulfill College of Liberal Arts and Sciences foreign language requirements or department major and minor requirements. Prerequisite: KOR 100 or equivalent.

KOR 104. Elementary Korean I. 5 Credits. U F1
Five hours of class and two hours of drill in the spoken language each week. Grammar and readings in selected texts.

KOR 108. Elementary Korean II. 5 Credits. U F2
Continuation of KOR 104. Prerequisite: KOR 104.

KOR 177. First Year Seminar: _____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Korean. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

KOR 204. Intermediate Korean I. 5 Credits. U F3
Five hours of class and two hours of spoken drill. Readings in selected texts in modern Korean. Prerequisite: KOR 108 or equivalent.

KOR 208. Intermediate Korean II. 5 Credits. U F4
Continuation of KOR 204. Prerequisite: KOR 204.

KOR 498. Directed Readings in Korean. 1-4 Credits. H/W FP
Readings in and discussion of selected modern Korean texts on various topics: history, literature, society, and language. Prerequisite: KOR 208 or equivalent.

KOR 504. Advanced Modern Korean I. 5 Credits. H/W FP
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 508 or equivalent.

KOR 562. Modern Korean Texts I. 3 Credits. H FP
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 564 or equivalent.

KOR 564. Modern Korean Texts II. 3 Credits.
A continuation of KOR 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 564 or equivalent.

KOR 568. Readings in: ______. 1-3 Credits. U
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: KOR 564 or permission of instructor.

KOR 601. Directed Readings and Research in Korean. 1-4 Credits. H/W FP
Advanced language training for the study of Korean sources in the humanities or social science field of the student. Prerequisite: KOR 564 or consent of instructor.

KOR 704. Modern Korean Texts II. 3 Credits. H FP
Continuation of KOR 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 704. Prerequisite: KOR 562 or equivalent.

KOR 998. Readings in: ______. 1-3 Credits. U
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: KOR 508 or permission of instructor.

KOR 762. Modern Korean Texts I. 3 Credits.
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 762. Prerequisite: KOR 508 or equivalent.

KOR 764. Modern Korean Texts II. 3 Credits. H FP
Continuation of KOR 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 764. Prerequisite: KOR 562 or equivalent.

East Asian Languages & Cultures Courses

MONG 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Mongolian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics

are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**East Asian Languages & Cultures Courses**

**TIB 101. Elementary Tibetan I. 3 Credits. U F1**
An introduction to the Tibetan language in both its literary and colloquial forms according to the Central Tibetan dialects. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement.

**TIB 102. Elementary Tibetan II. 3 Credits. U F2**
A continuation of TIB 101. Prerequisite: TIB 101 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement.

**TIB 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Tibetan. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**TIB 201. Intermediate Tibetan I. 3 Credits. U F3**
Continuation of TIB 102. Prerequisite: TIB 102 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement.

**TIB 202. Intermediate Tibetan II. 3 Credits. U F4**
Continuation of TIB 201. Prerequisite: TIB 201 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement.

**TIB 301. Advanced Tibetan I. 1-3 Credits. H**
This course focuses on developing reading fluency in classical and modern Tibetan with continued practice in the spoken language as well. Prerequisite: Tibetan 202 or permission of the instructor.

**TIB 302. Advanced Tibetan II. 1-3 Credits. H**
This course focuses on more advanced reading fluency in classical and modern Tibetan with continued practice in the spoken language as well. Prerequisite: TIB 301 or permission of the instructor.

**East Asian Languages & Cultures Courses**

**UYGR 101. Elementary Uyghur I. 3 Credits. U F1**
Uyghur is an important Central Asian Turkic language spoken by nine million people in China. The first semester is designed to give the student basic communicative competency, including pronunciation and intonation, structure, and syntax. Effective oral and written communication is stressed.

**UYGR 102. Elementary Uyghur II. 3 Credits. U F2**
Continuation of UYGR 101. Prerequisite: UYGR 101 or the equivalent.

**UYGR 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Uyghur. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**UYGR 201. Intermediate Uyghur I. 3 Credits. U F3**
Continuation of UYGR 102. Prerequisite: UYGR 102 or equivalent.

**UYGR 202. Intermediate Uyghur II. 3 Credits. U F4**
Continuation of UYGR 201. Prerequisite: UYGR 201 or equivalent.

**Economics Courses**

**ECON 104. Introductory Economics. 4 Credits. SF S**
An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economic policies to meet the current problems of the domestic and international economy. Course may be offered in lecture or online format. Prerequisite: MATH 101 or MATH 104, or LA&S 108, or eligibility for MATH 115 or MATH 116 or MATH 125.

**ECON 105. Introductory Economics, Honors. 4 Credits. SF S**
An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economic policies to meet the current problems of the domestic and international economy. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 116 or MATH 125. Open only to students who have been admitted to the University Honors Program, or by consent of instructor.

**ECON 110. The Economics of Globalization. 3 Credits. SF S**
The course emphasizes the application of economic methods of analysis to the public policy issues that globalization creates. Topics covered may include the following: winners and losers from trade; links between trade and labor markets; links between trade and foreign investment; the international financial system and exchange rates; outsourcing and multinational corporations; international institutions and regional trade agreements.

**ECON 142. Principles of Microeconomics. 3 Credits. SF S**
An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency and equity. Prerequisite: MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126.

**ECON 143. Principles of Microeconomics, Honors. 3 Credits. SF S**
An honors section of ECON 142. An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency and equity. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126. Open only to students who have been admitted to the University Honors Program, or by consent of instructor.

**ECON 144. Principles of Macroeconomics. 3 Credits. SF S**
An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126.

**ECON 145. Principles of Macroeconomics, Honors. 3 Credits. SF S**
An honors section of ECON 144. An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126. Open only to students who have been admitted to the University Honors Program, or by consent of instructor.

**ECON 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Economics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**ECON 199. Data I: Dealing with Data. 3 Credits.**
Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to derive knowledge and insights from data. This course teaches students the core concepts of inference and computing, working with real behavioral, economic, geographic, physical, social, and text data. Students obtain basic statistics training from a computational perspective using simulation to answer questions, explore problems, and delve into social issues surrounding data analysis such as privacy and design. (Same as POLS 199, PSYC 199 and SOC 199.)

**ECON 250. Study Abroad Topics in: _____ 1-5 Credits.**
This course is designed for the study of special topics in economics at the freshman/sophomore level. Coursework must be arranged by the Office of KU Study Abroad and approved by the Economics Department. This course may be repeated for credit if content varies.

**ECON 310. Topics in Applied Economics: _____ 3 Credits.**
(Topic, instructor, and specific prerequisites to be announced in the Schedule of Classes.) This course will focus on an area of applied economics of current interest. This course cannot be used to fulfill the elective course requirements for the Economics major or the Economics minor.

**ECON 399. Data 2: Foundations of Data Science. 3 Credits.**
Data science empowers its users to provide data-driven solutions to problems and questions in the world. This course provides foundational skill and knowledge behind this power. This knowledge and skill includes learning to formulate effective questions to answer with data, computer programming, data management and wrangling, exploratory data analysis and visualization, statistical inference and prediction, data-driven decision making, and communication. (Same as POLS 399 and PSYC 399.) Prerequisite: PSYC 199/POLS 199/ECON 199 or EECS 138; and PSYC 210 or MATH 365 or ECON 426 or POLS 306 or SOC 380 or MATH 101 or MATH 104 or MATH 115 or MATH 121.

**ECON 426. Statistics and Data Analysis for Economics. 3 Credits.**
An introduction to probability and statistical methods for empirical work in economics. Probability, random variables, sampling, descriptive statistics, probability distributions, estimation hypothesis testing, introduction to the regression model. Prerequisite: MATH 115 or MATH 125.

**ECON 450. Study Abroad Topics in: _____ 1-5 Credits.**
This course is designed for the study of special topics in economics at the junior/senior level. Coursework must be arranged by the Office of KU Study Abroad, approved by the Economics Department, and may count as an economics elective for economics majors. This course may be repeated for credit if content varies.

**ECON 505. History of Economic Analysis. 3 Credits.**
The history of intellectual efforts to understand economic phenomena and the impact of these efforts on the social and economic development of the modern world. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 510. Energy Economics. 3 Credits.**
The application of basic economic concepts and methods to the analysis of energy markets, regulation, and policies. Topics covered include energy trends and projections, economic growth and resource exhaustion, the organization and regulation of fossil fuel industries, nuclear power and non-conventional energy technologies, the world oil market, energy conservation, environmental pollution, and national energy policies in the U.S. and other developed as well as developing countries. Prerequisite: ECON 142 or ECON 143.

**ECON 513. Behavioral Economics. 3 Credits.**
Decisions link our thoughts to our actions and as a result define who we are and who people think we are. This makes decision making a fundamental life skill. But, can we make better decisions? This course will introduce you to the science of decision making that has developed as scholars including biologists, economists, mathematicians, philosophers, psychologists, and others have sought to answer this very question. Over the course of the semester we will examine what we have learned so far such as how people predict and mispredict events, how people make decisions and how their decisions can be quite irrational from one perspective but simultaneously appear quite reasonable, how people bargain and why they sometimes choose to cooperate and other times not, and why negotiating can be so difficult. (Same as PSYC 513.) Prerequisite: PSYC 104 or ECON 142; MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126.

**ECON 515. Income Distribution and Inequality. 3 Credits.**
An analysis of the distribution of income and wealth in the United States and a few other developed countries. The concepts of economic inequality, economic justice, statistical measures of inequality and their applications will be discussed. Various theories of income distribution (e.g., Ricardian, Marxian, neoclassical, and neo-Keynesian) will be covered. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 520. Microeconomics. 3 Credits.**
The theory of consumption, production, pricing, and resource allocation. Not open for credit to students with credit in ECON 524. Prerequisite: ECON 142 or ECON 143; and MATH 115 or MATH 125.

**ECON 522. Macroeconomics. 3 Credits.**
The theory of national income and employment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 144 or ECON 145; and MATH 115 or MATH 125.

**ECON 523. Macroeconomics Honors. 3 Credits.**
The theory of national income and unemployment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 144 or ECON 145; and MATH 115 or MATH 125. Open only to students who have been admitted to the University Honors Program, or by consent of instructor.

**ECON 526. Introduction to Econometrics. 3 Credits.**
An introduction to the statistical analysis of economic data and its application to economic inquiry. Includes extensive use of statistical software. Prerequisite: MATH 115 or MATH 125; ECON 426 or MATH 526.

**ECON 535. Economic History of Europe. 3 Credits.**
An introductory study of European economic history from the Middle Ages to the 1980s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as HIST 528.) Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 536. Economic Issues of the European Union. 3 Credits.**
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and
ECON 550. Environmental Economics. 3 Credits. U
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost-effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as EVRN 550.) Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 551. Philosophy of Economics. 3 Credits. HR
This course surveys the central concepts, issues and debates surrounding the philosophy of economics. The course is divided into three parts. The first is focused on the nature of economic science, whether it can be separated from value judgments, along with the foundational and methodological issues that arise in economics. The second part of the course provides a survey of several central topics in the philosophy of economics including rational choice theory, game theory, social choice theory, behavioral and neuroeconomics. The third part concerns welfare economics (broadly understood), including the aims of welfare economics, the nature of well-being, the possibility of interpersonal utility comparisons, and the aims of economic institutional design. At the end of this course, students should have knowledge and understanding of central methodological and substantive debates regarding the nature of economic theories. This course should also enhance students’ ability to think critically and analytically about the nature of economic theories and the key concepts in the philosophy of economics, write clearly and cogently about philosophical issues that arise in economic, incorporate the ideas, theories and techniques that arise in both philosophy and economics to understand social and economic issues. (Same as PHIL 551.) Prerequisite: An introductory course in philosophy or economics, or permission of instructor.

ECON 560. Economic Systems. 3 Credits. S
Critical analysis of economic theories underlying such economic systems as capitalism, different types of socialism, communism, and fascism. Comparative study of economic planning, production, distribution, price formation, economic institutions, and forms of government in countries under different economic systems. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 562. The Russian Economy. 3 Credits. S/W
An analytical survey of Russian economic development, with emphasis on the structure and operation of the Russian economy and transition issues. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 563. Current Economic Issues of East Europe. 3 Credits. S
An institutional and theoretical analysis of the issues arising from the transition from a command economy to a free market-oriented economy. With emphasis on the former Soviet Union, topics will include: assessment of the central planning experience; changes in property rights and their effect on resource allocation; market mechanisms and how they work when market institutions are at the formative stage; and public interest under privatization. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 564. Topics in Applied Economics: _____ . 3 Credits. S
This course will focus on an area of applied economics of current interest. This course can be used to fulfill the elective course requirement for the Economics major. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 566. Economic Development. 3 Credits. S
An introduction to economic growth and development in high and low income countries, problems of development, and development policy. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 568. Economic Development of Latin America. 3 Credits. S
This course explores development strategies followed in the countries of Latin America and the Caribbean, and analyzes current debates over development strategy. Topics covered include: debt, structural adjustment, and multilateral lending agencies; trade policy, and regional or hemispheric integration; state intervention in the economy; the role of elites; environmental degradation and sustainable development; land reform and agricultural policy; transnational enterprises and foreign investment; women in work and the household; migration (rural-urban, and international); and grassroots development projects. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 569. Economic Issues in China. 3 Credits. S
This course studies the Chinese economy, especially during the post-1979 reform period, and its relationship to the development of the Greater China Circle (China, Hong Kong, and Taiwan). Topics to be covered include economic development during the pre-1979 reform period, economic reform, and its impacts on China, Hong Kong, Taiwan, and lessons from the Chinese economic reforms. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 570. Game Theory. 3 Credits. S
Analysis of strategic choice problems. Firms, voters, bargainers, animals, sports competitors, and persons in everyday life choose alternative options with the outcomes depending on the choices of one or more other similar decision makers. Strategies of rational choices will be derived and analyzed in economic and other environments. Prerequisite: ECON 142 or ECON 143.

ECON 571. Research in Economics. 1-3 Credits. S
A directed reading and research course for economics majors. The course involves the preparation of a research paper under the supervision of a faculty member whose area of interest and specialization corresponds with the area of study selected by the student. Note that a maximum of 3 credits total of ECON 597 and ECON 697 can count for the elective requirements of any economics degree. Prerequisite: Completion of ECON 520 or ECON 522 or ECON 526, along with approval of the Director of Undergraduate Studies and selected faculty member.

ECON 580. Money and Banking. 3 Credits. S
The basic principles of money, credit, and banking and their relation to prices and business fluctuations; a study of commercial and central banking and the problems of credit control. Prerequisite: ECON 522 or ECON 523, and MATH 115 or MATH 125.

ECON 584. Economic Development of Latin America. 3 Credits. S
This course explores development strategies followed in the countries of Latin America and the Caribbean, and analyzes current debates over development strategy. Topics covered include: debt, structural adjustment, and multilateral lending agencies; trade policy, and regional or hemispheric integration; state intervention in the economy; the role of elites; environmental degradation and sustainable development; land reform and agricultural policy; transnational enterprises and foreign investment; women in work and the household; migration (rural-urban, and international); and grassroots development projects. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 586. Economic Issues in China. 3 Credits. S
This course studies the Chinese economy, especially during the post-1979 reform period, and its relationship to the development of the Greater China Circle (China, Hong Kong, and Taiwan). Topics to be covered include economic development during the pre-1979 reform period, economic reform, and its impacts on China, Hong Kong, Taiwan, and lessons from the Chinese economic reforms. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 587. Economic Development of Africa. 3 Credits. S
This course studies current economic issues facing African countries. It studies the general characteristics of several African economies and examines the impact of economic development policies, including those of international organizations, on the economies of Africa. Topics include poverty, income inequality, debt, foreign investment policies, trade policies, and government regimes. Prerequisite: ECON 104 or ECON 105 or (ECON 142 or ECON 143) and (ECON 144 or ECON 145).

ECON 590. Game Theory. 3 Credits. S
Analysis of strategic choice problems. Firms, voters, bargainers, animals, sports competitors, and persons in everyday life choose alternative options with the outcomes depending on the choices of one or more other similar decision makers. Strategies of rational choices will be derived and analyzed in economic and other environments. Prerequisite: ECON 142 or ECON 143.

ECON 597. Research in Economics. 1-3 Credits. S
A directed reading and research course for economics majors. The course involves the preparation of a research paper under the supervision of a faculty member whose area of interest and specialization corresponds with the area of study selected by the student. Note that a maximum of 3 credits total of ECON 597 and ECON 697 can count for the elective requirements of any economics degree. Prerequisite: Completion of ECON 520 or ECON 522 or ECON 526, along with approval of the Director of Undergraduate Studies and selected faculty member.
issues in international economic policy. Prerequisite: ECON 520, and MATH 115 or MATH 125.

ECON 605. International Finance. 3 Credits. S
This course surveys theories of exchange rate and balance of payments determination. Included are the elasticity approach, Keynesian models, and the monetary approach. The mechanics of foreign exchange trading, balance of payments accounting, and the working of the international monetary system are also discussed. Prerequisite: ECON 522 or ECON 523, and MATH 115 or MATH 125.

ECON 609. Sports Economics. 3 Credits. S
The course covers the microeconomics of the sports industry. Topics include analysis of teams, leagues, players, incomes, strategies, history, and government policy. Prerequisite: ECON 520, and MATH 115 or MATH 125 or permission of instructor.

ECON 610. Resource Economics and Environmental Policy. 3 Credits.
Survey of the economics of natural resources, designed to introduce the student to the economic models and analytical methods commonly used in natural resource problems and policy issues. Topics covered include environmental pollution and regulation, environmental case studies and applications of cost-benefit analysis, theoretical models, policy issues in the utilization of renewable and nonrenewable resources, sustainable development, and global environmental problems. Prerequisite: ECON 520, and MATH 115 or MATH 125 or permission of instructor.

ECON 620. Elements of Mathematical Economics. 3 Credits. S
Selected aspects of economic theory with emphasis on those parts where the spirit of mathematical analysis, rather than dexterity, is utilized. The simplification of the subject matter is accomplished by stressing complete treatment of special cases such as a two commodity-two individual world. Prerequisite: ECON 520; MATH 116 or MATH 126.

ECON 622. Public Finance. 3 Credits. S
A general introduction to the science of public finance. Topics covered include public expenditures, public revenues and public credit, and the shifting and incidence of taxation. Prerequisite: ECON 520, and MATH 115 or MATH 125.

ECON 630. Industrial Organization and Antitrust Policy. 3 Credits. S
An examination of the structure, conduct, and performance of American industry applying the concepts and techniques of economic analysis. Topics covered include the theories of monopoly, competition and oligopoly, concentration, barriers to entry, price-fixing and other restrictive practices, mergers, technological change, and public regulation. The course will also focus on the historical development of American antitrust law. Prerequisite: ECON 520, and MATH 115 or MATH 125.

ECON 640. Labor Economics. 3 Credits. S
Analysis of labor markets and differences in wage rates and incomes. Topics include returns to education and training, labor unions, unemployment, anti-poverty programs, and other government policies influencing the labor market. Not open to students with credit in ECON 641. Prerequisite: ECON 520; MATH 115 or MATH 125.

ECON 641. Labor Economics - Capstone. 3 Credits. S I S
This course covers the analysis of labor markets and differences in wage rates and incomes. The course covers various topics, such as returns to education and training, labor unions, unemployment, anti-poverty programs, and other government policies influencing the labor market. This course represents the capstone version of Labor Economics (ECON 640) by exploring a package of economic studies in the primary literature. Not open to students with credit in ECON 640. Prerequisite: ECON 520; ECON 526; MATH 115 or MATH 125; ECON 426 or MATH 526.

ECON 664. Topics in Economics: ______. 3 Credits.
This course focuses on a particular area of applied economics reflecting the current interests of students. Students can use this course to fulfill the elective course requirement for the Economics major. Repeatable for credit if topic varies. Prerequisite: ECON 520 or ECON 522 or ECON 523 or ECON 526.

ECON 669. The Economics of Financial Markets. 3 Credits. S
This course introduces the fundamentals of derivatives pricing, leading to the celebrated Black-Scholes formula—a discovery that led to the Nobel Prize for Robert Merton and Myron Scholes in 1997. Students will derive explicitly the formula for themselves. To achieve this objective, the course introduces and applies a wide array of important concepts drawn from economics, finance, mathematics, and statistics, including no-arbitrage, stochastic calculus, self-financing portfolios, risk-neutral measures, hedging, and the fundamental equations for pricing. Prerequisite: MATH 126; MATH 526.

ECON 680. Economic Growth. 3 Credits. S
This course studies growth with an emphasis on national evidence and macroeconomic policy issues. Classic and modern growth theories are developed and evaluated on the basis of how well they fit empirical evidence. Theories are developed in which productivity growth results from endogenous changes in technology or in the efficiency with which factors are utilized. The fundamental factors that affect productivity are examined, and they may include government policies, income inequality, geography, climate, resources and other factors. Prerequisite: ECON 522 or ECON 523, and MATH 115 or MATH 125.

ECON 696. Research Methods in Economics. 3 Credits. S
The course effectively considers research methods employed in microeconomic studies, macroeconomic studies, and econometric studies. As important, the course focuses strongly on research methods common to any type of economic study, such as effective literature reviews and technical writing tools. This course distinguishes across theoretical methods, empirical methods, and experimental methods. To the extent relevant, the course explores the links between theoretical methods and the other two methods. The course considers common theoretical methods (e.g., utility maximization), established empirical methods (e.g., difference-in-difference estimation), and standard experimental methods (e.g., blocked random assignment). Prerequisite: ECON 520; ECON 522 or ECON 523; and ECON 526.

ECON 697. Senior Research Honors. 1-3 Credits. S
A directed reading and research course for qualifying seniors. Involves preparation of a research paper under the supervision of a faculty member whose area of interest and specialization corresponds with the area of study selected by the student. Note that a maximum of 3 credits total of ECON 597 and ECON 697 can count for the elective requirements of any economics degree. Prerequisite: ECON 597 and approval of the selected faculty member and the Director of Undergraduate Studies.

ECON 700. Survey of Microeconomics. 3 Credits.
A comprehensive survey of microeconomics, including the theories of consumption, production, distribution, pricing, and resource allocation. Prerequisite: ECON 520; MATH 116 or MATH 126. Students approved to begin coursework in the Accelerated Master's program are exempt from the ECON 520 prerequisite.

ECON 701. Survey of Macroeconomics. 3 Credits.
A comprehensive survey of the modern theory of national income determination with particular emphasis on the foundation of macroeconomic models and their empirical implementation. Prerequisite:
ECON 705. Development of Economic Thought. 3 Credits.
The development of economic thought from the time of the physiocrats through the modern period. Consideration is given to the works of the English Classical school, the school of Vienna, the historical school, the Lausanne school, and Cambridge school. In addition, the development of economic thought in the United States during the period is treated. Prerequisite: ECON 520 and ECON 522.

ECON 715. Elementary Econometrics. 3 Credits.
An elementary analysis of the problems of estimation, prediction, and hypothesis testing in the context of general linear, stochastic difference equation and simultaneous equations models. Applications of econometric theory to practical economic problems will be emphasized. Prerequisite: ECON 526 or MATH 526; MATH 116 or MATH 126.

ECON 716. Econometric Forecasting. 3 Credits.
An analysis of econometric forecasting techniques, including time-series models, single-equation regression models, and multiple-equation regression models. The course will examine forecasts of (a) macroeconomic variables, such as interest rates, investment, GNP, and the rate of inflation; and (b) market variables, such as price and quantity. Prerequisite: ECON 526 or ECON 715 or permission of instructor.

ECON 730. Topics in Industrial Organization. 3 Credits.
Advanced study of recent research in applied microeconomics and business behavior. Topics include vertical integration, collusion, multi-plant and multi-product operations, regulated industries, tying arrangements, and the empirical links between monopoly power and profitability. Prerequisite: ECON 630.

ECON 740. Theory of Economic Growth and Development. 3 Credits.
Advanced study of the theory of economic growth and development. Recent growth models, theory of underdevelopment, programming, policies and plans for development. Prerequisite: ECON 520 and ECON 522.

ECON 769. Financial Economics. 3 Credits.
An introduction to the economic analysis of choice under uncertainty and asset pricing theory. Topics include the general equilibrium Arrow-Debreu model of complete markets; capital asset pricing model; stochastic dominance; portfolio frontiers; mutual fund separation theorems; arbitrage pricing theory; valuation of derivative securities. Both single-period models and multi-period models will be discussed. Students should have some background in elementary linear algebra, calculus, and probability theory. Prerequisite: MATH 127; ECON 526 or MATH 526; MATH 290 recommended.

ECON 770. Economics of the Labor Market. 3 Credits.
A theoretical and empirical analysis of labor supply and demand, human capital, information and labor mobility, unemployment, discrimination, and union behavior and influence. Prerequisite: ECON 520; MATH 116 or MATH 126.

ECON 780. Topics in Economics: _____ 1-3 Credits.
Selected topics in economics. Prerequisite: Consent of instructor.

ECON 790. Game Theory and Applications. 3 Credits.
This course covers basic game theory and applications. Topics covered include strategic games with complete information, Bayesian games (with incomplete information), extensive games with perfect information, and extensive games with imperfect information. Equilibrium concepts covered include Nash equilibrium, mixed-strategy Nash equilibrium, rationalizability, Bayesian Nash equilibrium, sub-game perfect Nash equilibrium, and sequential equilibrium. Depending on availability of time, additional topics may include strictly competitive games and repeated games. The course may include diverse applications such as in business strategy, auctions, voting, international trade, military conflicts, contracts, regulation, and industrial organization. Prerequisite: MATH 127; ECON 526 or MATH 526; MATH 290 recommended.

ECON 791. Game Theory and Applications II. 3 Credits.
This course is a continuation of game theory and applications (ECON 790). Topics may include rationality and common knowledge, multi-stage games and repeated games, coalitional games and the core, and sequential rationality, including possible applications such as signaling, reputation, and information transmission. Additional topics may include, among others, strictly competitive games, auctions, and evolutionary game theory. The course may include diverse applications within and outside economics. Prerequisite: ECON 790.

ECON 800. Optimization Techniques I. 3 Credits.
Economic models involving the maximization of a scalar (vector) function subject to equality and inequality constraint where the variables are in a finite dimensional Euclidean space. Characterization of optimal points by way of first and second order derivatives and by way of saddle points. Duality theorems of mathematical programming. Prerequisite: Consent of instructor.

ECON 801. Microeconomics I. 3 Credits.
An advanced course in price and distribution theory. Prerequisite: ECON 800 or consent of instructor.

ECON 802. Microeconomics II. 3 Credits.
The study of the operation of the economic system taking into account the diversity of goods and services. Primary attention is centered upon the competitive economy. A study is made of the existence, uniqueness, stability, and comparative statics of equilibrium positions. In addition, a study is made of ways of evaluating alternative states of the economy in terms of systems of value judgments. This includes a discussion of the Arrow Impossibility Theorem; the notion of a Pareto-satisfactory process is introduced and the relationship between Pareto-optimal states and competitive equilibrium positions is studied. Prerequisite: ECON 800 and ECON 801.

ECON 805. Teaching Methods in Economics. 3 Credits.
The goal of the course is to enhance undergraduate student learning by refining and expanding the teaching techniques in the teaching assistant’s arsenal. The course starts by discussing and illustrating the importance of setting the tone on the first day of class. Then the course turns to ways of creating intellectually exciting lectures and discussion sections. Active learning comes next as the course presents techniques to involve actively the students in their learning experience. Then the course examines ways for recognizing and broadening our teaching styles to include different learning styles. The course also discusses the evaluation of students by emphasizing the importance of matching the assessment of students with course objectives. This course will not assume any prior teaching experience. Prerequisite: Consent of instructor.

ECON 809. Optimization Techniques II. 3 Credits.
Economic models involving the maximization of an integral (a vector of integrals) subject to differential equality (inequality), integral equality (inequality), and finite equality (inequality) constraints. Characterization of optimal paths by way of first and second derivatives. Existence of optimal paths. Prerequisite: Consent of instructor.

ECON 810. Macroeconomics I. 3 Credits.
A survey of basic macroeconomic models, including Classical and Keynesian as well as more recent ones. Topics also cover monetary
and fiscal stabilization policies, the role of rational expectations, and basic behavioral equations. Tradeoffs of inflation and unemployment are examined both theoretically and empirically. Prerequisite: ECON 809 or consent of instructor.

ECON 811. Macroeconomics II. 3 Credits.
Structure of dynamic models and intertemporal optimization. Monetary and real business cycle theories and long-run economic growth. Microeconomic foundations of macroeconomics, theories of explicit and implicit contracts, and implications of overlapping generations models. Prerequisite: ECON 810.

ECON 816. Probability and Statistics. 3 Credits.
Basic tools in probability theory, mathematical statistics, and stochastic optimization designed to provide Ph.D. students training in stochastic models useful for all fields in economics. Prerequisite: Ph.D. standing in economics or consent of instructor.

ECON 817. Econometrics I. 3 Credits.
An intensive study of the general linear model and distribution theory associated with the multivariate normal; stochastic difference equation; autocorrelation, errors in variables. Prerequisite: MATH 628.

ECON 818. Econometrics II. 3 Credits.
The study of estimation and hypothesis testing within the context of the stochastic simultaneous equations model. Prerequisite: ECON 817.

ECON 825. Tutorial. 0 Credits.
This course is designed to provide extra assistance for graduate students in economics.

ECON 830. Game Theory and Industrial Organization. 3 Credits.
A comprehensive introduction to game theory and the theory of industrial organization. Basic game theoretic equilibrium concepts will be discussed in the context of static games, games of incomplete information, and dynamic games. These concepts will be applied to the theory of industrial organization. Topics may include mechanism design, market failure, monopoly, imperfect competition and oligopoly, limit pricing, predatory pricing, innovation and technical change, advertising and signaling theory, collusion and coordination, regulation under incomplete information, agency and auditing problems, incentives in hierarchies, job market signaling, insurance markets, nonlinear pricing and monopoly, and bargaining and long term relations. Prerequisite: ECON 801 and 802.

ECON 840. Microeconomic Issues in Development Economics. 3 Credits.
This course will examine the process and policies of economic development from a microeconomic perspective. Selected topics may include: the use of input-output matrices in development planning; price controls and corrections for their allocative distortions; international trade policies; transformations from planned to market economies; labor markets and labor mobility; and capital markets and capital mobility.

ECON 844. Macroeconomic Issues in Development Economics. 3 Credits.
This course will examine the process and policies of economic development from a macroeconomic perspective. Topics will include the theory of growth in the dual economy, the role of foreign trade in economic development, inflation and stabilization in developing economies, the problem of foreign debt, the relationship between financial and real development, and various development policies. Prerequisite: ECON 810 or consent of instructor.

ECON 851. The Theory of International Trade. 3 Credits.
The study of the pure theory of international trade; factor-price equalization, trade and welfare, general equilibrium in the international economy, comparative statics, and stability conditions. Prerequisite: ECON 700 and ECON 701.

ECON 855. Natural Resources. 3 Credits.
Advanced analysis of the economic relationships between natural resources, population, and environment. Emphasis is on the analytical techniques useful for solving the economic problems of natural resource allocation over time. Prerequisite: ECON 700.

ECON 869. Advanced Financial Economics. 3 Credits.
This course presents an analysis of financial markets and instruments, together with the quantitative tools essential for research in the field. The material will be presented in a discrete time setting and will stress the link between financial economics and equilibrium theory. Topics will include securities pricing in the absence of arbitrage, the theory of risk and utility in the basic portfolio problem, mean variance analysis and the CAPM, the Martingale properties of security prices, restricted participation, asymmetric information, and recent research results. Prerequisite: ECON 802 or consent of instructor.

ECON 870. Applied Microeconomics. 3 Credits.
This course introduces students to the data and empirical methods used in the fields of applied economics such as labor economics, public finance, and industrial organization. The course will focus on how to adjust for self-selection and identify causal relationships in applied microeconomic fields. Topics covered include economic data and statistical programming, instrumental variables, difference-in-differences, regression discontinuity, count data, sample selection, treatment effects, and duration models. Attention will be given to the suitability of the methods to the research question under consideration. Each topic will emphasize the proper application of the methods using the standard textbook treatment as well as assigned papers that examine the basic economic issues, the econometric techniques, and the applications to data. Prerequisite: ECON 817 and ECON 818, or consent of instructor. ECON 915 is recommended.

ECON 880. Advanced Topics in Economic Theory: _____. 1-3 Credits.
Selected topics in economics covered at an advanced level. Prerequisite: Consent of instructor.

ECON 899. Master’s Thesis. 1-10 Credits.

ECON 901. Advanced Economic Theory I. 3 Credits.
Advanced study of current general equilibrium analysis, the mathematical tools involved in such analysis, and some applications to other branches of economic theory. Prerequisite: ECON 802 and ECON 810.

ECON 910. Economic Theory Seminar-Workshop. 1-3 Credits.
This seminar-workshop is designed to study advanced research topics in the areas of microeconomic and macroeconomic theory, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in these areas of specialization.

ECON 911. Applied Macroeconomics. 3 Credits.
This course studies tools for applied macroeconomic research. It uses modern analytical methods to investigate economic theories. Econometric techniques to identify structure from time series data are emphasized. The goal is for each student to be able to use this toolkit to answer important macroeconomic questions. Prerequisite: ECON 810.

ECON 912. Advanced Macroeconomics. 3 Credits.
An analysis of economic policy in dynamic economic models. The effects of various policies on the equilibrium, stability, and adjustment paths of the models will be considered. Both open and closed economies will be analyzed. Prerequisite: ECON 810. MATH 320 is recommended.

ECON 913. Monetary Economics. 3 Credits.
This course examines how money, monetary policy, and monetary institutions influence the macroeconomy. Modern theories of money demand are presented and critiqued. The function of commercial banks, non-bank financial intermediaries, and central banks in the money supply process is addressed. Interrelationships between the tools, the instruments, the operating procedures, the intermediate targets, and the goals of policy are examined. Additional topics may include the monetary transmission mechanism, the effect of uncertainty on optimal policy decisions, the rules versus discretion debate, the monetary implications of fiscal policy, the term structure of interest rates, the causes and consequences of bank runs and financial panics, and the optimal method of constructing weighted monetary aggregates. Prerequisite: ECON 811 or consent of instructor.

ECON 915. Advanced Econometrics I. 3 Credits.
The study of selected topics in applied cross-section econometrics for uses mainly in applied microeconomics, public finance, and labor economics. Topics include traditional econometrics of production and demand, latent variable models, panel data studies, probabilistic choice models, censored and truncated models, sample selection, disequilibrium models, duration studies, and semi- and non-parametric models. Prerequisite: ECON 818, or consent of instructor.

ECON 916. Advanced Econometrics II. 3 Credits.
A study of selected topics in applied time-series econometrics for use mainly in applied macroeconomics, international finance, and development economics. Topics include empirical applications of ARCH models, VAR models (study of impulse response function and variance decomposition), unit-root cointegration and long memory models. Bayesian unit root analysis, estimation and inference of dynamic general equilibrium models, model calibration and simulation are also possible topics of this course. Prerequisite: ECON 818, or consent of instructor.

ECON 917. Advanced Econometrics III. 3 Credits.
A study of structural and nonlinear time series approaches to econometric modeling and inference. The course emphasizes techniques needed to use economic theory in system-wide econometrics. Emphasis is placed on selection of functional form for approximation to theoretical functions and the use of duality theorems for derivation of the resulting econometric systems of equation. Inference with those models will be by nonlinear parametric, semi-parametric, and nonparametric methods. Prerequisite: ECON 818.

ECON 918. Financial Econometrics. 3 Credits.
This course is designed to provide a variety of new econometric tools useful to investigate financial data. It discusses how to measure and forecast financial volatility using models such as Stochastic Volatility, multivariate GARCH, and Dynamic Conditional Correlation models. It also covers Dynamic Factor models and State Space models, which can be used in many financial data analyses. The course will be particularly helpful for the students preparing dissertations in the field of finance, macro-finance, monetary economics, international finance, and development economics. It will also benefit the students interested in more practical use of tools in the field such as financial risk management, insurance, and commercial banking. Prerequisite: ECON 818. ECON 916 is recommended.

ECON 919. Health Economics. 3 Credits.
An advanced course in the mathematical and graphical representations and classic and current literature in health economics. Students will be asked to read multiple academic papers per lecture. Topics may include measurement of health (height, infant mortality, life expectancy), health insurance, selection, Medicare, Medicaid, geographic variation, household finances, the Affordable Care Act, productivity of spending, international comparisons, health over the business cycle, hospitals, competition, physicians, nurses, health behaviors (alcohol, smoking, obesity, wellness), HIV/AIDS, pollution, malpractice, reproductive health, children, pharma, opioids, and machine learning. Prerequisite: ECON 802 and ECON 818. ECON 870 recommended.

ECON 940. Economic Seminar-Workshop in: ______. 1-3 Credits.
This seminar-workshop is designed to study advanced research topics in the specified area of applied economics (public finance, monetary analysis, environment-energy, economic growth and development, urban economics, health care economics, natural resources, labor-manpower, international trade and finance, comparative economic systems, Soviet economics), and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates with dissertations in a specific area of applied economics.

ECON 950. Special Problems in Economics. 1-3 Credits.

English Courses
ENGL 100. Introduction to Literature. 3 Credits. H
An introduction to critical thinking skills through the study of works of literature drawn from a variety of genres and methods of critical inquiry. This course does not fulfill any KU writing requirement.

ENGL 101. Composition. 3 Credits. U
Instruction and practice in writing in a variety of rhetorical contexts, including academic ones.

ENGL 102. Critical Reading and Writing. 3 Credits. U
Builds upon the instruction in writing of ENGL 101, emphasizing critical thinking through careful, thoughtful reading and writing. Also instructs in the evaluation and use of secondary sources. Prerequisite: Completion of ENGL 101 or its equivalent, or an ACT score of 27-31, or an SAT score of 600-649, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or an IB score of 5.

ENGL 105. Honors Introduction to English. 3 Credits. U
Study of significant works of world literature. The primary aims are to develop reading and writing skills and to introduce the students to works of literature drawn from a variety of genres and historical periods. Prerequisite: An ACT score of 31-36, or an SAT score of 650 or higher, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or membership in the University Honors Program.

ENGL 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in English. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ENGL 199. Orientation to English Studies. 1 Credits. H
Provides an overview of English Studies at the University of Kansas. Students learn about degree requirements and specializations; research, extracurricular, and study abroad opportunities; and career and internship options. Graded on a satisfactory/unsatisfactory basis.

ENGL 200. Study Abroad Topics in: ______. 1-6 Credits. H
This course is designed for the study of special topics in English. Coursework is completed through a KU study abroad program. Available only to KU study abroad participants. May be repeated for credit if content varies. Does NOT fulfill any part of the Freshman-Sophomore requirement.

ENGL 203. Topics in Reading and Writing: ______. 3 Credits. H
In-depth reading and writing on a significant topic, theme, or genre. Includes a variety of textual types or a range of historical periods. Continued practice in critical reading and writing. May include but will not be limited to writing in literary genres. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent.

ENGL 205. Freshman-Sophomore Honors Proseminar: _____ 3 Credits. H
Study of a major movement, topic, or theme in literature and culture. The primary aims are to further develop reading and writing skills and to consider significant cultural and artistic issues. Prerequisite: ENGL 105 or an AP exam score of 4 on either the Literature and Composition exam or the Language and Composition exam.

ENGL 209. Introduction to Fiction. 3 Credits. H
In-depth reading of and writing about prose fiction with emphasis on critical analysis of a variety of narrative types from different historical periods. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent.

ENGL 210. Introduction to Poetry. 3 Credits. H
In-depth reading of and writing about poetry with emphasis on critical analysis of a variety of forms and techniques used in poems from different historical periods. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent.

ENGL 211. Introduction to the Drama. 3 Credits. H
Study of plays selected to familiarize the student with dramatic masterpieces and with the drama as a literary type. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent.

ENGL 220. Introduction to Creative Writing. 3 Credits. H
In-depth reading and writing in multiple genres (e.g., poetry, fiction, creative nonfiction, playwriting). Creative assignments combine with critical analysis to help students identify, analyze, and employ forms and techniques across various genres, audiences, and contexts. Written assignments include creative works in multiple genres and critical responses to reading. Prerequisite: ENGL 101 and ENGL 102, or their equivalents.

ENGL 300. Introduction to English Studies. 3 Credits. H
An introduction to English Studies and its methods and areas, including literary studies, cultural studies, creative writing, rhetoric and composition, and language studies. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 301. Topics in British Literature to 1800: _____ 3 Credits. H
Study of British literary works before 1800. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 302. Topics in British Literature Since 1800: _____ 3 Credits. H
Study of British literary works since 1800. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 305. World Indigenous Literatures. 3 Credits. NW H
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as GIST 305/ISP 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 306. Global Environmental Literature. 3 Credits. H
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. (Same as EVRN 306 and GIST 306.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 308. Introduction to Literary Criticism and Theory. 3 Credits. H
Study of significant problems in literary interpretation and methodology, in which basic critical principles and approaches are systematically examined and applied. These approaches might include, but are not limited to, feminism, Marxism, deconstruction, psychoanalysis, and cultural studies. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 309. The British Novel. 3 Credits. H
Study of five or more significant novels representative of developments in the British novel of the eighteenth, nineteenth, and twentieth centuries. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 310. Literary History I. 3 Credits. H
A study of literature in English, including major forms and movements, from the medieval period to Romanticism. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 312. Major British Writers to 1800. 3 Credits. H
Outstanding works of British literature, from the earliest times to the close of the eighteenth century, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 314. Major British Writers after 1800. 3 Credits. H
Outstanding works of British literature, from 1800 to the present, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 315. Studies in British Literature. 3 Credits. H
For students enrolled in the annual summer Study Abroad program, an interdisciplinary program conducted with other humanities departments. British literature is studied in the context of visits to relevant sites such as London, the Lake District, and Edinburgh. Prerequisite: Prior completion of the KU Core Written Communication requirement. Approval for enrollment in the Summer Institute through the Study Abroad office is required. Recommended: Prior completion of one 200-level English course.

ENGL 317. Topics in American Literature to 1865: _____ 3 Credits. H
Study of American literary works before 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of
authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 318. Topics in American Literature Since 1865: ___. 3 Credits. H
Study of American literary works since 1865. Topics may focus on a particular genre, theme, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 320. American Literature I. 3 Credits. H
From the beginnings to 1865, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 322. American Literature II. 3 Credits. H
From 1865 to the present, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 323. Twentieth Century Literature and Culture. 3 Credits. H
The study of British and American literature, emphasizing important figures and movements since World War I. On occasion, the study of literature will be enriched with an investigation of other arts, such as music, film, and painting. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 324. Contemporary Authors: ___. 3 Credits. H
Study of one or more recent British and/or American authors. (Different authors in different semesters.) May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 325. Recent Popular Literature. 3 Credits. HL H
Study of recent best sellers or other works of popular interest. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 326. Introduction to African Literature. 3 Credits. NW H/W
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention is given to historical development and to traditional literature. (Same as AAAS 332.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 327. Studies in Twentieth-Century Drama: ___. 3 Credits. H
A survey of major twentieth-century playwrights and theatre groups, to be selected by the instructor. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 328. Literature and Film: ___. 3 Credits. H
The comparative study of the literary and film treatments of a particular topic or theme, with special attention to the generic qualities of literature and film. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 329. Topics in Forms and Genres: ___. 3 Credits. H
An introductory study of a selected topic focused on a literary or rhetorical form or genre (e.g., Lyric Poetry, Captivity Narratives, Genre Theory). May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 330. Literary History II. 3 Credits. H
A study of literature in English, including major forms and movements, from the Romantics to the present. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 331. Chaucer. 3 Credits. H
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 332. Shakespeare. 3 Credits. H
A study of ten to fourteen of Shakespeare's plays. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 334. Major Authors: ___. 3 Credits. H
Study of one or two major British and/or American authors. Different authors in different semesters. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 336. Jewish American Literature and Culture. 3 Credits. H
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as JWSH 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 337. Introduction to U.S. Latino/a Literature. 3 Credits. H
An historical survey of literature by U.S. Latino/a writers of Mexican, Puerto Rican, Cuban, Dominican, and Central/South American descent. Various genres, including oral forms such as corridos as well as novels, poetry, essays, and autobiographical writing, will be considered. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 338. Introduction to African-American Literature. 3 Credits. H
An introduction to prominent works of African-American literature from the 18th century to the present as well as to the basic approaches to study and principles of this body of work, including its connection with African sources. Literature will include a wide variety of genres, and course materials may be supplemented by folklore, music, film, and visual arts. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 339. Introduction to Caribbean Literature. 3 Credits. H
Reading, analysis, and discussion of fiction, poetry, and drama from the Caribbean, including a small selection of Spanish, French, and Dutch Antillean works in translation. (Same as AAAS 333.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 340. Topics in U.S. Ethnic Literature: ___. 3 Credits. H
A study of literature by authors from one or more ethnic groups within the U.S., including but not limited to Asian American, African American, American Indian, Jewish American, Italian American, U.S. Latina/o.

ENGL 341. American Literature of Social Justice. 3 Credits. H
An examination of U.S. literature that addresses situations of political and economic oppression or repression with the potential function of enlisting readers' sympathies in a project of social justice. The course focuses on U.S. literary texts dealing with social injustice and the curtailment of human and civil rights and addresses debates surrounding cultural authority and authenticity. Identity politics, attempts to represent the voice of the "oppressed," revision of strategies used in slave narrative or in testimonio, and ethical and rhetorical appeals to an assumed readership.
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 342. Topics in Transcultural Literature, Language, or Rhetoric: ______. 3 Credits. H
An introduction to a topic in the literatures, languages, or rhetorics of diverse cultural groups in the US or the world. A supermajority of the works considered were originally written in English. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 344. Black Feminist Theory. 3 Credits. HL H
This course will study the critical discourse produced by black female intellectuals, writers, and activists about their race, gender, sexual, and class identities. Students will explore black women's distinct positionality through an examination of their theory as well as their praxis from the nineteenth century to the contemporary moment. By tracing the evolution of black feminist thought, the class will explore black women's initiation of and engagement with political, social, and artistic conversations in various fields of scholarly inquiry including-but not limited to-literature, history, sociology, political science, and the law. (Same as AAAS 344 and WGSS 344.) Prerequisite: WGSS 101, AAAS 104, or prior completion of one 200-level English course.

ENGL 351. Fiction Writing I. 3 Credits. H
A study of narrative techniques and practice in the writing of fiction.
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 352. Poetry Writing I. 3 Credits. H
A study of prosody and practice in the writing of verse.
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 353. Screenwriting I. 3 Credits. H
An introduction to the practice of writing and evaluating scripts for film.
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 354. Playwriting I. 3 Credits. H
An introduction to the practice of writing and evaluating scripts for stage.
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 355. Nonfiction Writing I. 3 Credits. H
An introduction to the literary techniques of nonfiction and practice in the writing of one or more of the genre's subtypes, such as the personal essay, the familiar essay, the lyric essay, the memoir, nature writing, or travel writing.
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 359. English Grammar. 3 Credits. U
A course in traditional English grammar for students who wish to understand and be able to analyze English sentence structure. Students might apply the course to studies of style (their own or other authors'), rhetorical analysis, literary interpretation, or teaching. This course may be offered in either lecture or online format.
Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 360. Topics in Writing: ______. 3 Credits. H
A writing course that helps students continue their writing practices at an advanced level, with a focus on particular varieties, purposes, audiences, media, or other issues in rhetorical writing. Topics vary (e.g., Writing for Social Action, Writing with Confidence, Writing Online, Writing for Style). May be repeated for credit as topic changes.
Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 362. Foundations of Technical Writing. 3 Credits. H
Introduces students to the principles of technical communication. Students learn to organize, develop, write, and revise various technical documents (e.g., letters, manuals, presentations, proposals, reports, resumes, websites) often needed in business, engineering and scientific settings. Includes an introduction to technical-writing software. This course fulfills the prerequisite for English 562 and English 564.
Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 380. Introduction to Rhetoric and Composition. 3 Credits. H
Introduces students to rhetoric and composition, a field that investigates questions about the nature, processes, teaching and historical, social and cultural contexts of writing. Students survey the themes, debates, and trends that inform the work of scholars in this field. Students also become acquainted with the historical traditions of discourse instruction, and the relevance of those traditions to our current understandings of writing.
Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 381. Topics in Rhetoric and Composition: ______. 3 Credits. H
An introductory study of a selected topic in rhetoric or writing studies (e.g., Multimedia Rhetoric, Rhetoric of Social Action, Teaching Writing). May be repeated for credit as the topic changes.
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 382. Composing Cultures. 3 Credits. H
In this course, we will explore how texts are culturally situated and will carry out our own investigations of a subculture. Through analysis of the rhetorical and social situations that motivate writing and ethnographic investigation of a culture's discursive interactions, we will explore how a group's purposes and actions are shaped by cultural contexts for writing. We will complete a range of related writing projects (an observation of a place/settting for a culture's interactions; an analysis of a culture's language or cultural artifacts; interviews with participants in a culture or oral histories), culminating in a longer field study or ethnography-a descriptive and analytical account of a culture or subculture. We will also critically read and respond to multiple interdisciplinary texts and genres, including ethnographies and overviews of ethnographic research methods. As we explore the cultural embeddedness of writing, we will focus, in particular, on the positioning of the researcher and the ethics.
of conducting cultural research. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 383. Cultural Rhetorics. 3 Credits. H
In this course, we will engage in the interdisciplinary study of cultural rhetorics, which is an approach to rhetorical study that considers the role of cultural forces in shaping the rhetorical practices of individuals, communities, and politics. Emphasizing feminist, queer, critical race, and/or disability studies work in rhetorical studies, this course will focus on the following questions: How does rhetoric enable the functioning of power, oppression, and resistance? How are cultural, political, economic, and ideological notions of identity, of the body, and even of the human rhetorically constructed? What counts as rhetoric, and who gets to decide what is worthy of rhetorical study? How do rhetorics of space, place, home, diversity/identity, and the nation influence culture, politics, and institutions? Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 385. The Development of Modern English. 3 Credits. H
An introduction to the history of the English language, with special attention to general structural changes throughout its history, especially changes in vocabulary and meaning, and past influences of other languages upon present usage. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 386. Language and Social Justice in the US. 3 Credits. H
In this course, we consider the social implications of using different varieties and dialects of the English language in the US. Questions covered may include (but are not limited to): different social characteristics attributed to different varieties (dialects, ethnolinguists, genderlects) and their users; features of language that carry stigma and how such stigma is socially and historically constructed; and the role of media (news outlets, movies, "the internet") in conveying what is seen as acceptable or unacceptable in language. We also explore how these language attitudes and evaluations impact different groups of people in their daily lives, and what possible recourses we have to address language injustice. As we discuss these issues, you will not only gain an understanding of the social nature of the English language, but you will also acquire the skills and tools to discuss, analyze, and write about language. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 387. Introduction to the English Language. 3 Credits. HL H
A survey of the English language, its historical development, and its grammatical structure. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 388. Topics in English Language Studies. 3 Credits. H
An introductory study of a selected topic in English language studies (e.g., World Englishes, Language and Literary Style, The Secret Life of English Words.) Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 389. Postcolonial and World Englishes. 3 Credits. H
In this course, we explore the complex landscape of varieties of English or Englishes around the world. We chart the history of English and its spread through colonization and through the cultural and economic influence of especially the US and the UK. We get a sense of the diversity of Englishes by focusing on a selection of countries from various continents (including Africa and Asia), looking at the linguistic characteristics of these Englishes as well as the attitudes towards the Englishes within and outside the countries. This survey of Englishes leads us to consider broader questions such as how people evaluate different Englishes, who "owns" English, and similar issues. As we discuss these topics, you will not only gain an understanding of the variable and changeable nature of the English language, but you will also acquire the skills and tools to discuss, analyze, and write about language. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 390. Studies in: ______. 3 Credits. H
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 400. Teaching and Tutoring Writing. 3 Credits. U
Students explore theories and strategies of teaching and tutoring writing across academic disciplines. They learn more about themselves as writers as they build a repertoire of writing techniques useful in their studies, in the workplace, and in their personal lives. By observing and consulting in the writing center, they understand how reflection leads to responsive, ethical, and engaged practice. (Same as LA&S 400.) Prerequisite: ENGL 102 or equivalent.

ENGL 466. Literature for Children. 3 Credits. H
Wide reading in the great literature of the past and present suitable for children: folktales and epics, mythology, modern fantasy, fiction, poetry. Emphasis on extending the student's background and developing critical judgment. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 479. The Literature of: ______. 3 Credits. H
A study of the literary treatment of a particular aspect of British and/or American society. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 492. The London Review. 3 Credits. H
This class meets one day a week throughout the semester and includes a nine-day visit to London over the spring break period. Students spend the early part of the semester selecting special interests, researching places to visit and study, and exchanging information. After the trip, students compile and publish a journal entitled "The London Review", which is comprised of essays, photos, art work, and other reflections about their experience in London. Prerequisite: Admission to University Honors Program or permission of instructor.

ENGL 494. Research Internship. 1-3 Credits. H
Practical research experience in English studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. May be used as a component of the Research Experience Program (REP). Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor.

ENGL 495. Directed Study: ______. 1-3 Credits. H
Work for advanced majors in fields or on topics not covered in course work. May be repeated for a total of up to six hours. Does not satisfy specific course requirements for the English major. May be counted as part of the total junior-senior credit hours required. Prerequisite: Completion of three junior-senior courses in English and consent of instructor.

ENGL 496. Internship. 1-3 Credits. H
Practical experience in the use of English skills in supervised academic or professional settings. Credit hours are graded according to the written evaluation provided by the supervisor to the director. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level English course, declaration of English major, and permission of Undergraduate Director.
ENGL 497. Service Learning Internship. 1-3 Credits. H
Practical experience in the use of English skills in a non-profit or advocacy context. Credit hours are graded according to the written evaluation student provided by the on-site supervisor and on the student's written reflective component assigned and evaluated by the supervising faculty member. May be used as a component of the Service Learning certification program. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor.

ENGL 506. Science Fiction. 3 Credits. H
The development of science fiction as a literary genre, and as a literature of ideas for a future-oriented society. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 507. Science, Technology, and Society: Examining the Future through a Science-Fiction Lens. 3 Credits. H
Science and technology offer many benefits to individuals and to societies, yet they also present many challenges. This course explores the past, present, and possible future effects of science and technology on society through readings and discussions of nonfiction articles in conjunction with science-fiction stories and novels. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 508. Contemporary Literary Theory. 3 Credits. H
Study of selected works of literary theory and of current issues in literary studies. The course is designed for advanced undergraduates who intend to continue their study of literature in graduate school and for new graduate students who require a grounding in literary theory. According to each instructor's interest, the course may survey contemporary literary theory or may focus on a particular topic (e.g., authorship, canon formation, creativity, metaphor, narrative, rhetoric) or on a theoretical position (e.g., cultural studies, deconstruction, feminism, historicism, Marxism, psychoanalysis). A student may repeat the course with the permission of the appropriate director. Prerequisite: Completion of three junior-senior courses in English (or their equivalent) or graduate standing.

ENGL 520. History of the Book. 3 Credits. H
Brief history of writing materials and handwritten books; history of printed books from the fifteenth century as part of cultural history; technical progress and aesthetic change. (Same as HIST 500.)

ENGL 521. Advanced Topics in British Literature 1800: ____. 3 Credits. H
A Study of texts written before 1800. May be organized around a particular genre, historical period, a group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 522. Advanced Topics in British Literature After 1800: ____. 3 Credits. H
A study of texts written after 1800. May be organized around a particular genre, historical period, group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 525. Shakespeare: ____. 3 Credits. H
Intensive study of selected works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 530. Irish Literature and Culture: ____. 3 Credits. H
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 534. Major Authors (Capstone): ____. 3 Credits. H
Study of one or two major authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 554. Methodologies in Digital Humanities, Honors. 3 Credits. H
This course addresses research possibilities and ongoing debates in the field of Digital Humanities. Students will examine how digital technologies and methodologies can enhance or suggest new modes of Humanities research. The course focuses on core topics in the field, including text analysis, data visualization, digital mapping, collecting and (digital) cultural studies. We will take a hands-on and critical approach to investigating the benefits and limitations of different digital methods. Course assignments will consist of blog posts and mini projects conducted throughout the semester. At the end of the semester, students will develop a proposal for a project that brings digital methodologies to bear on a research inquiry related to the student's discipline. No prior experience in digital work or technical skills required. Prerequisite: Instructor permission.

ENGL 555. Nonfiction Writing II. 3 Credits. H
Continuation of ENGL 351. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 351 or equivalent.

ENGL 556. The Modern Tradition. 3 Credits. H
An intensive study of the formative backgrounds of the "modern" spirit as it is expressed in imaginative literature. Readings from such influential spokesmen as W. James, Zola, Marx, Darwin, Henry Adams, Kierkegaard, Dostoevsky, Nietzsche, I.A. Richards, T.S. Eliot, Joyce, Auden, Rilke, Croce, Yeats, Malraux, Freud, Jung, D.H. Lawrence,
Sartre, Camus, and Gide. Prerequisite: Prior completion of the freshman-sophomore English requirement or its equivalent.

ENGL 570. Topics in American Literature: _____ 3 Credits. H
Different topics in different semesters. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 572. Women and Literature: _____ 3 Credits. H
Different topics in different semesters. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 574. African American Literature: _____ 3 Credits. H
A study of the literature written by African Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of African American literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 576. Advanced Topics in American Literature to 1865: _____ 3 Credits. H
Study of American literary works before 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 577. Advanced Topics in American Literature Since 1865: _____ 3 Credits. H
Study of American literary works after 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 578. Poetry, 1900-1945. 3 Credits. H
A Study of English-language poetry of the early twentieth century. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 579. Poetry since 1945. 3 Credits. H
A study of English-language poetry from the mid-twentieth century to the present. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 580. Rhetoric and Writing: _____ 3 Credits. H
A study of selected broad topics in rhetoric and writing, including such topics as the rhetoric of law, the rhetoric of education, persuasion in literature, literacy, and rhetorical genres. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 581. English Language Studies: _____ 3 Credits. H
A study of selected topics in English language studies (e.g. World Englishes, Language and Literary Style, and The Secret Life of English Words). May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 582. Multimedia/Multimodal Rhetorics. 3 Credits. H
Digital culture and new media have transformed reading, writing, and research practices, revealing the multidimensionality of texts, blurring the roles of writer and audience, and creating new spaces for dialogue, collaboration, and participation in rhetorical acts. In this course, we will apply rhetorical principles across a variety of media genres—from blogs, to YouTube videos, to podcasts, to Tweets, to Instagram and Facebook posts—and will address the complex realities and challenges of composing ethical, persuasive, and effective arguments in the 21st century. The course will explore how traditional processes of writing and reading texts are challenged by communication across a range of diverse new media genres that employ multiple modes of communication (linguistic, visual, spatial, gestural, and aural ways of making meaning). We will examine the impact of multimedia/multimodal discourse on ourselves and our culture, and through our analysis and production of multimodal texts, we will explore how medium and mode shape the message, work to persuade multiple audiences, and alter the way that we understand, structure, and process knowledge. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 586. Language and Style. 3 Credits. H
When we talk about a writer's style, or the style of a text or genre, what exactly do we mean? How do we identify, define, and analyze the elements that make up a style? What is it that makes us think that one style is "better" than another style? This is what we will explore in this course. We draw on a number of frameworks and theories from English language studies that can be used to discuss and analyze linguistic choices and strategies in texts; in other words, we will take apart the language of a text or writer (including your own!) in order to understand how it has been put together. As we approach language, text, and style from this perspective, you will not only gain an understanding of the flexible, yet structured nature of the English language, but you will also acquire the skills and tools to discuss, analyze, and write about language. Prerequisite: Prior completion of a 300- or 400-level English course.

ENGL 587. American English. 3 Credits. H
A study of the structure, history, and varieties of the English language in the United States from the period of colonization to the present. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 589. Studies in: _____ 1-3 Credits. H
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of the first-and second-year English requirement or its equivalent, and at least one 300- or 400-level ENGL course; or permission of instructor.

ENGL 598. Honors Proseminar: _____ 3 Credits. H
Directed reading and participation in small discussion groups, each formed to consider a specific and limited subject during the semester. Written work will be required, and will be judged on both content and form. The course is part of a departmental program leading to Honors in English. Prerequisite: Admission must be approved by the departmental director of undergraduate studies.

ENGL 599. Honors Essay. 3 Credits. H
Independent study, culminating in a substantial essay prepared under the direction of a member of the Department of English who is a specialist in the area of the student's interest. Prerequisite: Admission must be approved by the departmental director of undergraduate studies.

ENGL 610. The Literature of England to 1500. 3 Credits. H
A survey of the literature of medieval England (in translation). Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 620. Renaissance English Literature: _____ 3 Credits. H
A broad view of literary works written between 1485 and 1660. Surveys may be offered with focus on a particular genre (poetry, drama, or prose), historical period (16th- or 17th-century literature), or group of authors (women writers). May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 633. Milton. 3 Credits. H
A close reading of Paradise Lost, Paradise Regained, Samson Agonistes, and the minor poems, with illustrative selections of prose. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 640. British Literature, 1600-1800: _____ 3 Credits.**

Study of literary works from the Restoration and eighteenth century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 650. Romantic Literature: _____ 3 Credits.**

Study of literary works from the British Romantic period. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 655. Victorian Literature: _____ 3 Credits.**

Study of literary works from the Victorian period. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 674. African Literature: _____ 3 Credits.**

An advanced study of a topic, genre, or area of written and/or oral African literature. Emphasis is placed on the critical analysis of major works, as well as their cultural and historical contexts. The course also addresses central critical and theoretical debates in the field. May be repeated for credit as the topic changes. Prerequisite: At least one 300- or 400-level English course, or permission of instructor.

**ENGL 690. Studies in: _____ 3 Credits.**

A study of a major topic of concern to English literature. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 709. Critical Theory: Problems and Principles: _____ 3 Credits.**

Study of a topic (such as mimesis, influence, deconstruction) that is important in critical theory. May be repeated for credit as topic varies.

**ENGL 714. Middle English Literature: 3 Credits.**

Reading of selected works in Middle English (exclusive of the works of Chaucer).

**ENGL 725. Shakespeare: _____ 3 Credits.**

Intensive study of selected plays. May be repeated for credit as the topic changes.

**ENGL 730. Topics in Early Modern Literature: _____ 3 Credits.**

Intensive study of texts written between 1485 and 1800. The course may be organized around a particular genre (poetry, prose, drama), historical period (e.g. Elizabethan literature), a major author (e.g. Milton), group of authors (e.g. women writers), or theme (e.g. literature and politics 1660-1800). Students will be expected to read and apply relevant criticism and theory as well as study primary texts. May be repeated for credit as topic varies.

**ENGL 750. British Literature of the 19th Century: _____ 3 Credits.**

Intensive study of British literary works of the 1800s. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes.

**ENGL 751. Fiction Writing III: 3 Credits.**

Practice in the writing of fiction under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance enrollment, manuscripts showing unusual ability. May be repeated for credit.

**ENGL 752. Poetry Writing III: 3 Credits.**

Practice in the writing of poetry under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance enrollment, manuscripts showing unusual ability. May be repeated for credit.

**ENGL 753. Writers Workshop: 3 Credits.**

An intensive course in writing prose fiction and/or verse. Criticism (NEW) of manuscripts through group meetings and individual conferences with the instructor. Membership limited to students who submit manuscripts showing special ability in at least one of the creative writing forms. May be repeated for credit.

**ENGL 756. Forms: _____ 3 Credits.**

A study of literary works belonging to a particular genre or to multiple genres (fiction, nonfiction, poetry, drama etc), either in a particular form (short story, essay, sonnet, etc.), concerned with a particular topic, or illustrative of a particular element of craft (voice, point of view, character development, etc.). Intended primarily for creative-writing students with an interest in developing their skills at reading as writers. May be repeated for credit as the topic varies.

**ENGL 757. Speculative Fiction Writing Workshop: 3 Credits.**

An intensive, 2-week course in writing speculative fiction, including genres such as slipstream, magical realism, fantasy, horror, and science fiction. The course is part of the Center for the Study of Science Fiction Summer Institute. Application period: January 1 - April 15. Application includes note to instructor expressing interest and one story. May be repeated for credit with instructor’s permission.

**ENGL 760. British Literature of the 20th Century: _____ 3 Credits.**

Intensive study of British literary works written during the 20th century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes.

**ENGL 767. Studies in Modern Drama: _____ 3 Credits.**

Reading of selected works in modern and contemporary drama. May be repeated for credit as the topic changes.

**ENGL 770. Studies in Life Writing: _____ 3 Credits.**

This course focuses on or surveys individual writers in the tradition of life writing; or intensively examines topics such as "Autobiography," "Memoir and Diary," "Biography," "Slave Narrative," "Letters," "Personal Essays," or "Autobiographical Fictions." Special emphasis within a topic, such as period, gender, or ethnicity, are possible. May be repeated for credit up to a maximum of six hours.

**ENGL 774. Topics in Literatures of Africa and the African Diaspora: _____ 3 Credits.**

An intensive study of the literatures of Africa and/or African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as AAAS 774.)

**ENGL 776. American Literature to 1900: _____ 3 Credits.**
Intensive study of North American literary works before 1900. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes.

ENGL 777. American Literature after 1900: ______. 3 Credits.
Intensive study of North American literary works after 1900. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes.

ENGL 779. U.S. Poetries Since 1900. 3 Credits.
A colloquium for graduate students, sampling the range of poetries and poetics produced in the United States in the twentieth and twenty-first centuries.

ENGL 780. Composition Studies. 3 Credits.
This course surveys the field of composition studies, examining major issues and theories in the study of writing. The course may include theories from classical to contemporary rhetoric, composition theory from the twentieth century, and the most current debates in the study of writing.

ENGL 785. History of the English Language. 3 Credits.
Historical study of the phonology, morphology, syntax, vocabulary, and semantics of English; the relation between linguistic and cultural change.

ENGL 787. Modern English Grammar. 3 Credits.
A study of contemporary English: phonology, morphology, syntax, and usage. The emphasis is structural, but "traditional" grammar is referred to for contrast, example, and clarification.

ENGL 790. Studies in: ______. 3 Credits.
Examination of a significant topic in literature or the English language. May be repeated for credit as the topic varies.

ENGL 800. Methods, Theory, and Professionalism. 3 Credits.
Acquaintance with resources and practice in techniques that are essential to other graduate courses. Major concerns include the writing and documentation of scholarly papers; basic reference and bibliographical aids; critical approaches to literature and literary historiography; and the place of language and rhetoric in English studies today.

ENGL 801. Study and Teaching of Writing. 3 Credits.
A survey of major concepts and issues in the study of writing, especially as applied to teaching composition. Practices in writing pedagogy are also discussed, and students' teaching of composition is observed and explored. Required of and enrollment limited to new teachers of English 101. May not be repeated for credit toward graduate degree.

ENGL 802. Practicum in the Teaching of College English. 1 Credit.
A course concerned primarily with the pedagogy and practice of teaching English 102. Includes weekly group meetings, individual conferences, and class visitations. Required of and enrollment limited to new teachers of English 102. May not be repeated for credit toward graduate degree. Course graded on a satisfactory/unsatisfactory basis.

ENGL 880. Topics in Composition Studies and Rhetoric: ______. 3 Credits.
Examination of selected topics in composition and rhetoric, such as literary studies, genre theory, dialogism, or writing across the curriculum. May be repeated for credit as the topic changes. Prerequisite: ENGL 780 or equivalent.

ENGL 896. Internship. 1-3 Credits.
Practical experience under professional supervision with the Writing Center, in editing, in theatrical production, or other activities relevant to the completion of an advanced degree in English. Prerequisite: Permission of Director of Graduate Studies.

ENGL 897. Preparation for the M.A. Examination. 1-6 Credits.
An independent reading course for students preparing to take the M.A. examination. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of the Director of Graduate Studies.

ENGL 898. M.A. Portfolio. 1-6 Credits.
An independent reading and writing course for students preparing the M.A. portfolio. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Consent of the Director of Graduate Studies.

An independent reading and writing course for students researching and writing the M.A./M.F.A. thesis. Graded on a satisfactory progress/limited progress/no progress basis.

ENGL 904. Seminar in Composition Theory: ______. 3 Credits.
Intensive study of one or more theoretical aspects of composition in English (e.g., rhetoric, text grammar, stylistics). Prerequisite: ENGL 800.

ENGL 905. Seminar in the English Language: ______. 3 Credits.
Close study of the English language in a particular period. Prerequisite: ENGL 800.

ENGL 908. Seminar in Literary Criticism: ______. 3 Credits.
Close study of one or more major critics, of a major critical school, or of a topic important in literary criticism. Prerequisite: ENGL 800.

ENGL 915. Seminar in Medieval English Literature: ______. 3 Credits.
Study may center on either Old or Middle English language and literature. Prerequisite: ENGL 800.

ENGL 920. Seminar in Renaissance English Literature: ______. 3 Credits.
Close study of one or two major authors or of a group of related works. Prerequisite: ENGL 800.

ENGL 950. Seminar in 19th Century British Literature: ______. 3 Credits.
Concentrated study of one or two major figures, or a group of significant writers, or an aspect of the literary scene. Prerequisite: ENGL 800.

ENGL 970. Seminar in American Literature: ______. 3 Credits.
Concentrated study of one or two authors or of historical periods or important movements. Prerequisite: ENGL 800.

ENGL 974. Seminar in Literatures of Africa and the African Diaspora: ______. 3 Credits.
Advanced study in a topic related to literature, language, and cultures of Africa and the African Diaspora, such as a concentrated study of one or two authors, a group of significant writers, an historical period or important movement, or an aspect of the literary or cultural scene of Black writing. May be repeated for credit as the topic varies.

ENGL 980. Seminar In: ______. 3 Credits.
Advanced study in a topic related to literature, language, theory, or a special skill such as analytical bibliography or editing. Prerequisite: ENGL 800.

ENGL 997. Preparation for the Doctoral Examination. 1-12 Credits.
An independent reading course for students preparing to take the Ph.D. comprehensive examination. May normally be taken in the semester or summer session immediately preceding the semester in which the comprehensive examination is taken. Does not count toward the residence requirement. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of the Director of Graduate Studies.

ENGL 998. Investigation and Conference: ______. 1-6 Credits.
Individual work in (a) language, (b) literature, (c) composition, or (d) the teaching of English, by properly qualified graduate students under the
direction of appropriate members of the Graduate Faculty as assigned by the Graduate Director. Limited to 6 hours of credit toward the M.A. or Ph.D. degree; only on three-hour enrollment may substitute for a formal course in satisfying a field distribution requirement. Normally offered for only up to three credit hours in any one enrollment. Permission of the supervising faculty member and of the Graduate Director required for enrollment.

ENGL 999. Doctoral Dissertation. 1-12 Credits. Graded on a satisfactory progress/limited progress/no progress basis.

Environmental Studies Courses

EVRN 103. Environment and History. 3 Credits. H
Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as HIST 103.)

EVRN 140. Global Environment I: The Discovery of Environmental Change. 5 Credits. U LFE
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 140 and HIST 140.)

EVRN 142. Global Environment II: The Ecology of Human Civilization. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to humanity's engagement with the global environment using historical and present-day examples. (Same as GEOG 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor.

EVRN 148. Scientific Principles of Environmental Studies. 3 Credits. NB N
This course provides the scientific knowledge necessary to understand the changing relationships between humans and the natural environment, with an emphasis on the assessment of current environmental problems and critical evaluation of potential solutions. Major topics include fundamental scientific concepts and principles, interactions among the biological and physical components of the environment, implications of a growing human population, water resources, the atmosphere, climate, and energy sources. (Same as GEOG 148.)

EVRN 150. Environment, Culture and Society. 3 Credits. SC S
An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere, and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as GEOG 150.)

EVRN 170. Introduction to Kansas Landscapes. 1 Credits. N
A course focused on the land and environment of Kansas. Field trips provide students with direct experience of the diverse landscapes in our area. Coursework also emphasizes the dynamic nature of the current landscape and the natural and cultural processes that have shaped it.

EVRN 171. Understanding Kansas Landscapes. 1 Credits. N
An introduction to the research methods used by scholars in diverse fields, applied to environmental issues introduced in EVRN 170. Prerequisite: EVRN 170.

EVRN 172. Kansas Landscape Projects. 1 Credits. N
Students participate in the design and execution of a simple research project focused on a local environmental topic. Prerequisite: EVRN 170, and EVRN 171.

EVRN 177. First Year Seminar: _____ . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Environmental Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

EVRN 200. Study Abroad Topics In: _____ . 1-5 Credits. U
This course is designed for the study of special topics in Environmental Studies. Coursework must be arranged through the Office of Study Abroad. May be repeated for credit if content varies.

EVRN 304. Environmental Conservation. 3 Credits. NE N
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural
resources, including fossil fuels, minerals, and water, are described with attention to the earth's total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as ENGL 306 and GIST 306.)

EVRN 306. Global Environmental Literature. 3 Credits. H
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. (Same as ENGL 306 and GIST 306.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

EVRN 320. Environmental Policy Analysis. 3 Credits. N
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention will be directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: EVRN 140/GEOG 140/HIST 140 or EVRN 142/GEOG 142/HIST 142; or EVRN 144/GEOG 144/HIST 144 or EVRN 145/GEOG 145/HIST 145; or EVRN 148/GEOG 148; or concurrent enrollment.

EVRN 330. Sculpture Intercepting the Waste Stream. 3 Credits. N
An introductory course using engaged learning to exploring the genre of ecological art practice (eco-art.) Class focuses on the waste stream particularly as it affects the Kansas River. Through remediation events, students build works of art from trash, in turn auctioned for environmental efforts. Creative attention is focused on ecological imbalance. (Same as SCUL 330.) Prerequisite: Visual Art major or minor, or instructor permission.

EVRN 332. Environmental Law. 3 Credits. U
An introduction to how the American legal process improves, transforms, and damages the natural environment. Emphasizes and compares shifting responsibilities of legal forces and institutions; judges and litigants, legislators and statutes, agencies and administrations, and citizens and regulated entities. Prerequisite: EVRN 140/GEOG 140/HIST 140 or EVRN 142/GEOG 142/HIST 142; or EVRN 144/GEOG 144/HIST 144 or EVRN 145/GEOG 145/HIST 145; or EVRN 148/GEOG 148; or concurrent enrollment.

EVRN 335. Introduction to Soil Geography. 4 Credits. N LFE
This course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body; genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken EVRN 353 or GEOG 535. (Same as GEOG 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 and CHEM 191 recommended.

EVRN 336. Ethics, Ideas and Nature. 3 Credits. H
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state in managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and rights ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as HIST 336.)

EVRN 338. Permaculture Design. 6 Credits. N
Students learn how a local, sustainable design system known as permaculture design creates an ecologically sound and economically viable way of living. The course consists of lecture, field, and practicum sessions. Lecture topics include food security, permaculture ethics, ecological principles, system design, sustainable soils, food production, food forests, earth works, and construction of human habitats.

EVRN 347. Environmental History of North America. 3 Credits. H
A survey of changes in the landscape and in people's perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile and the origins of conservation. (Same as HIST 347.)

EVRN 350. Global Environmental Justice. 3 Credits.
Drawing on interdisciplinary fields of study, this course surveys a wide range of situated environmental injustices and environmental justice movements associated with toxic dumping, oil extraction and mining, climate change, deforestation, agri-business, and tourism. As students gain an understanding of the connections and differences among specific situations, and between environmental justice and other forms of environmentalism, they engage with salient theoretical and practical questions. The content of the course will also be shaped by the interests of students. For example, each student will present on an environmental justice movement of her/his own choosing, on the connections between it and other movements we have been studying, and on the ways this movement can help us understand some of the key practical and theoretical questions raised by environmental justice struggle. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in EVRN 650. Prerequisite: EVRN 140 or EVRN 142 or EVRN 144 or EVRN 145 or EVRN 338 or permission of instructor.

EVRN 362. Art and Ecology: Inhabiting the Ecosphere. 3 Credits. N
An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as SCUL 362.) Prerequisite: Visual Art major or minor, or instructor permission.

EVRN 363. Introduction to Environmental Hydrology and Water Resources. 3 Credits. N
Water is vital to life on earth. In this course we cover components of the water or "hydrologic" cycle, how management has altered them, and how they are predicted to change with the changing climate. We discuss the evolution of water policy, its implications for managements and the economic impact of human perturbation on water. We study the physical processes that govern the water cycle, learn how they are measured, and estimate hydrologic fluxes. (Same as GEOG 363.) Prerequisite: GEOG 104 or GEOL 101.

EVRN 365. Invention of the Tropics. 3 Credits. H
This course surveys the history of the tropical environment and its diverse peoples from early European encounters until the current boom in extractivism and ecstaticm. It focuses on portrayals of the tropics in historical travel accounts and films. Through these sources, we will seek to understand cross-cultural interactions, and the ways in which science, technology, and tourism have reconstructed these environments over
time. Case studies are drawn from Latin America, Africa, Oceania, and/or Asia. (Same as HIST 365.)

**EVRN 371. Environmental Geopolitics. 3 Credits. S**
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as GEOG 371 and GIST 371.)

**EVRN 374. Vulnerability and Adaptation. 3 Credits. S**
The course objective is to understand and analyze human adaptation to environmental change by focusing on disasters and climate change. Each semester, the course rotates topics ranging from oil spills, hurricanes, sea-level rise to infectious disease. It provides undergraduate students with research experience and service learning, and offers opportunities for certificates through the Center for Undergraduate Research and the Center for Civic and Service Responsibility at KU. Students learn theories relevant to the case study, work in groups to generate research themes, conduct literature search and review, learn research methods, and write and present their work.

**EVRN 385. Environmental Sociology. 3 Credits. S**
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such items as social paradigms, theories, inequalities, movements, and research. (Same as SOC 385.)

**EVRN 386. Sociology of Global Food. 3 Credits. U**
The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food activism, technological developments, human/environment relationships, and labor issues. There is a lab component to this course. (Same as SOC 386.) Prerequisite: Junior standing.

**EVRN 390. Disaster and Culture. 3 Credits.**
This class explores representations of environmental disasters within various forms of cultural expression. Cultural beliefs and practices not only influence the ways environmental disasters are understood and responded to, but also shape the social dynamics that determine a population's vulnerability and resilience to hazards. Thus, while an earthquake may trigger a disaster, its impact largely will be influenced by social factors that pre-date the actual seismic event. The course will apply cultural materials (e.g., film, science writing, literature, policy statements, etc.) that emerge from specific case studies to analyze the social causes and effects of disaster, while drawing on an interdisciplinary set of tools and perspectives (from sociology, literary studies, science, economics, etc.) that animates inquiry.

**EVRN 400. Study Abroad Topics in: _____ 1-5 Credits. U**
This course is designed for the study of special topics in Environmental Studies. Coursework must be arranged through the Office of Study Abroad. May be repeated for credit if content varies.

**EVRN 405. Kansas Power. 3 Credits.**
Where does our energy come from? How can we optimize our use of renewable and nonrenewable sources of energy? What are the drivers moving us to more renewable sources of energy? What are the impediments? In this course we will explore the use of fossil fuels, nuclear, wind, geothermal and solar energy in Kansas. We will visit nearby power plants, and alternative energy companies. Students will be expected to design an energy plan for a local entity, and present their ideas. Prerequisite: EVRN 140 and EVRN 142.

**EVRN 410. Environmental Applications of Geographic Information Systems. 3 Credits. N**
An introduction to the use, display, and analysis of spatial data. Students will acquire a foundational skill-set in geographic information systems and remote sensing using industry-standard GIS software and will apply these skills using environmental data and case studies. Prerequisite: EVRN 148 or GEOG 148; EVRN 103 or HIST 103, EVRN 150 or GEOG 150 or EVRN 347 or HIST 347.

**EVRN 412. Ecology: Fundamentals and Applications. 3 Credits.**
An introduction to the principles of ecology, with an emphasis on environmental applications. Major topics include physiological and functional ecology, population and community dynamics, biogeography, and ecosystems ecology. Intended for students seeking B.A. or B.G.S. degrees. Prerequisite: EVRN 140 or EVRN 144 or EVRN 148 or consent of the instructor.

**EVRN 414. Principles of Ecology. 3 Credits. N**
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. (Same as BIOL 414.) Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

**EVRN 420. Topics in Environmental Studies: _____ 1-6 Credits. N LFE**
Courses on special topics in Environmental Science and/or Policy. These courses may be lecture, discussions, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once.

**EVRN 445. Introduction to Environmental Health. 3 Credits.**
This course is designed to provide a foundation for understanding how the natural and built environment affect human health in industrialized and developing countries by examining the impact of physical, chemical, and biological factors external to humans. Students will gain an understanding of the interaction of individuals and communities with the environment, the potential impact on health of environmental agents, and specific applications of concepts of environmental health. (Same as HSCI 445.)

**EVRN 451. Ecosystems Stewardship. 3 Credits.**
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as BIO 451 and GEOG 451.)

**EVRN 460. Field Ecology. 3 Credits. N LFE**
An introduction to research methods for environmental science. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). It emphasizes the development of skills in data analysis and interpretation that are essential to a full understanding of environmental issues. Enrollment limited to environmental studies majors, or by instructor permission. Prerequisite: Junior or Senior standing, completion of the natural sciences requirement of the KU Core (GE3N), and either EVRN 320 or EVRN 332.

**EVRN 490. Internship in Environmental Studies. 1-8 Credits. N**
Supervised practical experience in a specific environmental area of interest. The advisor will schedule regular meetings to evaluate progress and provide assistance. A written summary of the internship
experience and evaluation will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Total credit may not exceed 8 hours. Prerequisite: Junior standing and consent of program director. Restricted to declared Environmental Studies majors. Restricted to students with a 2.5 overall GPA or above.

EVRN 510. Advanced Environmental Applications in Geospatial Techniques. 3 Credits. H/N
This course focuses on applying advanced geospatial mapping and analysis techniques to "real-world" environmental issues. Course content may include lecture/lab time on advanced geospatial topics; a major class project, small-group projects, or individual projects; or half-semester internships with state agencies or campus entities that will culminate in an individual project. The specific nature of projects will be driven largely by student interest and ability, as well as agency/center needs. Prerequisite: EVRN 410 or equivalent course; or permission of the instructor.

EVRN 528. Environmental Justice and Public Policy. 3 Credits. S
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as POLS 528.) Prerequisite: POLS 306, or a statistics class, or consent of instructor.

EVRN 530. Biodiversity Discovery and Assessment. 2 Credits. N
An integrated lecture and laboratory course designed to provide an overview of modern methods in biodiversity exploration and discovery. Lectures cover the theory and practice of planning fieldwork in remote locations, documenting species and their natural history, how museum collections are made, calculating and comparing species richness estimates, and the process of describing and naming new species. The laboratory component provides students experience in documenting species and their natural history, processing and curating samples of natural history specimens, and the statistical analysis of biodiversity data. (Same as BIOL 530.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

EVRN 531. Tropical Fieldwork in Biodiversity Discovery. 1 Credits. U
An introduction to modern field methods of assessing biodiversity. Fieldwork employs insects and various field methods to estimate and compare species diversity between different habitats and field sites. Taught at different sites in tropical South America over Spring Break. Contact Undergraduate Biology, or the Office of Study Abroad. (Same as BIOL 531.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. Concurrent or prior enrollment of BIOL 530 is strongly encouraged.

EVRN 535. Soil Geography. 4 Credits. N LFE
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEG 335 or EVRN 335. (Same as GEOG 535.) Prerequisite: GEG 104 or GEOL 101 or consent of the instructor; BIOL 100 and CHEM 130 or CHEM 190 and CHEM 191 recommended.

EVRN 536. Environmental Remote Sensing. 3 Credits. NE
Covers fundamentals of remote sensing, including electromagnetic radiation principles and data collection and processing, followed by an introduction to the various remote sensing techniques and their application in understanding and managing environmental systems. Exercises are provided for students to be actively involved in evaluating, critically analyzing and interpreting images and data to determine implications for practice. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 736. Prerequisite: Junior or Senior standing.

EVRN 537. Water Resource Sustainability. 3 Credits. NE
Provides a framework for learning about our water future and ways we might define and achieve sustainability in water use and management. Concerns of ethics, culture, economics, politics, and environmental health will be discussed within the contexts of issues such as the global water crisis, water footprints, water pollution, human water systems, water security, and sustainable water technologies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 737. Prerequisite: Junior/senior standing.

EVRN 538. Soil Chemistry. 3 Credits. N LFE
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as GEOG 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195 and CHEM 196, MATH 125, or consent of the instructor.

EVRN 540. Ecohydrology. 3 Credits. N
Ecological hydrology is the discipline that answers real world hydrologic and biologic questions through integrating knowledge from hydrology, ecology, atmospheric science and biogeochemistry. We focus on the key concepts, methodological approaches and analytical techniques utilized in ecohydrology to understand and quantify: plant water use, evolution of hydrologic properties, groundwater-surface water interactions, controls on landscape patterns, spatial and temporal patterns of soil moisture and nutrient concentrations, and vegetation competition. Students should leave the class having developed critical skills in: 1) reviewing scientific literature, 2) collecting environmental samples, 3) analyzing ecohydrologic data, 4) writing a scientific research paper, 5) working collaboratively and independently. (Same as GEOG 540.) Prerequisite: GEOG 104 or GEOL 101 or EVRN 363 or GEOG 336 or permission of instructor.

EVRN 542. Ethnobotany. 3 Credits. S
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as ANTH 582 and ISP 542.) Prerequisite: EVRN 142, EVRN 145, EVRN 148, ANTH 150/151, ANTH 160/162/360 or permission of instructor.

EVRN 543. Natural Hazards and Environmental Risks. 3 Credits. NE
This course investigates the geophysical processes of the earth-atmospheric system that can create disastrous impacts on human life,
society, and economics. Hazards, including earthquakes, tsunamis, floods, hurricanes, mass movements, wildfires, and many others, are examined by analyzing spatial and temporal dynamics as well as any precursory indicators that may be present. Attention is also given to management and mitigation strategies. Case studies are utilized to examine interaction between society and natural hazards. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 743. Prerequisite: Junior/senior standing.

EVRN 550. Environmental Economics. 3 Credits. U
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as ECON 550.) Prerequisite: ECON 104 or ECON 105 or ECON 142 or ECON 143.

EVRN 555. Energy and Environment. 3 Credits. NE
This interdisciplinary course provides students with a broad understanding of the current energy system, including its challenges, with focus on changing global energy needs, current energy sources, developing and emerging renewable energy sources, and their economic, environmental, and societal implications. Analysis of energy fundamentals, fossil fuel exploration and use, nuclear energy, renewable energy sources, and subsequent environmental impacts. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 755. Prerequisite: Junior/senior standing.

EVRN 563. U.S. Environmental Thought in the 20th Century. 3 Credits. H
Explores both leading and dissident ideas that Americans have had about the natural world since 1900. Broad chronological periods are explored in some depth, including the Progressive Era, New Deal, Cold War, the Sixties, and the Reagan Eighties. The course uses articles and books, as well as visual and aural forms of communication. Commercial speech, as well as scholarly and literary works, are considered. (Same as HIST 563.) Prerequisite: EVRN 148 or HIST 129, or by permission of instructor.

EVRN 577. The Andean World. 3 Credits. H
The Andean environment is defined by its mountains, but includes all of the earth's major biomes: from tropical rainforest to the world's oldest and driest desert. These diverse landscapes have nurtured one of the most ancient and durable, yet diverse sets of Indigenous cultural lifeways. Most of the Andes was governed by a single power during the Inca and Spanish colonial eras, but the region is now divided between seven independent states with their own regional traditions. The Andean World has long been recognized as a laboratory for understanding the relations between nature and culture, and the tensions between tradition and revolutionary change. This course will examine the history of this region from a long-term perspective, from its indigenous roots to contemporary struggles over globalization and extractivism. (Same as HIST 577, ISP 577 and LAC 577.) Prerequisite: Prior 300+ level course in related discipline (ANTH, EEB, EVRN, HIST, LAC, SPAN, etc.) or permission of instructor.

EVRN 611. Water Quality, Land Use, and Watershed Ecosystems. 3 Credits. N
Water quality issues are integrated with land use planning and the development of watershed management strategies. Interrelationships among the hydrologic cycle, atmospheric deposition, nutrient transformations and pesticide use are examined in regards to stream, lake, and groundwater quality. Prerequisite: CHEM 110 or CHEM 130 and BIOL 414, or consent of instructor.

EVRN 615. Capstone Project. 3 Credits. N
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their environmental studies major. It rejoins the cohort that has separately pursued the BA/BGS and BS tracks and places them in situations in which they address real world environmental issues with a team approach and produce professionally meaningful analytical reports. Prerequisite: Junior standing; EVRN 320, EVRN 332, and EVRN 460. Restricted to declared Environmental Studies majors.

EVRN 616. Environmental Impact Assessment. 3 Credits. N
This course provides an overview of environmental laws and regulations. Additional focus is given to the process described in the National Environmental Policy Act (NEPA). Students will learn when NEPA is triggered, the difference between Environmental Impact Statements (EIS) and Environmental Assessments (EIA), and how to write an EIS/EIA. Prerequisite: An introductory course in environmental law, or consent of instructor.

EVRN 620. Environmental Politics and Policy. 3 Credits. S
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as POLS 624.)

EVRN 624. Independent Study. 1-9 Credits. N
A research course, in any of the fields of environmental studies, consisting of either experimental research, original policy analysis, or the preparation of an extensive paper based on library investigation. Project topic to be agreed upon in advance with supervising faculty member. Prerequisite: Consent of instructor.

EVRN 625. Honors Research in Environmental Studies. 3 Credits. N
A course giving eligible majors the opportunity to earn Departmental Honors by engaging in an intensive program of study leading to an original piece of research. Prerequisite: Senior standing, approval of the Environmental Studies Program, the Honors Project Director, and an overall 3.25 cumulative grade point average during the semester of enrollment. Restricted to declared Environmental Studies majors.

EVRN 628. The Politics of Public Health. 3 Credits. S
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation's public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as POLS 628.) Prerequisite: POLS 110 and POLS 306 are recommended.

EVRN 630. Sculpture Intercepting the Waste Stream. 3 Credits. N
An introductory course using engaged learning to exploring the genre of ecological art practice (eco-art.) Class focuses on the waste stream particularly as it affects the Kansas River. Through remediation events, students build works of art from trash, in turn auctioned for environmental efforts. Creative attention is focused on ecological imbalance. (Same as SCUL 630.) Prerequisite: Graduate standing or permission of instructor.

EVRN 635. Soil Physics. 3 Credits. N
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as GEOG 635.) Prerequisite: GEOG 335 or EVRN 335; or GEOG 535 or EVRN 535, and MATH 125, PHSX 114; or consent of instructor.

**EVRN 640. Natural Resource Management from an Indigenous Perspective. 3 Credits.**

The purpose of this course is to provide students with a solid understanding of how crucial the management of natural resources is, with emphasis on Indigenous communities. Indigenous communities are often ignored in such courses even though these peoples have distinctive views of how resources should be managed. This course allows students to focus on case studies and philosophical principles that compare management techniques derived from European based science with those derived from the cultural traditions and beliefs of Indigenous peoples and communities. Prerequisite: EVRN 140 and EVRN 142; or EVRN 144 and EVRN 145.

**EVRN 645. Native and Western Views of Nature. 3 Credits.**

This course emphasizes comparison of the attitudes and perspectives towards the natural world that have been developed by different cultural traditions. The primary example with which most of us are familiar is the contemporary Western attitude which emerges from traditions derived from Western European philosophy, i.e. the assumption that humans are autonomous from, and in control of, the natural world. A different approach is presented by Traditional Ecological Knowledge (TEK) of Indigenous peoples of the world, which are based on close observation of nature and natural phenomena; combined with a concept of community membership, which differs from that of Western political and social thought. Prerequisite: EVRN 140 and EVRN 142; or EVRN 144 and EVRN 145.

**EVRN 650. Global Environmental Justice. 3 Credits.**

Drawing on interdisciplinary fields of study, this course surveys a wide range of situated environmental injustices and environmental justice movements associated with toxic dumping, oil extraction and mining, climate change, deforestation, agri-business, and tourism. As students gain an understanding of the connections and differences among specific situations, and between environmental justice and other forms of environmentalism, they engage with salient theoretical and practical questions. The content of the course will also be shaped by the interests of students. For example, each student will present on an environmental justice movement of her/his own choosing, on the connections between it and other movements we have been studying, and on the ways this movement can help us understand some of the key practical and theoretical questions raised by environmental justice struggle. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in EVRN 350. Prerequisite: EVRN 140 or EVRN 142 or EVRN 144 or EVRN 145 or EVRN 336; or permission of instructor.

**EVRN 660. Summer Field Ecology. 3 Credits.**

An introduction to research methods for environmental science. Similar to EVRN 460, formatted for summer term. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). Assignments and group work emphasize analysis and interpretation of field data. (Same as BIOL 660.) Prerequisite: Junior, Senior, or graduate standing, completion of the natural sciences requirement of the KU Core (GE3N).

**EVRN 662. Art and Ecology: Inhabiting the Ecosphere. 3 Credits.**

An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as SCUL 630.) Prerequisite: Graduate standing or permission of instructor.

**EVRN 673. Environmental Justice. 3 Credits. NW U**

An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping, and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. (Same as ISP 673.) Prerequisite: Permission of instructor.

**EVRN 700. The Anthropocene: Interdisciplinary Perspectives on Environmental Change. 3 Credits.**

Have human activities become so pervasive that we have initiated a unique human epoch of earth history? This introductory, interdisciplinary graduate seminar will explore this question while examining the ways that different disciplines approach the understanding of environmental change, its impact on natural and human systems, and how these understandings have changed over time.

**EVRN 701. Climate Change, Ecological Change and Social Change. 3 Credits.**

This interdisciplinary graduate seminar examines the history of climate change from natural and physical science, social science, and humanities perspectives. The class explores the ways that different disciplines approach understanding climate change and its impact on natural and human systems and how these understandings have changed over time. The course is team-taught. Students will write a research paper on a climate change topic of their choice that reflects the historical and interdisciplinary approaches of the seminar. Prerequisite: Consent of instructor.

**EVRN 720. Topics in Environmental Studies: ____. 1-6 Credits.**

Courses on special topics in Environmental Studies. These courses may be lecture, seminars, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once.

**EVRN 721. Environmental Regulation and Policy. 3 Credits.**

This course provides a survey of the environmental regulations, environmental problems, and environmental solutions that must be dealt with by environmental scientists in agencies and industry. Considered both theoretical and practical/applied aspects of environmental practices.

**EVRN 725. Environmental Security. 3 Credits.**

This course examines environmental issues, concerns, and policy as they relate to security through the framework of geopolitics. National security and conflict are increasingly discussed in relation to the environment, such as concerns regarding environmental change as well as stresses and demands on natural resources, e.g., water, energy, deforestation, desertification. The course will examine key contributions to the environmental security, resource conflicts, climate security and related literatures.

**EVRN 730. Environmental Toxicology. 3 Credits.**

Examines the effects of toxic chemicals on individuals, populations, communities and ecosystems. Topics include major classes of pollutants, movement, distribution and fate of pollutants in the environment, mechanisms of action, toxicity testing, and environmental assessment.

**EVRN 735. Scientific Communication. 3 Credits.**
Principles of English communication skills for the professional scientist. The course begins by exploring the role of narrative in all forms of scientific communication; it then applies the use of narrative tools to scientific writing, message honing and speaking. The course covers written and verbal communication of primary research. Students must have an independent research project on which to focus their communication assignments. (Same as BIOL 735.)

EVRN 736. Environmental Remote Sensing. 3 Credits.
Covers fundamentals of remote sensing, including electromagnetic radiation principles and data collection and processing, followed by an introduction to the various remote sensing techniques and their application in understanding and managing environmental systems. Exercises are provided for students to be actively involved in evaluating, critically analyzing and interpreting images and data to determine implications for practice. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 536. Prerequisite: Graduate standing.

EVRN 737. Water Resource Sustainability. 3 Credits.
Provides a framework for learning about our water future and ways we might define and achieve sustainability in water use and management. Concerns of ethics, culture, economics, politics, and environmental health will be discussed within the contexts of issues such as the global water crisis, water footprints, water pollution, human water systems, water security, and sustainable water technologies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 537. Prerequisite: Graduate standing.

EVRN 740. Soil Science for Environmental Assessment. 3 Credits.
Provides students with a solid understanding of soils in the environment, particularly as it relates to environmental assessment. Topics include soil geomorphology, soil physics/chemistry/biology, management of soils, and soil contaminants. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor.

EVRN 743. Natural Hazards and Environmental Risks. 3 Credits.
This course investigates the geophysical processes of the earth-atmospheric system that can create disastrous impacts on human life, society, and economics. Hazards, including earthquakes, tsunamis, floods, hurricanes, mass movements, wildfires, and many others, are examined by analyzing spatial and temporal dynamics as well as any precursory indicators that may be present. Attention is also given to management and mitigation strategies. Case studies are utilized to examine interaction between society and natural hazards. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 543. Prerequisite: Graduate standing.

EVRN 747. Fluvial Geomorphology. 3 Credits.
This course develops an understanding of the research processes as applied to river systems by means of qualitative and quantitative research methods and approaches to solve problems. Applications of fluvial principles to river management and stream restoration are examined, as well as interactions between land use and geomorphic processes. Prerequisite: Graduate standing.

EVRN 750. Environmental Air Quality Assessment. 3 Credits.
Addresses scientific, regulatory, and technical aspects of air quality monitoring, including pollutant formation and dispersion, pollution control, national emissions standards, and methods for monitoring pollutants and air quality. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor.

EVRN 751. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as BIOL 759 and GEOG 759.)

EVRN 755. Energy and Environment. 3 Credits.
This interdisciplinary course provides students with a broad understanding of the current energy system, including its challenges, with focus on changing global energy needs, current energy sources, developing and emerging renewable energy sources, and their economic, environmental, and societal implications. Analysis of energy fundamentals, fossil fuel exploration and use, nuclear energy, renewable energy sources, and subsequent environmental impacts. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 555.

EVRN 771. Project Management for Science and Technical Managers. 3 Credits.
Students will learn to use current project planning tools to develop project plans that aid in bringing a project to completion on time and within budget. They will demonstrate the ability to manage projects within a science organization.

EVRN 772. Organizational Management and Leadership in Science and Technical Organizations. 3 Credits.
Explores concepts and practices in leadership, organizational behavior and change management. Emphasis is placed on understanding dynamics of individuals and groups in organizational structures focused on research and innovation. Students will tackle organizational culture, management approaches, performance-building, and creativity and innovation management in science organizations.

EVRN 773. Organizational Communication and Supervision in Science and Technical Organizations. 3 Credits.
Explores the duties and responsibilities of a supervisor/manager. Addresses management of an integrated team, recruitment and interviewing, professional development of employees, performance management, effective workplace communications; collaboration, and managing organizational conflict.

EVRN 774. Financial Management in Science and Technical Organizations. 3 Credits.
The goal of this course is to gain an understanding of finance, budget, and accounting in a science organization. The student will learn how to interpret and understand basic financial statements; how to make good decisions based on them; learn essential accounting concepts and characteristics of accounting systems; and budgeting/forecasting in a science-based organization.

EVRN 775. Technical Communication for Scientists. 1 Credits.
Addresses challenges and approaches of communicating science concepts and results to technical and non-technical as well as internal and external audiences. Focuses on techniques to improve the effectiveness of written and oral communication, including technical writing of project and research proposals, scientific presentations, and effective workplace communications.

EVRN 776. Patent Law and Intellectual Property Essentials for Scientists. 1 Credits.
This course provides an overview of basic patent law, the patent process, patent interpretation (claims and prior art) and intellectual property law in science.

EVRN 777. Professional Development for Science Managers. 1 Credit.
Addresses professional development of the scientist as managers. Students will develop a personal and professional development plan and understand how to apply it to their own professional career, future career transitions, and lifelong career progression.

EVRN 778. Topics in Science and Technical Management. 1-3 Credits.
Addresses special topics in Science Management. Students may enroll in more than one interest group but may enroll in a given interest group only once.

EVRN 814. Professional Science Masters Environmental Assessment Capstone I. 1 Credit.
A culminating experience to develop a workforce project and produce a written report to be presented orally to a committee that may include an industry member. Students will develop an applied workforce project in the student's place of employment for full-time employees, or an internship or similar individual project for full-time students or students who are not employed in the area of study. This course will initiate the process of project development and will be taken prior to a student's final semester. This project is to be continued in EVRN 815 in the last semester of the student's graduate career. Prerequisite: Minimum 20 credit hours completed in program.

EVRN 815. Professional Science Masters Environmental Assessment Capstone II. 2 Credits.
A culminating experience to develop a workforce project and produce a written report to be presented orally to a committee that may include an industry member. Students will develop an applied workforce project in the student's place of employment for full-time employees, an internship or similar individual project for full-time students or students who are not employed in the area of study. The students will compile their project results in a formal written report and will give an oral presentation to the Environmental Studies faculty (2 minimum) and the student's employer or mentor. Prerequisite: EVRN 814.

EVRN 915. Capstone. 3 Credits.
The goal of this research seminar is to discuss individual students' research, culminating in the completion of a paper in Environmental Studies for presentation at a professional meeting and/or publication in a professional journal.

Film and Media Studies Courses

FMS 100. Introduction to Film and Media. 3 Credits. HL H
An introduction to analyzing and thinking critically about film and other media. Students will learn to read and interpret the basic signs, syntagms, and structures of cinematic language. Through direct analysis of selected films, television, and new media, students will evaluate and construct evidentiary arguments about the aesthetic strategies creators use to make meaning for audiences. In addition, this course will familiarize students with the historical and industrial dimensions of film and media, as well as the influence technology has on their development into the twenty-first century.

FMS 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Film and Media Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

FMS 200. Film and Media Aesthetics. 3 Credits. HL H
An introduction to film and media aesthetics, including basic film/media theories and their practical applications. Students will be introduced to the concepts of time, space, composition, movement, editing, light, color, and sound. A key feature of the course will be a practical emphasis on learning how to see creatively by applying elements of design, camera lens and sound recording principles. Examples of these aspects of film and associated media will be examined and discussed in depth. Should be taken before or concurrently with FMS 275.

FMS 204. Study Abroad Topics in: ____. 1-6 Credits. H
This course is designed for the study of special topics in Film at the freshman/sophomore level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

FMS 273. Basic Screenwriting. 3 Credits. H
An introduction to the craft and principles of screenwriting, from inspiration to writing a complete first act. Emphasis on factors relevant to the creation of a treatment and a screenplay. Prerequisite: Consent of instructor.

FMS 275. Basic Video Production. 4 Credits. H
Theory and practice of video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. Lecture-laboratory. Prerequisite: FMS 100, completion of or concurrent enrollment in FMS 200.

FMS 301. Undergraduate Professional Development Seminar. 1 Credit. H
Provides an overview of opportunities for professional development in Film and Media Studies, and helps students plan goals for their education through an understanding of professional practices. The course also covers practical exercises in professional development, including writing resumes, finding internships and entry-level work, and other aspects of establishing a career in Film and Media Studies. Graded on a satisfactory/unsatisfactory basis. Prerequisite: FMS 275 or equivalent. Open to FMS Majors only.

FMS 302. Undergraduate Studies Seminar in: ____. 1-3 Credits. H
Course organized any given semester to examine a particular studies topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

FMS 303. Undergraduate Production Seminar in: ____. 1-3 Credits. H
Course organized any given semester to study a particular production topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

FMS 304. Study Abroad Topics in: ____. 1-6 Credits. H
This course is designed for the study of special topics in Film at the junior/senior level. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

FMS 307. Undergraduate Film/Media Internship. 1-6 Credits. H
Supervised study with an approved film/media company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Prerequisite: Consent of instructor and at least seven hours credit in the department.

FMS 310. History of the Silent Film. 3 Credits. H
A survey of the artistic, economic and sociological development of the narrative cinema with emphasis on the American studio system, German Expressionism, and Soviet Expressive Realism. Analysis of selected films.

**FMS 311. History of the American Sound Film. 3 Credits. HL H**
A study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television. Analysis of selected films.

**FMS 312. History of the International Sound Film to 1950. 3 Credits. H**
A survey of the artistic, economic, and sociological development of the international sound film from 1929 to 1950. Emphasis on European National Cinemas.

**FMS 313. History of the International Sound Film Post 1950. 3 Credits. H**
A survey of the artistic, economic, and sociological development of the international sound film from 1950 to the present. Emphasis on Free Cinema, New Wave, and other emerging post-war cinemas.

**FMS 314. History of African-American Images in Film. 3 Credits. HL H**
A history and critical assessment of the diverse images of African-Americans in American cinema and the impact of those images on American society. Screenings of feature and independent films, including those by African-Americans.

**FMS 315. Survey of Japanese Film. 3 Credits. NW H**
This course surveys the major developments and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, Survey of Japanese Film introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this institution shapes gender, class, ethnic, and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions, students critically examine how Japanese cinema as an institution both responds to and intervenes in the social, cultural, and political history of twentieth-century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 315.)

**FMS 316. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Credits. H**
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. Other themes in common are financing issues, such as co-production agreements, film production under the regional trade pact Mercosur and issues of circulation, distribution and marketing of national films. Most films will be feature length narrative, but a few documentaries will be shown. May be taken as FMS 716, but with additional requirements.

**FMS 318. Anti-war Film. 3 Credits. H**
An overview and exploration of the history of anti-war film and media themes to show how attitudes regarding war and political policy can be affected by positive and negative depictions of conflict. Course includes analysis of selected films.

**FMS 322. Soviet and Post-Soviet Russian Cinema. 3 Credits. H**
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences) and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. (Same as SLAV 322.)

**FMS 323. War and Memory in Asian Film. 3 Credits. H**
This course explores how the film industries of key East Asian nations have constructed, reimagined, debated, and commemorated their experiences of the major wars fought during the 20th century (i.e. The Greater East Asian War, the Chinese Civil War, the Korean War, and the Vietnam War). We will examine the intersection of various historical, political, cultural, and economic factors with the production of mainstream commercial film to consider how individual and collective memories of wars in Asia have transformed over time in different contexts. Films are particularly useful for examining how the cultural memory of wars survives and is conveyed from one era to another with each new generation reinventing and superimposing new layers of memory on the original phenomenon from a range of multiple perspectives. A central goal of this course is to provide students with various historical perspectives, cultural contexts, and analytical methods to develop your ability to apply visual literacy and critical thinking skills to contemporary Asian films about the major wars of the last century.

**FMS 330. Cinematic Rome. 3 Credits. H**
A study of cinematic representations of daily life, diversity, urban landscape, and social and political issues in modern and contemporary Rome as presented in different genres. Taught in English. (Same as ITAL 330.)

**FMS 331. Mafia Movies. 3 Credits. H**
This course investigates representations of the Italian mafia in Italian and American cinema since the 1960s, placing emphasis on conventions of the gangster genre and its evolution. We will examine films in relation to their socio-historical contexts and special attention will be dedicated to Italian films that de-glamorize the Italian mafia and champion the anti-mafia struggle. Taught in English. (Same as ITAL 331.)

**FMS 335. New Media and Society. 3 Credits. H**
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in research-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key research skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level.

**FMS 350. Indigenous Film and Media. 3 Credits. H**
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum-including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered
at the 300 and 700 level with additional assignments at the 700 level. Not available to students with credit in FMS 750 or ISP 755. (Same as ISP 355.)

FMS 355. Storytelling with Digital Media. 3 Credits. HL H
In this course, students will utilize digital tools and platforms to create online and mobile stories based on the theories and histories of interactive storytelling discussed in class. Through a survey of digital storytelling examples and concepts, students will create interactive projects to add to their portfolio and learn how to think critically and write analytically about digital media.

FMS 373. Intermediate Screenwriting. 3 Credits. H
Emphasis on writing a full-length screenplay. Explores genre, character, dialogue, and the development of a personal writing style. Prerequisite: FMS 273 (students will be selected based on writing samples).

FMS 374. Animation. 3 Credits. H
A survey that combines animation history, theory, and production by examining animated works of all kinds and exploring various styles utilizing both hands-on techniques and digital animation programs. Lecture-laboratory.

FMS 375. Intermediate Video Production. 3 Credits. H
Theory and practice of longer-form video production with emphasis on scripting, talent coordination and editing in preproduction, production and postproduction. Lecture-laboratory. Prerequisite: FMS 275.

FMS 376. Cinematography. 3 Credits. H
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. Prerequisite: FMS 275.

FMS 377. Post-Production. 3 Credits. H
Students become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: FMS 275.

FMS 380. American Popular Culture of: _____. 3 Credits. HL H
An interdisciplinary examination of popular cultural forms and their relationships with the social, political and economic dynamics of America, with emphasis on film, media, music, literature (including magazines and newspapers) and the graphic arts. The decade or other specific topic to be studied changes as needs and resources develop. May be repeated for credit for different decades or topics.

FMS 410. US Diversity in Visual Culture. 3 Credits. H
This course examines the way in which diversity in the United States, including race, class, gender, and sexuality, are represented through visual culture, historically and in the present. The study of visual culture analyzes the way in which visual images communicate systems of beliefs, contribute to identity formation, and have an influence on our thinking about diversity. Course looks at United States visual objects (i.e., film, television, photography, art, advertisements, and theatre as well as visual practices, i.e., in public and private spaces.

FMS 425. Ethics in Storytelling. 3 Credits. H
This course considers the ethics of telling stories with film and media. Using a framework of rhetorical criticism and postmodern ethics, the students will evaluate the ethical and social responsibility challenges of fiction and non-fiction writing, films, television and online projects from a variety of fields: anthropology, sociology, journalism, political rhetoric and documentary filmmaking. Through readings, case studies and application, students will explore the fundamentals of rhetorical ethics, and the questions raised my new and emerging forms of storytelling.

FMS 474. Videogame Theory and Design. 3 Credits. H
This course surveys the history and aesthetics of videogames and then provides a deep dive into the theory, design principles and techniques of game development on the Unity platform. Through assignments geared toward critical design, students gain the skills necessary for game-building in the areas of visual, narrative, game, level and sound design that comprise a typical development team. Although no prior coding experience is necessary, students may benefit from prior knowledge of C#, 3D modeling, or animation.

FMS 475. Advanced Video Production. 3 Credits. H
Special projects in video production, using both studio and remote locations. Prerequisite: FMS 375.

FMS 477. Sound Design. 3 Credits. H
Students will study and produce film and video work with an emphasis on sound design theory and practice. Course projects consist of several short works in response to readings and screenings, which include a survey of sound in cinema, internet and radio. Students will also become conversant with related equipment, software and techniques. Prerequisite: FMS 275.

FMS 478. Experimental Production. 3 Credits. H
Students produce experimental film and video projects, including installation art and performance art pieces, in both collaborative and a collaborative production modes. Practical production aspects of historical experimental works will be studied, with emphasis on creation of works inspired by these earlier artists and their work. Unorthodox video and film production concepts and modes will also be studied and used in the creation of original works. The incorporation of experimental elements in the creation of mainstream works, and the creation of such projects, will also be a key area of study and experimentation. By pushing their individual creative limits, students will gain an appreciation for the experimental film and video genre, as well as an expansion of their production skills. Prerequisite: FMS 275.

FMS 479. Documentary Production. 3 Credits. H
This is a hands-on production course in which students will research, plan and produce short-form non-fiction documentaries. The class is dedicated to training young professionals in the principles, skills, techniques, habits and practices of documentary production. We will focus also on the aesthetics of our craft and the documentary form. The objective is to ground students in the fundamental skills of good non-fiction storytelling-conceptualization, research, story structure, theme development, writing, producing and directing. The goal is the production of several short-form compositions (videos) where storytelling is employed to communicate a concept or idea effectively. Students will form into teams to research, develop and produce a course-long short-form documentary. Prerequisite: FMS 275.

FMS 480. Music Video Production. 3 Credits. H
This course will cover elements of the history, aesthetics, and business of music video and music video production. Students will view and discuss many different types of music videos, and will learn how to classify and critique these videos in a professional manner. Students will gain familiarity with the genres, themes, forms, and iconography of music video; an understanding of the place of music video in media culture; an exploration of the ideological, cultural, and historical contexts of music video; and an ability to create or assist in the creation of professional-quality music videos. Prerequisite: FMS 275.

FMS 498. Honors Seminar. 2-6 Credits. H
Study may be directed toward either (a) reading for integration of knowledge and insight in film and media, or (b) original research (i.e., investigation of a specific problem in film and media). Six hours maximum credit. Prerequisite: Consent of Departmental Honors Coordinator.
FMS 499. Directed Study in Film. 1-6 Credits. H
Investigation of a special topic or project selected by the student with advice, approval, and supervision by an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. A maximum of six hours credit may be counted toward a degree. Prerequisite: At least seven hours credit in the department and consent of instructor.

FMS 530. Film and Media Theory. 3 Credits. H
Comprehensive examination of most significant theories and theorists of film. Organized around specific questions, e.g., what qualities make film art unique, and how is film related to other visual and literary arts? Class discussion, individual projects. Prerequisite: FMS 100 or equivalent (determined by instructor).

FMS 543. Contemporary Japanese Film. 3 Credits. NW H
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 543.) Prerequisite: Junior status.

FMS 544. African Film. 3 Credits. W
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as AAAS 555.)

FMS 585. Capstone in Film and Media Studies. 4 Credits. H
This course integrates the knowledge and skills acquired across the curriculum of Film & Media Studies including academic studies, but also production and other related disciplines to enable the student to demonstrate achievement through the production of a major creative research project. Prerequisite: Must be admitted to the Film and Media Studies B.A. or B.G.S. degree. Must have completed one FMS production course.

FMS 592. Documentary Film and Video. 3 Credits. H
An historical and theoretical survey of that major genre of film and video typically termed "documentary." The course will trace the main historical developments from documentary's beginnings through contemporary innovations. Prerequisite: FMS 100 and FMS 310, FMS 311, or consent of instructor.

FMS 593. Experimental Film and Video. 3 Credits. H
A history of experimental film and video through an examination of major artists, movements, theories, and films/tapes. Prerequisite: FMS 100 and FMS 310, or consent of instructor.

FMS 620. International Women Filmmakers. 3 Credits. H
This course examines films made by women around the world. Mainstream and independent fiction, documentary, and experimental works will be screened and discussed. The objectives of the course are: 1) to learn the variety of films made by women and the conditions of their production, distribution reception. 2) to interrogate the idea of women's cinema as 'counter-cinema'. We will acquire tools for analyzing films in terms of economic, aesthetic, cultural, and political circumstance by women of different countries, classes, races, ethnicities, genders, and sexual preferences.

FMS 673. Problems in Basic Screenwriting. 3 Credits. U
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structure of a full-length, three-act screenplay. In addition to the class sessions taught with FMS 273 Basic Screenwriting, separate consultations and specific research assignments for graduate students in FMS 673 are also required.

FMS 675. Problems in Basic Video Production. 3 Credits. U
Theory and practice of single-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. In addition to the class sessions taught with FMS 275 Basic Video Production, separate consultations and specific research assignments for graduate students in FMS 675 are also required. Lecture-laboratory.

FMS 702. Graduate Seminar in: ______. 1-3 Credits.
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

FMS 704. Study Abroad Topics in: ______. 1-6 Credits.
This course is designed for the study of special topics in Film. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

FMS 707. Film/Media Internship. 3-12 Credits.
Study with an approved film or media company. Emphasis may be in one or all of the following areas: acting, directing, or promotion management. No more than six hours may be applied to an M.A. degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor.

FMS 715. Survey of Japanese Film. 3 Credits.
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions students will examine how Japanese cinema, as an institution, responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 715.)

FMS 716. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Credits.
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. In addition to the lecture sessions taught in tandem with FMS 316, additional research component, lecture presentation, and class meeting are also required.

FMS 718. Anti-war Films. 3 Credits.
An overview and exploration of the history of the portrayal of anti-war film and media themes to show how anti-war attitudes and political policy can be affected by positive and negative depictions of conflict. Analysis of selected films. FMS 318 and FMS 718 will meet concurrently, though separate consultations and specific research assignments for FMS 718 are also required.

FMS 722. Soviet and Post-Soviet Russian Cinema. 3 Credits.
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as works with attention to formal qualities, cinematic styles, and influences and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate
and graduate level, with additional assignments at the graduate level. Not open to students with credit in SLAV 322/FMS 322. (Same as SLAV 723.) Prerequisite: Graduate standing or instructor permission.

**FMS 743. Contemporary Japanese Film. 3 Credits.**
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 743.)

**FMS 745. New Media and Society. 3 Credits.**
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in production-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key digital skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level.

**FMS 750. Indigenous Film and Media. 3 Credits.**
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum-including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered at the 300 and 700 level with additional assignments at the 700 level. Not available to students with credit in FMS 350 or ISP 355. (Same as ISP 755.)

**FMS 773. Problems in Intermediate Screenwriting. 3 Credits.**
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structuring of a full-length, three act screenplay. In addition to the class sessions taught with FMS 373 Intermediate Screenwriting, separate consultations and specific research assignments for graduate students in FMS 773 are also required.

**FMS 775. Problems in Intermediate Video Production. 3 Credits.**
Theory and practice of multiple-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation, and audio. In addition to the class sessions taught with FMS 375 Intermediate Video Production, separate consultations and specific research assignments for graduate students in FMS 775 are also required. Lecture-laboratory. Prerequisite: Consent of instructor and FMS 675.

**FMS 776. Problems in Cinematography. 3 Credits.**
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. FMS 776 meets concurrently with FMS 376; students enrolled in the graduate-level course will have separate consultations and specific research assignments. Lecture-laboratory. Prerequisite: Consent of instructor and FMS 675.

**FMS 777. Post-Production. 3 Credits.**
Students will become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: Consent of instructor.

**FMS 800. Introduction to Graduate Study in Film/Media. 3 Credits.**
Major emphasis is placed upon the principles of research, bibliographical data, and research methods useful in film and television. The course should be taken at the beginning of the graduate student’s program.

**FMS 801. Professional Development Seminar. 1 Credits.**
Preparation and training for faculty careers in film and related fields, including research skills and methods, responsible scholarship, teaching, and service. Other topics vary from semester to semester. May be repeated for credit.

**FMS 811. Development of the American Sound Film. 3 Credits.**
Intensive study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television.

**FMS 813. Development of the International Sound Film. 3 Credits.**
Intensive study of the artistic, economic, and sociological development of the international sound film with emphasis on the cinemas of England, France, Italy, Germany, Sweden, and Eastern Europe.

**FMS 814. Development of African-American Images in Film. 3 Credits.**
A history and critical assessment of the development of diverse images of African-Americans in American cinema and the impact of those images of American society. Screenings of feature and independent films, including those by African-Americans. In addition to the lecture/screening sessions taught in tandem with FMS 314, a separate discussion section and specific research assignments for graduate students enrolled in FMS 814 are also required.

**FMS 862. Survey of Film and Media History. 3 Credits.**
This seminar will be primarily international in scope and will concentrate on the following: technological and production issues relating to the transition in 1927-1931 of silent to sound film; the constructions of national identity, including those of recently emerging cultures; a comparison and contrast of the censorial agencies in America and abroad; and current revisionist perspectives on received film and media history.

**FMS 863. Survey of Documentary and Experimental Film and Media. 3 Credits.**
Surveys the important historical and theoretical issues pertinent to both the documentary and experimental approaches as expressed in film, video and new technologies. Includes major documentary and experimental genres, directors, national schools, artistic movements, and landmark works. Screenings reflect a chronology from origins to present-day.

**FMS 865. Film and Media Theory. 3 Credits.**
This seminar is a comprehensive survey of the major classical and contemporary film and media theories and theorists, such as Munsterberg, Eisenstein, Bazin, and Adorno. The course includes film and media theory since the 1970s, moving through structuralism and into the posts:-structuralism, -modernism, -colonialism, and beyond. Within these broad paradigms some of the theories examined in depth are cinesemiotics, Marxism, cinematic apparatus, feminist film theory, reception theory, new media and virtual reality.

**FMS 875. Problems in Advanced Video Production. 3 Credits.**
Special projects in video production, using both studio and remote locations. In addition to the class sessions taught with FMS 475
Advanced Video Production, separate consultations and specific research assignments for graduate students in FMS 875 are also required. Prerequisite: FMS 775 or consent of instructor.

FMS 880. Development of American Popular Culture in the: 3 Credits.
Intensive interdisciplinary examination of popular culture forms and their relationships with the social, political, and economic dynamics of America in a specific decade, with emphasis on film, broadcasting, theatre, music literature (including magazines and newspapers), and the graphic arts. Decade to be studied changes as resources and needs develop.

FMS 888. Special Problems in Film History and Criticism. 1-4 Credits.

FMS 895. Intensive Film Project Seminar. 1-4 Credits.
The student plans and executes an intensive special project which requires the professional skills of investigation and performance appropriate to radio, television and/or film. May be repeated for credit up to a maximum of six credit hours. (This seminar is to the special project program what “thesis” is to the traditional program.)

FMS 897. Practicum in Film. 1-3 Credits.
Various approaches to the illustration of principles of production in film and/or video through the supervision of laboratory exercises and subsequent evaluation by the Theatre and Film graduate faculty.

FMS 898. Investigation and Conference (for Master's Students). 1-8 Credits.
Directed research and experimentation in film or media. Limited to eight hours credit toward the Master's degree.

FMS 899. Master's Thesis. 1-6 Credits.

FMS 902. Film Seminar in: 3 Credits.
A graduate seminar devoted to selected historical, theoretical, or critical issues. Prerequisite: Consent of instructor.

FMS 998. Investigation and Conference (for Doctoral Students). 1-8 Credits.

FMS 999. Doctoral Dissertation. 1-12 Credits.

French, Francophone, and Italian Studies Courses

FREN 104. Elementary French, Overseas. 1-5 Credits. U
Basic language instruction in French for beginners participating in study abroad programs in France or a French-speaking country. Graded on a satisfactory/unsatisfactory basis.

FREN 107. Elementary French I for the Professional Schools. 3 Credits.
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement.

FREN 110. Elementary French I. 5 Credits. U F1
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing.

FREN 111. Introduction to French I. 3 Credits. U
Introduction to French for special purposes; no previous French required. Provides basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Introduction to the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: Instructor permission required.

FREN 112. Introduction to French II. 3 Credits. U
Continuation of FREN 111. Further development of basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Continued exploration of the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: FREN 111 or permission of instructor.

FREN 120. Elementary French II. 5 Credits. U F2
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing. Prerequisite: FREN 110 or by departmental permission.

FREN 130. Critical Issues in Contemporary France. 3 Credits.
France is a society in transition. Profoundly altered by two World Wars and the aftermath of a colonial past, French culture has been propelled, in the last century, into the complexities of a modern, globalized world. While we have faced many similar challenges in United States to those confronted by our French counterparts, this course will help us think through the often drastically different outcomes of our respective approaches to such questions as immigration, national identity, education, and the perennial struggle between state and individual rights. This course is offered completely in English. It does not satisfy any requirements of the French major or minor.

FREN 150. Zombies, Aliens, Monsters. 3 Credits.
A comprehensive, interdisciplinary survey of the treatment of the Other in Western culture, predominantly the USA, UK, France, and Australia, that may include vampires, zombies, fairy tales, villains and anti-heroes, the macabre, alien encounters, dystopias and utopias, and deviancy, with particular attention to literature, film and TV, and thought. Taught in English. Does not fulfill any requirement in the French major or minor.

FREN 152. France and the French. 3 Credits. HL H
A comprehensive, interdisciplinary survey of French culture that may include topics ranging from the earliest times to the present, with particular attention to literature, the arts, thought, politics, society, food, and customs. Taught in English. Does not fulfill any requirement in the French major or minor.

FREN 153. Global Cultures: The French Connection. 3 Credits. H/W
A comprehensive, interdisciplinary and critical survey of the French-speaking cultures outside France in North America, the Caribbean, Africa, the Middle East, and Southeast Asia. Will include a variety of cultural topics, with particular attention to, and critique of, French colonization, the effects of empire on indigenous cultures, and postcolonial interactions today between France and its former colonies and protectorates. Taught in English. Does not fulfill any requirement in the French major or minor.

FREN 177. First Year Seminar: 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in French. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

FREN 205. French Literature in Translation: 3 Credits. HL H
Readings and discussions of representative great masterpieces of French and/or francophone literature from the medieval Arthurian romances and chansons de geste to the present, with particular emphasis on the question of the interrelations of form and content. Includes such authors as Rabelais, Montaigne, Racine, Moliere, Voltaire, Balzac, Flaubert, Baudelaire, Proust, Gide, Camus, and Beckett. Conducted in English. A reading knowledge of French is extremely useful but not a requirement.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>FREN 230</td>
<td>Intermediate French I. 3 Credits. U F3 Third-semester course stressing oral and written work in French; systematic review of grammar and introduction to reading in cultural texts. (See also FREN 231, FREN 234.) Prerequisite: FREN 120 or by departmental permission.</td>
<td>3</td>
<td>H/W</td>
<td>FREN 231, FREN 234, FREN 240, FREN 241--each completes foreign language requirement. (See also FREN 241.) Prerequisite: FREN 120 or by departmental permission.</td>
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<td>FREN 240</td>
<td>Intermediate French II. 3 Credits. U F4 Continuation of FREN 230. (FREN 234, FREN 240, FREN 241--each completes foreign language requirement.) Prerequisite: FREN 230, FREN 231, or by departmental permission.</td>
<td>3</td>
<td>H/W</td>
<td>FREN 241--each completes foreign language requirement. (See also FREN 241.) Prerequisite: FREN 230, FREN 231, or by departmental permission.</td>
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<td>FREN 301</td>
<td>French Written and Oral Communication 1. 3 Credits. H/W F P Designed to prepare students for oral and written work in advanced-level French. Prerequisite: FREN 234, or FREN 240, or FREN 241, or by departmental permission.</td>
<td>3</td>
<td>H/W</td>
<td>Designed to further students' proficiency in oral and written expression for work in advanced-level French. Prerequisite: FREN 301, or by departmental permission.</td>
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<td>FREN 410</td>
<td>Survey of French Culture I. 3 Credits. H/W F P A survey of the historical, philosophical, literary, and artistic development of France, from the beginning through the 17th century. Prerequisite: FREN 301 and FREN 326.</td>
<td>3</td>
<td>H/W</td>
<td>A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad programs.</td>
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<tr>
<td>FREN 420</td>
<td>Survey of French Culture II. 3 Credits. H/W F P Continuation of FREN 410, from the 18th century to the present. Prerequisite: FREN 301 and FREN 326.</td>
<td>3</td>
<td>H/W</td>
<td>Continuation of FREN 410, from the 18th century to the present. Prerequisite: FREN 301 and FREN 326.</td>
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FREN 430. La France d’Aujourd’Hui. 3 Credits. H/W FP
Social, political, and economic trends from 1939 to present, with emphasis on period since 1968. Prerequisite: FREN 301 and FREN 326.

FREN 431. French-Speaking World (Outside France). 3 Credits. H/W FP
Cultures of the some 235 million persons in the five world areas whose everyday and/or official language is French: Canada; Caribbean (e.g., Haiti, Guadeloupe, Martinique); Europe (e.g., Belgium, Switzerland); Africa and Indian Ocean (23 former French or Belgian colonies); Pacific (e.g., Tahiti, New Caledonia). Also French-speaking settlers in the United States (Louisiana, South Carolina, New England, Kansas). French presence in Indo-China and the Near East. Prerequisite: FREN 301 and FREN 326. (May be taken concurrently with FREN 301 and/or FREN 326.)

FREN 432. Francophone African Literature. 3 Credits. NW H/W
This course is an introduction of 20th Century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women’s writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as AAAS 432.) Prerequisite: ENGL 102 and a 200-level English course.

FREN 433. French Global Culture Through Film. 3 Credits. H/W
Discussion of great masterpieces of modern postcolonial Francophone and French global film, with a particular emphasis on how film portrays and conveys important aspects of the cultures of former French colonies and peoples in Quebec, the Caribbean, Africa, and Southeast Asia during and since independence, including immigrant populations in mainland France itself today. The works of a variety of French and indigenous filmmakers and cultures will be covered. Prerequisite: FREN 301, FREN 302, and FREN 326.

FREN 440. Studies in French Culture: ____. 3 Credits. H/W FP
Representative topics are: History of Paris, Role of Women in French Literature and Culture, Interrelationships of the Arts, French-speaking African Culture, Culture of French Canada. May be repeated for credit with departmental permission; may also be repeated as part of major in French language and culture. Prerequisite: FREN 301 and FREN 326.

FREN 441. The Story of French. 3 Credits. H/W
This course provides an overview of the historical development of the French language and an introduction to different varieties of French, as well as some current language-related issues in the French-speaking world. The history of the French language is considered both from an external perspective, by examining important historical events in the language's history, and from an internal perspective, by looking at specific ways the language has changed over time. Variation is examined: how French differs geographically (i.e. dialects and regional varieties in France and in the French-speaking world), socially (i.e. how social groups such as socioeconomic class or sex are reflected in language use), and situationally (i.e. language modification depending on formality, context, etc.). Will include comparisons of spoken versus written French, slang, and le français populaire, as well as current issues, e.g., les néologismes (word creation), les anglicismes (English influence) and feminization of language. Taught in French. Prerequisite: FREN 301.

FREN 443. French Inside Out. 3 Credits. H/W
This course provides an introduction to the structure of modern French and the various subfields of French linguistics. Topics will include major aspects of phonetics/phonology (the sounds/sound system), morphology (word formation), syntax (sentence structure), semantics, pragmatics (language use) and sociolinguistic variation (social, stylistic, geographical), as well as language attitudes and policies in France and other Francophone regions. Students will be introduced to different theoretical approaches to the study of French linguistics and will work on linguistic analyses of first- and second-language data. Taught in French and no prior study of linguistics is necessary to take this course. Prerequisite: FREN 301.

FREN 450. French Literature of the Middle Ages. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and FREN 326.

FREN 455. French Literature of the Renaissance. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and FREN 326.

FREN 460. Identity, Absolutism, and Power in France, 1589-1715. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and 326.

FREN 462. French Literature of the Eighteenth Century. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and 326.

FREN 465. French Literature of the 19th Century. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and 326.

FREN 470. French Literature of the Twentieth Century. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and 326.

FREN 471. Transcending Borders: Migrations, Identities, Voices, Narrative. 3 Credits. H/W
Study the themes of borders, migrations, and search for individual and collective identity and voice which define modern French and French-speaking cultures in continental France and around the globe. Authors, cultural movements and themes of the period, with an emphasis on twentieth- and twenty-first centuries. Introduce the student to the principal elements of the cultural, intellectual and artistic climate of the time, including literature, film, and other cultural documents and artefacts, print and electronic, visual and aural. May be taught in French or English. Prerequisite: FREN 301, FREN 302, and FREN 326.

FREN 480. Studies in French Literature: ____. 3 Credits. H/W FP
A study of a period, theme, group of authors, or movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: FREN 301 and 326.

FREN 481. Science-Fiction and Fantasy in French. 3 Credits. H
Study of the key works in different media in French dealing with the theme and traces the development of science-fiction and fantasy from its beginnings to the present day. Prerequisite: FREN 326.

FREN 494. Research Internship. 1-3 Credits. H
Practical research experience in French and Francophone studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. May be used as a component of the Research Experience Program (REP). Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level French course and permission of instructor.

FREN 495. Directed Readings in French. 1-15 Credits. U FP
May be taken more than once, total credit not to exceed fifteen hours. Fields not covered by course work, and/or field of student's special interest. Conferences. Counts as humanities when taken for two or three hours. Prerequisite: Twenty-five hours of French and consent of instructor.

FREN 496. Internship. 1-3 Credits. H
Practical experience in the use of French skills in supervised academic, professional, or study-abroad setting. Credit hours are graded according to the written evaluation provided by the supervisor to the director. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level French course and permission of instructor.

FREN 499. Honors in French. 3 Credits. H/W FP
Various topics in French or Francophone literature, language, culture, or film. May be repeated for credit, total credit not to exceed six hours. Six hours of FREN 499 required for B.A. with Honors in French. Before enrolling, the student must obtain the approval of the faculty member who will direct the Honors project.

FREN 500. Advanced French Phonetics. 3 Credits. H/W FP
Advanced theory and practice of French pronunciation. Not open to students who have taken FREN 310, except by departmental permission. Prerequisite: FREN 301 or FREN 326 or graduate standing.

FREN 530. Studies in Film: ______. 3 Credits. H/W FP
Studies in an aspect of film, a director or group of directors. Emphasis on French film. Given in French or English.

FREN 550. Capstone Seminar in French and Francophone Language, Literature, and Culture. 3 Credits. H/W
Small discussion groups, each designed to consider a specific, clearly defined topic, using an interdisciplinary approach and requiring the demonstration of a comprehensive knowledge of the fundamentals in the field as appropriate to the topic. Class discussion based on student presentation. A final comprehensive project required. All discussion and coursework will be in French. Prerequisite: Senior majors; special department permission for other students.

FREN 592. French Culture Through Film I, Beginnings to 1950. 3 Credits. H/W FP
A survey of the major public images of French culture as surveyed in French silent and sound film from the early 1900s through World War II and its immediate aftermath. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like Poetic Realism. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1950-present. May be taught in French or English. For students who already have some knowledge of French culture.

FREN 593. French Culture Through Film II, 1950-Present. 3 Credits. H/W FP
A survey of the major public images of French culture as surveyed in French silent and sound film from 1950 to present. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, colonialism and post-colonialism, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like the New Wave. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1950-present. May be taught in French or English. For students who already have some knowledge of French culture.

FREN 600. Studies in: ______. 3 Credits. H/W FP
Topics vary by semester. May be repeated for credit. Prerequisite: Departmental permission.

FREN 601. French for Reading Knowledge. 3 Credits.
Special course for candidates for advanced degrees in other departments. Fundamentals of grammar and reading of material of medium difficulty. Intended primarily for graduate students, but open also to seniors planning graduate study. Does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of French. Conducted in English. Prerequisite: Graduate status or instructor permission.

FREN 610. Theme et Version. 3 Credits. H/W FP
Exercises in English-French and French-English translation, designed to enable the student to write with greater clarity and precision in both languages.

FREN 620. Expository French Writing. 3 Credits. H/W FP
Intensive practice in writing French, designed to clarify fine points of grammar and usage and to aid the student in developing an accurate and graceful prose style.

FREN 700. Old French. 3 Credits.
Introduction to grammar and structure through the reading of representative works.

FREN 701. History of the French Language. 3 Credits.
Major aspects of development and growth. Conducted in English.

FREN 703. Structure of Modern French. 3 Credits.
Linguistic analysis of the phonological, morphological, and syntactic structure of modern French. Description in terms of current theories and models. Application of linguistic analyses to the teaching of French.

FREN 704. Methods in Foreign Language Instruction. 3 Credits.
This course provides an overview of current and historical approaches to foreign language teaching. Past and current trends and methodologies of language instruction are examined in order to acquaint students with various classroom approaches. Research findings in second language acquisition are explored and their implications discussed so as to show how these findings lead to more effective classroom practices.

FREN 720. Introduction to Graduate Studies in French. 3 Credits.
This course is an introduction to the skills required of students doing graduate degrees in French; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers.

FREN 730. Introduction to French Poetry. 3 Credits.
A detailed introduction to versification, rhetoric, image and symbol as they apply to the study of poetry. Texts will be chosen from one or more periods of French literature and will include poems in verse and prose. Considerations and readings on the history of French poetry, on the composition of recueils, on poetic theory, and on the relation of poetry to other genres and media may be incorporated.

FREN 732. Francophone Studies. 3 Credits.
Selected movements, themes, genres, topics in the cultures and/or literatures of the French-speaking world outside France. May be repeated for credit.

**FREN 785. French Romantic Movement. 3 Credits.**
Major Romantic writers viewed in context of intellectual, esthetic, and social milieu of period 1800-1850.

**FREN 790. Contemporary French Writers. 3 Credits.**
Major 20th century authors, stressing Proust, Gide, Giraudoux, Claudel, Sartre, and Camus.

**FREN 795. Investigation and Conference. 1-3 Credits.**
Readings and research projects in French language, literature, and culture for students at the MA level. Directed work to fulfill needs not met by available courses. One-three hours credit in any semester. Maximum credit for M.A.; Three hours. By special departmental permission only.

**FREN 799. Masters Seminar. 1 Credits.**
To meet Masters degree requirement for continual enrollment. Graded on a satisfactory/unsatisfactory basis.

**FREN 800. Studies in: ____. 3 Credits.**
Study of topics not limited to one century. May be repeated for credit.

**FREN 810. Criticism and Critical Methods. 3 Credits.**
Literary criticism from historical, theoretical, and practical point of view.

**FREN 812. Studies in the French Novel: ____. 3 Credits.**
Selected topics to be specified. Study of form, movements, or themes in the French Novel, not limited to one century. May be repeated for credit.

**FREN 814. Studies in the French Short Story: ____. 3 Credits.**
Selected topics to be specified. Study of form and theory of the French short story, not limited to one century.

**FREN 842. Arthurian Literature in France. 3 Credits.**
Origins and development of Arthurian legend; analysis of major texts. Prerequisite: FREN 700.

**FREN 848. Studies in Medieval French Literature: ____. 3 Credits.**
Various movements, themes, or genres. May be repeated for credit. Prerequisite: FREN 700.

**FREN 858. Studies in Sixteenth Century French Literature: ____. 3 Credits.**
Various movements, themes, or genres. May be repeated for credit.

**FREN 868. Studies in Seventeenth Century French Literature: ____. 3 Credits.**
Various movements, themes, or genres. May be repeated for credit.

**FREN 878. Studies in Eighteenth Century French Literature: ____. 3 Credits.**
Various movements, themes, or genres. May be repeated for credit.

**FREN 888. Studies in Nineteenth Century French Literature: ____. 3 Credits.**
Various movements, themes, or genres. May be repeated for credit.

**FREN 898. Studies in Twentieth Century French Literature: ____. 3 Credits.**
Various movements, themes, or genres. May be repeated for credit.

**FREN 899. M.A. Thesis. 1-6 Credits.**

**FREN 900. Seminar in French: ____. 3 Credits.**
Topics in literary, linguistic, and cultural research. May be repeated for credit.

**FREN 995. Investigation and Conference. 1-3 Credits.**
Readings and research projects in French language, literature, and culture for PhD students. Directed work to fulfill needs not met by available courses. One-three hours credit in any semester. Prerequisite: By Special Departmental Permission only.

**FREN 999. Ph.D. Dissertation. 1-12 Credits.**

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**French, Francophone, and Italian Studies Courses**

**ITAL 101. Studying Abroad: Italy at a Glance. 1 Credits.**
Online one-credit course which aims to prepare students for the study abroad experience in Italy. The course is taught in English and has no prerequisites. Students will improve their knowledge of Italy and gain a better understanding of the environment that they will find abroad. The course includes an overview of Italian habits and practices, a cross-cultural analysis of differences between Italy and the U.S., and an introduction to essential Italian vocabulary for daily usage while studying abroad. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Instructor permission.

**ITAL 103. Elementary Italian Language and Civilization. 3 Credits.**
A systematic review of the fundamentals of Italian grammar through practice in conversation and writing, with an introduction to Italian culture. Available only to participants in study abroad programs. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. No prerequisite.

**ITAL 107. Elementary Italian Conversation I. 3 Credits.**
First part of a two-course sequence (with 108) for students with no previous study of a foreign language and minimal linguistic background as well as for students in professional schools who plan to participate in study abroad programs in Italy. Offers knowledge of essential grammar and basic oral communication skills through practice in grammar, listening comprehension, and conversation. Active participation required. Completion of both ITAL 107 and ITAL 108 is equivalent to ITAL 110 and allows students to enroll in ITAL 120.

**ITAL 108. Elementary Italian Conversation II. 3 Credits.**
A continuation of ITAL 107, second part of a two-course sequence for students with no previous study of a foreign language and minimal linguistic background as well as for students in professional schools who plan to participate in study abroad programs in Italy. Offers knowledge of essential grammar and basic oral communication skills through practice in grammar, listening comprehension, and conversation. Active participation required. Completion of both ITAL 107 and ITAL 108 is equivalent to ITAL 110 and allows students to enroll in ITAL 120. Prerequisite: ITAL 107 or Italian Coordinator's approval.

**ITAL 110. Elementary Italian I. 5 Credits.**
Introduction to Italian language and culture. Essentials of grammar and practice in speaking, understanding, reading, and writing. Active participation required. Five hours of class per week.

**ITAL 111. Accelerated Elementary Italian I. 3 Credits.**
This accelerated course covers the same content as ITAL 110 in three hours rather than five and prepares students to move on to ITAL 120 or ITAL 121. Students engage in activities and assignments that help them develop listening, speaking, reading, and writing skills. Designed for students who have previous experience studying another foreign language or for those who desire to work at a faster pace. Active participation required.

**ITAL 120. Elementary Italian II. 5 Credits.**
ITAL 121. Accelerated Elementary Italian II. 3 Credits. U F2
This accelerated course covers the same content as ITAL 120 in three hours rather than five and prepares students to move on to ITAL 230. Students engage in activities and assignments that help them develop and reinforce listening, speaking, reading, and writing skills. Designed for students who completed ITAL 111 or who excelled in ITAL 110. Active participation required.

ITAL 152. Studies in Italian Heritage. 3 Credits. H
A comprehensive, interdisciplinary survey of the ways in which the historical culture of Italy can be found in Lawrence, KS. Emphasis is on politics, sciences, philosophy, media, and immigration. Uses materials from various KU collections. Taught in English. Does not fulfill any requirement in the Italian major or minor.

ITAL 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Italian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ITAL 203. Intermediate Italian Language and Civilization. 3 Credits. H
A systematic review of Italian grammar through practice in conversation and composition, with an introduction to Italian culture. Available only to participants in study abroad programs. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: ITAL 120.

ITAL 230. Intermediate Italian I. 3 Credits. U F3
Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 120 or ITAL 156.

ITAL 240. Intermediate Italian II. 3 Credits. U F4
Continuation of ITAL 230. (ITAL 240 completes foreign language requirement.) Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 230.

ITAL 300. Composition and Conversation. 3 Credits. H/W FP
Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 240 or permission of instructor.

ITAL 301. Introduction to Italian Literature and Textual Analysis. 3 Credits. H/W FP
Readings, textual analysis, and writing on a broad selection of Italian texts from different genres and periods, ranging from the medieval origins to contemporary literary culture. This course develops cultural and critical literacy as well as oral and written proficiency, and is a gateway to upper-division courses in the major and minor. Emphasis on study of Italian literature in its cultural context, history, politics, and society. Prerequisite: ITAL 240 or reading knowledge of Italian.

ITAL 303. Italian Language and Civilization I. 3 Credits. U FP
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 240.

ITAL 304. Italian Language and Civilization II. 3 Credits. U FP
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 303.

ITAL 315. Advanced Composition and Conversation. 3 Credits. H/W FP
Continuation of ITAL 300. Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 300 or permission of instructor.

ITAL 330. Cinematic Rome. 3 Credits. H
A study of cinematic representations of daily life, diversity, urban landscape, and social and political issues in modern and contemporary Rome as presented in different genres. Taught in English. (Same as FMS 330.)

ITAL 331. Mafia Movies. 3 Credits. H
This course investigates representations of the Italian mafia in Italian and American cinema since the 1960s, placing emphasis on conventions of the gangster genre and its evolution. We will examine films in relation to their socio-historical contexts and special attention will be dedicated to Italian films that de glamorize the Italian mafia and champion the anti-mafia struggle. Taught in English. (Same as FMS 331.)

ITAL 336. Italy and the Italians. 3 Credits. H
Survey of Italian culture with study of art and architecture, literary masterpieces in translation, science, culinary arts, and cinema. Lecture, discussion, and supportive readings. Not open to native speakers of Italian.

ITAL 340. Studies in Italian Culture: ______. 3 Credits. H
A study of particular aspects of and/or periods in Italian culture. May be repeated for credit with departmental permission. Prerequisite: ITAL 240 or permission of instructor.

ITAL 405. Italian Literature in Translation: ______. 3 Credits. H/W Major works representing various movements, themes, or genres. May be repeated with departmental permission. All work done in English.

ITAL 410. 19th and 20th Century Short Stories. 3 Credits. H/W FP
A survey of representative short stories of the 19th and 20th Centuries, including Verga, Panzini, Pirandello, Guareschi, Moravia, Calvino, Landolfi, and Bigiaretti. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor.

ITAL 420. 19th and 20th Century Poetry. 3 Credits. H/W FP
A survey of 19th and 20th century poets and their works, including Leopardi, Pascoli, d’Annunzio, Govoni, Palazzeschi, Gozzano, Marinetti, Bocchioni, Ungaretti, Montale, Quasimodo, and Pasolini. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor.

ITAL 440. Italian Renaissance and Early Modern Literature. 3 Credits. H/W FP
Detailed study of selected masterpieces of the Italian Renaissance from the 13th to the 18th centuries. Prerequisite: ITAL 300 or demonstrated knowledge of Italian.

ITAL 450. Studies in Italian Cinema. 3 Credits. H/W
A study of significant moments in Italian film history, including analysis of themes, genres, stylistics, directors, and film culture. May be repeated for credit with departmental permission. Prerequisite: ITAL 336 or ITAL 340 or permission of instructor.

ITAL 465. 19th and 20th Century Novels I. 3 Credits. H/W FP
With Italian 466, a survey of representative 19th and 20th century novels including those of Manzoni, Pirandello, Svevo, Deledda, Vittorini, Moravia, Pavese, Pratolini, Buzzati, Ginzburg, and Calvino. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor.

ITAL 466. 19th and 20th Century Novels II. 3 Credits. H/W FP
See ITAL 465. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor.

ITAL 480. Studies in Italian Literature: ___. 3 Credits. FP
A study of a period, theme, group of authors, or cultural movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: ITAL 300 or demonstrated knowledge of Italian.

ITAL 495. Directed Readings in Italian. 1-3 Credits. U FP
May be taken more than once, total credit not to exceed nine hours. Various fields of Italian literature. Prerequisite: Consent of instructor, given only to those having demonstrated ease in reading Italian.

ITAL 499. Honors in Italian. 3 Credits. H FP
Various topics in Italian literature or culture. Minimum of three hours of Italian 499 required for a B.A. with Honors in the Italian option of the French degree. Students must discuss Honors eligibility and their topic with a faculty member before enrolling. Honors paper must be written in Italian.

ITAL 502. Dante’s Divine Comedy I. 3 Credits. H/W FP
Detailed study of Dante’s masterpiece. Attention will also be given to such matters as the development of the Italian language at Dante’s period and the relation of the Comedy to Dante’s other works. Prerequisite: Reading knowledge of Italian.

ITAL 503. Dante’s Divine Comedy II. 3 Credits. H/W
Continuation of ITAL 502. Prerequisite: Completion of ITAL 502.

ITAL 601. Italian for Reading Knowledge. 3 Credits.
Special course for candidates for advanced degrees. Fundamentals of grammar and reading of material of medium difficulty. Open to graduate students and to seniors planning graduate study. Does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of Italian. Conducted in English. Prerequisite: Graduate status or instructor permission.

ITAL 695. Graduate Directed Readings in Italian. 1-3 Credits. U FP
May be taken more than once, total credit not to exceed nine hours. Directed readings, conferences with instructor. Prerequisite: ITAL 495 or consent of instructor.

Geography & Atmospheric Sci Courses

ATMO 105. Introductory Meteorology. 5 Credits. NE N LFE
A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting.

ATMO 177. First Year Seminar: ___. 3 Credits. U
A limited-enrollment seminar course for first-time freshmen, addressing current issues in Atmospheric Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ATMO 220. Unusual Weather. 3 Credits. NE N
An introductory lecture course which surveys the general principles and techniques of atmospheric science and illustrates their application through discussions of natural but unusual weather phenomena such as blizzards, hurricanes, tornados, and chinooks, of the effects of air pollution on weather, and of intentional human alteration of the atmosphere.

ATMO 321. Climate and Climate Change. 3 Credits. N
This course is designed to introduce students to the nature of the Earth’s physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as GEOG 321.) Prerequisite: ATMO 105 or GEOG 104.

ATMO 499. Honors Course in Atmospheric Science. 2-3 Credits. N
Open to students with nine hours of upper level credit in Atmospheric Science, an average of at least 3.5 in all Atmospheric Science courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members.

ATMO 505. Weather Forecasting. 3 Credits. N
A first course in synoptic meteorology designed to introduce students to weather analysis and forecasting through the application of hydrodynamic and thermodynamic principles to operational analysis and forecasting. Topics include analysis and interpretation of surface and upper-air observations and data from satellites, radars, and wind profilers; chart and sounding analysis; and three-dimensional, conceptual models of weather systems. The course includes student-led weather briefings and analysis exercises. Prerequisite: ATMO 105 and MATH 125 or MATH 115.

ATMO 521. Microclimatology. 3 Credits. N
A study of climatic environment near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget and water balance. (Same as GEOG 521.) Prerequisite: ATMO 105 and MATH 125.

ATMO 525. Air Pollution Meteorology. 3 Credits. N
A study of background levels and concentrated sources of atmospheric pollution together with considerations of pollution buildup in urban areas as related to particular weather conditions. Inadvertent weather modifications and effects of atmospheric pollution on particular weather events and general climate will be discussed. Prerequisite: ATMO 105, MATH 125, EECS 138 and CHEM 130.

ATMO 531. Topics in Atmospheric Science: ___. 1-3 Credits. N
An investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs.

ATMO 605. Operational Forecasting. 2 Credits. N
Students enhance their forecasting expertise by preparing forecasts for presentation to the public through a variety of media. Classroom activities include weekly map discussions and analysis of current weather situations. Forecasting topics such as forecast verification, aviation forecast products, severe weather, flash floods and watches and warnings are examined. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 505 and ATMO 640.

ATMO 606. Forecasting Practicum - Private Industry. 2 Credits. N

Practical experience in private industry working with current and/or archived meteorological data. Possibilities include the preparation of forecasts for TV stations and meteorological consulting firms, and working with environmental consulting firms to assess air pollution hazards. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: Instructor permission.

ATMO 607. Forecasting Intern - National Weather Service. 2 Credits. N
Practical experience working in a National Weather Service forecasting center in analyzing weather data and preparing weather forecasts. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: Instructor permission.

ATMO 615. Tropical Meteorology. 3 Credits. N
This course presents an undergraduate survey of tropical meteorology with an emphasis on clouds and convection ranging from fair-weather cumulus to hurricanes. Specific topics include the general circulation (climatology, air-sea interactions, Hadley and Walker circulation), convective processes in the topics (diurnal cycles, mesoscale convective systems, convectively coupled waves), and tropical variability (El Nino, Madden-Julian oscillation, monsoons, climate change). The genesis, thermodynamics, dynamics, and other topics related to tropical cyclones and hurricanes are also discussed. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in ATMO 715. Prerequisite: ATMO 640 and/or instructor permission.

ATMO 630. Synoptic Meteorology. 3 Credits. N
Interpretation, development, and analysis of synoptic charts. Prerequisite: ATMO 505 and ATMO 640.

ATMO 634. Physical Climatology. 3 Credits. N
Atmospheric processes are described and discussed in relation to the climate of the earth's surface. Such topics as the greenhouse effect, ozone depletion, and the effect of solar irradiance on climatic change will be included. The physical processes and relationships between various climatic features will be studied. Prerequisite: ATMO 505 and DSCI 301 or MATH 526.

ATMO 640. Dynamic Meteorology. 3 Credits. N
This course introduces the student to the fundamentals of fluid dynamics necessary for understanding large scale atmospheric motions. Fundamental physical laws of conservation of mass, momentum and energy are examined and applied to atmospheric flows. Rotation in the atmosphere is examined quantitatively in terms of both circulation and vorticity. Prerequisite: MATH 127 and PHSX 214 or PHSX 212 and PHSX 236.

ATMO 642. Remote Sensing. 3 Credits.
This course is designed to prepare students to effectively use remotely sensed data in operational or research settings for further work in this field. Topics include radiation and radiation transfer applied to active and remote sensing; radiative properties of space, sun, earth and atmosphere; instrument design considerations and operational characteristics; inversion methods for temperature or concentration profiling; surface temperature measurement; cloud top height determination; rain rate and wind velocity measurement; severe weather detection; satellite photograph interpretation. Prerequisite: ATMO 680, MATH 581.

ATMO 650. Advanced Synoptic Meteorology. 3 Credits. N
Analysis and interpretation of synoptic weather charts including treatment of numerical weather forecasting. Prerequisite: ATMO 630 and ATMO 660.

ATMO 660. Advanced Dynamic Meteorology. 3 Credits. N
Advanced study of the atmosphere including treatment of the vorticity equation. Prerequisite: ATMO 640 and MATH 220 or MATH 320.

ATMO 680. Physical Meteorology. 3 Credits. N
This course is designed to enhance the student's understanding of atmospheric processes through the study of these processes at molecular through micro scales. Topics include the properties and behavior of gases; transfer processes; phase change; solar and earth radiation; cloud drop, ice crystal and precipitation formation; atmospheric electricity; stratospheric chemistry. Prerequisite: MATH 127; PHSX 214, or PHSX 212 and PHSX 236.

ATMO 690. Special Problems in Meteorology. 1-3 Credits. N
Prerequisite: Nine hours in meteorology.

ATMO 697. Seminar for Seniors. 1 Credits. N
Current research in atmospheric science will be discussed. May be repeated for a total of two credit hours. Prerequisite: Senior level in atmospheric science.

ATMO 699. Undergraduate Research. 2 Credits. U
Work on a research project under the supervision of a faculty member. Prerequisite: Nine credit hours in atmospheric science. May be taken up to three times for credit.

ATMO 710. Atmospheric Dynamics. 3 Credits.
Presentation of contemporary approaches to the study of atmospheric dynamics. May include methodologies that provide insight into global, synoptic, mesoscale or microscale motions. Prerequisite: ATMO 660 or equivalent.

ATMO 715. Tropical Meteorology. 3 Credits.
This course presents a survey of tropical meteorology at the graduate level with an emphasis on clouds and convection ranging from fair-weather cumulus to hurricanes. Specific topics include the general circulation (climatology, air-sea interactions, Hadley and Walker circulation), convective processes in the topics (diurnal cycles, mesoscale convective systems, convectively coupled waves), and tropical variability (El Nino, Madden-Julian oscillation, monsoons, climate change). The genesis, thermodynamics, dynamics, and other topics related to tropical cyclones and hurricanes are also discussed. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in ATMO 615. Prerequisite: Instructor consent.

ATMO 720. Atmospheric Modeling. 3 Credits.
Illustration and application of contemporary approaches to mathematical and statistical description of atmospheric phenomena. Prerequisite: Consent of instructor.

ATMO 725. Clouds, Climate and Precipitation. 3 Credits.
This course includes seminar-style lectures and discussions bridging cloud physics, physical climatology, and climate dynamics with a central theme regarding how clouds and precipitation interact with the Earth's climate system. Specific topics include aerosol-cloud interactions, large-scale convective organization in the tropics, mid-latitudes, and polar regions, diabetic feedbacks on the general circulation, natural climate variability, and cloud effects in global climate models. How cloud systems have changed in recent decades, in addition to future model scenarios, are also discussed.

ATMO 731. Advanced Topics in Atmospheric Science: ______. 1-3 Credits.
Advanced investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs.

ATMO 898. Readings in Atmospheric Science. 1-4 Credits. Independent readings of special problems in Atmospheric Science.

ATMO 899. Master’s Thesis. 1-10 Credits. Thesis credit. Graded on a satisfactory progress/limited progress/no progress basis.

ATMO 998. Research in Atmospheric Science. 1-5 Credits. Individual investigation of special problems in Atmospheric Science.

ATMO 999. Doctoral Dissertation. 1-10 Credits. Enrollment course for writing doctoral dissertation in Atmospheric Science. Graded on a satisfactory progress/limited progress/no progress basis.

Geography & Atmospheric Sci Courses

GEOG 100. World Regional Geography. 3 Credits. SC S An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world.

GEOG 102. People, Place, and Society. 3 Credits. SC S An examination of the relationships between humans and their environments. The course introduces students to basic concepts in human geography relating to economic activities, landscapes, languages, migrations, nations, regions, and religions. Serves as the basis for further course work in cultural, economic, political, population, and urban geography.

GEOG 103. People, Place, and Society, Honors. 3 Credits. SC S An introduction to how human societies organize space and modify the world about them. Resultant patterns on the landscape are interpreted through principles of space perception, cultural ecology, diffusion, land use, and location theory. Comparisons are made between urban and rural areas and between subsistence and commercial societies. Open to students who have been accepted into the College Honors Program.

GEOG 104. Introduction to Physical Geography. 3 Credits. NE N The components of the physical environment are discussed in order to familiarize the student with their distributions and dynamic nature. Major topics include the atmosphere, landforms, soils, and vegetation together with their interrelationships and their relevance to human activity. This course and GEOG 105 together satisfy the laboratory science requirement. Both courses are required for geography majors.

GEOG 105. Introductory Laboratory in Physical Geography. 2 Credits. U LFE A laboratory course designed to complement GEOG 104 in satisfying the laboratory science requirement. It is required for geography majors. Laboratory exercises include a wide variety of analyses using data on the atmosphere, hydrosphere, biosphere, and lithosphere. Prerequisite: GEOG 104, which may be taken concurrently.

GEOG 111. Mapping Our Changing World. 4 Credits. N LFE This course is an introduction to geospatial technologies. It focuses on the conceptual and technical aspects of mapping technologies that transform information about locations, people, objects, environments, events, and phenomena to digital representations of the world and as end-products of geospatial analysis. Topics covered include surveying, aerial photography and photogrammetry, satellite remote sensing, global positioning systems (GPS), geographic information systems (GIS), and thematic mapping. Students will learn how to acquire and develop geospatial data as the sources for mapping, the skills of analyzing and interpreting spatial information, and how geovisualization can be used in addressing real-world problems. (Same as GiST 111.)

GEOG 140. Global Environment I: The Discovery of Environmental Change. 5 Credits. U LFE This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and HIST 140.)

GEOG 142. Global Environment II: The Ecology of Human Civilization. 5 Credits. U This interdisciplinary course and its laboratory sections survey the history of humanity's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilizational, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and HIST 142.)

GEOG 144. Global Environment I: The Discovery of Environmental Change, Honors. 5 Credits. U LFE This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 144 and HIST 144.) Open only to students admitted to the University Honors Program or by permission of instructor.

GEOG 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Credits. U This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilizational, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to humanity's engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor.

GEOG 148. Scientific Principles of Environmental Studies. 3 Credits. NB N
This course provides the scientific knowledge necessary to understand the changing relationships between humans and the natural environment, with an emphasis on the assessment of current environmental problems and critical evaluation of potential solutions. Major topics include fundamental scientific concepts and principles, interactions among the biological and physical components of the environment, implications of a growing human population, water resources, the atmosphere, climate, and energy sources. (Same as EVRN 148.)

GEOG 150. Environment, Culture and Society. 3 Credits. SC S
An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere, and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as EVRN 150.)

GEOG 177. First Year Seminar: _____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Geography. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

GEOG 201. Culture and Health. 3 Credits. H/W
This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as AAAS 203 and GIST 210.)

GEOG 202. Culture and Health, Honors. 3 Credits. H/W
Honors version of AAAS 203, GEOG 201 and GIST 210. This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as AAAS 204 and GIST 211.)

GEOG 304. Environmental Conservation. 3 Credits. NE N
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water are described with attention to the earth's total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as EVRN 304.)

GEOG 311. Introductory Cartography and GeoVisualization. 4 Credits. N LFE
This course is an introduction to cartography and focuses on computer-based map making skills. It begins with the history of cartography, cognitive maps, and the use of maps in the past and modern times. Topics covered in this course emphasize spatial data handling, principles of cartography and symbolization, map elements and design, and mapping techniques such as choropleth, proportional symbol and dot maps. Students will learn to adopt appropriate spatial data and mapping techniques to create accurate and creative digital maps reflecting given phenomena.

GEOG 316. Methods of Analyzing Geographical Data. 4 Credits. N LFE
Introduces the benefits and limitations of using quantitative methods to analyze geographical problems. Covers traditional descriptive (e.g., measures of central tendency) and inferential statistics (e.g., hypothesis testing) but also inherently geographical approaches such as shape and point pattern analysis, and spatial autocorrelation. Laboratory emphasizes using the computer to explore and analyze geographical problems.

GEOG 321. Climate and Climate Change. 3 Credits. N
This course is designed to introduce students to the nature of the Earth's physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as ATMO 321.) Prerequisite: ATMO 105 or GEOG 104.

GEOG 332. Glaciers and Landscape. 3 Credits. N
Elements from glaciology, geology, and climatology are merged to examine the interactions between glaciers and their natural environments, including the processes involved in glacier formation, the relationship between glaciers and climate, the mechanisms of glacier flow, and interpretation of the Earth's glacial record. Emphasis is placed on an interdisciplinary approach to study environmental change and paleoclimate reconstruction. Prerequisite: GEOG 104 or GEOL 101, or consent of instructor.

GEOG 335. Introduction to Soil Geography. 4 Credits. N LFE
This course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body: genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken EVRN 535 or GEOG 535. (Same as EVRN 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 and CHEM 191 recommended.

GEOG 336. Introduction to Environmental Hydrology and Water Resources. 3 Credits. N
Water is vital to life on earth. In this course we cover components of the water or "hydrologic" cycle, how management has altered them, and how they are predicted to change with the changing climate. We discuss the evolution of water policy, its implications for managements and the economic impact of human perturbation on water. We study the physical processes that govern the water cycle, learn how they are measured, and estimate hydrologic fluxes. (Same as EVRN 363.) Prerequisite: GEOG 104 or GEOL 101.

GEOG 339. Topics in Physical Geography: _____. 1-3 Credits. N
An investigation of special topics in Physical Geography. May include coursework under headings of soils, vegetation, climate, or geomorphology. May be repeated if topic differs.

GEOG 351. Africa's Human Geographies. 3 Credits. NW S/W
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as AAAS 351.)
GEOG 352. Economic Geography. 3 Credits. S
This course offers an overview of contemporary economic geography with an underlying theme of uneven regional development. Topics examined include: the historical context in which capitalism emerged; the major theoretical approaches used to understand the temporal and spatial dynamics of capitalist society; a series of case studies of different economic sectors; and the global economy, including its development with respect to colonialism, neocolonialism, international trade, third world development, and population growth.

GEOG 354. Globalization: A Geographic Approach. 3 Credits. S
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. (Same as GIST 354.)

GEOG 358. Introduction to Geographic Information Systems. 4 Credits. N LFE
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software.

GEOG 360. Computer Programming for Mapping and Spatial Analysis. 3 Credits. N
This course teaches basic computer programming concepts and skills for mapping and spatial analysis using various scripting languages. The goal is to enable students to write computer programs, develop mapping applications, and perform spatial data analysis. This course will lay the foundation for computerized problem solving skills that can be applied in later courses. This course assumes no previous programming experience.

GEOG 370. Introduction to Cultural Geography. 3 Credits. H
Charts some of the major lines of research in cultural geography, including critical theory, political economy, poststructuralist thought, feminism, and global consumption. Through fieldwork, diverse research methods are applied to issues such as community development, cultural patterns on the landscape and global impacts on local economies. Prerequisite: GEOG 100, GEOG 102 or GEOG 103; or consent of instructor.

GEOG 371. Environmental Geopolitics. 3 Credits. S
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as EVRN 371 and GIST 371.)

GEOG 372. Environmental Policy. 3 Credits. N
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention is directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: GEOG 148 or EVRN 148; and either EVRN 103 or HIST 103, EVRN 347 or HIST 347, or GEOG 150 or EVRN 150.

GEOG 373. Borders, Politics, and Territory. 3 Credits. S
This course considers how humans wield power in the geographical form of borders and territories. At the international level this is called geopolitics, while at the national, provincial, and local levels it is political geography. Rare is a day when headlines fail to portray ongoing negotiations for influence over the places and spaces through which people live and the very lines that divide them. This course traces the historical evolution of borders and territory before exploring contemporary practices of bordering and border crossing in relation to trade, migration, maritime, outer space, air space, environment, cyberspace, governance, and human rights. Prerequisite: GEOG 100 or GEOG 102 or equivalent or consent of instructor.

GEOG 374. Vulnerability and Adaptation. 3 Credits. S
The course objective is to understand and analyze human adaptation to environmental change by focusing on disasters and climate change. Each semester, the course rotates topics ranging from oil spills, hurricanes, sea-level rise to infectious disease. It provides undergraduate students with research experience and service learning, and offers opportunities for certificates through the Center for Undergraduate Research and the Center for Civic and Service Responsibility at KU. Students learn theories relevant to the case study, work in groups to generate research themes, conduct literature search and review, learn research methods, and write and present their work.

GEOG 377. Urban Geography. 3 Credits. S
This course explores the city from the multiple perspectives of its inhabitants. The cultural viewpoints of place, gender, age, and ethnicity are stressed. Traditional topics such as urban hierarchy, functions of the city, suburbanization, and ongoing changes in core and peripheral areas also receive attention. The distinctive landscapes of individual North American cities are emphasized, but examples also are drawn from throughout the world.

GEOG 378. Environmental Security. 3 Credits. S
This regional geography course examines contemporary environmental issues of a particular region of the world based on the expertise of the professor. Course emphasis is on the interaction of natural, socio-economic, and cultural factors of development that give rise to environmental problems. Students learn how local, national, and international government and non-governmental stakeholders address environmental problems. Course may be repeated with different professors.

GEOG 379. Sustainability. 3 Credits. S
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. (Same as GIST 354.)

GEOG 380. Environmental Policy. 3 Credits. N
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention is directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: GEOG 148 or EVRN 148; and either EVRN 103 or HIST 103, EVRN 347 or HIST 347, or GEOG 150 or EVRN 150.

GEOG 382. Environmental Policy. 3 Credits. N
This course teaches basic computer programming concepts and skills for mapping and spatial analysis using various scripting languages. The goal is to enable students to write computer programs, develop mapping applications, and perform spatial data analysis. This course will lay the foundation for computerized problem solving skills that can be applied in later courses. This course assumes no previous programming experience.

GEOG 383. Introduction to Geographical Information Systems. 4 Credits. N LFE
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software.

GEOG 385. Introduction to Geographical Information Systems. 4 Credits. N LFE
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software.

GEOG 387. Introduction to Geographical Information Systems. 4 Credits. N LFE
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software.

GEOG 390. Geography of the United States and Canada. 3 Credits. S
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as AMS 390.) Prerequisite: An introductory geography course or background in the United States or Canadian history, social science, or culture or consent of instructor.

GEOG 395. Environmental Issues of: various. 3 Credits. S
This regional geography course examines contemporary environmental issues of a particular region of the world based on the expertise of the professor. Course emphasis is on the interaction of natural, socio-economic, and cultural factors of development that give rise to environmental problems. Students learn how local, national, and international government and non-governmental stakeholders address environmental problems. Course may be repeated with different professors.

GEOG 396. East Asia. 3 Credits. NW S/W
This course is an introduction to the contemporary politics, economy, and culture of Korea, China, and Japan in the context of globalization. In addition to the discussion of individual countries, the course examines the cross-cutting themes such as international relations, cultural exchange, and economic development in the region of East Asia.

GEOG 397. Geography of Kansas and the Plains. 3 Credits. S
A study of the different physical, economic, and cultural settings in Kansas and the Plains that form the basis for various kinds of livelihood.

GEOG 399. Topics in Regional Studies: various. 1-3 Credits. S
An investigation of special topics in Regional Studies. May include coursework related to a specific country or region. May be repeated if topic differs.

GEOG 451. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students
will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as BIOL 451 and EVRN 451.)

GEOG 458. Geographical Information Systems: ______. 1-6 Credits. N
An introduction to the organization and components of geographic information systems and their software. Fundamental concepts and their implementation with applications to physical and human systems.

GEOG 490. Geographic Internship. 1-6 Credits. N
Supervised practical experience. The student submits a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Fifteen hours of geography and permission of instructor.

GEOG 498. Special Topics in Geography: ______. 1-5 Credits. U
Prerequisite: Fifteen hours of geography.

GEOG 499. Honors Course in Geography. 2-3 Credits. U
Open to students with nine hours of upper level credit in geography, an average of at least 3.5 in all geography courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members.

GEOG 500. Senior Capstone in Geography. 3 Credits. N
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their studies. The major goals of this course are to help students synthesize an integrated view of geography, advance steps toward career preparation, and develop networking and professional skills. The course will provide an overview of geography as a unified, coherent discipline with multiple perspectives, emphasize writing and analytical skills, introduce students to a major research project that integrates elements of physical and human geography, cultivate knowledge for future professional development, and introduce students to professional organizations. Students will gain experience applying and/or interviewing for professional positions and be introduced to multiple professional development and career services on campus. Graduate students may take this course by permission only. Prerequisite: Nine hours in Geography and status as a senior major in the department; or permission of instructor.

GEOG 512. Advanced Cartography and Geovisualization. 4 Credits. N
This is an advanced computer-based scientific cartography course. It covers mapping techniques such as dasymetric mapping, multivariate mapping, cartogram and flow map, map animation, geovisual analytics, web and interactive mapping, and mapping from remotely sensed imagery. This course focuses on practical and hands-on experience. Students will learn theoretical concepts, principles, and design examples, and produce a cartographic portfolio of well-designed and professional maps. Prerequisite: GEOG 311 or equivalent; or consent of instructor.

GEOG 518. Geoinformatics Internship. 1-3 Credits.
Real world experience with geospatial technologies is not only essential for understanding and using geospatial knowledge but also beneficial for students to start a career path in geospatial technologies. Approved internships are supervised development and applications of geospatial technologies in business, government, non-profit, educational or other related fields. They can involve field work, data collection, processing, and analysis. Internship supervisors must agree to mentor the student and to complete necessary evaluations within a timely manner. Prerequisite: GEOG 358 or consent of instructor.

GEOG 521. Microclimatology. 3 Credits. N
A study of climatic environments near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget, and water balance. (Same as ATMO 521.) Prerequisite: ATMO 105 and MATH 125.

Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth’s surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department’s NASA Earth Science Remote Sensing Laboratory. Prerequisite: MATH 101 or equivalent. GEOG 358 recommended.

GEOG 528. Spatial Databases. 3 Credits. N
This course covers concepts in spatial databases and their relevance in geographic information systems (GIS) and spatial analysis. It introduces the fundamental theories of data management behind Geographic Information Systems and imparts hands-on experience with mainstream spatial database management systems (DBMS), standard query languages and necessary tools to query/transform geospatial data, and perform spatial and network analysis. The course provides more in-depth coverage on database-oriented approaches for GIS geospatial analysis. Prerequisite: GEOG 358; or instructor permission.

GEOG 531. Topics in Physical Geography: ______. 1-3 Credits. N
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated, if topic differs.

GEOG 532. Geoarchaeology. 3 Credits. N
Application of the concepts and methods of the geosciences to interpretation of the archeological record. The course will focus primarily on the field aspects of geoarchaeology (e.g., stratigraphy, site formational processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as ANTH 517.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310.

GEOG 535. Soil Geography. 4 Credits. N LFE
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as EVRN 535.) Prerequisite: GEOG 104 or GEOL 101 or consent of the instructor; BIOL 100 and CHEM 130 or CHEM 190 and CHEM 191 recommended.

GEOG 538. Soil Chemistry. 3 Credits. N LFE
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as EVRN 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195 and CHEM 196, MATH 125, or consent of the instructor.

GEOG 540. Eohydrology. 3 Credits. N
Ecohydrology is the discipline that answers real world hydrologic and biologic questions through integrating knowledge from hydrology, ecology, atmospheric science and biogeochemistry. We focus on the key concepts, methodological approaches and analytical techniques utilized in ecohydrology to understand and quantify: plant water use, evolution of hydrologic properties, groundwater-surface water interactions, controls on landscape patterns, spatial and temporal patterns of soil moisture and nutrient concentrations, and vegetation competition. Students should leave the class having developed critical skills in: 1) reviewing scientific literature, 2) collecting environmental samples, 3) analyzing ecohydrologic data, 4) writing a scientific research paper, 5) working collaboratively and independently. (Same as EVRN 540.) Prerequisite: GEOG 104 or GEOL 101 or EVRN 363 or GEOG 336 or permission of instructor.

GEOG 541. Geomorphology. 4 Credits. N LFE
A critical study of land forms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOG 541.) Prerequisite: GEOG 101 and GEOG 103, GEOG 104 and GEOG 105, or GEOG 103 and GEOE 304.

GEOG 550. Environmental Issues in Africa. 3 Credits. S
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as AAAS 551.) Prerequisite: GEOG 104 or permission of instructor.

GEOG 552. Topics in Urban/Economic Geography: ______. 1-3 Credits. S
An investigation of special topics in urban/economic geography. May include specific course work under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated.

GEOG 553. Geography of African Development. 3 Credits. W
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as AAAS 553.)

GEOG 555. Geography of the Energy Crisis. 3 Credits. S
A discussion and analysis of the basic facts and causes of energy problems on a national and world scale. Examines current production, consumption, efficiency, reserves, conservation, and other energy policy options, including adjustments that will affect consumer use, national politics, and strategic issues. Prerequisite: GEOG 102.

GEOG 556. Intermediate Geographical Information Systems. 4 Credits. N LFE
An intermediate level course in geographic information science designed for advanced undergraduate and graduate level students who already have an introductory understanding of GIS. Emphasis will be placed on the application of spatial analytical techniques to geographical problem-solving. Topics include spatial data structures, interpolation techniques, terrain analysis, cost surfaces, and database management technique. Students will apply knowledge gained in lecture and reading to natural resource, urban, and scientific applications using state-of-the-art GIS software. Prerequisite: GEOG 358 or consent of instructor.

GEOG 550. GIS Application Programming. 3 Credits. N
This course teaches programming within Geographic Information Systems. Students learn how to customize GIS applications to automate data processing and spatial analysis through programming languages. GIS programming concepts and methods are introduced from the aspects of spatial data management and analysis covering both the vector and raster data models. Prerequisite: GEOG 558 and a course in programming languages.

GEOG 570. Geography of American Indians. 3 Credits. NW S
A survey of the culture and history of selected indigenous peoples of the Americas. Emphasis is placed on the environmental setting, the settlement and subsistence patterns, and the impact of European colonization. Discussion includes present-day ethnic and resource issues.

GEOG 571. Topics in Cultural Geography: ______. 1-3 Credits. S
An investigation of special topics in cultural geography. May include specific course work under the headings of cultural theory and methodology, material culture, foodways, religion, and similar topics. May be repeated, if topic differs.

GEOG 577. Human Dimensions of Global Change. 3 Credits. S
This class introduces concepts such as coupled human and natural systems, social-ecological resilience, and sustainability science, examines people's responses to major climate, land, water, and coastal change, and discusses case studies. One hour of each seminar will be devoted to individual needs that address topical or methodological issues. Class requirements include presentations, biweekly papers, and a term paper. (Same as GIST 577.) Prerequisite: One of the following: GEOG 100, GEOG 104, GEOG 374, or an Environmental Studies introductory course.

GEOG 582. Geopolitics and Genocide. 2-3 Credits. S
Explores the inherently geographical and geopolitical nature of genocide and related mass violence and introduces an overarching concept, territorial cleansing, that foregrounds the spatial and territorial nature of these events. Detailed studies of cases at a range of scales and locales provide the major context for critical examination and comparison of territorial cleansing concepts. Students enrolling for 3 credits will prepare and present a substantial independent research paper. (Same as GIST 582.) Prerequisite: GEOG 102 or GEOG 103; or ANTH 108 or ANTH 109; or permission of instructor.

GEOG 583. Migration, Diasporas and Development. 3 Credits. S
This course introduces students to key concepts in global migration and its implications on development in migrant sending states particularly those on the African continent. It will explore the various migration patterns from Africa (e.g. migration between North Africa and Europe in the aftermath of the Arab Spring), South-South migration, the ‘brain drain’ of skilled professionals and its implications for development, and the role of diasporas in development. The course will also assess the integration of migrants in major migrant destination regions. Finally, the course will provide students with an opportunity to critically examine the relationship between migration and development in a particular national context of
their choice. (Same as AAAS 583.) Prerequisite: GEOG 102 or consent of instructor.

GEOG 586. Sustainable Food Systems and Food Security in the Global South. 3 Credits. S
The course adopts an interdisciplinary approach to study food systems and food security in the Global South. It incorporates multiple perspectives ranging from the local to the global level to explore the cultural, ecological/environmental, economic, sociopolitical, and ethical dimensions connected to the global food system. It also examines several dimensions of food insecurity. Students will also examine the impact of food insecurity on health as well as racial and economic disparities in access to food. The course will also examine the research and conceptualization of food systems and analyze concepts such as "food deserts," "food oases," "food swamps," and "food grasslands." We will examine food production and food acquisition strategies in low-income areas. Case studies will be drawn on experiences from diverse regions particularly Southern Africa even though other regions such as Latin America and Southeast Asia will be considered. Prerequisite: GEOG 102 or consent of instructor.

GEOG 590. Understanding Central Asia. 3 Credits. NW S/W
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in REES 710. (Same as REES 510.) Prerequisite: One previous interdisciplinary area studies course or the instructor's permission.

GEOG 591. Geography of Latin America. 3 Credits. SC S/W
A study of the different physical, economic, and cultural settings in Latin America which form the basis for the various forms of livelihood.

GEOG 601. Indigenous Peoples of the World. 3 Credits. S
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GIST 601 and ISP 601.) Prerequisite: Permission of instructor.

GEOG 635. Soil Physics. 3 Credits. N
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as EVRN 635.) Prerequisite: GEOG 335 or EVRN 335; or GEOG 535 or EVRN 535, and MATH 125, PHSX 114; or consent of instructor.

GEOG 648. Location Modeling. 3 Credits. N
This course provides an overview of advanced location analysis and modeling in the context of GIS. Introduces students to principles of location analysis, methods for making strategic location decisions as well as existing classic location problems. Demonstrates analytical approaches by which location problems can be solved using mathematical programming, GIS and other optimization software. This course is a specialized course with an emphasis on the spatial analysis function of Geographic Information Systems, which covers many concrete applications of GIS geospatial analysis in urban planning, transportation, and service systems planning, ranging from firefighting stations to forestry management to transportation facilities. Prerequisite: GEOG 358; or instructor permission.

GEOG 658. Topics in Geospatial Technologies: ____. 1-6 Credits. LFE
An investigation of special topics in geoinformatics. May include specific coursework under the headings of methodology, basic research, thematic or regional applications, geographic information systems (GIS), Global Positioning System (GPS), and geostatistics. May be repeated if topic differs. Prerequisite: GEOG 111 or GEOG 358 or consent of instructor.

GEOG 716. Advanced Geostatistics. 3 Credits.
An introduction to the practical application of advanced geospatial statistical techniques. Potential topics include: spatial regression, interpolation, clustering, and advanced nonparametric statistics. Knowledge of a statistical package and GIS is assumed. Prerequisite: GEOG 358 or equivalent.

GEOG 719. Development of Geographic Thought. 2-3 Credits.
Critical analysis of the growth of geographic thought from antiquity to the present: emphasis on structure of modern geography. Prerequisite: Twenty hours of geography or consent of instructor.

GEOG 726. Remote Sensing of Environment II. 4 Credits.
An overview of techniques for computer analysis of digital data from earth orbiting satellites for environmental applications. Topics covered include: data formats, image enhancements and analysis, classification, thematic mapping, and environmental change detection. The laboratory exercises provide hands-on experience in computer digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. Prerequisite: Introductory statistics and GEOG 526 or equivalent.

GEOG 731. Topics in Physical Geography: ____. 1-3 Credits.
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated.

GEOG 752. Topics in Urban/Economic Geography: ____. 1-3 Credits.
An investigation of special topics in urban/economic geography. May include specific coursework under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated.

GEOG 758. Geographic Information Science. 3 Credits.
This course integrates topics in geographical information science (Gisci) with spatial analytical techniques to solve spatial problems. Focuses on the most current research in Gisci and its relevance to the environmental sciences, natural resource management, and spatial decision-making. Students are expected to apply the concepts and techniques learned in this class to their own research projects. Prerequisite: GEOG 316 and GEOG 558, or consent of instructor.

GEOG 759. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not
open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as BIOL 759 and EVRN 751.)

GEOG 771. Topics in Cultural Geography: ______. 1-3 Credits.
An investigation of special topics in cultural geography. May include specific course methodology, material culture, foodways, religion, and similar topics. May be repeated.

GEOG 781. Environmental Geopolitics. 3 Credits.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. This course is a more advanced and rigorous version of the undergraduate version of this course. It is not open to students who have taken or are enrolled in GEOG 371 or EVRN 371, Environmental Geopolitics.

GEOG 805. Perspectives in Geography. 2 Credits.
This course provides background on the discipline of geography and how it is practiced by the faculty in the department. It provides a foundation of knowledge of geography's role within the human and physical sciences as well as the humanities. Students will gain a critical perspective into the breadth of geography, including the ways in which geographers view the world through the lenses of place, space, and scale and the debates and approaches within the changing landscape of geographic inquiry.

GEOG 806. Proposal Writing and Research Design. 2 Credits.
The course is designed to assist graduate students in developing their research project, including refining research questions, creating a literature review, and defining appropriate methods to aid in successfully answering their questions. Learning outcomes include the production of an individual draft research proposal based upon the student's research design.

GEOG 875. Qualitative Research Methods. 3 Credits.
This course provides background on qualitative research methods used in human geography. Students will gain a critical perspective into relevant issues of qualitative methods with specific regard to ethical concerns related to human subjects research within the social sciences and humanities and the debates and approaches within the changing landscapes of qualitative methods. Students will have the opportunity to practice these techniques and strategies in a group research project. Prerequisite: GEOG 805 or consent of instructor.

GEOG 890. Geographic Internship. 1-6 Credits.
Supervised professional experience. The student submits to the program committee a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance, and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Twelve hours of graduate level geography courses and consent of program committee.

GEOG 898. Readings in Geography. 1-4 Credits.

GEOG 899. Master's Thesis. 1-10 Credits.
Thesis credit. Graded on a satisfactory progress/limited progress/no progress basis.

GEOG 980. Seminar in Geography: ______. 1-3 Credits.

GEOG 998. Research in Geography. 1-5 Credits.

GEOG 999. Doctoral Dissertation. 1-10 Credits.
Dissertation credit. Graded on a satisfactory progress/limited progress/no progress basis.

Geology Courses

GEO 101. The Way The Earth Works. 3 Credits. NE N
Introduction to the principles of earth science. Study of the formation, occurrence, and structure of minerals and rocks; action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape; volcanism, earthquakes, and plate tectonics. Discussion of earth processes in the context of sustainable energy, environmental concerns, climate and other topical issues. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Course may be offered in lecture or online format.

GEO 103. Geology Fundamentals Laboratory. 2 Credits. U LFE
A course in geologic laboratory studies. This course plus GEOL 101, GEOL 105, GEOL 106, or GEOL 121 satisfies the College laboratory science requirement. Gives students practical, hands-on experience with identifying earth materials (rocks, minerals, fossils), understanding their relationships to earth processes, understanding topographic and geologic maps, interpreting results of surficial processes, and learning about deep-earth processes such as earthquakes. Includes short field trips to see geologic structures and results of local geologic processes. This lab course may be offered in on-campus lab or online format. Prerequisite: Previous or concurrent enrollment in GEOL 101, GEOL 105, GEOL 106 or GEOL 121.

GEO 105. History of the Earth. 3 Credits. NE N
An introduction to the physical and biological history of the earth, the methods used to decipher earth history, and the development of the geological sciences. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Not open to students who have taken GEOL 106 or GEOL 304.

GEO 108. Troubled Waters: Water Resource Issues and Principles. 3 Credits. N
Worldwide, water security is necessary for life, and food, industry, and energy production, and is increasingly the source of conflict. This course explores water in the environment and the fundamental interactions between humans and water. Key topics and issues addressed include fundamentals of water and the water cycle; water in geologic processes; water availability, development and sustainability; climate effects including flooding and drought; economics; pollution, disease, sanitation, and health; culture, policy and law, and other challenging issues. Case studies explore examples from Kansas and around the world.

GEO 121. Life Through Time: DNA to Dinosaurs. 3 Credits. NB N
This course leads students on a journey through time to explore the interconnection between life and the geology of Earth, including our own complex relationship with the world around us. If taken with GEOL 122, this course satisfies the College laboratory science requirement. Concurrent enrollment in GEO 122 is required for students taking both.

GEO 122. Life Through Time: DNA to Dinosaurs Laboratory. 1 Credits. N LFE
This online companion to GEO 121 allows students a hands-on exploration of the principles and practices of paleontology research. Students will be guided through an individual term-length research project—from shaping a research question to collecting and analyzing data to drawing conclusions to presenting in front of an audience. This lab will not only allow students to explore the fossil record but it will bring them into the scientific conversation. Prerequisite: Corequisite: Students must be concurrently enrolled in GEOL 121.

GEO 171. Earthquakes and Natural Disasters. 3 Credits. NE N
Addresses the subject of natural disasters with concentration on earthquake effects and their mitigation. Briefly treats volcanic eruptions, tidal waves, floods, global warming, severe weather, and catastrophic meteorite impacts from the perspective of geological and human significance. Provides a basic background into earth-science processes.

GEOL 172. Earthquakes and Natural Disasters Laboratory. 1 Credit. N
This online companion to GEOL 171 allows students a hands-on exploration of the principles and practices of geologic and geophysical research. Students will be guided through an individual term-length research project—from shaping a research question to collecting and analyzing data to drawing conclusions to presenting in front of an audience. This lab will not only allow students to explore details of natural disasters, but it will bring them into the scientific conversation. Prerequisite: Corequisite: GEOL 171.

GEOL 177. First Year Seminar: _____ 3 Credits. NE
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in geology. May not contribute to major requirements in geology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

GEOL 190. Introduction to Quantitative Geoscience. 3 Credits. N
This applied, introductory-level program will explore topics in geology, hydrogeology, physics, chemistry, and biology from a mathematical perspective. The course is designed for students with a desire to expand their mathematical skills, building on practical applications in the natural sciences. The study of lab and field sciences and mathematical problem-solving through rigorous, quantitative, and interdisciplinary investigations will be emphasized. The course will take students from a review of arithmetic and algebraic manipulations, to the use of logarithms, and functions, through series, trigonometry and graphing, and finish with an introduction to the elements of calculus and statistics. The course will utilize Excel as platform for calculating and graphing numerical examples of the problems presented. We expect students in this course to emerge with confidence in the basic use of mathematics commonly applied to investigate and model the natural world. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

GEOL 301. Introduction to Oceanography. 3 Credits. N
The online course is an introduction to the earth and its oceans, including a discussion of the history of ocean exploration using the approach of the scientific method. The course will explore theories that describe the origin of the solar system, the earth, the atmosphere, and the oceans, in addition to a discussion of the origin of life on the earth. The course will cover the essential physics, chemistry, geology, biology, and the concepts of plate tectonics, as applied to understanding the oceans and seas. This course cannot be taken if a student has completed GEOL 302.

GEOL 302. Oceanography. 4 Credits. NE N LFE
An introduction to the origin, nature, and dynamics of the world's oceans, including aspects of geology, chemistry, biology, physics, and meteorology that are involved in ocean processes. The relations between the oceans and humans in the past, present, and future, and instruction in scientific reasoning as it applies to oceanography. Laboratory exercises in critical thinking about oceanography. This course cannot be taken if a student has completed GEOL 301. Prerequisite: An introductory science course.

GEOL 304. Historical Geology. 3 Credits. N
An introduction to the physical and biological history of the Earth, the methods used to decipher earth history, and the development of the geological sciences. Concepts of lithostratigraphy, chronostratigraphy and biostratigraphy, and methods of analysis of stratigraphic data focus on the interpretation of Earth history. Prerequisite: GEOL 101 and GEOL 103.

GEOL 311. Mineralogy and Structure of the Earth. 3 Credits. N LFE
Basic identification and properties of rocks and minerals in the context of whole-earth structure and evolution. Includes basic chemical equilibria for rock and mineral systems and their bearing on processes involved with formation and evolution of Earth's crust, mantle, and core. Two lectures and one lab per week. Prerequisite: GEOL 101, CHEM 130, and eligibility for MATH 125 or MATH 115.

GEOL 312. Mineral Structures and Equilibria Laboratory. 1 Credit. U LFE
A laboratory to accompany GEOL 311. Presents more rigorous analysis of the structures, compositions, and chemical equilibria governing the formation and stability of common rock-forming mineral systems. Prerequisite: GEOL 311 (may be taken concurrently), CHEM 130, and eligibility for MATH 125 or MATH 115.

GEOL 315. Gemstones. 3 Credits. NE N
The properties, occurrence, description, determination, mineral affinities, and legend and lore of gems, ornamental stones, and gem materials.

GEOL 316. Geochemistry. 3 Credits. N
The course is intended to be an introduction to all types of geochemistry. It focuses on the chemistry of the natural world and the chemical evolution of the Earth over geological time. The course is composed of three modules: (a) geochemical fundamentals; (b) natural and anthropogenically perturbed aspects of the Earth's hydrosphere and its interaction with surficial rocks, sediments, soils, the biosphere and the atmosphere and (c) the origin and evolution of Earth (crust-mantle-core) and the solar system through nuclear and high temperature chemical processes. Prerequisite: GEOL 101, CHEM 130 or 190; and eligibility for MATH 115.

GEOL 331. Sedimentology and Stratigraphy. 4 Credits. N LFE
Basic principles used in the study of sedimentology and stratigraphy. Physical, chemical, and biological processes in sedimentary environments applied to the recognition of the depositional environment, preservation, and alteration of sedimentary rocks. Field and laboratory study of sedimentary rocks with emphasis on interpretation of original depositional environments and preservation in the stratigraphic record. Prerequisite: GEOL 101 and GEOL 103; and GEOL 304 or taken concurrently.

GEOL 332. Sedimentology for Petroleum Engineers. 4 Credits. N
This course is designed for Petroleum Engineering majors. It covers basic principles used in the study of sedimentary environments. Topics include classification of sedimentary rocks, diagenesis and the alteration of sedimentary rocks. Surface processes and recognition of depositional environments in the rock record is emphasized. Basic concepts of stratigraphy are introduced. Emphasis is placed on practical examples relating to petroleum reservoirs. Lecture, lab and field trips. Prerequisite: GEOL 101 and GEOL 103 and Petroleum Engineering Major.

GEOL 351. Environmental Geology. 3 Credits. NE N
An introductory course dealing with the implications of geologic processes and materials for civilization. Topics to be considered include: geologic hazards such as floods, landslides, earthquakes, and volcanism; the availability of water, mineral, and energy resources; and the environmental impact of resource utilization. The importance of recognizing geologic constraints in land use planning and engineering projects is emphasized and illustrated by examples.

GEOL 360. Field Investigation. 2 Credits. N
Summer session. A field-geology course that provides beginning geology students with an initial understanding of the nature of geological evidence
in the field, the breadth of geological phenomena, and the importance
of the interplay of information from many geological disciplines in
solving problems. Given at various geologically diverse locations. Fee.
Prerequisite: GEOL 101.

GEOL 370. Study Abroad in Greece: Natural Environment and
Civilizations. 3 Credits. N
This course examines the profound influence of the natural environment
on the development of civilizations and the course of history. Geologic
processes responsible for natural resources, water, landscapes, natural
hazards and climate are presented in the context of their impact on
ancient Greek society. The class visits sites of geologic and historic
interest such as Athens, Delphi, Mycenae and the Aegean Sea islands
including Santorini volcano. Examples from other eras and regions of
the world are discussed along with present-day analogues. Prerequisite: An
introductory geology course or permission of the instructor.

GEOL 391. Special Studies in Geology. 1-6 Credits. N
Special reports upon subjects in which students have a particular interest.
Prerequisite: Fifteen hours of geology.

GEOL 399. Senior Honors Research. 2-5 Credits. N
Normally two to five hours in any one semester with a maximum of eight
hours. An undergraduate research course, in any of the fields of geology,
open by permission of the department to seniors in the College who
have an average grade of B or higher in geology courses. Prerequisite:
Thirty hours of geology, five of which may be taken concurrently with this
course.

GEOL 501. Simple Error Analysis with Matlab. 2 Credits. NE N
This course covers basic error analysis as it applies to geology. The course
will emphasize the description and propagation of errors in
data collection and reduction. Subjects include: how to report data and
associated errors, error propagation in simple and complex equations,
the Normal, Gaussian, and Poisson distributions, linear and higher order
regression, and X-squared test. Prerequisite: MATH 125.

GEOL 502. Linear Algebra for Earth Scientists. 2 Credits. N
This course covers basic linear algebra as it applies to geology and
emphasizes the description and use of linear algebra to solve geologic
problems. Subjects include: how to solve systems of equations,
determinants, inversion, vector spaces, matrix manipulation, eigenvectors
and values, least squares solutions, and orthogonality. Prerequisite:
MATH 125.

GEOL 503. Numerical Methods in the Earth Sciences. 2-3 Credits. N
The class will provide an introduction to writing and testing code in the
numerical computing environment MATLAB, using examples from Earth
Science disciplines to introduce basic concepts and develop progressively
more complex code. Prerequisite: MATH 125 and prior completion or co-
enrollment in GEOL 502.

GEOL 511. Raman Spectroscopy of Crystalline Solids. 3 Credits. N
This course introduces students to Raman scattering in crystalline
solids. This class with cover light and polarization of light, phonons and
magnons, Raman scattering, Raman Tensor, wave vectors and k space,
reciprocal space and Brillouin zones (and zone edge), group theory and
character tables, polarized Raman scattering (symmetry of zone center
phonons), Frohlick intraband electro-optical coupling and other multi-
phonon Resonance Raman mechanisms in crystalline solids, and phonon
confinement in nanomaterials. Prerequisite: GEOL 311 or PHSX 212.

GEOL 512. Igneous and Metamorphic Petrology. 3 Credits. N
The study of minerals, rocks and fluids within the earth's crust and mantle
to elucidate their mechanisms of formation and the pressure-temperature-
composition conditions within the earth. The course emphasizes
equilibrium thermodynamics, phase equilibria, fractionation mechanisms,
tectonic control of petrogenesis, and quantitative analysis of mineral
parageneses. Prerequisite: GEOL 311 and first semester calculus, or
permission of instructor.

GEOL 513. Petrology Laboratory. 1 Credits. U LFE
A laboratory course to accompany GEOL 512. Material covered will
include the use of the polarizing microscope in study of rocks in thin
sections; identification of rock-forming minerals in thin section; study of
textures as guides to the crystallization process; calculations of chemical
changes during fractional crystallization and partial melting. Students
will also make extensive study of igneous and metamorphic rocks in
hand specimens, accompanied by thin section study, with emphasis on
composition, texture, and structure. Students must co-enroll in GEOL 512.
Prerequisite: GEOL 312. Concurrent enrollment in GEOL 512 required.

GEOL 521. Paleontology. 3 Credits. N
A study of the structure and evolution of ancient life; the nature and
diversity of life through time; the interactions of ancient organisms with
their environments and the information that the study of fossils provides
about ancient environments; the use of fossils to determine the ages of
rocks and the timing of past events in earth history; and the patterns of
extinction through time. (Same as BIOL 622.) Prerequisite: BIOL 100 or
BIOL 152 or GEOL 105 or GEOL 304.

GEOL 523. Paleontology Laboratory. 1 Credits. U LFE
Laboratory course in the study of fossils with emphasis on the practice
of paleontology and the morphology of ancient organisms. (Same as
BIOL 623.)

GEOL 524. Mammalian Paleontology. 3 Credits.
Evolution of mammals, and anatomical modifications involved in the
process as ascertained from the fossil record. Lectures and laboratory.
(Same as BIOL 524.) Prerequisite: One of the following: BIOL 225,
BIOL 412, BIOL 413, GEOL 304, GEOL 521, or consent of the instructor.

GEOL 525. Geobiology: The Coevolution of Life and Rocks. 3
Credits. N
This course is an exploration of the parallel evolution of life and the Earth.
In the almost 4 billion years since life first appeared, biological processes
have been influencing and been influenced by physical and chemical
processes in the atmosphere, cryosphere, hydrosphere, and inside the
Earth. Microbial processes helped form fossils, reefs, and the oxygen we
all breathe; the traces microbes leave behind in the rock record inform
our understanding of how life originated and evolved on Earth, what
environmental changes triggered the Big Five mass extinctions, and
guide NASA’s exploration of the solar system. Prerequisite: BIOL 152 and
GEOL 101.

GEOL 533. Shales and Other Mudstones. 3 Credits. N
This course defines mudstones and shales. Deposition and constituents
of fine-grained sediment; geochemistry, diagenesis and lithification of
such deposits. Organic constituents of mudstone and their function
as sources of crude oil and natural gas. Petrophysics and mechanical
properties of mudstones and their potential as reservoirs of hydrocarbons.
Not open to students with credit in GEOL 733. Prerequisite: GEOL 331.

GEOL 535. Petroleum and Subsurface Geology. 4 Credits. N LFE
A general study of the occurrence, properties, origin, and migration
of petroleum. Studies of various oil fields and oil-bearing basins.
Laboratory studies include well logs, subsurface mapping, and cross-
sections. Prerequisite: GEOL 331 and either GEOL 562 or C&PE 327, or
permission of instructor.

GEOL 536. Geological Log Analysis. 1 Credits. U
islands were settled by colonists who stemmed from a single population with a shared culture, language, technology, and agriculture, the cultures of these islands are incredibly rich and varied. In this course we will examine some of the cultural mores and practices of the Polynesian islands, including how these were shaped by the climate, geology, soil, hydrology, and marine resources of each individual island. In this course we will examine these factors and assess their potential impact on the cultures present in the region. Prerequisite: A course in Biology, Chemistry, Physics, or Geology.

GEOL 552. Introduction to Hydrogeology. 3 Credits. N

GEOL 554. Contaminants in Groundwater. 3 Credits. N
This course introduces the basics of groundwater flow, water quality, and contaminant transport from a qualitative perspective. The course also surveys common groundwater pollutants, such as heavy metals, organic compounds, radionuclides, salts, non-aqueous phase liquids, risk analysis, and forensic hydrogeology. Students are expected to work together to complete weekly reading assignments. A course field trip forms the basis for a term report that is expected to incorporate concepts and tools covered during the lectures and readings. This course requires no calculations, but mathematical and chemical terms are presented. Prerequisite: One semester of general chemistry, and at least one 100 level course or higher in Geology or physical geography (GEOG 104 or GEOG 105), or permission of the instructor.

GEOL 555. Climate Science. 3 Credits. N
This course explores the science of climate change. Students will learn how the climate system works; what factors cause climate to change across different time scales and how those factors interact; how scientists use models, observations and theory to make predictions about future climate; and the possible consequences of climate change for our planet. Students will learn how climate change today is different from past climate cycles and how satellites and other technologies are revealing the global signals of a changing climate. Finally, the course looks at the connection between human activity and the current warming trend and considers some of the potential social, economic and environmental consequences of climate change. Prerequisite: GEOL 101 or GEOL 121.

GEOL 556. Field Methods in Hydrology. 3 Credits. N
The course offers an overview on basic field methods for characterization of hydrologic systems. Topics to be covered include physical and chemical characterization techniques, such as: how to measure water levels; perform single well and aquifer tests; unsaturated zone parameterization; inorganic, organic, isotopic, and dissolved gas characterization; groundwater-surface water characterization techniques, and geophysical techniques for hydrogeology. Additionally, the class will visit a variety of sites of hydrogeologic interest. Prerequisite: GEOL 552 or permission from instructor.

GEOL 558. Applied Groundwater Modeling. 3 Credits. N
This course focuses on how to construct simple to complex computer models of groundwater systems and systems in which water flows between groundwater and surface water bodies such as springs, streams and lakes. We consider water flow, transport of solutes, density effects (from saltwater or brines), and the use of groundwater and surface water

Application of well logging measurements to interpretation subsurface. Not open to students who have completed or are taking C&PE 528. Prerequisite: GEOL 101.

GEOL 537. Petroleum Reservoir Characterization. 3 Credits. N
Geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Consider economic analysis of steps to improve oil recovery. Students who have completed GEOL 837 may not take GEOL 537 for credit. Prerequisite: GEOL 535 and permission of instructor.

GEOL 538. Basin Analysis. 3 Credits. N
Overview of sedimentary basins, mechanisms of basin formation, and basin evolution through time. Topics include lithospheric stretching and flexure to form sedimentary basins, geohistory analysis and backstripping, and thermal history and controls on basin fill. This course consists of lectures, exercises, and a field trip. This course is available at both the 500 and 700 level with additional assignments required at the 700 level. Not open to students with credit in GEOL 738. Prerequisite: GEOL 331 and GEOL 562.

GEOL 539. Sequence Stratigraphy. 3 Credits. N
Principles and practical applications of sequence stratigraphy, the process of studying and correlating depositionally linked stratigraphic successions in a chronostratigraphic framework. The concepts of depositional sequences, parasequences, bounding surfaces, systems tracts and incised valleys are studied through class exercises and a regional field trip. Seismic stratigraphic techniques and concepts are covered in the latter part of the course. This course is available at both the 500 and 700 level with additional assignments required at the 700 level. Not open to students with credit in GEOL 739. Prerequisite: GEOL 331 or GEOL 332.

GEOL 541. Geomorphology. 4 Credits. N LFE
A critical study of landforms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOG 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEOL 304 and GEOL 103.

GEOL 542. Energy and Society. 3 Credits. N
In this course, you will gain the necessary understanding of energy technologies and policies to evaluate options for energy usage and its socioeconomic and environmental impacts. You will analyze different opportunities and impacts of energy systems that exist within and between groups defined by national, regional, household, ethnic, and gender distinctions. Analysis of the range of current and future energy choices will be stressed, as well as the role of energy in determining local environmental conditions and global climate. Prerequisite: A course in Biology, Chemistry, Physics, or Geology.

GEOL 543. Environmental Ethics: A View from the National Parks. 3 Credits.
To what extent are our National Parks protected from pollution, invasive species, mining, climate change and tourism? In this course you will learn about the geologic processes that form our National Parks as well as the competing interests that stakeholders have on the land. Prerequisite: A course in Biology, Chemistry, Physics, or Geology.

GEOL 548. Geology and Culture of Polynesia. 3 Credits. N
Polynesia, encompassing over 1,000 islands in the southern and central Pacific Ocean, was the last region of the Earth to be settled by humans. Around 3000-1000 BCE, people from northwest Melanesia first reached one of these islands, and over the next few centuries spread to colonize all of the islands. However, despite the fact that all of the Polynesian
GEOL 560. Introductory Field Geology. 3 Credits. N
Summer session. The study of the principles of field geology and the
application of field methods to solve geological problems. Includes use
of topographic maps and aerial photographs for geological mapping,
the stratigraphic methods by measuring sections, and working
field trips to areas of regional geological interest. Given at the University
of Kansas Geology Field Camp near Canon City, Colorado. Fee
Prerequisite: GEOL 331, GEOL 360, and GEOL 562, or consent of
instructor.

GEOL 561. Field Geology. 3 Credits. N
Summer session. The application of the principles of field geology to
solve complex geological problems in the field. Given at the University
of Kansas Geology Field Camp near Canon City, Colorado, or at other sites
as appropriate. Fee. Prerequisite: GEOL 560.

GEOL 562. Structural Geology. 4 Credits. N LFE
A study of primary and secondary rock-structures and their genesis.
Includes techniques of structural analysis and introduces mechanisms
of rock deformations. Lectures, laboratory, and required field trip.
Prerequisite: GEOL 311; PHSX 111, PHSX 114, or PHSX 211 and
PHSX 216; and MATH 115 or MATH 126.

GEOL 563. Tectonics and Regional Geology. 3 Credits. NE N
Topics vary with demand and include fundamental features of plate
tectonics, interpretation and distribution of regional geology of mountain
belts with emphasis on tectonic setting and processes, regional geology,
and tectonics of selected mountain belts. This course is offered at the 500
and 700 level with additional assignments at the 700 level. Not open to
students with credit in GEOL 763. Prerequisite: GEOL 562, GEOL 512, or
GEOL 331, and GEOL 572.

GEOL 564. Geophysics. 3 Credits. N
Introductory study of gravitational, magnetic, seismic, electrical, and
thermal properties of the earth. Measurements, interpretation, and
applications to exploration, earth structure, and global tectonics.
Prerequisite: An introductory course in geology; MATH 116 or MATH 126;
and PHSX 115 or PHSX 212 and PHSX 236. PHSX 115 or PHSX 212
may be taken concurrently.

GEOL 575. Seismic Exploration. 3 Credits. N
Application of seismic reflection and refraction techniques to the
description of near-surface geology and the exploration for energy and
mineral resources. Theory of seismic information, data collection, data
processing using computers, and geologic interpretation. Prerequisite: A
course in computer programming, either FORTRAN or C, which may
be taken concurrently. An introductory geophysics course, such as
GEOL 572.

GEOL 577. Environmental Geophysics. 3 Credits.
Application of the methods of geophysical exploration to evaluate,
mitigate, and prevent environmental problems below the surface of the
earth. Development of fundamental principles and discussion of
environmental case histories using seismic, gravity, magnetic,
electromagnetic, electrical, and radar methods. Prerequisite: An
introductory course in geology; MATH 116 or MATH 126; and PHSX 115,
PHSX 214, or PHSX 212 and PHSX 236.

GEOL 578. Seismic Data Analysis and Interpretation. 3 Credits. N
Interpretation methods applied to seismic exploration and reservoir
characterization. Topics include: rock physics, the convolutional model,
synthetic seismograms, seismic response of hydrocarbon reservoirs,
resolution, seismic velocity, depth conversion, seismic attributes, AVO,
conversion, seismic anisotropy, 3-D & 4-D interpretation, S-wave and
converted wave interpretation, laboratory use of commercial seismic
interpretation software. Prerequisite: GEOL 572 or consent of the
instructor.

GEOL 579. Hydrogeophysics. 3 Credits. N
This course is designed to introduce students to current hydrogeophysics
research. Students will learn about determining, predicting, and
studying the physical properties and hydrologic processes associated
with groundwater flow, contaminant transport, and microbimineral
interactions using geophysical measurements at different scales. This
course combines lectures, literature review and discussion, and student
presentations. Not open to students with credit in GEOL 779. Prerequisite:
GEOL 101 or GEOL 121.

GEOL 591. Topics in Geology: ____. 1-5 Credits. N
May include lectures, discussions, readings, laboratory, and field work
in geology. Will be given as needed. May be taken more than once.

GEOL 715. Geochemistry. 3 Credits.
Application of chemical equilibria and kinetics to geological environments
and processes, with emphasis on processes involving solution equilibria.
Includes introduction to thermodynamic aspects of equilibria.

GEOL 717. Geochronology. 3 Credits.
Principles and applications of natural radioactive systems for
geochronology and cosmochronology, including use of radiogenic
isotopes as geochemical tracers. Prerequisite: GEOL 512 or consent of
instructor.

GEOL 718. Stable Isotope Geochemistry. 1-3 Credits.
Principles and applications of equilibria among stable isotopes in the
geological environment, with emphasis on the isotopic systems of
hydrogen, carbon, and oxygen. Prerequisite: GEOL 715 or consent of
instructor.

GEOL 723. Museum Internship. 1-6 Credits.
Provides directed, practical experience in research, collection, care,
and management, public education, and exhibits with emphasis to suit
the particular requirements of each student. Graded on a satisfactory/
unsatisfactory basis. (Same as AMS 799, ANTH 799, and MUSE 799.)

GEOL 728. Paleoecology. 3 Credits.
Paleoecology is the study of ancient soils preserved in the geologic
record. The course covers concepts of paleopedology and its applications
to the interpretation of paleoenvironmental, paleoecologic, and
paleohydrogeologic settings and its use in sequence stratigraphy and
correlation. Prerequisite: GEOG 535 or GEOL 331; or consent of
the instructor.

GEOL 729. Ichnology. 3 Credits.
Ichnology is the study of organism-substrate interactions. The class
will cover concepts and applications of ichnology in the marine and
continental realms, including the behavior of such organisms as microbes,
plants, invertebrates, and vertebrates preserved in the geologic record as
trace fossils. Ichnology is applied to geology and in the petroleum industry
to interpret ancient environments, hydrogeology, ecology, and climate.
Prerequisite: GEOL 331 or GEOL 521; or consent of the instructor.

GEOL 731. Terrigenous Depositional Systems. 4 Credits.
Processes that operate in recent sedimentary environments, responses
of sediment to those processes, and criteria for determining depositional
environments of ancient sedimentary rocks. Lectures, practical exercises, and field trips. Prerequisite: GEOL 331.

GEOL 732. Carbonate Depositional Systems. 3 Credits.
Patterns and processes of contemporaneous carbonate deposition and diagenesis, depositional models; applications to interpretation of carbonate rocks. Lecture, discussion, laboratory and field trips.

GEOL 733. Shales and Other Mudstones. 3 Credits.
This course defines mudstones and shales. Deposition and constituents of fine-grained sediment; geochemistry, diagenesis and lithification such of deposits. Organic constituents of mudstone and their function as sources of crude oil and natural gas. Petrophysics and mechanical properties of mudstones and their potential as reservoirs of hydrocarbons. Not open to students with credit in GEOL 533. Prerequisite: GEOL 331.

GEOL 738. Basin Analysis. 3 Credits.
Overview of sedimentary basins, mechanisms of basin formation, and basin evolution through time. Topics include lithospheric stretching and flexure to form sedimentary basins, geohistory analysis and backstripping, and thermal history and controls on basin fill. This course consists of lectures, exercises, and a field trip. This course is available at both the 500 and 700 level with additional assignments required at the 700 level. Not open to students with credit in GEOL 538. Prerequisite: GEOL 331 and GEOL 562.

GEOL 739. Sequence Stratigraphy. 3 Credits.
Principles and practical applications of sequence stratigraphy, the process of studying and correlating depositionally linked stratal successions in a chronostratigraphic framework. The concepts of depositional sequences, parasequences, bounding surfaces, systems tracts and incised valleys are studied through class exercises and a regional field trip. Seismic stratigraphic techniques and concepts are covered in the latter part of the course. This course is available at both the 500 and 700 level with additional assignments required at the 700 level. Not open to students with credit in GEOL 539. Prerequisite: GEOL 331 or GEOL 332.

GEOL 751. Physical Hydrogeology. 3 Credits.
Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy's law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as CE 752.)

GEOL 753. Chemical and Microbial Hydrogeology. 3 Credits.
Lecture and discussion of chemical and microbiological controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics; and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis. Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics of microbial growth will be covered. (Same as CE 753.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors.

GEOL 754. Contaminant Transport. 3 Credits.
A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as CE 754.) Prerequisite: Introductory Hydrogeology or consent of instructor.

GEOL 755. Site Assessment. 3 Credits.
Site Assessment encompasses both the academic and applied aspects of environmental geology. The student is presented with the historical, regulatory and risk characteristics of environmental issues as well as specific geologic principles such as GIS and remote sensing, geophysics, geomorphology and surface and groundwater practices. Site assessment concepts include surface and subsurface sampling, analyses and interpretations, conceptual site models, environmental geologic forensics, and environmental Phase I site assessments (USEPA and ASTM). Environmental geology project management principles and practices are examined in detail. These core aspects of the course form the basic structure in understanding and applying environmental remediation and state-of-the-art/state-of-the-practice processes. Case studies are researched and analyzed for the assessment phase of the program.

GEOL 758. Applied Groundwater Modeling. 3 Credits.
This course focuses on how to construct simple to complex computer models of groundwater systems and systems in which water flows between groundwater and surface water bodies such as springs, streams and lakes. We consider water flow, transport of solutes, and density effects (from saltwater or brines). We consider the conjunctive use of groundwater and surface water (demand-driven, supply-limited problems), and managed aquifer recharge (MAR). We consider three aspects of model development: (1) how to compare the computer models we construct to the systems modelers intend them to represent, (2) how accurate the models are likely to be and how uncertainty can be quantified, and (3) how useful the models are in practice. (Same as CE 731.) Prerequisite: GEOL 751 or CE 752, or approved by the professor.

GEOL 761. Topics in Regional Field Geology: ______. 1-5 Credits.
A detailed field study of a carefully selected area that includes features of several phases of geology. Field trip fee. Prerequisite: GEOL 561 or equivalent and departmental approval.

GEOL 763. Tectonics and Regional Geology. 3 Credits.
Topics vary with demand and include fundamental features of plate tectonics, interpretation and distribution of regional geology of mountain belts with emphasis on tectonic setting and processes, regional geology, and tectonics of selected mountain belts. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in GEOL 563. Prerequisite: GEOL 562, GEOL 512, or GEOL 331, and GEOL 572.

GEOL 771. Advanced Geophysics: ______. 1-3 Credits.
Topics to vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics—tectonophysics, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as PHSX 727.) Prerequisite: GEOL 572 or consent of instructor.

GEOL 772. Geophysical Data Analysis. 3 Credits.
Fourier analysis, sampling theory, prediction and interpolation of geophysical data, filtering theory, correlation techniques, deconvolution. Examples will be chosen from various fields of geophysics. Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/C&PE 250/EECS 250/EPHX 250/ME 250 and GEOL 572.
GEOL 773. Seismology. 3 Credits.

GEOL 779. Hydrogeophysics. 3 Credits.
This course is designed to introduce students to current hydrogeophysics research. Students will learn about determining, predicting, and studying the physical properties and hydrologic processes associated with groundwater flow, contaminant transport, and microbemineral interactions using geophysical measurements at different scales. This course combines lectures, literature review and discussion, and student presentations. Not open to students with credit in GEOL 579.

GEOL 780. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

GEOL 781. Introduction to Museum Exhibits. 3 Credits.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 714, BIOL 700, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

GEOL 783. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

GEOL 784. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 791, BIOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

GEOL 785. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, BIOL 798, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

GEOL 791. Advanced Topics in Geology: _____. 1-5 Credits.
Selected offerings in geology. Intended primarily for graduate students and qualified seniors. May include lectures, discussions, reading, laboratory and field work. May be taken more than once.

GEOL 814. Professional Science Masters Environmental Geology Capstone I. 1 Credits.
A culminating experience to develop a workforce project and produce a written report to be presented orally to a committee that may include an industry member. Students will develop an applied workforce project in the student's place of employment for full-time employees, or an internship or similar individual project for full-time students or students who are not employed in the area of study. This course will initiate the process of project development and will be taken prior to a student's final semester. This project is to be continued in GEOL 815 in the last semester of the student's graduate career. Prerequisite: Minimum 20 credit hours completed in program.

GEOL 815. Professional Science Masters Environmental Geology Capstone II. 2 Credits.
A culminating experience to develop a workforce project and produce a written report to be presented orally to a committee that may include an industry member. Students will develop an applied workforce project in the student's place of employment for full-time employees, an internship or similar individual project for full-time students or students who are not employed in the area of study. The students will compile their project results in a formal written report and will give an oral presentation to the Environmental Studies faculty (2 minimum) and the student's employer or mentor. Prerequisite: GEOL 814.

GEOL 837. Geoscience and Petroleum Engineering. 3 Credits.
Advanced geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve recovery. Students who have completed GEOL 537 may not take GEOL 837 for credit.

GEOL 851. Field and Laboratory Methods: Physical Hydrogeology. 1 Credits.
Introduction to field and laboratory methods commonly used in physical hydrogeology. Practical experience with common water level measurement techniques, various well pumping techniques, well installation and geologic core sampling, and hydraulic testing. Prerequisite: Introductory course in hydrogeology and familiarity with computer use for data processing, or consent of instructor.

GEOL 852. Field and Laboratory Methods: Contaminant Transport. 1 Credits.
Introduction to laboratory methods for evaluating reactive transport parameters, followed by development and implementation of computer models. Students will gain experience building models starting from basic transport equations using a spreadsheet platform and, where appropriate, commercial software packages. Prerequisite: GEOL 751 (may be taken concurrently) or equivalent, or consent of the instructor.

GEOL 853. Field and Laboratory Methods: Chemical Hydrogeology. 1 Credits.
Practical experience in measuring unstable chemical parameters in groundwater, including pH, dissolved oxygen, temperature, alkalinity, specific conductance, and turbidity. Practical experience in collecting water samples for chemical analysis, choosing appropriate sample containers and preservation methods, and special techniques for collecting samples for determination of parameters sensitive
to environmental changes such as oxygen level or temperature. Prerequisite: GEOL 753 (may be taken concurrently) or equivalent, or consent of the instructor.

**GEOL 855. Field and Laboratory Methods: Environmental Geophysics. 1 Credits.**
Introduction to the application of geophysical methods to environmental investigations. Practical experience in designing, conducting, and interpreting information obtained using downhole and shallow surface geophysical methods will be addressed. Prerequisite: Introductory course in hydrogeology and GEOL 577 or concurrent enrollment, or consent of instructor.

**GEOL 856. Field and Laboratory Methods Special Topics: ______. 1 Credits.**
Practical experience in a special topic in Environmental Geology. Course may be repeated if topic varies.

**GEOL 891. Special Studies in Geology. 1-5 Credits.**
May be repeated.

**GEOL 899. Master’s Thesis. 1-12 Credits.**
Thesis Hours. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Graduate standing.

**GEOL 999. Doctoral Dissertation. 1-12 Credits.**
Dissertation Hours. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Graduate standing.

### Slavic, German, and Eurasian Studies Courses

**GERM 100. German Reading Course I. 3 Credits. **
Primarily for graduate students in other departments but also open to seniors planning to pursue graduate study. Fundamentals of grammar and reading texts of medium difficulty. Does not count toward undergraduate language requirement. Previous study of German not necessary. Not open to native speakers of German.

**GERM 101. German Reading Course II. 3 Credits. **
Continuation of GERM 100. Advanced grammar and reading advanced texts in the students’ respective fields. Does not count toward undergraduate language requirement. Not open to native speakers of German. Prerequisite: GERM 100 or permission of instructor.

**GERM 104. Elementary German I. 5 Credits. **
U F1
Introductory German; no previous German required. Development of students’ balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 108.

**GERM 108. Elementary German II. 5 Credits. **
U F2
Continuation of GERM 104. Further development of students’ balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 201. Prerequisite: GERM 104 or placement by examination.

**GERM 111. Introduction to German I. 3 Credits. **
U
Introduction to German for special purposes; no previous German required. Provides basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar.

Introduction to the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement.

**GERM 112. Introduction to German II. 3 Credits. **
Continuation of GERM 111. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 111 or permission of instructor.

**GERM 113. Introduction to German III. 1.5 Credits. **
Continuation of GERM 112. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 112 or permission of instructor.

**GERM 124. German Cinema in Context. 3 Credits. **
HL H
Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films’ sources, ideologies, techniques, and artistic achievements. Does not count toward the German major or minor.

**GERM 125. German Cinema in Context (Honors). 3 Credits. **
HL Course content similar to GERM 124. Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films’ sources, ideologies, techniques, and artistic achievements. Does not count toward German major or minor.

**GERM 128. Introduction to the Arts in German-Speaking Europe. 3 Credits. **
H
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 328.

**GERM 130. Today’s Challenges in German-Speaking Europe. 3 Credits. **
H
This course explores significant political, social, and cultural challenges facing German-speaking Europe today. Specific issues may include migration, the environment, national identity, European integration, business, remembering the past, and technology. Focus on Germany, Austria, and Switzerland and to a lesser extent Belgium, Luxembourg, and Liechtenstein. Taught in English. Does not count toward the German Studies major or minor.

**GERM 132. The City of Berlin in German Culture. 3 Credits. **
H
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 332.

**GERM 148. Germanic Mythology, Religion, and Folklore. 3 Credits. **
H/W
Taught in English. Introduction to the pagan myths and beliefs of Teutonic antiquity and their survival in the popular traditions of Germanic countries, within the framework of comparative mythology, archaeology, and anthropology. Does not count toward the German major or minor.

GERM 177. First Year Seminar: _____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in German. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

GERM 201. Intermediate German I. 3 Credits. U F3
Continuation of GERM 108. Further development of students’ balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 202. Prerequisite: GERM 108 or placement by examination.

GERM 202. Intermediate German II. 3 Credits. U F4
Continuation of GERM 201. Further development of students’ balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who successfully complete this course should take GERM 301. Prerequisite: GERM 201 or placement by examination.

GERM 203. Introduction to Business German: Deutsch im Berufsalltag. 3 Credits. H F4
Continuation of GERM 201; completes language proficiency sequence. Further development of students’ balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on the topics related to professional communication and to interpret, compare, and contrast German and American business cultural phenomena. Emphasis on interaction. Recommended for students planning to take GERM 352 and GERM 462. Not open to native speakers of German. Prerequisite: GERM 201 or placement by examination.

GERM 220. Study Abroad Topics in the German Language. 1-5 Credits. U
This course is for elementary- and intermediate-level instruction in the German language while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies.

GERM 222. Study Abroad Topics in German Studies: _____. 1-3 Credits. H/W
This course is for elementary- and intermediate-level German Studies courses taught in German taken while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies.

GERM 233. Introduction to German Conversation. 3 Credits. U
Students learn basic techniques and strategies, expand vocabulary and idiomatic usage, and improve accuracy in grammar and pronunciation. Prerequisite: Only open to students in the KU Summer Language Institute in Eutin, Germany and GERM 108. Corequisite: GERM 201 and GERM 202.

GERM 240. Introduction to Translation and Translation Theory. 3 Credits. H
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as AAAS 250, LING 250, SLAV 250 and SPAN 202.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

GERM 250. Migrants and New Media in 21st-century Germany. 3 Credits. H
This course investigates the phenomenon of human migration through the lens of New Media (documentaries, film essays, digitized political performance art, gallery installations) in Germany. Drawing also on cinematic, historical, and legal texts, we will uncover the complex layers of existence that result when migrants cross a national border. Students will better understand the nuanced aesthetics and sociopolitical context of Germany’s New Media production. Ultimately, we will analyze how German productions inform the global debate on migration and our understanding of migrant experiences.

GERM 301. High Intermediate German I. 3 Credits. H/W FP
Continuation of GERM 202. Further development of students’ use of German through reading and discussion of literary and non-literary texts (spoken, written, multimedia, combined with intensive grammar review). Introduction to expressive functions of German with emphasis on spoken and written communication. Not open to native speakers of German. Students who complete this course successfully should take GERM 302. Prerequisite: GERM 202 or placement by examination.

GERM 302. High Intermediate German II. 3 Credits. H/W FP
Continuation of GERM 301. Refinement and expansion of students’ use of German. Reading and discussion in German of literary and non-literary texts (spoken, written, multimedia), combined with continued intensive grammar review. Emphasis on better understanding German grammatical structures and acquisition of vocabulary. Not open to native speakers of German. Students who complete this course successfully should take GERM 401. Prerequisite: GERM 301 or placement by examination.

GERM 315. Magic, Murder, Monsters: German Literature and the Modern Era. 3 Credits. H
Introduction in English to German writers 1750-present featuring texts about the supernatural and monstrous. Students examine how encounters with magic and construction of monsters reflect particular cultural anxieties, fears, and ideals as relating to historical developments, industrialization, and scientific advancement. Discussion of themes such as gender, sexuality, class, race, empire, war, politics, and technology in German-speaking Europe. Readings include works in translation by influential German writers. Open to first-year students and non-majors. GERM 315 is required for admission to all courses beyond GERM 402 except GERM 462. (Same as EURS 315.)

GERM 320. Border Crossings in German Culture. 3 Credits. HT
Taught in English. Exploration of writers, filmmakers, and artists who have emigrated from, or migrated to German-speaking Europe. Emphasis on both their transnational impact and their representations of border crossings. Topics may include exile communities before, during, and after World War II and multiculturalism in contemporary Germany, Austria, and Switzerland.

GERM 322. Study Abroad Topics in German Studies: _____. 1-5 Credits. H
This course is for 300-level German Studies courses taught in German taken while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies. Prerequisite: GERM 302 or the equivalent.

GERM 328. The Arts in German-Speaking Europe. 3 Credits. HL
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 128.

GERM 330. Topics in: ______. 3 Credits. H
Taught in English. Interdisciplinary study of selected aspects of the society or culture of German-speaking Europe or of the European experience. Does not count toward the German major or minor.

GERM 332. Berlin in German Culture. 3 Credits. HL
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 132.

GERM 333. German Conversation and Idioms. 3 Credits. H
Intensive practice in conversational German with instruction in proper pronunciation as well as an introduction to idiomatic usage. Only for students in the KU Summer Language Institute in Holzkirchen, Germany or in courses offered through the KU Language Training Center. Prerequisite: GERM 202 or equivalent fourth-semester German course.

GERM 334. Review of German Grammar. 3 Credits. H
Intensive review and practice of select topics in German grammar. Offered only for students in the KU Summer Language Institute in Holzkirchen, Germany or in courses offered through the KU Language Training Center. Prerequisite: GERM 202 or equivalent fourth-semester German course.

GERM 336. The German Transatlantic Experience. 3 Credits. U
Introduction to the migration of German-speaking Europeans to North America, 17th-century present. Consideration of European and North American factors motivating migration, the journey to the New World, the experiences of immigrants and their descendants, and the ways in which German-speaking Europeans shaped the multicultural history of America. Taught in English.

GERM 350. Studies in German Language, History, and Culture. 3 Credits. SC H
Students visit museums and cultural sites in Cologne, Berlin, Munich, and other locations, with a focus on the 20th century. Discussion and written assignments in German. Offered only for the KU Summer Language Institute in Holzkirchen, Germany. Prerequisite: GERM 202 or equivalent fourth-semester German course.

GERM 353. German Conversation. 3 Credits. H/W FP
Further development of practical conversational skills for students with intermediate proficiency in German. Discussion of topics from everyday German life and current affairs, based on German newspapers and magazines. May be repeated but counts only once toward the major or minor. Not open to native speakers of German. Prerequisite: GERM 202.

GERM 352. German and Germany in Global Business Culture I. 3 Credits. H/W
High-intermediate content-based course with focus on the language skills needed to engage actively with the German business world, including applying for internships and jobs. Introduction to common cultural practices in the German business environment. Use of multimedia sources to explore current events and issues in Germany and their significance within a global business context. Not open to native speakers of German. Prerequisite: GERM 202 or the equivalent.

GERM 370. German Studies Topics: ______. 3 Credits. H
Exploration of German Studies topics such as literature, film, philosophy, social institutions, language, the arts, media. Topics vary, and course may address topics across a narrow or broad time frame. Course conducted in German. May be repeated if content varies. Prerequisite: GERM 302.

GERM 375. Topics in Film of German-Speaking Europe: ______. 3 Credits. H
Examination of topics such as Expressionism, Turkish-German culture in contemporary German film, popular filmmaking, post-unification film, German literature as film, German film and national identity. Topics and periods vary. Prerequisite: GERM 302.

GERM 400. Introduction to German Literary Masterpieces. 3 Credits. H/W FP
For students enrolled in the KU Summer Language Institute in Germany. Selected works of major German Language writers of the 19th and 20th centuries. Not open to native speakers of German. Prerequisite: GERM 302.

GERM 401. Advanced German I. 3 Credits. H FP
Continuation of GERM 302. Expansion and refinement of proficiency in German (speaking, listening, reading, writing), increased understanding of German grammatical structures, development of a more sophisticated vocabulary, and introduction to stylistics through discussion and analysis of literary and nonliterary texts. Students successfully completing GERM 401 may take all other GERM courses at the 400 and 500 levels. Prerequisite: GERM 302.

GERM 402. Advanced German II. 3 Credits. H FP
Continuation of GERM 401. Development of advanced proficiency in German through analysis and discussion of literary and nonliterary texts and practice in advanced composition. Emphasis in both discussions and papers on style and rhetoric and on developing skill in textual analysis. Focus on advanced German grammar and on style and idiomatic expression in spoken and written German. Prerequisite: GERM 401.

GERM 411. German Culture 1150-1750. 3 Credits. H FP
Exploration of major cultural periods and movements within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 315 and GERM 401.

GERM 412. German Culture 1750-Present. 3 Credits. H FP
Exploration of major cultural periods and movements 1750-present within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 315 and GERM 401.
GERM 421. Exiles, Migrants, and Refugees in German Literature and Film. 3 Credits. H
What does it mean to cross a border in today’s world? This course explores different examples of “border crossing” in German-speaking Europe and in their broader European and transatlantic contexts. Engaging with literature, film, and works of art from the 20th to 21st centuries, we will address topics such as fictional representations of America; exile literature before and during World War II; the Berlin Wall and divided Germany; and migration and multiculturalism in contemporary Germany, Austria, and Switzerland. This course is taught in German. Prerequisite: GERM 302.

GERM 453. Investigation and Conference: ____. 1-3 Credits. H/W FP
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student’s work is required. Not open to native speakers of German.

GERM 462. German and Germany in Global Business Culture II. 3 Credits. H/W FP
Advanced content-based course with focus on the language skills needed to examine the German social market economy, legal forms of companies, and the business planning process. Use of multimedia sources to explore current German business and economic issues in international, transatlantic, and global contexts. Team research project and presentation. Prerequisite: GERM 362 or permission of instructor.

GERM 481. Literature and Culture of German-Speaking Europe 1750-1830. 3 Credits. H FP
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 315 and GERM 401.

GERM 482. Literature and Culture of German-Speaking Europe 1830-1918. 3 Credits. H FP
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 315 and GERM 401.

GERM 501. Advanced German III. 3 Credits. H FP
Focus on usage-based grammar of contemporary German. Extensive reading and analysis of grammatical structures in context and integration of form, meaning, and use. Exploration of grammatical structures using contemporary electronic textual analysis tools. Prerequisite: GERM 402.

GERM 550. History of the German Language. 3 Credits. H FP
Introduction to basic concepts of German philology and historical linguistics and exploration of the development of a national German language. Prerequisite: GERM 315 and GERM 401.

GERM 560. Structure of the German Language. 3 Credits. H FP
This course provides an overview of the structure of modern standard German. Students will explore different levels of the linguistic system of German (including phonology, morphology, and syntax) and complete practical exercises. Prerequisite: GERM 315 and GERM 401.

GERM 575. Topics in Genre: ____. 3 Credits. H FP
Study of the definition, style, form, and content of a specific literary genre in German-language literature and the social, cultural, political, and economic factors that led to its emergence. Consideration of the genre’s suitability for particular writers or periods. Topic and period vary. May be repeated if content varies. Prerequisite: GERM 315 and GERM 401.

GERM 579. Investigation and Conference: ____. 1-3 Credits. H/W FP
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student’s work required. Prerequisite: GERM 315 and GERM 401.

GERM 580. Senior Capstone Course: German-Speaking Europe Today. 3 Credits. H FP
Students write and present a research paper on an aspect of contemporary German-speaking Europe. Focus on learning or refining the linguistic and research-related skills needed to produce a research paper. Students synthesize their knowledge of German Studies with coursework they have completed in other disciplines. Conducted in German and English. Required of all German Studies majors in senior year. Prerequisite: GERM 315, GERM 401, and senior standing.

GERM 598. Research for Departmental Honors. 3 Credits. H FP
Research for a departmental honors project, on a topic chosen in conjunction with the faculty advisor. Emphasis on independent study and writing. Open to students with previous coursework in German at the 400 level, an overall 3.0 GPA, and at least a B+ average in advanced work in German. Prerequisite: GERM 315, GERM 401, senior standing, and permission of Undergraduate Advisor.

GERM 599. Departmental Honors Project. 3 Credits. H FP
Continuation of GERM 598. Course consists of completion of Departmental Honors project. Quality of project determines whether student receives credit only or Honors in German. Prerequisite: GERM 598.

GERM 616. Topics in German Literature: ____. 3 Credits. H/W FP
Readings and discussions in German of selected literary works on a particular topic or theme (e.g., nature, women, art and literature, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

GERM 618. Topics in German Language and Linguistics: ____. 3 Credits. H/W FP
Readings and discussions in German in an area of specialized language or linguistic study (e.g., lexical fields, modern German dialects, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

GERM 620. Topics in German Culture and Folklore: ____. 3 Credits. H/W FP
Readings and discussions in German on some aspect of German culture or folklore, including Landeskunde (study of contemporary Germany). May be repeated. Prerequisite: Two literature courses from GERM 400,
GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

GERM 626. Idiomatic Usage in Modern Colloquial and Literary German. 3 Credits. H/W
Practical exercises in the systematic study of idioms and synonyms, designed to foster a more discriminating and effective usage of German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

GERM 630. Advanced German Grammar. 3 Credits. H/W
Recommended for students intending to teach German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

GERM 700. Introduction to Graduate Studies in German. 3 Credits.
An introduction to the skills required of students enrolled in graduate degree programs in German Studies; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to 10-page conference paper.

GERM 701. Introduction to the Study of Literature. 3 Credits.
Introduction to methods of literary research and presentation of seminar papers. Exercises in the use of basic guides to the study of German language and literature, in the documentation of scholarly research, and in the writing of interpretive essays, based on reading and discussion of selected works from different periods of the departmental "Basic Reading List.

GERM 710. Workshop for M.A. Students. 1 Credits.
Discussion of policies in the M.A. program, examinations, thesis proposals, writing of theses, grant proposals, conference presentations, publications of scholarship, and entrance into the academic job market. Required of all M.A. students in the first year in the program. Does not count toward completion of 30 hours of course work for the M.A.

GERM 712. The Structure of Modern Standard German. 3 Credits.
A comprehensive introduction to the structure and usage of contemporary German, including phonetics, phonology, morphology, syntax, text linguistics, semantics, pragmatics, and language variation. Students will listen to lectures, read texts on German linguistics, participate in discussions, and work extensively on linguistic problems involving German.

GERM 716. Topics in German Literature: ____. 3 Credits.
Intensive study of a selected topic in German literature. May be repeated. Offered only in conjunction with GERM 616 when taught by a Max Kade Distinguished Visiting Professor. Graduate students will be assigned additional work.

GERM 734. Age of Goethe. 3 Credits.
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history.

GERM 736. Post-Romantic Nineteenth Century. 3 Credits.
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history.

GERM 738. Twentieth Century. 3 Credits.
Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history.

GERM 751. Topics in German Studies: ____. 3 Credits.
Course covers key topics in German Studies and represents the expertise of faculty in the department as well as department-affiliated faculty. Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics. May be repeated as topics vary.

GERM 753. Investigation and Conference: ____. 1-6 Credits.
To be taken only in exceptional cases. Permission of the instructor who will supervise the student's work is required.

GERM 756. Studies in Enlightenment Literature: ____. 3 Credits.

GERM 800. Seminar: Teaching German as a Second Language. 3 Credits.
Introduction to selected aspects of second-language acquisition, foreign-language pedagogy, and contrastive grammar, with the major concentration on practical guidance in teaching elementary German, in test preparation and grading, and in the use of equipment.

GERM 801. Practicum in GTAs. 1 Credits.
Discussion of matters relating to the teaching of German in specific courses. Required of all GTAs in each semester of teaching, unless enrolled in GERM 800. Does not count toward completion of 30 hours of course work for the M.A. or 27 hours of course work for the Ph.D.

GERM 855. Introduction to German Applied Linguistics. 3 Credits.
Introduction to theories and topics in German applied linguistics.

GERM 860. Introduction to Modern German Dialects. 3 Credits.
Introduction to modern German dialects, methods of dialect research and aspects of linguistic assimilation and loss as well as a survey of German-American dialects. Prerequisite: Permission of instructor required.

GERM 899. Master's Thesis. 3 Credits.
May not be repeated.

GERM 900. Workshop for Ph.D. Students. 1 Credits.
Discussion of policies in the Ph.D. program, research specializations, examinations, dissertation proposals, writing of dissertations, grant proposals, conference presentations, publication of scholarship, and entrance into the academic job market. Required of all Ph.D. students in the first year in the program. Does not count toward completion of 27 hours of course work for the Ph.D.

GERM 953. Investigation and Conference: ____. 1-6 Credits.
To be taken only in exceptional cases. Permission of the instructor who will supervise the student's work is required.

GERM 960. Seminar on Writers of the Age of Goethe: ____. 3 Credits.

GERM 962. Seminar in Romanticism: ____. 3 Credits.

GERM 967. Seminar in Special Topics: ____. 3 Credits.

GERM 999. Doctoral Dissertation. 1-10 Credits.
Global & International Studies Courses

Etoi 500. Study Abroad Topics in European Studies: ____. 1-5 Credits. U
This course is designed for the study of special topics in European Studies at the 100-level (Freshman/Sophomore level). Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies.

Etoi 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in European Studies. Course is designed to meet the critical thinking learning outcome of the KIU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

Etoi 302. European Culture and Society 1945 to Present. 3 Credits. HT H
The course provides historical, cultural, and political overviews of Europe since 1945 with particular emphasis on the contribution of French and Italian culture and society. The course emphasizes Europe's contribution to Western intellectual thought, social movements, arts and literature, and global society.

Etoi 315. Magic, Murder, Monsters: German Literature and the Modern Era. 3 Credits. H
Introduction in English to German writers 1750-present featuring texts about the supernatural and monstrous. Students examine how encounters with magic and construction of monsters reflect particular cultural anxieties, fears, and ideals as relating to historical developments, industrialization, and scientific advancement. Discussion of themes such as gender, sexuality, class, race, empire, war, politics, and technology in German-speaking Europe. Readings include works in translation by influential German writers. Open to first-year students and non-majors. GERM 315 is required for admission to all courses beyond GERM 402 except GERM 462. (Same as GERM 315.)

Etoi 350. Study Abroad Topics in: ____. 1-5 Credits. H
This course is designed for the study of special topics in European Studies at the Junior/Senior level. Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies.

Etoi 430. European Civilization in World Context: ____. 3 Credits. HL H
An introduction to the literature of encounters between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as HUM 430.) Prerequisite: HUM 114 or HUM 204 and HUM 115 or HUM 205.

Etoi 500. Seminar in European Studies. 3 Credits. H
Provides an interdisciplinary approach to the study of modern European civilization. By discussing both classic and contemporary, controversial readings each week and writing several papers during the semester, students acquire an understanding of the development of modern European culture and society and Europe's contemporary problems. Topics for discussions and papers are drawn from the following subjects: the economic and political integration of European states; modernism and anti-modernism in European culture; imperialism, migration, and ethnic and racial division in European society; democracy versus dictatorship; American-European relations; mass culture, urban development, and the welfare state; and contrasts and comparisons between European Cultures--East and West, North and South. Seminar discussions are led by invited European Studies faculty as well as the instructor or instructors. Required of all European Studies majors. Prerequisite: Junior standing or consent of instructor.

Etoi 501. Research for Honors in European Studies. 3 Credits. W
Research for a European Studies honors project, on a topic chosen in conjunction with the faculty advisor. Emphasis on independent study and writing. Open to students with previous coursework who counts toward the European Studies co-major at the 400 level, an overall 3.25 GPA, and at least a B+ average in advanced work in European Studies. Prerequisite: At least one course for the EURS co-major at the 400 level and permission of the Academic Director.

Etoi 502. European Studies Honors Project. 3 Credits. H/W
Continuation of EURS 501. Student must defend completed honors project in an oral examination before a thesis committee of three faculty members. The committee determines whether the student earns Honors. See Departmental Honors section of catalog for more information. Prerequisite: EURS 501.

Etoi 504. Europe Today. 3 Credits. H
An exploration of major social, political and economic developments post World War II including the rise of the European Union, the integration of Eastern and Western Europe, the growing role of Islam, attitudes towards the United States, and Europe's role in the world economy. Topics may vary based on current events. (Same as HUM 505.) Prerequisite: Junior or senior standing or consent of instructor.

Etoi 507. Research in European Collections. 1-3 Credits. H
This course allows students in the European Studies Co-Major and related disciplines to receive credit for research related to European Collections in one or more of the following institutions: Watson and Spencer Research Libraries, the Dole Institute, the Eisenhower and Truman Presidential Libraries, the U.S. Army Combined Arms Research and Foreign Military Studies Office at Fort Leavenworth, the Linda Hall Library in Kansas City, and the Winston Churchill Collection at the Westminster College Library in Fulton, Missouri. May be taken in place of EURS 501 by European Studies Honors Students if taken for three credit hours. Permission of instructor necessary.

Etoi 511. Topics in European Studies: ____. 3 Credits. H
A study of significant themes, movements, or problems in European history, literature, politics, society, or culture. May also relate European issues to issues in other world areas (Africa, North America, Asia, etc.) May be repeated for credit when topic varies.

Etoi 550. Classics of Peace Literature. 3 Credits. HL H
A study of influential proposals for world peace from Erasamus' The Complaint of Peace (1515) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henry Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as PCS 550.) Prerequisite: HUM 204 or HUM 205.

Etoi 555. The Literature of Human Rights. 3 Credits. H
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as GIST 560 and PCS 565.) Prerequisite: Junior/Senior standing or consent of instructor.
EURS 580. Directed Study. 1-3 Credits. H
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required.

EURS 604. The European Union. 3 Credits. S
This course will introduce students to the politics of the European Union. The course will cover three closely connected topics. First, it will discuss the institutional make-up of the EU, such as the European commission, the European parliament, the European Council, and the European court of justice. It will assess how well these institutions deal with the growing importance of transnational issues, such as migration and economic policy issues. Second, the course will examine how national governments pursue national interests at the level of the European Union. Third, the class will study how well the EU represents the citizens of European countries. Finally, the course will assess the extent to which the EU has successfully developed into a supra-national federation. (Same as POLS 643.) Prerequisite: Sophomore standing or consent of instructor.

Global & International Studies Courses

GIST 111. Mapping Our Changing World. 4 Credits. N LFE
This course is an introduction to geospatial technologies. It focuses on the conceptual and technical aspects of mapping technologies that transform information about locations, people, objects, environments, events, and phenomena to digital representations of the world and as end-products of geospatial analysis. Topics covered include surveying, aerial photography and photogrammetry, satellite remote sensing, global positioning systems (GPS), geographic information systems (GIS), and thematic mapping. Students will learn how to acquire and develop geospatial data as the sources for mapping, the skills of analyzing and interpreting spatial information, and how geovisualization can be used in addressing real-world problems. (Same as GEOG 111.)

GIST 139. The Global Cold War. 3 Credits. H
This course provides an immersive introduction to the global Cold War and its legacies. It explores how the contest between capitalism and communism unfolded not only in the United States and the Soviet Union, but also in Asia, Africa, Europe, Latin America, and the Middle East. Through interactive lectures, discussions, and role-playing games, students will learn to "think globally," gain an understanding of imperialism, nationalism, and decolonization, and discover how the Cold War shaped culture, economics, politics, the environment, and the international system in ways that remain relevant today. (Same as HIST 139.)

GIST 177. First Year Seminar: _____ . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Global & International Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

GIST 201. Topics in: _____. 1-3 Credits. U
An interdisciplinary study of international topics. Designed especially for freshmen and sophomores. May be repeated for credit if content varies.

GIST 203. Topics in Middle Eastern Studies: _____. 1-3 Credits. U
An interdisciplinary study of topics related to the Middle East. Designed especially for freshmen and sophomores. May be repeated for credit if content varies.

GIST 205. Muslim Lives: Politics, Culture, and Society. 3 Credits. S
The course provides a general introduction to Muslim communities and societies by surveying some of the major aspects of Muslims' lived experiences from the early Islamic period to the modern globalized world. It will challenge the essentialized notion of a "Muslim world," which is usually presented as a monolithic society. Through the course, students will develop a basic understanding of the rich diversity of Muslim communities in terms of cultural mores, religious practices, and sociopolitical conditions. Religious and sociopolitical practices will be analyzed in their ethical and moral perspectives. (Same as SLAV 205.)

GIST 210. Culture and Health. 3 Credits. H/W
This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as AAAS 203 and GEOG 201.)

GIST 211. Culture and Health, Honors. 3 Credits. H/W
Honors version of AAAS 203. GEOG 201 and GIST 210. This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as AAAS 204 and GEOG 202.)

GIST 220. Introduction to Global and International Studies. 3 Credits. S
This course provides an overview to the major approaches and themes involved in the study of world cultures, politics, and societies from a multi-disciplinary perspective. Topics of global importance, such as the construction and maintenance of cultures, comparative political systems, global and regional economies, popular culture, gender and the environment will be covered through their manifestations in particular regional and global contexts. Students will be challenged to address their own views and existing approaches to global dynamics from a critical and reflective perspective.

GIST 303. Language, Gender, and Sexuality. 3 Credits. S
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as ANTH 325, JWSH 305, SLAV 305 and WGSS 325.)

GIST 304. Globalization and Afro-Brazilian Culture. 3 Credits. W
During this study abroad experience, students will explore how Afro-Brazilian cultural elements, such as the music of Afro groups, the art form/martial art/dance capoeira, and the candomblé religion became realities around the world. Guest lecturers will present on topics such as Brazilian history, music, religion, dance, education, Carnival, and tourism. Planned site visits include temples of Afro-Brazilian religions such as candomblé and syncretic Catholic churches such as the Church of Our Lady of the Black Rosary. The program is based in Salvador, one of the Brazilian cities where African influence is the most visible and celebrated. This course and study abroad program is open to all majors.

GIST 305. World Indigenous Literatures. 3 Credits. NW H
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres
studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ENGL 305 and ISP 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

GIST 306. Global Environmental Literature. 3 Credits. H
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. (Same as ENGL 306 and EVRN 306.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

GIST 308. Key Themes in Modern Global History. 3 Credits. H
A comparative historical analysis of major global developments from the late 15th century to the present. Some of the themes likely to be explored are empire-building, contact between cultures and colonial social relations; the attraction of cities, their role in a global economy and the shift to an urban world; and the impact of capitalism and industrialization on social organization including conflict between classes and changes in the nature of work. Students learn ways of interpreting primary historical documents and comparing historical investigations across time and space. (Same as HIST 308.)

GIST 310. Modern Turkey: Culture and Society. 3 Credits. H/W
As a country that is geographically in the middle of a strategic global region, a key NATO ally, a candidate for EU membership, and representing a mix of democratic traditions, military coups, and authoritarian leaders combined with periods of rapid and drastic socioeconomic transformation, for one reason or another, Turkey seems to always be a country under the spotlight. This course is designed to give an overview of Modern Turkey and familiarize the student with its history, society and culture. Topics to be covered include the early republican period, ethnic and religious minorities, religion and secularism, music, cuisine, women, gender and sexuality, religious and national holidays, cinema and TV, among others. The primary purpose of this course is to help students develop necessary analytical and interpretive skills to identify, compare, and analyze Turkish cultural practices, products and perspectives as they relate to basic social, political, and historical contexts. No background knowledge of Turkey or the Turkish language is required. (Same as SLAV 310 and TURK 310.)

GIST 314. Globalization: History and Theory. 3 Credits. H
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 315. (Same as SLAV 310 and TURK 310.)

GIST 320. Love, Sex and Marriage in India. 3 Credits. H
This course addresses diverse aspects of the philosophies and expressions of intimacy and pleasure as found in India. Using old and new literature, including from the Kamasutra, as well as media, we examine the following: how and why in ancient times sensual pleasure was another path for ultimate bliss; how perspectives and traditions of intimacy have changed over time; diverse types of marriages; the culture and practice of arranged marriages; same-sex intimacy; and universal concepts of love.

GIST 321. Graphic Novels as Memory. 3 Credits. H
This course examines the interaction between literature and memory, in particular how authors respond to major historical events and contribute to shaping the collective memory of those events. Students will read graphic novels inspired by memories of the Holocaust and Communism. Through the visual and textual mix of the graphic novel, we will consider the impact of historical upheavals on the lives of ordinary individuals, drawing connections to contemporary national and global socio-political problems. Students will write on these topics in a variety of academic and non-academic genres, including: journal, article summary, synthetic essay, analytical essay, and reflection essay/creative writing. (Same as SLAV 320.)

GIST 323. Environmental Dynamics in India. 3 Credits. S/W
This course introduces students to the relationships the people of India have had with their landscape from ancient times to the present. Students will learn about diverse ecosystems and the indigenous peoples they have harbored from the high Himalayas altitudes to the coastal regions, from the desolate arid deserts to the rain forests of India. The class will discuss how the very nature of the relationship of the people with their land has changed over the long course history of South Asia with specific case studies of environmental challenges, failures and successes. Examples of possible cases include: the Chipko movement led by the women of the Himalayas to save their forests from loggers; the traditions of creating lakes and water conservation lifestyles in the arid region of Rajasthan; and nature worship and cases of leopards and tigers receiving protection by the very villages they terrorize. (Same as ANTH 323.)

GIST 325. Peoples and Cultures of South Asia. 3 Credits. S
This course provides an introduction to the diversity of peoples in South Asia, including India, Pakistan, Nepal, Bangladesh and Bhutan. The particular cultures and language of the indigenous peoples in the region are highlighted through academic sources and the direct study of reproductions of these cultures in literature and film.

GIST 329. Israeli-Palestinian Conflict: An Introduction. 3 Credits. S
This course provides an introduction to the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. (Same as HIST 482 and JWSH 329.)

GIST 335. Iran Through Literature and Film. 3 Credits. W
This course examines aspects of Iranian society through literature and film. Students will analyze selected Iranian texts in their historical, social, and political contexts to examine and gain a comprehensive understanding of the complex and pressing issues facing the modern Iranian society. The course will utilize nationalist, Marxist, feminist, and Islamist paradigms to provide a theoretical framework for discussions and to better understand the crosscurrent of ideas in contemporary Iran. No knowledge of Persian language required because all the texts will be available in English translation and subtitles.

GIST 350. Study Abroad Topics in: ______. 1-5 Credits. U
This course is designed for the study of special topics in global and international studies at the junior/senior level. Course work must be arranged through the KU Office of Study Abroad and approved by a faculty adviser in Global and International Studies. May be repeated for credit if content varies.

GIST 354. Globalization: A Geographic Approach. 3 Credits. S
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. (Same as GEOG 354.)
GIST 355. International Women’s Rights. 3 Credits. SC
Women face discrimination and abuse around the world: at home, in the workplace, and in the public sphere. How are these systems of oppression connected? How are women working together for change, and what can you do to support their efforts? This course will investigate what feminist solidarity looks like around the world, with an emphasis on connections across different cultural and political contexts. (Same as WGSS 355.)

GIST 371. Environmental Geopolitics. 3 Credits. S
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as EVRN 371 and GEOG 371.)

GIST 376. Immigrants, Refugees, and Diasporas. 3 Credits. H
This course looks at people who choose to cross political borders, are forced to flee beyond them, or constitute ethnic minorities living outside a homeland. Examining these groups from a global historical perspective, this course explores how ethical debates about the rights of non-citizens and ethnic outsiders have evolved in the modern age. Students learn about important issues that have affected the lives of immigrants, refugees, and diasporas, including citizenship, mobility, cultural representation, asylum policies, and the concept of human rights. The course concludes with a look at contemporary manifestations of these issues, from debates over the place of Muslims in Europe to discussions about immigration policy in the United States. (Same as HIST 376.)

GIST 420. Analyzing Contemporary Global Issues. 3 Credits. S/W
This course enhances students' ability to critically analyze the intricacies of current international issues through three core goals. First, the content of the course is unique each semester as it targets major international issues in the moment, so students gain an in-depth understanding about things happening in the world around them. Second, the course refines students' critical writing skills by combining the critical thinking skills needed for issue analysis with the writing skills required to disseminate their thoughts in a variety of forms. Finally, for GIST majors specifically, the course offers an ideal preparation for the senior capstone experience.

GIST 465. Genocide and Ethnocide. 3 Credits. S
This course provides students with a conceptual and historical synopsis of genocide and ethnocide from an anthropological perspective. Taking its lead from a human rights orientation, the course assesses why such atrocities must be confronted. This includes grappling with ethical, legal and definitional ambiguities surrounding the concepts of genocide and ethnocide. We will explore a range of cases in the 20th and 21st centuries, while focusing on diverse conditions leading to genocide, ethnocide, population displacements, human trafficking and the modern phenomena of refugee camps. The course will analyze the role of the modern state, colonialism, political ideologies, ethnicity and nationalism as major forces underpinning ethnocide and genocidal campaigns. Based primarily on a select review of cases of ethnocide and genocide, the class examines how to spread global awareness and communal engagement by actively protecting human rights. (Same as ANTH 465.)

GIST 471. Politics of Human Trafficking. 3 Credits. S
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 714, POLS 714, or GIST 714. (Same as POLS 471 and WGSS 514.) Prerequisite: Sophomore standing or consent of instructor.

GIST 493. Directed Readings. 3 Credits. U
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director.

GIST 495. Global Internship. 3 Credits. U
Semester-long internship with a business or organization located abroad or that provides a global or international working context for the interning student. The assessment component normally requires the submission of a reflective internship journal documenting work experiences within this unique context, and a final paper on a relevant theme that is determined by instructor and student based on context. This course is available to GIST majors and minors only. Prerequisite: Consent of instructor.

GIST 501. Topics in: _____, 1-3 Credits. U
An interdisciplinary study of international topics. Designed especially for juniors and seniors. May be repeated for credit if content varies.

GIST 502. Advanced Topics in South Asian Studies: _____, 1-3 Credits. U
An interdisciplinary study of topics related to South Asia. May be repeated for credit if content varies. Prerequisite depends on specific topic offered.

GIST 503. Advanced Topics in Middle East Studies: _____, 3 Credits. U
An interdisciplinary study of topics related to the Middle East. May be repeated for credit if content e depends on specific topic offered.

GIST 529. Globalization. 3 Credits. S
Addresses sociological aspects of the growth of transnational economic, cultural, institutional, and political interconnections, the freer and faster movement of goods, images, ideas, people, and institutional forms across national borders, and the consequences and problems of these processes. The focus is on recent (later 20th century to the present) global restructuring in the context of historical shifts in capitalist development. (Same as SOC 529.) Prerequisite: SOC 104 or GIST 220.

GIST 535. Literature and Society in the Contemporary Middle East. 3 Credits. NW H/W
This course offers a general introduction to the modern Middle Eastern literatures in English translation. Through analyses of selected short stories and novels from Arabic, Turkish and Persian literature, the students develop an understanding of the issues that shape everyday life in the Contemporary Middle East. The course investigates issues of nation and national identity, war, ethnicity, class, religion, and gender and sexuality. We use a variety of paradigms, namely nationalist, Marxist, feminist, and Islamist, to provide a theoretical framework for discussion of the selected works. No prior knowledge of Arabic, Turkish or Persian language is needed. Prerequisite: Junior or Senior standing or consent of instructor.

GIST 550. Issues in Global Studies: _____, 3 Credits. U
An interdisciplinary study of topics with particular emphasis on issues of global importance—i.e. transnational and trans-regional. May be repeated for credit if content varies. Prerequisite: GIST 220.

GIST 560. The Literature of Human Rights. 3 Credits. H
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as EURS 565 and PCS 565.) Prerequisite: Junior/Senior standing or consent of instructor.

GIST 565. Gender, Culture, and Migration. 3 Credits. S
This course examines the gendered experiences of transnational migration through a combination of ethnography, literature, film, and news media. How do different people experience the desire to migrate, the logistics of movement, and life in a faraway place? How does mobility shape ideas of family, community, and nation? How do class, race, sexuality, and legal status also infect these experiences, especially in rendering certain groups vulnerable to abuse and exploitation? Attention will also be paid to gendered thinking against migration, including the ways gender and sexuality infect xenophobia, border enforcement, refugee recognition, deportation policy, and contemporary political debates. (Same as WGSS 565.) Prerequisite: Any 100 level AAS course, WGSS 101, AMS 100, AMS 110, or GIST 220.

GIST 570. Anthropology of Violence. 3 Credits. S
Introduces students to the comparative and cross-cultural study of violence. The course begins by surveying different anthropological approaches to the study of violence, with special attention paid to classical social theorists as well as ethnographic works. Topics may include (post) coloniality and identity politics, nationalism, race, religion, and political culture; geographic areas to be covered may include Africa, Europe, Latin America, the Middle East, and South Asia. (Same as ANTH 570.) Prerequisite: Junior standing or above or permission of instructor.

GIST 577. Human Dimensions of Global Change. 3 Credits. S
This class introduces concepts such as coupled human and natural systems, social-ecological resilience, and sustainability science, examines people's responses to major climate, land, water, and coastal change, and discusses case studies. One hour of each seminar will be devoted to individual needs that address topical or methodological issues. Class requirements include presentations, biweekly papers, and a term paper. (Same as GEGO 577.) Prerequisite: One of the following: GEGO 100, GEGO 104, GEGO 374, or an Environmental Studies introductory course.

GIST 582. Geopolitics and Genocide. 2-3 Credits. S
Explores the inherently geographical and geopolitical nature of genocide and related mass violence and introduces an overarching concept, territorial cleansing, that foregrounds the spatial and territorial nature of these events. Detailed studies of cases at a range of scales and locales provide the major context for critical examination and comparison of territorial cleansing concepts. Students enrolling for 3 credits will prepare and present a substantial independent research paper. (Same as GEGO 306.) Prerequisite: GEGO 102 or GEGO 103; or ANTH 108 or ANTH 109; or permission of instructor.

GIST 585. Transnational Terrorism. 3 Credits. S
The course provides a study of the patterns of transnational terrorism. First, it introduces students to the analytical study of terrorism. The course traces the evolution of terrorism, from the French Revolution to the modern day era. It also covers how scholarship defines, conceptualizes, and measures terrorism. The second goal is to introduce students to key scholarly debates within the literature. Some of the example questions we ask are: are democracies more vulnerable to terrorism? Does globalization render states open to being attacked by transnational actors? Is torture warranted as an effective counterterrorism tactic? The readings draw on empirical scholarship on the causes and consequences of transnational terrorism. (Same as POLS 582.) Prerequisite: Sophomore level or consent of instructor.

GIST 601. Indigenous Peoples of the World. 3 Credits. S
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GEOG 601 and ISP 601.) Prerequisite: Permission of instructor.

GIST 610. Interdisciplinary Methods for Global Contexts. 3 Credits. S
An introduction to a variety of widely-employed quantitative and qualitative research methods in the social sciences and humanities, including methods such as statistical analysis, ethnography, and content analysis. Prerequisite: GIST 220 or consent of the instructor.

GIST 624. Social Movements in the Middle East. 3 Credits. S
Using the major theories and approaches comparatively applied to social movements around the world, this course critically analyzes historical and existing cases of social movements and "nonmovements" in the Middle East. We cover examples of Islamist (and post-Islamist), women's, nationalist, democratic, youth and labor movements and their impact on the region. Contextual factors like technology and social networking, regime type, institutions, and socioeconomic structures are also considered for their role in supporting or inhibiting collective action. Prerequisite: GIST 220 or POLS 150.

GIST 633. Iran, Turkey, and the Kurds. 3 Credits. NW S
This course examines the contemporary political and social dynamics within these three communities residing along the northern stretch of what is commonly referred to as the Middle East. Using social and political theory as a starting point, students will comparatively study critical elements and issues facing the members of these societies. Issues and themes for comparison will include the structure and institutions of politics, nation-building and nationalism, Islam and politics, women and politics, and regional and global engagement. (Same as POLS 633.) Prerequisite: GIST 220, POLS 150, SOC 130, or consent of instructor.

GIST 667. Islam and Politics. 3 Credits. W
This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as POLS 667 and SOC 640.) Prerequisite: A principal course in sociology, POLS 150, or consent of instructor.

GIST 678. Chinese Foreign Policy. 3 Credits. S/W
In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as EALC 678 and POLS 678.) Prerequisite: Sophomore level or consent of the instructor.

GIST 686. International Human Rights. 3 Credits. S
The course introduces students to historical and philosophical bases of contemporary human rights, theoretical approaches and methodological challenges to studying human rights questions, and acquaints them with the main topics, controversies, and tensions in the scholarship,
practice and politics of human rights. (Same as POLS 686.) Prerequisite: Sophomore level or consent of instructor is required.

**GIST 698. Capstone Seminar. 3 Credits. H**
A seminar designed to introduce students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: GIST 610 or consent of the instructor.

**GIST 699. Capstone Seminar, Honors. 3 Credits. H**
A seminar designed to introduce honors students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major.

**GIST 701. Approaches to International Studies. 3 Credits.**
This course examines various approaches to the study of cultures, politics, and societies in their global and international contexts through the exploration of a series of exemplary works of global/international research from a variety of disciplines (e.g. anthropology, sociology, political science, economics, geography, history, etc.). The course will cover the major contributions of these disciplines in their approaches to global questions and themes and will provide a multi-disciplinary framework within which students can begin exploring their own global and international research questions. The course also provides an introduction to the major regions and many of the themes that students will be able to specialize in during the course of the MA program.

**GIST 702. Globalization. 3 Credits.**
A central issue in international studies is globalization, the increasing interconnectedness of societies and economies. This course examines globalization from an historical and contemporary perspective. Major topics include (but are not necessarily limited to) the historical expansion of the West since 1500, the growth of international economic institutions, conflict among global cultures, the future of state sovereignty, and the challenges of economic integration.

**GIST 705. Globalization in History. 3 Credits.**
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and spread of international institutions. The current world problems investigated will vary, but may include issues such as environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as HIST 705.)

**GIST 707. Studying Modern Islam. 3 Credits.**
An in-depth introduction to the issues involved in the academic study of modern Islam. In this class students will investigate the ideas, assumptions and historical circumstances that gave rise to and continue to influence scholarly approaches to Islam. Topics may include the Orientalism, gender studies, colonialism, secularism, Islamism and the concept of modernity. Students will apply what they learn to the study of Islam in contemporary Egypt.

**GIST 709. Research Design. 1-3 Credits.**
This course guides new graduate students through the process of designing and developing an original research project. The fundamentals of interdisciplinary research will be the instructional framework within which students will design their own original research project. Instruction regarding the review of literature, methodology, and how to structure and scale the project will be given. Students taking this course will be required to take the companion course, GIST 810.

**GIST 710. Research Design for International Area Studies. 3 Credits.**
This course addresses the challenges for students engaged in graduate research projects and theses in an interdisciplinary and international context. The course will guide the students through the structures of research design processes for various epistemological approaches, and will assist students in formulating strong research questions, reviewing and situating their own work within the literature, working with the library and subject librarians, appropriating theory, and modeling writing conventions for research within their selected epistemological community. Students will also be exposed to a variety of research methods and will practice designing projects utilizing a select number of them. During the course of the semester, students will be working toward a plan for a substantial graduate research project. (Same as CEAS 710 and LAC 710.) Prerequisite: Consent of instructor.

**GIST 714. Politics of Human Trafficking. 3 Credits.**
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in GIST 471, POLS 471, or WGSS 514. (Same as POLS 714 and WGSS 714.) Prerequisite: Consent of instructor.

**GIST 750. Topics in International Studies: _____, 3 Credits.**
A study of one or more selected topics in international studies. Course may be taken more than once.

**GIST 751. Human Rights and U.S. National Security. 3 Credits.**
This course explores the history, debates, and contemporary issues related to human rights and U.S. national security policy. Through lecture, practical exercises, and class-led discussions, the course will cover relevant and timely issues such as human rights and counter-terrorism, security assistance and cooperation, peacekeeping and protection of civilians, and global criminal accountability. Prerequisite: Graduate standing or consent of instructor.

**GIST 752. International Conflict Prevention and Resolution. 1 Credits.**
This course examines three connected fields of study related to armed conflict and acute violence from the perspective of US policymakers: the nature of contemporary conflict and its causes; mediation, and peacebuilding; and the policy options for preventing or managing conflict. Throughout the short course, students will explore the major analytical frameworks and theories used to examine conflict, and the major approaches applied to address it, including contemporary approach to stabilization and reducing state fragility.

**GIST 783. Theories of Conflict, Security and Peace. 3 Credits.**
Armed conflicts can be caused by a myriad of factors; thus, conflict studies in international relations provide useful theories and methods through which inter- and intra-state conflict may be analyzed. The goal of this course is an analytical understanding of the conditions, processes, and events that lead to the outbreak and escalation of war. This course
focuses predominantly on the causes of interstate conflict, global security, and conflict resolution but also includes a brief examination of the causes of civil war. The course highlights the complexity of the subject matter, scrutinizing war through the many lenses of peace and conflict theory, including but not limited to realism and the balance of power, levels of analysis, misperception, rivalries, grievances, bargaining, and insecurity.

GIST 793. Directed Readings. 1-5 Credits.
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director.

GIST 810. Graduate Writing Experience. 1-3 Credits.
This course guides students through the process of effectively communicating the findings of original research through formal writing. The purpose of the course is to provide writing guidance and instruction to students conducting ongoing research, so that they are familiar with successful ways of communicating research to academic and professional audiences. Depending on the career objectives of the student, the writing project will be tailored to address the relevant audience--academic or professional. The fundamental components of the research writing process will be individualized to correspond with student's research goals. Prerequisite: GIST 709.

GIST 818. Islamic Law. 2-4 Credits.
Examines the history, doctrine, texts, and role of Islamic law (Shari'a) throughout the world. This course complements (but is independent of) LAW 879. The course focuses on the background and birth of the Arab-Islamic Empire, the life and times of the Prophet Muhammad (PBUH), the development of Islam, the Rashidun, Umayyad, and Abbasid Caliphs, Moghul and Ottoman Empires, the Koran and Sunnah and other sacred texts, the Sunni-Shi'a split, the principal schools of Islamic law, the status of women and religious minorities, and principles of the substantive areas of law, including criminal, family, inheritance, contract, property, business, banking, and international law (including law of war). Also covered are issues of economic growth, marginalization, and terrorism. (Same as LAW 918.)

GIST 897. Examination Preparation. 1 Credits.
Independent study in preparation for the Comprehensive M.A. examination. May be repeated. Graded on a satisfactory/unsatisfactory basis.

GIST 898. Thesis and Research Project Writing. 3 Credits.
This course is primarily designed to guide MA students through the writing development of their concluding graduate research, whether a final graduate research project or a thesis. Students will learn and apply the practices of effective communication and writing of research while completing the various components of their final projects. The intention of the class is to help students complete a high quality draft of their research, though deadlines and assignment may relate to practice in graduate level research writing in general. Within an interdisciplinary framework and an understanding of rhetorical distinctions across various epistemologies, students will practice relevant modeling of academic literature reviews, transparency in communicating research practices, analyzing/interpreting texts, data, or other information, and introducing and concluding their work. (Same as CEAS 898.) Prerequisite: GIST 710.

GIST 899. Thesis. 1-6 Credits.
Enrollment for writing thesis for master’s degree. Graded on a satisfactory progress/limited progress/no progress basis.

History of Art Courses

HA 100. Introduction to Western Art History. 3 Credits. HT H
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 150, HA 151, HA 160, HA 161, or HA 300.

HA 105. Special Study: _____ . 1-6 Credits. H
This course is designed for the study of special topics in art history at the introductory level, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies.

HA 150. History of Western Art: Ancient Through Medieval. 3 Credits. HT H
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 160.

HA 151. History of Western Art: Renaissance to Contemporary. 3 Credits. H
A survey of art in the West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 161.

HA 160. History of Western Art: Ancient Through Medieval, Honors. 3 Credits. HT H
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 150. Prerequisite: Membership in the University Honors Program or consent of instructor.

HA 161. History of Western Art: Renaissance to Contemporary, Honors. 3 Credits. H
A survey of the art in West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 151. Prerequisite: Membership in the University Honors Program or consent of instructor.

HA 166. The Visual Arts of East Asia. 3 Credits. W
This course examines major forms of artistic expression in China, Korea, and Japan. Discussions introduce basic art concepts, the themes and purposes of art, and different art styles in East Asia from ancient times to the present. Students develop critical skills through analyzing, writing about, and talking about art and East Asian cultures. Students also learn about important museums in North America and Asia. No prior knowledge of art history or East Asia expected.

HA 177. First Year Seminar: _____ . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in History of Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HA 261. Introduction to Modern Art. 3 Credits. HT H
This course considers the efforts of artists to explore and represent their place in the modern world. The political, industrial, and scientific revolutions of the late 18th and 19th centuries in the West overturned the certainties of traditional authority and liberated artists to raise new questions. Innovations ranged from Impressionism's light-filled
lands to Surrealism’s dream imagery, Abstract Expressionism’s paint-splattered canvases, and Pop Art’s celebration of consumer culture. This course addresses these and other modern art movements, emphasizing developments in Europe and the United States through the late 20th century and concluding with international contemporary art in an age of globalization. Intended for non-majors.

HA 300. Introduction to Western Art History. 3 Credits. HT H
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 100, HA 150, HA 151, HA 160, or HA 161.

HA 305. Special Study: _____. 1-6 Credits. H
This course is designed for the study of special topics in art history, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies.

HA 311. The Art and Architecture of the British Isles. 3 Credits. H
Taught in the British Summer Institute in the Humanities Study Abroad program, this course offers an introductory survey of British art and architecture. Through classroom lectures, readings, and visits to museums, churches, and other historic sites, selected works of art and architecture are analyzed in terms of their formal qualities, iconography, and cultural context. Prerequisite: Approval for enrollment in the British Summer Institute in the Humanities Study Abroad program through the KU Office of Study Abroad.

HA 315. The Prehistory of Art. 3 Credits. S
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as ANTH 315.)

HA 322. European Architecture 300-1300. 3 Credits. H
This course surveys the architecture of Western Europe from the 4th through the 14th centuries, concentrating on 750-1300. The medieval millennium was an era of constant conflict: military, diplomatic, intellectual, ideological, theological, and stylistic. Within a chronological framework, this course will examine selected works of architecture and urban design, paying special attention to the tension between architectural innovation and traditional practices. Its mission is to explore why and how these buildings and sites were produced, to understand how they communicate their patrons and makers’ ideas, and to discover their audiences’ responses to them. Students will consider the reinterpretation and transformation of the classical orders, the adaptation and transformation of several ancient building types, the establishment and development of architecture to serve newly emerging nation-states and religions, the evolution of vaulting, the changing conception of the wall, and the representational qualities of medieval architecture. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor.

HA 325. Aegean Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaens, Minoans, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 525 or HA 525. No knowledge of Greek or Latin is required. (Same as CLSX 525.)

HA 326. Greek Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 526 or HA 526. No knowledge of Greek or Latin is required. (Same as CLSX 326.)

HA 327. Roman Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 527 or HA 527. No knowledge of Greek or Latin is required. (Same as CLSX 327.)

HA 330. Italian Renaissance Art. 3 Credits. H/W
A survey of the art and architecture of Italy from c. 1300 to 1550. Special emphasis is placed on regional styles and the private, political, and devotional contexts in which works of art and architecture functioned. Some of the artists whose works are considered are Giotto, Duccio, Donatello, Botticelli, Leonardo, and Michelangelo.

HA 331. Northern European Art from Van Eyck to Brueghel. 3 Credits. H
This course examines Bohemian, French, Netherlandish, and German art in the 14th-16th centuries in settings ranging from religious foundations to noble courts and cities. Participants in the course will consider painting, prints, sculpture, and manuscripts from the era of Jan van Eyck to that of Hieronymus Bosch and Pieter Brueghel the Elder. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor.

HA 335. Renaissance Architecture in Italy. 3 Credits. H
This course examines the history of Italian Renaissance architecture from its origins in the 15th century to its transformation in the 16th, featuring (but not limited to) the work of three of its most celebrated exponents: Filippo Brunelleschi, Michelangelo Buonarroti, and Andrea Palladio. Students will explore how and why 15th and 16th-century architects and patrons appropriated and interpreted both ancient and medieval forms to create the architectural culture of the Renaissance. We will investigate the revival and transformation of the classical architectural language, the emerging notion of architectural authorship, the ability of architectural forms and materials to convey particular meanings to particular audiences, the deployment of architecture as an instrument of power, and the birth of architectural history and theory. The course is
taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 535. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor.

HA 340. Special Study in Asian Art Before 1900: _____. 1-6 Credits. H
This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 342. Special Study in 18th/19th-Century European or American Art: _____. 1-6 Credits. H
This course is designed for the study of special topics in European or American art of the 18th and/or 19th centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 343. Special Study in 20th/21st-Century Art: _____. 1-6 Credits. H
This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 344. Manga: Histories and Theories. 3 Credits. H
Manga (Japanese comics) have long been an extremely popular and influential medium in Japan and internationally. Manga offer engaging narratives and visual imagery revealing central concerns not only of Japanese culture, history, society and politics, but also of the global cultural industry. The medium has been studied through various disciplinary lenses ranging from art history to visual culture and media studies, literature, sociology, and anthropology. Through the examination of several manga artists and works from the late 19th century to the present as well as reading a broad range of scholarship, this course explores the major issues addressed and theoretical approaches used in the interdisciplinary study of manga. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 544. (Same as EALC 344.)

HA 347. Ceramics of East Asia. 3 Credits. NW H
This course explores the history of East Asian ceramics from the 10th to the late 20th century. Using critical approaches from art history, anthropology, sociology, literature, and materials science, students discuss the iconography and connoisseurship as well as the production, design, and consumption of ceramics such as Yaozhou celadon, Temmoku and Rakku tea bowls, stamped and slip-decorated Punch’ong ware, and Ming blue-and-white porcelain. This is a hybrid course, which means that most of the material and assignments of the course are online. However, students are required to participate in 6-7 field trips, including trips to the Spencer Museum of Art, the kilns located on campus, and a demonstration of the Japanese tea ceremony. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in HA 547.

HA 353. Modern and Contemporary African Art. 3 Credits. H
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists’ engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. Not open to students with credit in AAAS 569/HA 569. (Same as AAAS 353.)

HA 354. Japanese Prints. 3 Credits. NW H/W
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. (Same as EALC 354.)

HA 361. Buddhist Art of Korea. 3 Credits. H
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 561 or REL 511. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as EALC 360.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

HA 362. Ceramics of Korea. 3 Credits. H
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Ming pottery. Not open to students who have taken HA 562. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as EALC 372.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

HA 363. Modern Korean Art and Culture. 3 Credits. H
This course is a thematic introduction to Korean art and culture with an emphasis on modern and contemporary Korea. Pre-modern works are contextualized with respect to contemporary issues. Students learn how to conduct a comprehensive analysis of an artwork by considering the political, historical and social conditions of its time within a broader East Asian cultural framework. (Same as EALC 373.) Prerequisite: An introductory course in art history at the college level, or consent of instructor.

HA 367. Art and Culture of Japan. 3 Credits. NW H/W
The history of Japanese art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions with different countries, and the roots of modernism in Japanese art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art. (Same as EALC 367.)

HA 368. Art and Culture of China. 3 Credits. NW H/W
The history of Chinese art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions between different ethnic groups, and the roots of modernism in Chinese art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art. (Same as EALC 378.)

HA 370. American Art. 3 Credits. H
A survey of American painting, sculpture, and architecture from colonial to recent times. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 371. Modern Sculpture. 3 Credits. H
Since the 1870s, modern sculptors have dramatically transformed their medium, pioneering new forms of figuration and abstraction, investigating new materials and processes, and developing installation and site-specific art. With a focus on Europe and the U.S. through the 1980s, expanding to global trends of recent decades, this course explores how this happened, considering the work of major artists from Rodin, Matisse, Picasso, and Brancusi to Donald Judd, Eva Hesse, Anish Kapoor, Jeff Koons, and David Hammons. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in HA 571. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 372. Baroque Art in Europe. 3 Credits. H
This course surveys significant 17th-century paintings, sculpture and architecture that were produced in Italy, Spain, France and the Southern and Northern Netherlands. Artists whose works are discussed include Caravaggio, Bernini, Velazquez, Rubens, Rembrandt and Vermeer. Artistic elements of individual works, major changes in patronage, and the religious, political, economic and cultural contexts in which the art was produced are examined. Assigned readings present a range of methodological perspectives.

HA 376. Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque. 3 Credits. H
This course surveys significant 17th-century paintings, prints and drawings produced in the Northern and Southern Netherlands (modern-day Netherlands and Belgium). Artists whose works will be discussed include Peter Paul Rubens, Rembrandt van Rijn, Johannes Vermeer, and other painters of scenes of daily life, landscapes, cityscapes, portraits and still-lifes. Artistic elements of individual works and their relationship to major changes in patronage and religious, political, economic and cultural contexts will be examined. Assigned readings will present a range of methodological perspectives. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 576. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 377. African Design. 3 Credits. H/W
This course examines the conceptualization of the "decorative" arts in Africa, including textiles, metals, ceramics, wall decoration, and jewelry, and investigates the relation of this art historical category to modernism. How did such a wide range of artistic practices come to be grouped together? Are terms such as "decorative art" and "craft" still operative, and how do they reflect ideas about race and gender? How have African artists approached "traditional" design? What social factors influenced artistic processes and what is the historical symbolism of medium? To address these questions, we will consider artists' writings, art schools and apprenticeships, gender dynamics, transnational artistic exchanges, the concept of the artist-artisan, and the meaning of material and process. Our discussions will span historical and contemporary contexts, and also will examine colonial systems of classification, gender norms and laws, practices of appropriation, and tourism. Not open to students with credit in AAAS 677/Ha 677. (Same as AAAS 377.) Prerequisite: An Art History course 100 level or above, or consent of instructor.

HA 380. History of Photography. 3 Credits. H
An introduction to the history of photography. We will consider strategies used over its history to make photography an art, a witness to truth, a record of fact, a purveyor of falsehoods, a mass medium, a hawk of goods and ideologies, an agent of political change, a means of remembrance, and more. Not open to students with credit in HA 580. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 385. The Art of Buddhism. 3 Credits. H/W
A survey of Buddhist visual arts (architecture, sculpture, and painting) of India, China, Japan, and Korea. Through an examination of the history of Buddhist art interpreted from visual, historical, social, and political perspectives, the course enables students to analyze a wide range of Buddhist art forms within their regional contexts. Students will also consider how Buddhist-related material functions within museums and engage with local collections. The course is taught at the 300 and 500 levels with additional work required at the 500-level. Not open to students with credit in HA 585. (Same as EALC 385.)

HA 388. Modern and Contemporary Visual Arts of Japan. 3 Credits. H
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 588. (Same as EALC 388.)

HA 390. Special Study in African Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 391. Special Study in Asian Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 392. Special Study in Ancient Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 393. Special Study in Medieval Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 394. Special Study in Renaissance Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 395. Special Study in Baroque Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 396. Special Study in American Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in American art. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels.

HA 397. Special Study in Modern Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels.

HA 468. Art and Culture of China, Honors. 3 Credits. NW H/W
An introduction to the arts of China using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 368, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 268 or HA 368.

HA 488. Chinese Painting, Honors. 3 Credits. NW H/W
A survey of the development of painting in China, beginning with the earliest forms of figural and landscape depiction. Emphasis will be placed on the major painting traditions of the Song, Yuan, Ming, and Qing Dynasties. Prerequisite: An introductory course in art history or Eastern Civilizations and membership in the University Honors Program or consent of instructor.

HA 505. Special Study: ______. 1-6 Credits. H
This course is designed for the study of special topics in art history on a trial basis, open to both undergraduate and graduate students. Prerequisite: An introductory-level course in art history, appropriate to the specific special study topic; or consent of instructor.

HA 506. Early Medieval and Romanesque Art. 3 Credits. H
This course examines the art of Europe from the Early Christian era through the Romanesque period, up to 1200. Architecture, sculpture, manuscript illumination, metalwork and painting are explored in relation to their political, religious and social contexts. Graduate students can expect to complete additional reading and writing assignments. Prerequisite: HA 100 or HA 150, or permission of the instructor.

HA 507. Gothic Art. 3 Credits. H
This course examines the art of Europe during the Gothic period, from 1140-1500. Architecture, sculpture, manuscript illumination, metalwork, painting and furniture are explored in relation to their political, religious and social contexts. Graduate students can expect to complete additional reading and writing assignments. Prerequisite: HA 100 or HA 150, or permission of instructor.

HA 510. Medieval Manuscripts and Early Printed Books. 3 Credits. H
Students study the history of the book from 300 to 1500 A.D., concentrating on the role of visual imagery in books and the place of books in medieval and renaissance culture. In addition to discussing the relation between text and image, and studying the stylistic contexts for ancient, medieval, and Renaissance illumination and early woodcut illustration, participants in this course consider such additional topics as methods of book production, the development of cycles of illustration for religious and secular books, and the relationship between manuscripts and early printed books. Lectures and discussion are supplemented by visits to the fine collection of manuscripts, printed books, and facsimiles in the Kenneth Spencer Research Library. Prerequisite: An introductory course in Western art history at the college level, or consent of the instructor.

HA 511. From Court to City: Northern Art. 3 Credits. H
This course will examine painting, manuscripts, metalwork, tapestry, ivories, prints, and ephemeral arts such as the material culture of feasts or the entry processions of rulers into cities in order to gain insight into the place of the arts in late medieval and Renaissance culture in the fourteenth and fifteenth centuries. In addition to discussion of noble, clerical and civic patronage and of artistic style, participants in this course will consider such additional topics as artistic production and the development of art markets in cities. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor.

HA 512. Humanism and Reform: 16th Century Northern European Art. 3 Credits. H
This course explores the history of Northern European painting, manuscripts, printed books, sculpture, prints, and architecture paying particular attention to the artists and patrons that produced and consumed art, the function of artistic objects in settings ranging from church to palace, and the impact of humanism and the Reformation on the arts. Bosch, Brueghel, Cranach, Dürer, and Holbein will be considered among other artists. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor.

HA 517. Directed Readings. 1-6 Credits. U
Supervised study and research into specialized areas of art history.

HA 525. Aegean Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaeans, Minoans, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 325 or HA 325. No knowledge of Greek or Latin is required. (Same as CLSX 525.)

HA 526. Greek Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 326 or HA 326. No knowledge of Greek or Latin is required. (Same as CLSX 526.)

HA 527. Late Medieval Art in Italy. 3 Credits. H
This course examines the history of paintings, sculptures and buildings produced in Italy from c. 1250 to 1400. Important individual works, artists, and decorative complexes, such as Giotto's Scrovegni (Arena) Chapel, are analyzed in terms of their stylistic, geographical, social, historical, devotional, and literary contexts. Current theories and controversies pertinent to the history and study of 13th- and 14th-century Italian art are also addressed. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor.

HA 528. The Spatial Arts of Urban Italy. 3 Credits. H
This course examines the central role played by the arts of urbanism, architecture, and monumental sculpture in shaping the distinctive civic cultures of Italy at the threshold of the Renaissance, 1200-1550. It will pay particular attention to the republics of Florence and Venice, but also
consider papal Rome and Pienza, and a changing selection of Italy's magnificent court cities (including Milan, Padua, Parma, and Verona). Prerequisite: HA 100, HA 150, or the equivalent, and an upper-level (300-level or above) course in art history or Western European culture, or consent of instructor.

HA 529. Archaeology and Art of the Ancient Near East. 3 Credits. H

A cross-cultural survey of the material remains of the major civilizations of the ancient Near East, including Anatolia, Mesopotamia, the Levant, and Egypt from Neolithic period to the rise of the Roman empire (ca. 6000 B.C.E. - 30 B.C.E.). Includes lectures with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as CLSX 529.)

HA 533. Roccoco to Realism: Painting in Europe c. 1750-1848. 3 Credits. H

This course considers European painting c. 1750 to 1848 within the context of dramatic political and industrial revolutions. Exploring the power of the visual to engage with broader circumstances and to effect change, we will examine the ways in which shifting constructions of gender, empire, colonialism, race, slavery, and class were addressed by such artists as Watteau, David, Vigée-Lebrun, Delacroix, Géricault, Goya, Turner, Constable, Ingres, Daumier, Bonheur, and Courbet. Graduate students will complete additional assignments. (Same as WGSS 533.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 534. Impressionism and Post-Impressionism: 1848-1900. 3 Credits. H

This course considers French painting 1848 to 1900, a period marked by unprecedented technological advancements, the restructuring of Paris, and the rise of consumer culture. As large sections of the city were leveled to make way for broad boulevards, cafés, and department stores, some artists strove to represent the ever-changing spectacle of urban life; others found their inspiration away from the city. Focusing on Manet, Degas, Caillebotte, Morisot, Cassatt, Monet, Renoir, Seurat, Gauguin, Van Gogh, and Cézanne, we will explore how artists engaged with shifting constructions of modernity, gender, fashion, public and private, empire, race, class, and consumer leisure cultures. Graduate students will complete additional assignments. (Same as WGSS 534.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 535. Renaissance Architecture in Italy. 3 Credits.

This course examines the history of Italian Renaissance architecture from its origins in the 15th century to its transformation in the 16th, featuring (but not limited to) the work of three of its most celebrated exponents: Filippo Brunelleschi, Michelangelo Buonarroti, and Andrea Palladio. Students will explore how and why 15th and 16th-century architects and patrons appropriated and interpreted both ancient and medieval forms to create the architectural culture of the Renaissance. We will investigate the revival and transformation of the classical architectural language, the emerging notion of architectural authorship, the ability of architectural forms and materials to convey particular meanings to particular audiences, the deployment of architecture as an instrument of power, and the birth of architectural history and theory. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 335. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor.

HA 536. Islamic Art and Architecture in Africa. 3 Credits. H

Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade and commerce, ritual and political power, and contemporary expression. (AAAS 536.) Prerequisite: AAAS 102, AAAS 103, HA 100, or HA 150; or permission of instructor.

HA 537. Roman Archaeology and Art. 3 Credits. H/W

An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. For advanced undergraduates with backgrounds in the humanities; and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 327 or HA 327. No knowledge of Greek or Latin is required. (Same as CLSX 527.)

HA 538. Pompeii and Herculaneum. 3 Credits. H

An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HUM 538.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor.

HA 540. Special Study in Asian Art Before 1900: ____. 1-6 Credits. H

This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in Asian art history, or consent of the instructor.

HA 543. Special Study in 20th/21st-Century Art: ____. 1-6 Credits. H

This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.

HA 544. Manga: Histories and Theories. 3 Credits. H

Manga (Japanese comics) have long been an extremely popular and influential medium in Japan and internationally. Manga offer engaging narratives and visual imagery revealing central concerns not only of Japanese culture, history, society and politics, but also of the global cultural industry. The medium has been studied through various disciplinary lenses ranging from art history to visual culture and media studies, literature, sociology, and anthropology. Through the examination of several manga artists and works from the late 19th century to the present as well as reading a broad range of scholarship, this course explores the major issues addressed and theoretical approaches used in the interdisciplinary study of manga. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 344. (Same as EALC 544.) Prerequisite: A college level introduction to Asian art history or Asian studies, or consent of instructor.

HA 545. Early Chinese Art. 3 Credits. NW H
A survey of Chinese art from Neolithic times through the Han Dynasty (ca. 200 C.E.). Emphasis will be placed on recent archaeological excavations and also on the development of bronze vessels of the Shang and Zhou Dynasties. Prerequisite: A college level introduction to Asian art history, or consent of instructor.

**HA 546. Chinese Sculpture. 3 Credits. H**
A survey of Chinese sculpture from the Shang dynasty through the Song dynasty (1600 BCE-1279 CE), focused on sculptural programs in native funerary art and Buddhist temples and cave-shrines.

**HA 547. Ceramics of East Asia. 3 Credits. NW H**
This course explores the history of East Asian ceramics from the 10th to the late 20th century. Using critical approaches from art history, anthropology, sociology, literature, and materials science, students discuss the historiography and connoisseurship as well as the production, design, and consumption of ceramics such as Yaozhou celadon, Temmoku and Raku tea bowls, stamped and slip-brushed Punch'ong ware, and Ming blue-and-white porcelains. This is a hybrid course, which means that most of the material and assignments of the course are online. However, students are required to participate in 6-7 field trips, including trips to the Spencer Museum of Art, the kilns located on campus, and a demonstration of the Japanese tea ceremony. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in HA 347. Prerequisite: A college level introduction to Asian art history or Asian studies, or consent of instructor.

**HA 549. Chinese Painting. 3 Credits. H**
An introductory survey of painting in China from the 7th through the 19th centuries. Prerequisite: One course in art history, or in East Asian languages & cultures; or consent of instructor.

**HA 550. Capstone in Art History: ______. 3 Credits. H**
An advanced course dedicated to the in-depth study of special topics in art history. Students conduct research on a question within the parameters of the course topic and produce a research product that integrates knowledge from within the discipline of art history or in combination with other disciplines to generate new ideas. May be repeated for credit if content varies. Prerequisite: Junior or senior standing and twelve hours of art history, or consent of the instructor.

**HA 554. Japanese Prints. 3 Credits. NW H/W**
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Prerequisite: An introductory course in art history or consent of instructor.

**HA 561. Buddhist Art of Korea. 3 Credits. H**
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 361. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as REL 511.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

**HA 562. Ceramics of Korea. 3 Credits. H**
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 362. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor.

**HA 564. European Art, 1900-1945. 3 Credits. H**
A detailed survey of modern European art from the turn of the century through World War II. Movements to be considered may include post-impressionism, cubism, constructivism, dada, and surrealism. Graduate students may be expected to do additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

**HA 566. Art From 1945 to the 1980s: Modernism to Post-Modernism. 3 Credits. H**
An international survey of modern and post-modern art from World War II to the 1980s. Topics may include abstract expressionism, pop art, minimalism, happenings and performance art, earth works, conceptual art, feminist art, photo-realism, the craft revival, and new media. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151 or the equivalent, or consent of instructor.

**HA 567. Contemporary Art. 3 Credits. H**
This course surveys the dynamic developments in art practice worldwide since the 1980s, highlighting innovations in painting, photography, sculpture, installation, performance, video, and digital art. The course explores contemporary artists' engagement with such themes as the body, identity, politics, spirituality, ecology, technology, time, and globalization. Artists to be considered may include Cindy Sherman, Jeff Koons, Damien Hirst, Kara Walker, Takashi Murakami, Yinka Shonibare, and Ai Weiwei. Graduate students will complete additional assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

**HA 569. Modern and Contemporary African Art. 3 Credits. H**
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. Not open to students with credit in AAAS 353/HA 353. (Same as AAAS 569.) Prerequisite: Junior/Senior standing and at least one course at the 100-level or above in AAAS or HA.

**HA 570. American Art. 3 Credits. H**
A survey of American painting, sculpture, and architecture from colonial to recent times. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

**HA 571. Modern Sculpture. 3 Credits. H**
Since the 1870s, modern sculptors have dramatically transformed their medium, pioneering new forms of figuration and abstraction, investigating new materials and processes, and developing installation and site-specific art. With a focus on Europe and the U.S. through the 1980s, expanding to global trends of recent decades, this course examines how this happened, considering the work of major artists from Rodin, Matisse, Picasso, and Brancusi to Donald Judd, Eva Hesse, Anish Kapoor, Jeff Koons, and David Hammons. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in HA 371. Intended for graduate students. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.
HA 576. Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque. 3 Credits. H
This course surveys significant 17th-century paintings, prints and drawings produced in the Northern and Southern Netherlands (modern-day Netherlands and Belgium). Artists whose works will be discussed include Peter Paul Rubens, Rembrandt van Rijn, Johannes Vermeer, and other painters of scenes of daily life, landscapes, cityscapes, portraits and still-lifes. Artistic elements of individual works and their relationship to major changes in patronage and religious, political, economic and cultural contexts will be examined. Assigned readings will present a range of methodological perspectives. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 376. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 580. History of Photography. 3 Credits. H
An introduction to the history of photography. We will consider strategies used over its history to make photography an art, a witness to truth, a record of fact, a purveyor of falsehoods, a mass medium, a hawkers of goods and ideologies, an agent of political change, a means of remembrance, and more. Intended for graduate students. Not open to students with credit in HA 380. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 582. American Art 1860-1900: Gilded Age. 3 Credits.
A survey of major artists and movements in painting, sculpture, and allied arts in the later 19th century. Consideration will be given to developments in landscape painting and images of the American West, the impact of impressionism and other European movements, and the decorative programs of the Gilded Age. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 583. American Art 1900-1945: Rise of Modernism. 3 Credits. H
A survey of major artists and movements in painting, sculpture, and allied arts, from the early urban realists to the emergent avant-garde at mid century. Consideration will be given to the cosmopolitan tendencies of the 1910s and the 1920s, to nationalist impulses of the 1930s, and the assimilation of European modernism. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 585. The Art of Buddhism. 3 Credits. NW H/W
A survey of Buddhist visual arts (architecture, sculpture, and painting) of India, China, Japan, and Korea. Through an examination of the history of Buddhist art interpreted from visual, historical, social, and political perspectives, the course enables students to analyze a wide range of Buddhist art forms within their regional contexts. Students will also consider how Buddhist-related material functions within museums and engage with local collections. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 385. Prerequisite: Consent of instructor.

HA 586. Japanese Painting. 3 Credits. NW H/W
A survey covering the development of Japanese painting from the Kofun period to the early twentieth century. Topics include Buddhist and other religious paintings, narrative handscrolls, ink painting, decorative screens, ukiyo-e, and Western-style paintings of the Meiji and Taisho periods. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: An introductory course in Asian art or consent of instructor.

HA 587. Japanese Sculpture. 3 Credits. NW H
A survey of Japanese sculpture from the Kofun period (300-700 C.E.) to the present day. Emphasis is placed on works of Buddhist sculpture from the 7th through the 13th centuries. Prerequisite: An introductory course in Asian art history or consent of instructor.

HA 588. Modern and Contemporary Visual Arts of Japan. 3 Credits. H
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 388/EALC 388. Prerequisite: An introductory course in art history or consent of instructor.

HA 590. Special Study in African Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history or African Studies, or consent of the instructor.

HA 591. Special Study in Asian Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history or Asian Studies, or consent of the instructor.

HA 592. Special Study in Ancient Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in Art History or Classics, or consent of the instructor.

HA 593. Special Study in Medieval Art: _____ 1-6 Credits. H
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.

HA 594. Special Study in Renaissance Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.

HA 595. Special Study in Baroque Art: _____ 1-6 Credits. H
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.

HA 597. Special Study in Modern Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.
HA 677. African Design. 3 Credits. NW H/W
This course examines the conceptualization of the "decorative" arts in Africa, including textiles, metals, ceramics, wall decoration, and jewelry, and investigates the relation of this art historical category to modernism. How did such a wide range of artistic practices come to be grouped together? Are terms such as "decorative art" and "craft" still operative, and how do they reflect ideas about race and gender? How have African artists approached "traditional" design? What social factors influenced artistic processes and what is the historical symbolism of medium? To address these questions, we will consider artists' writings, art schools and apprenticeships, gender dynamics, transnational artistic exchanges, the concept of the artist-artisan, and the meaning of material and process. Our discussions will span historical and contemporary contexts, and also will examine colonial systems of classification, gender norms and laws, practices of appropriation, and tourism. Not open to students with credit in AAAS 377/H&W 377. (Same as AAAS 677.) Prerequisite: An Art History course 100 level or above, or consent of instructor.

HA 698. Honors Essay in Art History. 3 Credits. H
Required for departmental honors. A course of directed research and the preparation of a paper on an art history topic, supervised by a professor. Prerequisite: A grade-point average of 3.5 in art history and 3.25 in all courses, and consent of a major advisor and supervising professor.

HA 706. Seminar: _____ 3 Credits.
A concentrated study of a specific topic in art history. May be repeated for credit if content varies. Prerequisite: Consent of instructor.

HA 707. Directed Readings. 1-6 Credits.
Supervised study and research into specialized areas of art history.

HA 719. Art Histories: Theory and Methodology. 3 Credits.
This course examines the major methodologies and theories that have shaped and continue to shape the field of art history. Through critical reading of primary, secondary, and interpretive texts, the course will analyze closely the history and current state of the discipline. Prerequisite: Nine hours of History of Art or consent of instructor.

HA 720. Asian Art: Theory and Method. 3 Credits.
This course examines important methodologies and theories of the past and present employed in the field of Asian art history. Through critical reading of primary documents and secondary scholarship, students will gain historical perspective on and practical tools for research in the history of Asian art and visual culture. Prerequisite: Nine hours of History of Art or consent of instructor.

HA 760. Proseminar in Korean Art. 3 Credits.
Intensive study of a selected topic in the visual arts of Korea; topics may focus on a particular genre, theme, historical period or group of artists, for example Buddhist painting and sculpture, Choson period landscape and genre painting, ceramics and lacquerware or modern and contemporary art in North and South Korea. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor.

HA 788. Proseminar in Japanese Art. 3 Credits.
Critical analysis of readings on selected topics in Japanese art. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor.

HA 789. Proseminar in Chinese Art. 3 Credits.
Critical analysis of readings on selected topics in Chinese art. May be repeated for credit up to a maximum of 12 credit hours. Prerequisite: Consent of instructor.

HA 898. Franklin Murphy Seminar in Art History: _____ 3 Credits.

This seminar is given each spring by the Murphy Lecturer of the year and includes two weeks of intensive study with a nationally known expert in a special field of art history. The other weeks of seminar meetings for the semester are conducted by the faculty member most closely specialized in this field. Prerequisite: Consent of supervising faculty member.

HA 899. Thesis. 1-6 Credits.
Thesis Hours. Graded on a satisfactory progress/limited progress/no progress basis.

HA 906. Seminar: _____ 3 Credits.
A concentrated study of a specific topic in art history. May be repeated for credit if content varies. Prerequisite: Consent of instructor.

HA 907. Directed Readings. 1-6 Credits.
Supervised study and research into specialized areas of art history. Prerequisite: Nine hours of art history and a reading knowledge of a pertinent foreign language.

HA 925. Seminar in Late Medieval Art: _____ 3 Credits.
A study of selected problems dealing with the art of the later Middle Ages. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 935. Seminar in Northern Renaissance Art: _____ 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 940. Seminar in 17th Century Art: _____ 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 955. Seminar in 19th Century Art: _____ 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 980. Seminar in Chinese Art: _____ 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 990. Seminar in Japanese Art: _____ 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 995. Seminar in Korean Art: _____ 3 Credits.
Concentrated study of one particular genre, theme, historical period or group of artists. Readings will include primary and secondary language material in Korean, Japanese and/or Chinese including texts in classical forms of these languages. May be repeated for credit up to a maximum of twelve hours. Prerequisite: Reading knowledge of Korean, Japanese or Chinese and consent of instructor.

HA 999. Doctoral Dissertation. 1-12 Credits.
This course may be taken more than once, but not for more than twelve hours of credit in any one semester. Graded on a satisfactory progress/limited progress/no progress basis.

History Courses

HIST 101. Introduction to Western History: _____ 3 Credits. HT H
An introduction to the study of history focusing on a topic in Western History. The course will expose the student to the major issues and methods of historical study through the study of a specific historical
period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. This course grants HIST Category I credit.

HIST 102. Introduction to History, Honors: _____ 3 Credits. HT H
An introduction to the study of history. The course will expose the student to the major issues and methods of historical study. This will be done through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. Prerequisite: Membership in the College Honors Program or consent of department.

HIST 103. Environment and History. 3 Credits. H
Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as EVRN 103.)

HIST 104. Introduction to African History. 3 Credits. NW H/W
An introduction to important historical developments in Africa. Topics include empires, kingdoms, the slave trade, European colonialism, liberation movements, national identities, and a return to independence. (Same as AAAS 105.)

HIST 105. Introduction to Ancient Near Eastern and Greek History. 3 Credits. NW H/W
A general survey of the political, social, and economic developments of Mesopotamia, Egypt, Asia Minor, and Greece from Paleolithic times to 323 B.C. (Same as CLSX 105.)

HIST 106. Introduction to Roman History. 3 Credits. H/W
A general survey of the political, social, and economic developments of ancient Rome from 753 B.C. to 475 A.D. (Same as CLSX 106.)

HIST 107. Introduction to the Ancient World. 3 Credits. H
This course covers the history of the ancient Near East, Greece and Rome with emphasis on the origins of agriculture, writing, cities, empires, and democracy. Students will be introduced to schemes of interpretation, critical readings, and analysis, primary sources, and evaluation of evidence.

HIST 108. Medieval History. 3 Credits. HT H/W
The history of Europe from the Barbarian Invasions to the beginning of the 16th century.

HIST 109. The Black Experience in the Americas. 3 Credits. HT H/W
An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as AAAS 106.)

HIST 110. Introduction to Non-Western History: _____ 1-3 Credits. H
An introduction to the study of history focusing on a topic in non-Western History. The course will expose the student to the major issues and methods of historical study through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. This course grants HIST Category II credit.

HIST 111. Introduction to African History, Honors. 3 Credits. NW H/W
An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as AAAS 115.)

HIST 112. Introduction to British History. 3 Credits. H
This course will introduce students to the concepts, issues, and methods of historical study, at the same time as it explores the main processes and events which shaped the history of Britain and its imperial dependencies. Students will be introduced to the nature and validity of different historical interpretations, and to the purpose and merit of historical writings.

HIST 114. Renaissance to Revolution: Europe 1500-1789. 3 Credits. HT H/W
An introduction to early modern European history, with emphasis on the cultural, political, economic, and cultural forces which have helped to shape the modern world. The renaissance, the rise of nation states, the Reformation, absolutism and constitutionalism, the Enlightenment, and the coming of the French Revolution.

HIST 115. French Revolution to the Present: Europe 1789-Present. 3 Credits. HT H/W
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: the French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war, and its aftermath.

HIST 116. French Revolution to the Present: Europe 1789 to Present. 3 Credits. NT H/W
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: the French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war, and its aftermath. Not open to students who have taken HIST 115. This Honors course is a Humanities Historical Studies Principal Course. Prerequisite: Membership in the College Honors Program or consent of department.

HIST 117. Russia, An Introduction. 3 Credits. HT H/W
This course introduces students to the history of Russia from its beginnings to the present. It explores Russia's ethnic and religious diversity, the relationship between the state and its peoples, the geopolitics of its place between Europe and Asia, and the revolutionary movements that shook Russia and shaped the world around it.

HIST 118. Premodern East Asia. 3 Credits. NW H/W
A survey of the premodern history of China, Japan, Korea, and other cultures in East Asia. Students are introduced to the major currents of East Asian history and historical methods used to study them. Not open to students with credit in upper division East Asian history.

HIST 119. Modern East Asia. 3 Credits. NW H/W
A survey of the modern history of China, Japan, Korea, and other cultures in East Asia. Students are introduced to the major currents of East Asian history and historical methods used to study them. Not open to students with credit in upper division East Asian history.
HIST 120. Colonial Latin America. 3 Credits. NW H/W
The principal focus is on the evolution and analysis of societies, economies, and religions of native American peoples, the impact of Spanish and Portuguese conquests and settlement, government, trade and culture upon native civilizations, the influence of African population and culture, and the creole nature of the resulting society in the colonial period. Changes in the society and economy which presaged the movements for independence are also discussed.

HIST 121. Modern Latin America. 3 Credits. HT W
A survey of Latin America since the 1800s. Students will examine the emergence of national identities and the processes of modernization and globalization in the region. The course also examines how race, social structures, and politics evolved after independence in the region, giving particular attention to the legacies of colonialism. Course readings and lectures highlight unique national experiences and continuities across the region. This course is offered at the 100 and 300 level with additional assignments at the 300 level. Not open to students who have taken HIST 315.

HIST 122. Colonial Latin America, Honors. 3 Credits. NW H/W
The principal focus is on the evolution and analysis of societies, economies, and religions of native American peoples, the impact of Spanish and Portuguese conquests and settlement, government, trade and culture upon native civilizations, the influence of African population and culture, and the creole nature of the resulting society in the colonial period. Changes in the society and economy which presaged the movements for independence are also discussed. Prerequisite: Membership in the College Honors Program or permission of instructor.

HIST 123. Modern Latin America, Honors. 3 Credits. HT W
Similar in content to HIST 121. Students are introduced to historical analysis within the context of the emergence of national identities and the process of modernization in the region. The course compares social, cultural, economic, and political changes across a variety of countries since 1810, giving particular attention to the legacies of colonialism. It also discusses key processes such as urbanization and industrialization and examines social movements for reform and revolution in the 20th century. In this way the course deals with interpretations of these processes and movements and major issues of Latin American historiography. Prerequisite: Membership in the University Honors Program or permission of instructor.

HIST 124. Latin American Culture and Society. 3 Credits. SC S
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives made possible by interdisciplinary collaboration and provides students with a basic knowledge base for understanding Latin America today. (Same as LAC 100.)

HIST 128. History of the United States Through the Civil War. 3 Credits. HT H
A historical survey of the United States from the peopling of the continent through the Civil War. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events that shaped American history.

HIST 129. History of the United States After the Civil War. 3 Credits. HT H
A historical survey of the American people from Reconstruction to the present. This survey is designed to reflect the diversity of the American experience, to offer the student a chronological perspective on the history of the United States, and to explore the main themes, issues, ideas, and events that shaped American history.

HIST 139. The Global Cold War. 3 Credits. H
This course provides an immersive introduction to the global Cold War and its legacies. It explores how the contest between capitalism and communism unfolded not only in the United States and the Soviet Union, but also in Asia, Africa, Europe, Latin America, and the Middle East. Through interactive lectures, discussions, and role-playing games, students will learn to “think globally,” gain an understanding of imperialism, nationalism, and decolonization, and discover how the Cold War shaped culture, economics, politics, the environment, and the international system in ways that remain relevant today. (Same as GIST 139.)

HIST 140. Global Environment I: The Discovery of Environmental Change. 5 Credits. U LFE
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and GEOG 140.)

HIST 142. Global Environment II: The Ecology of Human Civilization. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity’s engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and GEOG 142)

HIST 144. Global Environment I: The Discovery of Environmental Change, Honors. 5 Credits. U LFE
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 144 and EVRN 144.) Open only to students admitted to the University Honors Program or by permission of instructor.

HIST 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics will include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the
ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity’s engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and GEOG 145.) Open only to students in the University Honors Program or by permission of instructor.

**HIST 150. Introduction to Food History: Around the World in Eight Dishes. 3 Credits. H**

Foods and drinks such as chocolate, coffee, curry, and olive oil have changed the world in ways that transcend national boundaries; this course follows their stories tracing routes of imperialism and globalization while attentive to the impact of these foods on indigenous peoples. Each week offers new foods and new discoveries drawing from cases globally to ask why people choose certain foods, what that says about their culture, and how foods and drinks have changed historically. Besides learning how food can be a window to history and gaining an introduction to the interdisciplinary methodology of food studies, this course will help you understand the consequences of what you eat in terms of your own body, the environment, and communities a world away.

**HIST 160. Introduction to West African History. 3 Credits. W**

This course treats West African history through the first part of the twentieth century. The student is provided with a perspective on the major historical patterns that gave rise to West Africa’s development as an integral part of world history. Special attention is paid to anthropological, geographical, and technological developments that influenced West African political and socioeconomic changes. (Same as AAAS 160.)

**HIST 177. First Year Seminar: _____. 3 Credits. HT**

A limited-enrollment, seminar course for first-time freshmen, organized around current issues in history. May not contribute to major requirements in history. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**HIST 190. Warlords and Rebels in Asia. 3 Credits. NW H**

Warlords tear apart society and try to rebuild it according to their own terms. Rebels challenge the status quo. This course provides an introduction to East Asian political, social, and cultural history through a thematic lens. The class offers students a diverse variety of perspectives on social and political change in East Asia and encourages them to reflect on such themes in Western contexts as well.

**HIST 201. Writing the Past-Category I/Western Topics: _____. 3 Credits. H**

Many of the words that human beings have written down in one form or another have been stories of events, people, and places from the past. History is a story of countless people-some famous, many anonymous-who have made up the human past. This course will introduce students to the basic skills of analytical, descriptive, and narrative writing and reading through the lens of history. Students will learn how to develop a voice of their own as writers and build a toolkit of skills that will help them effectively communicate in writing, in their course work and careers. This course will cover topics that will fulfill the Category II/Non-Western requirement of the History major.

**HIST 203. Speaking the Past-Category I/Western Topics: _____. 3 Credits. H**

This seminar offers students the opportunity to learn about a specific theme or topic in history through the development of their verbal communication skills. A variety of scaffolded assignments will introduce students to the essential elements of interpersonal and public speaking, provide opportunities to practice their performances and receive constructive feedback, and hone their organizational and critical-thinking skills. In doing so, they will achieve a deeper understanding of an important aspect of the past. Specific historical topics will be determined by individual instructors. This course will cover topics that will fulfill the Category I/Western requirement of the History major.

**HIST 204. Speaking the Past-Category II/Non-Western Topics: _____. 3 Credits. H**

This seminar offers students the opportunity to learn about a specific theme or topic in history through the development of their verbal communication skills. A variety of scaffolded assignments will introduce students to the essential elements of interpersonal and public speaking, provide opportunities to practice their performances and receive constructive feedback, and hone their organizational and critical-thinking skills. In doing so, they will achieve a deeper understanding of an important aspect of the past. Specific historical topics will be determined by individual instructors. This course will cover topics that will fulfill the Category II/Non-Western requirement of the History major.

**HIST 220. A Global History of Human Health. 3 Credits. H**

This course surveys how human populations have experienced diseases including those induced by infectious microbes, environmental agents, and dietary causes from prehistoric hunter-gatherer societies to today’s global population. Particular emphasis is on major transitions and historical events that have led to major epidemics. These transitions and events include but are not limited to the transition to agriculture, urbanization, imperial expansion, colonialism, industrialization, world wars, factory farming, and the transportation revolution. The development of medicine, public policies, and global health organizations is a central theme as is the development of global health disparities. Students are challenged to think historically and apply a long-term perspective to understand today’s global health problems.

**HIST 229. United States in the 1960s. 3 Credits. H**

In the Sixties, millions of Americans rejected socially-sanctioned established wisdom, long-standing cultural precepts and conventional political policies and practices. In this gateway course we will examine how and why they did so, why so many other Americans rejected their challenges to the status quo, and what difference these rebellions made in Americans’ lives. By placing their struggles in historical context, we will think about how and why people make and resist social change and how historical circumstances restrain and enable people’s individual and collective ability to act and to make their own futures. Through readings, lectures, discussion, and various assignments students will have opportunities to debate the great questions of that era and ponder the relevance of historical events and understandings to their own lives and to the life of the nation, as they sharpen their analytic abilities and their capacity to communicate those analyses effectively.

**HIST 230. Sex, Gender, Film, and History. 3 Credits. H**

In the second half of the 20th century, Americans struggled over sex and gender-and both their behaviors and beliefs changed dramatically, though not without controversy. In this class, we use mainstream, popular
American films produced during this volatile era to analyze historical
understandings of gender identity and appropriate sexual behaviors in
post-WWII American society. This course is also an introduction to the
study of history: students will work extensively with film and other primary
documents, and will analyze different scholarly interpretations of the same
set of events.

HIST 231. War and 20th Century U.S. Culture. 3 Credits. H
This course analyzes the "cultural construction" of war in 20th century
America by focusing primarily on World War II and the Vietnam War. How
have Americans attempted to come to terms with the wars they have
fought? How have Americans' cultural understandings shaped the wars
they have waged? How have Americans used various cultural forms (film,
music, photography, etc.) to support a war effort or to protest against it?
We pay special attention to the place of the military in American society,
to notions of patriotism and citizenship, to constructions of gender, race,
and sexuality, and to the roles of government, media, technology, and
public opinion.

HIST 250. Study Abroad Topics in: _____. 1-5 Credits. H
This course is designed for the study of special topics in History at the
freshman/sophomore level. Coursework must be arranged through the
Office of KU Study Abroad. May be repeated for credit if content varies.

the Age of Exploration. 3 Credits. HL H
In fourteen hundred and ninety-two, Columbus sailed the ocean blue.
But what happened before Columbus' great journey? And, more to the
point, why did he and his contemporaries feel entitled to simply claim
whatever land they found? This course proposes to explore the medieval
experiences of cultural and racial Otherness in order to better understand
the roots of some of the assumptions about difference (interpersonal,
intercultural, and international) that continue to play out in American
society today. Taught in English. (Same as FREN 285.)

HIST 300. Modern Africa. 3 Credits. NW H/W
A survey of social, political, and economic developments during the
colonial era and independence struggles. Themes may include resistance,
liberation, nationalism, gender issues, agriculture, genocide, and human
rights. (Same as AAAS 305.)

HIST 301. The Historian's Craft. 3 Credits. H
This course introduces students to the practice and methods of the
study of history and serves as the gateway to the major. HIST 301 trains
students to think like historians, equipping them with skills in research,
critical analysis, and oral and written presentation useful to any career
but especially integral to careers in archival work, museum work, law, and
research. Students learn (1) to think historically; (2) to understand how
historians construct and write about the past through narratives, theory
and analytical discussion; (3) to critically evaluate historical arguments
and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course, or HIST 301 - its non-honors equivalent, is required of all history majors and is a prerequisite for HIST 696 Seminar in: _______. Prerequisite: Open only to students admitted to the University Honors Program who are declared History majors, or by consent of instructor.

HIST 303. Sin Cities. 3 Credits. H
This course offers a comparative global introduction to the history of the
modern city by looking at the ways in which certain metropolises developed
an attractive underbelly of decadence at the same time as they sought to
be centers of refined and orderly cosmopolitan life. The course examines
topics such as popular culture, gambling, prostitution, crime, violence,
nightlife, tourism, and corruption in the context of the increased social
mobility that characterized the beginning of the industrial age and that has
extended into the 21st century. Students investigate the changing relation
between work and leisure, spectacle and consumerism, and urban space
and the struggle for order.

HIST 304. 1642, 1688, 1776: Three British Revolutions. 3 Credits. H
Explains and analyzes the three revolutions in the English-speaking world
which, more than any others, are held to have laid the foundations of
modernity. Themes discussed include social, intellectual, and political
developments, structures, and conflicts. 1642 and 1688 are treated in
the setting of England's relations with Scotland and Ireland, and against
the background of European wars of religion. 1776 is analyzed in a
transatlantic context as a civil war within the wider British polity.

HIST 305. The Scientific Revolution. 3 Credits. H
Describes and analyzes the factors producing a Scientific Revolution in
early-modern Europe. Focuses on fundamental changes in astronomy-
cosmology, physics, and biology from Copernicus to Newton. Examines
the emergence of experimental method as an essential part of Western
science. Portrays the development of new forms of scientific organization
and the cultural frameworks that bore and shaped them. Surveys the
various interpretations of this period expressed by current historians of
science.

HIST 307. Modern Africa, Honors. 3 Credits. NW H
An intensive version of HIST 300. A survey of social, political, and
economic developments during the colonial era and independence struggles.
Themes may include resistance, liberation, nationalism, gender issues, agriculture, genocide, and human
rights. (Same as AAAS 307.) Prerequisite: Open only to students admitted to the University Honors Program, or by consent of the instructor.

HIST 308. Key Themes in Modern Global History. 3 Credits. H
A comparative historical analysis of major global developments from
the late 15th century to the present. Some of the themes likely to be
explored are empire-building, contact between cultures and colonial social
relations; the attraction of cities, their role in a global economy and the
shift to an urban world; and the impact of capitalism and industrialization
on social organization including conflict between classes and changes in
the nature of work. Students learn ways of interpreting primary historical
documents and comparing historical investigations across time and
space. (Same as GIST 308.)

HIST 312. American Culture, 1877 to the Present. 3 Credits. H
An examination of the major historical shifts, trends, and conflicts that
have shaped the multicultural nature of life in the United States from
1877 to the present. In addition to tracing developments in literature,
architecture, drama, music and the visual arts, this course investigates
patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as AMS 312.)

HIST 314.  Globalization: History and Theory.  3 Credits.  H
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 315. (Same as GIST 314.)

HIST 315.  Modern Latin America.  3 Credits.  H
A survey of Latin America since the 1800s. Students will examine the emergence of national identities and the processes of modernization and globalization in the region. The course also examines how race, social structures, and politics evolved after independence in the region, giving particular attention to the legacies of colonialism. Course readings and lectures highlighting unique national experiences and continuities across the region. This course is offered at the 100 and 300 level with additional assignments at the 300 level. Not open to students who have taken HIST 121. (Same as LAC 320.)

HIST 316.  Ministers and Magicians: Black Religions from Slavery to the Present.  3 Credits.  H
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths both inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and AMS 316.)

HIST 317.  African American Women: Colonial Era to the Present.  3 Credits.  H
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches.

HIST 318.  Indian Territory.  3 Credits.  H
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HUM 345 and ISP 345.)

HIST 319.  History, Women, and Diversity in the U.S..  3 Credits.  H
This survey course explores the history of being female in America through a focus on the ways differences in race, sexuality, ethnicity, class, and life cycle have shaped various aspects of women's lives. Themes to be explored could include, but are not limited to: social and political activism; intellectual developments; family; women's communities; work; sexuality; and culture. (Same as WGSS 319.)

HIST 320.  From Goddesses to Witches: Women in Premodern Europe.  3 Credits.  HT H
This course examines the social, cultural, and political contexts of women's spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshipping cultures, women's roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as WGSS 320.)

HIST 321.  From Mystics to Feminists: Women's History in Europe 1600 to the Present.  3 Credits.  HT H
This course surveys women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as WGSS 321.)

HIST 322.  LGBTQ U.S. History, 1600-1900.  3 Credits.  H
This course will take students on the first part of an exciting journey through an alternative version of U.S. history, exploring the experiences and treatment of men who love men, women who love women, and people with unconventional sexual and gender identities, telling this story as it unfolded in the British colonies established in North America, through the revolutionary period, and in the United States over the course of the nineteenth and twentieth centuries, and into the early twenty-first century. The first part of this two course sequence begins in the colonial period and ends around 1900 as modern categories of sexuality and sexual orientation came into existence. We will examine the ways in which individuals who craved intimacy with members of the same sex understood and negotiated their desires in an often hostile world. And we will consider how Early America's remarkable diversity shaped this history of same-sex love and desire. (Same as WGSS 322.)

HIST 323.  LGBTQ U.S. History, 1900-Present.  3 Credits.  H
This course will take students on the second part of an exciting journey through an alternative version of U.S. history, exploring the experiences and treatment of men who love men, women who love women, and people with unconventional sexual and gender identities, telling this story as it unfolded in the British colonies established in North America, through the revolutionary period, and in the United States over the course of the nineteenth and twentieth centuries, and into the early twenty-first century. The second part of this two course sequence focuses on the twentieth and twenty-first centuries. We will examine the changing understanding of non-normative sex, love, and desire; the political tactics, framings, and fights around sexual identities and rights; and the intersection of structural inequalities including, but not limited to, race, class, ability, and gender with LGBTQ histories. Please note that WGSS 322 or HIST 322 is not a prerequisite for WGSS 323 or HIST 323, though students interested in LGBTQ history should consider taking both. (Same as WGSS 323.)

HIST 324.  History of Women and the Body.  3 Credits.  H
This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women's lives in relation to their bodies, and women's responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as WGSS 324.)

HIST 325.  The Spanish Inquisition.  3 Credits.  H
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its
depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as JWSH 315 and SPAN 302.)

HIST 326. Native Americans Confront European Empires. 3 Credits. NW H/W
Since 1492, Native American societies have struggled against European conquest and colonization. This course examines the history of Native American encounters with Europeans and their empires from 1492 through 1800 in North and South America. Native American cultures varied widely as did their interactions with Europeans of diverse nations. Using a comparative framework this course will examine the continuities and differences in indigenous reactions to European imperialism in the Americas. Themes of the course include: conquest, colonialism, religion, and resistance and accommodation.

HIST 327. The Premodern Middle East. 3 Credits. NW H
A survey of the history of the Middle East from the origins of Islam in the seventh century to the rise and consolidation of the Ottoman Empire in the eighteenth century. Lectures and discussions focus on diversity within the Middle East at the height of the Islamic empires. Topics include the life of Muhammad and early Islamic communities, expansion of Islam into Asia, Africa and Europe, intellectual strength in the medieval period, and the everyday lives of women, Christians, Jews and other minority groups.

HIST 328. The Modern Middle East. 3 Credits. W
A survey of the history of the Middle East from 1800 to the present. Lectures and discussions focus on diversity within the Middle East over two centuries of major political and cultural change. Topics include causes for the decline of the Ottoman Empire, debates over modernization, European imperialism and the formation of nation-states, twentieth century cultural revolutions and women's activism, the Arab-Israeli conflict, and the revival of Islamic social movements.

HIST 331. Age of Empires-The Atlantic 1400-1800. 3 Credits. H
This course examines the history of empires in the Atlantic World. During this period African, European and Native American empires encountered each other vying for people and territory. These encounters vastly transformed the people and societies of this broad geographic region. Not only did these empires challenge each other, anti-imperial groups including pirates and African maroons actively undermined imperial systems. This course will examine themes of empire in the Atlantic including conquest, enslavement and slave trades, indigenous and African resistance, and independence.

HIST 332. Sex in History. 3 Credits. HT H
This course offers a survey of the history of human sexuality in the Western world; the second half of the semester emphasizes the American experience. Topics for consideration may include: masturbation, pornography, sex work, homosexuality, bisexuality, "perversions" (paraphilias), sex and marriage, racialized sexualities, sexual violence, trans* identities and experiences, sexuality and national identities, and colonialized sexualities. The course demonstrates the various ways in which sex, specifically the social and political meanings attributed to physical acts, changes over time and shapes human experiences and interactions far beyond the bedroom. (Same as AMS 323, HUM 332 and WGSS 311.)

HIST 333. Eurometro: Visions of the European Metropolis, 1849-1939. 3 Credits. H
This course investigates the interrelated symbols of the European metropolis during the "Age of Great Cities", from the filth of the sewers to the "filthiness" of prostitution. Students investigate gender and class in the metropolis by exploring a few stereotypes: the juvenile delinquent, the woman on the street, and the flaneur. The course format stresses discussion of common texts, including short readings of literature from the period and historical scholarship. Students also analyze contemporary photographs, art, architecture, and advertising.

HIST 334. The Great War: The History of World War I. 3 Credits. H
A historical survey of the causes, course, and consequences of the conflict, 1878-1919, stressing its socio-economic dimensions as well as its political ramifications and military aspects. Considerable use will be made of visual aids. No prerequisites.

HIST 335. History of Jewish Women. 3 Credits. H
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as JWSH 335, WGSS 335.)

HIST 336. Ethics, Ideas, and Nature. 3 Credits. H
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state of managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and right ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as EVRN 336.)

HIST 337. History, Ethics, Modernity. 3 Credits. H
This course will examine the question "How has human dignity been preserved or violated in the modern age?" Cast in a global framework, some of the probable themes are the history of human rights; the moral universe of genocide; the (in)dignity of industrial work; the shifting status of the poor and the colonized and their treatment by the state and society; the impact of changing technology on ethics in war, peace and the environment; and the violation of dignity as a factor in collective resistance.

HIST 338. African American Urban Community and Class in the Midwest. 3 Credits. H
This course provides historical perspective on African Americans and the politics of economic class within black urban spaces from the end of Reconstruction to the post-World War II era. It focuses on the development of an upwardly mobile urban black middle class, and impoverished black urban "underclass," since the 1960s. Students are encouraged to have taken one of three courses: AAAS 104, AAAS 106, or AAAS 306.

HIST 340. The History of the Second World War. 3 Credits. H
A survey of the origins, course, and consequences of the war, 1930-1945. Political, economic, military, and social aspects will be dealt with in the context of their global effects. Extensive use will be made of motion pictures and other media.

HIST 341. Hitler and Nazi Germany. 3 Credits. H/W
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as JWSH 341.)
HIST 343. The Holocaust in History. 3 Credits. H
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as JWSH 349.)

HIST 344. Modern Jewish History. 3 Credits. H
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as JWSH 344.)

HIST 345. Hard Times: The Depression Years in America, 1929-1941. 3 Credits. H
An analysis of the experiences of the American people during the Great Depression. Attention will also be given to the global dimensions of the crisis, socioeconomic dislocation, cultural and institutional change, and the impact of the Asian and European wars.

HIST 346. Law and Society in America. 3 Credits. H
Law and lawyers have powerfully shaped American values and institutions. This course explores law’s impact on American society from the age of European colonization through present. Topics include liberty, public order, race and ethnicity, the family, property, speech, environment, and self-government. The course also examines the changing images of lawyers and the law over time. Course materials include not just statutes and court decisions, but literature, imagery, and popular culture materials.

HIST 347. Environmental History of North America. 3 Credits. H
A survey of changes in the landscape and in people’s perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile, and the origins of conservation. (Same as EVRN 347.)

HIST 348. History of the Peoples of Kansas. 3 Credits. H
A survey of culture and society in Kansas from prehistory to the present. Topics include Native American life, Euro-American resettlement, Bleeding Kansas and the Civil War, agricultural settlement, urbanization and industrialization, depression and recovery, and modern Kansas in transition. Emphasis in the course will be on social and economic conditions, the experience of ethnic and racial groups, inter-racial relations, and the role of women.

HIST 349. Antisemitism: A Long History. 3 Credits. H/W
This course surveys the genesis, evolution and persistence of antipathy towards Jews and Judaism from late antiquity through the twentieth century, exploring its connections to religious and secular ideologies and its changing nature over time, place, and culture. Using primary source documents, religious and secular art and literature, the mass media and popular expression, the course examines how antisemitism was articulated and implemented, how Jews and Judaism were perceived and represented, and how Jews and Judaism responded to antisemitism. (Same as JWSH 349.)

HIST 350. The Korean War, 1950-1953. 3 Credits. H
An examination of the origins, pattern of development, and legacy of this still unsettled conflict, which in many ways set the tone for the entire post-1945 era of the Cold War. Points of emphasis will include the motives and policies of the major participants (Koreans, Americans, Chinese, and Soviets), as well as the effects of the war on their domestic politics and foreign policy positions.

HIST 351. American Indian and White Relations to 1865. 3 Credits. H
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HUM 348, ISP 348.)

HIST 352. American Indians Since 1865. 3 Credits. H
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will gain multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HUM 350 and ISP 350.)

HIST 353. Indigenous Peoples of North America. 3 Credits. NW H/W
This course surveys the history of the first peoples to inhabit North America from prehistory to present. Commonly and collectively referred to as American Indians, indigenous peoples include a diverse array of nations, chiefdoms, confederacies, tribes, and bands, each of which has its own unique cultures, economies, and experiences in dealing with colonial and neocolonial powers. This class seeks to demonstrate this diversity while at the same time providing an understanding of the common struggle for political and cultural sovereignty that all indigenous nations face. Indigenous nations that have developed a relationship with the United States will receive primary focus, but comparative reference will be made to First Nations of Canada.

HIST 356. At the Movies: U.S. History on the Silver Screen. 3 Credits. H
The motion picture was invented right here in the United States more than a century ago, and Americans have been going to the movies ever since. Movies have expressed their dreams and nightmares, aspirations and fears, hopes and dreads. Through a wide-ranging study of Hollywood films from the 1920s to the present, including the industry that created them and the people who watched them, this course explores what Americans have seen and felt at the movies.

HIST 357. History of the American West. 3 Credits. H
This course examines major themes in the history of the American West from Columbus to the present. The course includes topics familiar to the American West such as the California Gold Rush and the Battle of Little Bighorn. More importantly, it also offers a way of understanding North American history that is different from that of most U.S. history courses: through the lens of imperial settlement. The course focuses on: 1) cultural encounters between settlers and indigenous peoples as well as among Anglo settlers, the Spanish-speaking populations of the Mexican borderlands, and Asian immigrants to the Pacific Coast; 2) the impact of hunting, logging, ranching, and mining on the environment and...
the influence of the arid Western environment on human societies; and 3) the cultural symbolism of the American West in literature and film as an enduring national icon and ideology that has shaped settlement and regional history.

**HIST 358. The Vietnam War. 3 Credits. H**
This course is a survey of the Vietnam War. It covers the early days of Cold War, 1945-54, and all phases of the Vietnam War: the advisory phase (1955-64); the Americanization phase (1965-68); the Vietnamization Phase (1969-73); and the final phase, the Vietnam Civil War, 1972-75. This course covers the causes, course, conduct, and consequences of the war and in so doing provides a political, military, and social history of the war.

**HIST 359. The Black Experience in the U.S. Since Emancipation. 3 Credits. H**
An interdisciplinary study of the history and culture of Black people in American from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde culture changes. (Same as AAAS 306.)

**HIST 361. Youth, Sex, and Romance in Post-WWII United States. 3 Credits. H**
Most people don’t think of sex and romance as having a history. And youth seems just a natural stage of life. But the nature of “courtship,” the definitions of sex, and the meaning of “youth” have changed dramatically over time, and people struggle over those definitions right up to the current day. In this class we try to make historical sense of those struggles by focusing on a volatile and complicated period in U.S. history: the years from World War II through the recent past. (Same as WGSS 361.)

**HIST 362. The American Way of War Since World War II. 3 Credits. H**
This course is a survey of American Military History from World War II to current military operations. It covers the Cold War, the Korean War, the Vietnam War, both Persian Gulf wars, the global war on terrorism, and the war in Afghanistan. The course examines the causes, course, conduct, and consequences of the wars and covers advances in technology and doctrine, civil-military relations, foreign policy, and inter-service rivalry, providing a political, military, and cultural history of the wars.

**HIST 363. Perspectives on Science, Engineering and Mathematics. 3 Credits. H**
This course places the historical creation of scientific and technological knowledge within a broader social, cultural, and political context. Students will learn that the STEM disciplines are not merely a static body of facts, theories, and techniques but involve diverse, evolving processes which are continually generated and reformulated. By examining the role of failure in knowledge creation, the religious motivations behind space exploration, the continued legacy of racist practices in medicine, the construction and ramifications of “Big Science,” and other topics, students will go beyond the “genius inventor” narrative to question the presumed neutrality and progressive inevitability of scientific and technological advancements. Through a mixture of online activities, readings, videos, and synchronous online discussions, we will also examine the formulation and codification of “expertise;” investigate the process of professionalization within the STEM fields, and interrogate how science and technology have supported systems of oppression throughout history. (Same as HUM 363.)

**HIST 364. Angry White Male Studies. 3 Credits. H**
This course charts the rise of the “angry white male” in America and Britain since the 1950s, exploring the deeper sources of this emotional state while evaluating recent manifestations of male anger. Employing interdisciplinary perspectives this course examines how both dominant and subordinate masculinities are represented and experienced in cultures undergoing periods of rapid change connected to modernity as well as to rights-based movements of women, people of color, homosexuals and trans individuals. (Same as AMS 365, HUM 365 and WGSS 365.)

**HIST 365. Invention of the Tropics. 3 Credits. H**
This course surveys the history of the tropical environment and its diverse peoples from early European encounters until the current boom in extractivism and ecotourism. It focuses on portrayals of the tropics in historical travel accounts and films. Through these sources, we will seek to understand cross-cultural interactions, and the ways in which science, technology, and tourism have reconstructed these environments over time. Case studies are drawn from Latin America, Africa, Oceania, and/or Asia. (Same as EVRN 365.)

**HIST 367. Magic and Superstition in European History. 3 Credits. H**
This course traces the changing role and understanding of magic in European culture, religion, politics and science from the late Middle Ages through the early 20th century. Topics may include alchemy, miracles, magical healing, witchcraft, monsters and demonic possession.

**HIST 368. A History of Afro-Latin America. 3 Credits. H**
This course examines the history of Africans and their descendants in Latin America. In this region, Africans could be found serving as militia commanders, laboring as skilled tradesmen, running their own businesses, working as household servants, and toiling on plantations. Students will study the varied experiences of these men and women across colonial and national boundaries. Topics include: acculturation/Creolization, manumission, family formation, social networks, economic roles, political mobilization, and interaction with indigenous peoples.

**HIST 369. Colonialism and Revolution in the Third World, Honors. 3 Credits. NW H**
This course will study the structure and dynamics of colonialism and neo-colonialism in the third world beginning in the 19th Century and continuing to the 1980s. It will also examine responses to these systems, from small-scale resistance to nationalist revolutions. Attention will be given to the relationship between ideology and collective behavior. Case studies will be drawn from Africa, Asia, and Latin America. Prerequisite: Membership in the University Honors Program or permission of instructor.

**HIST 371. Tequila, Tango, Carnival, City. 3 Credits. H**
This course explores the history of modern urban Latin America through the lens of popular culture. Elements of culture that will be examined include music, food, soccer, cinema, photography, and art of the 19th and 20th centuries. Some of the themes likely to be explored are collective identity, exile, travel, cultural resistance to state violence, public rituals, and the evolution of the city and its cultural spaces.

**HIST 373. The Supreme Court and Religious Issues in the United States. 3 Credits. H**
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Not open to freshmen. (Same as REL 373.)

**HIST 374. The History of Modern American Conservatism. 3 Credits. H**
In this course students will gain an in-depth knowledge of modern American conservatism, primarily through the lens of political history. We will focus on the development of the conservative political movement from the 1930s through contemporary times. We will ponder several interrelated questions: how did conservatives build a movement capable of exercising political power; what do conservatives mean when they discuss equality, liberty, and freedom; how have conservatives conceptualized the role of the United States in the world; what role have ideas played in the conservative movement; how have different factions of conservatives fought for control of their movement while struggling to maintain political unity; and how have conservatives governed? Finally, we will contextualize modern American conservatism in the broader, dynamic political culture of the United States.

HIST 376. Immigrants, Refugees, and Diasporas. 3 Credits. H
This course looks at people who choose to cross political borders, are forced to flee beyond them, or constitute ethnic minorities living outside a homeland. Examining these groups from a global historical perspective, this course explores how ethical debates about the rights of non-citizens and ethnic outsiders have evolved in the modern age. Students learn about important issues that have affected the lives of immigrants, refugees, and diasporas, including citizenship, mobility, cultural representation, asylum policies, and the concept of human rights. The course concludes with a look at contemporary manifestations of these issues, from debates over the place of Muslims in Europe to discussions about immigration policy in the United States. (Same as GIST 376.)

HIST 377. Everyday Communism in Eastern Europe. 3 Credits. H
This course investigates through film, literature, memoirs, photography, architecture, and scholarship the experience of ordinary citizens under Soviet-style communism in Eastern Europe. We study the ways people supported, resisted, opposed, and merely got by under state socialism from the late 1940s to the collapse of Communism in 1989.

HIST 378. Beyond the Iron Curtain: Soviet Perspectives on the Cold War. 3 Credits. H
This course reimagines the Cold War through Soviet eyes, challenging assumptions and offering less familiar perspectives on a global conflict. Analyzing Soviet and American mass media, popular culture, declassified documents, and personal stories, students investigate the following: Who started the Cold War, and who won it? Was it a time of relative peace or paranoia? How did the two sides view each other and did espionage help them know each other better? How did people and culture sometimes cross the iron curtain? What were the Soviets doing in places like Latin America and the Middle East? And why were both sides so concerned with Olympic athletes, ballet defectors, and cosmonauts?

HIST 379. Europe in Crisis: Empire, Extremism, and War, 1890-1945. 3 Credits. H
This course examines the sense of crisis that defined European life in the first half of the twentieth century, an era defined by economic spasms, cultural revolts, extreme political ideologies, and two massively destructive world wars. We will examine the period between 1890 and 1945 as a violent, at times apocalyptic, clash between three competing ideologies - communism, fascism, and liberal democracy - demonstrating how extremism both fed upon and created a sense of crisis.

HIST 381. Enemies of Ancient Israel. 3 Credits. H
An exploration of the social world of the Bible through its antagonists and their cultures. We will examine the so-called "Bad Guys of the Bible" using the lenses of history, archaeology, geography, and religion to better understand their cultures and how they are portrayed in the biblical text. (Same as JWSH 387 and REL 387.)

HIST 382. Jerusalem Through the Ages. 3 Credits. H
As a prominent site in the religious and cultural histories of Judaism, Christianity, and Islam, Jerusalem is uniquely situated as one of the world's most sacred cities. For more than 3,000 years, this city has been a focal point of religious and political activity. Through the critical reading of historical and religious texts, and archaeological data, this course will explore the historical development of Jerusalem as a sacred place in Judaism, Christianity, and Islam. (Same as CLSX 382, JWSH 382 and REL 382.)

HIST 387. Alexander the Great: Man and Myth. 3 Credits. HT H
This course explores the life, times, and legacy of Alexander the Great (356-323 BCE). It covers the historical context of ancient Greece and Macedon from which Alexander emerged; his engagement with ancient Greek, Egyptian, and Persian cultures; his military campaigns; his aims in creating an empire; and the immediate aftermath of his conquests. In addition, the course considers the role of great men in history and historiographical problems in reconstructing the past. It also explores how the image of Alexander has been transmitted, interpreted, challenged, and reshaped from antiquity to the present. Topics may include: the use of the memory of Alexander by later Greeks and Romans; the medieval Alexander tradition; responses to Alexander in Middle Eastern and Indian thought and literature; the legacy of Alexanders conquests in the age of empires; his transformation in Hollywood; and his contested place in the modern political dispute between Greece and North Macedonia. (Same as CLSX 322.)

HIST 388. Julius Caesar: Man and Myth. 3 Credits. HT H
This course explores the life, times, and legacy of Julius Caesar (c. 100-44 BCE). It covers Caesars early political career, his military campaigns, and his rise to power through civil war, with special attention paid to his aims, political reforms, and the institutions that enabled his rise to power. In addition, it considers the role of great men in history and historiographical problems in reconstructing the past. It also explores how the image of Caesar has been transmitted, interpreted, challenged, and reshaped from antiquity to the present. Topics may include: the impact of Julius Caesar in Rome with the creation of an empire ruled by Caesars; Medieval responses to Caesar as tyrant, king, and emperor; Caesar as a paradigm of populist tyranny from the Renaissance to the present; the legacy of his literary output and the Romantic image of Caesar as a genius; his impact on the modern age of empires; and re-imaginings of Caesar in film, TV, and video games. (Same as CLSX 323.)

HIST 389. Topics in Western History: ____. 3 Credits. H
A study of a specialized theme or topic in Western History. Students will examine major issues and methods of historical study through the study of a specific historical period or topical area. This course grants HIST Category I credit. May be repeated for credit when topic varies.

HIST 390. Topics in Non-Western History: ____. 3 Credits. H
A study of a specialized theme or topic in non-Western History. Students will examine major issues and methods of historical study through the study of a specific historical period or topical area. This course grants HIST Category II credit. May be repeated for credit when topic varies.

HIST 391. Topics in (Honors): ____. 3 Credits. H
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. Open only to students admitted to the University Honors Program. Prerequisite: Permission of instructor.

HIST 392. Huns, Turks, and Mongols: The Nomad Factor in Asian History. 3 Credits. NW H/W
This course introduces the history of major nomadic powers in Eurasian Steppe and their impact in the world from the first Millennium BCE to around 1500 AD. The main topics include the culture of the Scythians, the Hun and Xiongnu confederacy, the Mongol conquest, and the Turkish empires in Central and West Asia. It investigates the natural and human
forces that shape the identities of the nomads and their changing images in history.

HIST 393. The Silk Road. 3 Credits. H
A comprehensive introduction to the cultural influence and material exchange among major civilizations along the Silk Road. It covers the period of more than one thousand years between the 2nd and the 15th centuries CE, during which time forces wielded by the Persians, the Chinese, the Indians, the Tibetans and the Mongols shaped the geopolitical landscape of the vast region that spreads from the Caspian Sea to the Gobi Desert. Students explore the role of the Silk Road in the formation of the religious and ethnic identities of these civilizations, as well as their perceptions towards one another. Along with textual materials, the course uses extensive visual and musical materials to present interesting phenomena, such as Sogdian burial practice, Arab accounts of Tang China, Nestorial Christianity at the Mongol court, and Marco Polo's journey to the East. The course begins and concludes with discussion of the contemporary significance of the Silk Road as a historical category.

HIST 394. Made in China: Chinese Business History. 3 Credits. H
This course examines the development of business culture in China since 1900. Looking particularly at how it has transformed and adapted in response to China's own changing political environment as well as China's changing engagement with the West and Japan. We examine cases of western businesses in China and Chinese businesses in both China and the West. Topics include the rise of industrialism, the role of foreign investment, China's role in the global market place, the relationship between business and the state, state-run enterprises, factory life, entrepreneurialism, advertising, consumerism, and economic nationalism.

HIST 395. History of Sushi. 3 Credits. H
Sushi, now served at Midwestern supermarkets and university cafeterias, reveals the transformation of an ancient Japanese dish into a global phenomenon. This course takes familiar Japanese dishes like sushi and ramen as starting points to ask how food accrues or sheds national characteristics in an age of globalization. To learn the origin of sushi and ramen, the class traces the evolution of the diet in the context of the development of Japanese civilization. Using the methodology of food history, course assignments include short research papers on Japanese foodstuffs; analyses of primary sources from statistics to comic books to movies; and short essays drawing from participant observation of Japanese foods now available locally.

HIST 397. From Mao to Now: China's Red Revolution. 3 Credits. W
This course on China's Communist revolution considers the evolution of Maoism, or Chinese Communism, from its ideological origins through its implementation during and after the Chinese Communist revolution. It examines major Maoist movements such as Land Reform, the Great Leap Forward, the Cultural Revolution, and the cult of Mao. It further considers the globalization of Maoism by examining examples of other Maoist revolutions and revolutionaries in places like Cambodia, Peru, and Nepal.

HIST 398. Introduction to History of Japan: Anime to Zen. 3 Credits. NW H/W
This course provides a foundation for study of Japanese history. It combines lectures on the scope of Japanese history over the past 2,000 years with discussions of topics key to the development of Japanese civilization such as religion and literature. We analyze how different media, such as film, Japanese animation (anime), and art can be used as historical sources, and how these shape our understanding of Japan. Students hone their ability to analyze both thematic and historical questions through writing assignments and discussions.

HIST 399. The Samurai. 3 Credits. NW H/W
Japan's warrior class, the samurai, dominated politics and society for more than half of Japan's recorded history. This course traces the history of the samurai from their origins to the dissolution of their class in 1877, examining their military role, philosophy, and cultural contributions. It also considers continued references to the "spirit of the samurai" in the twentieth century.

HIST 400. Indigenous People of the Great Plains. 3 Credits. H
This course examines the emergence of horse-mounted indigenous societies in the Great Plains; the nature of the indigenous societies of the Great Plains in the nineteenth century; conflicts with the United States; the beginning of the reservation period; and indigenous people of the Great Plains in the modern era. Readings combine primary documents and novels with selections from anthropology, social history, and environmental history. (Same as ISP 400.)

HIST 401. Case Studies in: ______. 2-3 Credits. H
Examination of a limited aspect of a general subject; other aspects of the same subject may be offered other semesters.

HIST 402. War and Society in Greece and Rome. 3 Credits. H/W
This course explores the military history of the ancient world, with a focus on the connections between warfare and political, social, and cultural developments. Through extensive reading, analysis, and discussion of a wide variety of ancient sources (literary, epigraphic, archaeological) and contemporary scholarship, this class will survey both the major developments in warfare in Greece and Rome, while at the same time investigating the relationship of military institutions, technologies, tactics, and strategies to the key political and economic changes, social structures, and value systems of antiquity. Beyond exploring famous and influential campaigns and battles (Persian Wars; Peloponnesian War; rise of Macedon; Punic Wars; Roman civil wars; barbarian invasions), topics will include: hoplite warfare and the emergence of Sparta and Athens; sea-power, democracy, and imperialism; citizen militia and professionalization in Rome; trauma, triumph, and memorialization; gender roles and ethnic identity. (Same as CLSX 402.)

HIST 404. Technology and the Modern World. 3 Credits. H
We live in a technological world. From the moment we wake up until the moment we fall asleep, our lives as modern human beings are defined by the existence of and our interactions with various technologies. Far from neutral, technologies embody the values, priorities, and power disparities of a society. As a result, their creation, use, and proliferation raise profound ethical questions such as their environmental impact, equitable access, and potential unintended consequences or "spillover effects". In this class, we will apply ethical codes to key case studies within the history of technology to understand how moral issues inherent within contemporary discussions of emerging technologies have developed and changed over time.

HIST 405. Women, Gender, and Sexuality in the North American West. 3 Credits. H
This course will provide students with an overview of how the history of women have profoundly shaped and given meaning to the development of the North American West (which includes present-day states and provinces in the U.S., Canada, and Mexico). The class will examine the lives of women who represent diverse backgrounds, lands, and time periods in this western region. In addition to women, lectures, readings, and discussion will focus on the themes of gender, masculinity, class, race, ethnicity, sexuality, labor, and environment. Broad in chronological scope that spans pre-contact into the twenty-first century, this course is not a comprehensive survey. Rather, the class will examine how women and groups of women across the region defended, survived, explored, cultivated, and imagined the West as a place that defined their homes,
migrations, settlement patterns, as well as sites of captivity, displacement, war, and development. (Same as WGSS 305.)

HIST 407. History of Science in the United States. 3 Credits. H
Traces the evolution of a scientific tradition in American culture. Examines the growth of scientific ideas and institutions under European and indigenous influences. Studies the interactions of science with technological, theological, political, and socio-economic developments.

HIST 408. History of the Great Plains. 3 Credits. H
This course is an overview of the history of the North American Great Plains up to 1900. Today's plains region comprises ten American states and three Canadian provinces, but it also connects dozens of Indigenous nations that (historically and presently) overlapped through seasonal migrations, trade, resources, and sacred lands. The Great Plains is a unique geographical area that is united by several environmental traits: flatness, aridity, unusual elevations, and an abundance of grasslands. It is also a region of North America characterized by significant cultural diversity, contested spaces, and national myths of empire and settlement. Lectures, readings, and discussion will cover these topics chronologically while emphasizing major themes of ethnicity, race, gender, class, environment, politics, and economic development.

HIST 410. The American Revolution. 3 Credits. H
This course will focus on the meaning the American Revolution had for different groups of Americans. Particular emphasis will be on the relationship between ideology and experience, and the impact of the Revolution on such groups as women, slaves, Indians, African-Americans, the poor, merchants, and loyalists.

HIST 412. The Civil War in America, 1828-1877. 3 Credits. H
The United States from the rise of sectional conflict through the disintegration and reunification of the Union.

HIST 415. The Rise of Civilization. 3 Credits. S
A study of evolutionary processes leading to the birth of the early great urban civilizations of the Old World and the New World. Patterns of growth and similarities and differences in the rise of urban complexes and states in Mesopotamia, Egypt, the Indus Valley, and in Mexico/Guatemala and Peru.

HIST 441. Aviation in American Culture. 3 Credits. H
This course examines the complex relationship between powered flight and American society from the invention of the airplane to the rise of drone warfare. Through a mixture of scholarly works, personal accounts, and primary sources, we will investigate how use of and access to the airplane became a focal point for the construction and deconstruction of race, gender, and class distinctions and an important site in the struggle for equality and social justice. Using the airplane as a lens, we will recognize and challenge key assumptions within American technoculture such as technological messianism, technological neutrality, and the role of government in technological development. (Same as HUM 373.)

HIST 442. The Politics of Racial Injustice in the United States. 3 Credits.
In this course, students will examine, in detail, four historical eras in which the American people struggled over anti-Black racial injustice in the United States. While the role and efficacy of social change movements and grass-roots activism in that struggle will be analyzed, the course will emphasize political, policy, and institutional responses and remedies to the problem of American racism. In particular, discussions, readings, and assignments will evaluate the successes and failures of specific legislative, judicial, administrative, and organizational interventions. How and why these responses developed and fared as they did-as well as the debates over their efficacy-will be the focal point of this course. (Same as AAAS 442.)

HIST 450. Study Abroad Topics in: _____ 1-5 Credits. H
This course is designed for the study of special topics in History at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

HIST 460. Topics in: _____ 1.5 Credits. H
An eight-week course devoted to a specific historical topic. May be repeated for credit as topics change.

HIST 461. The Asia-Pacific War, 1937-1945. 3 Credits. H
This course introduces students to the Asia-Pacific War, which began with the outbreak of fighting between Japan and China in July 1937 and ended with the unconditional surrender of the Japanese Empire to Allied forces in August 1945. The course revolves around three themes, which are explored through lecture, discussion, and extensive use of film and visual materials: the geopolitical and colonial origins of the conflict; the concept of total war and the political and social transformations it unleashed on all belligerent nations; and the ideologies on the home front justifying the mass slaughter of soldiers and civilians. There is also discussion about how people in Japan, the United States, China, Korea, and other countries remember the war in the postwar period.

HIST 475. Professional Skills in History. 3 Credits. H
This course will introduce students to the fundamentals of planning and organizing job search strategies. Students will identify their professional interests, research specific careers, and prepare applications to positions or internships based on the skills, experience, and knowledge acquired in their History courses. The final project assignment will consist of preparing a digital portfolio that will include a cover letter, c.v., or resume, lists of specific positions or internships they could apply for, and a video of a mock professional interview.

HIST 480. Travelers' Tales of the Middle East. 3 Credits. H
This reading-intensive seminar examines the multiple visions of “the Orient” that appeared in the letters, memoirs, and novels of Western travelers to the Middle East in the nineteenth and twentieth centuries. We examine the rise of tourism and travel-writing within the Middle East and their links to European imperialism. Working closely with primary source documents, we question what these highly personal and often misinformed types of writing can tell us about the politics and culture of everyday life in the Middle East.

HIST 481. From Harem to the Streets: Gender in the Middle East, 1900-Present. 3 Credits. H
This reading-intensive seminar examines shifts in gender roles and expectations in the Middle East during the twentieth and twenty-first centuries. The course begins with the importance of harem within Middle Eastern society, and traces Middle Eastern women’s increasingly public presence in national movements, feminist activism, and peace protests as well as the impact of Western standards of marriage, child-rearing, beauty, and sexuality on gender roles. The course uses primary and secondary sources to analyze how gender identity is informed by religion and culture and grounded in specific historical moments.

HIST 482. Israeli-Palestinian Conflict: An Introduction. 3 Credits. S
This course provides an introduction to the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. (Same as GIST 329 and JWSH 329.)

HIST 492. Readings in History. 1-4 Credits. H
Investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Two (2) Readings in History courses may be applied to the major and no more
than one (1) may be applied to the minor. Prerequisite: Ten hours of college history including at least two upper-class courses and a "B" average in history. Consent of instructor.

HIST 493. History Research Internship. 1-3 Credits. H
The course allows students to work with a faculty mentor and learn firsthand the tasks that historians undertake to research and present their findings. Potential student assignments include database entry and retrieval, translation, fact checking, and compiling sources. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level history course; declared major in history; and permission of the instructor.

HIST 494. Service Learning in History. 1-3 Credits. H
This course is designed to give students the opportunity to apply historical knowledge and ideas gained through course work to real-life situations in volunteer service agencies and community centers. Open to History majors and others with significant History backgrounds. Permission of instructor is required.

HIST 500. History of the Book. 3 Credits. H
Brief history of writing materials and handwritten books; history of printed books from the 15th century as part of cultural history; technical progress and aesthetic change. Offered every second year. (Same as ENGL 520.)

HIST 501. Topics in Western History: ____. 3 Credits. H
A study of a specialized theme or topic in western History. Students will examine major issues and methods of historical research through the study of a specific historical period or topical area. This course grants HIST Category I credit. May be repeated for credit when topic varies. Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor.

HIST 502. The Age of Heroes: Early Greece. 3 Credits. H/W
This course explores the Greek Bronze and Dark Ages and in particular the relationship of the Iliad and the Odyssey to early Greek history. The course is organized around current methods, problems, and debates in the fields of Greek history, archaeology, and Classics. Topics include the rise and fall of the Minoan and Mycenaean worlds, the historicity of the Trojan War, and social, religious, and political institutions of the Dark Ages. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 502.) Prerequisite: Any CLSX or HIST course.

HIST 503. The Ancient History of the Near East. 3 Credits. H
History of the rise of civilizations in the ancient Near East from the earliest time to the Muslim conquest of the early seventh century, including the areas of Mesopotamia, Egypt, Syria, Palestine and Asia Minor. An archaeological approach is used in focusing attention on the cultural phenomena and achievements of the peoples of these areas, including the Babylonians, Assyrians, Persians, ancient Israelites, Greeks and Romans.

HIST 504. Rise of Athens and Sparta. 3 Credits. H/W
This course explores the history of Archaic and Classical Greece, focusing on the rise and fall of the rival states of Sparta and Athens. The course is organized around current methods, problems, and debates in the fields of Greek history and Classics. Topics include the emergence of the Greek polis; Greek colonization; developments in political, religious, and social institutions, including the Spartan constitution and the rise of Athenian democracy; the changing definitions of personal, cultural, and national identities; cultural, political, and economic tensions between rival Greek city-states and neighbouring cultures, especially Persia and Macedonia. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 504.) Prerequisite: Any CLSX or HIST course.

HIST 506. Roman Republic. 3 Credits. H
This course investigates the origins, development, and eventual crisis of the Roman Republic, from its foundation in the eighth century BC to Civil War in the first century BC. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include the contexts and causes for the rise of Rome, the growth, development, and eventual collapse of the Roman republican constitution, and the impact of empire on Roman society, culture, religion, economy, and identity. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 505.) Prerequisite: Any CLSX or HIST course.

HIST 507. Early Roman Empire. 3 Credits. H
This course investigates the establishment and development of the Roman Empire, from the rise of Augustus to the peak of Roman power and prosperity in the second century AD. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include the creation of the imperial system; developments in the role of the emperor and the Roman government; continuity and transformation in society, culture, religion, economy, and identity with the shift from republic to empire; daily life across the empire and in the army. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 507.) Prerequisite: Any CLSX or HIST course.

HIST 508. Late Roman Empire (284-527). 3 Credits. H
This course investigates the history of the later Roman Empire, from the height of its power in the second century AD to the fall of the Western Roman Empire in the fifth century AD. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include continuity and change in Roman culture, identity, and institutions; the Christianization of the empire; contact and conflict between Romans and the "barbarians"; political decline and daily life across the empire. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 508.) Prerequisite: Any CLSX or HIST course.

HIST 510. Topics in Non-Western History: ____. 3 Credits. H
A study of a specialized theme or topic in non-Western History. Students will examine major issues and methods of historical research through the study of a specific historical period or topical area. This course grants HIST Category II credit. May be repeated for credit when topic varies. Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor.

HIST 511. Foodways: Native North America. 3 Credits. H
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save
seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HUM 551 and ISP 551.) Prerequisite: Upper division course on indigenous/ American Indian history, or permission of the instructor.

HIST 512. Foodways: Latin America. 3 Credits. H
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HUM 552, ISP 552, and LAC 552.) Prerequisite: Upper division course on Latin America or permission of the instructor.

HIST 514. The Civil Rights Movement. 3 Credits. H
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. (Same as AAAS 511.)

HIST 518. Capitalism and the Black Experience. 3 Credits. H
This is an upper level course designed to analyze the experiences that define the African American relationship to the American economy. The course begins with the slave trade and ends in the present. It explores and explains how African American economic development intimately intertwined with the movement for freedom. Students will learn how African Americans addressed issues around slavery, housing, banking, capitalism/socialism, underground economy, and gentrification. This course is chronological in nature with thematic elements. Lectures will provide brief histories and conceptual framework for readings. This background will help students understand and explore how black identity, culture, and politics interact with economy. However, the bulk of the course will operate as a seminar. By the end of the course, students will be able to summarize African American past experiences with capitalism and its relevance to contemporary economic issues affecting African American people today. (Same as AMS 518.) Prerequisite: Any American Studies or History Courses on American History.

HIST 520. The Age of the Renaissance. 3 Credits. H/W
A survey of economic, political, social, and cultural developments in Italy in the 14th and 15th centuries, with special attention to those elements in the life of the age which look forward to the modern world.

HIST 521. The Age of the Reformation. 3 Credits. H/W
The Protestant revolt of the 16th century.

HIST 522. The Age of Religious Wars, 1540-1648. 3 Credits. H/W
The Catholic or Counter-Reformation and the wars of religion, including the Thirty Years War.

HIST 524. The French Revolution. 3 Credits. H/W
A study of the origins, development, and impact of the French Revolution, beginning with a description of France in the 18th century and ending with a look at France under Napoleon.

HIST 525. France and Its Empire: From Acadia to Zidane. 3 Credits. H/W
A study of modern France through the lens of its overseas empire and the relations between French colonies and the metropolitan "Hexagon." This course studies the establishment of New France in the early modern period, the relationship between the French Revolution and colonies like Haiti, the French obsession with North Africa in the nineteenth century, the "Second Empire" at home and abroad, the French role in the Scramble for Africa and the global age of imperialism, the participation of colonial troops in the world wars, the post-World War II age of colonial wars and decolonization, and the contemporary role of imperial memory and immigrants to France from its former colonies. Prerequisite: Requires a prior history course or permission of the instructor.

HIST 527. Recent European History, 1870 to the Present. 3 Credits. H/W
A study of the issues and themes that have shaped the contemporary European world, exploring European politics, economy, and society from the zenith of Europe's power and influence at the turn of the century through two world wars and into the contemporary era. This survey begins with the period of consolidation of a system of major national states in western Europe and ends with the search for alternatives to that system in the break-up of empires and movements for European unity in the post-World War II era. The course also considers the emergence of the states of central and eastern Europe and examines the impact of the Russian Revolution and the Soviet state on European affairs. Not open to those who have credit in either HIST 435 or HIST 436.

HIST 528. Economic History of Europe. 3 Credits. S/W
An introductory study of European economic history from the Middle Ages to the 1890s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as ECON 535.) Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

HIST 530. History of American Women--Colonial Times to 1870. 3 Credits. H
A survey of women's history in the United States that will consider women's roles as housewives, mothers, consumers, workers, and citizens in preindustrial, commercial, and early industrial America. (Same as AMS 510 and WGSS 510.)

HIST 531. History of American Women--1870 to Present. 3 Credits. H
A survey of women's history in the United States that will include radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and WGSS 511.)

HIST 541. British History, Tudors and Stuarts. 3 Credits. H
An introduction to the impact on the British Isles of the Reformation and Renaissance; the development of the Tudor state; Parliament; the Stuart monarchy; the Anglican counter-reformation; civil war; the Cromwellian experiment. Prerequisite: A prior history course, or permission of the instructor.

HIST 545. British History from Monarchy to Democracy. 3 Credits. H
A study of Britain's recovery from civil war; state formation and national identity; ideological conflict; the Revolution of 1688; religion and secularization; social stability and commercial expansion; reform; threats to the state, and the American revolution; Britain's survival of the French Revolution; the breakdown of the ancient regime in 1828-32. Prerequisite: A prior history course, or permission of the instructor.

HIST 548. Rise of Modern Britain. 3 Credits. H
A study of the rise of modern Britain from the 1832 Reform Act, a major step on the path from aristocratic government to mass democratic politics. It covers the politics and society of the Victorian era, the extension of British influence overseas, the origins and social impact of two world wars,
the creation of the Welfare State, the loss of Empire, and Britain's entry into Europe.

**HIST 561. Liberation in Southern Africa. 3 Credits. W**

This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and POLS 561.)

**HIST 563. U.S. Environmental Thought in the 20th Century. 3 Credits. H**

Explores both leading and dissident ideas that Americans have had about the natural world since 1900. Broad chronological periods are explored in some depth, including the Progressive Era, New Deal, Cold War, the Sixties, and the Reagan Eighties. The course uses articles and books, as well as visual and aural forms of communication. Commercial speech, as well as scholarly and literary works, are considered. (Same as EVRN 563.) Prerequisite: EVRN 148 or HIST 129, or permission of instructor.

**HIST 564. Medieval Russia. 3 Credits. H**

Political, economic, social, cultural, and religious developments of Russia from the beginnings of the Russian state in the 9th Century through the 17th Century.

**HIST 565. Imperial Russia. 3 Credits. H/W**

The history of Imperial Russia from Peter the Great's reinvention of the empire in the eighteenth century to its demise in the revolutions of 1917. Placing Russia in a global context, the course examines change and continuity in politics, society, economy, and culture and looks at Russia as a diverse empire between Europe and Asia. Readings include historical scholarship and some of the classics of Russian literature.

**HIST 566. Rise and Fall of the Soviet Union. 3 Credits. H/W**

An exploration of the Soviet Union's creation, evolution, collapse, and legacy in contemporary Russia and Eurasia. Drawing on historical scholarship, literature, music, and film, the course examines the major trends and developments in Soviet politics, ideology, society, economy, and culture. Special attention is paid to how the multiethnic Soviet state's rise and fall reflected broader changes in the world during the "Soviet century."

**HIST 570. The Middle East After World War II. 3 Credits. NW H/W**

An intensive study of developments and changes in the Middle East since World War II. Topics and themes will vary, but may include the long-lasting effects of European imperialism, Big Oil and the energy crisis, the Arab-Israeli conflict and peace process, American intervention in the Middle East, minority communities, and the revival of Islamic and popular protest movements.

**HIST 571. Pre-Hispanic Mexico and Central America. 3 Credits. NW S/W**

A survey of indigenous, Pre-Hispanic cultures of Mexico and Central America, including Olmecs, Teotihuacan, Mayas, Zapotecs, Toltecs, and Aztecs. This course teaches how to interpret art, architecture, artifacts, and culture change in the context of iconography and symbols, metaphysical beliefs and ritual practices, crafts and technologies, trade and exchange, social inequality and conflict resolution, and the relationships among these cultures and their environments. (Same as ANTH 506 and LAC 556.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, Indigenous Studies, History, or permission of instructor.

**HIST 572. Ancient American Civilizations: The Central Andes. 3 Credits. W**

An archaeological survey of the ancient peoples of Peru and neighboring countries in South America. The origins of complex societies on the coast and in the Andean highlands will be reviewed with special consideration of the role of "vertical" environments in the development of Andean social and economic systems. Cultures such as Chavin, Moche, Nazca, Huari, Tiwanaku, and Chimú, and the rise of the imperial Inca state will be examined through artifacts, architectural remains, and ethnographic documents. (Same as ANTH 508 and LAC 558.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, History, or Indigenous Studies, or permission of instructor.

**HIST 574. Slavery in the New World. 3 Credits. H/W**

Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. (Same as AAAS 574.)

**HIST 575. The Many Faces of Mexico. 3 Credits. H/W**

From Aztecs, Incas, and Mayas, to Spaniards, Mestizos, and Indios to Zapatistas, Narcos, and Luchadores, Mexico has been a place of vast social and cultural diversity. This class examines the history of Mexico and its many facets from the pre-Columbian period through the present. Students examine such topics as conquest and colonialism, independence and revolution, race, politics, and religion. Prerequisite: An earlier course in history or permission of the instructor.

**HIST 576. History of the Caribbean and Central America. 3 Credits. H/W**

A comparative examination of Central America and the Caribbean. Emphasis is on understanding the complex social, cultural, and political development of this broad region from the pre-Columbian period until the modern era. Topics include: conquest, colonization, racial and ethnic diversity, economic development, political conflict, and globalization. Prerequisite: HIST 120 or HIST 121.

**HIST 577. The Andean World. 3 Credits. H**

The Andean environment is defined by its mountains, but includes all of the earth's major biomes: from tropical rainforest to the world's oldest and driest desert. These diverse landscapes have nurtured one of the most ancient and durable, yet diverse sets of Indigenous cultural lifeways. Most of the Andes was governed by a single power during the Inca and Spanish colonial eras, but the region is now divided between seven independent states with their own regional traditions. The Andean World has long been recognized as a laboratory for understanding the relations between nature and culture, and the tensions between tradition and revolutionary change. This course will examine the history of this region from a long-term perspective, from its Indigenous roots to contemporary struggles over globalization and extractivism. (Same as EVRN 577, ISP 577 and LAC 577.) Prerequisite: Prior 300+ level course in related discipline (ANTH, EEB, EVRN, HIST, LAC, SPAN, etc.) or permission of instructor.

**HIST 579. The History of Brazil. 3 Credits. H/W**

The history of Brazil from European discovery to the present with emphasis on social and economic change. Topics discussed will include the Indian, African, and European backgrounds, slave society, the frontier in Brazilian development, cycles of economic growth and regionalism, the role of foreign capital, industrial development, labor, urban problems, the military in government, and human rights.
HIST 580. Economic History of Latin America. 3 Credits. H/W
A study of the changing economic conditions in Latin America from Colonial times through the Twentieth Century and the effect of these conditions on Latin American society. Emphasis will be on the major theoretical issues of development economics, patterns of growth, and suggested strategies for economic development. Analysis will center on changes in agriculture, industry, labor, finance, transportation and technology, urbanization, immigration, role of women, export and commerce, and foreign involvement.

HIST 581. The Japanese Empire. 3 Credits. H
Although the history of modern Japan was for a long time conventionally understood within the parameters of the nation-state, in fact modern Japanese identity coalesced around empire. This reading-intensive course explores the Japanese empire from its origins in the late nineteenth century to its collapse at the end of World War II in 1945, as well as the empires post-1945 legacies in Asia. Particular attention is paid to different forms of Japanese colonial domination practiced in Hokkaido, Okinawa, Taiwan, Korea, the South Seas Islands, Manchuria, occupied China, and Southeast Asia. We also study the ways in which the empire and colonial subjects, in turn, transformed Japanese state and society. Furthermore, we examine transnational themes the Japanese empire shared with other modern empires in areas such as colonial violence, gender, migration, settlements, war mobilization, and historical memories of the colonial experience. Prerequisite: Successful completion of an East Asian history or culture course numbered below 500; or a history course numbered below 500; or permission of the instructor.

HIST 583. Imperial China. 3 Credits. NW H/W
An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as EALC 583.)

HIST 584. Modern China. 3 Credits. NW H/W
An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as EALC 584.)

HIST 585. Beer, Sake, Tea-Beverages in Japan History. 3 Credits. H
Sake and tea are synonymous with Japan today, but the history of beverages from water to whiskey illuminates key developments in Japanese civilization. This course makes a thematic survey of Japanese beverages introducing the place of drinks in global history before examining their distinct context in Japan. Topics include the ritual consumption of beverages as in the tea ceremony; the place of alcohol in Japanese culture; locales for consuming beverages such as bars, teahouses and coffee shops; and the Westernization of taste preferences as characterized by the introduction of beer and wine. By taking this course, students gain insight into ways that beverages contribute to Japanese culture and help shape personal and national identity. Prerequisite: Successful completion of an East Asian history or culture course number below 500 or permission of the instructor.

HIST 587. Age of Shoguns: Early Modern Japan. 3 Credits. NW H/W
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as EALC 587.) Prerequisite: An earlier course in history or east Asian languages and cultures, or permission of the instructor.

HIST 588. Japan, 1853-1945. 3 Credits. NW H/W
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as EALC 588.)

HIST 589. Japan Since 1945. 3 Credits. NW H/W
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic "miracle," popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as EALC 589.)

HIST 591. Food in History: West and East. 3 Credits. H/W
A survey of scholarship on food in the West and in East Asia, choosing works primarily by historians, but also by sociologists, geographers, and anthropologists. We consider how scholars have approached issues concerning food productions and consumption, what habits of eating reveal about daily life, and how and when food is embedded with historiography related to these topics, keeping in mind the famous maxim of the noted French gastronome Brillat-Savarin (d. 1826): "Tell me what you eat: I will tell you what you are.

HIST 596. Defining Japan: Marginalized Groups and the Construction of National Identity. 3 Credits. NW H/W
This course investigates the construction of national identity in modern Japan by examining the historical experiences of groups marginalized by mainstream society. We will explore the pressures of conformity, the pervasiveness of social ostracism and the surprising diversity in Japanese society. Among the groups discussed will be indigenous peoples (the Ainu, Okinawans), the Korean minority, the outcast class (burakumin), the sick and disabled, the Yakuza, and political activists.

HIST 598. Sexuality and Gender in African History. 3 Credits. W
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as AAAS 598 and WGSS 598.)

HIST 601. Oral History. 3 Credits. H
This course explores the emergence of oral history as a methodology and focuses on the guidelines and ways to effectively use oral history in historical, journalistic, and social science research. The skills of collecting and sorting information gathered through eyewitness accounts, oral traditions, genealogies, investigative reporting procedures, and questionnaires are developed. The nature of the interview in relation to personal and public documents, ordinary conversation, and other related data sources will be considered in this course.

HIST 603. History of Tibet. 3 Credits. NW H
This course surveys the cultural and political history of Tibet from the eighth to the twentieth century. Through readings, lectures, and discussions, students gain familiarity with the dominant features of Tibetan civilization. Topics include the relationship between Tibet and the civilizations of India and China, Tibetan Buddhism, and the tensions between the struggle for Tibetan independence versus claims of Chinese sovereignty. The course also considers the Tibetan diaspora and the reception of knowledge about Tibetan civilization in the West.

HIST 604. Contemporary Greater China. 3 Credits. W
This course considers contemporary China, Taiwan, and Hong Kong in comparative perspective. It begins in the early twentieth century so as to set up a comparison between Nationalist, Communist and Colonial China. It focuses on the evolution from the 1940s to the present studying the political, economic and social systems of the three regions that constitute what we now call 'Greater China' and considers, in particular, important points of difference and similarity between them.

HIST 605. Medieval Japan. 3 Credits. NW H
Course examines the history of Japan from the end of the ancient period (c. 1200 AD) through the medieval era (approximately 1573). Issues covered include the formation and destruction of the Kamakura and Muromachi warrior governments, medieval religious life and culture. Writing assignments provide students with opportunities to gain familiarity with historical methods for analysis and to strengthen their written expression. Not open to students who have taken HIST/EALC 586.

HIST 610. American Colonial History. 3 Credits. H
Examines colonial American history from the age of Columbus to the mid-1760s. The course seeks to place colonial American history into the larger historical context, particularly the expansion of the British Empire in the early modern period. Emphasis in the course will be on migration, social and economic conditions, and inter-racial relations.

HIST 611. Early American Indian History. 3 Credits. H
This course will focus on the history of American Indians, especially those of the eastern woodlands, from precontact times to the 1830's. Particular emphasis will be on the response of Indians to demographic catastrophe, the development of trade between Indians and colonists, and Indian responses to European colonization in British America and New France. The role of Indians in the American Revolution and the changes caused by Removal will also be treated.

HIST 612. History of Federal Indian Law and Policy. 3 Credits. H
This course offers a comprehensive examination of federal legislation and court decisions in the United States that have affected American Indians. The history of law and policy will be traced from the colonial period, but major emphasis will be on the struggle of American Indians to preserve sovereignty in the 19th and 20th centuries.

HIST 615. Rise of Modern America: Politics, Culture, and Society, 1900-1950. 3 Credits. H
The history of the United States in the First Half of the Twentieth Century.

HIST 616. Contemporary America, 1941-Present. 3 Credits. H
A history of the United States from its entry into World War II to the present. A study of such selected topics as women's history and feminism, race relations and the Afro-American civil rights movement, power, poverty, the military-industrial complex, McCarthyism, and presidential administrations.

HIST 617. America in the 1960's. 3 Credits. H
The people of the United States experienced significant social political, and cultural change during the 1960's. This course studies the history of these changes, focusing on the American people, the institutions that shaped their lives, and the social and political movements, for and against change, that surfaced during this decade. Specific topics include: the struggle for racial equality, the Kennedy, Johnson, and Nixon administrations; the Vietnam War, the antíwar movement, New Left; and counterculture; feminism's rebirth; the white backlash; and the resurgence of political and cultural conservatism. Course requirements include readings, discussion, and original historical research and writing.

HIST 618. History of the American West to 1900. 3 Credits. H
A survey of Western history with emphasis on such topics as Native Americans and Indian-white relations, environment and resource use, exploration and discovery, expansionism and Manifest Destiny, economic development, urban, rural, and alternative communities, ethnic and racial experience, women and violence. Consideration will also be given to topics such as fur trade, mining, the cattle business, and agriculture.

HIST 619. History of the American Indian. 3 Credits. NW H/W
A study of Indians in the United States from colonial times to the present. Consideration will be given to the political, social, and cultural history of selected Indian tribes and to Indian-white relations with particular attention to the Indian point of view. Other topics will include a comparative study of Indian policy of nations colonizing in America, cultural intermingling and cultural conflict, and current Indian problems. Slides, films, and guest speakers (including American Indians) will be used in the course.

HIST 621. The American West in the 20th Century. 3 Credits.
A study of the post-frontier era and the struggle to create a regional identity, drawn from legends of the heroic past, varieties of racial and ethnic experience, political culture, and the possibilities of the land.

HIST 625. The Body, Self and Society. 3 Credits. H
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HUM 575, WGSS 575.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

HIST 630. The United States and the World, 1890-2003. 3 Credits. H
An examination of the history of United States foreign relations over the course of the twentieth century. Treats America's emergence as a world power before World War I, imperialism and interventionism, involvement in World War I and World War II, internationalism, the Cold War and America's anti-communist crusade, third world nationalism, responses to a global economy, and the obligations of a military superpower in a chaotic world.

HIST 631. The Contemporary Afro-American Experience. 3 Credits. H
A history of Afro-America from the end of the Civil War to the present. Consideration will be given to such topics as America's capitulation to racism, blacks in agriculture, blacks and the labor movement, Booker T. Washington and W.E.B. DuBois, civil rights protest, migration and urbanization, Marcus Garvey and black nationalism, the Harlem Renaissance, blacks during the New Deal, blacks in recent politics, the modern civil rights movement, ghetto uprisings, and the changing relationships among race, caste, and class.

HIST 649. History of Feminist Theory. 3 Credits. H
This discussion course will cover the development of feminist theories from the late Middle Ages to the 1970s. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as WGSS 549.) Prerequisite: Any previous course in WGSS or HIST or permission of instructor.

HIST 690. Honors Course in History. 3 Credits. H
This course is the first part of a two-part course that provides a group setting for writing the Senior Honors Thesis, which is a substantial work of historical research based above all on the analysis of primary sources. During this first semester students must produce a serious working draft of the thesis. Assignments and discussions will help students to prepare this draft, which will establish a solid foundation for the Honors Thesis. In addition, this course will provide a close experience of advanced, professional, historical work. Presentations, weekly comments on the work of others, and active participation in seminar discussions with
constructive observations and questions will complete that professional experience. A History faculty advisor will provide essential guidance throughout the process of writing the thesis. Prerequisite: HIST 301 and permission of instructor.

HIST 691. Undergraduate History Honors Seminar. 3 Credits. H
Required for students in the History major honors program, normally in the second semester of their History honors projects. Another seminar experience may be substituted, with the approval of the Honors Coordinator. Prerequisite: Approval of the Honors Coordinator of the Department of History.

HIST 692. Independent Capstone. 3 Credits. H
This independent study is designated for students who did not, or are unable to, complete one of the department's other capstone offerings (HIST 696 or HIST 691). The course will introduce students to the theory and practice of historical inquiry and require a substantial research project. May not be repeated for credit. Prerequisite: Completion of 75 credit hours of undergraduate study, including HIST 301, and consent of the instructor.

HIST 696. Seminar in: _____ . 3 Credits. H
A seminar designed to introduce students to the theory and practice of historical inquiry. A research paper will be required. May not be repeated for credit. Prerequisite: Completion of 75 credit hours of undergraduate study and completion of HIST 301, and recommended completion of one 500 level history course, or consent of the instructor.

HIST 705. Globalization in History. 3 Credits.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and spread of international institutions. The current world problems investigated will vary, but may include issues such as environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as GIST 705.)

HIST 720. The Nature of Museums. 3 Credits.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as MUSE 801.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

HIST 721. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, GEOL 784, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 722. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, GEOL 780, and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 723. Introduction to Museum Exhibits. 3 Credits.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, BIOL 787, GEOL 781, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 725. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, BIOL 798, GEOL 785, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 727. Practical Archival Principles. 3 Credits.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as MUSE 707.)

HIST 728. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 740. Topics in History for Educators: _____ . 1-3 Credits.
Reading and discussion of selected historical topics, designed specifically for K-12 educators. Pedagogical methods and resources for the study of history will be addressed. Prerequisite: Approval of the instructor.

HIST 747. East Asian History and Culture for Teachers. 2 Credits.
An advanced survey of the history, culture, and contemporary affairs of , China, Japan and Korea, specifically designed for K-12 educators who wish to incorporate East Asian topics into their classroom teaching. Pedagogical methods and resources for the study of East Asia will be emphasized. Topics covered will address relevant benchmarks in the state curricular standards in social studies, themes from the Advanced Placement world history examination, and the national standards in world history. Prerequisite: Approval of the instructor.

HIST 748. East Asian Historical Materials: _____ . 3 Credits.
The aim of the course is to provide students with the linguistic tools needed for archival research in East Asian history by assisting them in gaining experience reading primary and secondary language materials in Japanese and/or Chinese including texts in classical forms of these languages. After studying the rules of classical grammar and the particulars of historical materials as needed, students will read primary documents in conjunction with secondary readings in Japanese and/or Chinese. Fundamental aspects of paleography may also be introduced in this course depending on student need. Prerequisite: Capability of reading Japanese or Chinese and permission of the instructor.

HIST 800. Readings in: _____ . 1-8 Credits.
Prerequisite: Consent of instructor.
HIST 801. Colloquium in: _____ 1-6 Credits.
Reading and discussion of selected topics.

HIST 802. Seminar in: _____ 3 Credits.
Research Seminar on selected topics.

HIST 805. The Nature of History. 3 Credits.
The introductory course to graduate study, this colloquium introduces students to the practice and epistemology of history, familiarizing them with various methodological schools, theoretical touchstones, and historiographical subfields. Required of all incoming M.A. and Ph.D. students.

HIST 806. Studies in: _____ 3 Credits.
The core course for each thematic major field in the graduate program in History. The course, offered in a colloquium style format, will serve as an introduction to the principal standard literature in the field, and will consider the full range of methodologies or approaches appropriate to the field.

HIST 807. Professional Development Colloquium in Pedagogy. 3 Credits.
This course will help train future professional historians to teach. It will focus on a variety of pedagogical topics for future college history faculty, including: developing students' critical and analytical thinking; teaching research skills; promoting student involvement/participation; determining course goals; use of multi-media technology. In addition to attending class meetings of History 807, students will attend as observers throughout the semester one 500/600-level course in an area relevant to their future teaching and complete the readings assigned to the class. They will produce a course portfolio for an undergraduate course, including: a syllabus designed by the student; a set of assignments that will be part of that course, such as examinations and papers; sample lesson plans; an annotated bibliography of materials relevant to the subject-matter of the course.

HIST 808. Colloquium in Comparative History: _____ 3 Credits.
A readings-oriented course which explores themes in two or more geographic and/or chronological fields of history. The benefits and disadvantages of comparative methodologies will be analyzed. Topics will vary each term but may include the examination of such subjects as the history of urbanization, labor, colonialism, immigration, the family, political thought, or industrialization. Prerequisite: Varies with area of subtopic.

HIST 810. Colloquium in Nationalism Studies. 3 Credits.
Exploration of the major contemporary scholarly theories of nationalism and other forms of group identification, supplemented with case studies.

HIST 811. Colloquium in Comparative Empires. 3 Credits.
This colloquium explores the evolution of empires across space and time by surveying the rather contentious scholarly literature on the subject, offering a methodological introduction to comparative and transnational history in the process.

HIST 834. Colloquium in the History of the British Empire. 3 Credits.
The course will deal selectively with themes in the political and cultural interaction of the peoples of the British Isles with peoples overseas, the expansion and contraction of empire, and the rationales for these processes.

HIST 847. Colloquium in Russian History. 3 Credits.
A group readings course that begins with Russia in the medieval period and continues through the end of the twentieth century. Topics may vary each term, but may include such subjects as political, social, religious, gender, or intellectual history. The course will focus around significant interpretive issues and the historiography that address them.

HIST 853. Colloquium in the Early Modern Atlantic World. 3 Credits.
This colloquium will focus on interactions between the so-called Old and New Worlds in the three centuries following Columbus’ voyages. The course will pay particular attention to the changes in the lives of Europeans, Africans, and the peoples of the Americas as a result of the emergence of transatlantic economies, empires, and cultural systems.

HIST 862. Indigenous Archives and Tribal Historic Preservation. 3 Credits.
In this methods class, students will gain foundational knowledge in the archival and preservation of Indigenous source materials: oral histories, printed materials, Tribal documents, letters/journals/diaries, artwork, and a host of other sources. Students will also utilize digital history technology to create online exhibits and an original research paper. Beyond the archives this course introduces students to the important work of Tribal Historical Preservation examining the laws, ethics, cultures, policies, histories, ethics, recovery/restoration, Indigenous GIS, consultation, management, and career paths in Tribal Historical Preservation. Finally, students will gain invaluable experiences by writing grants and developing final projects that can lead to real-world applications of their research.

HIST 878. Colloquium in Global Environmental History. 3 Credits.
This graduate colloquium examines the intersection between environmental history, world history, and global history as interdisciplinary fields of inquiry, as well as regional approaches to environmental history from around the globe.

HIST 879. Colloquium in North American Environmental History. 3 Credits.
Intensive survey of significant works in the field from colonial times to the present, with attention to bibliography, research methods and needs, and leading issues in interpretation.

HIST 881. Slavery in the Atlantic World. 3 Credits.
A graduate colloquium examining the historical roots, processes, experiences, and legacies of human slavery from local, regional, comparative, and global perspectives.

HIST 883. Ethnohistory of the Americas. 3 Credits.
A graduate colloquium that develops methodologies and examines historical case studies for the study of ethnicity, interethnic relations, and cultural hybridity from a hemispheric perspective, not only for indigenous peoples, but also for African-, Asian-, European-, or Pacific-derived groups, as well as new ethnic groupings and identities that emerged from their interaction.

HIST 890. Colloquium in American History 1492-1800. 3 Credits.
Study of the leading interpretations of major issues in the history of Colonial and Revolutionary America, including appropriate attention to new approaches and techniques in research. The first course in the sequence of colloquia in United States history.

HIST 891. Colloquium in 19th Century U.S. History. 3 Credits.
Study of the leading interpretations of major issues in the history of the United States in the 19th century. The second course in the sequence of colloquia in United States history.

HIST 892. Colloquium in 20th Century U.S. History. 3 Credits.
Study of the leading interpretations of major issues in the history of the United States in the 20th century. The third course in the sequence of colloquia in United States history.

HIST 893. Colloquium in Military, War, and Society. 3 Credits.
Analysis of key historiographical conversations and major trends in US-focused Military, War, and Society scholarship, including their relation to the broader fields of military and US history.
HIST 895. Colloquium in the History of Gender. 3 Credits.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and WGSS 835.)

HIST 896. Colloquium in United States Women’s History. 3 Credits.
This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field.

HIST 898. Colloquium in the History of the American West. 3 Credits.
Study of issues and interpretations in the history of the American West from prehistory to the present, including attention to new approaches and techniques in research.

HIST 997. Dissertation Seminar. 1-12 Credits.
In this course, students who have successfully completed their doctoral oral comprehensive exam will research, write, and workshop dissertation chapters, while engaging in other professionalization exercises and discussions. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Must pass oral comprehensive exam before enrolling.

HIST 998. Portfolio Preparation. 1-3 Credits.
This course will guide students through the process of preparing and submitting their written portfolio and preparing for the oral defense. In this course, students will complete field readings and prepare the cover letter, professional essay, grant application, and sample syllabus they are required to submit to their Advisory Committee in advance of the oral defense. Working closely with their Advisory Committee members, students in HIST 998 will generate these documents and workshop them with the course instructor and their fellow students. The instructor will mentor students through the process of scheduling their exams and preparing the final written document for submission. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be a second year Ph.D. student and obtain permission of the instructor.

HIST 999. Doctoral Dissertation. 1-12 Credits.
An inquiry into the source material upon a specific subject. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Consent of instructor.

Honors Program Courses

HNRS 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Honors. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HNRS 190. First Year Honors Seminar: _____ 1 Credits. U
This seminar serves as an introduction to the University Honors Program, to research opportunities and other academic resources available at the University of Kansas, and to specific disciplinary perspectives on an overarching theme. While closely examining the designated topic, students develop skills in research, reading, writing, and in-depth discussion. Required of all first-year Honors students; open only to first-year students in the University Honors Program.

HNRS 195. Transfer Honors Seminar: _____ 1 Credits. U
This seminar serves as an introduction to the Honors Program, and to the research opportunities and other academic resources available at the University of Kansas. This seminar fosters the transfer students’ oral and written communication and the critical assessment of their academic and pre-professional goals. The instructor of the student’s seminar also serves as the student’s honors mentor. Open only to transfer students in the University Honors Program.

HNRS 250. Citizen Philanthropy: An Introduction to the Nonprofit World. 3 Credits. U
This interdisciplinary course explores the historical and economic roots of citizen generosity and the role of the nonprofit/philanthropic sector. This service learning course combines volunteer experiences and public service internships with research and exploration of the missions and ethical orientations of nonprofit organizations. The course is designed to explore the social and the ethical contexts of the nonprofit sector with opportunities to demonstrate social and civic responsibility.

HNRS 310. University Scholars Seminar. 3 Credits. H
An interdisciplinary survey to acquaint students with some of the main ideas, methods, and outstanding problems in various areas of scholarship. The organization of human knowledge inside and outside the university, as well as the implications of this organization for scholarship and society, are emphasized. Ideas and methods in various disciplines are contrasted and compared. Required of and open only to newly admitted students in the University Scholars Program.

HNRS 320. Global Scholars Seminar. 3 Credits. H
The Global Scholars Seminar is designed to foster academically talented and motivated undergraduate students’ interest in global studies. Through interdisciplinary coursework, mentorship and research experience in global studies, the seminar provides cohorts of students with opportunities to develop their intellectual capabilities and interests to the fullest and better prepares them for careers, further study, and leadership roles in today’s complex international arena. Required of and open only to newly admitted students in the Global Scholars Program.

HNRS 370. Personal Writing Seminar. 1 Credits. U
This seminar helps students develop their personal writing abilities. Students analyze language and rhetorical choices in the genre of the personal essay. Students demonstrate rhetorical flexibility within the genre, considering audience, purpose, and application of the material. This course is intended for candidates for national fellowships, regardless of University Honors Program membership. (Same as LA&S 370.) Prerequisite: Permission of the Office of Fellowships.

HNRS 380. Critical Thinking and Advocacy Seminar. 1 Credits. U
The focus of this class is on honing the two basic skills of critical thinking and advocacy. In this seminar, students develop a basic system for critical analysis that can be applied generally; test that critical analysis system in a series of practicums to develop the skills necessary to apply it; and develop a basic system for designing effective and ethical persuasive messages. (Same as LA&S 380.) Prerequisite: Permission of the Office of Fellowships.

HNRS 395. Edwards Campus Honors Seminar. 1 Credits.
This seminar serves as an introduction to the KU Edwards Campus Honors Program, and to the research opportunities and other academic resources available at the University of Kansas Edwards Campus. The seminar focuses on an overarching theme or current societal problem, and explores specific disciplinary perspectives of that theme. While closely examining the designated topic, students develop skills in research, reading, writing, and in-depth discussion. This seminar fosters the KU Edwards Campus students’ oral and written communication and the critical assessment of their academic and pre-professional goals. Required of all KU Edwards Campus Honors students. Prerequisite: KU Edwards Campus Honors Student.
HNRS 410. Professional Responsibility, Honors: _____ 1-3 Credits.

This course focuses on the challenges facing practitioners in a specific professional field. Students will learn about the ethics, conduct, and other responsibilities associated with that profession, and will explore career choices within the field. Prerequisite: Membership in the University Honors Program, sophomore standing or above, and prior completion of an Honors Seminar (HNRS 190 or HNRS 195.) Concurrent enrollment with HNRS 195 is possible with special permission from the Honors Program.

HNRS 430. Honors Interdisciplinary Seminar. 3 Credits. U

An opportunity to synthesize topic across various subjects and disciplines. This course examines a problem or topic from the perspectives of several disciplines. Open to qualified sophomores, juniors, and seniors in the University Honors Program.

HNRS 492. Topics and Problems on: _____. 1-6 Credits. U

An interdisciplinary study of different topics. Designed especially for juniors and seniors.

HNRS 495. Honors Directed Study. 1-3 Credits. U

Individual and supervised study of an interdisciplinary topic or topics. May be repeated for a total of up to 6 hours. Up to one 3-hour enrollment will count as one course toward completion of the University Honors Program. Prerequisite: Membership in the University Honors Program and consent of the instructor.

HNRS 496. Honors Internship. 1-3 Credits. U

Students participate in an internship in an organization related to their professional/career goals. An internship plan is developed by the student in conjunction with the student's academic adviser and an authorized agent of the internship site. Prerequisite: Instructor permission required.

HNRS 497. Honors Seminar Assistantship. 0 Credits.

Open to all Honors students selected to be Honors Seminar Assistants, regardless of major field. These students assist Seminar instructors in the teaching of an Honors seminar in various ways, including but not limited to: leading group discussions, engaging students in the learning process, developing classroom material, encouraging and guiding students to solve problems themselves and helping students prepare for their advising appointments. May be repeated. Prerequisite: HNRS 190 or HNRS 195 and membership in the University Honors Program.

HNRS 595. Edwards Campus Honors Capstone. 3 Credits.

This seminar serves as an interdisciplinary capstone experience for students KU Edwards Campus Honors Program, and as an introduction to the research opportunities and other academic resources available at the University of Kansas Edwards Campus. The seminar focuses on an overarching theme or current societal problem that students explore from the perspectives of several disciplines, incorporating experiential learning opportunities. While closely examining the designated topic, students develop skills in research, reading, writing, and in-depth discussion. This seminar fosters the KU Edwards Campus students' oral and written communication and the critical assessment of their academic and pre-professional goals. Required of all KU Edwards Campus Honors students.

Liberal Arts & Sciences Courses

HUM 110. Introduction to Humanities. 3 Credits. HL H

An introduction to the humanities as a division of learning and to interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education, perspectives and methods in the humanities, the humanities and human diversity, and interdisciplinary approaches to understanding and interpreting texts.

HUM 111. Introduction to Humanities, Honors. 3 Credits. HL H

An introduction to the humanities as a division of learning and to interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education; perspectives and methods in the humanities; the humanities and human diversity; and interdisciplinary approaches to understanding and interpreting texts. Prerequisite: Membership in the University Honors Program.

HUM 112. Exploring The Human Condition: _____. 3 Credits. H

This is a special topics course that provides an interdisciplinary exploration of human experience through the study of specific themes, periods or genres. Through reading and discussion of primary sources and scholarly texts, students will examine issues central to the human condition, be introduced to the methods that disciplines in the humanities use to analyze them, and learn the skills of close reading, critical analysis, and the interpretation of evidence. Assignments require students to analyze source material, synthesize information, solve problems and construct arguments to support conclusions.

HUM 114. Western Civilization I Honors. 3 Credits. H

A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. Prerequisite: Membership in the University Honors Program or permission of the department.

HUM 115. Western Civilization II Honors. 3 Credits. H

A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period. Prerequisite: Membership in the University Honors Program or permission of department.

HUM 125. Introduction to Medical Humanities. 3 Credits. H

An interdisciplinary introduction to the field of medical humanities, which considers the relationship between medicine and humanistic thought. Students analyze the role of medicine in a variety of genres, while considering the growing importance of narrative and artistic expression in the medical profession. Topics may include: the objectification of the body, ageism, art and self-expression as medical care, and the impact of race, class, and culture on definitions of "illness", "health", and "beauty".

HUM 133. Technology and the Individual. 3 Credits. H

This course focuses on the complex relationship among technological change, increasing social complexity, and the individual from the Paleolithic Era to the so-called Computer Revolution, with a particular emphasis on Europe and the United States. Through the study of foundational texts in the history of technology and dystopian fiction, students will analyze a range of technologies from stone tools to smartphones to better understand the social, cultural, and economic forces that underlie technological change and how to critically evaluate assumptions about the nature of that change.

HUM 140. Introduction to World Literature. 3 Credits. H

This course provides an introduction to the field of world literature as an approach to critical reading and writing about literary works in a global context. Topics may include: what constitutes literature; challenges to reading works across time or within different cultural traditions; reading works in translation; history of writing technologies and canon formation; literature and market forces; and the literature of global encounters and exchanges. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice.

HUM 175. Kansas Environment and Culture. 3 Credits. H
An introduction to the inhabitants of Kansas and their experiences of the unique landscapes found within the state. Through the use of sources such as letters, autobiographies, novels, art, architecture and film, this course explores how Kansas environments have shaped and been shaped by the humans that occupy them, and why Kansas has had a powerful hold on the American imagination.

HUM 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Humanities. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HUM 204. Western Civilization I. 3 Credits. H
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice.

HUM 205. Western Civilization II. 3 Credits. H
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period.

HUM 206. Contemporary Western Civilization. 3 Credits. HL H
A sequel to the two Western Civilization courses which offers the opportunity to examine influential works of literature, philosophy, history, and political thought written since the end of World War II. In keeping with the decline of colonialism and the growth of global and multicultural civilization since 1945, the readings of the course are selected from both Western and non-Western writers.

HUM 300. Studies In: ______. 3 Credits. H
An interdisciplinary course, focusing on different topics and drawing on diverse media, cultures, and historical periods. Humanities-based, this course, depending on its topic, may include the arts, the social sciences, and the natural sciences. May be repeated for credit with different topics.

HUM 304. World Literature I. 3 Credits. HL H
The study of great books in English translation from antiquity through the fifteenth century from two or more national literatures.

HUM 308. World Literature II. 3 Credits. HL H
The study of great books in English translation from the sixteenth, seventeenth, eighteenth, and early nineteenth centuries from two or more national literatures.

HUM 312. World Literature III. 3 Credits. HL H
The study of great books in English translation in the modern period (late nineteenth and twentieth centuries) from two or more national literatures.

HUM 320. Being Human in the Workplace. 3 Credits. H
A study of what it means to be human and humane in the workplace. Topics include the concepts of work, the worker, and the workplace; workers' rights; issues of discrimination; business ethics; privacy and confidentiality; bullying; whistle blowing; workplace environment.

HUM 332. Sex in History. 3 Credits. HT H
This course offers a survey of the history of human sexuality in the Western world; the second half of the semester emphasizes the American experience. Topics for consideration may include: masturbation, pornography, sex work, homosexuality, bisexuality, "perversions" (paraphilias), sex and marriage, racialized sexualities, sexual violence, trans* identities and experiences, sexuality and national identities, and colonized sexualities. The course demonstrates the various ways in which sex, specifically the social and political meanings attributed to physical acts, changes over time and shapes human experiences and interactions far beyond the bedroom. (Same as AMS 323, HIST 332 and WGSS 311.)

HUM 335. Introduction to Indigenous Studies. 3 Credits. NW H
This course is an introduction to the study of modern and historic indigenous peoples. It surveys the concepts, methods and content relevant to Indigenous Studies, using case studies drawn from the diverse indigenous cultures. Special attention is paid to the various ways in which standard academic disciplines --history, anthropology, literature, law, political science, among others --contribute to the study of Indigenous cultures and current issues. The course illustrates that the social, political, religious, and economic aspects of indigenous life are interconnected and tribal histories and cultures cannot be understood without an awareness of these fields.

HUM 340. Understanding the European Migrant Crisis. 3 Credits. H
This course offers students the opportunity to explore the social, political and ethical consequences of transnational migration in a European context. As the foundation of a winter-break study abroad experience in the Humanities Program, the course surveys the history and geography of human mobility across the EU with a focus on concepts such as "fortress Europe," and "shelter Europe," and the borderization of the Mediterranean basin. The main component of the course consists of experiential learning activities. Students engage in site visits, interact with activists and immigrants, and participate in migrant relief projects to better understand the dynamics of immigration policies as well as efforts to foster multiculturalism and integration within the area in question. (The program will take place in select European cities and location may vary by semester.) Prerequisite: Open only to students in the Humanities winter break study abroad program.

HUM 345. Indian Territory. 3 Credits. H
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and ISP 345.)

HUM 348. American Indian and White Relations to 1865. 3 Credits. H
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, ISP 348.)

HUM 350. American Indians Since 1865. 3 Credits. H
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will gain multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and ISP 350.)
HUM 363. Perspectives on Science, Engineering and Mathematics. 3 Credits. H
This course places the historical creation of scientific and technological knowledge within a broader social, cultural, and political context. Students will learn that the STEM disciplines are not merely a static body of facts, theories, and techniques but involve diverse, evolving processes which are continually generated and reformulated. By examining the role of failure in knowledge creation, the religious motivations behind space exploration, the continued legacy of racist practices in medicine, the construction and ramifications of "Big Science," and other topics, students will go beyond the "genius inventor" narrative to question the presumed neutrality and progressive inevitability of scientific and technological advancements. Through a mixture of online activities, readings, videos, and synchronous online discussions, we will also examine the formulation and codification of "expertise," investigate the process of professionalization within the STEM fields, and interrogate how science and technology have supported systems of oppression throughout history. (Same as HIST 363.)

HUM 364. Pregnancy in Modern Literature. 3 Credits. HL
An examination of pregnancy, childbirth and reproductive control as depicted in literature from various national traditions in the twentieth and twenty-first centuries. This course draws together voices from literature, history, and feminist theory to deepen students' understanding of the ways nationality, class, race, ability, and gender affect the aesthetics surrounding reproduction. Special attention is given to the relationship between society and the pregnant/postpartum individual. Other topics may include: eugenics, contraception, male pregnancy, and speculative reproduction. (Same as WGSS 364.)

HUM 365. Angry White Male Studies. 3 Credits. H
This course charts the rise of the "angry white male" in America and Britain since the 1950s, exploring the deeper sources of this emotional state while evaluating recent manifestations of male anger. Employing interdisciplinary perspectives this course examines how both dominant and subordinate masculinities are represented and experienced in cultures undergoing periods of rapid change connected to modernity as well as to rights-based movements of women, people of color, homosexuals and trans individuals. (Same as AMS 365, HIST 364 and WGSS 365.)

HUM 366. Fat, Food and the Body in Global Perspective. 3 Credits. H
An examination of fat and food as they relate to human embodiment in a variety of world locations. Bringing into a dialogue a number of disciplinary voices, including anthropology, fat studies, feminist theory, food studies, history, medicine, and psychology, the course applies theories of culture and embodiment to select global case studies as a means of approaching the pleasures, anxieties, health implications, and symbolic functions of ingesting food and drink. Topics may include the cultural and gender politics of fatness and thinness; anorexia and feederism; food, sex, and animality; vegetarianism, food scares and food purity movements; neoliberalism and the consuming body; and the material and symbolic aspects of fats and oils. (Same as WGSS 366.)

HUM 373. Aviation in American Culture. 3 Credits. H
This course examines the complex relationship between powered flight and American society from the invention of the airplane to the rise of drone warfare. Through a mixture of scholarly works, personal accounts, and primary sources, we will investigate how use of and access to the airplane became a focal point for the construction and deconstruction of race, gender, and class distinctions and an important site in the struggle for equality and social justice. Using the airplane as a lens, we will recognize and challenge key assumptions within American technoculture such as technological messianism, technological neutrality, and the role of government in technological development. (Same as HIST 441.)

HUM 375. The Refugee Experience: Stories of Statelessness and Citizenship. 3 Credits.
This course draws on materials from multiple disciplines in the humanities including literature, history, philosophy, and cultural studies, to examine how belonging or not belonging to a state shapes the human experience. Literary texts, theoretical reflections, and historical studies on the subject of mass migration in Europe in the middle of the 20th-century will prepare for discussions of contemporary statelessness as well as responses to the refugee condition in a global context. (Same as PCS 375.)

HUM 380. Modern Themes, Ancient Models: ______. 3 Credits. H
The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as CLSX 350.)

HUM 424. Senior Seminar in Humanities. 3 Credits. H
A seminar to result in the student's integration of knowledge within the Humanities major. Students undertake a project that reflects and utilizes the interdisciplinary perspectives of the humanities. Options for the final project include a portfolio, web page, or significant writing project. Not open to freshmen and sophomores; recommended in the senior year. Prerequisite: Completion of at least 9 hours of upper division courses in the major.

HUM 430. European Civilization in World Context: ______. 3 Credits. HL H
An introduction to the literature of encounters between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as EURS 430.) Prerequisite: HUM 114 or HUM 204 and HUM 115 or HUM 205.

HUM 477. Gender and Religion. 3 Credits. H
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as REL 477 and WGSS 477.) Prerequisite: An introductory course in Humanities, Religious Studies or Women, Gender & Sexuality Studies.

HUM 494. Humanities Directed Study: ______. 1-3 Credits. H
Investigation of a subject in fields or on topics not covered in regularly scheduled courses. May be repeated for a total of 6 hours. Does not replace or satisfy specific course requirements for the HWC major. May be counted as part of the total junior-senior credit hours required.

HUM 500. Studies in: ______. 3 Credits. H
A study of significant themes, topics, or problems in the humanities. May also relate an issue in the humanities to the social sciences or natural sciences. May be repeated for credit when the topic varies.

HUM 505. Europe Today. 3 Credits. H
An exploration of major social, political and economic developments post World War II including the rise of the European Union, the integration of Eastern and Western Europe, the growing role of Islam, attitudes towards the United States, and Europe's role in the world economy. Topics may
vary based on current events. (Same as EURS 504.) Prerequisite: Junior or senior standing or consent of instructor.

HUM 508. Special Topics in World Literature: _____ 3 Credits. H
An examination of selected theoretical texts and literary works relevant to the emerging field of "world literature studies" that seeks to account for the ways that global relationships structure literary production, circulation, and reception. Topics and texts vary. May be taken more than once if content differs sufficiently.

HUM 510. Science, Technology, and Society. 2-3 Credits. H
The objective of this course is to provide members of the university community with information that enables them to judge the humanistic, moral, and ethical implications of scientific and technological developments. Formal presentations by guest lecturers, followed by question-and-answer periods, will alternate with panel discussions, symposia, etc., prepared by faculty members drawn from the various departments, schools, and organizational units of K.U.

HUM 524. Chinese Thought. 3 Credits. NW H/W
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and PHIL 506.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy.

HUM 538. Pompeii and Herculaneum. 3 Credits. H
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HA 538) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor.

HUM 545. Methodologies in Digital Humanities, Honors. 3 Credits. H
This course addresses research possibilities and ongoing debates in the field of Digital Humanities. Students will examine how digital technologies and methodologies can enhance or suggest new modes of Humanities research. The course focuses on core topics in the field, including text analysis, data visualization, digital mapping, archiving and (digital) cultural studies. We will take a hands-on and critical approach to investigating the benefits and limitation of different digital methods. Course assignments will consist of blog posts and mini projects conducted throughout the semester. At the end of the semester, students will develop a proposal for a project that brings digital methodologies to bear on a research inquiry related to the student's discipline. No prior experience in digital work or technical skills required. Prerequisite: Instructor permission.

HUM 551. Foodways: Native North America. 3 Credits. H
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and ISP 551.) Prerequisite: Upper division course on indigenous/ American Indian history, or permission of the instructor.

HUM 552. Foodways: Latin America. 3 Credits. H
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, ISP 552, and LAC 552.) Prerequisite: Upper division course on Latin America or permission of the instructor.

HUM 570. Men and Masculinities. 3 Credits. H
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as WGSS 570.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

HUM 575. The Body, Self and Society. 3 Credits. H
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, WGSS 575.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

HUM 701. Practicum in Teaching Humanities and Western Civilization. 1 Credits.
Discussion of matters relating to teaching in Humanities and Western Civilization courses. Sections may vary according to course topics. Required of all GTAs in the first year of teaching in the Program or for the first semester of a new teaching assignment. Does not count towards completion of coursework for the M.A. or Ph.D. in any field or department. Open only to GTAs employed by the Humanities Program. Graded on a satisfactory/unsatisfactory basis.

HUM 770. Research in Men and Masculinities. 3 Credits.
An intensive examination of the history and theory of masculinities in the Western World since the sixteenth century. Students will become acquainted with some of the key theories of men and masculinities, examine in depth the interplay between manhood and modernity, and develop research projects on a topic negotiated with the instructor. May be repeated if content varies sufficiently. (Same as WGSS 770.)

HUM 775. Advanced Study in the Body and Senses. 3 Credits.
An intensive examination of the role of the human body in the creation of personal and social identities in the West since the sixteenth century. Emphasis is on understanding how contemporary theories of embodiment are applied to concrete historical or contemporary problems. May be repeated if course content varies sufficiently. (Same as WGSS 775.)

Global & International Studies Courses

PCS 120. Introduction to Peace and Conflict Studies. 3 Credits. HT H
An introduction to the content and methods of peace studies. Peace studies is a multidisciplinary and interdisciplinary approach to the study of war and peace. Building on and integrating the work of various fields of study, the course examines the causes of structural and direct violence within and among societies and the diverse ways in which humans have sought peace, from conquest and balance of power to international organizations and nonviolent strategies.
PCS 329. History of War and Peace. 3 Credits. HL H
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the “military revolution” that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, and San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war, and guerrilla warfare involving civilians in the twentieth century; the history of the League of Nations and United Nations; and the rise of intergovernmental and non-governmental organizations.

PCS 350. Study Abroad in Topics in Peace and Conflict Studies: _____ 1-5 Credits. H
This course is designed for the study of special topics in Peace and Conflict Studies at the Junior/Senior level. Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in Peace and Conflict Studies. May be repeated for credit if content varies.

PCS 375. The Refugee Experience: Stories of Statelessness and Citizenship. 3 Credits.
This course draws on materials from multiple disciplines in the humanities including literature, history, philosophy, and cultural studies, to examine how belonging or not belonging to a state shapes the human experience. Literary texts, theoretical reflections, and historical studies on the subject of mass migration in Europe in the middle of the 20th-century will prepare for discussions of contemporary statelessness as well as responses to the refugee condition in a global context. (Same as HUM 375.)

PCS 550. Classics of Peace Literature. 3 Credits. HL H
A study of influential proposals for world peace from Erasmus' The Complaint of Peace (1515) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henry Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as EURS 550, GIST 560.) Prerequisite: HUM 204 or HUM 205.

PCS 555. Topics in Peace and Conflict Studies: _____ 3 Credits. H
This course offers specialized or interdisciplinary perspectives on historical, political, social, and religious movements, institutions, societies, agencies, or texts dealing with conflict resolution. May be repeated for credit with different topics.

PCS 556. Education for Peace and Non-Violence. 3 Credits. H
This course reviews the history, aims and methodology of peace education. Topics include examination of the roots and causes of social violence; educational initiatives that seek to reduce structural and direct violence; and teaching methodologies in the field of multicultural education and pedagogy.

PCS 560. Directed Study in Peace and Conflict Studies. 1-3 Credits. H
Practicum or research under the supervision of a faculty member and with the approval of the Peace and Conflict Studies Minor. Individual conferences, reports, and papers, and, in the case of practicum, supervised experience with an approved organization or agency. Prerequisite: Completion of three core courses in the minor.

PCS 565. The Literature of Human Rights. 3 Credits. H
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as EURS 565 and GIST 560.) Prerequisite: Junior/Senior standing or consent of instructor.

PCS 650. Senior Seminar in Peace and Conflict Studies. 3 Credits. H
This capstone seminar provides a sustained and in-depth study of a particular topic in Peace and Conflict Studies, to be chosen by the instructor. Each student is required to carry out a substantive research project to produce a term paper or comparable work. Required for completion of minor. Prerequisite: Students must have completed at least nine hours in the minor before enrolling.

PCS 801. Peace and Conflict Studies: Texts and Methods. 3 Credits.
An interdisciplinary study of the historic literature on human conflict and peacemaking and the methods used to analyze and interpret the literature. Peace literature encompasses a range of genres that include religious teachings, philosophical essays, political proposals, treaties and conventions, fiction, poetry, and drama. Approaches to solutions to human conflict cover a spectrum including political revolution, diplomacy and treaties, international law and organizations, and world government. Students produce a substantial graduate-level research project. PCS 801 is required for the Graduate Certificate in Peace and Conflict Studies, and to be taken as early as possible in the students program of study. Open only to graduate students.

PCS 850. Peace and Conflict Studies Research Seminar. 3 Credits.
The capstone of the Graduate Certificate program, providing a sustained and in-depth study of a particular topic in Peace and Conflict Studies, to be chosen by the instructor. The members of the seminar have the option of doing a research project or supervised practicum resulting in a substantial paper that integrates their work in the program. Required for the Graduate Certificate and open only to graduate students. Prerequisite: At least six hours of course work toward the Graduate Certificate including PCS 801.

Indigenous Studies Courses

ISP 101. Introduction to Indigenous Nations Studies. 3 Credits. NW S
An introduction to the study of Indigenous peoples. It surveys the concepts, methods, and content relevant to Applied Indigenous Studies, using case studies drawn from diverse cultures. The course illustrates that the social, political, religious, and economic aspects of American Indian life are interconnected and that tribal histories cannot be understood without an awareness of these fields. Students are introduced to controversies over how to research, write, and interpret American Indians, and will address the foundations of Indigenous Studies, and that is Indigenous concepts of decolonization, empowerment and Nation-building. The course explores how the lives of Indigenous people have been affected by colonization, while exploring the varying definitions of “colonialism”, “colonizer” and the “colonized.”

ISP 204. Special Topics: _____ 1-6 Credits.
This course concentrates on selected problems in the interdisciplinary field of Indigenous Studies. Courses in this field utilize methods developed in various disciplines to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Some sections may be offered at Haskell Indian Nations University through the Haskell-KU Exchange, which requires permission from the Haskell-KU liaison.

ISP 304. Special Topics: _____ 3 Credits. H
This course concentrates on selected problems in the interdisciplinary field of Indigenous Studies. Courses in this field utilize methods developed in various disciplines to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs.

**ISP 305. World Indigenous Literatures. 3 Credits. NW H**
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ENGL 305/GIST 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ISP 345. Indian Territory. 3 Credits. H**
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and HUM 345.)

**ISP 348. American Indian and White Relations to 1865. 3 Credits. H**
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, HWC 348.)

**ISP 350. American Indians Since 1865. 3 Credits. H**
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will gain multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and HUM 350.)

**ISP 355. Indigenous Film and Media. 3 Credits. H**
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum-including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered at the 300 and 700 level with additional assignments at the 700 level. Not available to students with credit in FMS 750 or ISP 755. (Same as FMS 350.)

**ISP 400. Indigenous People of the Great Plains. 3 Credits. H**
This course examines the emergence of horse-mounted indigenous societies in the Great Plains; the nature of the indigenous societies of the Great Plains in the nineteenth century; conflicts with the United States; the beginning of the reservation period; and indigenous people of the Great Plains in the modern era. Readings combine primary documents and novels with selections from anthropology, social history, and environmental history. (Same as HIST 400.)

**ISP 495. Directed Readings. 1-3 Credits.**
Work for advanced majors in fields or on topics not covered in course work. May be repeated for a total of up to six hours. May be counted as part of the total junior-senior credit hours required. Prerequisite: Consent of instructor.

**ISP 504. Topics in Indigenous Studies: ______. 3 Credits. W**
This course concentrates on selected problems in the interdisciplinary field of Indigenous Studies. Courses in this field utilize methods developed in various disciplines in order to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Recommended for juniors or seniors, or for students who have completed ISP 101/GINS 101/INS 101.

**ISP 530. Indigenous Food and Health. 3 Credits. NW U**
This course investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. The class traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems and offers traditional cultural strategies for health recovery.

**ISP 542. Ethnobotany. 3 Credits. S**
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as ANTH 582 and EVRN 542.) Prerequisite: EVRN 142, EVRN 145, EVRN 148, ANTH 150/151, ANTH 160/162/360 or permission of instructor.

**ISP 551. Foodways: Native North America. 3 Credits. H**
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and HWC 551.) Prerequisite: Upper division course on indigenous/ American Indian history, or permission of the instructor.

**ISP 552. Foodways: Latin America. 3 Credits. H**
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally,
and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HUM 552 and LAC 552.) Prerequisite: Upper division course on Latin America or permission of the instructor.

ISP 567. Native Feminisms. 3 Credits. SC H/W
This course examines the foundation of Native feminist scholarship and the history of Native feminist activism. The class will begin by considering whether feminist theory can support contemporary Native women Native Two-Spirit (LGBTQ+) in their struggles against settler colonialism and heteropatriarchy. While the course begins by examining the North American experience, the course will also cover a range of international indigenous contexts, with a focus on the Global South and the Indigenous Pacific. Topics explored include the history of settler-colonialism, cultural revitalization and gender roles, change and continuity under cycles of settler-colonialism, the connection between colonialism and sexual violence in Native communities, debates over citizenship and sovereignty, and contemporary Native gender roles and identities. During the conclusion of the course, students will learn to identity how Native feminism informs activism and practice. (Same as WGSS 567.) Prerequisite: Any previous course in WGSS or ISP, or by permission of instructor.

ISP 577. The Andean World. 3 Credits. H
The Andean environment is defined by its mountains, but includes all of the earth's major biomes: from tropical rainforest to the world's oldest and driest desert. These diverse landscapes have nurtured one of the most ancient and durable, yet diverse sets of Indigeneous cultural lifeways. Most of the Andes was governed by a single power during the Inca and Spanish colonial eras, but the region is now divided between seven independent states with their own regional traditions. The Andean World has long been recognized as a laboratory for understanding the relations between nature and culture, and the tensions between tradition and revolutionary change. This course will examine the history of this region from a long-term perspective, from its indigenous roots to contemporary struggles over globalization and extractivism. (Same as EVRN 577, HIST 577 and LAC 577.) Prerequisite: Prior 300+ level course in related discipline (ANTH, EEB, EVRN, HIST, LAC, SPAN, etc.) or permission of instructor.

ISP 601. Indigenous Peoples of the World. 3 Credits. S
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GEOG 601 and GIST 601.) Prerequisite: Permission of instructor.

ISP 673. Environmental Justice. 3 Credits. NW U
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping, and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. (Same as EVRN 673.) Prerequisite: Permission of instructor.

ISP 755. Indigenous Film and Media. 3 Credits.
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum—including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered at the 300 and 700 level with additional assignments at the 700 level. Not available to students with credit in FMS 350 or ISP 355. (Same as FMS 750.)

ISP 800. Indigenous Issues in the United States. 3 Credits.
This course will focus on contemporary issues relating to Indigenous peoples and nations within the United States, with particular emphasis on such issues as sovereignty, indigeneity, colonialism and decolonization. The course will address varied disciplinary approaches to this range of issues and will consider how this discourse bears upon scholarly conversations regarding broader themes in other selected fields of study.

ISP 804. Special Topics: ______. 1-3 Credits.
Designed to fulfill program needs of the Indigenous Studies master's program, this course may meet with appropriate professional or graduate courses. Can be repeated for credit when topic differs.

ISP 806. Directed Readings. 1-3 Credits.
An individual readings course with a qualified instructor on a topic in Indigenous Studies.

ISP 807. Internship in Indigenous Studies. 1-6 Credits.
Internships provide students the opportunity to obtain training and perform professional duties for academic credit at pre-approved indigenous-related agencies, organizations, and communities. Students are required to demonstrate a minimum of 60 contact hours for each one credit hour. To enroll, students must obtain the consent of their ISP faculty advisor or the Program's Director if a student is outside ISP. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission from instructor.

ISP 824. Federal Indian Law. 3 Credits.
Addresses the law and policy of the United States regarding Indian nations and their members. Issues include the origins and contours of federal plenary power over Indian affairs, the scope of inherent tribal sovereignty, the limits of state power in Indian country, civil and criminal jurisdiction, and gaming. (Same as LAW 914.)

ISP 830. Indigenous Food and Health. 3 Credits.
Investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. Traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems. Will offer traditional cultural strategies for health recovery.

ISP 871. Community Health and Development. 3 Credits.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Same as ABSC 710.)

ISP 898. Master's Non-Thesis. 1-6 Credits.
Course for Indigenous Studies students completing a portfolio Master's exam. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission from instructor.
ISP 899. Master’s Thesis. 1-6 Credits.
Course for Indigenous Studies Program students completing Master’s thesis projects. Prerequisite: Permission from instructor.

Institute for Leadership Stds Courses

LDST 200. Introduction to Leadership Studies and Applications. 3 Credits. SC S
This course combines an introduction to a theoretical, research-based approach to the study of leadership with hands-on application, analysis and experimentation with the process of leadership. Students will explore core leadership competencies and apply leadership tools and processes across a variety of groups and systems, addressing issues of concern within those communities. This course satisfies the LDST 201/LDST 202 requirement for the Leadership Studies Minor. This course is not available to students with credit in LDST 201/LDST 202. Prerequisite: Instructor permission.

LDST 201. Introduction to Leadership. 2 Credits. S
This course introduces students to the study of the leadership process. The course covers theories and research on core themes of leadership, focusing on how course materials relate to students’ own leadership experiences. Concurrent enrollment in LDST 202 is recommended. Students considering the Leadership Studies Minor must complete LDST 202. This course is not available to students with credit in LDST 200. Not open to seniors.

LDST 202. Introduction to Leadership Applications. 1 Credits. S
This course focuses on the application of information learned in LDST 201. Activities and discussions emphasize application, analysis, and engagement with the process of leadership. Concurrent enrollment in LDST 201 is recommended. Students considering the Leadership Studies Minor must complete LDST 201 and LDST 202. This course is not available to students with credit in LDST 200. Not open to seniors. Prerequisite: Corequisite: LDST 201.

LDST 203. Introduction to Leadership, Honors. 3 Credits. S
This course combines an introduction to a theoretical, research-based approach to the study of leadership with hands-on application, analysis, and engagement with the process of leadership. Within a small group setting, students explore core leadership competencies and experiment with the process of leadership by engaging classmates and members of the university and local communities and addressing issues of concern within those communities. This course satisfies the LDST 201/LDST 202 requirement for the Leadership Studies Minor. This course is not available to students with credit in LDST 200 or LDST 201/LDST 202. Prerequisite: Admission to the University Honors Program, Instructor Permission.

LDST 260. Study Abroad Topics in Leadership Studies. 1-6 Credits. S
This course is designed to enhance international experience in topic areas related to Leadership Studies at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

LDST 290. Foundations of Leadership in Society. 3 Credits. S
This course will expose students to a variety of concepts, theories, and skills relevant to contemporary leadership thought. Students will be challenged to consider their personal conceptions and philosophy of leadership. Students will examine leadership within particular contexts such as creating change, ethical leadership, leadership and management, and historical leadership thought and leaders.

LDST 301. It’s On Us: Gender Based Violence Prevention. 0-1 Credits. S
This class is the first in a series of four addressing Gender Based Violence Prevention. This class examines the foundational concepts of Gender Based Violence Prevention at the individual level. Topics covered include; but are not limited to, Consent, Drug and Alcohol Facilitated Rape, Gender Based Violence as Oppression, and Bystander Intervention. Students will participate in small and large group discussions, online reflection journals, and evidence based trainings. At the end of the eight-week course students will be able to 1) Assess behaviors that put other at risk for violence, victimization, or perpetration (2) Identify the four main characteristics of consent and describe what is necessary for consent to be present (3) Identify and apply strategies for safely intervening as an active bystander on the individual level (4) Identify multiple ways that power and oppression is impacted by individual identity. Completion of three credits of LDST 301-LDST 304 will fulfill KU Core Goal 3S.

LDST 302. Breaking the Cycle: Gender Based Violence Prevention. 0-1 Credits. S
This class is the second in a series of four addressing Gender Based Violence Prevention. This class examines the intersection between Gender Based Violence and individual identities in relation to gender and sexual orientation on the relationship level. Topics cover include; but are not limited to, Introduction or Sexual Orientations, Gender Roles and Gender Construct, Sexual Health and Sex Positivity, and Healthy Relationships. Students will participate in small and large group discussions, online reflection journals, and evidence based trainings. At the end of the eight-week course student will be able to 1) Assess behaviors that put other at risk for violence, victimization, or perpetration (2) Assess behaviors that contribute to sexual health and sex positivity (3) Identify multiple ways that power and oppression are utilized through the social construct of gender and toxic masculinity (4) Identify multiple characteristics of healthy relationships and describe what is necessary for consent to be present in intimate partner relationships (5) Identify and apply strategies for safely intervening as an active bystander on the relationship level. Completion of three credits of LDST 301-LDST 304 will fulfill KU Core Goal 3S. Prerequisite: LDST 301.

LDST 303. Prevention is Possible: Gender Based Violence Prevention. 0-1 Credits. S
This class is the third in a series of four addressing Gender Based Violence Prevention. This class examines the critical role social justice plays in the prevention of Gender Based Violence on the community level. Topics cover include; but are not limited to, Introduction to Social Justice, Cultural Humility, Systems of Oppressions, and Primary Prevention as Activism. Students will participate in small and large group discussions, online reflection journals, and evidence based trainings. At the end of the eight-week course student will be able to 1) Assess behaviors that put other at risk for violence, victimization, or perpetration (2) Identify and apply strategies for safely intervening as an active bystander on the relationship and community level (3) Identify multiple ways that power and oppression is impacted by individual identity (4) Contribute to gender based violence prevention on the community level. Completion of three credits of LDST 301-LDST 304 will fulfill KU Core Goal 3S. Prerequisite: LDST 302.

LDST 304. ACTivist: Gender Based Violence Prevention. 0-1 Credits. S
This is the final class in a series of four addressing Gender Based Violence Prevention. This class examines Gender Based Violence prevention through a Social Justice Frame Work and the Socioecological Model on the community and societal level. Topics cover include; but are not limited to, Social Justice Frame Work, Socioecological Model, Evidence Based Primary Prevention, and Accountability. Students will participate in small and large group discussions, online reflection
LDST 320. How to Plan (Almost) Anything: Event Development and Management. 3 Credits. S
This course is designed to provide an introduction to the principles of special event planning and management. Students will gain foundational concepts and professional skills through researching, planning, coordinating, marketing, management, and evaluation of special events. This course will develop student skills necessary to lead and manage in an ethically, environmentally, economically, and socially sustainable way. By utilizing the adaptive leadership model, students will analyze core objectives of event planning, while experimenting with smart risks and disciplined assessment. Essential topics will include event planning and coordination, sponsorship, negotiations, marketing, communications, customer service, vendor management, volunteer management, crisis risk management, and event evaluation.

LDST 420. Communication, Leadership, and Conflict Management. 3 Credits. S
This course introduces students to theories of conflict management from a variety of academic perspectives and the role leadership plays in managing conflict across multiple contexts. Students will learn how to successfully assess and command situations and effectively resolve interpersonal, organizational, and systemic conflict while doing the work of leadership. (Same as COMS 415.)

LDST 431. Communication and Leadership. 3 Credits. S
This course provides an overview of the role of communication in leadership in a variety of contexts, including: interpersonal, small group, intercultural, organizational, and public sphere. It will include theoretical and experiential approaches to effective leadership communication. Prerequisite: LDST 200, LDST 201, or LDST 203.

LDST 460. Study Abroad Topics in Leadership Studies. 1-6 Credits. S
This course is designed to enhance international experience in topic areas related to Leadership studies at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

LDST 470. Independent Study in Leadership Studies. 1-6 Credits. S
This course engages students in an investigation of a special topic or project selected by the student with advice, approval, and supervision of a Leadership Studies instructor. Such study may take the form of special research, individual reports and/or conferences. Prerequisite: Permission of Instructor, LDST 201, LDST 202.

LDST 480. Internship in Leadership Studies. 1-6 Credits. S
Students complete leadership-centered fieldwork in an organization related to their career goals. Criteria for the organizations and work assignments suitable for internship credit are available through the Institute for Leadership Studies. An internship plan is developed with the field supervisor and internship faculty adviser. Reports and meetings are required. Prerequisite: Permission of Instructor.

LDST 490. Special Topics in Leadership Studies: ______. 3 Credits. S
This course is designed for the study of special topics in leadership studies. Course content addresses major topics and specialized issues in the field and topics change as needs and resources develop. May be repeated for credit if the content differs. Prerequisite: Permission of Instructor.

LDST 500. Directed Readings in Leadership Studies. 1-6 Credits. S
This course is designed for directed readings in selected areas of Leadership Studies. Individual and supervised readings address major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Permission of Instructor.

LDST 520. Leadership Ethics. 3 Credits. S
Through collaboration, discussion, case study, and course readings, Leadership Ethics familiarizes students with various theoretical perspectives of ethical decision making and the ethics-guided behavior essential for competent leadership. Upon completion, students will understand a variety of ethical perspectives for the prescription of action in a leadership context, apply a variety of ethical perspectives to the choice and evaluation of action in leadership work, and recognize the significance of considering multiple ethical perspectives in both leadership and broader contexts. Prerequisite: LDST 202.

LDST 532. Leadership Studies Practicum. 3 Credits. S
Students simultaneously complete a 1-hour seminar in equity-centered leadership and a 2-hour supervised, direct, community involvement project in which they apply leadership knowledge, tools, and skills to a real world environment. Written assignments, journal reflections, and group discussions are used to record and assess learning. Prerequisite: LDST 201 and admission to the Leadership Studies minor.

LDST 535. Seminar in Leadership Strategies and Applications. 3 Credits. S
This seminar serves as the capstone course for the Leadership Studies minor. It includes advanced readings on leadership theory and practice, as well as major written and applied projects in which students integrate and demonstrate what they have learned in the program. Prerequisite: LDST 201, or LDST 431, and admission to the Leadership Studies minor.

LDST 690. Special Topics in Leadership Studies: ______. 3 Credits. S
This course is designed for the study of special topics in Leadership Studies. Course content addresses major topics and specialized issues in the field and topics change as needs and resources develop. May be repeated for credit of the content differs. Prerequisite: Permission of instructor.

LDST 695. Advanced Special Topics in Leadership Studies: ______. 3 Credits. S
This course is designed to take advantage of special competence by an individual faculty member in Leadership Studies. Course content addresses timely topics and relevant issues in the field and topics change as needs and resources develop. May be repeated for credit of the content varies. Prerequisite: Permission of instructor.

LDST 700. Introduction to Graduate Studies. 3 Credits.
This course is designed to prepare students accepted into the Master of Arts in Leadership in Diversity and Inclusion program for further graduate studies through a series of workshops, experiential learning opportunities, lecture, discussion, research assignments, and peer collaboration. Upon completion, students will have a better understanding of the expectations of graduate education as well as campus resources, and networking opportunities designed to support degree work. Students will develop their
academic skill set by focusing on scholarly writing, oral communication/ presentation, research and information literacy, critical thinking, and argumentation. Prerequisite: Permission of Instructor.

LDST 705. Professionalization Seminar in Leadership Studies. 3 Credits.
This course is designed to cultivate professional habits, perspectives, and identities for graduate students primarily in the humanities and social science fields, but is open to students from all fields. The course focuses on preparation for career paths outside of higher education and based in work around Leadership in Diversity and Inclusion in the United States. Prerequisite: Graduate standing.

LDST 710. History and Theory of Leadership Studies. 3 Credits.
Theoretical foundations in leadership, organizational decision making, and communication will enhance students' development of expertise in assessing organizational and systems issues, and facilitating unit-, organization-, and system-wide improvements. Traditional approaches to leadership, organizing and communicating are contrasted with emerging approaches that promote sensitivity to diverse organizational cultures, systems, and populations. Through examination of theoretical perspectives, the student will develop an ability to integrate the contributions of different points of view and ways of thinking crucial to effectively assess, design and lead high performing organizations in a dynamic world. Contexts discussed will include for-profit, not-for-profit, healthcare, community, and military organizations. Prerequisite: Graduate standing.

LDST 720. Leadership Ethics. 3 Credits.
This course establishes a theoretical groundwork with readings and discussions that will familiarize students with five perspectives on ethical decision making and behavior as well as the essential competencies of leadership. For each of those perspectives, students will engage in reflections, collaborative case studies, and debates based on a case in point approach as well as a single-authored analysis of a selected leadership case. Prerequisite: Graduate Standing.

LDST 730. Managing the Work of Leadership. 3 Credits.
Through webinars and case in point pedagogy, this course prepares students to manage the day to day communicative and executive functions necessary for doing the work of leadership. Topics will include crisis management, stakeholder engagement, speech writing, fundraising, image management, and professionalization. Prerequisite: Graduate standing.

LDST 740. Leadership and Power. 3 Credits.
Leadership and power often are confused and this misunderstanding can lead to members of oppressed groups dismissing their own leadership potential. Through reading, reflective writing, and engaged discussion, this course will help students understand power and leadership as distinct concepts that occasionally intersect. Within their various systems, people continuously perceive, encounter, and work within different power dynamics. Thus students will learn about historical and culturally diverse understandings of power, the ethical responsibilities of power, the dangers of misuse of power, and doing the work of leadership with (and without) power. Prerequisite: Graduate standing.

LDST 760. Leadership and Communication. 3 Credits.
This course focuses on intra- and inter-personal communication, supporting students to: develop listening and empathy skills; make clear and specific requests; and express feelings and needs in a way that does not imply judgment, criticism, blame, or punishment. Learning this process involves working collaboratively through small group practice, pair shares, and teamwork to master the skills. A collaborative education approach is employed throughout the course, reinforcing learning, and providing students with confidence and competence to resolve conflict and handle challenging communication. Students critique one another's work, present feedback and suggestions, and collectively develop aptitude for successful work environments and personal relationships. Prerequisite: Admission to a graduate program or graduate certificate or instructor permission.

LDST 770. Independent Study in Leadership Studies. 1-3 Credits.
This course engages students in a graduate-level investigation of a special topic or project selected by the student with advice, approval, and supervision of a Leadership Studies instructor. Such study may take the form of special research, individual reports and/or conferences. Prerequisite: Permission of instructor.

LDST 800. Directed Readings in Leadership Studies. 1-3 Credits.
This course is designed for graduate level directed readings in selected areas of Leadership Studies. Individual and supervised readings address major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Permission of instructor.

LDST 850. Leadership in Diversity and Inclusion Capstone. 1-3 Credits.
This course provides students an opportunity to integrate and synthesize the interdisciplinary knowledge they have gained in their graduate learning, combining self assessment and reflection with a guided project to create a final portfolio. Students will work closely with their faculty committee to design an experience that makes relevant connections across disciplines represented within the degree program and applies this knowledge to a new setting or complex problem. Prerequisite: Graduate standing. Instructor Consent.

Jewish Studies Courses

HEBR 110. Elementary Modern Hebrew I. 5 Credits. U F1
A beginning course in modern Hebrew. Essentials of grammar, syntax and conversational practice; elementary reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam.

HEBR 120. Elementary Modern Hebrew II. 5 Credits. U F2
A continuation of HEBR 110. Note Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 110.

HEBR 177. First Year Seminar: _____ . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hebrew. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HEBR 200. Elementary Studies in Modern Hebrew. 3 Credits. H
This course is designed to help prepare students for the intermediate level of Modern Hebrew. Not open to native speakers of Hebrew. Does not count toward the JWSH minor or major. Prerequisite: HEBR 110 or equivalent. Consent of instructor.

HEBR 210. Intermediate Modern Hebrew I. 3 Credits. U F3
Further development of language skills: listening comprehension, oral efficiency, intermediate grammar and syntax, reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 120.

HEBR 220. Intermediate Modern Hebrew II. 3 Credits. U F4
A continuation of HEBR 210. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 210.

HEBR 340. Advanced Modern Hebrew I. 3 Credits. U FP
Advanced study of Modern Hebrew. This course is designed to strengthen linguistic skills, enrich vocabulary, and further the study of grammar and syntax. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or permission of the instructor.

HEBR 350. Advanced Modern Hebrew II. 3 Credits. U FP
Continued advanced study of modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 340 or permission of the instructor.

HEBR 395. Study Abroad Topics in Hebrew: ____. 3-6 Credits. H
This course is designed for the study abroad of special topics in Hebrew at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

HEBR 410. Studies in Modern Hebrew Literature. 3 Credits. H FP
An introduction to Hebrew literature from the nineteenth century to the present day. The course emphasizes the development of basic interpretive skills and the understanding of basic literary movements, genres, and concepts. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent.

HEBR 420. Studies in Modern Hebrew. 3 Credits. U FP
This course is designed to help students achieve fluency in speaking, listening, and writing Modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent.

HEBR 490. Independent Study. 3 Credits. U
Intensive reading or research under faculty supervision. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent.

Jewish Studies Courses

JWSH 107. Jews, Christians, Muslims. 3 Credits. HR H
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken JWSH 109. (Same as REL 107.)

JWSH 109. Jews, Christians, Muslims, Honors. 3 Credits. HR H
A basic introduction to the major religious traditions in the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken JWSH 107 or REL 107.

JWSH 120. Exploring the Jewish Experience. 1 Credits. H
This course introduces students to basic aspects of Jewish studies, including Jewish history, Judaism and theology, philosophy and science, and culture. Not open to students who have completed JWSH 400 or JWSH 610.

JWSH 124. Understanding the Bible. 3 Credits. HR H
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as REL 124.)

JWSH 125. Understanding the Bible, Honors. 3 Credits. HR H
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as REL 125.)

JWSH 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Jewish Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

JWSH 300. Topics in Jewish Studies: ____. 3 Credits. H
Examination of special topics in Jewish Studies. May be repeated if topic varies.

JWSH 305. Language, Gender, and Sexuality. 3 Credits. S
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as ANTH 325, GIST 303, SLAV 305 and WGST 335.)

JWSH 311. Narratives of Jewish Life. 3 Credits. HL H
The course focuses on the narratives through which Jews made sense of their lives under the impact of the forces of modernity, beginning in the "old world," and moving through the 19th century and into the 20th. The goal is to analyze how the imagination of Jewish writers was captured by the changes in social structures such as new educational, residential and occupational opportunities, leading to increased interactions with the gentile society. Students read and discuss literary works based in the shtetl in revolutionary Russia, and in America. We will also look at memoirs and letters written by ordinary Jews. All assigned texts will be in English.

JWSH 315. The Spanish Inquisition. 3 Credits. H
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including the use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and SPAN 302.)

JWSH 316. Jews and Slavs in Eastern Europe. 3 Credits. H
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups has shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. "Jews and Slavs" examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as SLAV 318.)

JWSH 320. The Bible Then and Now. 3 Credits.
An introduction and survey of the history and interpretation of the Jewish and Christian bibles from their first formation to the present day. Students will explore the way the text, interpretation and format of the Bible have adjusted over time to accommodate religious, political, social and technological changes. Class will occasionally meet in the university's rare book collection to study rare bibles. (Same as REL 320.)
JWSH 323. The Jewish World of Jesus. 3 Credits. H
An introduction to the figure of Jesus in his ancient Jewish context. What was Jewish life like in Jesus's time? What did the early Jesus movement share with other forms of Judaism, and how did it differ? Evidence from the New Testament, the Dead Sea Scrolls, and other textual and archaeological sources will be used to explore the first-century Jewish society of which both Jesus and the first Christians were a part. (Same as REL 323.)

JWSH 325. Introduction to Judaism. 3 Credits. H
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as REL 325.)

JWSH 326. The Talmud: Its Origins, Nature, and Evolution. 3 Credits. H
This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as REL 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of the instructor.

JWSH 327. Jewish Secular Culture. 3 Credits. HL H
By examining the modern concept of Yiddishkeit (Jewishness), this course explores Jewish secularism as a set of modern intellectual, literary, and cultural practices that redefined the relationship between the secular and religious in literature, music, theatre, art, humor, and foodways. This interdisciplinary course draws on theoretical approaches from history, cultural studies, religious studies, folklore, and linguistics to examine the different secularizing cultural practices of the Jews in Central and Eastern Europe, as well as in North America.

JWSH 329. Israeli-Palestinian Conflict: An Introduction. 3 Credits. S
This course provides an introduction to the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. (Same as GIST 329 and HIST 482.)

JWSH 330. Mystical Tradition in Judaism. 3 Credits. H
Mystical experiences and supernatural encounters in Jewish texts and tradition: Dybbuks and demons, angels and Elijah; from ecstatic enlightenment to succumbing to satan - Jewish texts and tradition are riddled with the arcane, the occult and the mystical. This course will mine the sources for a deep exploration of these aspects of Judaism that are most often obscured by "normative" teachings and practices, yet remain deeply embedded in the customs and beliefs of Jews around the world. (Same as REL 329.)

JWSH 333. History of Jewish Women. 3 Credits. H
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as HIST 335, WGSS 335.)

JWSH 336. Jewish American Literature and Culture. 3 Credits. H
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as ENGL 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

JWSH 338. Languages of the Jews. 3 Credits. H
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as LING 338.)

JWSH 339. Languages of the Jews, Honors. 3 Credits. H
Honors version of JWSH 338 or LING 338. Languages of the Jews. Prerequisite: Membership in the University Honors Program or consent of instructor. (Same as LING 339.)

JWSH 341. Hitler and Nazi Germany. 3 Credits. H/W
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as HIST 341.)

JWSH 342. Medieval to Early Modern Jewish History. 3 Credits. H
This course surveys the political, economic, social, and cultural experience of Jews in the medieval and early modern periods, from the sixth through the seventeenth centuries. It examines Jewish life in the Mediterranean diaspora, the Iberian Peninsula, and Christian Europe and considers the impact of Jewish communities on the non-Jewish host societies in which they settled.

JWSH 343. The Holocaust in History. 3 Credits. H
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as HIST 343.)

JWSH 344. Modern Jewish History. 3 Credits. H
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as HIST 344.)

JWSH 345. Theatre and Genocide. 3 Credits. H
This seminar focuses on theatre art production under extreme situations. Do artists have a moral obligation to bear witness to genocide and war? Lectures, historical and theoretical readings, play texts, dance performance, and films provide students with a context within which to explore such issues as: the function of the performing arts under duress; the artist's role under and in response to atrocity; and how art aids us to explore the human condition. Class discussion, readings, and individual projects. This course is offered at the 300 and 600 level with
additional assignments at the 600 level. Not open to students with credit in JWSH 645 or THR 645. (Same as THR 345.)

**JWSH 346. The Jewish Experience in America. 3 Credits.**
This course surveys the history of American Jewry from the 17th to the 20th centuries through overlapping perspectives of economics, politics, ethnicity, culture, and gender. The first part of the course examines the three waves of Jewish immigration - Sephardic ("Spanish-Portuguese"), West-Ashkenazic ("German"), and East Ashkenazic ("Russian") - that took place between the 1600s and World War I: their specific European roots and American circumstances; the different ways in which each group adapted to, interacted with, shaped and was shaped by American life, constructed ideas of community and identity, and influenced those who came later. The second part of the course explores the genesis of an integrated and distinctive modern American "Jewishness" that emerged after World War I and reached its zenith in the 1960s. Informed by interwar and postwar social, economic and demographic transformation and critical domestic and international political developments, this process involved the reconstruction of Jewish identity and community based on the conscious blending of Jewish values, traditions, rituals, and institutions with American notions of personal happiness and success, family, domesticity and upward mobility and the conscious broadening of Jewish concepts of philanthropy and activism based on expanded notions of American Jewry's social and political mission in the United States and the world.

**JWSH 347. Jewish Ethics. 3 Credits. HR H**
In this course we will explore the variety of ways that Judaism and Jewish people have approached ethics, both theoretically and practically. Our investigation will consider the evolution of approaches across time, and variations among different communities, as well as examining how the religious tradition has, at times, differed from actual practice among Jewish people. We will look at theological, philosophical, and sociological elements that inform Jewish ethics, as well as delving into specific issues in Jewish ethics, including autonomy vs. communal norms; business and labor practices; saving a life vs. taking a life; the treatment of animals; marriage and family matters; medical ethics; universalism vs. particularism, and more.

**JWSH 349. Antisemitism: A Long History. 3 Credits. H/W**
This course surveys the genesis, evolution and persistence of antipathy towards Jews and Judaism from late antiquity through the twentieth century, exploring its connections to religious and secular ideologies and its changing nature over time, place, and culture. Using primary source documents, religious and secular art and literature, the mass media and popular expression, the course examines how antisemitism was articulated and implemented, how Jews and Judaism were perceived and represented, and how Jews and Judaism responded to antisemitism. (Same as HIST 349.)

**JWSH 350. Contemporary Jewish Identities. 3 Credits. SC H**
This course explores the variety of ways in which American Jews create Jewish identities as individuals and groups. It traces the emergence of the various current divisions within Judaism: Reform Judaism (which by definition, implies Orthodoxy), then Conservative Judaism, and then the later development of Reconstructionist Judaism. The course also explores other contemporary options for being Jewish: cultural Jews, secular Jews, unaffiliated Jews, religious Jews, and gay or lesbian or transgendered Jews.

**JWSH 361. Jewish Film. 3 Credits. HL H**
An examination of the cultural history of the Jews through films that explore Jewish themes, including but not limited to: issues of tradition and modernity, religion and secularism, immigration, gender, Zionism, anti-Semitism, and the Holocaust. Films studied may be in English and in foreign languages (with English subtitles) like Yiddish, Hebrew, and Russian.

**JWSH 371. Archaeology of Ancient Israel. 3 Credits. H**
Archaeology and art, sites and monuments of ancient Israel from the Neolithic period to Late Roman. Special topics will include the peoples of the region, nomadism and urbanization, the kingdoms of Israel, Second Temple Period, Qumran, Roman Jerusalem, and the creation and development of the synagogue. (Same as CLSX 371.)

**JWSH 382. Jerusalem Through the Ages. 3 Credits. H**
As a prominent site in the religious and cultural histories of Judaism, Christianity, and Islam, Jerusalem is uniquely situated as one of the world's most sacred cities. For more than 3,000 years, this city has been a focal point of religious and political activity. Through the critical reading of historical and religious texts, and archaeological data, this course will explore the historical development of Jerusalem as a sacred place in Judaism, Christianity, and Islam. (Same as CLSX 382, HIST 382 and REL 382.)

**JWSH 387. Enemies of Ancient Israel. 3 Credits. H**
An exploration of the social world of the Bible through its antagonists and their cultures. We will examine the so-called "Bad Guys of the Bible" using the lenses of history, archaeology, geography, and religion to better understand their cultures and how they are portrayed in the biblical text. (Same as HIST 381 and REL 387.)

**JWSH 395. Study Abroad Topics in Jewish Studies: _____ 3-6 Credits. H**
This course is designed for the study of special topics in Jewish Studies at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

**JWSH 400. Foundations of Jewish Studies. 3 Credits. H**
This course introduces students to basic aspects of Jewish studies, including Jewish history, Judaism and theology, philosophy and science, ethnicities and narratives, languages, customs and the arts. Special attention will be given to various career options available to students of Jewish studies. Not open to students who have completed JWSH 120 or JWSH 610.

**JWSH 410. Israel: From Idea to State. 3 Credits. S**
The course focuses on understanding Israel as a Nation-State of the Jewish people and its challenges regarding the balance between being a Jewish and a Democratic state. In the first part, the course surveys Jewish history in the 19th century, the birth of Zionism, and statehood's progress through the British Mandate. In the second part, students learn about Israel's major contemporary issues by discussing political, ethnic, national, economic, gender, and religious divides and their relation to the pre-statehood period.

**JWSH 412. Mandatory Palestine: 1920-1948. 3 Credits. S**
A review of the thirty-year history of the British Mandate over Palestine, with a focus on the successful nation building by the Jewish people and the demise of the Palestinian project in 1948.

**JWSH 414. Israel/Palestine: The War of 1948. 3 Credits. S**
The war of 1948 shaped the history of the modern Middle East more than any other single event. Issues that will be discussed include the participating parties, the efforts of the international community, the establishment of Israel, the division of Palestine, and the continuing problem of Palestinian refugees.

**JWSH 416. Israel in the First Decade. 3 Credits. S**
The course focuses on the formative period of the State of Israel from sociological, economic, religious, and cultural perspectives.

**JWSH 420. Politics and Government in Israel. 3 Credits. S**
The course is an introduction to the Israeli system of government and its complexities, from a comparative perspective. The course aims to deal with the processes and critical issues that characterize the Israeli political system, as well as dilemmas and conflicts that are part of it since the early days of statehood until today.

**JWSH 422. Topics in Israeli Society:** ______. 3 Credits. U
This course explores the social interconnections and interactions of the various cultures, religions, and ethnic identities in Israel.

**JWSH 426. Polls and Public Opinion in Israel.** 3 Credits. S
An examination of public opinion in Israel, polls, and their effect on election results, policy making, and politics -- from a comparative perspective. We will discuss the validity of public opinion polls as a measurement tool, its advantages and disadvantages, and its success and failure at predicting election results.

**JWSH 434. Arab-Palestinian Society, Culture and Politics.** 3 Credits. S
This course introduces students to the study of Arab-Palestinians in Israel, by exploring the construction of Palestinian identity, their social and political structures, their culture, relations with Israeli Jews and the status of integration vs segregation within Israel.

**JWSH 440. International Relations of the Middle-East.** 3 Credits. S
An overview of the politics and the governmental systems of Middle Eastern nations, including the historic, religious, ideological, economic and cultural forces that shape government policies and social movements.

**JWSH 445. Local Self-Governments in Israel.** 3 Credits. S
An introduction to the fundamentals of local governments in Israel and their relationships, political, legal, and economic, to the central government.

**JWSH 490. Directed Study in Jewish Studies.** 3 Credits. H
Intensive reading or research under faculty supervision. Prerequisite: Consent of instructor.

**JWSH 491. Directed Study in Jewish Studies, Honors.** 3 Credits. H
Honors version of JWSH 490. Intensive reading or research under faculty supervision. Prerequisite: Membership in the University Honors Program or consent of instructor.

**JWSH 525. Jews and Christians.** 3 Credits. H/W
This course examines the ways Jews and Christians have interacted with and characterized one another at various points in their histories. Special emphasis is placed on the gradual separation of the two religious traditions in the 1st-4th centuries. (Same as REL 525.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor.

**JWSH 562. Judaism and Political Theology.** 3 Credits. H
A consideration of the relationship between religion and politics in Judaism, and of the relevance of Judaism to broader discussions about religion and politics. Topics will include sovereignty, secularization, pluralism, democracy, and revolution. (Same as REL 572.) Prerequisite: At least one course in Jewish Studies or Religious Studies, or permission of instructor.

**JWSH 590. Research Methods.** 3 Credits. U
This seminar will introduce students to appropriate approaches and methods, especially in the Humanities and Social Sciences, for conducting research in Jewish Studies and/or in Israel Studies. Examples will draw on many disciplines, especially in the humanities and social sciences. Students will prepare a research proposal and investigative methodology. Prerequisite: Any JWSH course 300 or above or permission of the instructor.

**JWSH 600. Advanced Topics in Jewish Studies:** ______. 3 Credits. H
Examination of advanced topics in Jewish Studies. May be repeated if topic varies. Prerequisite: Consent of instructor.

**JWSH 601. Senior Seminar in Jewish Studies.** 3 Credits. H
Investigation of topics related to Jewish studies from an interdisciplinary perspective: Jewish culture, history, and religion. The course focuses on research methods and intensive writing. Prerequisite: Open only to Jewish studies majors. Suggested for students with senior standing.

**JWSH 610. Foundations of Jewish Studies.** 3 Credits. H
This course introduces students to basic aspects of Jewish studies, including Jewish history, Judaism and theology, philosophy and science, ethnicities and narratives, languages, customs and the arts. Special attention will be given to various career options available to students of Jewish studies. Not open to students who have completed JWSH 120 or JWSH 400. Prerequisite: Graduate status.

**JWSH 645. Theatre and Genocide.** 3 Credits.
This seminar focuses on theatre art production under extreme situations. Do artists have a moral obligation to bear witness to genocide and war? Lectures, historical and theoretical readings, play texts, dance performance, and films provide students with a context within which to explore such issues as: the function of the performing arts under duress; the artist's role under and in response to atrocity; and how art aids us to explore the human condition. Class discussion, readings, and individual projects. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to student with credit in JWSH 345 or THR 345. (Same as THR 645.) Prerequisite: Graduate standing or consent of instructor.

**JWSH 650. Service Learning in Jewish Studies.** 3 Credits. S
This course, to be taken in the junior or senior year, is designed to give students the opportunity to apply the knowledge, concepts, and ideas gained in courses in Jewish studies to real-life situations in appropriate agencies and organizations. Open to students in the Jewish Studies program. Prerequisite: Permission of instructor.

**JWSH 661. Regimes in the Middle-East and North Africa.** 3 Credits. S
Using governmental case-studies in North Africa and the Middle East, this course will examine basic definitions and behaviors of liberal democracies, dictatorships, and hybrid regimes, the transitions between them, and the strategies they (and their leaders) use to stay in power. Prerequisite: JWSH 440 or permission of instructor.

**JWSH 695. Study Abroad Advanced Topics:** ______. 3 Credits. U
Advanced study abroad topics in Jewish and Israel studies. Prerequisite: Any JWSH course 300 or above or permission of the instructor.

**JWSH 700. Topics in Jewish Studies:** ______. 3 Credits.
A study of one or more selected topics in Jewish studies. Topics can be on Jewish religion, history, culture, languages, or Israel studies. Repeatable for credit if topic varies. Prerequisite: Any JWSH course 300 and above, or equivalent by permission of instructor.

**JWSH 729. Research in the Israeli-Palestinian Conflict.** 3 Credits.
This course guides students in conducting research on any aspect of the Israeli-Palestinian conflict, such as its history from the Ottoman period to the present day, the social and political effects on Israelis and Palestinians, various narratives, and international responses. Prerequisite: JWSH 329 or JWSH 410 or JWSH 414 or JWSH 412 or JWSH 434 or permission of the instructor.
Jewish Studies Courses

YDSH 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Yiddish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

YDSH 300. Studies in Yiddish: _____ 3 Credits. H
Examination of special topics in Yiddish. May be repeated if topic varies.

YDSH 410. Studies in Modern Yiddish Literature. 3 Credits. H
An introduction to Yiddish literature from the nineteenth century to the present day. The course emphasizes the development of basic interpretive skills and the understanding of basic literary movements, genres, and concepts. Prerequisite: Instructor permission.

YDSH 490. Independent Study. 1-3 Credits. U
Intensive reading or research under faculty supervision

Global & International Studies Courses

KQKL 110. Elementary Kaqchikel Maya I. 3 Credits. U F1
An orientation to Kaqchikel Maya language and culture for beginning students. Includes elements of grammar, conversation, and composition. Kaqchikel is the first language of approximately 500,000 people of highland Guatemala and one of roughly 30 Mayan languages. This course is offered at the 100 and 600 level with additional assignments at the 600 level. Not open to students with credit in KQKL 600.

KQKL 114. Elementary Kaqchikel Maya II. 3 Credits. U F2
Continuation of KQKL 110. Prerequisite: Completion of KQKL 110 or equivalent.

KQKL 230. Intermediate Kaqchikel Maya I. 3 Credits. U F3
Continuation of KQKL 114. Prerequisite: Completion of KQKL 114 or equivalent.

KQKL 234. Intermediate Kaqchikel Maya II. 3 Credits. U F4
Continuation of KQKL 230. Prerequisite: Completion of KQKL 230 or equivalent

KQKL 350. Advanced Kaqchikel Maya I. 3 Credits. FP
Advanced study of Kaqchikel Maya, continuation of KQKL 234. Prerequisite: KQKL 234 or equivalent.

KQKL 360. Advanced Kaqchikel Maya II. 3 Credits.
Advanced study of Kaqchikel Maya, continuation of KQKL 350. Prerequisite: Completion of KQKL 350 or equivalent.

KQKL 500. Directed Studies in Kaqchikel Maya. 3 Credits.
Advanced work in Kaqchikel language and culture. May be taken more than once. Prerequisite: KQKL 360 or equivalent.

KQKL 600. Elementary Kaqchikel Maya I. 3 Credits. U
An orientation to Kaqchikel Maya language and culture for beginning students. Includes elements of grammar, conversation, and composition. Kaqchikel is the first language of approximately 500,000 people of highland Guatemala and one of roughly 30 Mayan languages. This course is offered at the 100 and 600 level with additional assignments at the 600 level. Not open to students with credit in KQKL 110. Prerequisite: Instructor permission.

Global & International Studies Courses

LAC 100. Latin American Culture and Society. 3 Credits. SC S
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives made possible by interdisciplinary collaboration and provides students with a basic knowledge base for understanding Latin America today. (Same as HIST 124.)

LAC 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin Area and Caribbean Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

LAC 300. Interdisciplinary Themes in Latin American Studies. 3 Credits. U
This course offers an in-depth examination of several key themes in Latin American Studies. Emphasis is placed on exploring the utility of interdisciplinary methods and on becoming familiar with the theoretical framework that underpins the field. Prior completion of LAC 100 recommended.

LAC 302. Topics in Latin American Area Studies: _____ 1-3 Credits. U
Investigation of special topics on Latin America at the undergraduate level.

LAC 310. Topics in LAC - Anthropology: _____ 3 Credits. W
A Latin American and Caribbean topics course with content related to the Anthropology disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 311. Topics in LAC - History: _____ 3 Credits. U
A Latin American and Caribbean topics course with content related to the History disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 312. Topics in LAC - Spanish American Literature and Culture: _____ 3 Credits.
A Latin American and Caribbean topics course with content related to the Spanish American Literature and Culture disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 313. Topics in LAC - Brazilian Literature and Culture: _____ 3 Credits. U
A Latin American and Caribbean topics course with content related to the Brazilian Literature and Culture disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 314. Topics in LAC - Latino and Caribbean Literature: _____ 3 Credits. U
A Latin American and Caribbean topics course with content related to the Latino/a and Caribbean Literature disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 315. Topics in LAC - Film Music Arts: _____ 3 Credits. U
A Latin American and Caribbean topics course with content related to the Film, Music, Arts disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 316. Topics in LAC - Geography and Environment: _____ 3 Credits. U
A Latin American and Caribbean topics course with content related to the Geography and Environment disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 317. Topics in LAC - Politics, Society, Business and Economy: _____ 3 Credits. U
A Latin American and Caribbean topics course with content related to the Politics, Society, Business and Economy disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 318. Topics in LAC - Transatlantic and Transnational: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Transatlantic and Transnational disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 319. Topics in LAC - Methodology and Theory: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Methodology and Theory disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 320. Modern Latin America. 3 Credits. H
A survey of Latin America since the 1800s. Students will examine the emergence of national identities and the processes of modernization and globalization in the region. The course also examines how race, social structures, and politics evolved after independence in the region, giving particular attention to the legacies of colonialism. Course readings and lectures highlighting unique national experiences and continuities across the region. This course is offered at the 100 and 300 level with additional assignments at the 300 level. Not open to students who have taken HIST 121. (Same as HIST 315.)

LAC 332. Language and Society in Latin America. 3 Credits. W
This course examines the diversity of languages and cultures that make up Latin America and the Caribbean, including the influence of colonial Spanish and Portuguese as well as the many Indigenous, Afro-Caribbean, and Creole languages and cultures that can be found in Latin America. Attention is paid to the multifaceted relations between language and ethnic group, as well as to dynamics of gender and social class within Latin American cultures. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in LAC 632.

LAC 334. Indigenous Traditions of Latin America. 3 Credits. NW S/W
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAC 634. (Same as ANTH 379.)

LAC 499. Honors Course in Latin American Studies. 3 Credits. H
Intensive study and research under faculty direction. Open to students wishing to graduate with honors in Latin American Studies and having a grade point average of at least 3.5 in Latin American Studies and at least 3.25 overall. Requires an interdisciplinary project concerning a specific topic involving at least two disciplines. Must be directed by a faculty member in Latin American Studies, approved by the Center Associate Director, and defended before a committee of at least three faculty members. To earn departmental honors, a student must take the course for two semesters (with a minimum grade of B the first semester, and an A the second).

LAC 500. Directed Study in Latin American Area Studies. 1-3 Credits. U
Independent study and directed reading on special topics.

LAC 501. Multilingualism and Multiculturalism in Latin America. 3 Credits. H
Examines the sociolinguistic issues of multilingual countries in Latin America from an interdisciplinary perspective. Topics include but are not limited to linguistic inequality, the language of politics, language and education, urban and rural linguistic interaction, and indigenous and creole languages. Prerequisite: A liberal arts course with Latin American content.

LAC 505. U.S. Latino and Latin American Film and Literature. 3 Credits. H
This course follows the development of U.S. Latino and Latin American cinema from its origins to the present and its relationship with literary discourse. U.S. Latino/Latin American cinema can be seen as a specific practice that cannot be reduced in all its manifestations to the institutional mode of production of the dominant Hollywood model. The course examines the creation of a national cinema that seems to be more dependent on a literary canon. Knowledge of Spanish is not required.

LAC 510. Topics in LAC - Anthropology: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Anthropology disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 511. Topics in LAC - History: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the History disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 512. Topics in LAC - Spanish American Literature and Culture: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Spanish American Literature and Culture disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 513. Topics in LAC - Brazilian Literature: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Brazilian Literature and Culture disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 514. Topics in LAC - Latino and Caribbean Literature: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Latina/o and Caribbean Literature disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 515. Topics in LAC - Film Music Arts: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Film, Music, Arts disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 516. Topics in LAC - Geography and Environment: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Geography and Environment disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 517. Topics in LAC - Politics, Society, Business and Economy: ____. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Politics, Society, Business and Economy disciplinary group of the
Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

**LAC 518. Topics in LAC - Transatlantic and Transnational:** 3 Credits. U
A Latin American and Caribbean topics course with content related to the Transatlantic and Transnational disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

**LAC 519. Topics in LAC - Methodology and Theory:** 3 Credits. U
A Latin American and Caribbean topics course with content related to the Methodology and Theory disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

**LAC 550. Capstone in Latin American and Caribbean Studies.** 3 Credits. U
The capstone course in the major offers interdisciplinary approaches to a thematic topic or focus related to Latin America/ the Caribbean and contains substantial writing and independent research requirements. By the end of the class and culminating their study of the field at KU, students will be able to discuss the course topic from a variety of theoretical, methodological, and disciplinary perspectives. Prerequisite: Completion of at least 18 credits toward the LAA major, or permission of instructor.

**LAC 552. Foodways: Latin America.** 3 Credits. H
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. This class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HUM 552, and ISP 552.) Prerequisite: Upper division course on Latin America or permission of the instructor.

**LAC 556. Pre-Hispanic Mexico and Central America.** 3 Credits. NW
A survey of indigenous, Pre-Hispanic cultures of Mexico and Central America, including Olmecs, Teotihuacan, Mayas, Zapotes, Toltecs, and Aztecs. This course teaches how to interpret art, architecture, artifacts, and culture change in the context of iconography and symbols, metaphysical beliefs and ritual practices, crafts and technologies, trade and exchange, social inequality and conflict resolution, and the relationships among these cultures and their environments. (Same as ANTH 506 and HIST 571.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, Indigenous Studies, History, or permission of instructor.

**LAC 557. The Ancient Maya.** 3 Credits. S/W
An intensive examination of current scholarship on the ancient Maya civilization of Mexico and Central America. The course will consider Maya culture from its roots in early villages of the Preclassic period to the warring city-states of the Postclassic period. Topics will include settlement and subsistence systems, sociopolitical evolution, art and architecture, myth and symbolism, and Maya hieroglyphic writing. An important theme of the course will be the relevance of the Precolumbian Maya for understanding complex societies and contemporary Latin American Culture. (Same as ANTH 507.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, or Indigenous Studies, or permission of instructor.

**LAC 558. Ancient American Civilizations: The Central Andes.** 3 Credits. W
An archaeological survey of the ancient peoples of Peru and neighboring countries in South America. The origins of complex societies on the coast and in the Andean highlands will be reviewed with special consideration of the role of “vertical” environments in the development of Andean social and economic systems. Cultures such as Chavin, Moche, Nazca, Huari, Tiahuanaco, Chimú, and the rise of the imperial Inca state will be examined through artifacts, architectural remains, and ethnohistoric documents. (Same as ANTH 508 and HIST 572.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, History, or Indigenous Studies, or permission of instructor.

**LAC 559. Ancient Central America.** 3 Credits. NW
This course will examine the Precolumbian cultures of the region situated between Mesoamerica to the north and the Central Andes to the south, focusing principally on the countries of Honduras, Nicaragua, Costa Rica, Panama, and Colombia. Once regarded as an “Intermediate Area” on the peripheries of the ancient civilizations to the north and south, the area of southern Central America and northern South America is now recognized as a center of innovation from very remote times up until the Spanish Conquest. The archaeological remains of stone tools, pottery, jade carvings, gold and copper ornaments, and a wide variety of structures will be interpreted within the context of information on subsistence, settlement patterns, social organization and religious ideology. Issues of the relationships with populations of regions in major culture areas to the north and south will also be considered in detail. (Same as ANTH 509.) Prerequisite: ANTH 110 or ANTH 115.

**LAC 561. Indigenous Development in Latin America.** 3 Credits. S
Surveys the history of the development enterprise since WWII, examines the marginalization and impoverishment of Latin America’s indigenous peoples, and provides training to carry out projects for and with them to enhance their quality of life. Development is understood as not merely technological or economic, but also social, emotional, and educational. Students work in teams to design their own mock development project. A 3-credit non-obligatory companion course, Applied Anthropological Field School among the Ch’orti’ Maya, will follow in the intersession after each version of this course. (Same as ANTH 561.) Prerequisite: ANTH 100, ANTH 108, ANTH 160 or LAC 100; or consent of instructor.

**LAC 562. Mexamerica.** 3 Credits. SC
This class surveys the relations between Mexico and the U.S. as nation-states, and among Mexicans, Mexican Americans, and Anglo Americans (to a lesser extent other U.S. citizens) in historical perspective. Issues of sovereignty, national and ethnic identity, immigration, labor relations, popular culture, media, and transnational economics are covered. (Same as ANTH 562.) Prerequisite: ANTH 108 or ANTH 308 or ANTH 160 or ANTH 360 or LAC 100.

**LAC 577. The Andean World.** 3 Credits. H
The Andean environment is defined by its mountains, but includes all of the earth’s major biomes: from tropical rainforest to the world’s oldest and driest desert. These diverse landscapes have nurtured one of the most ancient and durable, yet diverse sets of Indigenous cultural lifeways. Most of the Andes was governed by a single power during the Inca and Spanish colonial eras, but the region is now divided between seven independent states with their own regional traditions. The Andean World has long been recognized as a laboratory for understanding the relations between nature and culture, and the tensions between tradition and revolutionary change. This course will examine the history of this region from a long-term perspective, from its indigenous roots to contemporary struggles over globalization and extractivism. (Same as EVRN 577, HIST 577 and ISP 577.) Prerequisite: Prior 300+ level course in related
discipline (ANTH, EEB, EVRN, HIST, LAC, SPAN, etc.) or permission of instructor.

LAC 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Credits. **S**
Teams of interdepartmental students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preferrence for admission. (Same as ANTH 587.)

LAC 602. Topics in Latin American Studies: ______ 1-3 Credits. **U**
Investigation of special topics on Latin America.

LAC 632. Language and Society in Latin America. 3 Credits.
This course examines the diversity of languages and cultures that make up Latin America and the Caribbean, including the influence of colonial Spanish and Portuguese as well as the many Indigenous, Afro-Caribbean, and Creole languages and cultures that can be found in Latin America. Attention is paid to the multifaceted relations between language and ethnic group, as well as to dynamics of gender and social class within Latin American cultures. Students will conduct independent research on non-dominant languages and cultures in Latin America. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in LAC 332. Prerequisite: Any previous LAC course.

LAC 634. Indigenous Traditions of Latin America. 3 Credits. **NW S/W**
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken ANTH 379 or LAC 334.

LAC 701. Interdisciplinary Seminar in Latin American Culture and Problems. 3 Credits.
An interdisciplinary seminar incorporating significant and pertinent materials from the fields of anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature. Required of all graduate students enrolled in the Master of Arts program in Latin American Area Studies. Prerequisite: LAC 710 (may be taken simultaneously with LAC 701 if both courses offered during same semester.)

LAC 702. Topics in Latin American Studies: ______ 3 Credits.
Investigation of special topics on Latin America. Topics are drawn from many disciplines within Latin American and Caribbean Studies. Course can be repeated for credit as the topic changes.

LAC 710. Research Design for International Area Studies. 3 Credits.
This course addresses the challenges for students engaged in graduate research projects and theses in an interdisciplinary and international context. The course will guide the students through the structures of research design processes for various epistemological approaches, and will assist students in formulating strong research questions, reviewing and situating their own work within the literature, working with the library and subject librarians, appropriating theory, and modeling writing conventions for research within their selected epistemological community. Students will also be exposed to a variety of research methods and will practice designing projects utilizing a select number of them. During the course of the semester, students will be working toward a plan for a substantial graduate research project. (Same as CEAS 710 and GIST 710.) Prerequisite: Consent of instructor.

LAC 800. Investigation and Conference. 1-2 Credits.
Investigation and research of interdisciplinary topics in Latin American Studies.

LAC 899. Thesis/Non-Thesis. 1-6 Credits.
Prerequisite: Consent of instructor.

Global & International Studies Courses

QUEC 110. Elementary Quechua I. 3 Credits. **U**
An orientation to Ecuadorian Quechua language and culture for beginning students. Includes elements of grammar, conversation, and composition. Quechua (a.k.a. Kechwa, Quichua, Kechua, Ketchwa, Khetcheua, or Runa Xiim) in its various forms is an indigenous language spoken by over six million people in Ecuador, Peru and Bolivia combined.

QUEC 114. Elementary Quechua II. 3 Credits. **U**
Continuation of QUEC 110. Prerequisite: QUEC 110 or equivalent.

QUEC 230. Intermediate Quechua I. 3 Credits. **U**
Continuation of QUEC 114. Prerequisite: QUEC 114 or equivalent.

QUEC 234. Intermediate Quechua II. 3 Credits. **U**
Continuation of QUEC 230. Prerequisite: QUEC 230 or equivalent.

QUEC 610. Directed Study in Quechua Language and Culture. 3 Credits. **H**
This course is intended for students seeking proficiency in Quechua beyond QUEC 234. Instructor will direct the student through readings and materials in Quechua that will add to the student's substantive knowledge of Quechua speakers and their cultures. May be taken multiple semesters for credit with varying content. Prerequisite: QUEC 234 or consent of instructor.

Liberal Arts & Sciences Courses

LA&S 108. Personal Numeracy. 3 Credits. **NM**
This course will provide the tools to help you understand and make decisions using data. You will learn the basics of human decision making and why relying on numerical data is an important component of good decisions. The class will also help you understand the basics of probability and statistics. This will include fundamental statistical concepts used in everyday decision-making as well as training to perform statistical tests. The class will conclude with applications of numeracy to make sound personal financial decisions regarding spending and borrowing and saving and investing. Throughout the course, you will learn to use Excel to perform calculations, analyze data and spending habits and develop a personal budget.

LA&S 110. Cherokee Language I. 5 Credits. **U**
Emphasizes the vocabulary of and fundamentals of reading and writing the Cherokee language. Students will have an opportunity to learn the language, beliefs, and religious practices of the Cherokee. Taught at Haskell Indian Nations University.

LA&S 120. Cherokee Language II. 5 Credits. **U**
Continuation of Cherokee Language I. Includes an intermediate level of vocabulary skill with increased emphasis on reading and writing. Taught at Haskell Indian Nations University. Prerequisite: LA&S 110.

LA&S 150. Academic Success Seminar. 1 Credits. **U**
This course provides students with the skills and resources necessary to improve their approach to their academic career. It is designed to help enhance students' time management and study skills as well as facilitate a connection with student success resources. Students and instructors work together in an interactive learning environment to create an academic foundation for success. Additional topics covered include: test preparation and anxiety; reading comprehension; procrastination; and memory and concentration. Recommended for students with less than a 2.5 GPA.

LA&S 172. Exploring Health Professions. 3 Credits. U
Students will have the opportunity to explore health care career pathways broadly and will look more thoroughly at specific pathways of interest through experiential learning activities. Class-time will include discovering the knowledge, skills, and attributes typically seen in health care professionals and the requirements for gaining admission to the various professional degree programs. The course will also discuss important ethical issues in health care and the future direction of the field. This course is designed for KU students who are interested in pursuing a health care career. This includes but is not limited to: medicine, pharmacy, physician assistant, physical therapy, and occupational therapy.

LA&S 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in liberal arts and sciences. First-year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

LA&S 200. Topics at HINU: _____ 1-6 Credits. U
Special topics at the undergraduate level. Taught at Haskell Indian Nations University. Special permission from the Provost's Office required.

LA&S 202. History of North American Indian Tribes. 3 Credits. W
Introductory survey of the origin, evolution, and distribution of Indians throughout North America, location of tribes in historic times, their relationships to one another, and their responses to white penetration of the continent. Emphasis on American Indian leadership and major contributions of American Indian people to American society. Taught at Haskell Indian Nations University.

LA&S 204. Contemporary Issues of the American Indian. 3 Credits. H
An overview of current and historical issues which have resulted in policies and regulations affecting American Indians and Alaska Natives. The issues include: education, treaties, sovereignty and self-determination, religions, natural resources, legislation, jurisdiction, reservation and/or urban status, federal trust relationship, tribal economics and enterprises, American Indian policy, federal recognition, and current issues both regional and local. Taught at Haskell Indian Nations University.

LA&S 206. Indian Law and Legislation. 3 Credits. S
An introduction and general overview of federal Indian law and processes and its relationship to tribal governments. Focus will be on sovereignty and its relationship to the internal and domestic laws of the United States government, tribal governments, and the international community. Taught at Haskell Indian Nations University.

LA&S 210. Tribal Resources and Economic Development. 3 Credits. S
Inventory and identify the resources currently available to tribal governments to include natural and human resources and those financial resources available to tribal governments from federal, state, and private resources. Included will be an economic analysis on how to best optimize available resources while recognizing the economic concept of constrained maximization. Taught at Haskell Indian Nations University.

LA&S 230. Cherokee Language III. 5 Credits. U F3
Continuation of Cherokee language II. Taught at Haskell Indian Nations University. Prerequisite: LA&S 230.

LA&S 240. Cherokee Language IV. 5 Credits. U F4
This course is a continuation of LA&S 230, Cherokee Language III, and includes the study of grammar, with particular attention to speaking fluency and continued practice in reading and writing. Taught at Haskell Indian Nations University. Prerequisite: LA&S 230.

LA&S 250. Western Civilization I. 3 Credits. H
The beliefs and values of Western civilization from the eighth century BC to the close of the eighteenth century are compared with the ideas central to American Indian cultural traditions. Fulfills the Western Civilization I requirement for CLAS. Taught at Haskell Indian Nations University.

LA&S 252. Western Civilization II. 3 Credits. H
The beliefs and values of Western Civilization since the close of the eighteenth century are compared with the ideas central to American Indian cultural traditions. Fulfills the Western Civilization II requirement for CLAS. Taught at Haskell Indian Nations University.

LA&S 260. Interpersonal Management. 3 Credits. U
This course is designed to provide students with an understanding of their personal strengths and skills that can be applied in a variety of organizational settings and in society. The course includes skills needed to be successful as a member of both professional and citizen communities, including ethical views, project management, financial management, technology, and information literacy.

LA&S 262. Workplace Success Skills. 3 Credits. U
This course is designed to provide students with the skills and content they need to be successful professionals in a variety of organizational settings. The course includes professional communication skills along with an understanding of organizational culture and context.

LA&S 290. Approaches to Teaching Science and Mathematics I. 1 Credits. U
Science and Mathematics students explore teaching as a career by teaching lessons in elementary classrooms in order to obtain first hand experience planning and implementing inquiry-based curriculum. This course is open to any student who has completed or is concurrently enrolled in a science or mathematics course at KU.

LA&S 291. Approaches to Teaching Science and Mathematics II. 1 Credits. U
Science and Mathematics students continue to explore secondary teaching as a possible career choice by teaching several lessons in a middle school classroom. The students build upon and practice lesson design skills that were developed in LA&S 290, in which they taught in elementary classrooms. Prerequisite: LA&S 290.

LA&S 292. Topics and Problems on: _____ 1-6 Credits. U
An interdisciplinary study of different topics. Designed especially for freshmen and sophomores.

LA&S 295. Introduction to Secondary Stem Teaching. 2 Credits. U
The UKanTeach program invites all students who have 45 hours toward their degree and have an interest in teaching secondary mathematics and/or science to take this two-hour UKanTeach course. Students learn quickly whether they are suited to the profession of teaching while also acquiring important communication skills. Through coursework and classroom experiences, students teach four hands-on inquiry-based science/mathematics lessons in local elementary and middle school classrooms. Upon successful completion of this course, student are eligible for acceptance to the UKanTeach program as they complete their
bucks. This course is only offered in the summer semester. Prerequisites: Minimum of 45 hours toward a BA or a BS degree.

**LA&S 325. Career Transitions. 3 Credits. U**

This career development course studies the theories of career development and decision making focusing significantly on self-assessment and occupational research to help students make informed career decisions by better understanding themselves and the world of work in relationship to career transitions. In addition, students will learn valuable networking, personal branding, and job search tips. Prerequisite: This course is designed for students in the Military Transition Program and currently enrolled veterans. Instructor consent is required to enroll.

**LA&S 370. Personal Writing Seminar. 1 Credits. U**

This seminar helps students develop their personal writing abilities. Students analyze language and rhetorical choices in the genre of the personal essay. Students demonstrate rhetorical flexibility within the genre, considering audience, purpose, and application of the material. This course is intended for candidates for national fellowships, regardless of University Honors Program membership. (Same as HNRS 370.) Prerequisite: Permission of the Office of Fellowships.

**LA&S 372. Preparing for Programs in the Health Professions. 3 Credits. U**

Students will participate in experiential learning activities to confirm their interest in the health care professions and prepare documents for application. Class-time will include exploring crucial health care topics such as ethical standards, the future of medicine, and social determinants of health. Additionally, students will prepare application materials, research professional programs, create a personal statement, participate in mock interviews, and decide where to apply. This course is designed for KU students who are planning to apply in the current or subsequent academic year to a health professional program including (but not limited to) medicine, pharmacy, physician assistant, physical therapy, and occupational therapy.

**LA&S 380. Critical Thinking and Advocacy Seminar. 1 Credits. U**

The focus of this class is on honing the two basic skills of critical thinking and advocacy. In this seminar, students develop a basic system for critical analysis that can be applied generally; test that critical analysis system in a series of practicums to develop the skills necessary to apply it; and develop a basic system for designing effective and ethical persuasive messages. (Same as HNRS 380.) Prerequisite: Permission of the Office of Fellowships.

**LA&S 400. Teaching and Tutoring Writing. 3 Credits. U**

Students explore theories and strategies of teaching and tutoring writing across academic disciplines. They learn more about themselves as writers as they build a repertoire of writing techniques useful in their studies, in the workplace, and in their personal lives. By observing and consulting in the writing center, they understand how reflection leads to responsive, ethical, and engaged practice. (Same as ENGL 400.) Prerequisite: ENGL 102 or equivalent.

**LA&S 414. Ethnobiology. 5 Credits. N**

Integrates Native American traditional knowledge of ecology and biology with modern, western science. One purpose of the course is to preserve the unique knowledge and varied cultural traditions relating to the life sciences that are possessed by indigenous people. Taught at Haskell Indian Nations University. Prerequisite: BIOL 100 or BIOL 150.

**LA&S 450. Topics at Haskell Indian Nations University: _____). 1-6 Credits.**

Special topics at the junior/senior undergraduate level. Taught at Haskell Indian Nations University. Special permission from the Provost's office required.

**LA&S 470. Job Search Skills for Liberal Arts and Sciences Majors. 1 Credits. U**

This course is designed to introduce students to the fundamentals of planning and organizing job search strategies. Emphasis is placed on practical application of employment search tools for post-graduation employment or graduate school admission, stressing the value of the arts and sciences degree in the labor market. Prerequisite: Students must be sophomore standing or above.

**LA&S 475. Professional Career Management. 3 Credits. U**

When envisioning the future, many students consider immediate post-graduation needs but may fail to consider future professional career management, life and career transitions, and career progression. This advanced career development course studies the theories of career development, organizational and industrial psychology, and human resources. Students learn theories from these areas and understand how to apply them to their own professional career, future career transitions, and lifelong career progression. Prerequisite: Students must be sophomore standing or above.

**LA&S 480. Preparing for International Careers. 1-3 Credits. U**

This course, delivered through an 8-week seminar and week-long study abroad experience, teaches the fundamentals of executing an international job search. The course is open only to participants admitted to the Preparing for International Careers study abroad program. Students must complete a study abroad application and be approved before enrolling in the course.

**LA&S 485. Global Career Management. 3 Credits. U**

This global career development course studies the theories of cross-cultural communication and analyzes the global economy to help students apply these concepts to their own lifelong career management. Furthermore, the course builds upon the international experiences students are having at KU and also allows any student to gain lifelong knowledge and skills to be successful in a global job search or career transition, by assisting them to articulate their skills and value through a cross-cultural perspective to potential employers. Prerequisite: Students must be sophomore standing or above.

**LA&S 490. Internship Exploration. 1-5 Credits. U**

This course provides credit for supervised practical experiences in an occupational area of interest. In addition to the work-related activity, students complete reading and writing assignments, participate in an online discussion and create a final portfolio of internship accomplishments. Hours of credit recorded (1-5) are based on number of hours at internship site and agreement of instructor. Credit hours will be assigned a letter grade. Repeatable for up to 5 credit hours, provided the internship experiences are different. Prerequisite: Consent of Instructor.

**LA&S 492. Topics and Problems on: ______. 1-6 Credits. U**

An interdisciplinary study of different topics. Topics include Sanskrit. Designed especially for Juniors and Seniors.

**LA&S 494. Senior Seminar in Liberal Arts and Sciences. 3 Credits. H**

This course is a seminar to result in the student's integration of knowledge within the liberal arts and sciences. Through lecture and discussion, students explore a series of issues or themes that integrate several disciplines in the humanities, arts, social sciences, and mathematics and natural sciences. A final project (options include a portfolio, web page, paper, presentation) demonstrates the students' knowledge of the concepts, theories, and methods of several disciplines, and their ability to integrate that knowledge across disciplines. Not open to freshmen and sophomores; recommended in the senior year. Prerequisite: Completion of at least 30 junior/senior hours.
LA&S 701. Introduction to Graduate Professional Development. 1 Credit.
This course is designed to introduce early career graduate students to self-assessment and career exploration tools and best practices in developing a professional network and strong mentoring relationships. Emphasis is placed on practical application of career exploration, networking, and managing mentor relationships in order to identify and successfully pursue a variety of career pathways within and beyond the academy. Graded on a satisfactory/unsatisfactory basis.

LA&S 702. Introduction to Career Preparation for Graduate Students. 1 Credit.
This course is designed for 2nd year master's students and mid-career PhD students who are soon to complete or have just completed their comprehensive exams. The course will present various career preparation tools and techniques for careers both within and beyond the academy, and other best practices aimed at supporting students in the completion of their research and creative projects. Topics covered include but are not limited to: individual development plans, project management, building a professional network, informational interviews, CV and resume development, and identifying and applying for funding opportunities. Graded on a satisfactory/unsatisfactory basis. Prerequisite: LA&S 701 or permission by the instructor.

LA&S 703. Fundamentals in Career Planning for PhD Students. 1 Credit.
This course is designed to introduce late-career PhD students to the fundamentals of effective planning and organizing job search and application strategies for a variety of career paths. Emphasis will be placed on career paths beyond the professoriate including the private, non-profit, and public/government sectors. Topics covered include but are not limited to: external opportunities and fellowships for PhDs (ex: Presidential Management Fellowship, ACLS Public Fellows, AAAS Science & Technology Fellowships) in non-academic careers, advanced resume and cover letter development, interview and negotiation skills, and tailoring application materials to specific job postings. Graded on a satisfactory/unsatisfactory basis. Prerequisite: LA&S 702 or instructor permission.

LA&S 720. Introduction to Language Teaching Research. 3 Credits.
An introductory study of topics in language teaching research with the focus on higher education contexts. Intended for graduate students in any area of specialization related to foreign language teaching and learning. Prerequisite: Consent of instructor.

LA&S 792. Topics in: _____ 1-3 Credits.
An interdisciplinary study of a variety of topics from the Liberal Arts and Sciences. Usually intended for graduate students, but may also be taken by qualified upper level undergraduates. May be repeated for credit when topic differs.

Linguistics Courses

LING 106. Introductory Linguistics. 3 Credits. SC S
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as ANTH 106).

LING 107. Introductory Linguistics, Honors. 3 Credits. SC S
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as ANTH 107.)

LING 110. Language and Mind. 3 Credits. SI S
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language.

LING 111. Language and Mind, Honors. 3 Credits. SI S
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language. Open only to students admitted to the University Honors Program, or by consent of instructor.

LING 120. The Physics of Speech. 4 Credits. N
An introduction to the acoustic structure of speech intended for non-science majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as SPLH 220.) Prerequisite: MATH 101 or 104 or equivalent.

LING 177. First Year Seminar: _____. 3 Credits. SC
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in linguistics. May not contribute to major requirements in linguistics. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

LING 180. Study Abroad Topics in Linguistics: _____. 1-3 Credits. U
This course is designed for the study of special topics in Linguistics. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

LING 250. Introduction to Translation and Translation Theory. 3 Credits. H
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as AAAS 250, GERM 240, SLAV 250 and SPAN 202.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

LING 305. Phonetics I. 3 Credits. S
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world's sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A hands on laboratory project is part of the course. Prerequisite: An introductory course in Linguistics.
LING 308. Linguistic Analysis. 3 Credits. H
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. Prerequisite: LING 106.

LING 312. Phonology I. 3 Credits. S
This course focuses on crucial phonological concepts such as contrast, alternation, neutralization, distinctive features, and the syllable. It also provides students with basic skills for phonological analysis, including the selection of underlying representations, rule notation, rule ordering, identifying phonological universals, and how to make an informed decision when multiple analyses are viable. In addition, it discusses the external motivations for phonological grammar and relates phonology to other disciplines in linguistics such as language acquisition and psycholinguistics. Not open to students who have taken LING 712. Prerequisite: LING 305.

LING 320. Language in Culture and Society. 3 Credits. SC S
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as ANTH 320.)

LING 321. Language in Culture and Society, Honors. 3 Credits. SC S
An honors section of LING 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as ANTH 321.) Prerequisite: Membership in the University Honors Program or consent of instructor.

LING 325. Syntax I. 3 Credits. H
An introduction to generative syntax with special attention to theory and method. The course covers such topics as phrase structure, the lexicon, transformations and derivation. Prerequisite: LING 106.

LING 338. Languages of the Jews. 3 Credits. H
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as JWSH 338.)

LING 339. Languages of the Jews, Honors. 3 Credits. H
Honors version of LING 338 or JWSH 338, Languages of the Jews. (Same as JWSH 339.) Prerequisite: Membership in the University Honors Program or consent of instructor.

LING 343. Bilingualism. 3 Credits. S
This course is an introduction to bilingualism in the U.S. and in the world. It explores the linguistic, sociolinguistic, and psycholinguistic aspects of bilingualism. We will consider how bilingualism impacts language itself, considering the new varieties that emerge as languages come into contact. We will also consider bilingualism at the societal level, considering how language policies and notions of ‘prestige’ impact language communities and whether they are able to preserve their languages. Finally, we will consider bilingualism at the individual level, considering how using two or more languages on a daily basis impacts language acquisition and language processing. We will also consider whether using more than one language affords certain cognitive advantages. We will discuss these topics to better understand research in this area and think critically about what relevance this research has in real world settings such as homes, classrooms, corporations, and clinical settings. The final project will ask you to make a proposal/argument related to bilingualism based on primary research in this area. The main goal will be to consider how research findings can be used to inform a real-world problem and how to best communicate those findings to the general public.

LING 345. Language and Gender. 3 Credits. S
This course explores the relationship between language use and gender. The course will specifically focus on how gender affects the ways we use spoken language as well as how we interpret the speech of others. Topics to be discussed will include the function of language in social relationships and language variation in different social contexts.

LING 370. Introduction to the Languages of Africa. 3 Credits. NW H/W
A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g., Fula, Hausa, Maninka, Swahili, Yoruba). (Same as AAAS 370.)

LING 380. Study Abroad Topics in Linguistics: _____. 1-6 Credits. S
This course is designed for the study of special topics in Linguistics at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad.

LING 415. Second Language Acquisition I. 3 Credits. H
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language that a learner acquires, and to the process of acquisition. Prerequisite: An introductory course in linguistics.

LING 418. Introduction to Cognitive Science. 3 Credits. S
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an interdisciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as PHIL 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor.

LING 420. Capstone: Research in Language Science. 3 Credits. S
This course, an on-site practicum in Linguistics, provides a foundation in the scientific method, dependent and independent variables, data collection, descriptive and inferential statistics. Instruction builds discipline-specific knowledge of linguistics to formulate a research hypothesis and design an experiment to evaluate this hypothesis. Prerequisite: LING 305, LING 312, LING 325, and either LING 415, LING 425, LING 435, or LING 438.

LING 421. Capstone: Typology-Unity and Diversity of Human Language. 3 Credits. S
This course, an on-site practicum in Linguistics, explores the similarities and differences among the worlds’ languages. Students apply their knowledge of phonetics, phonology, morphology, and syntax in describing and analyzing phenomena from a number of languages. The typological perspective that students develop is applied to topics such as word order, morphological typology, case, lexical categories, and valency. In addition
to lecture style instruction, students get hands on practice in collecting, transcribing, and analyzing data from different languages through face to face elicitation with native speakers. Instruction builds discipline-specific knowledge and skills for career preparation. Prerequisite: LING 305, LING 312, and LING 325.

LING 425. First Language Acquisition I. 3 Credits. S
An introductory course in the acquisition of child language. The course will cover relevant historical studies of child language but will focus primarily on recent psycholinguistic approaches toward the description of the process by which a child acquires his native language. Phenomenological, syntactic, semantic, cognitive, pragmatic, sociolinguistic, and anthropological aspects of the acquisition process are covered. Prerequisite: An introductory course in linguistics.

LING 430. Linguistics in Anthropology. 3 Credits. S
The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as ANTH 430.)

LING 435. Psycholinguistics I. 3 Credits. S LFE
A detailed examination of issues in the processing of language. The course provides a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes are examined. (Same as PSYC 435.) Prerequisite: An introductory course in linguistics or permission of instructor.

LING 438. Neurolinguistics I. 3 Credits. S
The course explores how language is represented and processed in the human brain. This includes a critical survey of the foundations and the current research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course also includes a component providing laboratory experience with brain imaging research on language. Prerequisite: An introductory course in Linguistics.

LING 440. Linguistic Data Processing. 3 Credits. H
This course introduces the tools and techniques necessary to analyze fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. The course also covers field recording and data analysis technology, along with methods of phonetic transcription, grammatical annotation and analysis of language context. Practice of techniques is provided via short studies of at least one language. Prerequisite: LING 305 or permission of instructor.

LING 447. North American Indian Languages. 3 Credits. S
This course introduces students to the indigenous languages of North America. Students critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics. Not open to students enrolled in 747

LING 470. Language and Society in Africa. 3 Credits. NW H/W
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning; writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as AAAS 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor.

LING 490. Independent Study. 1-3 Credits. U
A special research project or directed readings in an area of linguistics not covered in other courses. No more than 3 hours of LING 490 may be applied toward the requirements for the major. Prerequisite: Consent of instructor.

LING 491. Topics in Linguistics: ______. 1-3 Credits. H
The content, prerequisites, and credits of this course will vary. May be repeated.

LING 492. Topics in Linguistics: ______. 1-3 Credits. S
The content, prerequisites, and credits of this course will vary. May be repeated. (Distribution credit given for two or three hours only.) Prerequisite: Consent of instructor.

LING 496. Honors Essay in Linguistics. 1-3 Credits. H
Individual directed research and preparation of an essay on a linguistic topic. Prerequisite: A grade-point average of 3.5 in linguistics and 3.25 in all courses, and consent of the major adviser.

LING 507. Phonetics II. 3 Credits. S
This course is a continuation of Phonetics I (LING 305/705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects are required. Prerequisite: LING 305.

LING 514. Phonology II. 3 Credits. S
This course discusses the problems in rule-based phonology that led to the development of Optimality Theory. Discussions of Optimality Theory include its basic architecture, the nature of markedness constraints, the role of phonetics in the theory, correspondence between different levels of representation, and how variants of the theory can model free and lexical variation. A selection of the following topics will also be included depending on class interest: interface between phonology and morphology, syntax, and the lexicon, reduplication, loanword phonology, biases in phonological learning, stress, and tone. The course has a particular focus on theory-building, with discussions on the how to lay out the predictions of a theoretical proposal, and how phonological predictions can be tested using experimental methods. Not open to students who have taken LING 714. Prerequisite: LING 312 or instructor consent.

LING 516. Second Language Acquisition II. 3 Credits. S
This advanced course provides in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues are discussed. Prerequisite: LING 415 and LING 325; or permission of instructor.

LING 526. Syntax II. 3 Credits. S
An advanced course covering one or more current theories of syntax. The course provides in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory; lexicon and argument structure; binding, control, locality conditions; constraints on representation and derivation; and the relation between syntax and the semantic module. Prerequisite: LING 325.

LING 527. Morphology. 3 Credits. S
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morpho-phonology, and
morpho-syntax. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho-syntactic concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: LING 312 and LING 325, or permission of instructor.

LING 531. Semantics. 3 Credits. S
This course explores how meaning works in the grammar of natural languages. Students actively learn and apply formal structures to meaning in relation to truth, logic, and morphosyntax. The course emphasizes the role of context in semantic and pragmatic interpretation, including using context-based elicitation techniques to collect semantic data. Other topics include the nature of events and argument structure, tense and aspect, reference and binding, quantification and scope, and the semantic motivation behind syntactic structures. This course is offered at the 500 and 700 level, with additional assignments at the 700 level. Not open to students with credit in LING 731. Prerequisite: LING 525 or instructor permission.

LING 537. Psycholinguistics II. 3 Credits. S
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. Prerequisite: LING 435 or consent of instructor.

LING 539. First Language Acquisition II. 3 Credits.
A second semester course in child language that explores the acquisition of morphology, syntax, and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. Prerequisite: LING 425 or consent of instructor.

LING 541. Field Methods in Linguistic Description. 3 Credits. H
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. Prerequisite: LING 305, LING 312, and LING 325 or permission of instructor.

LING 542. Neurolinguistics II. 3 Credits. S
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 438 or permission of the instructor.

LING 543. Language and Culture in Arabic-Speaking Communities. 3 Credits. W
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g., linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as AAAS 543)

LING 570. The Structure of Japanese. 3 Credits. H
A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 570.)

LING 572. The Structure of Chinese. 3 Credits. H
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 572.)

LING 575. The Structure of: _____. 3 Credits. S
A detailed study of a language, including its phonological, morphological, syntactic and semantic characteristics. The course provides students with a linguistic knowledge of the language rather than a practical command of it. Prerequisite: A course in linguistics.

LING 700. Introduction to Linguistic Science. 3 Credits.
An introduction to the theory and techniques of linguistic science for majors and others intending to do advanced work in linguistics and linguistic anthropology. Emphasis on the sound system, grammatical structure, and semantic structure of languages. Lectures and laboratory sessions. Not open to students who have taken ANTH/LING 106 or ANTH/LING 107. Prerequisite: Graduate standing.

LING 705. Phonetics I. 3 Credits.
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world’s sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A ‘hands on’ laboratory project is part of the course. Prerequisite: Graduate standing or consent of instructor.

LING 706. Current Linguistic Anthropology. 3 Credits.
The fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as ANTH 706.) Prerequisite: Graduate standing or consent of the instructor.

LING 707. Phonetics II. 3 Credits. LFE
This course is a continuation of Phonetics I (LING 705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects will be required. Prerequisite: LING 705.

LING 708. Linguistic Analysis. 3 Credits.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural type. (Same as ANTH 736.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308.

LING 709. First Language Acquisition I. 3 Credits.
Introduction to the study of language acquisition: the significant findings, the basic methodological procedures, and some of the more recent theoretical accounts. Not open to students who have taken LING 425. (Same as CLDP 709.) Prerequisite: Graduate standing or consent of instructor.
LING 712. Phonology I. 3 Credits.
This course focuses on crucial phonological concepts such as contrast, alternation, neutralization, distinctive features, and the syllable. It also provides students with basic skills for phonological analysis, including the selection of underlying representations, rule notation, rule ordering, identifying phonological universals, and how to make an informed decision when multiple analyses are viable. In addition, it discusses the external motivations for phonological grammar and relates phonology to other disciplines in linguistics such as language acquisition and psycholinguistics. Not open to students who have taken LING 312. Prerequisite: LING 705.

LING 714. Phonology II. 3 Credits.
This course discusses the problems in rule-based phonology that led to the development of Optimality Theory. Discussions of Optimality Theory include its basic architecture, the nature of markedness constraints, the role of phonetics in the theory, correspondence between different levels of representation, and how variants of the theory can model free and lexical variation. A selection of the following topics will also be included depending on class interest: interface between phonology and other components of the grammar (e.g., morphology, syntax, and the lexicon), reduplication, loanword phonology, biases in phonological learning, stress, and tone. The course has a particular focus on theory-building, with discussions on how to lay out the predictions of a theoretical proposal and how phonological predictions can be tested using experimental methods. Not open to students who have taken LING 514. Prerequisite: LING 712.

LING 715. Second Language Acquisition I. 3 Credits.
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language a learner acquires, and to the process of acquisition. Prerequisite: Graduate standing or consent of instructor.

LING 716. Second Language Acquisition II. 3 Credits.
This advanced course will provide in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues will be discussed. Prerequisite: LING 715; LING 725, which may be taken concurrently, or permission of instructor.

LING 720. Research Methods in Linguistics. 3 Credits.
This course provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, validity, reliability, data collection, dependent and independent variables, descriptive and inferential statistics. This course will serve students who are interested in the basics of research design and statistics for the study of language. Prerequisite: Graduate standing or consent of instructor.

LING 722. Linguistic Typology. 3 Credits.
Different languages use different linguistic mechanisms to encode meanings. This course surveys grammatical concepts and categories found in the world's languages including tense, aspect, mood, voice, person, and number as well as case relations such as nominative, accusative, ergative, and absolutive. Basic word order typology and discourse functions such as topic, focus, and cohesion are introduced. Examples will be drawn from a wide variety of languages to illustrate how the same concept may be encoded differently, i.e., morphologically, syntactically, or lexically, in different languages. Prerequisite: Graduate standing or consent of instructor.

LING 725. Syntax I. 3 Credits.
The basics of theoretical syntax, examining the principles of universal grammar. Topics include phrase structure, relations among syntactic constituents, and the nature of syntactic rules and lexical categories. Prerequisite: Graduate standing or consent of instructor.

LING 726. Syntax II. 3 Credits.
An advanced course covering one or more current theories of syntax. The course will provide in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory, lexical projections of argument structure, binding, control, locality condition, constraints on representation, and the relation between syntax and the semantic module. Prerequisite: LING 725.

LING 727. Morphology. 3 Credits.
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morpho-phonology, and morpho-syntax. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho-syntax concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: LING 712, LING 725, or permission of instructor.

LING 730. Linguistics in Anthropology. 3 Credits.
The study of language as it concerns anthropology. Language systems in relation to culture, language taxonomy, semantics, linguistic analysis as an ethnographic tool. (Same as ANTH 730.)

LING 731. Semantics. 3 Credits.
This course explores how meaning works in the grammar of natural languages. Students actively learn and apply formal structures to meaning in relation to truth, logic, and morphosyntax. The course emphasizes the role of context in semantic and pragmatic interpretation, including using context-based elicitation techniques to collect semantic data. Other topics include the nature of events and argument structure, tense and aspect, reference and binding, quantification and scope, and the semantic motivation behind syntactic structures. This course is offered at the 500 and 700 level, with additional assignments at the 700 level. Not open to students with credit in LING 531. Prerequisite: LING 725 or instructor permission.

LING 732. Discourse Analysis. 3 Credits.
This course focuses on linguistic frameworks for the analysis of discourse. Discourse is a linguistic system larger than the sentence (utterance), which connects and contextualizes speech and written text. This course focuses on current issues and theoretical frameworks in the analysis of discourse. Using oral and written data, students will examine how contexts influence and shape linguistic form. Topics covered include transcription systems, the structure and organization of different genres of language, and the performance of social actions, including stance-taking, framing, and the construction of identity. Students will also have an opportunity to perform discourse analytic research on the data of their choice. (Same as ANTH 732.) Prerequisite: ANTH 706 or permission of the instructor.

LING 735. Psycholinguistics I. 3 Credits. LFE
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes will be examined. (Same as PSYC 735.)

LING 737. Psycholinguistics II. 3 Credits.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. (Same as PSYC 737.) Prerequisite: PSYC 735/LING 735 or consent of instructor.

LING 738. Neurolinguistics I. 3 Credits.
We will explore how language is represented and processed in the human brain. This will include a critical survey of the foundations and the newest state-of-the-art research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course will also include a laboratory component providing hands-on experience with brain imaging research on language. Prerequisite: Graduate standing or consent of instructor.

LING 739. First Language Acquisition II. 3 Credits.
A second semester course in child language which explores the acquisition of morphology, syntax and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. (Same as CLDP 739.) Prerequisite: LING 709 or permission of the instructor.

LING 740. Linguistic Data Processing. 3 Credits.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as ANTH 740.) Prerequisite: LING 709 or permission of the instructor.

LING 741. Field Methods in Linguistic Description. 3 Credits.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as ANTH 741.) Prerequisite: LING 705 or permission of instructor.

LING 742. Neurolinguistics II. 3 Credits.
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing a series of mini-labs introducing neuromaging methods and analyses. Prerequisite: LING 738 or permission of the instructor.

LING 747. North American Indian Languages. 3 Credits.
This course introduces student to the indigenous languages of North America. Students will critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics.

LING 748. Language Contact. 3 Credits.
Theories and case studies of languages in contact. Areal and genetic linguistics, genetics of pidgins and creoles, multilingualism. Social, political, economic, and geographic factors in language change. (Same as ANTH 748;) Prerequisite: A course in Linguistics.

LING 749. Linguistics and Ethnolinguistics of China and Central Asia: ____. 3 Credits.
Selected topics in Linguistics and Linguistic Anthropology, focusing on dominant and/or minority languages of China, Central Asia, or a particular region of Central and Eastern Eurasia. Topics may include any subfield of linguistics, including language contact, typology, dialectology, and sociolinguistics. Topic for semester to be announced. Prerequisite: A course in Linguistics.

LING 782. Research Methods in Child Language. 3 Credits.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as CLDP 782 and PSYC 782.)

LING 794. Proseminar. 3 Credits.
Introduction to the field of linguistics. Topics include research literature and research methods, thesis and grant writing, and ethics in linguistic research. Required for all first-year graduate students in linguistics. Graded on a satisfactory/unsatisfactory basis.

LING 799. Proseminar in Child Language. 2 Credits.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, CLDP 799, PSYC 799 and SPLH 799.)

LING 807. Seminar in Phonetics. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of phonetics. Prerequisite: LING 705 or consent of instructor.

LING 810. Seminar in Ethnolinguistics: ____. 2-3 Credits.
An advanced study of the relations between language and culture. Subject will vary each semester. Students may repeat the course more than once.

LING 814. Seminar in Phonology. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of phonology. Prerequisite: LING 712 or consent of instructor.

LING 822. Seminar in First Language Acquisition. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of first language acquisition. (Same as CLDP 822.) Prerequisite: LING 709 or consent of instructor.

LING 826. Seminar in Syntax. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of syntax. Prerequisite: LING 725 or consent of instructor.

LING 831. Seminar in Semantics. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of semantics. Prerequisite: LING 731 or consent of instructor.

LING 837. Seminar in Psycholinguistics. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of psycholinguistics. Prerequisite: LING 735 or consent of instructor.

LING 842. Seminar in Neurolinguistics. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of neurolinguistics. Prerequisite: LING 738 or consent of instructor.

LING 850. Topics in Research in Experimental Linguistics: ____. 1-9 Credits.
This course is primarily for students actively engaged in experimental linguistic research. The course provides students with the opportunity to focus on their current research projects and involves critical analysis, presentation, and discussion of research design, methods, statistical
analysis, and data interpretation. May be repeated. Prerequisite: Permission of instructor.

LING 851. Research in Language Acquisition and Processing. 1-9 Credits.
This course is primarily intended for students actively engaged in linguistic research on language acquisition, language processing, and neurolinguistics. Students in this course present and discuss study design, methods, data analysis and interpretation of results for their research projects. Professional development topics such as CV development, applications for fellowships, grants and jobs, and the dissemination of research findings are also discussed. May be repeated. Prerequisite: Permission of instructor.

LING 852. Research in Field and Formal Linguistics. 1-9 Credits.
This course is intended for students who are conducting field work on syntax or morphology, typically of an understudied language. The course is structured around a set of topics (variable by semester) which each student will investigate in a particular language. The focus of the course is on data collection and analysis and students will present and discuss the results of their research projects. May be repeated. Prerequisite: Permission of instructor.

LING 860. Seminar in Second Language Acquisition. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of second language acquisition. Prerequisite: LING 715 or permission of instructor.

LING 899. Master's Research Project. 1-3 Credits.
A course for students working on their M.A. Research Project. Normally to be taken during the semester in which the student is submitting the M.A. Research Project. Students must enroll for at least one credit hour. Up to three credits will count toward the minimum number of credits required for the M.A. degree in linguistics.

LING 910. Linguistic Seminar: _______. 1-3 Credits.
The content and prerequisites of this course will vary. May be repeated.

LING 980. Linguistics Field Work. 3-6 Credits.
Independent field work with an informant on a language not normally offered at the University of Kansas, or on a non-standard dialect of one of the more accessible languages. Student must show evidence (file slips for grammatical and phonological analysis, dictionary slips, etc.) of having done the required amount of work without necessarily being able to turn in a completed analysis. Normally for three credits; six credits would be available under certain circumstances such as intensive summer work on location away from the university. Graded on a satisfactory/unsatisfactory basis. Prerequisite: LING 712 and LING 725.

LING 997. Ph.D. Examinations. 1-12 Credits.
A course for students writing answers to the preliminary Ph.D. examination and/or preparing to take the Oral Comprehensive Examination. Normally to be taken during the semester in which the student is submitting answers to the written preliminary examination. May be taken for a maximum of two semesters or twelve credits, whichever comes first. Does not count toward the minimum number of credits required for a graduate degree in linguistics. Graded on a satisfactory/unsatisfactory basis.

LING 998. Independent Study. 1-12 Credits.
A special research project or directed readings in an area of linguistics not covered in other courses. Prerequisite: Written consent of instructor.

LING 999. Doctoral Dissertation. 1-12 Credits.

Mathematics Courses

MATH 2. Intermediate Mathematics. 3 Credits. U

Mathematics (primarily algebra) preparatory to MATH 101. Topics include: solving linear equations, inequalities, and system; solving quadratic, radical, and rational equations; and introduction to imaginary numbers. Qualification: Two years of high school college preparatory mathematics, algebra and geometry, and a score of 16 or more on ACT mathematics; or a qualifying score on the mathematics placement test. MATH 002 is the lowest level mathematics course offered at the University of Kansas, and does not count towards the 120 credit hours required for graduation. Students not prepared for MATH 101 will be permitted to enroll in MATH 002. However, before enrolling in MATH 002, such students are encouraged to prepare by self-study or by completing a beginning algebra course in high school, community college, or correspondence study.

MATH 101. College Algebra: ______. 3 Credits. U
Coordinate systems, functions and their graphs; linear, quadratic, general polynomial, rational, exponential, and logarithmic functions; equations and inequalities; and linear and non-linear systems. Data Driven sections are intended for non-STEM majors and cover college algebra content with increased emphasis on context and interpretation of data, and decreased emphasis on symbolic manipulation. Enrollment in Enhanced sections will benefit students by providing additional instructional time and integrated review of some prerequisite material. Students in Enhanced sections must enroll in Math 197 as a co-requisite. Not open to students with credit in MATH 104. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. Students with slightly lower ACT scores may be admitted to Enhanced sections based on high school GPA.

MATH 103. Trigonometry. 2 Credits. U
The circular functions and their applications. Not open to students with credit in MATH 104. May not be used to fulfill the College mathematics requirement. Prerequisite: MATH 101, or two years of high school algebra and a score of 26 or higher on enhanced ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 104. Precalculus Mathematics. 5 Credits. U
An introduction to the elementary functions (polynomial, rational, exponential, logarithmic, and trigonometric) and their properties. Open for only two hours credit for students with credit in MATH 101. Not open to students with credit in MATH 103. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 105. Introductory Quantitative Reasoning. 3 Credits. N
This diverse course introduces students to foundational quantitative reasoning skills that will assist them throughout their college-level work and beyond. Topics may include logic and problem solving, personal finance, elementary statistics and data analysis, voting theory and fair division problems, basic linear programming, and network theory. Students taking this class will gain an appreciation for how mathematical thinking can be used in everyday decision making. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 109. Mathematics for Elementary School Teachers I. 3 Credits. U
This course is designed to give the prospective elementary school teacher an overview of several components of the elementary school mathematics curriculum, including number systems, estimation, inequalities and order, sequences and patterns, sets, and relations and functions. The class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 101 or equivalent placement.
MATH 110. Mathematics for Elementary School Teachers II. 3 Credits. U
Continuation of MATH 109, including geometry (including transformations) and elementary probability and statistics. Class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course does not serve as a prerequisite for any mathematics course. It may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 109.

MATH 115. Calculus I. 3 Credits. N
Elementary differential and integral calculus, with applications in management and the biological sciences. Not open to students with credit in MATH 125 or MATH 145. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 116. Calculus II. 3 Credits. NM N
Continuation of MATH 115 including exponential, logarithmic, and trigonometric functions, techniques of integration, and the calculus of functions of several variables. Not open to students with credit in MATH 127 or MATH 147. Prerequisite: MATH 115 plus a course in trigonometry, or MATH 125 or MATH 145. MATH 103 may be taken concurrently.

MATH 125. Calculus I. 4 Credits. N
Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116 or MATH 145. Prerequisite: MATH 103 or MATH 104, with a grade of C- or higher; or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the ACT Mathematics exam.

MATH 126. Calculus II. 4 Credits. N
Techniques of integration, including integration by parts. Applications of integration, including volume, arc length, work and average value. Infinite sequences and series and Taylor series. Polar coordinates, vectors and the geometry of space. Open for only 2 hours of credit to students with credit in MATH 116. Not open for credit to students with credit in MATH 146. Prerequisite: MATH 116, MATH 125, or MATH 145, with a grade of C- or higher.

MATH 127. Calculus III. 4 Credits. N
Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Not open for credit to students with credit in MATH 147. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher.

MATH 145. Calculus I, Honors. 4 Credits. NM N
Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116 or MATH 125. Prerequisite: An ACT Math score of 34 or higher, or membership in the University Honors Program and an ACT Math score of 32 or higher.

MATH 146. Calculus II, Honors. 4 Credits. N
Techniques of integration, including integration by parts. Applications of integration, including volume, arc length, work and average value. Infinite sequences and series and Taylor series. Polar coordinates, vectors and the geometry of space. Open for only 2 hours of credit to students with credit in MATH 116. Not open for credit to students with credit in MATH 126. Prerequisite: MATH 125, or MATH 145, with a grade of C- or higher; and invitation of the Department of Mathematics.

MATH 147. Calculus III, Honors. 4 Credits. N
Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Not open for credit to students with credit in MATH 127. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher; and invitation of the Department of Mathematics.

MATH 177. First Year Seminar: ______. 3 Credits. NM
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in math. May not contribute to major requirements in math. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

MATH 197. Mathematical Workshops: ______. 1-3 Credits. U
Offered to provide opportunities for deeper understanding of freshman-sophomore mathematics through interactive learning. Topics will vary. May be repeated for additional credit. Prerequisite: Variable.

MATH 209. Functions and Modeling. 3 Credits. N
Study of the use of functions in mathematical modeling, with topics drawn from algebra, analytic geometry, statistics, trigonometry, and calculus. These topics include function properties and patterns, complex numbers, parametric and polar equations, vectors and various growth models. The course also includes inquiry methods, collaborative problem solving, the use of multiple representations and data analysis techniques, and the justification and presentation of results. Central to the course are investigative labs employing various technologies and software. The course is designed to help prepare students for secondary school mathematics teaching. (Same as PHSX 209.) Prerequisite: MATH 126 or MATH 146.

MATH 220. Applied Differential Equations. 3 Credits. N
Linear ordinary differential equations, Laplace transforms, systems of equations, and applications. Not open to those who have taken MATH 320. Prerequisite: MATH 126 or MATH 146 with grade of C- or higher; previous or concurrent enrollment in MATH 290 or MATH 291 recommended.

MATH 221. Applied Differential Equations, Honors. 3 Credits. N
Linear Ordinary Differential Equations, Laplace Transforms, Systems of Equations, Enrichment Applications. Prerequisite: MATH 126 or MATH 146 with grade of C- or higher, and invitation from the Department of Mathematics; previous or concurrent enrollment in MATH 290 or MATH 291 recommended. Not open to students with credit in MATH 320.

MATH 290. Elementary Linear Algebra. 2 Credits. N
Systems of linear equations, matrices, vector spaces, linear transformations, and applications. Not open to those who have taken MATH 590. Prerequisite: MATH 126 or MATH 146 with grade of C- or higher.

MATH 291. Elementary Linear Algebra, Honors. 2 Credits. N
Systems of Linear Equations, Matrices, Vector Spaces, Linear Transformations, Enrichment Applications. Prerequisite: MATH 126 or MATH 146 with a grade of C- or higher, and invitation from the Department of Mathematics. Not open to students who have taken MATH 590.

MATH 296. Special Topics: ______. 1-3 Credits. N
Designed for the study of special topics in mathematics at the freshman/sophomore level. May be repeated for additional credit; does not count toward the major or minor in mathematics. Prerequisite: Variable.

MATH 320. Elementary Differential Equations. 3 Credits. N Linear ordinary differential equations, series solutions. Systems of equations. Not open to those who have taken MATH 220. Prerequisite: MATH 127 or MATH 147 with a grade of C- or higher, and MATH 290 or MATH 291.

MATH 365. Elementary Statistics. 3 Credits. N Elementary descriptive statistics of a sample of measurements; probability; the binomial, Poisson, and normal distributions, populations and sampling from populations; simple problems of statistical inference. May not be counted for junior-senior credit toward a major in mathematics. Not open to students with credit in DSCI 202, BIOL 570, MATH 465, MATH 526, or MATH 628. Prerequisite: MATH 101, MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 409. Topics in Geometry for Secondary and Middle School Teachers. 2 Credits. N Study of selected topics from Euclidean, non-Euclidean, and transformation geometry chosen to give breadth to the mathematical background of secondary and middle school teachers. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 128 or MATH 146. Students enrolled in MATH 409 must concurrently enroll in MATH 410.

MATH 410. Topics in History of Mathematics for Secondary and Middle School Teachers. 1 Credits. N Study of selected topics from mathematical history chosen to provide students with knowledge of major historical developments in mathematics including individual contributions and contributions from different cultures. These topics will include a historical development of Euclidean and non-Euclidean geometry. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 126 or MATH 146. Students enrolled in MATH 410 must concurrently enroll in MATH 409.

MATH 450. Discrete Mathematics. 3 Credits. N Basic topics in discrete mathematics including sets, logic, relations and functions, graphs and combinatorics. Advanced topics chosen from partially ordered sets and lattices, Boolean algebras, automata, game theory, coding theory, cryptography, optimization and enumeration. Prerequisite: MATH 290.

MATH 500. Intermediate Analysis. 3 Credits. N A careful formulation of convergence and limits of sequences and functions; continuity and properties of continuous functions; differentiation; the Riemann integral; mean-value theorems and the fundamental theorem of calculus. Not open to students with credit in MATH 765. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

MATH 510. Introduction to the Theory of Computing. 3 Credits. N Finite state automata and regular expressions. Context-free grammars and pushdown automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation. (Same as EECS 510.) Prerequisite: EECS 210 and upper-level EECS eligibility.

MATH 526. Applied Mathematical Statistics I. 3 Credits. NM N A first course in statistics for students with the techniques of calculus at their disposal. The following topics are studied with illustrations and problems drawn from various fields of applications: basic notions of probability and probability distributions; classical estimation and testing procedures for one and two sample problems; chi-square test. Not open to those with credit in MATH 628. Prerequisite: MATH 127 or MATH 147 or MATH 116 (MATH 127 or MATH 147 recommended.)

MATH 530. Mathematical Models. 3 Credits. N An introduction to mathematical models useful in a large variety of scientific and technical endeavors. Topics include: model construction, Markov chain models, models for linear optimization, graphs as models, and game theory. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

MATH 540. Elementary Number Theory. 3 Credits. N Divisibility, primes and their distribution, the Euclidean algorithm, perfect numbers, Fermat's theorem, Diophantine equations, applications to cryptography. Prerequisite: MATH 127 or MATH 147.

MATH 542. Vector Analysis. 2 Credits. N Vector algebra; vector and scalar fields; line and surface integrals; theorems of Gauss, Green, and Stokes. Curvilinear coordinates. Applications. Introduction to tensor analysis. Not open to those with credit in MATH 143. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

MATH 558. Introductory Modern Algebra. 3 Credits. N Development of the number systems. Polynomials. Introduction to abstract number systems such as groups and fields. Not open to students with credit in MATH 791. Prerequisite: MATH 290 or MATH 291.

MATH 559. Modern Geometries. 3 Credits. N Selected topics in Euclidean geometry. Synthetic and analytic projective geometry; duality. Desargues' theorem, perspectives, conics. Non-Euclidean and metric projective geometries. Prerequisite: MATH 127 or MATH 147.

MATH 581. Numerical Methods. 3 Credits. N An introduction to numerical methods and their application to engineering and science problems. Applied treatment of elementary algorithms selected from the subject areas: finding roots of a single nonlinear equation, numerical differentiation and integration, numerical solution of ordinary differential equations. Emphasis on implementing numerical algorithms using the computer. Not open to students with credit in MATH 781 or MATH 782. Prerequisite: MATH 220 and MATH 290, or MATH 320.

MATH 582. Computational Data Science. 3 Credits. N This course provides an introduction to topics in data science and machine learning with an emphasis on computation and applications. Programming for the course uses the student's choice of Matlab, Python, or R. Topics covered include dimension reduction, regression techniques, density estimation, machine learning, data assimilation, and clustering and classification techniques. Prerequisite: MATH 290 or equivalent.

MATH 590. Linear Algebra. 3 Credits. N Vector spaces, linear transformations, and matrices. Canonical forms, Determinants. Hermitian, unitary and normal transformations. Not open to students with credit in MATH 792. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

MATH 591. Applied Numerical Linear Algebra. 3 Credits. N An introduction to numerical linear algebra. Possible topics include: applied canonical forms, matrix factorizations, perturbation theory, systems of linear equations, linear least squares, singular value decomposition, algebraic eigenvalue problems, matrix functions, and the use of computational software. Not open to students with credit in MATH 782. Prerequisite: MATH 290 or MATH 291. EECS 138 or equivalent recommended.

MATH 596. Special Topics: ____. 1-3 Credits. N
MATH 597. Special Topics, Honors: _____ 3 Credits. N
A study of a specialized topic in mathematics. May be repeated for credit when the topic varies. Prerequisite: A previous Honors course in Mathematics or permission of instructor. Other prerequisites depending on topic possible.

MATH 601. Algebraic Topics in Computing: _____ 3 Credits. N
Topics motivated by applications in computer science, studied from a mathematical perspective, and based on methods from linear and abstract algebra. Examples of topics include error-correcting codes, cryptography, and computer algebra. May be repeated with different topics for additional credit. Prerequisite: MATH 290 or MATH 291.

MATH 605. Applied Regression Analysis. 3 Credits. N
This course provides an introduction to regression analysis and statistical learning with an emphasis on mathematical understanding and its software implementation. Programming uses Python, R, or Julia. Covered topics include the following. Linear regression: parameter estimation, confidence ellipsoids and prediction intervals, hypothesis tests. Classification: logistic regression, linear discriminant analysis. Basis expansion: polynomial regression, regression splines. Resampling methods: cross-validation, bootstrap. Shrinkage methods. Model selection: information criteria, forward and backward selection, lasso. Decision trees and random forests: bagging, boosting. Prerequisite: MATH 290 or MATH 291, and MATH 526 or MATH 628.

MATH 608. Statistical Data Science. 3 Credits. N
This course provides an introduction to main statistical concepts in data science with an emphasis on mathematical understanding and its software implementation. Programming uses Python or Julia. Covered statistical models include linear regression and linear classification for high-dimensional problems; support vector machines and flexible discriminants; Bayesian learning and the EM algorithm; Monte Carlo methods; probabilistic graphical models; unsupervised learning. Prerequisite: A calculus-based statistics course (MATH 628 or MATH 526) and a linear algebra course (MATH 290 or MATH 291). Recommended: EECS 138 or equivalent experience.

MATH 611. Time Series Analysis. 3 Credits. N
This course provides an introduction to time series analysis with an emphasis on mathematical understanding and its software implementation. Programming uses Python, R, or Julia. Covered topics include the following. Modeling time series, trend, seasonality and residual process. Autocovariance function, multivariate time series, moving average and autoregression. Stationary processes, linear processes, linear filtering. Confidence intervals for the mean and the autocorrelation, hypothesis tests for a time series model. ARIMA models, partial autocorrelation function, parameter estimation methods, forecasting, model selection. Stationary processes in the frequency domain, spectral density, periodogram, smoothing, spectral window. Nonstationary time series, ARIMA models. State-space representation, Kalman recursions. Recurrent neural networks as time allows. Prerequisite: MATH 290 or MATH 291, and MATH 526 or MATH 628.

MATH 624. Discrete Probability. 3 Credits. N
Theory and applications of discrete probability models. Elementary combinatorial analysis, random walks, urn models, occupancy problems, and the binomial and Poisson distributions. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

MATH 627. Probability. 3 Credits. N
Introduction to mathematical probability; combinatorial analysis; the binomial, Poisson, and normal distributions; limit theorems; laws of large numbers. Prerequisite: MATH 127 or MATH 147 and MATH 290 or MATH 291.

MATH 628. Mathematical Theory of Statistics. 3 Credits. N
An introduction to sampling theory and statistical inference; special distributions; and other topics. Prerequisite: MATH 627.

MATH 630. Actuarial Mathematics. 3 Credits. N
This course is an introduction to some of the notions and computations in actuarial mathematics. Many computations are associated with compound interest with applications to bank accounts, mortgages, pensions, bonds, and annuities. Life contingencies are considered for annuities and insurance. Some introduction to option pricing is given, particularly the Black-Scholes formula. This course provides the background material needed for some of the initial examinations given by the societies for actuaries, including the Financial Mathematics Exam. Prerequisite: MATH 526 or MATH 627 or a comparable course in probability.

MATH 646. Complex Variable and Applications. 3 Credits. N
Analytic functions of a complex variable, infinite series in the complex plane, theory of residues, conformal mapping and applications. Prerequisite: MATH 127 or MATH 147.

MATH 647. Applied Partial Differential Equations. 3 Credits. N
Boundary value problems; topics on partial differentiation; theory of characteristic curves; partial differential equations of mathematical physics. Prerequisite: MATH 127 or MATH 147 and MATH 220 or MATH 221 or MATH 320.

MATH 648. Calculus of Variations and Integral Equations. 3 Credits. N
Topics in the calculus of variations, integral equations, and applications. Prerequisite: MATH 127 or MATH 147 and MATH 220 or MATH 221 or MATH 320.

MATH 650. Nonlinear Dynamical Systems. 3 Credits. N
This course provides an introduction to nonlinear ordinary differential equations and dynamical systems theory with an emphasis on applications. Topics covered include the existence and uniqueness of solutions to initial value problems, as well as the qualitative behavior of solutions, including existence of equilibria, periodic and connecting orbits and their stability. Additional topics include an introduction to bifurcation theory and chaos. Prerequisite: MATH 127 or MATH 147, and MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291.

MATH 660. Geometry I. 3 Credits. N
An introduction to modern geometry. Differential geometry of curves and surfaces, the topological classification of closed surfaces, dynamical systems, and knots and their polynomials. Other topics as time permits. Prerequisite: MATH 127 or MATH 147 and MATH 290 or MATH 291.

MATH 661. Geometry II. 3 Credits. N
Continuation of Math 660. Prerequisite: MATH 660 or permission of instructor.

MATH 669. Special Topics: ____. 1-3 Credits. N
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Variable.

MATH 724. Combinatorial Mathematics. 3 Credits.
An introduction to enumerative combinatorics. Topics include basic counting principles, induction and recursion, graph theory, partitions and compositions, generating functions, inclusion/exclusion, and Polya-
Redfield theory. Prerequisite: MATH 290 or MATH 291 and a MATH course numbered 450 or higher.

MATH 725. Graph Theory. 3 Credits.
Graphs; trees; connectivity; Menger's theorem; eulerian and hamiltonian graphs; planarity; coloring of graphs; factorization of graphs; matching theory; alternating chain methods; introduction to matroids with applications to graph theory. Prerequisite: MATH 290 and a MATH course numbered 450 or higher.

MATH 727. Probability Theory. 3 Credits.
A mathematical introduction to premeasure-theoretic probability. Topics include probability spaces, conditional probabilities and independent events, random variables and probability distributions, special discrete and continuous distributions with emphasis on parametric families used in applications, the distribution problem for functions of random variables, sequences of independent random variables, laws of large numbers, and the central limit theorem. Prerequisite: MATH 290, or equivalent.

MATH 728. Statistical Theory. 3 Credits. N
Theory of point estimation and hypothesis testing with applications. Confidence region methodologies and relations to estimation and testing. Prerequisite: MATH 727 or equivalent.

MATH 750. Stochastic Adaptive Control. 3 Credits.
Stochastic adaptive control methods. Stochastic processes such as Markov chains and Brownian motion, stochastic integral, differential rule, stochastic differential equations, martingales and estimation techniques. Identification and control of discrete and continuous time linear stochastic systems. Specific applications and simulation results of stochastic adaptive control theory. Prerequisite: MATH 627 and some knowledge of control.

MATH 765. Mathematical Analysis I. 3 Credits.
MATH 765 and MATH 766 are theoretical courses on the fundamental concepts of analysis and the methods of proof. These two courses include the concept of a real number; limits, continuity, and uniform convergence; derivatives and integrals of functions of one and of several real variables. Prerequisite: MATH 290, or equivalent.

MATH 766. Mathematical Analysis II. 3 Credits.
A continuation of MATH 765. Prerequisite: MATH 765.

MATH 781. Numerical Analysis I. 3 Credits.
Finite and divided differences. Interpolation, numerical differentiation, and integration. Gaussian quadrature. Numerical integration of ordinary differential equations. Curve fitting. (Same as EECS 781.) Prerequisite: MATH 320 and knowledge of a programming language.

MATH 782. Numerical Analysis II. 3 Credits.

MATH 783. Applied Numerical Methods for Partial Differential Equations. 3 Credits.
Finite difference methods applied to particular initial-value problems (both parabolic and hyperbolic), to illustrate the concepts of convergence and stability to provide a background for treating more complicated problems arising in engineering and physics. Finite difference methods for elliptic boundary-value problems, with a discussion of convergence and methods for solving the resulting algebraic system. Variational methods for elliptic problems. Prerequisite: MATH 647 or equivalent.

MATH 790. Linear Algebra II. 3 Credits.
A theoretical course on the fundamental concepts and theorems of linear algebra. Topics covered are: vector space, basis, dimension, subspace, norm, inner product, Banach space, Hilbert space, orthonormal basis, positive definite matrix, minimal polynomial, diagonalization and other canonical forms, Cayley-Hamilton, spectral radius, dual space, quotient space. Prerequisite: MATH 590.

MATH 791. Modern Algebra. 3 Credits.
This course includes the following topics: multiplicative properties of the integers and introductions to group theory, ring theory and field theory. Prerequisite: MATH 290, or equivalent.

MATH 796. Special Topics: ____. 1-3 Credits.
Arranged as needed to present appropriate material for groups of students. May be repeated for credit. Prerequisite: Variable.

MATH 799. Directed Readings. 1-3 Credits.
Directed readings on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment.

MATH 800. Complex Analysis I. 3 Credits.
Cauchy's theorem and contour integration; the argument principle; maximum modulus principle; Schwarz symmetry principle; analytic continuation; monodromy theorem; applications to the gamma function and Riemann's zeta function; entire and meromorphic functions; conformal mapping; Riemann mapping theorem; univalent functions. Prerequisite: MATH 766 or concurrently with MATH 766.

MATH 802. Set Theory. 3 Credits.
Axiomatic set theory; transfinite induction; regularity and choice; ordinal and cardinal arithmetic; miscellaneous additional topics (e.g., extra axioms such as GCH or MA; infinite combinatorics; large cardinals). Prerequisite: MATH 765 or MATH 791, or concurrent enrollment in MATH 765 or MATH 791, or equivalent evidence of mathematical maturity.

MATH 810. Real Analysis and Measure Theory I. 3 Credits.

MATH 811. Real Analysis and Measure Theory II. 3 Credits.
Continuation of MATH 810. Prerequisite: MATH 810.

MATH 820. Introduction to Topology. 3 Credits.
General topology. Set theory; topological spaces; connected sets; continuous functions; generalized convergence; product and quotient spaces; embedding in cubes; metric spaces and metrization; compact spaces; function spaces. Prerequisite: MATH 765.

MATH 821. Algebraic Topology I. 3 Credits.
The fundamental group and covering spaces (including classification); compact surfaces; homology theory, computations (including homotopy invariance) and applications (including Brouwer fixed point theorem); introduction to cohomology theory. Prerequisite: MATH 790 and MATH 791 and MATH 820, or permission of instructor.

MATH 824. Algebraic Combinatorics. 3 Credits.
An introduction to the fundamental structures and methods of modern algebraic combinatorics. Topics include partially ordered sets and lattices, matroids, simplicial complexes, polytopes, hyperplane arrangements, partitions and tableaux, and symmetric functions. Prerequisite: MATH 724 and MATH 791, or permission of the instructor.

MATH 830. Abstract Algebra. 3 Credits.
This is an introductory course covering the basics of module theory over commutative rings. Topics include quotient modules and module homomorphisms; direct sums and free modules; tensor products of modules and exact sequences; projective, injective, and flat modules;
direct and inverse limits of modules; the theory of modules over principal ideal domains, and normal forms; graded rings and modules. Prerequisite: MATH 790 and MATH 791.

MATH 831. Abstract Algebra II. 3 Credits.
This course covers foundational topics in commutative algebra not covered in MATH 830. Potential topics include integral extensions, lying over and going-up; normal rings and going-down; Noether normalization, and dimension theory for finitely generated algebras over a field; chain conditions, and Noetherian and Artinian rings and modules; local rings and Nakayama’s Lemma; rings of formal power series; completion and flatness; primary decomposition and associated primes; affine algebraic varieties and Hilbert’s Nullstellensatz; the prime spectrum of a ring and the Zariski topology. Prerequisite: MATH 830.

MATH 840. Differentiable Manifolds. 3 Credits.
Multilinear algebra of finite dimensional vector spaces over fields; differentiable structures and tangent and tensor bundles; differentiable mappings and differentials; exterior differential forms; curves and surfaces as differentiable manifolds; affine connections and covariant differentiation; Riemannian manifolds. Prerequisite: MATH 765 and MATH 790.

MATH 850. Differential Equations and Dynamical Systems. 3 Credits.
Discrete and differentiable dynamical systems with an emphasis on the qualitative theory. Topics to be covered include review of linear systems, existence and uniqueness theorems, flows and discrete dynamical systems, linearization (Hartman-Grobman theorem), stable and unstable manifolds, Poincare sections, normal forms, Hamiltonian systems, and an introduction to bifurcation theory and chaos. Prerequisite: MATH 320 and MATH 766, or permission of instructor.

MATH 851. Topics in Dynamical Systems: ____. 3 Credits.
Topics to be covered include complex dynamical systems, perturbation theory, nonlinear analysis of time series, chaotic dynamical systems, and numerical methods as dynamical systems. Topics may vary. Course may be repeated if topic varies. Prerequisite: MATH 850 or permission of instructor.

MATH 865. Stochastic Processes I. 3 Credits.
Markov chains; Markov processes; diffusion processes; stationary processes. Emphasis is placed on applications: random walks; branching theory; Brownian motion; Poisson process; birth and death processes. Prerequisite: MATH 627 and MATH 765.

MATH 866. Stochastic Processes II. 3 Credits.
This is a second course in stochastic processes, focused on stochastic calculus with respect to a large class of semi-martingales and its applications to topics selected from classical analysis (linear PDE), finance, engineering, and statistics. The course will start with basic properties of martingales and random walks and then develop into the core program on Ito’s stochastic calculus and stochastic differential equations. These techniques provide useful and important tools and models in many pure and applied areas. Prerequisite: MATH 727 and MATH 865.

MATH 874. Statistical Decision Theory. 3 Credits.
Game theory, admissible decision functions and complete class theorems; Bayes and minimax solutions; sufficiency; invariance; multiple decision problems; sequential decision problems. Prerequisite: MATH 628 and MATH 766.

MATH 881. Topics in Advanced Numerical Linear Algebra: _____. 3 Credits.
Advanced topics in numerical linear algebra including pseudo-spectra, rounding error analysis and perturbation theory, numerical methods for problems with special structure, and numerical methods for large scale problems. Topics may vary. Course may be repeated if topic varies. Prerequisite: MATH 781, MATH 782, MATH 790, or permission of the instructor.

MATH 882. Topics in Advanced Numerical Differential Equations: _____. 3 Credits.
Advanced course in the numerical solution of ordinary and partial differential equations including modern numerical methods and the associated analysis. Topics may vary. Course may be repeated if topic varies. Prerequisite: MATH 781, MATH 782, MATH 783, or permission of the instructor.

MATH 890. Fourier Analysis. 3 Credits.
Introduction to modern techniques in Fourier Analysis in the Euclidean setting with emphasis in the study of functions spaces and operators acting on them. Topics may vary from year to year and include, among others, distribution theory, Sobolev spaces, estimates for fractional integrals and fractional derivatives, wavelets, and some elements of Calderon-Zygmund theory. Applications in other areas of mathematics, in particular partial differential equations and signal analysis, will be presented based on the instructor’s and the students’ interests. Prerequisite: Math 810 and Math 800, or instructor’s permission.

MATH 896. Master’s Research Component. 1-6 Credits.

MATH 899. Master’s Thesis. 1-10 Credits.

MATH 910. Algebraic Curves. 3 Credits.
Algebraic sets, varieties, plane curves, morphisms and rational maps, resolution of singularities, Reimann-Roch theorem. Prerequisite: MATH 790 and MATH 791.

MATH 920. Lie Groups and Lie Algebras. 3 Credits.
General properties of Lie groups, closed subgroups, one-parameter subgroups, homogeneous spaces, Lie bracket, Lie algebras, exponential map, structure of semi-simple Lie algebras, invariant forms, Maurer-Cartan equation, covering groups, spinor groups. Prerequisite: MATH 766 and MATH 790 and MATH 791.

MATH 940. Advanced Probability. 3 Credits.
Probability measures, random variables, distribution functions, characteristic functions, types of convergence, central limit theorem. Laws of large numbers and other limit theorems. Conditional probability, Markov processes, and other topics in the theory of stochastic processes. Prerequisite: MATH 810.

MATH 950. Partial Differential Equations. 3 Credits.
Introduction; equations of mathematical physics; classification of linear equations and systems. Existence and uniqueness problems for elliptic, parabolic, and hyperbolic equations. Eigenvalue problems for elliptic operators; numerical methods. Prerequisite: MATH 766.

MATH 951. Topics in Advanced Partial Differential Equations II: ____. 3 Credits.
The course uses functional analytic techniques to further develop various aspects of the modern framework of linear and nonlinear partial differential equations. Sobolev spaces, distributions and operator theory are used in the treatment of linear second-order elliptic, parabolic, and hyperbolic equations. In particular we discuss the kind of potential diffusion and wave equations that arise in inhomogeneous media, with an emphasis on the solvability of equations with different initial/boundary conditions. Then, we will survey the theory of semigroup of operators, which is one of the main tools in the study of the long-time behavior of solutions to nonlinear PDE. The theories and applications encountered in this course will create a strong foundation for studying nonlinear equations and nonlinear science in general. Topics may vary. Course may be
repeated if topic varies. Prerequisite: MATH 950 or permission of the instructor.

MATH 960. Functional Analysis. 3 Credits.

MATH 961. Topics in Functional Analysis: _____ 3 Credits.
Continuation of MATH 960. Topics may vary. Course may be repeated if topic varies.

MATH 990. Seminar: _____ 1-10 Credits.

MATH 993. Readings in Mathematics. 1-10 Credits.

MATH 996. Special Topics: _____ 3 Credits.
Advanced courses on special topics; given as need arises. Prerequisite: Variable.

MATH 999. Doctoral Dissertation. 1-10 Credits.

Museum Studies Courses

MUSE 177. First Year Seminar: _____ 3 Credits.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Museum Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

MUSE 301. Museums and Society: Past, Present, Future. 3 Credits.
An introduction to museums and the field of museum studies. Using short lectures, discussion, laboratory exercises, field trips, and guest speakers, students will explore the history, role, and function of museums including types, dimensions, creation and management of collections, exhibition development, administration, and visitor experiences. Includes instruction and practice in writing for a variety of museum contexts and audiences. Designed for students interested in museums and curious about museum careers.

MUSE 400. Directed Readings in Museum Studies. 1-3 Credits.
Directed reading in an area of Museum Studies for which there is no course in the Museum Studies program or in cooperating departments and in which a member of the faculty has expertise. Prerequisite: Consent of instructor.

MUSE 480. Special Topics in Museum Studies: _____ 1-3 Credits.
Courses on special topics in museum studies, given as need arises. Lectures, discussions of readings, and guest speakers. Topic for semester to be announced. Instructor permission usually required. Prerequisite: Varies by section and instructor.

MUSE 580. Special Topics in Museum Studies: _____ 1-3 Credits.
Courses on special topics in museum studies, given as need arises. Lectures, discussions of readings, and guest speakers. Topic for semester to be announced. Instructor permission may be required. Prerequisite: Successful completion of a History, Art History, Anthropology or Museum Studies course numbered below 500, or permission of instructor.

MUSE 699. Anthropology in Museums. 3 Credits.
The course reviews the history of archeological, ethnographic, physical anthropological and other types of collections. It also considers current issues facing anthropologists, such as: contested rights to collections and the stories that accompany them; representation and interpretation of cultures; art and artifact; conceptualization, design and building of exhibitions; and anthropological research and education in the museum. (Same as ANTH 699.) Prerequisite: ANTH 150 or ANTH 108 or consent of instructor.

MUSE 701. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and HIST 728.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

MUSE 703. Introduction to Museum Exhibits. 3 Credits.
Presentation of principles and practices of exhibit management, design, and production. Topics will include developing a master plan for museum exhibits; concept development; design, installation, and maintenance of exhibits; design theory; design process; label writing and editing; selection of materials architectural requirements and building codes; cost estimating; publicity; security; and exhibit evaluation. Consideration will be given to exhibition problems in public and private museums in the areas of anthropology, art, history, natural history, and technology. (Same as AMS 700, BIOL 787, GEOL 781, and HIST 723.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

MUSE 704. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, ANTH 798, BIOL 789, GEOL 785, and HIST 725.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

MUSE 705. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, GEOL 784, and HIST 721.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

MUSE 706. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, GEOL 780, and HIST 722.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

MUSE 707. Practical Archival Principles. 3 Credits.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as HIST 727.)
MUSE 710. Natural Sciences Curation and Collections Management. 3 Credits.
This course explores collections in the KU Museum of Natural History through the eyes of their curators and collection managers. It addresses aspects of collecting, cataloging, preserving, storing, managing, and digitally archiving different types of natural science collections. The course format consists of lectures, readings, workshops, and guided tours of the museum's paleontological, biological (flora and fauna) and archaeological division collections, as well as the Spencer Museum of Art's ethnographic collections. Student projects will involve one of the museum's collections with the opportunity for hands-on experience. (Same as BIOL 706.)

MUSE 780. Special Topics: 1-3 Credits.
Advanced courses on special topics in museum studies, given as need arises. Lectures, discussions of readings, and guest speakers. Topic for semester to be announced. Prerequisite: Graduate standing in Museum Studies Program or permission of instructor.

MUSE 790. Advanced Study. 1-3 Credits.
Individual research in a specialized topic not ordinarily treated in a Museum Studies core course for which there is a member of the graduate faculty competent and willing to direct a research project. Prerequisite: Consent of instructor.

MUSE 792. Directed Readings. 1-3 Credits.
Directed reading in an area of Museum Studies in which there is no particular course in the Museum Studies program or in cooperating departments but in which there is a member of the graduate faculty competent and willing to direct a program study. Prerequisite: Consent of instructor.

MUSE 799. Museum Internship. 1-6 Credits.
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. Graded on a satisfactory/unsatisfactory basis. (Same as AMS 799, ANTH 799, and GEOL 723.)

MUSE 801. The Nature of Museums. 3 Credits.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as AMS 799, ANTH 799, and GEOL 723.)

MUSE 802. Culture of Museums. 3 Credits.
Culture of Museums is the second of a 2-semester course sequence, and highlights classic texts and current directions in museum studies. It is organized around the core conceptual domains of museums - Materiality, Representation, and Engagement. The course establishes the framework for understanding changes on the horizon for museums, and enables students to be familiar with classic texts in the field. Museums of art, history, natural history, and small. Each week the class will read assigned articles or chapters and will be prepared to discuss and analyze the assignment. In addition, each week there will be several monographs assigned that elaborate and inform the topic. One student will take responsibility for each work and will lead discussion concerning the material. The student will familiarize themselves with the work, and should meet with the instructor before class to structure their presentation. In class, the student will lead discussion and emphasize key elements in the work.

MUSE 803. Seminar in Current Museum Topics. 3 Credits.
This course has two core objectives - (1) to consider current issues in and around museums that will have a bearing on the field's future, and (2) to be a springboard for museum studies students to formulate and make substantial headway on their required final projects. Therefore, in addition to each week's readings assigned by the instructor, each student will have several opportunities to select the readings for the rest of the class. The student-assigned readings will be relevant to each student's research, and will (1) help students acquire a more nuanced and critical grasp of works that are key to their research by getting feedback from the rest of the class; and (2) build the class's general awareness of important scholarship in the field.

Philosophy Courses

PHIL 140. Introduction to Philosophy. 3 Credits. HR H
An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge.

PHIL 141. Introduction to Philosophy Honors. 3 Credits. HR H
An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. Prerequisite: Open only to students in the University Honors Program or by consent of department.

PHIL 148. Reason and Argument. 3 Credits. H
An introduction to the theory and practice of logical analysis. Special emphasis is placed upon the logical appraisal of everyday arguments.

PHIL 150. Philosophical Communication. 3 Credits. S
This course provides an introduction to philosophy, with a focus on the traditional philosophical practice of oral communication and argument. Through exploration of perennial philosophical questions (e.g., Are there different ways of knowing? What makes for a good life? Could computers have minds? Are we obligated to obey the law? What makes you the same person over time?), students develop their ability to participate in various forms of philosophical communication. In this course, students have the opportunity to teach course material to peers, engage in class debates over philosophical issues, and craft short presentations exploring a facet of the course topic.

PHIL 160. Introduction to Ethics. 3 Credits. HR H
An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice.

PHIL 161. Introduction to Ethics Honors. 3 Credits. HR H
An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice. Prerequisite: Open only to students in the University Honors Program or by consent of department.

PHIL 170. The Meaning of Life. 3 Credits. H
This course introduces central questions about the meaning of life. The question itself may be taken in a number of ways: Why is there a universe that contains life? What is the nature or purpose of human being and persons? What is the point of our existence? Is it possible to lead a meaningful life? This course examines these and other questions relating to meaning in life, such as our place in the physical universe, the possibility and significance of God's existence, the nature of human persons (including the relation between, and nature of, body, mind, and consciousness), what death tells us about the nature of life and whether it is appropriate to fear death, the nature of 'the good life' (including
the import for 'the good life' of knowledge, success, pleasure, health, friendship, love, in both our physical and mental life, etc.), the nature of value and its relation to meaning in life, and our obligations to other beings.

PHIL 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Philosophy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

PHIL 180. Introduction to Social and Political Philosophy. 3 Credits. HR H
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty.

PHIL 181. Introduction to Social and Political Philosophy, Honors. 3 Credits. HR H
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty. Prerequisite: Open only to students in the University Honors Program or by consent of department.

PHIL 200. Study Abroad Topics in Philosophy: ______. 1-6 Credits. H
This course is designed for the study of special topics in Philosophy. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

PHIL 210. Playing the Odds: Reasoning, Chance, and Probability. 3 Credits. H
Many of the things we need to think through involve uncertainty. There may be a chance that it will rain, that a flight will get canceled, that a car accident will occur, or that a team will win. Should you buy a $10 parking pass if you know there's a 5% chance you'll get a $100 fine if you don't buy one? This course will teach you how to think through uncertainty and probability, using philosophical and mathematical techniques, logic, and critical thinking. This course presupposes knowledge of pre-algebra and basic high school algebra.

PHIL 305. The Meaning of Death. 3 Credits. HR
A number of puzzles and paradoxes surround the nature and (dis)value of death. These include: is death a bad thing? If so, when is it a bad thing? Is it rational to fear death? If so, is it rational to regret that we were not born earlier? What is death? Can a person's death have a valuable meaning? Readings for this course will be taken from Epicurus, Derek Parfit, Fred Feldman, and many others.

PHIL 306. God, Buddhism, and the Good Life. 3 Credits. HR
This course introduces students to rigorous philosophic debates about some gripping existential questions surrounding the value of religion with God, a religion without God (focusing on Buddhism), and atheism. We will explore arguments for opposing answers regarding topics such as: whether atheism threatens the value of life; differences in how the self is viewed in Western and Eastern religions; and differences in how morality is grounded in these different traditions. We will examine the compatibility of atheism with Buddhism, and of Buddhism with belief in God. (Same as REL 306.) Prerequisite: A 100-level Philosophy course or permission of instructor.

PHIL 310. Introduction to Symbolic Logic. 3 Credits. H
An introduction to the theory and practice of elementary symbolic logic. Special emphasis will be placed upon the logical analysis of mathematical proof and upon a proof of the consistency of elementary logic.

PHIL 320. Philosophical Issues in the Life Sciences. 3 Credits. HR H
A philosophical analysis of theoretical and ethical issues that arise in the practice of the life sciences. Discusses the conceptual foundation of the life sciences—evolutionary theory and genetics. Critically explores the use of statistical and non-human-animal models. Examines ethical issues including problems that arise in human and other animal experimentation, obligations to the environment, proper use of patents, and conflicts in professional duties.

PHIL 323. Philosophy of Psychology. 3 Credits. HR
The philosophy of psychology is a relatively new field of inquiry in philosophy and so the question of what the philosophy of psychology is remains an open question. In this course, we will understand the philosophy of psychology in two ways. First, it is the study of the nature of psychology and the various capacities and mechanisms that make cognition possible. We will consider whether there is a unique psychological level of explanation or whether psychology ultimately reduces to the brain. We will also explore various philosophical puzzles raised by consideration of psychological abilities like memory, attention, and emotion. Second, philosophy of psychology is a subfield of philosophy of science, where we examine a particular science—here, experimental psychology—as a way to explore broader questions about what science is, how science explains phenomena, and how values intersect with its investigations. All of this makes it an exciting time to study the philosophy of psychology as students in this course, student's interests will play a role in selecting topics and shaping the direction of our inquiry. (Same as PSYC 323.)

PHIL 325. Philosophy of Computation, AI, and Robots. 3 Credits. HR
Computers are everywhere, and they seem to be getting increasingly intelligent. However, it is surprisingly difficult to say what exactly a computer is, and what it means for one to be intelligent. In this course, we will examine arguments about the nature of computation, including how computation is used in science, whether computers and robots could really have minds (or could only just simulate having a mind), and whether the brain might literally be a computer. Prerequisite: An introductory course in philosophy or permission of instructor.

PHIL 330. Belief and the Social. 3 Credits. HR
This is a course in social epistemology. It explores how social phenomena within communities and between individuals bear on issues of belief, justification, and knowledge. Topics may include philosophical examinations of lies, BS (in the technical sense of Frankfurt and others), conspiracy theories, propaganda, disagreement, testimony, expertise, trust, group belief, and epistemic injustice.

PHIL 335. Philosophy of Social Groups and Identities. 3 Credits. H
This course is on social groups, which include teams and clubs as well as gender and racial groups. Topics to be covered might include whether a group exists, in addition to its members, and if so what kind of thing it is; whether group membership in various cases is a matter of members sharing a group identity rather than having certain biological features in common or occupying a common social position; and what it is for someone to have a certain group identity in the first place. Additional topics to be covered might include whether there are different kinds of groups; whether a group can do things, and be responsible for doing things, that none of its members does individually; and whether there
are ways in which we should, or shouldn't, talk about a group and its members. Groups and identities to be discussed might include those relating to gender, race, sexual orientation, and disability.

**PHIL 340. Women Philosophers. 3 Credits. HR**
This course will examine and evaluate the work of some of the women philosophers in the history of philosophy. The course will focus on a variety of philosophical issues, including social and political issues, such as women's equality and education and political rule; metaphysical issues, such as mind-body dualism, vitalism, and the existence of God; and issues concerning the relationship between philosophy, science, and religion.

**PHIL 350. Philosophical Issues in Religion. 3 Credits. H**
This course will consider, from a philosophical perspective, some of the problems in religion which arise in the development of "Natural Theology" broadly conceived. (Same as REL 380.)

**PHIL 355. Moral Issues in Political Governance. 3 Credits. HR**
This course offers a survey of competing ethical frameworks and applies them to issues in governmental policy and political activity. Topics may include the duties and virtues of citizenship, conflict of interest, public health policy, immigration, corruption, the value of patriotism, and conflicts between private and public morality. This course leaves aside debates about what sort of political framework to adopt and focuses on moral issues that matter from most any political perspective.

**PHIL 360. Moral Issues in Business. 3 Credits. H**
After a brief survey of techniques of moral argument and analysis, particular moral issues related to business will be discussed. These will include such topics as advertising, conflict of interest, personal and corporate responsibility, codes of conduct, private property, strikes, just wage, and the tension between moral ideals and business pressures.

**PHIL 368. Moral Issues in Sports. 3 Credits. H**
This course is a philosophical investigation of the nature and value of sports. Provides students with an overview of ethical theory and considers principled answers to questions about the values of sports and about how those values can be sustained or demeaned. Students debate a variety of live controversies in sports today such as drugs, cheating, sexism, racism, the role of sports in educational institutions, Title IX, commercialization, and violence.

**PHIL 369. Moral Issues in Warfare. 3 Credits. H**
This course is a philosophical investigation of the nature and ethical dimensions of warfare and the use of force. It provides students with an overview of ethical theory and considers answers to questions about the principles of just war theory, the values served by these principles, and about how those values can be sustained or demeaned. Students debate a variety of live controversies in warfare today such as just causes for war, when threats ought to be deemed imminent, collateral damage and the nature of non-civilians on the battlefield, and terrorism.

**PHIL 370. Moral Issues in Medicine. 3 Credits. H**
After a brief survey of techniques of moral argument and analysis, particular moral issues related to medicine will be discussed. The justification and limits of some rules of professional conduct that deal with such matters as confidentiality, truth-telling, and protection of medical research subjects will be considered. Issues relating to death and dying in medicine such as abortion, euthanasia, and the refusal of life-saving medical therapy also will be discussed.

**PHIL 375. Moral Issues in Computer Technology. 3 Credits. H**
After surveying the nature of ethics and morality and learning some standard techniques of moral argumentation, we shall examine such topics as: property and ownership rights in computer programs and software; privacy in computer entry and records; responsibility for computer use and failure; the "big brother" syndrome made possible by extensive personal data banks; censorship and the world-wide web; computer illiteracy and social displacement; and ethical limits to computer research.

**PHIL 380. Environmental Ethics. 3 Credits. H**
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the environment will be discussed. These will include such topics (one of which may be dealt with in depth) as animal rights, rights of future generations, wilderness preservation, population control, endangered species, and economics and public policy. Prerequisite: EVRN 148 or consent of instructor.

**PHIL 381. Feminism and Philosophy. 3 Credits. H**
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion, and justifications for preferential treatment of women. (Same as WGS 381.)

**PHIL 382. Philosophy in Literature and Film. 3 Credits. HR**
A survey of topics of philosophical interest as they appear in literature, film, and the writings of philosophers. We will consider what these arts can contribute to the practice of philosophy and how philosophy might guide our engagement with literature and film.

**PHIL 384. Ancient Philosophy. 3 Credits. HR H**
A survey of the thought of the principal philosophers of ancient Greece, with emphasis on the pre-Socratics, Plato, and Aristotle.

**PHIL 386. Modern Philosophy from Descartes to Kant. 3 Credits. HR H**
A survey of the writings of such principal philosophers of the modern period as Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume, and Kant.

**PHIL 388. Analytic Philosophy: Frege to Quine. 3 Credits. H**
An introduction to the principal figures in the philosophical tradition that forms the background to contemporary investigations in analytic philosophy of language. Particular attention will be paid to Frege, Russell, Wittgenstein, and Quine. Prerequisite: PHIL 310 or equivalent, or PHIL 310 may be taken concurrently.

**PHIL 418. Introduction to Cognitive Science. 3 Credits. S**
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor.

**PHIL 499. Senior Essay. 3 Credits. H**
This course is required, in addition to regular major requirements, of those students wishing to work for departmental honors in Philosophy. Students wishing to enroll should first speak with the departmental adviser for majors. Prerequisite: Open to senior majors in Philosophy by consent of instructor.

**PHIL 500. Studies in Philosophy:_____. 1-6 Credits. H**
(Topic, instructor, and specific prerequisite to be announced in Schedule of Classes.) A study of particular philosophical problems or thinkers not covered by other courses. The course may be offered concurrently by different instructors under different subtitles, and may, with the consent of the chair, be taken more than once if content varies.

**PHIL 504. Philosophy of Sex and Love. 3 Credits. H**
A discussion of philosophical issues such as the relation between love, autonomy, and friendship; heterosexual and homosexual relationships; marriage and adultery; rape and sexual harassment; prostitution; and pornography.

PHIL 506. Chinese Thought. 3 Credits. NW H/W
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and HUM 524.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy.

PHIL 508. Early Greek Philosophy. 3 Credits. H/W
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers, with some attention paid to the Sophists and the Hippocratic corpus. (Same as GRK 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor.

PHIL 551. Philosophy of Economics. 3 Credits. HR
This course surveys the central concepts, issues and debates surrounding the philosophy of economics. The course is divided into three parts. The first is focused on the nature of economic science, whether it can be separated from value judgments, along with the foundational and methodological issues that arise in economics. The second part of the course provides a survey of several central topics in the philosophy of economics including rational choice theory, game theory, social choice theory, behavioral and neuroeconomics. The third part concerns welfare economics (broadly understood), including the aims of welfare economics, the nature of well-being, the possibility of interpersonal utility comparisons, and the aims of economic institutional design. At the end of this course, students should have knowledge and understanding of central methodological and substantive debates regarding the nature of economic theories. This course should also enhance students' ability to think critically and analytically about the nature of economic theories and the key concepts in the philosophy of economics, write clearly and cogently about philosophical issues that arise in economic, incorporate the ideas, theories and techniques that arise in both philosophy and economics to understand social and economic issues. (Same as ECON 551.) Prerequisite: An introductory course in philosophy or economics, or permission of instructor.

PHIL 555. Justice and Economic Systems. 3 Credits. H
An examination of important representative theories of the justness of an economic system, with particular attention paid to such institutions as private property, a market economy, means and relationships of production, and principles of distribution to individuals. The theorists under consideration include Locke, Adam Smith, Marx and Engels, contemporary utilitarians, Rawls, and Nozick. Prerequisite: A course in ethics or an introductory course in economics or in business.

PHIL 557. Kant. 3 Credits. H
A survey of the major works of Immanuel Kant, with attention to his critical method and its application to issues in theoretical philosophy, practical philosophy, aesthetics, or the philosophy of history. Prerequisite: PHIL 386.

PHIL 558. Seventeenth Century Philosophy. 3 Credits. H
The development of philosophy in the 17th century. Special attention will be paid to such major figures as Descartes, Malebranche, Spinoza, Leibniz, Elisabeth of Bohemia, Cavendish, Conway, Astell, Hobbes, and Locke. Prerequisite: PHIL 386 or consent of instructor.

PHIL 559. Eighteenth Century Philosophy. 3 Credits. H
The development of philosophy in the 18th century. Special attention will be paid to such major figures as Hutcheson, Butler, Berkeley, Mandeville, Hume, Smith, Kant, Rousseau, Bentham, Wolstonecraft and Shepherd. Prerequisite: PHIL 386 or consent of instructor.

PHIL 560. Nineteenth Century Philosophy. 3 Credits. H
The development of philosophy in the 19th century. Special attention will be paid to such major figures as Hegel, Kierkegaard, Marx, Nietzsche, and Mill. Prerequisite: PHIL 386 or permission of instructor.

PHIL 562. Kierkegaard. 3 Credits. H
A study of the thought of Soren Kierkegaard through examination of some of his major writings. Some attention is given to his influence on the development of existentialist philosophies. Prerequisite: PHIL 384 or PHIL 386.

PHIL 570. Nietzsche. 3 Credits. H
A study of Nietzsche's major writings and ideas, with some attention to his philosophical influence. Prerequisite: PHIL 384 or PHIL 386 or permission of instructor.

PHIL 582. Existentialism. 3 Credits. H/W
A study of the main themes and leading philosophers of the existentialist movement. Prerequisite: Two courses in philosophy.

PHIL 590. Phenomenology. 3 Credits. H
A study of the main themes and leading philosophers of the phenomenological movement. Prerequisite: PHIL 386.

PHIL 592. Contemporary Continental Philosophy. 3 Credits. H
A study of selected topics in 20th century European philosophy, such as hermeneutics, critical theory, and poststructuralism. Figures to be studied could include Heidegger, Gadamer, Adorno, Habermas, and Foucault. Prerequisite: PHIL 386.

PHIL 600. Readings in Philosophy: ______. 1-6 Credits. H
Individual reading on topics not covered in course work. Prerequisite: Consent of instructor.

PHIL 605. The Philosophy of Plato. 3 Credits. H
A survey of the major works of Plato, with attention both to Plato's distinctive arguments and positions in the major areas of philosophy and to the distinctive literary form in which Plato presents his thinking. Prerequisite: PHIL 384.

PHIL 607. The Philosophy of Aristotle. 3 Credits. H
A survey of the major works of Aristotle, with the aim of understanding Aristotle's distinctive formulations of central philosophical questions, the arguments he presents for his answers to those questions, and the systematic interconnections between his positions in the different areas of philosophy. Prerequisite: PHIL 384.

PHIL 608. Hellenistic Philosophy. 3 Credits. H
Survey of Stoicism, Epicureanism, and Scepticism from their beginnings through the second century AD. Prerequisite: PHIL 384 and another course in philosophy.

PHIL 610. Metalogic. 3 Credits. H
Propositional calculus, predicate calculus, consistency, decidability of formal systems, the paradoxes and number concept will be covered. Prerequisite: PHIL 310 or EECS 210 or MATH 450 or consent of instructor.

PHIL 611. Topics in Symbolic Logic: ______. 1-3 Credits. H
This course is a workshop in any of a variety of topics in symbolic logic of special importance to contemporary analytic philosophy, such as modal logic, tense logic, axiomatic set theory, Goedel's theorems, model theory, etc. May be repeated for credit as topics vary. Prerequisite: PHIL 310.

PHIL 612. Modal and Non-classical Logics. 3 Credits. H
This course provides an investigation of logics beyond first-order predicate logic, including modal logic, non-classical logic, and second-
order logic. Prerequisite: PHIL 310 or EECS 210 or MATH 450 or consent of instructor.

PHIL 620. Philosophy of Natural Science. 3 Credits. H
An examination of conceptual and foundational issues in the natural sciences. Topics may include the methodology of science (the nature and status of laws, the precise way in which experiment contributes to theory) and puzzles concerning the content of science (the status of space and time, the problematic nature of quantum mechanics). Prerequisite: PHIL 310 or PHIL 610, or permission of instructor.

PHIL 622. Philosophy of Social Science. 3 Credits. H
A critical examination of the methods, concepts, and practices of the social sciences. Topics to be considered may include: theories of explanation, methodological individualism vs. holism, objectivity, the role of rationality, myth and the unconscious in the explanation of behavior, and the value neutrality of science. Prerequisite: One previous course in philosophy, or permission of instructor.

PHIL 630. Philosophy of Mathematics. 3 Credits. H
An examination of varying conceptions of the role and status of mathematical arguments. Topics may include realism/anti-realism, the consequences of Goedel's Incompleteness Theorems, the role of mathematics in the sciences, and an examination of such historical thinkers as Plato, Frege, Russell, Wittgenstein, Goedel, and Hilbert. Prerequisite: PHIL 310 or PHIL 610, or permission of instructor.

PHIL 638. Philosophy of Language. 3 Credits. H
An examination of the nature of language using the methods of analytic philosophy. Topics may include meaning, truth, reference, language and thought, and the nature of linguistic rules. Prerequisite: PHIL 388 or permission of instructor.

PHIL 648. Theory of Knowledge. 3 Credits. H
An examination of the nature of knowledge. Topics may include the concept of knowledge, knowledge of the external world, induction, theories of justification, and scientific knowledge. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor.

PHIL 650. Metaphysics. 3 Credits. H
An examination of some of the central issues in metaphysics. Topics may include causation, the mind-body problem, free will and determinism, modality, natural kinds, the nature of properties, and personal identity. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor.

PHIL 654. Philosophy of Mind. 3 Credits. H
An examination of the nature of mind using the methods of analytic philosophy. Topics may include consciousness, perception, propositional attitudes, thought and language, action and intention, mind and body, the prospects for scientific psychology, and personal identity. Prerequisite: PHIL 388 or permission of instructor.

PHIL 662. Aesthetics. 3 Credits. H
A study of some of the central themes and problems in aesthetics, such as the beautiful and the sublime in nature and the arts. Prerequisite: Two courses in philosophy or graduate standing.

PHIL 666. Rational Choice Theory. 3 Credits. H
This course is an introduction to the philosophical issues surrounding individual decision theory, game theory, and social choice theory. This includes issues of scientific theory selection, the nature of preference, the uses of games to model social interaction, and the ethical and political implications of Arrow's impossibility theorem. Formal techniques of modeling and proof, akin to those used in logic and mathematics, will be used in much of the course. Prerequisite: Two courses in economics, a philosophy course numbered 500 or above, or consent of instructor.

PHIL 668. Political Philosophy. 3 Credits. H
A systematic analysis of the concepts of politics, with reference to representative political theories. Prerequisite: A course in philosophy and a course in political science.

PHIL 670. Contemporary Ethical Theory. 3 Credits. H
An examination of some major moral philosophers and some important issues in ethical theory since the beginning of the twentieth century. Topics covered typically include intuitionism, emotivism, utilitarianism, virtue ethics, and the relationship between morality and rationality. Prerequisite: PHIL 160 or PHIL 161 or two courses in philosophy.

PHIL 671. Feminist Theories in Ethics. 3 Credits. H
This course addresses the role (if any) that gender plays in constructing ethical theories. Topics include the impact of culture, affect, and the body on our understanding of gender differences and the importance of these differences for ethics. Prerequisite: PHIL 160 or PHIL 161, or two previous philosophy courses.

PHIL 672. History of Ethics. 3 Credits. H
An interpretive and critical examination of central texts in the history of moral philosophy, which may include works by Aristotle, Hume, Kant, and J.S. Mill. Prerequisite: PHIL 160 or PHIL 161 or two previous philosophy courses.

PHIL 674. Philosophy of Law. 3 Credits. H
An examination of the concept of law and of legal reasoning. In addition, the course may consider such topics as natural law, legal excuses, the relations between law and morality, civil disobedience, civil liberties, the concept of property. Prerequisite: Two courses in philosophy or one course in philosophy and one course in law or consent of instructor.

PHIL 676. Medical Ethics: Life and Death Issues. 3 Credits. H
After a brief survey of techniques of moral argument and analysis especially as they pertain to the moral impermissibility of murder, particular moral and conceptual issues relating to death and dying in medical contexts will be addressed. Topics such as abortion, infanticide, suicide, euthanasia, the definition of death, and the right to refuse life-saving medical therapy will be included. Prerequisite: Two courses in biology or consent of instructor.

PHIL 677. Medical Ethics: Professional Responsibilities. 3 Credits. H
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the obligations of health care professionals and the rights of patients will be discussed. These will include such matters as confidentiality, truth-telling, informed consent, the ethics of research on human subjects, psychosurgery, the rights of the mentally ill, and the rights of the mentally retarded. Prerequisite: Two courses in biology or consent of instructor.

PHIL 800. Tutorial. 3 Credits.
Intensive supervised training in and application of the techniques of research. Required of every graduate student seeking an advanced degree in the first or second semester of enrollment. Passing this tutorial constitutes partial fulfillment of the Ph.D. RSRS requirements. Consent of instructor required for repeating the course. Prerequisite: Graduate standing.

PHIL 805. Plato. 3 Credits.
Prerequisite: PHIL 508 or PHIL 605 or PHIL 607 or PHIL 608 or permission of instructor.

PHIL 807. Aristotle. 3 Credits.
Prerequisite: PHIL 508 or PHIL 605 or PHIL 607 or PHIL 608 or permission of instructor.

**PHIL 820. Topics in the History of Philosophy:** _____ 3 Credits.
This course may be offered by different instructors under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisites to be announced in the Schedule of Classes. Prerequisite: 500-600 level course as specified or permission of instructor.

**PHIL 824. Hume. 3 Credits.**
Prerequisite: PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor.

**PHIL 828. Kant. 3 Credits.**
Prerequisite: PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor.

**PHIL 831. Hegel. 3 Credits.**
Prerequisite: PHIL 560 or 500-600 level course as specified or permission of instructor.

**PHIL 833. Nietzsche. 3 Credits.**
A study of the philosophy of Friedrich Nietzsche. Prerequisite: PHIL 560 or PHIL 570 or permission of instructor.

**PHIL 835. Frege. 3 Credits.**
Gottlob Frege was the founder of the analytic movement in philosophy, having done seminal work in logic, the philosophy of language, and the philosophy of mathematics. This course will focus on his primary texts as well as his influence on present-day studies. Prerequisite: PHIL 630 or PHIL 638 or permission of instructor.

**PHIL 848. Wittgenstein. 3 Credits.**
Prerequisite: PHIL 638 or PHIL 650 or PHIL 654 or permission of instructor.

**PHIL 850. Topics in Recent Philosophy:** _____ 3 Credits.
This course may be offered by different instructors under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: 500-600 level as specified or permission of instructor.

**PHIL 860. Topics in Philosophy of Science:** _____ 3 Credits.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 620 or PHIL 622 or PHIL 648 or PHIL 650 or permission of instructor.

**PHIL 868. Topics in Philosophy of Language:** _____ 3 Credits.
This course may be offered under different subtitles and may be taken more than once if the subject matter varies sufficiently. Prerequisite: PHIL 638 or permission of instructor.

**PHIL 870. Topics in Metaphysics:** _____ 3 Credits.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 650 or permission of instructor.

**PHIL 872. Topics in Theory of Knowledge:** _____ 3 Credits.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 648 or permission of instructor.

**PHIL 877. Topics in Philosophy of Mind:** _____ 3 Credits.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 654 or permission of instructor.

**PHIL 880. Topics in Ethics:** _____ 3 Credits.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 670 or PHIL 672 or permission of instructor.

**PHIL 884. Topics in Social and Political Philosophy:** _____ 3 Credits.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 655 or PHIL 666 or PHIL 668 or PHIL 674 or permission of instructor.

**PHIL 885. Topics in Law and Philosophy. 3 Credits.**
Explores various topics at the intersection of law and philosophy. Content varies but may include: What is freedom and what role should government play in a free society? What is equality and what is the best way to achieve it? What is the relationship between law and social justice? What is the source and value of human rights? Should social and economic rights be legally guaranteed? How should government redress historical injustices such as slavery, apartheid, and the Holocaust? Students must complete a substantial seminar paper.

**PHIL 886. Topics in Applied Ethics:** _____ 3 Credits.
This course may be offered under different subtitles, such as professional ethics or some issue in business ethics (e.g., corporate responsibility) or in medical ethics (e.g., the definition of death); it may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in Schedule of Classes. Prerequisite: PHIL 670 or PHIL 672 or 500-600 level course as specified or permission of instructor.

**PHIL 888. Topics in the Philosophy of the Social Sciences:** _____ 3 Credits.
This course may be offered under different subtitles, such as philosophy of a particular social science (e.g., economics, psychology) or a particular issue in the social sciences (e.g., ideology, reductivism), and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 622 or permission of instructor.

**PHIL 890. Topics in Continental Philosophy:** _____ 3 Credits.
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topics, instructor, and specific prerequisites to be announced in the Schedule of Classes.

**PHIL 899. Master's Thesis. 1-6 Credits.**
Six hours of credit will be awarded upon completion of the master's thesis, but no more than six hours of credit may be obtained in this course altogether. Graded on a satisfactory progress/limited progress/no progress basis.

**PHIL 900. Research in Philosophy:** _____ 1-3 Credits.
Intensive research in philosophy. This course may be taken through individual arrangement, or in connection with small research seminars which are offered occasionally. Students may only enroll for three hours in any given semester. May be repeated if content varies significantly. Prerequisite: Twelve hours of graduate work.

**PHIL 901. Ph.D. Tutorial. 3 Credits.**
Independent research on any topic that a graduate student and a faculty member shall agree on. It shall result in a tightly focused 20-30 page paper. The student's written work will be repeatedly evaluated over the semester by the director, and the final product must be defended in an oral examination conducted by a three-member faculty committee (including the director). Prerequisite: Students must be admitted to the Ph.D. program and have successfully completed the Ph.D. core courses requirement.

PHIL 999. Dissertation. 1-12 Credits.
This course may be taken more than once, but not for more than twelve hours of credit in any one semester. Graded on a satisfactory progress/limited progress/no progress basis.

Physics & Astronomy Courses

ASTR 150. Seminar in Physics, Astronomy and Engineering Physics. 0.5 Credits. N
This course is intended for all students in physics, astronomy and engineering physics. Course content includes topics of current interest in all fields of physics and astronomy and an introduction to professional ethics and frameworks for ethical decision making. Topics covered include but are not limited to nanotechnology, cosmology, nuclear and high energy physics, galactic evolution, condensed matter physics, space physics, biophysics and plasma physics. Course will include hands on demonstrations, group in-class activities and general advising information. (Same as PHSX 150.)

ASTR 177. First Year Seminar: _____.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Astronomy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ASTR 190. Astronomy and Civilization. 3 Credits. N
A survey course that describes the interplay between the science of astronomy and cultural beliefs. It uses, among others, examples of how religious and philosophical tenets have enhanced or conflicted with scientific principles. Not for astronomy majors.

ASTR 191. Contemporary Astronomy. 3 Credits. NP N
The structure and evolution of the universe, from nearby planets to distant quasars, are examined. Topics include recent discoveries concerning planets, stars, pulsars and black holes as well as their evolution, the structure of the universe today and how it will be in the future. The emphasis is descriptive rather than mathematical. (Same as PHSX 191.) Prerequisite: Eligibility for MATH 101.

ASTR 196. Contemporary Astronomy Laboratory. 1 Credits. NP N LFE
An introduction to astronomical observations and modern data analysis methods. Students will carry out independent investigations as well as standard exercises. This is an online course, delivered through Blackboard. (Same as PHSX 196.) Prerequisite: Corequisite: ASTR 191.

ASTR 293. Astronomy Bizarre. 3 Credits. N
An exploration of physical phenomena found in astrophysical extremes. Topics may include the following: the most violent explosions in the Universe (supernovae and gamma ray bursts); the biggest collisions in nature (galaxy interactions); the densest and most bizarre forms of matter (white dwarfs, neutron stars); the strongest magnetic fields (magnetars, pulsars); the amazing range of exo-planetary properties; and the mysteries of black holes. Prerequisite: Eligibility for MATH 101.

ASTR 390. Undergraduate Problems. 1-3 Credits. N
Undergraduate observational or theoretical problems in astronomy. Maximum credit, six hours. Prerequisite: Permission of department.

ASTR 391. Physical Astronomy, Honors. 3 Credits. NP N
An honors, calculus-based introduction to astronomy and astrophysics, required for astronomy majors. Components of the Universe - from planetary systems, stellar systems, large scale structure and cosmology - are examined to illuminate the physics principles which govern their evolution. Prerequisite: MATH 125, and either permission of instructor, or participation in the University Honors Program.

ASTR 394. The Quest for Extraterrestrial Life. 3 Credits. NP N
An introduction to the search for planets around other stars and for life in the universe beyond the earth. A discussion of the astronomical conditions under which life might form and the biological conditions of life formation and evolution. Methods of searching for extraterrestrial life. Prerequisite: An introductory course in astronomy, biology, or geology.

ASTR 400. Topics in Astronomy: _____.
A course on special topics in astronomy. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor.

ASTR 501. Honors Research. 1-4 Credits. N
This course is for students seeking Departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required four hours of total enrollment, a written and oral report of the research is required. (Same as EPHX 501 and PHSX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

ASTR 503. Undergraduate Research. 1-4 Credits. N
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as EPHX 503 and PHSX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

ASTR 591. Stellar Astronomy. 3 Credits. N
Fundamentals of stellar astronomy including astronomical optics and techniques, coordinate and time systems, stellar spectroscopy, properties of normal, binary and variable stars. Prerequisite: PHSX 212 and PHSX 236 or PHSX 214. An introductory astronomy course is desirable.

ASTR 592. Galactic and Extragalactic Astronomy. 3 Credits. N
A study of stellar groups, the interstellar medium, galactic structure and dynamics, galaxies, and cosmology. Prerequisite: ASTR 591 or consent of instructor.

ASTR 596. Observational Astrophysics. 3 Credits. NP N
Students acquire practical experience with astronomical equipment and data reduction techniques used in research and educational contexts. ASTR 596, combined with an independent research experience, provides a pathway for students to demonstrate creativity and integration of background knowledge. Prerequisite: Corequisite: ASTR 591.

ASTR 691. Astrophysics I. 3 Credits. N
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as EPHX 691 and PHSX 691.) Prerequisite: PHSX 313 or consent of instructor.

ASTR 692. Astrophysics II. 3 Credits. N
The formation and evolution of stars, nucleosynthesis of the elements, and the physical processes of high energy physics. Prerequisite: ASTR 691 or consent of instructor.
ASTR 791. Seminar in Astrophysics. 1-3 Credits.
Seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor.

ASTR 792. Topics in Advanced Astrophysics. 3 Credits.
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrobiophysics, and the interstellar and intergalactic media (ISM/IGM). This course may be repeated for credit if topical content differs. (Same as PHSX 792.) Prerequisite: ASTR 692 or permission of instructor.

ASTR 795. Space Plasma Physics. 3 Credits.
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the surface of the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind and the magnetosphere. (Same as PHSX 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631.

ASTR 815. Computational Methods in Physical Sciences. 3 Credits.
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document computer programs to solve physical problems. (Same as PHSX 815 and CHEM 914.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above.

Physics & Astronomy Courses

PHSX 111. Introductory Physics. 3 Credits. NP N
A one-semester survey of classical and modern physics, designed primarily for liberal arts students. Typical subjects include the laws of motion, gravity, electricity and magnetism, sound, light, quantum mechanics, atomic and subatomic physics. Subjects are treated mainly conceptually with some use of basic data. Prerequisite: Eligibility for MATH 104.

PHSX 114. College Physics I. 1-4 Credits. NP N LFE
Principles and applications of mechanics, fluids, heat, thermodynamics, and sound waves. Three class hours and one laboratory per week. This course emphasizes the development of quantitative concepts and problem solving skills for students needing a broad background in physics as part of their preparation in other major programs, and for those who wish to meet the laboratory science requirement of the College. Students who enroll in this course are expected to have had 3.5 years of college-prep math, including trigonometry. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 211 or PHSX 216 or PHSX 212 or PHSX 236. Prerequisite: MATH 104 or a score of 25 or higher on ACT mathematics.

PHSX 115. College Physics II. 1-4 Credits. N LFE
A continuation of PHSX 114. Principles and applications of electricity, magnetism, light, atomic physics, and nuclear physics. Three class hours and one laboratory per week. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 212 or PHSX 236. Prerequisite: PHSX 114.

PHSX 116. Introductory Physics Laboratory. 1 Credits. U LFE

A laboratory exploring classical and modern physics, designed primarily for liberal arts students. Experiments in motion gravity, electricity and magnetism, sound, light, atomic and subatomic physics are designed to teach physics concepts and basic laboratory techniques. One two-hour lab period per week. Counts as a laboratory science when preceded or accompanied by PHSX 111. Prerequisite: Eligibility for MATH 104. Corequisite: PHSX 111.

PHSX 150. Seminar in Physics, Astronomy and Engineering Physics. 0.5 Credits. N
This course is intended for all students in physics, astronomy and engineering physics. Course content includes topics of current interest in all fields of physics and astronomy and an introduction to professional ethics and frameworks for ethical decision making. Topics covered include but are not limited to nanotechnology, cosmology, nuclear and high energy physics, galactic evolution, condensed matter physics, space physics, biophysics and plasma physics. Course will include hands on demonstrations, group in-class activities and general advising information. (Same as ASTR 150.)

PHSX 177. First Year Seminar: _______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Physics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

PHSX 191. Contemporary Astronomy. 3 Credits. NP N LFE
The structure and evolution of the universe, from nearby planets to distant quasars, are examined. Topics include recent discoveries concerning planets, stars, pulsars and black holes as well as their evolution, the structure of the universe today and how it will be in the future. The emphasis is descriptive rather than mathematical. (Same as ASTR 191.) Prerequisite: Eligibility for MATH 101.

PHSX 196. Contemporary Astronomy Laboratory. 1 Credits. NP N LFE
An introduction to astronomical observations and modern data analysis methods. Students will carry out independent investigations as well as standard exercises. This is an online course, delivered through Blackboard. (Same as ASTR 196.) Prerequisite: Corequisite: ASTR 191.

PHSX 201. Calculus Supplement to College Physics I. 1 Credits. N LFE
A calculus-based course in classical mechanics and thermodynamics for students who have had an algebra-based course in classical mechanics and thermodynamics. This course, combined with PHSX 114, covers the content of PHSX 211 or PHSX 210. Prerequisite: PHSX 114 and MATH 116 or MATH 125. Corequisite: MATH 126; and permission of the department.

PHSX 202. Calculus Supplement to College Physics II. 1 Credits. N LFE
A calculus-based course in classical mechanics and thermodynamics for students who have had an algebra-based course in electricity and magnetism. This course, combined with PHSX 115, covers the content of PHSX 212. Prerequisite: PHSX 115 and permission of the department. Corequisite: MATH 126.

PHSX 209. Functions and Modeling. 3 Credits. N LFE
Study of the use of functions in mathematical modeling, with topics drawn from algebra, analytic geometry, statistics, trigonometry, and calculus. These topics include function properties and patterns, complex numbers, parametric and polar equations, vectors and various growth models. The course also includes inquiry methods, collaborative problem solving, the use of multiple representations and data analysis techniques,
and the justification and presentation of results. Central to the course are investigative labs employing various technologies and software. The course is designed to help prepare students for secondary school mathematics teaching. (Same as MATH 209.) Prerequisite: MATH 126 or MATH 146.

PHSX 210. General Physics I for Engineers. 3 Credits. N
Introduction to classical mechanics and thermodynamics designed for students in the School of Engineering who have completed MATH 125 or MATH 145 with a grade of C or better. Students not admitted to the School of Engineering must receive permission from instructor. PHSX 210 and PHSX 211 cannot both be taken for credit. Prerequisite: MATH 125 or MATH 145 with a grade of C or better; co-requisite MATH 126 or MATH 146; courses in high school physics and/or chemistry recommended.

PHSX 211. General Physics I. 4 Credits. NP N LFE
Introduction to classical mechanics and thermodynamics. Designed for students in engineering and physical science majors. Prerequisite: MATH 116 or MATH 125 or MATH 145. Corequisite MATH 126 or MATH 146; courses in high school physics and/or chemistry are recommended.

PHSX 212. General Physics II. 3 Credits. N LFE
Study of electricity, magnetism, waves, and optics. Prerequisite: PHSX 201, PHSX 210, PHSX 211 or PHSX 213; MATH 126 or MATH 146. Co-enrollment in MATH 127 or MATH 147 is strongly encouraged.

PHSX 213. General Physics I Honors. 1-5 Credits. NP N LFE
An honors section of PHSX 210 and PHSX 216. Credit for fewer than five hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in Astronomy, Physics, or Engineering Physics. Courses in high school physics and chemistry are strongly recommended. Prerequisite: MATH 125 or MATH 145; co-requisite MATH 126 or MATH 146; and permission of instructor.

PHSX 214. General Physics II Honors. 1-4 Credits. N LFE
An honors section of PHSX 212 and PHSX 236. Credit for fewer than four hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in Astronomy, Physics, or Engineering Physics. Prerequisite: PHSX 216 together with either PHSX 211 or PHSX 210; or PHSX 213, and permission of instructor. Corequisite: MATH 127 or MATH 147.

PHSX 216. General Physics I Laboratory. 1 Credits. N LFE
Experiments in classical mechanics and thermodynamics. The course includes practice in the ethics of recording and presentation of data. Counts as a laboratory science when accompanied by PHSX 210 or PHSX 211. Prerequisite: Corequisite: PHSX 210 or PHSX 211.

PHSX 236. General Physics II Laboratory. 1 Credits. N LFE
Experiments in electricity and magnetism, waves and sound. Students will practice data reduction and error analysis in ways that are consistent with professional ethics. Prerequisite: Corequisite: PHSX 212.

PHSX 313. General Physics III. 3 Credits. N LFE
This course is an introduction to modern physics. The topics covered in this course include special relativity, optics, and introductions to quantum mechanics and its applications. Prerequisite: PHSX 212 and PHSX 236, or PHSX 214, or PHSX 202, or EECS 220, or EECS 221. Corequisite: MATH 320 or MATH 220 or MATH 221.

PHSX 315. Introduction to Computation for Physics and Astronomy. 3 Credits. N
This course introduces the use of computational techniques as applied to solving problems in physics and astronomy. It serves as a gateway to the use of such methods in upper level classes and research. Highlighted techniques will include the use of numerical methods for the solution of differential equations encountered in physics and astronomy, the use of random numbers for simulation and modeling, data analysis using computers, and data visualization. Problems will be drawn from a wide variety of physical applications including mechanics, electromagnetism, thermodynamics, and stellar dynamics. Students will develop their own computer programs to investigate, illustrate, and report their results. Prerequisite: EECS 138 or EECS 168 or EECS 169, or permission of the instructor. Corequisite: PHSX 212 or PHSX 214.

PHSX 316. Intermediate Physics Laboratory I. 1 Credits. U LFE
Experiments in optics and modern physics. Development of experimental skills, data reduction, error analysis, and technical writing. One lab meeting per week and one lecture per week on topics including error analysis and experimental design, and the development of professional ethics in regard to citation and data presentation. Prerequisite: Corequisite: PHSX 313.

PHSX 395. Physics Education Theory and Practice. 3 Credits. N
This course focuses on how people teach, learn, and understand key concepts in physics, including an introduction to physics education research. Topics include student conceptions, assessments, impacts of student identity, metacognition, and nature of science. Current issues and tensions in science and math education will be discussed, especially as it relates to physics instruction. This course also provides students firsthand experience in planning and implementing a phenomena-based curriculum through teaching lessons in elementary or middle school classrooms. Prerequisite: Corequisite: PHSX 313.

PHSX 400. Topics in Physics and Astronomy: ______. 1-3 Credits. N
A course on special topics in physics and astronomy, given as the need arises. Course may be repeated for different topics. Each section may have prerequisites to be determined by the instructor.

PHSX 420. Science and Policy. 3 Credits. N
An introduction to the relationship between science and public policy. The mutual interactions between public policy and scientific practice are explored within an ethical framework with examples that include energy and sustainability issues. An experiential course where students will be asked to develop and implement ethical solutions and engage meaningfully on a practicum project for local, regional, national, or international partners who are working on policy decisions which have technology implications. Honors credit is available for this course. Prerequisite: Eligibility for MATH 101.

PHSX 500. Special Problems. 1-5 Credits. N
Work in some area of physics beyond the topics or material covered in other courses. For some problems, continued enrollment in consecutive semesters may be appropriate. Prerequisite: One junior-senior course in science in an area related to the problem and consent of instructor.

PHSX 501. Honors Research. 1-4 Credits. N
This course is for students seeking Departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required four hours of total enrollment, a written and oral report of the research is required. (Same as ASTR 501 and EPHX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

PHSX 503. Undergraduate Research. 1-4 Credits. N
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of
ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and EPHX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

PHSX 518. Mathematical Physics. 3 Credits. N
Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electrodynamics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. (Same as EPHX 518.) Prerequisite: PHSX 313; MATH 220 or MATH 221 or MATH 320; or permission of instructor.

PHSX 521. Mechanics I. 3 Credits. N
Newton's laws of motion. Motion of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as EPHX 521.) Prerequisite: PHSX 213 or PHSX 211 and PHSX 216; MATH 127 or MATH 147; MATH 290 or MATH 291; and MATH 220, MATH 221 or MATH 320.

PHSX 531. Electricity and Magnetism. 3 Credits. N
This course will explore the properties of electric and magnetic fields, including electrostatics, Gauss' Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles, and of dielectric and magnetic materials. (Same as EPHX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236, or PHSX 236; MATH 127 or MATH 147; and MATH 290 or MATH 291; and MATH 220, MATH 221, or MATH 320.

PHSX 536. Electronic Circuit Measurement and Design. 4 Credits. N LFE
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. Students will also practice ethical decision making using case studies appropriate for the discipline. (Same as EPHX 536.) Prerequisite: PHSX 313, PHSX 316, and PHSX 521 or EPHX 521. (PHSX 521 or EPHX 521 may be taken concurrently.)

PHSX 594. Cosmology and Culture. 3 Credits. N
A survey of modern physical cosmology, its recent historical roots, and creation myths from many world cultures. An examination of the effects of these stories on their parent cultures.

PHSX 598. Research Methods. 3 Credits. N LFE
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. (Same as CHEM 598.) Prerequisite: At least one course at the 100 level or above in CHEM, MATH, or PHSX.

PHSX 600. Special Topics in Physics and Astrophysics: ____. 3 Credits. N
Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as EPHX 600.) Prerequisite: Permission of instructor.

PHSX 601. Design of Physical and Electronic Systems. 4 Credits. N LFE
A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers with measurement devices, and use of approximations and/or computer simulation to optimize design parameters, linear control systems, and noise. (Same as EPHX 601.) Prerequisite: Twelve hours of junior-senior credit in physics or engineering, including one laboratory course.

PHSX 611. Introductory Quantum Mechanics. 3 Credits. N
An introduction to quantum mechanics, emphasizing a physical overview. Topics include the formalism of nonrelativistic quantum mechanics with emphasis on linear algebra, the 3-dimensional Schrodinger equation with applications to the hydrogen atom; harmonic oscillator; and time-independent perturbation theory. (Same as EPHX 611.) Prerequisite: PHSX 313, PHSX 521 or EPHX 521, and MATH 290 or MATH 291.

PHSX 615. Numerical and Computational Methods in Physics. 3 Credits. N
An introduction to the use of numerical methods in the solution of problems in physics for which simplifications allowing closed-form solutions are not applicable. Examples are drawn from mechanics, electricity, magnetism, thermodynamics, and optics. (Same as EPHX 615.) Prerequisite: PHSX 313, MATH 320 or equivalent, and EECS 138 or equivalent.

PHSX 616. Physical Measurements. 4 Credits. N LFE
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. Students will also practice ethical decision making using case studies appropriate for the discipline. (Same as EPHX 616.) Prerequisite: PHSX 313, PHSX 316, and PHSX 521 or EPHX 521. (PHSX 521 or EPHX 521 may be taken concurrently.)

PHSX 621. Mechanics II. 3 Credits. N LFE
Continuation of PHSX 521. Lagrange's equations and generalized coordinates. Mechanics of continuous media. Tensor algebra and rotation of a rigid body. Special relativity and relativistic dynamics. (Same as EPHX 621.) Prerequisite: EPHX 521 or PHSX 521.

PHSX 631. Electromagnetic Theory. 3 Credits. N
Maxwell's equations, wave propagation, optics and waveguides, radiation, relativistic transformations of fields and sources, use of covariance and invariance in relativity. Normally a continuation of PHSX 531. (Same as EPHX 631.) Prerequisite: EPHX 531 or PHSX 531.

PHSX 641. Introduction to Nuclear Physics. 3 Credits. N
Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. (Same as EPHX 641.) Prerequisite: PHSX 313 and PHSX 511.

PHSX 655. Optics. 3 Credits. N
Geometric optics. Wave properties of light: interference, diffraction, coherence. Propagation of light through matter. Selected topics in modern optics, e.g., lasers, fibers. (Same as EPHX 655.) Prerequisite: PHSX 531 or EPHX 531 or PHSX 212 or PHSX 214 and special permission from instructor.

PHSX 661. Introduction to Elementary Particle Physics. 3 Credits. N
Properties and interactions of quarks, leptons, and other elementary particles; symmetry principles and conservation laws; broken symmetry; gauge bosons; the fundamental interactions, grand unified theories of strong, electromagnetic, and weak interactions; the cosmological
implications of elementary particle physics. (Same as EPHX 661.)
Prerequisite: PHSX 511 and MATH 320.

PHSX 671. Thermal Physics. 3 Credits. N
This course introduces thermodynamics from statistical considerations
and presents the associated techniques for calculating the thermodynamic
properties of systems. Highlighted applications of these techniques
include the elementary kinetic theory of transport processes and statistical
descriptions of both Fermi-Dirac and Bose-Einstein systems. (Same as
EPHX 671.) Prerequisite: PHSX 611 or EPHX 611.

PHSX 681. Concepts in Solids. 3 Credits. N
Properties of common types of crystals and amorphous solids. Lattice
vibrations and thermal properties of solids. Electrons and holes in energy
bands of metals, semiconductors, superconductors, and insulators. (Same as
EPHX 681.) Prerequisite: PHSX 313 and PHSX 511.

PHSX 691. Astrophysics I. 3 Credits. N
An introduction to radiation processes, thermal processes, and radiative
transfer in stellar atmospheres and the interstellar medium. (Same as
ASTR 691 and EPHX 691.) Prerequisite: PHSX 313 or consent of
instructor.

PHSX 693. Gravitation and Cosmology. 3 Credits. N
An overview of topics relevant to gravitation and modern cosmology:
special relativity, tensor notation, the equivalence principle, the
Schwarzschild solution, black holes, and Friedmann models. Cosmic
black body radiation, dark matter, and the formation of large-scale
structure. The idea of quantum gravity and an introduction to the current
literature in cosmology. (Same as EPHX 693.) Prerequisite: PHSX 313 or
MATH 320.

PHSX 700. Colloquium. 1 Credits.
Topics of current interest in physics, astronomy, and atmospheric science.
Repeated enrollments are permitted.

PHSX 701. Major Experiments and Observations in Classical
and Contemporary Physics. 1-3 Credits.
Critique, discussions, and interpretation of the most important discoveries
and observations in physics.

PHSX 702. Introductory Physics Pedagogy. 1 Credits.
This course will address basic elements of pedagogy in specific relation
to the teaching of physics and astronomy labs. It contains such elements
as: peer and instructor evaluations of teaching, reading and discussion
of pedagogical materials, development of online course material, and
discussion of teaching methods. This course may be repeated for credit.
Prerequisite: Permission of instructor.

PHSX 703. Proposal Writing. 1 Credits.
Means and methods for preparing a successful proposal. This course
will discuss how to find funding and other award opportunities. Students
will learn how to develop an effective application and will complete an
application. Intended for early career graduate students and advanced
undergraduate students.

PHSX 711. Quantum Mechanics I. 3 Credits.
Linear vector spaces. Bra-ket notation for abstract vector spaces and its
applications in quantum mechanics. Angular momentum and Clebsch
Gordan coefficients. Product spaces; Heisenberg picture. Spin. Fermi-
Dirac and Bose-Einstein statistics. Time independent perturbation
theory of first and second order. Prerequisite: PHSX 611 or EPHX 611,
MATH 220 or MATH 221 or MATH 320.

PHSX 717. Graduate Seminar. 1 Credits.
First year graduate students meet to survey research opportunities in
the department and develop skills in giving oral presentations in physics
and related areas. Students will also learn about topics in responsible
scholarship that may include: the origin of ideas and the allocation of
credit, the treatment of data, scientific misconduct, intellectual property
and entrepreneurship, the researcher in society, collaborative research,
mentor/trainee responsibilities, and safe practices.

PHSX 718. Mathematical Methods in Physical Sciences. 3 Credits.
Review of complex variable theory; introduction to the partial differential
equations of physical systems; Fourier analysis; special functions of
mathematical physics; and chemistry. (Same as CHEM 718.) Prerequisite:
Two semesters of junior-senior mathematics.

PHSX 719. Physics and Astronomy Graduate Problem Solving. 1
Credits.
This course teaches students skills in solving graduate level physics and
astronomy problems. Graded on a satisfactory/unsatisfactory basis.

PHSX 721. Chaotic Dynamics. 3 Credits.
Topics covered may include the following: dynamical systems, attractors,
sensitive dependence on initial conditions, chaos, one-dimensional maps,
strange attractors and fractal dimensions, fat fractals, the horseshoe map,
symbolic dynamics, linear stability of periodic orbits, stable and unstable
manifolds, Lyapunov exponents, topological entropy, quasiperiodicity,
strange nonchaotic attractors, nonattracting chaotic sets, fractal basin
boundaries, renormalization group analysis, intermittency, crisis and
chaotic transients. Prerequisite: Mechanics (PHSX 521, or its equivalent),
ordinary differential equations (MATH 320, or its equivalent), and some
computer programming knowledge.

PHSX 727. Advanced Geophysics. 1-3 Credits.
Topics vary with demand and include heat flow, wave propagation,
synthetic seismograms, groundwater exploration, geothermal exploration,
electrical methods in exploration, rock mechanics-tectonophysics, rock
magnetism, geomagnetism, paleomagnetism, geophysical inverse theory,
and others upon sufficient demand. May be repeated for different topics.
(Same as GEOL 771.) Prerequisite: GEOL 572 or consent of instructor.

PHSX 731. Molecular Biophysics. 3 Credits.
Methods and concepts in contemporary molecular biophysics are
discussed. Particular emphasis is placed on the thermodynamics of
macromolecular interactions and quantitative methods of data analysis.
Basic enzymology and biophysical spectroscopy will also be reviewed.
Prerequisite: PHSX 212, MATH 125, and either CHEM 135 or CHEM 175.

PHSX 741. Nuclear Physics I. 3 Credits.
Experimental methods in nuclear physics, elementary concepts
and simple considerations about nuclear forces, alpha and beta
decay, gamma radiation, nuclear structure, and reaction systems.
Prerequisite: PHSX 511.

PHSX 761. Elementary Particles I. 3 Credits.
Particle accelerators and detectors; quarks and leptons; invariance
principles and conservation laws; strong, electromagnetic, and weak
interactions of elementary particles; unification of electroweak and other
interactions. Prerequisite: Corequisite: PHSX 711.

PHSX 781. Solid State Physics I. 3 Credits.
Classification of solids, structure and symmetry of crystals; lattice
vibrations and thermal properties of solids; electric and magnetic
properties; electron theory of metals and semiconductors; electronic and
atomic transport processes; theory of ionic crystals. Prerequisite: PHSX
511 (or CHEM 648) and PHSX 671 (or CHEM 646).

PHSX 791. Seminar in Astrophysics, Cosmology, and Space
Physics. 1-3 Credits.
Seminar designed to cover current topics in the physics of the Universe
beyond the solar system. Content will vary. Graduate students engaged
in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor.

**PHSX 792. Topics in Advanced Astrophysics. 3 Credits.**
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrophysics, and the interstellar and intergalactic media (ISM/IGM). This course may be repeated for credit if topical content differs. (Same as ASTR 792.) Prerequisite: ASTR 692 or permission of instructor.

**PHSX 793. Physical Cosmology. 3 Credits.**
Discussion of how fundamental laws of physics govern the evolution of the universe as a whole along with its structure. Survey of cosmonogenic clues in the observable universe, including observed structures, cosmic background radiation and evidence for dark matter. Development of the universe, including theories of initial conditions; cosmological phase transitions; generation of possible relics and dark matter; symmetry breaking; baryon asymmetry; nucleosynthesis; recombination, gravitational instability and the formation of structure; current experimental techniques. Prerequisite: PHSX 718. Recommended: PHSX 693.

**PHSX 795. Space Plasma Physics. 3 Credits.**
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind, the ionosphere, and the magnetosphere. (Same as ASTR 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631.

**PHSX 800. Graduate Problems. 1-5 Credits.**
Advanced laboratory problems, special research problems, or library reading problems. Repeated enrollments are permitted.

**PHSX 801. Advanced Topics. 1-3 Credits.**
Lectures on advanced material not covered by regular courses. The topics are not limited but generally address recent experimental or theoretical developments in subjects such as superconductivity, nuclear physics, elementary particle physics, quantum field theory, gauge and unified theories, nonlinear or chaotic systems, space plasma physics, and astrophysics and cosmology. Repeated enrollments are permitted.

**PHSX 811. Quantum Mechanics II. 3 Credits.**
This advanced course in quantum mechanics covers scattering theory, time dependent perturbation theory, density-matrix formalism, entanglement, and relativistic quantum mechanics, e.g., Klein-Gordon and Dirac equations. Additional advanced topics may be covered at the discretion of the instructor. Prerequisite: PHSX 711.

**PHSX 815. Computational Methods in Physical Sciences. 3 Credits.**
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document computer programs to solve physical problems. (Same as ASTR 815 and CHEM 914.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above.

**PHSX 821. Classical Mechanics. 3 Credits.**
Vector and tensor notation; review of Newtonian mechanics; Lagrangian mechanics; linear vector spaces and matrix theory with applications to the theory of small oscillations; rigid bodies; Hamiltonian formalism. Special relativity. Prerequisite: Twelve hours of junior-senior courses in physics.

**PHSX 831. Electrodynamics I. 3 Credits.**
Electrostatics and magnetostatics; Maxwell's equations; plane waves; waveguides. Prerequisite: PHSX 718 and PHSX 821.

**PHSX 841. Nuclear Physics II. 3 Credits.**
Nuclear forces and the two-body problem; nuclear models; phenomenological treatment of nuclear reactions and decay processes. Prerequisite: PHSX 741 and PHSX 811.

**PHSX 855. Advanced Optics. 3 Credits.**
Advanced topics in optics that may include: Laser principles and techniques, light propagation in dielectrics, absorption and luminescence, interaction of light with free electrons and phonons, nonlinear optics, photonic devices, and optical spectroscopy.

**PHSX 861. Elementary Particles II. 3 Credits.**
Theoretical analysis of the standard model of strong and electroweak interactions. Applications to decay and scattering processes with comparison to experiments. Selected topics in non-perturbative physics. Examples of tests to probe beyond the standard model. Prerequisite: PHSX 761. Corequisite: PHSX 911.

**PHSX 871. Statistical Physics I. 3 Credits.**
Review of and advanced topics in thermodynamics; the Maxwell relations; the third law; phase transitions. Kinetic theory: the Boltzmann equation; transport phenomena. Statistical mechanics: ideal Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein gases; ensemble theory; derivation of the laws of thermodynamics. Prerequisite: PHSX 711 and PHSX 821. PHSX 671 is recommended.

**PHSX 881. Solid State Physics II. 3 Credits.**
More advanced topics in solid state physics that may include: diamagnetism, paramagnetism, ferromagnetism, and antiferromagnetism; electron and nuclear spin magnetic resonance; dielectric properties and ferroelectricity; photoconductivity and luminescence. Prerequisite: PHSX 631 and PHSX 711 (or CHEM 750).

**PHSX 895. Plasma Physics. 3 Credits.**
Magnetohydrodynamics, including discussion of shocks, waves, and stability theory; statistical mechanical foundations; kinetic theory; microstability; non-linear phenomena. Prerequisite: PHSX 795.

**PHSX 899. Master's Research/Thesis. 1-10 Credits.**
Research work (either experimental or theoretical) in physics for students working toward the master's degree. Repeated enrollments are permitted. Graded on a satisfactory progress/limited progress/no progress basis.

**PHSX 911. Quantum Mechanics III. 3 Credits.**

**PHSX 912. Quantum Field Theory. 3 Credits.**

**PHSX 915. Relativity. 3 Credits.**
Reviews of special relativity, manifolds, tensors, and geometry. General coordinate covariance and general relativity. Applications to classical theory of gravitation: weak field tests, isotropic, homogeneous cosmology, Schwarzschild solution. Selected advanced topics. Prerequisite: A total of 10 hours of junior/senior work in physics and mathematics, including at least concurrent enrollment in MATH 646.

**PHSX 917. Seminar in Theoretical Physics. 1-3 Credits.**
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary.

**POLS 102. Introduction to Political Science as a Career. 1 Credits. S**
Provides an overview of the discipline of political science; emphasizes developing an understanding of opportunities in political science at the University of Kansas and careers with a political science degree. Major sub-fields within the discipline are discussed as well as the benefits of particular tracks within the departmental coursework. The course helps students plan their goals for their education and match those goals to career goals. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment by permission of the instructor only.

**POLS 110. Introduction to U.S. Politics. 3 Credits. SF S**
An introduction to basic American governmental institutions, political processes, and policy.

**POLS 111. Introduction to U.S. Politics Honors. 3 Credits. SF S**
Open only to students in the College Honors Program or by consent of instructor.

**POLS 125. Intelligence: Supporting National Security. 3 Credits. S**
This course examines the evolution of the U.S. Intelligence Community and how it is adapting to new international security challenges. The course discusses the historical background of U.S. intelligence and how political ideology, domestic policies, technology, and the threat have shaped today's U.S. Intelligence Community. The course provides an overview of the roles, missions, and structure of the U.S. Intelligence Community and how the various components support national security decision makers. The course also provides an overview of diplomacy and intelligence as tools of statecraft. Course looks at foreign intelligence services, their targets, and operational successes and failures. Finally, the course addresses emerging national security issues potentially shaping future U.S. intelligence operations. On completion of the course, students will have an in-depth understanding of the U.S. Intelligence Community, how it supports national security decision makers, and how it can influence policy development.

**POLS 130. US Intelligence Community. 3 Credits. S**
This course provides a comprehensive look at the roles, missions, and structure of the U.S. Intelligence Community. Students will develop an understanding of the components of the intelligence process used by the U.S. Intelligence Community: (1) planning and direction, (2) collection, (3) processing, (4) analysis and production, and (5) dissemination. This course also addresses the various policies and executive orders shaping intelligence collection both domestically and abroad, such as, intelligence oversight and restrictions on sharing and dissemination of information within and between local, state, and federal government agencies and the private sector. On completion of the course, students will have an in-depth understanding of the roles of the various components of the U.S. Intelligence Community and the intelligence processes used to support national security decision makers. Prerequisite: POLS 125.

**POLS 150. Introduction to Comparative Politics. 3 Credits. SF S**
An introduction to the comparative study of political systems emphasizing governmental structures, parties, electoral techniques, and recent trends in the field. The course also considers major differences between (1) representative and autocratic systems, and (2) developed and underdeveloped nations.

**POLS 151. Introduction to Comparative Politics Honors. 3 Credits. SF S**
Open only to students in the College Honors Program or by consent of instructor.

**POLS 170. Introduction to International Politics. 3 Credits. SF S**
A study of the nation-state system including the role of nationalism, sovereignty, and power. Patterns of state action including neutrality, collective security, war, and cooperation through international organizations are stressed. Specific examples of contemporary international problems are also analyzed and discussed.

**POLS 171. Introduction to International Politics Honors. 3 Credits. SF S**
Open only to students in the College Honors Program or by consent of instructor.

**POLS 177. First Year Seminar: ______. 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Political Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**POLS 199. Data I: Dealing with Data. 3 Credits. S**
Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to derive knowledge and insights from data. This course teaches students the core concepts of inference and computing, working with real behavioral, economic, geographic, physical, social, and text data. Students obtain basic statistics training from a computational perspective using simulation to answer questions, explore problems, and delve into social issues surrounding data analysis such as privacy and design. (Same as ECON 199, PSYC 199 and SOC 199.)

**POLS 249. Study Abroad Topics in Political Science: ______. 1-6 Credits. S**
This course is designed for the study of special topics in Political Science at the freshman/sophomore level. Course work must be arranged through
the Office of KU Study Abroad. May be repeated for credit if content varies.

POLS 301. Introduction to Political Theory. 3 Credits. S
An examination of the perennial issues and major concepts in political philosophy. Ideas such as community, liberty, equality, justice, and democracy are examined in order to understand the various meanings given to these concepts in political discourse and to understand the role of these ideas in various political theories.

POLS 306. Political Science Methods of Inquiry. 3 Credits. S
An introduction to the social science methods of investigation and analysis that are used in political science as a discipline and, in many cases, in public and private sector analytical work as well. The nature of political science data sources and methods of data collection, the logic of social scientific inquiry, and key methods of data analysis are emphasized. Prerequisite: POLS 110 or POLS 150 or POLS 170 (or their Honors equivalents), or consent of instructor.

POLS 308. Topics in Social Justice: ______. 3 Credits.
The study of selected problems in social justice or equity. Course is repeatable for different topics.

POLS 310. Contemporary Issues in U.S. Politics. 3 Credits. S
An examination of issues and problems concerning government and politics in American society. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement.

POLS 320. Introduction to Public Policy. 3 Credits. S
Offers an introduction to the policy-making process covering policy formulation, adoption, and implementation. Overview of major theories of the policy-making process, the actors involved in the process, and the constraints and enhancements offered by the broader political environment. The theoretical frameworks are applied to several substantive policy areas.

POLS 325. Intelligence Analytics. 3 Credits. S
This course develops advanced critical thinking, writing, oral communication skills by enhancing the student's ability to apply analytic tradecraft methods to intelligence products. Course emphasizes in-class, hands-on exercises to enhance the student's ability to apply structured analytic techniques, critically assess bias and logical fallacies in information sources, critiquing analytical products, and applying sound analytical tradecraft to individual and team writing exercises and oral presentations. Course also emphasizes the team-oriented environment of the intelligence profession, specifically focusing on standards of practice found in US intelligence agencies. On completion of the course, students will have an understanding of the analytic processes and guidelines the U.S. Intelligence Community uses to create intelligence products for national security decision makers. Prerequisite: POLS 125 and POLS 130.

POLS 330. Introduction to Public Administration. 3 Credits. S
Introduction to administration, public policy and policy making is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 330.) Prerequisite: POLS 110.

POLS 345. Counterintelligence. 3 Credits. S
This course provides an overview and history of the counterintelligence discipline; the structure and operations of the U. S. counterintelligence community including its legal foundation; and the privacy and civil liberties implications of counterintelligence operations. Course discusses how counterintelligence has evolved from the Cold War-era, with its focus on counter espionage, to 21st Century challenges such as threats from non-state actors and to our cyber networks. Course also addresses the emerging national security issues which will shape future U.S. counterintelligence operations. On completion of the course, students will have an understanding of how the U.S. counterintelligence capabilities and programs work to detect and neutralize the impact of espionage against US interests. Prerequisite: POLS 125 and POLS 130.

POLS 350. Contemporary Issues in Comparative Politics. 3 Credits.
This course will survey selected current political issues around the globe. The focus of the course will be on understanding and analyzing the wide diversity of political phenomena that mark countries around the world. Topics may include such things as elections and electoral politics; political parties; government stability; democratization; ethnic, racial, caste, or religious conflict; protest and revolutionary movements; social movements (environmental, feminist, and others); and the politics of economic reform. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement.

POLS 360. Ancient Roots of Modern Politics. 3 Credits. S
This course examines the political thought and practice of Ancient Greece and Rome, and the enduring impact of these cultures upon contemporary political institutions. Students will consider topics such as origins of democracy in Ancient Athens; the Roman Republic as a model for the constitution of the United States; and the causes and results of Romes transition from Republic to monarchy. The course will also introduce students to key perspectives in the analysis of ancient and modern politics, for example constitutional theory, political psychology, and source criticism. All readings will be in English; no knowledge of any ancient languages is required. (Same as CLSX 360.)

POLS 370. Contemporary Issues in International Politics. 3 Credits. S
A survey of selected issues in current international relations. Topics include global economic interdependence, regional conflicts and nationalism, United States military and economic policy in the post-Cold War era, the role of international organizations such as the United Nations and the European community, global environmental problems and the contemporary role of international law. This course is intended primarily for non-majors and does not meet the junior/senior level course field distribution requirement.

POLS 399. Data 2: Foundations of Data Science. 3 Credits. S
Data science empowers its users to provide data-drive solutions to problems and questions in the world. This course provides foundational skill and knowledge behind this power. This knowledge and skill includes learning to formulate effective questions to answer with data, computer programming, data management and wrangling, exploratory data analysis and visualization, statistical inference and prediction, data-driven decision making, and communication. (Same as ECON 399 and PSYC 399.) Prerequisite: PSYC 199/POLS 199/ECON 199 or EECS 138; and PSYC 210 or MATH 365 or ECON 426 or POLS 306 or SOC 380 or MATH 101 or MATH 104 or MATH 115 or MATH 121.

POLS 471. Politics of Human Trafficking. 3 Credits. S
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 714, POLS 714, or GIST 714. (Same as GIST 471 and WGSS 514.) Prerequisite: Sophomore standing or consent of instructor.

POLS 492. Field Work in Politics and Policy-Making. 3-6 Credits. S

This offering provides course credit for field work in politics and policy-making that takes place outside the department’s Spring Semester internship programs in Washington, D.C. and Topeka. Consent of Instructor is required prior to enrollment.

POLS 493. Directed Readings. 1-3 Credits. U

Individual and supervised readings in selected areas of political science. Course is repeatable for different areas; however, only 3 hours of directed readings can be applied to the major. Prerequisite: Junior level and consent of department.

POLS 494. Washington Semester Intern Seminar. 3 Credits. S

Intern seminar in Washington, D.C. Students meet weekly during Washington Semester program, in speaker/seminar format. Participation is expected, and a term paper is a requirement. Prerequisite: Consent of instructor.

POLS 495. Topeka Semester Intern Seminar. 3 Credits. S

Intern seminar at statehouse in Topeka. Students meet regularly during this program, in speaker/seminar format. Participation is expected, and a term paper is a requirement. Prerequisite: Consent of instructor.

POLS 496. Washington Semester Field Work. 3-6 Credits. S

Supervised internships in public and private agency offices in the Washington, D.C. area. This course is open only to students who are participating in the department’s organized, supervised, semester-long Washington internship program. In order to be eligible for the program, students must have junior or senior standing, an overall grade-point average of 2.75, must have completed POLS 110 and have a 3.0 grade-point average in all political science courses. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor is required prior to enrollment.

POLS 497. Topeka Semester Field Work. 3-6 Credits. S

Supervised internships in public and private agency offices in the Topeka area. This course is open only to students who are participating in the department’s organized, supervised, semester-long Topeka internship program. In order to be eligible for the program, students must have junior or senior standing, an overall grade point average of 2.75, must have completed POLS 110 and have a 3.0 grade-point average in all political science courses. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor is required prior to enrollment.

POLS 498. Honors Thesis. 3-6 Credits. S

Political science majors who in their senior year who wish to become candidates for graduation with honors in political science must enroll in and successfully complete six hours of honors thesis work. Consent of the department is required and candidate must have minimum grade point averages of 3.5 in political science courses and 3.25 in all courses, in both in-residence and combined work.

POLS 499. Capstone Research/Field Work Experience. 3 Credits. S

Capstone research and/or field work experience project for political science majors. Project specified under the direction of a faculty mentor and approved by the undergraduate director. Prerequisite: Senior standing and 12 hours of upper division credit in POLS.

POLS 501. Contemporary Political Thought. 3 Credits. S

An examination of the major theoretical questions concerning citizenship and government in modern society. Major ideologies and important contemporary philosophers are examined to determine how they address such issues as the meaning of the public interest, the just distribution of power and privilege, the proper role of government in society, and legitimate methods for making collective decisions. Prerequisite: POLS 301, or consent of instructor.

POLS 502. History of Political Thought. 3 Credits. S

A survey of major concepts and theories in political philosophy from Plato to Marx. The emphasis is on understanding major classics in western political thought. Prerequisite: Sophomore level or consent of instructor.

POLS 503. Politics in Literature. 3 Credits. S

An examination and analysis of the portrayal of politics and political problems in literature. Classical and modern texts will be considered, including dramas, poems, and novels. Prerequisite: Sophomore level or consent of the instructor.

POLS 512. Latino Politics in the U.S.. 3 Credits. S

An overview of the political position of Latinas/os in the United States. The focus is on the three largest Latino groups in the U.S.: Mexican-Americans, Cuban-Americans, and Puerto Ricans; as well as an examination of other South American and Central American populations in the U.S. The main topics include identity formation, the political circumstances of Latinos, relationship to the electoral process, political behavior, and the policy process.

POLS 515. American Political Parties. 3 Credits. S

Survey of the development of the American political party system, stressing party organization, nominating systems, campaigns, elections, role of mass media, and party finances. Prerequisite: Sophomore level or consent of the instructor.

POLS 516. Public Opinion and American Democracy. 3 Credits. S

This course examines the construction, administration, and interpretation of public opinion polls. The course will also examine the role of public opinion in the democratic process and the formation of public opinion.

POLS 520. Political Campaigns. 3 Credits. H

This course will examine the communication involved in political campaigns. Students will be exposed to theories and ideas related to campaigns and will apply this knowledge to current political activity. Although the primary focus of the course is politics, students interested in public relations and strategic communication also benefit from learning and practicing media relations strategies. The mediated nature of modern political communication, as well as the communication strategies of campaigns and journalists, will be examined in a semester-long simulated campaign. By the end of the semester, students will become more informed users and consumers of political campaign messages. (Same as COMS 607.) Prerequisite: COMS 130.
POLS 521. Mass Media and Politics. 3 Credits. H
The primary goal of this course is to critically examine the role of mass media in U.S. politics. Students learn how information makes it into news coverage, as well as how media content affects individuals, political campaigns, and governing decisions. The course covers media effects theories, news bias and polarization, political entertainment, and other topics. Although the primary focus of the course is politics, students interested in public relations and strategic communication also benefit from learning about U.S. journalism. By the end of the semester, students will be able to critically evaluate political and media systems in the U.S. (Same as COMS 335.) Prerequisite: COMS 130.

POLS 528. Environmental Justice and Public Policy. 3 Credits. S
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as EVRN 528.) Prerequisite: POLS 306 or a statistics class or consent of instructor.

POLS 561. Liberation in Southern Africa. 3 Credits. W
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and regional consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and HIST 561.)

POLS 562. Women and Politics. 3 Credits. S
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy, gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as WGSS 562.) Prerequisite: Sophomore level or consent of the instructor.

POLS 563. Comparative Political Economy. 3 Credits. S
This course studies fiscal, monetarist, and trade policies to assess the usefulness and problems posed by these policy instruments across countries. This includes examining exchange rates, interest rates, budget deficit, trade deficit, and debt, to understand their composition and relevance to domestic economy, employment, investment, development, and international trade, the problems they pose, and how these may be overcome. We then examine how, and why government enacts these instruments across countries and regions. Prerequisite: Sophomore level or consent of the instructor.

POLS 564. Elections and Political Parties Around the World. 3 Credits. S
An examination of the diverse forms of election rules and their consequences for political parties, politicians, and voters. The course will survey election rules in theory and practice; the design and re-design of election rules in new and established democracies; and how elections affect party strategies or governance and representation, and the types of party systems that emerge. The course will also incorporate intensive studies of election campaigns occurring during the semester that the course meets. Prerequisite: Sophomore level or consent of the instructor.

POLS 565. Political Change in Asia. 3 Credits. S
This course focuses on three periods of major political changes in Asia since 1945; independence from colonization; adoption of governance; and steps toward democratization. The focus on political change is to help students see that a) many countries initiate political reforms domestically; b) the ability to implement changes is correlated to ability to win support; c) the constitutional process may favor some groups over others; d) the ability to mediate political stability depends on (a), (b), and (c). Prerequisite: Sophomore level or consent of the instructor.

POLS 582. Transnational Terrorism. 3 Credits. S
The course provides a study of the patterns of transnational terrorism. First, it introduces students to the analytical study of terrorism. The course traces the evolution of terrorism, from the French Revolution to the modern day era. It also covers how scholarship defines, conceptualizes, and measures terrorism. The second goal is to introduce students to key scholarly debates within the literature. Some of the example questions we ask are: are democracies more vulnerable to terrorism? Does globalization render states open to being attacked by transnational actors? Is torture warranted as an effective counterterrorism tactic? The readings draw on empirical scholarship on the causes and consequences of transnational terrorism. (Same as GIST 585.) Prerequisite: Sophomore level or consent of instructor.

POLS 600. Contemporary Feminist Political Theory. 3 Credits. S
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. woman of color and women of post-colonial societies. This course is a service learning course that provides students with on-site practicum, mentoring, and networking skills. (Same as WGSS 600.) Prerequisite: Sophomore level or consent of the instructor.

POLS 603. Democratic Theory. 3 Credits. S
Detailed study of the typical and perennial dilemmas that arise in theories of democratic governance with an emphasis on contemporary analytical investigations of democratic systems. Prerequisite: Sophomore level or consent of the instructor.

POLS 606. Introduction to Political Computing. 3 Credits. S
This course allows student to learn the major software programs associated with data analysis in politics, including R and STATA. Students also learn the major sources of political and policy data. Students will conduct data collection and analysis for specific political research activities like public opinion surveys, voting behavior, Congressional behavior, comparisons of political processes in different countries, and the evaluation of public policies. Prerequisite: POLS 306.

POLS 607. Modern Political Theory. 3 Credits. S
An analysis of works by various authors, with the intention of exploring the political ideas that emerge in conjunction with the appearance of modern science, the Enlightenment, the Industrial Revolution, and Romanticism. Topics will include the modern conceptions of the nature of being, truth, justice, and the relationship of the individual to the community. Prerequisite: Sophomore level or consent of the instructor.

POLS 609. Topics in Political Theory: _____ 3 Credits. S
A study of selected theorists in relation to a topic in political theory. Sample topics include: revolution; authority and community; elements of political power; political elites: ideology, human nature in politics, political conflict, etc. Theorists will range from ancient to contemporary. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

**POLS 610. Constitutional Law: Governmental Powers. 3 Credits. S**

The Supreme Court viewed as a political branch of our government. Special emphasis on the Court's role in determining powers of government and their relationships. Prerequisite: Junior level or consent of instructor.

**POLS 611. Constitutional Law: Civil Liberties. 3 Credits. S**

The constitutional limits on governmental powers are studied with special emphasis on constitutional guarantees of individuals freedom. Prerequisite: Junior level or consent of instructor.

**POLS 612. Psychology in Politics. 3 Credits. S**

An examination of psychological perspectives on political phenomena. Topics include political personality, foreign policy decision making, international conflict and cooperation, voting behavior, and political participation and socialization. Prerequisite: Sophomore level or consent of the instructor.

**POLS 613. Comparative U.S. State Politics. 3 Credits. S**

A systematic comparative analysis of structures, functions, and policies of state political systems. Prerequisite: Sophomore level or consent of the instructor.

**POLS 614. Urban Politics. 3 Credits. S**

A survey of the social, cultural, economic, and structural differences among cities and an investigation into how these factors affect urban politics and policies. Specific topics include leadership, governmental reform, citizen participation, inter-ethnic conflict, and economic development. Prerequisite: Sophomore level or consent of the instructor.

**POLS 615. Campaigns and Elections. 3 Credits. S**

This course examines the behavior of candidates, campaigns, and voters in the electoral process. Topics will include the role of media, the impact of money, the operations of political campaigns and the effect of campaign laws.

**POLS 616. Interest Group Politics. 3 Credits. S**

Study of internal group organization and the politics of interests within the U.S. policy-making process. Prerequisite: Sophomore level or consent of the instructor.

**POLS 617. The Congress. 3 Credits. S**

Descriptive and comparative analysis of legislative institutions and processes in the United States, covering Congress and state legislatures. Prerequisite: Sophomore level or consent of the instructor.

**POLS 618. The Presidency. 3 Credits. S**

The office of the President of the United States, its place in the constitutional and political system. Emphasis is given to modern experience and current problems. Prerequisite: Sophomore level or consent of the instructor.

**POLS 619. Topics in American Politics: ______. 1-3 Credits. S**

A study of selected contemporary problems of policy or politics in the United States. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

**POLS 620. Formulation of Public Policy. 3 Credits. S**

Analysis and evaluation of the structures and processes involved in the formulation of public policy at all levels of government. Prerequisite: Sophomore level or consent of the instructor.

**POLS 621. Public Policy Analysis. 3 Credits. S**

An introduction to the study and analysis of public policy with emphasis on the concepts and techniques of policy thinking. The methods of policy description, explanation, evaluation, and choice will be applied to a variety of policy topics, e.g. health care, defense, environmental protection, education, etc. Prerequisite: Sophomore level or consent of the instructor.

**POLS 622. The Politics of Social Policy. 3 Credits. S**

An examination of the formulation and execution of key social policies in the United States, such as welfare policy, crime and drug control policy, disability rights policy, education policy, and social regulatory policy concerning controversial social issues such as abortion and gun control. Prerequisite: Sophomore level or consent of the instructor.

**POLS 623. Environmental Politics and Policy. 3 Credits. S**

Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as EVRN 620.)

**POLS 624. Extremist Groups and Government Response. 3 Credits. S**

Examines left- and right-wing extremist political groups in America and how the government has developed policies and respond to these groups. Special attention will be given to the process of policy adoption and implementation and how the government might respond to extremist groups in the future. Issues and themes will include groups such as the left-wing terrorists of the 1960s and 1970s, right-wing anticommmunist groups of the 1950s and 1960s, international terrorists acting in the U.S., hate crime, ecoterrorism, citizen militia groups, and pro- and anti-abortion extremist groups. Prerequisite: Sophomore level or consent of the instructor.

**POLS 625. Political Polling and Survey Research. 3 Credits. S**

This course focuses on the role of polling in the political process and introduces the theory and methods used in survey research. Topics include the role of polling in campaigns and the policy process, how survey research firms produce polls, analysis of polling for campaigns and public opinion, the psychology of survey response, survey construction, and sampling. Other data collection techniques commonly used in politics and political science such as focus groups and experiments will be covered. Students will conduct original surveys. Prerequisite: Junior level or consent of instructor.

**POLS 626. The Politics of Public Health. 3 Credits. S**

This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation's public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as EVRN 628.) Prerequisite: POLS 110 and POLS 306 are recommended.

**POLS 627. Topics in Public Policy: __________. 1-3 Credits. S**

Examination of the U.S. political system and policy formulation and administration through intensive analysis of selected current public policy problems. Sample topics include the environment, education, and economic well-being. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.
POLS 630. Politics of Identity. 3 Credits. S
This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as WGSS 630.) Prerequisite: Sophomore level or consent of the instructor.

POLS 633. Iran, Turkey, and the Kurds. 3 Credits. NW S
This course examines the contemporary political and social dynamics within these three communities residing along the northern stretch of what is commonly referred to as the Middle East. Using social and political theory as a starting point, students will comparatively study critical elements and issues facing the members of these societies. Issues and themes for comparison will include the structure and institutions of politics, nation-building and nationalism, Islam and politics, women and politics, and regional and global engagement. (Same as GIST 633.) Prerequisite: GIST 220, POLS 150, SOC 130, or consent of instructor.

POLS 640. Politics of Reproductive Policy. 3 Credits. S
Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. This course is a service learning course that provides students with on-site practicum, mentoring, and networking skills. (Same as WGSS 640.) Prerequisite: Sophomore level or consent of the instructor.

POLS 643. The European Union. 3 Credits. S
This course will introduce students to the politics of the European Union. The course will cover three closely connected topics. First, it will discuss the institutional make-up of the EU, such as the European Commission, the European parliament, the European Council, and the European court of justice. It will assess how well these institutions deal with the growing importance of transnational issues, such as migration and economic policy issues. Second, the course will examine how national governments pursue national interests at the level of the European Union. Third, the class will study how well the EU represents the citizens of European countries. Finally, the course will assess the extent to which the EU has successfully developed into a supra-national federation. (Same as EURS 604.) Prerequisite: Sophomore standing or consent of instructor.

POLS 644. Justice and Public Policy in Democratic Societies. 3 Credits. S
Examines the ethical and philosophical choices that inform public policy in democratic societies. The guiding idea of the course is that public policies reflect underlying decisions about the nature of state authority and the just use of that authority. The theoretical focus is on modern European and American liberal democratic thought; the empirical focus is global. Among the policy issues examined in the course are public education, immigration, gender equality, same-sex marriage, and drugs. Prerequisite: Sophomore level or consent of the instructor.

POLS 645. Corruption, Crisis and Scandal. 3 Credits. S
This course investigates political events and decisions that are considered illegal or illegitimate. Cases from the U.S. and around the world are considered. Issues discussed include the misuse of governmental power and funds, electoral fraud, and bribery. Conditions under which problems arise and reforms that address them are considered. Prerequisite: Junior level or consent of instructor.

POLS 648. Western European Politics. 3 Credits. W
This class is an introductory course to European politics which pursues three goals. First, the class is designed to introduce you to a variety of different aspects of European political systems, their main political actors, and basic historical traditions. A second objective consists of discussing the enormous transformation of European politics that is currently underway in Europe. Third, you will become acquainted in some detail with the institutions and operating procedures of four political systems that we focus on: France, Germany, Great Britain, and the European Union. These systems represent the range of traditions we encounter in Western and Central Eastern Europe so they serve as an example of how European politics work. Prerequisite: POLS 150.

POLS 650. Palestinians and Israelis. 3 Credits. S
Examines the international relations, political institutions, and social politics of these two ethnonational communities in relation to each other. Specific topics include the historical evolution of the Israeli–Palestinian conflict, prospects for conflict resolution, electoral systems and political parties in the two nations, state-society relations, social movements, and roles of gender and religion. Prerequisite: Nine hours of Political Science, including POLS 150/POLS 151 or POLS 170/POLS 171, or permission of instructor.

POLS 652. Politics in Europe. 3 Credits. S
The study of the politics and government of Europe. Major countries are covered in depth, while smaller democracies are grouped according to political concepts. Prerequisite: Sophomore level or consent of the instructor.

POLS 653. Gender, War, and Peace. 3 Credits. S
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world—would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as WGSS 653.) Prerequisite: Sophomore level or consent of the instructor.

POLS 654. Politics and Government of Russia and the Central Eurasian States. 3 Credits. S/W
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Sophomore level or consent of the instructor.

POLS 655. Politics of East-Central Europe. 3 Credits. S/W
This course analyzes Communist political theory in its application to the countries of East-Central Europe with consideration of their traditional backgrounds and their patterns of political, social, and economic developments. It constructs a theoretical model of the communist state and discusses its variations by description and comparison of the governments and political processes of Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Rumania, and Yugoslavia. Prerequisite: Sophomore level or consent of the instructor.

POLS 656. Government and Politics of East Asia. 3 Credits. NW S/W
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as EALC 656.) Prerequisite: Junior level or consent of the instructor.

POL 657. Government and Politics of Southeast Asia. 3 Credits. NW S/W
An evaluation of the traditional and contemporary political institutions, behavior and ideas of the countries of Southeast Asia. Prerequisite: Sophomore level or consent of the instructor.

POL 658. Theories of Politics in Latin America. 3 Credits. S/W
This course examines how political science can be used to explain the political dynamics of Latin America. The course will be devoted to understanding different theories about politics -- many of which have been devised by political scientists whose primary focus of study is not Latin America -- and examining their uses and limitations in understanding Latin America. Among the themes we will be examining are the relationships between economic growth, political culture, and democracy, the role of the military in politics, the political impact of new social movements (such as the women's movement and religious movements), theories of revolution, and understanding the prevalence of political corruption in the region. Along the way, we will analyze how political scientists attempt to develop hypotheses, gather data, and test theories. Prerequisite: Sophomore level or consent of the instructor.

POL 659. Political Dynamics of Latin America. 3 Credits. S/W
Study of the institutions, processes, and special problems of selected Latin American countries. Prerequisite: Sophomore level or consent of the instructor.

POL 660. Politics of Development: Latin America, Africa, and Asia. 3 Credits. NW S/W
A focus on topics pertinent to all of the underdeveloped areas such as the role of the military, styles of political leadership, land tenure systems, the role of the middle sectors, the nature of bureaucracy, the activity of the students, and foreign policy attitudes. Prerequisite: Sophomore level or consent of the instructor.

POL 661. Politics of the Middle East. 3 Credits. NW S/W
Survey of domestic and international political developments in the Middle East. Topics include: emergence of the modern nation-state, the role of Islam, leadership patterns, competing political ideologies, prospects for democratization, foreign policy relations, and regional conflicts. Prerequisite: Sophomore level or consent of the instructor.

POL 662. Gender and Politics in Africa. 3 Credits. S
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women's health, gender and militarism. We also explore women's roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as AAAS 662 and WGSS 662.) Prerequisite: Sophomore level or consent of instructor.

POL 663. Populism and Nationalism. 3 Credits. S
This course will acquaint students with the various understandings and manifestations of the important phenomena of populism and nationalism around the world, including the United States. These political phenomena and their existence around the world and at home highlight the importance of the concepts of identity, citizenship, and practices of exclusion among others. While nationalism and populism are far from synonymous, they both underscore the challenges in the dynamic interaction between politics, society and culture(s). Prerequisite: Junior/Senior standing or consent of instructor.

POL 665. Politics in Africa. 3 Credits. W
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as AAAS 600.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor.

POL 666. Political Economy of East Asia. 3 Credits. S
This course provides basic understanding of fiscal, monetarist, and trade politics; how governments in East Asia use them to pursue growth; the extent to which these governments follow or counteract economics to pursue growth; and how the performances of economies in East Asia relate to the U.S. and global economies. (Same as EALC 666.) Prerequisite: POLS 150.

POL 667. Islam and Politics. 3 Credits. W
This course gives students a basic understanding of Islamist and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as GIST 667 and SOC 640.) Prerequisite: A principal course in sociology, POLS 150, or consent of instructor.

POL 668. Reform in Contemporary China. 3 Credits. NW H/W
Examines the epochal changes that have occurred in China from Deng Xiaoping's rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that spawned the 1989 "prodemocracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and economic decentralization, and leadership succession. A previous course on China is helpful, but not mandatory. (Same as EALC 585.)

POL 669. Topics in Comparative Politics: ______. 2-3 Credits. S
A study of selected contemporary problems of policy or politics affecting several countries. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

POL 670. United States Foreign Policy. 3 Credits. S
An evaluation of the formulation of United States foreign policy in the post-World War II period. Economic, military, and diplomatic dimensions of policy; internal and external influences on policy; theories of foreign policy decision-making. Prerequisite: Nine hours of political science.

POL 671. International Cooperation. 3 Credits. S
An examination of the gains possible from international cooperation and the barriers to achieving cooperation. Theoretical perspectives on international cooperation will be explored along with cases such as trade, the environment, arms control, and the European community. Prerequisite: Sophomore level or consent of the instructor.

POL 672. International Political Economy. 3 Credits. S
Structural theories of the international political economy provide the framework for a consideration of the nature of hegemony, the management problem of multinational corporations, the role of
It surveys national and international responses by the U.S. government to the crime-terror nexus. Prerequisite: POLS 110, or POLS 170, or POLS 150, or POLS 582, or POLS 625 or consent of instructor.

POLS 684. International Law: The State and the Individual. 3 Credits. S
International law has assumed an increasingly significant role in international life. This course will examine major law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course will examine the central questions and the relevant international legal principles associated with each issue. Prerequisite: Junior level or consent of instructor.

POLS 685. International Law: Laws of Armed Conflicts. 3 Credits. S
This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current "war on terrorism." Prerequisite: Junior level or consent of instructor.

POLS 686. International Human Rights. 3 Credits. S
The course introduces students to historical and philosophical bases of contemporary human rights, theoretical approaches and methodological challenges to studying human rights questions, and acquaints them with the main topics, controversies, and tensions in the scholarship, practice and politics of human rights. (Same as GIST 686.) Prerequisite: Sophomore level or consent of instructor is required.

POLS 687. Introduction to Cyber Intelligence. 3 Credits. S
Course will provide instruction about the fundamental principles, impact and issues of cyber intelligence. Course will focus on cyber intelligence supporting operations in cyberspace (to include risk management functions, cyber defense, cyber espionage, and cyber-attack) as well as intelligence developed through cyberspace. Topics include cyber-threats, cyber defense, and cyber warfare as well as ethical and legal considerations. In addition to providing a foundation of understanding cyber intelligence within the context of the United States, this course will analyze cyber capabilities of nations and non-nation state actors. Learning outcomes for students include an understanding of the cyber intelligence cycle and structured analytic techniques in providing cyber intelligence products to national security and organizational leadership. Students will also gain an understanding of cyber threat actors and complexity of emerging threats. Prerequisite: Instructor permission.

POLS 688. U.S. Counterterrorism Approaches to International and Domestic Terror Groups. 3 Credits. S
The course will cover U.S. counterterrorism policy and practices historically and in the current era. For international (multinational) terrorism, the course will focus on how the historical actions of western powers contributed to the rise of terrorist groups, as well as the evolution of U.S. responses to these groups. Groups examined could include Hamas and Al-Qaida. For domestic terrorism, the course will focus on the evolution of counterterrorism responses within the U.S., with particular attention to far-right terrorism, including the Oklahoma City Bombing. We will examine U.S. counterterrorism policy in the law, as well as in the practices of Intelligence, Department of Defense, and law enforcement. Prerequisite: POLS 125 or POLS 130 or permission from the instructor.

POLS 689. Topics in International Relations:. 2-3 Credits.
A study of selected problems in international relations. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

POLS 690. Research and Diplomacy Lab. 3 Credits. S
This course is designed to provide students with basic tools and an understanding of interdisciplinary social science research and to simultaneously partner with an innovative program implemented by the US Department of State. While learning about the research process and research design, students enrolling in this course team up with a group of four or more students to address a real world problem posed by a State Department officer with whom they have contact through videoconferencing throughout the semester. The team engages in extensive and systematic research to address the problem and presents their finding in a formal report presented to the State Department in the desired format. Prerequisite: GIST 220 or POLS 150 or POLS 170 or instructor permission.

POLS 691. Diplomacy Lab. 1 Credits. S
This course is a supplemental research lab designed to partner with a jr/sr level course offering an innovative program implemented by the US Department of State. Students enrolling in this course team up with a group of four or more students to address a real world problem posed by a State Department officer. This one-credit hour course is intended to function as a special lab project and must be taken in conjunction with a standard course that has a diplomacy lab option. Prerequisite: Instructor permission required.

POLS 692. International Security and Migration Policy. 3 Credits. S
This course examines the politics of migration in receiving and sending states with special attention to the policies of developed democracies, including the US and UK, and the member states of the European Union and Schengen zone. It aims to introduce students to the theories of international migration with special attention to the migration-security nexus. Toward this end, topics cover neoclassical economic models of international migration, the effects of globalization on migration policies, and how perceived economic and security interests shape migration policies. Second, the course will cover the political consequences of migration for sending and receiving states, the economics and politics of migration, including remittances, public opinion, interest group politics, and the role of institutions. Third, the course encompasses different types of migration policies including visas, asylum and refugee admissions, and citizenship and naturalization. Finally, the course examines the foreign policy consequences of international migration, giving special consideration to the migration-security nexus. Throughout the course students are exposed to two major questions: (1) what are the effects of migration on both the states that receive immigrants and the states that send emigrants and (2) how do policymakers respond to these effects? Prerequisite: POLS 170.

POLS 705. Research Design for Political Science. 3 Credits.
Introduction to the discipline of political science, the philosophy of science, research design, and data acquisition. Prerequisite: Graduate standing or consent of instructor.

POLS 706. Research Methods I. 3 Credits.
An introduction to quantitative research methods, including probability theory, hypothesis-tests, and multiple regression. Includes regression diagnostics, the treatment of numeric and categorical predictors, interaction effects and elementary nonlinear models. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and lab sessions where computing applications are taught.

POLS 707. Research Methods II. 3 Credits.
This course covers basic techniques for multivariate analysis, focusing on multiple regression. Topics include interpretation of regression statistics, diagnostics for common problems, dummy variables, instrumental variables, basic time series methods including adjustment for autocorrelated error, logistic models, and nonlinear modeling; additional techniques may be covered at the discretion of the instructor. Prerequisite: POLS 706.

POLS 708. Advanced Qualitative Research Methods. 3 Credits.
An examination of qualitative research approaches frequently employed within political science. Topics may include the use of case studies, archival and documentary research, content analysis, interviewing and focus group techniques, ethnographic fieldwork, narrative and discourse analysis, and others. The course will examine the strengths and limitations of these methods in relation to major research traditions such as culturalist approaches, historical institutionalism, rational choice, and constructivism. Prerequisite: POLS 705 and either graduate standing or consent of instructor.

POLS 712. The Electoral Process. 3 Credits.
A study of the characteristics of voting behavior and the influences upon such behavior in the United States. Emphasis is placed upon relevant research findings concerning partisanship and participation in politics, and on the methodology employed in the study of political behavior. Prerequisite: Twelve hours of political science and consent of instructor.

POLS 714. Politics of Human Trafficking. 3 Credits.
This course examines the politics of human trafficking-both labor and sex trafficking-using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in GIST 471, POLS 471, or WGSS 514. (Same as GIST 714 and WGSS 714.) Prerequisite: Graduate standing.

POLS 716. Political Behavior. 3 Credits.
A seminar for students interested in understanding the public opinion, voting, and other forms of political participation. This course will include a discussion of the formation, measurement of political attitudes as well as an examination of protest and other forms of extra-legal participation. Prerequisite: Graduate standing or consent of instructor.

POLS 719. Topics in the American Political Institutions: _____. 3 Credits.
A seminar to be offered as occasion demands, dealing with, but not limited to special topics in the presidency, congress, and judicial processes. Prerequisite: Graduate standing or consent of instructor.

POLS 720. The Scope of Public Policy. 3 Credits.
Introductory graduate course in the examination of public policy making. Considers institutions, basic theoretical frameworks, and standard methods, and places policy-making within a broad political context. Emphasizes American examples, but relevant comparative material is employed. Prerequisite: Twelve hours of political science.
POLS 754. Politics and Government of Russia and the Central Eurasian States. 3 Credits.
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Eight hours in the social sciences and/or history, including POLS 150, or consent of instructor.

POLS 782. Transnational Terrorism. 3 Credits.
The course provides a study of the patterns of transnational terrorism. First, it introduces students to the analytical study of terrorism. The course traces the evolution of terrorism, from the French Revolution to the modern day era. It also covers how scholarship defines, conceptualizes, and measures terrorism. The second goal is to introduce students to key scholarly debates within the literature. Some of the example questions we ask are: are democracies more vulnerable to terrorism? Does globalization render states open to being attacked by transnational actors? Is torture warranted as an effective counterterrorism tactic? The readings draw on empirical scholarship on the causes and consequences of transnational terrorism.

POLS 789. Topics in International Relations: _____. 2-3 Credits.
A study of selected problems in international relations. Prerequisite: Consent of instructor.

POLS 810. American Politics. 3 Credits.
A survey and critical examination of recent theoretical developments and research focusing on national institutions, electoral behavior, and policy-making processes. Emphasis is given to conceptualizing and analyzing the changing nature of the American political system.

POLS 812. Political Psychology. 3 Credits.
A critical examination of the principal areas in current literature in political psychology, including psychological perspectives on mass political behavior, elite decision making, and international relations. Attention will be given to articulating and evaluating theories, constructing research questions and programs, and comparing methodologies.

POLS 820. Policy Formulation and Adoption. 3 Credits.
Survey of the literature on the institutional, socioeconomic, and political forces influencing the formulation and adoption of public policy, as well as policy change, at all levels of government. Topics include problem definition, agenda setting, and the methods of decision-making. This is a research seminar so students will be required to conduct an original research project.

POLS 825. Urban Policy and Administration. 3 Credits.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. In so doing, the course examines a range of current substantive policy and administrative issues facing urban communities and governments. (Same as PUAD 825.)

POLS 850. Introduction to Comparative Politics. 3 Credits.
This course provides a graduate level introduction to the field of Comparative Politics. Among topics it will survey are: the history and development of the field; classic works and major founding concerns of the field; methodological and epistemological debates; competing paradigms which had characterized Comparative Politics (structural-functionalist, culturalists, state-centrists, institutionalists, rational choice, and other); theory building and the role of area studies.

POLS 851. Comparative Institutions and Government. 3 Credits.
This course provides a survey of the subfield of political institutions within Comparative Politics. Among the topics it will cover are: identifying regime types (democracy vs. non-democracy); comparative electoral systems; party systems; presidential vs. parliamentary systems; comparative legislatures; constitutional engineering and democratic transitions, and others. Prerequisite: POLS 850.

POLS 857. Comparative Political Behavior. 3 Credits.
The course introduces students to the vast literature on comparative elections and comparative political parties. It pursues a twofold goal. First, the course surveys the large comparative electoral behavior literature. The themes covered in the first half include a discussion of why voters participate in elections, how voters form preferences, how psychological processes affect mass views, and how these, in turn, influence party preferences. Second, the course introduces students to the supply-side of politics and the role of political parties. This second part of the course, therefore, examines why parties form in the first place, what motives they have, what choices they offer in short, how and why parties compete. Together, the way voters form preferences and the logic of party formation illuminate a central element of the democratic process.

POLS 870. International Relations. 3 Credits.
Critical evaluation of the major approaches to international relations and their application to conflict and conflict resolution, foreign policy, and international political economy.

POLS 878. Conducting and Analyzing Fieldwork in Developing Countries. 3 Credits.
An introduction to fieldwork and surveys conducted in developing and non-democratic countries. The course covers the challenges of conducting interviews and surveys in these countries. The intent is to develop the research skills necessary for data collection and fieldwork as well as evaluating an analyzing survey data collected by other researchers in developing countries. Prerequisite: POLS 705 or equivalent or consent of the instructor.

POLS 899. Thesis. 1-6 Credits.
Enrollment for writing thesis for master's degrees. Graded on a satisfactory progress/limited progress/no progress basis.

POLS 904. Statistical Computing Foundations. 3 Credits.
This is an interdisciplinary course for social science researchers who need to develop routines to estimate and evaluate statistical models. It introduces tools for software development, primarily with the statistical programming language R (and related languages like C). Topics include code organization and optimization, concurrent version management, LaTeX document preparation, and high-performance computing on the KU Linux cluster. Examples from various fields are considered. Prerequisite: Two courses in graduate level statistics and familiarity with R.

POLS 906. Advanced Regression. 3 Credits.
Covers topics appropriate for a second course in regression analysis. The content will vary according to the interest of the instructor and students, but will generally include such topics as multiple imputation of missing data, the generalized linear model (GLM), and specialized models for longitudinal data. The course will include a review of the principles of maximum likelihood estimation and applications of matrix algebra and differential calculus in statistical applications.

POLS 909. Topics in Methodology: _____. 3 Credits.
An intensive seminar in a method (or a variety of relevant methods) of theoretical or empirical research designed for Ph.D. students only. Emphasis is on deepening the understanding and ability to use advanced methods of analysis. Prerequisite: Admission to the Ph.D. program or consent of instructor.

POLS 910. Research Seminar in American Government. 2-3 Credits.
A faculty and advanced graduate student collegiate research experience focusing on American politics, policy-making and administration, with faculty and students engaged in the production of scholarly research articles, books and conference papers. Topics will be chosen by individual students with consent of the seminar professor.

POLS 911. The U.S. Congress. 3 Credits.
This seminar employs various theoretical and methodological perspectives to explore the burgeoning post-1960 literature on Congress. Traditional subjects such as committees, parties, and elections are examined through applications of formal models, behavioral analyses, and participant observation.

POLS 913. State and Local Politics. 3 Credits.
Research seminar on various aspects of state and local government, such as reformed institutions, fiscal stress, citizen participation, and various policy problems.

POLS 915. American Political Parties. 3 Credits.
A survey of the theories and research findings dealing with political parties in American politics, including third and minor parties. Topics to be covered include the development and evolution of the party system, the nature of party organization and the recruitment of party activists, the role of parties in the electoral process, the impact of parties upon public policy, and party reform.

POLS 919. Topics in U.S. Government and Politics: ____. 2-3 Credits.
A seminar to be offered as occasion demands, dealing with, but not limited to, bureaucracy, legislative policy, federalism, and special problems in U.S. politics.

POLS 940. Teaching Political Science. 1 Credits.
A discussion of teaching methods and approaches. Students are expected to develop a personal teaching portfolio that describes their outlook on teaching political science and provides sample teaching materials. This course must be taken by all graduate teaching assistants and assistant instructors during the first year of their appointment. Grades are issued on a pass/fail basis.

POLS 954. Politics in Post-Soviet States. 3 Credits.
In-depth study of the politics of Russia, Ukraine, and the other Post-Soviet states. Focus on the problems of transforming a centrally planned authoritarian system to a free market democracy.

POLS 955. Politics of Advanced Industrial Societies. 3 Credits.
Theory and research on the patterns of behavior that characterize the politics of North America, Europe, and developed regions of Asia. Topics include corporatism and alternative forms of interest intermediation, economic theories of socialization and electoral choice, and the role of the state; its finances, adaptation, and the problem of power and legitimacy. Prerequisite: POLS 850 or permission of instructor.

POLS 959. Topics in Comparative Politics: ____. 1-3 Credits.
Study of selective topics in comparative government and politics.

POLS 960. Politics of Developing Countries. 2-3 Credits.

POLS 970. Foreign Policy Analysis. 3 Credits.
Designed to acquaint students with the principal theories, approaches and types of empirical analysis generally employed to explain and interpret the creation and implementation of foreign policy. Topics include rational actor models, collective and bureaucratic processes, societal influences, cognitive and psychological factors, and comparative foreign policy. Prerequisite: POLS 870. An undergraduate United States foreign policy class is recommended.

POLS 972. Theories of International Conflict. 3 Credits.
An in-depth survey of theories and research on international conflict. Topics will range from anthropological studies of conflict in primitive societies to contemporary theories of nuclear conflict. The course will also cover current empirical research methodology and results of research on international conflict, as well as models of conflict processes. Prerequisite: POLS 870.

POLS 973. International Political Economy. 3 Credits.
Provides an eclectic survey of major developments in the field. Topics include the intellectual origins of IPE; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., IMF, IBRD, MNCs, etc.). (Same as SOC 873.) Prerequisite: POLS 870 or consent of instructor.

POLS 977. Ethics in International Relations Theory. 3 Credits.
This course examines how issues of International Ethics have been treated in International Relations theory. This course begins by reviewing several theoretical perspectives of International Relations and how these perspectives have historically understood the role ethics plays in international politics. By the end of the semester, students should have a firm understanding of (1) the salient issues of international ethics in world politics and (2) whether and how IR scholars have (theoretically and methodologically) placed those issues in their research paradigms. The issue areas the course will cover include, but are not limited to, human rights doctrines, issues of economic and political justice, just war theory (jus ad bellum) and just conduct of war (jus en bello), and humanitarian intervention. The course will assess the role international law has played in stemming and/or punishing human rights abuses. Students will review several historical cases of genocide, as well as several cases of truth and reconciliation commissions.

POLS 979. Topics in International Relations: ____. 3 Credits.
To be offered periodically when topics of special interest arise.

POLS 980. International Organizations. 3 Credits.
Considers theoretical and empirical work on international governmental and non-governmental organizations (IOs). Specifically highlights the evolving scholarly debates regarding the function, design, and delegation of authority to IOs as well as their behavior and change. Explores these questions in depth through a wide range of cases, including comprehensive coverage of the United Nations, Bretton Woods Institutions, and the European Union, and their activities in issue areas concerning international security, trade, finance, development, humanitarian aid, and the environment.

POLS 993. Directed Readings. 1-5 Credits.
Designed to meet the needs of graduate students whose study in political science cannot be met with present course. Prerequisite: Consent of instructor.

POLS 997. Preparation for the Comprehensive Examination. 1-6 Credits.
An independent reading course for students preparing to take the Ph.D. comprehensive examination. May be taken for two semesters or six credits, whichever comes first. Graded A, B, C, D, or F depending on the results of the comprehensive examination.

POLS 999. Doctoral Dissertation. 1-15 Credits.
Enrollment for writing doctoral dissertations. Graded on a satisfactory progress/limited progress/no progress basis.

Psychology Courses

PSYC 102. Orientation Seminar in Psychology. 1 Credits.
Provides an overview of the discipline of psychology. Emphasizes developing an understanding of opportunities in psychology at the
University of Kansas, exploring service-learning options related to the major, and helping students plan goals for their education through an understanding of their personal values and options within and outside the discipline. Open to KU-degree-seeking students only. Contact the Psychology Department to enroll in the course. Non-degree-seeking and non-KU students may enroll in the course by signing up with KU Continuing Education. Graded on a satisfactory/unsatisfactory basis.

**PSYC 104. General Psychology. 3 Credits. SI**
A basic introduction to the science of psychology.

**PSYC 105. General Psychology, Honors. 3 Credits. SI**
Open to students in College or Departmental Honors programs or by permission of instructor.

**PSYC 177. First Year Seminar: ______. 3 Credits. SI**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in psychology. May not contribute to major requirements in psychology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**PSYC 199. Data I: Dealing with Data. 3 Credits. S**
Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to derive knowledge and insights from data. This course teaches students the core concepts of inference and computing, working with real behavioral, economic, geographic, physical, social, and text data. Students obtain basic statistics training from a computational perspective using simulation to answer questions, explore problems, and delve into social issues surrounding data analysis such as privacy and design. (Same as ECON 199, POLS 199 and SOC 199.)

**PSYC 200. Research Methods in Psychology. 3 Credits. S**
An examination of the scientific "ways of knowing" employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Prerequisite: PSYC 104.

**PSYC 201. Research Methods in Psychology, Honors. 3 Credits. S**
An examination of the scientific "ways of knowing" employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Open to students in University and Departmental Honors programs or by permission of instructor. Not open to students taking PSYC 200. Prerequisite: PSYC 104.

**PSYC 202. Study Abroad Topics in: ______. 1-6 Credits. S**
This course is designed for the study of special topics in Psychology equivalent to courses at the 100 and 200 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

**PSYC 210. Statistics in Psychological Research. 3 Credits. S**
An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Prerequisite: PSYC 104.

**PSYC 211. Statistics in Psychological Research, Honors. 3 Credits. S**
An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Open only to student in University and Departmental Honors programs or by permission of instructor. Not open to students who have taken PSYC 210. Prerequisite: PSYC 104.

**PSYC 250. Human Development. 3 Credits. S**
This course examines the psychological, social, and physical development of humans across the lifespan from conception through infancy, childhood, adolescence, adulthood and death. The course will explore the broad array of factors that contribute to development including cognitive, emotional, social, neurological, physical, genetic, and environmental influences. (Same as ABSC 250.) Prerequisite: PSYC 104 or PSYC 105.

**PSYC 318. Cognitive Psychology. 3 Credits. S**
An introduction to contemporary research and theory in human learning and memory, relevant perceptual processes, and higher functions such as language. Prerequisite: PSYC 104.

**PSYC 319. Cognitive Psychology, Honors. 3 Credits. S**
Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104.

**PSYC 320. Personality. 3 Credits. S**
A survey of personality theories, development, assessment and current research. Prerequisite: PSYC 104.

**PSYC 321. Personality, Honors. 3 Credits. S**
Honors version of PSYC 320. Open to students in College or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104.

**PSYC 322. Philosophy of Psychology. 3 Credits. HR**
The philosophy of psychology is a relatively new field of inquiry in philosophy and so the question of what the philosophy of psychology remains an open question. In this course, we will understand the philosophy of psychology in two ways. First, it is the study of the nature of psychology and the various capacities and mechanisms that make cognition possible. We will consider whether there is a unique psychological level of explanation or whether psychology ultimately reduces to the brain. We will also explore various philosophical puzzles raised by consideration of psychological abilities like memory, attention, and emotion. Second, philosophy of psychology is a subfield of philosophy of science, where we examine a particular science—here, experimental psychology—as a way to explore broader questions about what science is, how science explains phenomena, and how values intersect with its investigations. All of this makes it an exciting time to study the philosophy of psychology as students in this course, student's interests will play a role in selecting topics and shaping the direction of our inquiry. (Same as PHIL 323.)

**PSYC 333. Child Development. 3 Credits. S**
A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Prerequisite: PSYC 104.

**PSYC 334. Child Development, Honors. 3 Credits. S**
A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Open to students in University or Departmental Honors Programs or by permission of instructor. Prerequisite: PSYC 104.

**PSYC 350. Psychological Disorders. 3 Credits. S**
A broad survey of psychopathology, with a focus on the primary symptoms, causes, consequences, and treatments of its major manifestations, including: anxiety disorders, mood disorders, trauma-related disorders, eating disorders, substance-use disorders, personality disorders, and psychotic-spectrum disorders. Relevant scholarship from neuroscience, cognitive science, medicine, behavioral science, and
sociocultural perspectives will be integrated throughout. Prerequisite: PSYC 104.

PSYC 351. Psychological Disorders, Honors. 3 Credits. S
Open to students in College or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104.

PSYC 360. Social Psychology. 3 Credits. S
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Prerequisite: PSYC 104.

PSYC 361. Social Psychology, Honors. 3 Credits. S
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104.

PSYC 370. Behavioral Neuroscience. 3 Credits. N
A survey of topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurotransmitter, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 371. Behavior Neuroscience, Honors. 3 Credits. N
A survey of basic topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 375. Cognitive Neuroscience. 3 Credits. N
A survey of topics related to the biological processes underlying cognition in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and functional neuroanatomy. Selected topics within the area of cognitive neuroscience also covered, such as sensory processing, hearing, vision, learning and memory, attention, motor control, language, hemispheric asymmetry, executive function, and neuroplasticity. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 380. Clinical Neuroscience, 3 Credits. N
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 381. Clinical Neuroscience, Honors. 3 Credits. N
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 385. Social Neuroscience. 3 Credits. S
This course is designed to acquaint students with the Social Neuroscience approach as well as recent findings using this approach. The class will focus on particular social phenomena and (a) evaluate the utility of current social neuroscience research examining these phenomena and (b) consider future experimental designs using the Social Neuroscience approach to further inform our understanding of each phenomenon. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 390. The Psychology of Aging. 3 Credits. S
Social, psychological, and economic adjustments required by aging; changes in cognition, role and personality necessitated by advancing age. Not open to students with credit in PSYC 691. Prerequisite: PSYC 104.

PSYC 399. Data 2: Foundations of Data Science. 3 Credits. S
Data science empowers its users to provide data-drive solutions to problems and questions in the world. This course provides foundational skill and knowledge behind this power. This knowledge and skill includes learning to formulate effective questions to answer with data, computer programming, data management and wrangling, exploratory data analysis and visualization, statistical inference and prediction, data-driven decision making, and communication. (Same as ECON 399 and POLS 399.) Prerequisite: PSYC 199/POLS 199/ECON 199 or ECES 138; and PSYC 210 or MATH 365 or ECON 426 or POLS 306 or SOC 380 or MATH 101 or MATH 104 or MATH 115 or MATH 121.

PSYC 402. Study Abroad Topics in: _______. 1-6 Credits. S
This course is designed for the study of special topics in Psychology equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

PSYC 410. Intimate Relationships. 3 Credits. S
A social psychological perspective on adult intimate relationships, examining friendship, dating, committed relationships, and the dissolution of committed relationships. Topics include romance, jealousy, self-disclosure, power, loneliness, and social support. Discussion of heterosexual and homosexual relationships, traditional forms (e.g., marriage) of relationships as well as alternative lifestyles (e.g., cohabitation) and gender-linked differences in relationships. (Same as WGSS 410.) Prerequisite: PSYC 104.

PSYC 412. Introduction to Motivation and Emotion. 3 Credits. S
An examination of contemporary issues, theories, and research in motivation and emotion. Prerequisite: PSYC 360 or PSYC 361, or consent of instructor.

PSYC 415. Social and Cultural Sources of Self. 3 Credits. S
An interdisciplinary exploration of the social and cultural sources of self-experience. The first part of the course emphasizes a general process: how the development and experience of self, though it might seem essentially personal, is shaped by social interaction. The second part of the course highlights particular cases: how self-experience may be constructed differently depending on the particular social and cultural settings a person inhabits. Cases include influences of gender, socioeconomic status, and age group on the construction of self-experience within societies from around the world, and ethnic-identity groups within the USA. Prerequisite: PSYC 104.

PSYC 418. Introduction to Cognitive Science. 3 Credits. S
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and SPLH 418.) Prerequisite: Consent of instructor.

**PSYC 430. Cognitive Development. 3 Credits. S**
A basic survey course in the development of thinking and understanding in normal children. The course will cover Piaget's theory and information processing theories at the advanced undergraduate level. Topics include perception, attention, learning, memory, language, problem solving, and individual differences from birth to the mid-teens. Prerequisite: PSYC 104 or ABSC 160.

**PSYC 435. Psycholinguistics I. 3 Credits. S LFE**
A detailed examination of issues in the processing of language. The course provides a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes are examined. (Same as LING 435.) Prerequisite: An introductory course in linguistics or permission of instructor.

**PSYC 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N LFE**
This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, BIOL 449, and SPLH 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

**PSYC 453. Psychological Foundations of Musical Behavior. 3 Credits. S**
Study of human musical behavior, including basic psychoacoustic phenomena, musical taste, functional music, musical ability, cultural organization of musical sounds, and the affective response. Prerequisite: General Psychology, MEMT 370, or consent of instructor.

**PSYC 460. Honors in Psychology. 1-2 Credits. S**
A seminar for juniors and seniors in the Honors Program in Psychology. Students who have been admitted to the Honors Program in Psychology may enroll for one credit for one or both semesters of their junior year and are required to enroll for two credits for both semesters in their senior year.

**PSYC 465. Stereotyping and Prejudice Across Cultures. 3 Credits. S**
This course covers a variety of theoretical views concerning the origins of stereotypes and the factors that maintain them, as well as how and when the revision of such beliefs take place. Analysis of various stereotypes (including gender and race) and the experience of prejudice across a variety of cultural contexts is examined. Many difficult social issues are discussed in depth. Prerequisite: PSYC 360 or PSYC 361; or consent of instructor.

**PSYC 466. Psychology of Women. 3 Credits. S**
A survey of the psychological theories about women; similarities and differences in the behavior of women and men; the effects of biological and social factors on the behavior of women and men; and issues of concern to women of different races, sexual orientations, ages, and so forth. (Same as WGSS 468.) Prerequisite: Any previously completed course in PSYC or WGSS.

**PSYC 469. Seminar: ______. 1-5 Credits. U**
Discussion of current problems in psychological theory and research. Prerequisite: PSYC 104.

**PSYC 470. Introduction to Contemporary Psychotherapies. 3 Credits. S**
Review of current psychotherapies with special references to their underlying philosophies, theories of personality, techniques, and effectiveness. Issues concerning the use of drugs in the treatment of mental disorders are also reviewed. Prerequisite: PSYC 104.

**PSYC 472. Psychology of Sleep and Dreaming. 3 Credits. S**
This course reviews recent evidence on the roles of dreaming and dreamless sleep. Psychological, developmental, personality, and social psychological aspects are considered. Prerequisite: PSYC 104.

**PSYC 480. Independent Study. 1-5 Credits. U**
Investigation of a special research problem or directed reading in an area not covered in regular courses. No more than 3 hours of PSYC 480 may be counted toward the minimum hours required for the major. Prerequisite: Consent of instructor.

**PSYC 481. Research Practicum. 1-5 Credits. U**
Guided participation in ongoing research programs to augment quantitative skills through direct practicum experience. No more than 3 hours of PSYC 481 may be counted toward the Psychology minor or the Psychology, Developmental Psychology, and Behavioral Neuroscience major requirements. Prerequisite: PSYC 200 or PSYC 201 or PSYC 210 or PSYC 211 or consent of instructor.

**PSYC 482. Sensation and Perception. 3 Credits. S**
Introduction to human sensory and perceptual capabilities. Topics include: sensory systems, perceptual development, and perceiving color, objects, space, movement, sound, speech, touch, smell, and taste as well as various perceptual illusions. Prerequisite: PSYC 104.

**PSYC 483. Undergraduate Internship in Psychology. 1-3 Credits. U**
Students conduct psychology focused fieldwork in an organization related to their professional/career goals. Credit hours are determined on the basis of 120 clock hours for 3 credit hours, 80 clock hours for 2 credit hours, and 40 clock hours for 1 credit hour. An internship plan (contract) is developed by the student in conjunction with the student’s academic adviser and signed off by the academic adviser and an authorized agent of the internship site. At the conclusion of the internship experience, the authorized agent of the internship site writes the academic adviser indicating that the student has met the goals of the internship plan and the hours required. No more than 3 hours of PSYC 483 may be counted toward the minimum hours required for the major. Prerequisite: Admission to the Psychology major.

**PSYC 484. Classroom to Career. 3 Credits. S**
Students who are preparing to enter the workforce are introduced to current challenges and trends in professional development and workforce psychology. In addition to discussion of interdisciplinary research centered around career management topics such as preventing burnout, recognizing and eliminating bias in interviews, or predictors of job satisfaction and productivity, emphasis is placed on the creation of a job
dossier and tools to help bridge skills from the classroom and their place in an individuals' career. Prerequisite: Junior or senior status.

**PSYC 492. Psychology and Social Issues. 3 Credits. S**
A study of psychological aspects of selected social issues in contemporary American society. Race relations and the civil rights movement. Political extremism. Public opinion and social change. Social psychological approaches to a variety of social problems. Prerequisite: PSYC 360 or 361, or consent of instructor.

**PSYC 499. Conceptual Issues in Psychology. 3 Credits. S**
This course examines classic issues in psychology--free-will and determinism, nature and nurture, the mind-body problem, approaches to human action, cultural influences on psychological theories, the evolution of intellectual paradigms, and inductive and deductive approaches to social scientific research--from multiple perspectives within psychology and related social sciences. Prerequisite: PSYC 104 or equivalent.

**PSYC 500. Intermediate Statistics in Psychological Research. 3 Credits. U**
A second course in statistics with emphasis on applications. Analysis of variance, regression, analysis, analysis of contingency tables; possibly selected further topics. Prerequisite: Grade of B- or better in PSYC 210 or PSYC 211.

**PSYC 502. Human Sexuality. 3 Credits. S**
An introduction to the field of human sexuality. Topics to be covered include sexual anatomy and physiology, fertilization, pregnancy, birth and lactation, contraception, human sexual response, sexuality across the life cycle, love, marriage, alternatives to marriage, sexual orientation, sex differences in behavior, parenthood, sexually transmitted diseases, sex and the law, and sex education. (Same as WGSS 502.) Prerequisite: Any previous coursework in either WGSS or PSYC.

**PSYC 513. Behavioral Economics. 3 Credits.**
Decisions link our thoughts to our actions and as a result define who we are and who people think we are. This makes decision making a fundamental life skill. But, can we make better decisions? This course will introduce you to the science of decision making that has developed as scholars including biologists, economists, mathematicians, philosophers, psychologists, and others have sought to answer this very question. Over the course of the semester we will examine what we have learned so far such as how people predict and mispredict events, how people make decisions and how their decisions can be quite irrational from one perspective but simultaneously appear quite reasonable, how people bargain and why they sometimes choose to cooperate and other times not, and why negotiating can be so difficult. (Same as ECON 513.)

**PSYC 518. Human Memory. 3 Credits. S**
In-depth coverage of human memory phenomena, including phenomena concerning acquisition, storage and retrieval, unconscious forms of memory, memory monitoring and control, and practical aspects of memory such as autobiographical memory, mnemonic techniques and eyewitness memory. Prerequisite: PSYC 104.

**PSYC 520. Memory and Eyewitness Testimony in Children. 3 Credits. S**
A review of the literature on the development of memory in young children, and the implications of this research for understanding children's eyewitness testimony. The course will present current research on children's long-term memory abilities, the impact of stress on recall performance, the effectiveness of various types of interviewing techniques, and the suggestibility of children's recollections. Policy issues and potential guidelines for the elicitation and evaluation of children's memory reports in both clinical and legal arenas will be discussed. Prerequisite: PSYC 104 or ABSC 160, or consent of instructor.

**PSYC 521. Women and Violence. 3 Credits. S**
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as WGSS 521.) Prerequisite: PSYC 104.

**PSYC 533. The Psychology of Addictive Behaviors. 3 Credits. S**
The course will take an in-depth look at addiction processes using an interdisciplinary perspective. The course will cover processes that lead to the development of substance use disorders, as well as advanced topics in prevention and treatment. Addiction is a behavioral disorder, and the seminar will focus heavily on learning theory and conditioning processes that can yield problem substance use. Readings will be derived from a variety of sources, including both animal and human studies. This seminar is appropriate for graduate students from a variety of disciplines, as well as advanced undergraduate students who satisfy the prerequisite requirements. This course is offered at the 500 and 800 level with additional assignments at the 800 level. Not open to students with credit in PSYC 823. Prerequisite: PSYC 104.

**PSYC 535. Developmental Psychopathology. 3 Credits. S**
A review of contemporary psychological and developmental disorders of children and youth. Course presents current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention is given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, depression, chronic physical illness, and autism. (Same as ABSC 535.) Prerequisite: PSYC 104 or ABSC 333, or instructor permission.

**PSYC 545. Culture and Psychology. 3 Credits. S**
The course considers the relationship between culture and psyche. One theme throughout the course involves revealing the cultural grounding of psychological functioning. The second and complementary theme involves identifying the psychological processes involved in the phenomenon of culture. Prerequisite: PSYC 333, 334, 360 or 361 or consent of instructor.

**PSYC 555. Evolutionary Psychology. 3 Credits. S**
A review of evolutionary theory and its application to human personality, cognition, interpersonal relationships, family dynamics, and development. Prerequisite: PSYC 104 and at least 3 additional hours in Psychology, or consent of instructor.

**PSYC 556. Applied Developmental Psychology. 3 Credits. S**
An advanced study of the application of theories and concepts of developmental and behavioral psychology to a range of specific issues and problems of childhood and adolescence. This course relies heavily on the empirical research literature. Topics include contemporary social issues and child development, research in applied settings, assessment, intervention, and prevention, as well as program evaluation. Prerequisite: ABSC 160 or PSYC 333, and ABSC/PSYC 535.

**PSYC 566. Psychology and the Law. 3 Credits. S**
An application of psychological processes and concepts to the American legal system. Among the topics covered are the socialization of legal attitudes, opinions about the purposes of the criminal justice system and especially of prisons, the concept of "dangerousness," the nature of jury decision making, and the rights of prisoners, patients, and children.

**PSYC 570. Group Dynamics. 3 Credits. S**
A study of the processes underlying the dynamics of the group, including the observation of group phenomena and a consideration of their relation...
PSYC 572. Psychology and International Conflict. 3 Credits. S
A study of psychological approaches to analysis and intervention in the field of international conflict and peace-making. Focus on major contributions and important paradigms for explanation and action. Prerequisite: PSYC 360 or consent of instructor.

PSYC 578. Social Attitudes. 3 Credits. S
An introduction to the study of attitudes focusing on problems of measurement and on empirical findings and theories of attitude acquisition and change. Prerequisite: PSYC 360, 361, or consent of instructor.

PSYC 580. Research Lab. 1-5 Credits. S
Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor.

PSYC 590. Nonverbal Communication. 3 Credits. S
Examination of non-linguistic behavior in human communication, including proxemics (spacing), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as COMS 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211.

PSYC 592. Psychological Significance of Physical Illness and Disability. 3 Credits. S
A lecture course to help students become more aware of and responsive to the psychological needs of persons with physical illnesses or disabilities. Emphasis is upon the meanings of such conditions in individuals' lives and the effects of treatment and rehabilitation settings on psychological adaptation. Prerequisite: PSYC 104.

PSYC 595. Eating and Weight Disorders. 3 Credits.
This course is an intensive seminar in which students will critically examine up-to-date research and theoretical models on eating and weight disorders. Content will include diagnosis and assessment, as well as psychological, social, cognitive, biological, and “addiction” model influences/perspectives. Students will gain exposure to literature on treatment and prevention of eating disorders and obesity. Class will include critical discussion, brief lecture, and active-learning strategies to facilitate learning during class. Students will also participate in group work. Prerequisite: PSYC 350 or instructor permission.

PSYC 598. Positive Psychology. 3 Credits. S
An introduction to the core assumptions and research findings associated with human strengths and positive emotions. Also an exploration of interventions and applications informed by positive psychology in counseling and psychotherapy, and its application to school, work, family and other close relationships. (Same as EPSY 580.) Prerequisite: PSYC 104 or consent of instructor.

PSYC 605. Health Psychology. 3 Credits. S
Review of research and theory concerning the role of psychological factors in the development of physical illness and the contribution of psychologists to the treatment and prevention of physical illness. Prerequisite: PSYC 104.

PSYC 618. Experimental Psychology: Human Learning. 6 Credits. S
Lectures and laboratory research on human information processing as related to theories of word recognition, reading, and language comprehension. Major emphasis on experimental design, data analysis, interpretation, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor.

PSYC 620. Experimental Psychology: Sensation, Perception, and Cognition. 6 Credits. S
Lectures and laboratory work on human sensory processes and how they result in perceptions of the environment. Experience is provided in designing and implementing research as well as in the skills necessary for statistical analysis, interpretation of data, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor.

PSYC 622. Experimental Psychology: Social Behavior. 6 Credits. S
Lectures, laboratory and field work on various issues in research in social psychology (e.g., conformity, attitude change, social processes). Two two-hour periods a week and appointment for research. Prerequisite: PSYC 104, PSYC 360, and PSYC 210 or PSYC 211 or consent of instructor.

PSYC 624. Experimental Psychology: Clinical Psychology. 6 Credits. S
Lectures and laboratory research on contemporary issues in clinical psychology. Emphasis on experimental design, data analysis, interpretation of data, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor.

PSYC 625. Experimental Psychology: Methods in Psychophysiology and Neuroscience. 6 Credits. S
Lectures and laboratory work on psychophysiology and neuropsychology research methods. Overview of psychophysiological tools to measure the central and peripheral nervous systems. Experience designing and implementing neuropsychology and psychophysiology research. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor.

PSYC 626. Adolescent Behavior and Development. 3 Credits. S
Impact of factors of social environment and physical growth upon psychological development from puberty to young adulthood. (Same as ABSC 626.) Prerequisite: PSYC 104, PSYC 333, or ABSC 160.

PSYC 630. Clinical Psychology. 3 Credits. S
The historical and empirical foundations of clinical psychology. Significant trends in theory, research, and social organization which have shaped clinical practice. A review of clinical practice. Prerequisite: PSYC 104.

PSYC 632. Advanced Child Behavior and Development. 3 Credits. S
An advanced course in child development that includes a survey of the field's principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development, cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Same as ABSC 632.) Prerequisite: ABSC 160, PSYC 333, or instructor permission, and senior or graduate status.

PSYC 644. Behavioral Pharmacology. 3 Credits. S
Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis is placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research
methods, biology, chemistry, neurophysiology, and the nervous system. Prerequisite: PSYC 104 or consent of instructor.

PSYC 650. Statistical Methods in Behavioral and Social Science Research I. 4 Credits. S
Elementary distribution theory; t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 790 will have different course requirements. Prerequisite: A grade of B- or better in a beginning course in statistics (e.g., PSYC 210 or PSYC 211, MATH 365, POLS 306, COMS 356, SOC 380, or equivalent) is recommended, or consent of instructor.

PSYC 651. Anova and Other Factorial Designs. 4 Credits. S
Course covers one-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 791 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 678. Drugs and Behavior. 3 Credits. S
A survey of the methods used to study the effects of drugs on behavior, and of the effect of selected drugs on behavior, particularly the narcotics, hallucinogens, and drugs used in the treatment of mental illness. Prerequisite: PSYC 104.

PSYC 687. Factor Analysis. 4 Credits. S
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 887 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 689. Conceptual Issues in Human Sexuality. 3 Credits. S
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 689.) Prerequisite: Any previously completed course in PSYC or WGSS.

PSYC 690. Seminar: ____. 1-5 Credits. U
Discussion of current problems in psychological theory and research. Prerequisite: PSYC 104 and sophomore status.

PSYC 691. The Psychology of Aging. 3 Credits. S
Social, psychological, and economic adjustments required by aging; changes in cognition, role and personality necessitated by advancing age. Not open to students with credit in PSYC 390. Prerequisite: PSYC 104 or consent of instructor.

PSYC 693. Multivariate Analysis. 4 Credits. S
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 893 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 694. Multilevel Modeling I. 4 Credits. S
Introduction to statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. Emphasis will be on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 894 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 696. Structural Equation Modeling I. 4 Credits. S
Introduction to statistical methods for modeling latent variables. Topics include a review of latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, and hierarchical CFA. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 896 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 697. Longitudinal Data Analysis. 3 Credits. S
Reviews and contrasts various statistical models for the analysis of change. Course focuses on techniques to analyze longitudinal (repeated measures) data beyond the repeated-measures ANOVA framework. Applications across the behavioral and social sciences are emphasized. Students taking this course as PSYC 991 will have different course requirements. Prerequisite: PSYC 696 or equivalent, or consent of instructor.

PSYC 698. Bayesian Data Analysis. 3 Credits.
This course will provide a tutorial introduction to doing Bayesian data analysis. The course is intended to make advanced Bayesian methods accessible to all students in the behavioral and social sciences. During the course we will cover the fundamental of Bayesian methods and work from the simplest model up through hierarchical or multilevel models for all types of data from binary to continuous to count data. By the end of the course each student should be able to carry out their own Bayesian data analysis for nearly any question they might ask in the social and behavioral sciences. Open only to undergraduate students. Not open to students with credit in PSYC 797. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 704. Research Practicum in Clinical Child Psychology. 3 Credits.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities
by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare research for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as ABSC 704.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**PSYC 706. Special Topics in Clinical Child Psychology:** 3 Credits.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as ABSC 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**PSYC 710. Feminist Issues in Psychology.** 3 Credits.
Detailed examination and discussion of psychological theory and research from a feminist perspective. Specific topics will vary. The goal of the course is to facilitate students' ability to develop feminist critiques of existing research and theory as well as to generate nonsexist alternative approaches. Open to advanced undergraduates with consent of instructor. Prerequisite: Some familiarity with research methods in the social sciences.

**PSYC 723. Advanced Cognitive Psychology.** 3 Credits.
Advanced cognitive psychology reviewing theories of pattern recognition, attention, working memory, language comprehension and problem solving. Emphasis will be placed upon the application of these theories to real-life situations. Prerequisite: PSYC 104 and six additional credit hours in psychology, or permission of the instructor.

**PSYC 725. Cognitive Neuroscience.** 3 Credits.
A survey of the critical issues within cognitive and behavioral neuroscience. The course will provide information about neuronal physiology, functional neuroanatomy, and psychophysiological research methods. Human cognition and the neurophysiology that subserves the primary cognitive functions will be discussed.

**PSYC 735. Psycholinguistics I.** 3 Credits. LFE
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processing will be examined. (Same as LING 735.)

**PSYC 737. Psycholinguistics II.** 3 Credits.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. (Same as LING 737.) Prerequisite: PSYC 735/LING 735 or consent of instructor.

**PSYC 750. Advanced Seminar in Gender Identity and Sexual Orientation.** 3 Credits.
Design and execution of research on the causes and consequences of variations in gender identity, sexual orientation or affectional preference, sex roles, and sex-linked behaviors. Prerequisite: Consent of instructor.

**PSYC 757. Theories of Perception.** 3 Credits.
A consideration of the facts and theories of human perception. The emphasis will be on vision, although hearing, smell, pain, and other senses will also be discussed. Of particular concern is the question of perceptual modifiability and the response of the human observer to unusual sensory environments. Prerequisite: PSYC 104.

**PSYC 774. Advanced Social Psychology I.** 3 Credits.
First semester of a two-semester course. Designed to provide a thorough background in social psychology and to motivate a continuing exploration of theoretical problems and issues in the field. Combines examination of historical development of theories and methods in social psychology with analysis of theoretical and methodological approaches to a variety of contemporary topics.

**PSYC 775. Advanced Social Psychology II.** 3 Credits.
A continuation of PSYC 774.

**PSYC 777. Social Psychology: Theory, Research, and Clinical Applications.** 3 Credits.
Basic theories in social psychology, as well as their applications to the process of coping with life events. The focus is on the nature of each theory, including the history and more recent developments; however, where clinical applications have been made of a particular theory, these will be discussed.

**PSYC 780. Research Lab.** 1-5 Credits.
Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor.

**PSYC 782. Research Methods in Child Language.** 3 Credits.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as CLDP 782 and LING 782.)

**PSYC 787. Multidisciplinary Perspectives on Gerontology and Aging.** 3 Credits.
A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, COMS 787, and SOC 767.)

**PSYC 790. Statistical Methods in Psychology I.** 4 Credits.
Elementary distribution theory; t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: A beginning course in statistics and graduate standing, or consent of instructor.

**PSYC 791. Statistical Methods in Psychology II.** 4 Credits.
Continuation of PSYC 790. One-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 795. Computing and Psychology.** 3 Credits.
Introduction to the use of personal computers to facilitate and standardize administration of research protocols and to automate data collection.
Lectures and projects emphasize direct application to research in the behavioral sciences. Prerequisite: Graduate standing in the Department of Psychology and consent of instructor.

**PSYC 796. Computer Models of Brain and Behavior.** 3 Credits.
An introduction to the techniques of computer modeling with applications in the study of brain-behavior mechanisms. Early and contemporary efforts to simulate the neuron, neural networks, and neural processes which regulate behavior, are reviewed. Application of modeling techniques in sample brain-behavior problem areas are used to illustrate the operation of thresholds, feedback, dynamic equilibrium, redundancy, plasticity, network structure, and similar constructs. Programming skill in a high-level language available on personal computers or mainframe is required. Prerequisite: EECS 128 or EECS 138 or PSYC 795, and PSYC 370, or equivalent courses or experience.

**PSYC 797. Bayesian Data Analysis.** 3 Credits.
This course will provide a tutorial introduction to doing Bayesian data analysis. The course is intended to make advanced Bayesian methods accessible to all students in the behavioral and social sciences. During the course we will cover the fundamental of Bayesian methods and work from the simplest model up through hierarchical or multilevel models for all types of data from binary to continuous to count data. By the end of the course each student should be able to carry out their own Bayesian data analysis for nearly any question they might ask in the social and behavioral sciences. Not open to students with credit in PSYC 698. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 798. Introduction to Mathematical Methods in Psychology.** 3 Credits.
A first course in scaling and modeling psychological processes. Substantive areas treated selected from sensation, perception, learning, memory, preference, choice and decision processes, problem solving, games, social interaction, and individual differences. May be repeated with permission. Prerequisite: Previous course work beyond the introductory level in psychology or a closely related area, a course in statistics, and a course in calculus.

**PSYC 799. Proseminar in Child Language.** 2 Credits.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, CLDP 799, LING 799, and SPLH 799.)

**PSYC 800. Experimental Psychology: _____ .** 3 Credits.
An advanced survey of theory and research in a selected area of experimental psychology. Continual enrollment for four semesters is required of entering graduate students in experimental psychology. Open to other students with graduate standing in psychology or a closely related field. May be repeated with permission.

**PSYC 802. Social-Psychological Aspects of Health, Disability, and Associated Life Stress.** 3 Credits.
Disabling myths; perception of causes and effects of disease and disability; attitudes and interpersonal relations; hoping, coping, and reality issues; values; professional-client relations; public media and societal rehabilitation. A departmental core course for graduate students.

**PSYC 803. Fundamentals of Psychological Assessment and Intervention with Children.** 3 Credits.
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as ABSC 803.) Prerequisite: Graduate student in clinical child psychology program.

**PSYC 805. History of Psychology.** 3 Credits.
A historical survey of basic concepts and theories in psychology with emphasis on their relationship to contemporary problems in theory.

**PSYC 809. Professional Issues: Clinical Child Psychology.** 1 Credits.
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues, including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Same as ABSC 809.) Prerequisite: Graduate standing in clinical child psychology.

**PSYC 810. History and Ethics in Psychology.** 3 Credits.
A historical survey of basic concepts and theories in psychology with emphasis on their relationship to contemporary issues. Examination of historical and contemporary code of ethics and its application to the conduct of clinical psychologists.

**PSYC 811. Achievement and Intellectual Assessment in Clinical Child Psychology.** 3 Credits.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPSSI. (Same as ABSC 811.) Prerequisite: Graduate student in clinical child psychology.

**PSYC 812. Behavioral and Personality Assessment of Children.** 3 Credits.
Lecture, laboratory, field work, and supervision. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Same as ABSC 812.) Prerequisite: Graduate standing in clinical child psychology.

**PSYC 814. Advanced Child and Family Assessment.** 3 Credits.
Lecture, laboratory, field work, and supervision. Supervised experience in specialized psychological assessment approaches for children and families. Emphasis on interviewing, observation, psychometric scales, consultation, rationale, administration, analysis, and reporting of mental health functioning of children and families. Experience with clinical populations, and communication with referral sources. Prerequisite: Graduate student in clinical child psychology.

**PSYC 815. Design and Analysis for Developmental Research.** 3 Credits.
Coverage of the philosophy and basic principles of group-design research, with a special emphasis on designs that are appropriate for developmental studies. Designs for both experimental and quasi-experimental research are covered, and appropriate statistical procedures are presented concomitantly with the designs. Individual-difference analyses and statistical control issues are also addressed.

**PSYC 816. Design and Analysis for Neuroimaging Research.** 3 Credits.
Course covers research design and analysis issues for event-related potential (ERP) and functional magnetic resonance imaging (fMRI) studies. Repeated measures, statistical parametric mapping, principal components analysis, and independent components analysis techniques are covered. Both practical and theoretical aspects of these statistical
techniques will be explored in Matlab environment. Matrix algebra recommended but not required. Prerequisite: PSYC 790 and 791 or equivalent are required.

**PSYC 818. Experimental Research Methods in Social Psychology. 3 Credits.**
Systematic discussion of the techniques of research in social psychology, with practice in the utilization of selected methods. Prerequisite: One course in social psychology in addition to introductory social psychology.

**PSYC 819. Field and Evaluation Research Methods in Social Psychology. 3 Credits.**
Basic principles and practices of field methods in basic and applied research in social psychology and related fields; relationships between field and laboratory studies; special emphasis on survey and evaluation research methods and study designs; client and respondent relationships; research and public policy.

**PSYC 820. Advanced Child Development. 3 Credits.**
A survey of the basic empirical research in the field of child development, covering intelligence, cognition, perception, attention, personality, social behavior, and socialization processes. These literatures are integrated and their implications for social application are addressed. Prerequisite: A course in child development or equivalent.

**PSYC 821. Women and Violence. 3 Credits.**
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor.

**PSYC 823. The Psychology of Addictive Behaviors. 3 Credits.**
The course will take an in-depth look at addiction processes using an interdisciplinary perspective. The course will cover processes that lead to the development of substance use disorders, as well as advanced topics in prevention and treatment. Addiction is a behavioral disorder, and the seminar will focus heavily on learning theory and conditioning processes that can yield problem substance use. Readings will be derived from a variety of sources, including both animal and human studies. This seminar is appropriate for graduate students from a variety of disciplines, as well as advanced undergraduate students who satisfy the prerequisite requirements. This course is offered at the 500 and 800 level with additional assignments at the 800 level. Not open to students with credit in PSYC 533. Prerequisite: PSYC 104 or equivalent.

**PSYC 825. Social Development. 3 Credits.**
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. Prerequisite: A course in child psychology or development.

**PSYC 831. Advanced Human Learning and Memory. 3 Credits.**
An in-depth analysis of current research and theory. Focus will be on experimental methodology in these areas.

**PSYC 832. Clinical Health Psychology: Health Promotion and Disease Prevention. 3 Credits.**
An overview of the field of health psychology as applied to health promotion and disease prevention. Content areas include history and current research regarding behavioral and psychosocial risk factors for disease, as well as empirically supported assessment and therapeutic techniques for risk factor reduction and health promotion. Prerequisite: Graduate student in psychology or health-related fields, or permission of instructor.

**PSYC 833. Clinical Health Psychology: Acute and Chronic Illness. 3 Credits.**
An overview of the field of health psychology as applied to acute and chronic illness in adult, adolescent, and child populations. Content areas include psychological aspects of acute and chronic illness, including relevant empirically supported assessment and intervention strategies, adherence to medical regimens, pain, and enhancement of the psychologist's role in medical settings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 834. Clinical Health Psychology: Physical Aspects of Health and Disease. 3 Credits.**
An overview of physical manifestations of health and disease. Content areas include overview of anatomy and physiology of each body system, description of how deviations form normal anatomical development and physiological function result in common disorders, methods for distinguishing psychological from organic etiologies, indications of side effects of medications for common disorders, and description of roles of key members of health care team members. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 835. Clinical Practicum IV: Health. 3 Credits.**
Supervised assessment and treatment of individuals and families within a medical setting, as well as multidisciplinary consultation. Inpatient and outpatient clinical health psychology rotations may include pediatrics, oncology, pain, rehabilitation, and other health psychology related fields. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 970 and graduate student in clinical health psychology specialty.

**PSYC 836. Clinical Practicum V: Health. 3 Credits.**
Continuation of PSYC 835. Prerequisite: Graduate student in clinical health psychology specialty.

**PSYC 838. Assessment and Management of Chronic Pain Across the Life Span. 3 Credits.**
Focuses on chronic pain affecting a person's life span from childhood to older adults. Topics include traditional versus modern biopsychosocial models along with treatments/measurements of chronic pain. In addition to medical and non-medical (mainly cognitive-behavioral) treatments for chronic pain. Also discussed will be experimental designs/determining significance in pain research and ethical/policy issues related therein. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 839. Palliative Care in Health Psychology. 3 Credits.**
Based on the biopsychosocial model, this course focuses on the current practice of palliative care in community and hospital settings by health care professionals. Classes will be discussion based, centered on current issues and controversies in care of the chronically ill and dying. Recent research will be highlighted, as will cultural perspectives on death. Students will be expected to identify applicable literature for presentation and class discussion, along with assigned readings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 840. Psychology of Women's Health. 3 Credits.**
A seminar devoted to examination of psychosocial and behavioral factors in women's health. Content areas include women and the health care system, social roles and health, gender differences, and similarities in morbidity and mortality, gynecologic health, chronic diseases, and health-
related behaviors. Prerequisite: Graduate student in psychology or health-related field, or by permission of instructor.

**PSYC 841. Stress and Coping. 3 Credits.**

Theories and research on conceptualization, assessment, and effects of stress. Focus on coping processes and other determinants of adjustment to stressful conditions. Discussion of psychological interventions for managing stress and trauma. Prerequisite: Graduate student in psychology or related fields.

**PSYC 842. Specialized Health Psychology Practicum. 1-3 Credits.**

Specialized advanced practicum in clinical health psychology, with an area of emphasis mutually defined by student and instructor. Prerequisite: Consent of instructor.

**PSYC 843. Behavioral Pharmacology. 3 Credits.**

Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis will be placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neurophysiology, and the nervous system. Specific course structure will be modified to suit student interests. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 844. Mental Health and Aging. 3 Credits.**

Reviews recent research and application in the field of mental health and aging. Theoretical perspectives appropriate for understanding mental health issues with increased age are discussed. The epidemiology, assessment, diagnosis, and treatment methods associated with a variety of mental health conditions are surveyed. The community mental health resources available for older adults are discussed as well as practically-related issues such as evaluations of functional independence and competency among older adults. Prerequisite: Graduate student in psychology or related health field, or permission of instructor.

**PSYC 845. Impression Formation and Interpersonal Behavior. 3 Credits.**

Intensive investigations of the processes involved in impression formation and of the effects of established impressions upon interpersonal communications. (Same as COMS 835.) Prerequisite: PSYC 670 or COMS 535.

**PSYC 846. Practicum in Clinical Child Psychology I. 1-3 Credits.**

Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients’ presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as ABSC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**PSYC 848. Clinical Practicum VI: Health. 3 Credits.**

Intensive clinical psychology practice, including group and individual supervision that may be taken either through Clinical Psychology or an approved site outside of the university. Focus is on the acquisition and demonstration of advanced therapy skills with a focus on acquiring core Health Psychology competencies. Graded on a satisfactory/unsatisfactory basis. Prerequisite: PSYC 835 and PSYC 836 and graduate student in clinical health psychology specialty.

**PSYC 849. Clinical Practicum VII: Health. 3 Credits.**

Continuation of PSYC 848. Graded on a satisfactory/unsatisfactory basis. Prerequisite: PSYC 848 and graduate student in clinical health psychology specialty.

**PSYC 850. Assessment I: Foundations of Psychological Assessment. 3 Credits.**

Introduction to the history, methods and theory underlying psychological assessment techniques and methods. Students learn to administer, score, and interpret mental status exams and intelligence tests for children, adolescents and adults. Structured diagnostic assessments are introduced and practiced. Psychological report writing is introduced and practiced. The psychometric theory underlying the construction and validation of personality assessment instruments is reviewed. Prerequisite: Graduate student in clinical psychology or consent of instructor.

**PSYC 855. Assessment II: Integrative Psychological Assessment. 3 Credits.**

Lecture, laboratory and field work. Students learn to administer, score and interpret various personality assessment instruments. Students apply skills acquired in previous coursework to write integrated psychological assessment reports based on anamnesis, structured interview data, intelligence tests, and both objective and projective personality assessment instruments. Prerequisite: PSYC 850 or consent of instructor.

**PSYC 860. Affective Science. 3 Credits.**

An in-depth analysis of current research and theory in affective bases of psychological science. Emphasis will be placed on basic research on emotion, culture, and psychopathology using a broad range of experimental, psychophysiological, and neural methods to test theories about affective psychological mechanisms underlying human behavior. Prerequisite: Graduate student in psychology or health-related fields.

**PSYC 863. Clinical Neuropsychology Across the Lifespan. 3 Credits.**

Reviews neural development and the brain-behavior relationships in intact, injured, and diseased brain systems. Details basic issues in clinical assessment and reporting of cognitive impairment resulting from developmental disorders, stroke, traumatic brain injury, and brain-disease. Selected topics include perception, speech, memory/dementia, judgment, and attention. Prerequisite: Graduate status and PSYC 961 or consent of instructor.

**PSYC 864. Clinical Neuropsychology. 3 Credits.**

Brain-behavior relationships in humans; structure and function of the brain; evaluation of function; the interpretation of neuropsychological data. Lecture and laboratory.
PSYC 865. Advanced Psychological Assessment: Interview Based Techniques. 3 Credits.
Lecture and fieldwork. Advanced clinical interviewing. Structured diagnostic interviewing. Coverage of specialized areas of clinical interviewing (e.g., motivational interviewing). Report writing focused on documentation of clinical and structured interviewing. Prerequisite: PSYC 855 or consent of instructor.

PSYC 870. Cognitive Development. 3 Credits.
A lecture/discussion course in cognitive development. The course will contrast the theory and research of Jean Piaget and his followers, with an information processing or cognitive psychology approach to issues. Topics include development of perception, attention and information getting; memory and metamemory; problem solving; discrimination learning and concept formation; and individual differences in cognitive styles and strategies. Prerequisite: A course in child psychology or development, a course in cognitive psychology, or consent of instructor.

PSYC 872. Attention, Perception, and Learning in Infancy. 3 Credits.
Coverage of the basic literatures on perceptual-cognitive behavior during the first three years of life, as assessed by measures of attention, perception, learning, and memory. Course material is approached from an information-processing framework.

PSYC 875. Advanced Assessment: Integration of Assessment Techniques. 3 Credits.
Lecture and fieldwork on selection, administration, scoring and interpretation and integration of data from personality and abilities tests. Focus on assessments includes history, theory and application in psychological assessment batteries. Emphasis on advanced training in objective personality assessment, projective personality assessment, psychometric theory and integrated report writing. Prerequisite: PSYC 855 or consent of instructor.

PSYC 879. Applied Nonparametric Statistical Methods. 4 Credits.
This course covers nonparametric statistical methods for testing hypotheses when the assumptions of ordinary parametric statistics are not met. Topics include a review of parametric statistics, sampling distributions, the logic of hypothesis testing, and motivations for using nonparametric techniques. In-depth coverage will be given to distribution-free procedures, sign tests, contingency tables, median tests, chi-square and other goodness-of-fit tests, rank correlations, randomness tests, Monte Carlo methods, resampling methods, tests of independence, 1-sample, 2-sample, and k-sample methods, permutation tests, and function smoothing and splines. There will be an emphasis on the theory underlying nonparametric methods. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 and 791 or equivalent, or consent of instructor.

PSYC 881. Proseminar in Quantitative Behavioral and Social Sciences. 1 Credits.
This course is an open forum discussion of issues, topics, and presentations in quantitative behavioral and social sciences. The course can be repeated for credit and is open to any graduate student in any discipline across the behavioral and social sciences.

PSYC 882. Theory and Method for Research of Human Environments. 3 Credits.
Conceptual and technical methods for analysis of behavioral environments; theory and research utilization of behavior settings and other ecobehavioral units. Prerequisite: Nine hours of social science including at least one course dealing with research methods and consent of instructor.

PSYC 885. Altruism and Helping Behavior. 3 Credits.
Review of contemporary research of prosocial behavior. Topics to be covered include the existence of altruism, why people do and do not help others, and the effect of institutional roles on the behavior of service professionals such as therapists, counselors, and social workers.

PSYC 887. Factor Analysis. 4 Credits.
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

PSYC 888. Diversity Issues in Clinical Psychology. 3 Credits.
Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as ABSC 888.) Prerequisite: Graduate status in clinical psychology, or instructor permission.

PSYC 889. Conceptual Issues in Human Sexuality. 3 Credits.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGST 889.) Prerequisite: Six hours in WGST and/or PSYC, or permission of instructor.

PSYC 890. Foundations of the Mind. 3 Credits.
Advances in cognitive psychology have illuminated the way in which we understand mind and mental processes and have the power to affect how we conduct our lives as moral beings (e.g., Are human beings alone in the animal kingdom in possessing minds?). In this graduate course, we will cover key historical and social events that shaped the field; when and how cognitive psychology became a science; and future directions of studying the mind, especially in light of cognitive neuroscience. Students will analyze and critically evaluate cognitive psychological theory, empirical research, and practice in a historical context, as well as develop ideas, critiques, and conclusions of their own on the accomplishments and prospects of the science of cognitive psychology. Readings and discussion include an analysis of significant theoretical, historical, and empirical work of topics in cognitive psychology, as well as the cognitive and brain sciences more generally.

PSYC 891. Intelligence and Cognition. 3 Credits.
This course concerns the nature of intelligence. Theory and research on cognitive abilities, reasoning, and complex problem solving are surveyed. Special emphasis is given to contemporary cognitive ability research that applies both experimental and correlation methods to understand the nature of intelligence.

PSYC 892. Test Theory. 4 Credits.
This course begins with recommendations for how to write a test (with or without correct answers, for assessing a wide variety of constructs of interest in social and behavioral sciences), covers basics of classical test
theory, and then emphasizes modern statistical methods for analyzing item data. Methods include factor analysis of categorical responses, methods for identifying measurement invariance (differential item functioning), and item response theory. Lectures and Laboratory. This course is offered at the 600 and 800 levels, with additional assignments at the 800 level. Prerequisite: PSYC 790/650 or equivalent, or consent of instructor.

PSYC 893. Multivariate Analysis. 4 Credits.
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

PSYC 894. Multilevel Modeling. 4 Credits.
Statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. There will be a heavy emphasis on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

PSYC 895. Categorical Data Analysis. 4 Credits.
Multivariate analyses of count data. Error models, statistical inference, loglinear models, logit models, logistic regression. Homogeneity, symmetry, and selected other topics. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

PSYC 896. Structural Equation Modeling I. 4 Credits.
Introduction to statistical methods for modeling latent variables. Topics include a review latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, Hierarchical CFA, and Multi-trait Multi-Method SEM. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

PSYC 897. Master’s Thesis in Clinical Child Psychology. 1-10 Credits.
Supervised research experience completing thesis leading to master’s degree. (Same as ABSC 897.)

PSYC 898. Proseminar: Professional Issues in Clinical and Health Psychology. 1 Credits.
Discussion of current theoretical, empirical, and applied issues in clinical and clinical health psychology involving students, faculty, guest speakers. Prerequisite: Graduate student in clinical psychology.

PSYC 899. Thesis. 1-10 Credits.
Thesis hours. Graded on a satisfactory progress/limited progress/no progress basis.

PSYC 902. Proseminar in Experimental Psychology. 1 Credits.
Seminar in experimental psychology to be conducted in rotation by the experimental psychologists on the staff and a monthly visiting experimental psychologist.

PSYC 903. Proseminar in Social Psychology. 1 Credits.
A series of research talks on topics relevant to social and personality psychology featuring different weekly speakers from inside and outside the university. Graded on a satisfactory/unsatisfactory basis.

PSYC 905. Psychopathology in Children. 3 Credits.
Diagnosis and treatment of psychological problems in childhood and adolescence. Preference given to graduate students in child clinical psychology, school psychology, and counseling psychology. (Same as ABSC 905.) Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor.

PSYC 921. Seminar in Early Development. 3 Credits.
A seminar devoted to factors affecting early human development with some attention to theoretical formulations and the relevant animal literature.

PSYC 923. History and Systems of Developmental Psychology: Developmental Theory. 3 Credits.
An intensive study of traditional and recent developmental theories with an emphasis upon the role of heredity, early stimulation, reinforcement, and modification as each affects the course of the development of children.

PSYC 925. Seminar in Cognitive, Affective, and Social Bases of Psychology. 3 Credits.
Integrative examination of foundations and contemporary issues in the cognitive, affective, and social bases of psychological science. Review of the historical development of psychological theories and research in cognitive, affective, and social aspects of behavior, and examination of recent developments and contemporary trends in these areas. Topics include mood, emotion, and emotion regulation, memory, attention, perception, decision-making, group relations, attributions, discrimination, and attitudes. Prerequisite: Graduate standing in clinical or counseling psychology, or consent of instructor.

PSYC 927. Seminar in Psychobiology. 3 Credits.
A detailed study of a specific research area dealing with the biological foundations of behavior. Each week articles will be assigned from the journal literature.

PSYC 930. Research Seminar on Intimate Relationships. 3 Credits.
Consideration of current psychological theory and research on adult intimate relationships: friendship, dating, committed relationships, dissolution of committed relationships. Students will be expected to be involved in on-going empirical research in the area. Prerequisite: Graduate level courses in research design and statistics.

PSYC 933. Seminar: The Measurement of Attitudes. 3 Credits.
An examination of the concept of attitude and the methods developed to assess the various aspects of attitudes. Prerequisite: PSYC 578 or consent of instructor.

PSYC 935. Seminar in Group Dynamics. 3 Credits.
Intensive examination of selected problems in the functioning of small groups. May be taken for two semesters.

PSYC 936. Group Therapeutic Techniques. 3 Credits.
PSYC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Credits.
Advanced practicum experience for the Clinical Child Psychology Program. Development of advanced competencies in assessment and intervention with children, adolescents, and their families through
didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as ABSC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

PSYC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Credits. Advanced practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., integrated case presentation), and modeling of clinical competencies for junior students. Course requirements include the development of portfolios for demonstration of clinical competencies and application to clinical internships. May be taken in more than one semester. (Same as ABSC 944.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

PSYC 946. Theories and Methods of Psychotherapy. 3 Credits. Comparative examination and analysis of major theories and approaches to psychotherapeutic interventions, core principles of therapeutic change, scientific approaches to establishing treatment efficacy, current intervention issues. Prerequisite: Nine hours in graduate clinical psychology or consent of instructor.

PSYC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Credits. Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior students. May be taken in more than one semester. (Same as ABSC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

PSYC 949. Evidence Based Practice in Psychology. 3 Credits. This course provides an overview of theoretical and applied issues germane to evidence-based treatment in clinical psychology. The course will include an in-depth examination of several psychotherapy protocols which have been identified as empirically supported, with considerable attention accorded to implementation of techniques within the context of evidence-based practice.

PSYC 950. Clinical Supervision and Consultation: Theory & Research. 1 Credits. Lecture, readings, and discussion of theory and research related to the practices of clinical supervision and consultation. Developmental and competency based approaches to supervision with exposure to other approaches. Professional issues, ethics, and multicultural aspects of supervision and consultation. Prerequisite: Previous or concurrent enrollment in PSYC 969 or consent of instructor.

PSYC 951. Clinical Supervision Practicum. 1-3 Credits. Fieldwork in supervision under direction of instructor. Practice in supervision of clinical work, assessment, psychotherapy, and documentation. Prerequisite: Previous or concurrent enrollment in PSYC 950 and PSYC 969, or consent of instructor.

PSYC 955. Close Relationships and Adult Attachment: Theory, Research, and Current Controversies. 3 Credits. Review of attachment theory literature and the research it has generated in clinical developmental, personality, and social psychology. The course will allow discussion of a wide range of issues including the evolution of behavioral systems that underlie close human relationships, the developmental roots of relational styles and affect-regulation processes, the role of mental representations in interpersonal behavior, and some of the attachment and close relationship processes involved in good and poor mental health. Prerequisite: Graduate standing or consent of instructor.

PSYC 956. Social Neuroscience. 3 Credits. Acquaint students with the Social Neuroscience approach as well as recent findings using this approach. The course will focus on particular social phenomena and (a) evaluate the utility of current social neuroscience research examining these phenomena and (b) consider future experimental designs using the Social Neuroscience approach to further inform our understanding of each phenomenon. After being acquainted with foundational concepts, students will analyze findings in a number of core content domains (including emotions, emotion regulation, self, stereotyping, attitudes and beliefs, social decision making, cooperation, close relationships), focusing on neuroscience’s contribution beyond traditional methods. Prerequisite: Graduate standing or consent of instructor.

PSYC 960. Advanced Psychopathology. 3 Credits. Review of current nosology of adult psychopathological syndromes emphasizing development of diagnostic skills. Critical survey of recent research and theory related to the etiology, course, prognosis, and treatment of adult psychopathological conditions. Prerequisite: Graduate student status in clinical psychology, clinical child psychology, or counseling psychology.

PSYC 961. Biological Foundations of Psychopathology. 3 Credits. A review of fundamental topics in the neurosciences and their relevance to selected psychopathological disorders. The fundamental topics are taken from genetics, neuroanatomy, neurophysiology, and neurochemistry. The disorders include schizophrenia, depression, anxiety disorders, Alzheimer’s disease, Parkinson’s disease, and Huntington’s disease. Prerequisite: Graduate student in clinical psychology or consent of instructor.

PSYC 962. Advanced Personality. 3 Credits. A survey of selected advanced topics in the area of personality. Includes review of theoretical and research issues in the area of personality. Prerequisite: Consent of instructor.

PSYC 963. Clinical Child Psychology Internship. 1 Credits. Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians.
Required of all clinical psychology program students. An intensive
guided experience in application of clinical child psychology theory,
methods, and practices. Integrates scientific and clinical aspects of field.
( Same as ABSC 963.) Prerequisite: Completion of Ph.D. comprehensive
examinations, graduate standing in clinical child psychology, and
permission of clinical child psychology faculty.

PSYC 964. Clinical Practicum I.  3 Credits.
Lecture, laboratory and field work, and supervision appointment.
Psychological evaluation and treatment of individuals, couples, families,
and groups: supervised, progressive experience in psychological
treatment and in the clinical evaluation of intellectual, personality, and
social functioning. Emphasis in selection of and training in psychological
intervention strategies is on the use of empirically supported treatments
where possible. Grading on Satisfactory/Fail basis. Prerequisite: Graduate
student in clinical psychology program.

PSYC 965. Clinical Practicum II.  3 Credits.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis.
Prerequisite: PSYC 964 or permission of instructor.

PSYC 966. Clinical Practicum III. 1-3 Credits.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis.
Prerequisite: PSYC 964 or permission of instructor.

PSYC 967. Psychotherapy with Families.  3 Credits.
Clinical approaches to marriage and family therapy. Intensive
consideration of the theoretical positions, research findings, clinical
methods, and technical problems in marriage and family therapy.
Prerequisite: PSYC 946.

PSYC 968. Research Methods in Clinical Psychology.  3 Credits.
Systematic consideration of research methods in clinical psychology
including identification of a research problem, selection of the research
design and assessment strategies, and methods of evaluating the results.
The principles, pitfalls, artifacts, biases, and sources of controversy in
research in this area are also covered. Prerequisite: Graduate standing in
clinical or counseling psychology.

PSYC 969. Clinical Practicum IV.  3 Credits.
Lecture, laboratory, field work, and supervision appointment. Advanced
psychological treatment of the individual, couple, family, and group
client; supervised, progressive experience in the clinical application of
psychotherapeutic treatment methods with emphasis on the use of
empirically supported interventions where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 966 or consent of instructor.

PSYC 970. Clinical Practicum V.  3 Credits.
A continuation of PSYC 969. Grading on Satisfactory/Fail basis.
Prerequisite: PSYC 969 or consent of instructor.

PSYC 974. Clinical Psychology Internship. 1-3 Credits.
Three consecutive enrollments, covering a minimum of eleven months of
experience in an approved clinical psychology field setting; supervision
by clinical psychology faculty and field staff clinical psychologists.
Required of all clinical psychology program students. An intensive guided
experience in the application of clinical psychology theory, methods, and
practices. An emphasis upon the relationships between scientific and
clinical functions. Integrations between research and clinical practice.
Prerequisite: Completion of Ph.D. comprehensive examinations and
consent of clinical psychology faculty.

PSYC 975. Professional and Ethical Problems in Clinical
Psychology.  3 Credits.
Interprofessional relationships, case security, legal aspects, ethical code
of practice, clinic administration, and problems in the clinical practice of
psychology. Issues involving ethics in research will also be explored.
Prerequisite: Consent of instructor.

PSYC 976. Therapeutic Interventions with Children.  3 Credits.
Clinical approaches to the therapeutic treatment of children with special
emphasis on research findings and laboratory (practicum) experience. A
survey of relationship therapies, operant strategies, system approaches,
parent education and play therapy by the right therapist for a specific child
with a particular problem. (Same as ABSC 976.) Prerequisite: Instructor
permission.

PSYC 977. Specialized Clinical Practicum.  1-4 Credits.
Lecture; laboratory and field work, and supervision appointment.
Specialized psychological services for the evaluation and/or treatment
of the individual client or the group or the institution. Investigation of and
experience in a special practicum area not covered in regular courses.
Prerequisite: Students must consult with members of the clinical faculty
and propose an acceptable project in advance of enrollment.

PSYC 980. Special Problems in Psychology.  1-5 Credits.
Investigation of a special research problem or directed reading in an area
not covered in regular courses. Prerequisite: Consent of instructor.

PSYC 981. Teaching Psychology.  1 Credits.
Discussion of the problems and techniques of teaching psychology at
the undergraduate level. A minimum of one credit of this course must
be taken by all assistant instructors during the two semesters of the first
year of their appointment in the department. Only three hours may count
toward the Ph.D. degree.

PSYC 982. Issues in Scientific Conduct.  3 Credits.
Lectures and discussion on issues in the conduct of a scientific career,
with emphasis on practical topics of special importance in behavioral
science. Topics will include the academic and scientific roles of behavioral
scientists, establishing a research lab, communicating research findings,
tenure processes, gender equity, ethical conduct, and good scientific
citizenship. Discussions will highlight important case studies. (Same as
CLDP 982 and SPLH 982.)

PSYC 983. Methods & Professional Issues in the Cognitive & Brain
Sciences. 3 Credits.
Methodology, inferential problems, and professional issues in the
cognitive and brain sciences. Prerequisite: PSYC 790 and PSYC 791 or
consent of instructor.

PSYC 986. Interprofessional and Integrated Behavioral Health
Care.  3 Credits.
Overview of current interprofessional care models in primary care. Review
integrated behavioral health care approaches to common mental health
disorders and approach to lifestyle issues, such as smoking, exercise
and poor sleep, and how they impact health. Learn how mental and
behavioral health services come together within primary care at an
interprofessional level to deliver health care. Review research emerging
on integrated and interprofessional care models. Prerequisite: Graduate
student in psychology, health related field, or permission of instructor.

PSYC 990. Methods for Clustering and Classification.  3 Credits.
Statistical methods for identifying classes, clusters, and taxa. Topics
include k-means, discriminant analysis, hierarchical clustering algorithms,
additive trees, neural network models for clustering, latent class
models, finite mixture models, and models for skills/cognitive diagnosis.
Applications across the social and behavior sciences are emphasized.
Prerequisite: PSYC 790 and PSYC 791 or equivalent, or consent of
instructor.

PSYC 991. Longitudinal Data Analysis.  3 Credits.
Reviews and contrasts various statistical methods for the analysis of change. Course focuses on various techniques to analyze longitudinal (repeated-measures) data beyond the repeated-measures ANOVA framework. Techniques covered include latent change scores, latent difference scores, individual-differences modeling of latent residual and change scores, intra-individual differences modeling (e.g., growth curve, mixed modeling) and growth mixture modeling. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor.

PSYC 993. Seminar: ______. 1-5 Credits.

PSYC 996. Structural Equation Modeling II. 3 Credits.
Continuation of PSYC 896. Advanced applications of modern methods for testing hypotheses on multivariate correlational data in the behavioral and social sciences. Topics include advanced confirmatory factor analysis, mediation and moderation among latent variables, latent growth curve modeling, and other latent variable mean and covariance structures analysis techniques. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor.

PSYC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Credits.
Research experience making original contribution to literature in clinical child psychology. (Same as ABSC 998.)

PSYC 999. Dissertation. 1-12 Credits.
Dissertation hours. Graded on a satisfactory progress/limited progress/no progress basis.

Public Affairs & Adm, School Courses

LWS 330. Introduction to Law & Society. 3 Credits. S
Offers an introduction to the interdisciplinary field of law and society. Surveys the role of law in social processes and the influence of these processes on law, and introduces alternative theoretical perspectives on these processes.

LWS 332. Methods in Law and Society. 3 Credits. S
Surveys the various methods used in law & society research and prepares students to be sophisticated readers of basic socio-legal research, capable of evaluating the quality of the research design and methods. Prepares students to participate as research assistants in original studies.

LWS 333. The Pursuit of Rights: Law, Democracy & Power. 3 Credits. S
Examines how law and legal norms, particularly rights, support social and political institutions yet also may be used to challenge these institutions and foster change. Particularly examines the role of law in supporting but also challenging hierarchies of race, ethnicity and gender. Surveys major studies of these processes both domestically and across the globe. Prerequisite: LWS 330 or permission of the instructor.

LWS 443. Theoretical Foundations of Law & Society. 3 Credits. S
This course examines classic texts from institutional, functional, and economic theories of law that have served as the basis for Law & Society research. It then considers the continued development of those classical theories to make sense of important current social and legal problems. Students will practice using theory to make sense of puzzling empirical patterns, and developing theoretical explanations of their own. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in LWS 643 or LWS 743. Prerequisite: LWS 330.

LWS 494. Topics in Law & Society: ______. 3 Credits. U
Study of selected topics in law and society. Course may be repeated for credit if content varies. Not open to students with credit in LWS 694 or LWS 794 if the topic is the same. Prerequisite: LWS 330.

LWS 691. Internship in Law & Society. 1-3 Credits. S
Designed to provide law & society students an applied learning experience in a relevant public, non-governmental, or nonprofit organization. Students are required to critically reflect on their experience through a variety of academic assignments throughout their internship experience. Prerequisite: LWS 330 and LWS 332, and permission of instructor.

LWS 699. Capstone in Law and Society. 3 Credits.
Integrates learning across the Law & Society curriculum with an applied, original research experience. Class topics rotate depending on faculty research agenda and current policy foci. Students gather and analyze data throughout the class, and present their final work to a variety of audiences. The product is an original research presentation that advances knowledge. Prerequisite: LWS 330 and LWS 332.

LWS 743. Theoretical Foundations of Law and Society. 3 Credits.
This course examines classic texts from institutional, functional, and economic theories of law that have served as the basis for Law & Society research. It then considers the continued development of those classical theories to make sense of important current social and legal problems. Students will practice using theory to make sense of puzzling empirical patterns, and developing theoretical explanations of their own. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in LWS 443. Prerequisite: Graduate student standing or faculty approval.

LWS 794. Topics in Law & Society: ______. 3 Credits.
Study of selected topics in law and society. Course may be repeated for credit if content varies. Not open to students with credit in LWS 494 if topic is the same. Prerequisite: Graduate student standing or faculty approval.

Public Affairs & Adm, School Courses

PUAD 177. First Year Seminar: ______. 3 Credits. SF
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in public administration. May not contribute to major requirements in public administration. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

PUAD 330. Introduction to Public Administration. 3 Credits. S
Introduction to administration, public policy and policy makings is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 330.) Prerequisite: POLS 110.

PUAD 331. Introduction to Public Administration, Honors. 3 Credits. S
Introduction to administration, public policy, and policy making, for honors students is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 331.) Prerequisite: POLS 110.

PUAD 332. Quantitative Methods for Public Administration. 3 Credits. S
Focuses on building the quantitative analysis skills of students in public administration. Students learn basic and intermediate statistics, and methods of data analysis and interpretation. Students gain exposure to the uses of data in public organizational settings.

PUAD 333. Hard Choices in Public Administration: _____ 3 Credits.  S
Focuses on some of America’s most vexing public policy challenges and emphasizes the political context of difficult choices. Course examines models of decision-making and the process of policy analysis. Students learn how to apply the tools of policy analysis to make policy judgments. Prerequisite: PUAD 330 or PUAD 331.

PUAD 401. Administration of Justice. 3 Credits.  S
Examines the administration of justice and focuses on differential and discriminatory treatment in policing, criminal prosecutions, trials, sentencing, or imprisonment. Also considered are the basis and impact of racial profiling, harassment, arbitrary detention, and abusive treatment of members of racial and ethnic groups, immigrants, and/or other vulnerable groups by law enforcement, and disparate treatment by prosecutors and the courts. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 601 or PUAD 701.

PUAD 402. Diversity and Social Equity in Public Administration. 3 Credits.  S
Analyzes diversity and leadership in public and private institutions along ethnic, racial, and gender lines and the challenges of the facilitation of open dialogue on diversity. Examines the political, historical, social, and economic reasons why Americans of different ethnic, racial, and gender groups hold divergent views about major public policy areas, as well as fundamental views about democratic participation. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 602 or PUAD 702. Prerequisite: PUAD 330 or PUAD 331.

PUAD 403. Foundations of the Nonprofit Sector. 3 Credits.  H/S
This course provides an overview of the U.S. nonprofit sector, its history, scope, diversity and its positioning among and between the private and public sectors of the U.S. economy. The course explores the legal framework under which nonprofit organizations operate and are regulated. Economic, political, social, organizational and giving theories of the sector are reviewed in order to understand the sectors existence, roles and activities with particular attention to philanthropy and voluntarism. Distinct contributions to society as well as contemporary challenges faced by the sector are examined. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 603 or PUAD 703. Prerequisite: PUAD 330, or POLS 110, or MGMT 305, or a PUAD master's core course, or consent of instructor. Junior status or above is also required.

PUAD 404. Resource Development and Management in Nonprofit Organizations. 3 Credits.  H
This course provides an overview of the broad range of activities relevant to acquisition, management and utilization of resources in nonprofit organizations. The course identifies the primary strategies through which resources are generated with emphases on grantwriting, fundraising, social entrepreneurship, and public/private partnerships. Development of organizational identity and management of public relations is examined in relation to resource and relationship development. Strategies for management of resources to ensure long-term benefit and sustainability are explored. Not available to students with credit in PUAD 604. Prerequisite: PUAD 403.

PUAD 405. Managing Nonprofit Relationships. 3 Credits.  H
This course considers the set of relationships that nonprofit leaders must balance within the organization and beyond organizational boundaries. Both internal relationships (with staff, volunteers, and board members) and external relationships (with stakeholders, other organizations, and the community at large) are critical to mission accomplishment. This course provides students with the resources necessary to understand the challenges and opportunities related to building and maintaining these relationships. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in PUAD 605 or PUAD 705.

PUAD 406. Nonprofit Accountability: Public Needs and Public Values. 3 Credits.  H
This course examines the role of the nonprofit sector in society by posing broad questions about why nonprofit organizations are held accountable, to whom they are accountable, and detailing how organizations can satisfy accountability demands. The course investigates the public role of the nonprofit sector in society, identifies the stakeholders that are integral to an organization's mission, and describes and critiques the financial and evaluation tools that nonprofits can use to ensure their social viability. Not available to students with credit in PUAD 606. Prerequisite: PUAD 403.

PUAD 407. Introduction to Project Management. 3 Credits.  H
An exploration of the technical aspects of project management and the human aspects of project leadership. The course integrates conceptual approaches with practical applications of knowledge and skill sets. The course addresses the Project Management Body of Knowledge (PMBOK--as created by the Project Management Institute) and project leadership competencies including leading, communicating, negotiating, problem solving, and influencing. Not available to students with credit in PUAD 607.

PUAD 408. Collaboration in Public Administration. 3 Credits.  S
Managers must work effectively across organizational and sector boundaries to solve problems and produce public value. This course considers the forces contributing to the need for collaborative governance, changing management tasks and competencies, and how to address key collaborative challenges. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 608 and PUAD 708.

PUAD 431. Bureaucracy, Public Administration, and the Private Sector. 3 Credits.  S
Examines the problems posed by behaviors within and by bureaucracies. Provides students with a set of conceptual tools for understanding the organizational environment in which policy analysts ply their profession and the role of a manager within such organizations. Offers strategies for the policy professional seeking to navigate large bureaucracies. Readings and class discussions integrate theoretical analyses of organizations with detailed case studies. Prerequisite: PUAD 330 or PUAD 331.

PUAD 432. Conducting the People’s Business Ethically. 3 Credits.  S
Addresses the moral challenges facing leaders in the public and nonprofit sectors. Examines the values and virtues important to sustained ethical leadership, as well as strategies to build strong institutional cultures and support ethical practices in institutions. Considers moral and political theory by focusing on contemporary cases and issues. Students learn how to identify moral issues in public life and public management. There is a special focus on the integration of moral concerns into public discussion in a manner that contributes to good policy and does not polarize issues. This course considers moral and political theory by focusing on contemporary cases and issues.

PUAD 433. Metropolitics and Macroproblems: The American City in Local and Global Context. 3 Credits.  S
An interdisciplinary study of American cities, focusing on the rapidly changing demographic, physical, political, social, and economic changes. Sunbelt cities, edge cities, the rustbelt cities, planned and unplanned suburban communities, as well as declining center cities and newly revitalized downtowns are considered. The role of immigration and migration in reshaping the urban environment, and the effects of globalization are also examined.

PUAD 435. Generating, Allocating and Managing Public Resources. 3 Credits. U
This course is devoted to topics in public budgeting, finance and financial management. These activities play a central role in public management. The intent of this course is to understand the role these activities play in local, state, and federal governments and to see how policy and management are shaped and influenced by budgets, financial reports, and tax policy.

PUAD 436. Managing People in Public Organizations. 3 Credits. U
Effective human resources management is one of the key goals of organizations in both the public and private sectors. This course focuses on human resources management in a public sector context with particular emphasis placed upon past, current, and future challenges in the field. The course covers topics such as the recruitment, selection, and compensation of public sector employees, as well as more contemporary issues such as diversity management and public sector personnel reform.

PUAD 439. Concepts of Civil Society. 3 Credits. U
Concepts of community, social capital, and civil capacity building, and their relation to effective community functioning, democratic politics, and administrative expertise. Not available to students with credit in PUAD 639.

PUAD 441. Public Service Leadership. 3 Credits. U
This course is based on the premise that leadership is not confined to the top tiers of organizations and that each individual can and should develop their leadership abilities. To that end, this course examines the concept of leadership through a variety of lenses-individual, environmental, and follower perspectives-in public, nonprofit and private contexts. Special emphasis will be placed on scholarly practice and perspectives of individual leadership assessment and development. This course is offered at the 400 and 700-level, with additional assignments at the 700-level. Not available to students with credit in PUAD 641 and PUAD 741.

PUAD 494. Topics in Public Administration: _____ . 3 Credits. S
An introductory study of selected topics in public affairs and administration. Course may be repeated for credit if content varies. Course may be offered in lecture or online format. Not open to students with credit in PUAD 694 if the topic is the same.

PUAD 691. Internship in Public Service. 1-6 Credits. U
Designed to provide public administration students an applied learning experience in either a public or nonprofit organization. Open to majors in Public Administration only. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333, and consent of instructor required.

PUAD 701. Administration of Justice. 3 Credits.
Examines the administration of justice and focuses on differential and discriminatory treatment in policing, criminal prosecutions, trials, sentencing, or imprisonment. Also considered are the basis and impact of racial profiling, harassment, arbitrary detention, and abusive treatment of members of racial and ethnic groups, immigrants, and/or other vulnerable groups by law enforcement, and disparate treatment by prosecutors and the courts. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 401.

PUAD 702. Diversity and Social Equity in Public Administration. 3 Credits.
Analyzes diversity and leadership in public and private institutions along ethnic, racial, and gender lines and the challenges of the facilitation of open dialogue on diversity. Examines the political, historical, social, and economic reasons why Americans of different ethnic, racial, and gender groups hold divergent views about major public policy areas, as well as fundamental views about democratic participation. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 402.

PUAD 703. Foundations of the Nonprofit Sector. 3 Credits.
This course provides an overview of the U.S. nonprofit sector, its history, scope, diversity and its positioning among and between the private and public sectors of the U.S. economy. The course explores the legal framework under which nonprofit organizations operate and are regulated. Economic, political, social, organizational and giving theories of the sector are reviewed in order to understand the sectors existence, roles and activities with particular attention to philanthropy and voluntarism. Distinct contributions to society as well as contemporary challenges faced by the sector are examined. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 403.

PUAD 705. Managing Nonprofit Relationships. 3 Credits.
This course considers the set of relationships that nonprofit leaders must balance within the organization and beyond organizational boundaries. Both internal relationships (with staff, volunteers, and board members) and external relationships (with stakeholders, other organizations, and the community at large) are critical to mission accomplishment. This course provides students with the resources necessary to understand the challenges and opportunities related to building and maintaining these relationships. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in PUAD 405.

PUAD 708. Collaboration in Public Administration. 3 Credits.
Managers must work effectively across organizational and sector boundaries to solve problems and produce public value. This course considers the forces contributing to the need for collaborative governance, changing management tasks and competencies, and how to address key collaborative challenges. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 408.

PUAD 741. Public Service Leadership. 3 Credits.
This course is based on the premise that leadership is not confined to the top tiers of organizations and that each individual can and should develop their leadership abilities. To that end, this course examines the concept of leadership through a variety of lenses-individual, environmental, and follower perspectives-in public, nonprofit and private contexts. Special emphasis will be placed on scholarly practice and perspectives of individual leadership assessment and development. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 441.

PUAD 824. Creating Good Public Policy. 3 Credits.
This course is an introduction to policy making in the United States with the aim of providing students with the skills and knowledge necessary to make and communicate good decisions about public policy. Competing theoretical approaches will be used to understand the policy making process. The class will highlight interactions between residents, organized interest groups, governments, the economy, and the environment. It introduces basic approaches for stakeholder analysis and methods for developing evidence-based policies or programs. Students will discuss
common obstacles to good policy-making and the tensions of making public policy in a political environment.

PUAD 825. Urban Policy and Administration. 3 Credits.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. In so doing, the course examines a range of current substantive policy and administrative issues facing urban communities and governments. (Same as PUAD 825.)

PUAD 828. Nonprofit Management and Policy. 3 Credits.
This course focuses on the economic, social, and legal foundations of the nonprofit sector. Nonprofits are examined in the context of a three-sector economy, with emphasis on the ways in which nonprofits compensate for market failures and government failures. The course examines government-nonprofit relations in the modern welfare system and offers an in-depth examination of the health, education, and welfare functions as performed by nonprofits. This course also provides exposure to selected topics in nonprofit management such as grant writing, board relations, advocacy, fundraising and volunteer management.

PUAD 834. Human Resource Management. 3 Credits.
This course presents the context and practice of effective human resource management, with emphasis on the political, legal, historical, and ethical dimensions of public employment. This course considers the functions of workforce management, including: 1) planning of work and the allocation of labor to that work, 2) acquisition of employees and their competencies, knowledge, skills, and abilities, 3) development of employees to channel, improve and create new knowledge, skills, and abilities, and 4) maintaining the working relationship between employee and employer. Students will apply workforce management theories and techniques to contemporary organizational challenges and investigate the tensions inherent to balancing competing values (such as: responsiveness/ neutrality and efficiency/equity) and meeting conflicting demands of organizational stakeholders and society.

PUAD 835. Managing Public Money. 3 Credits.
This course covers essential financial management practices and the budgetary processes of the United States federal, state and local governments. It provides an overview of major revenue, spending, and debt financing policies.

PUAD 836. Data Driven Decision-Making. 4 Credits.
This integrated lecture and laboratory course introduces quantitative approaches to examine public management and public policy decisions. It covers concepts of research design, probability, and inferential statistics. The laboratory portion of the course uses data analytical tools to do applied problem solving.

PUAD 837. Advanced Public Budgeting and Finance. 3 Credits.
In this class, students examine the design and impacts of budgetary institutions and processes in-depth. Students are introduced to and apply various technical analyses for budgetary policymaking, such as forecasting, financial statement analysis, and cost analysis. Prerequisite: The successful completion of PUAD 835 with a grade of C of higher or instructor approval is needed to enroll.

PUAD 839. Topics in Public Administration: ______. 3 Credits.
Study of selected topics in public administration.

PUAD 841. Context, Ethics and Legal Environment of Public Administration. 3 Credits.
This course explores the environment in which public administrators work that both empowers and constrains what public administrators can do. Through discussion, cases, and classic readings, the course explores the accepted uses and procedures of the field. This includes the intellectual history, the political and legal context, the tensions between democracy and bureaucracy, and ethical decision making.

PUAD 842. Law and Public Management. 3 Credits.
This course introduces constitutional and administrative law issues that face public administrators, with a particular focus on the state and local level. Using legal reasoning as a decision-making tool, the context of often-competing administrative values-efficiency, effectiveness, and equity-will be considered. While administrators do not face constitutional issues every day, this course examines how constitutional values often play out in the day-to-day decision-making of public administrators.

PUAD 843. Managing Public Organizations. 3 Credits.
This class explores concepts and practices in organization behavior and management theory as they apply to public organizations. It covers dynamics associated with organizational structures, accountability, and culture and dynamics of risk in leadership, collaboration, and contracting. It emphasizes approaches to understanding the dynamics of individuals, groups, and teams within organizations.

PUAD 849. Law, Courts, and Public Policy. 3 Credits.
This course provides an overview of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. Prerequisite: Graduate standing or consent of instructor.

PUAD 850. Intergovernmental Relations. 3 Credits.
This course focuses on the fiscal and administrative relationships among the three levels of government - federal, state, and local - in the United States. A number of topics will be examined, including a history of intergovernmental relations, the political, constitutional, and legal foundations of the intergovernmental system, and intergovernmental fiscal policy. The impact of the intergovernmental system will be assessed from the perspective of specific areas and intergovernmental programs.

PUAD 851. Infrastructure Management. 3 Credits.
This course introduces students to infrastructure management from a local government perspective. Through a heavy reliance on guest speakers and site visits, it provides an overview of infrastructure development, financing, and maintenance. Throughout the course, students are taught to think in terms of systems and collaborative relationships.

PUAD 853. Policy Analysis. 3 Credits.
This course exposes students to the conceptual foundations and applied techniques associated with identifying, describing, and seeking solutions to public policy problems. Recognizing that it often occurs in a context where competing values and perspectives are often strongly held, students will learn the designs and methodologies to conduct policy analysis systematically and with minimal bias. Prerequisite: The completion of a graduate-level statistics class or instructor approval is required to enroll.

PUAD 854. Innovation and Organizational Change. 3 Credits.
This course will examine theories of innovation and organizational change as applied to public organizations. Particular emphasis will be placed on the concepts of innovation in bureaucratic organizations, on the process of successful change in organizations, and on leadership and employees' roles.

PUAD 856. Management and Information Technology. 3 Credits.
An introduction to the concepts of information policy and management of technology within governmental organizations. The course covers the effects of technology on government and society as well as information
policy (privacy, security and access) and their importance to democracy. The course also includes a leadership perspective on planning, funding, and implementation of technology systems in governmental organizations as well as the role of Chief Information Officer.

**PUAD 857. Performance Management and Governance. 3 Credits.**

This course examines the practice and governance challenges of performance management and budgeting in the public sector. Topics covered in this course include: a) the governance context of performance measurement and management; b) the historical and theoretical foundation of performance measurement and management; c) the global trend of performance-oriented reforms; d) the practice and politics of performance measurement and management; and e) governance and ethical issues in managing for results. Prerequisite: The completion of a graduate-level statistics class or instructor approval is required to enroll.

**PUAD 858. Performance Audit. 3 Credits.**

This course examines the practice of performance audit at the national, state, and local levels. Topics covered in the course include: a) the concept of performance audit and the roles of auditors in performance management; b) performance audit systems and standards at the national, state and local levels; c) performance audit methodologies and techniques; d) the establishment of audit criteria; e) the concept and practice of risk and vulnerability analysis; f) the reporting and communication of performance audit results. Prerequisite: The completion of a graduate-level statistics class or instructor approval is required to enroll.

**PUAD 860. Governing Sustainable Communities. 3 Credits.**

This course examines the role that communities can play in advancing environmental, economic, and social sustainability. Although sustainability has traditionally been viewed as an international or national issue, the unit of action has been shifting downward. Cities, in particular, have been characterized as a key "battleground for sustainability." This is in part because an estimated 50 percent of the global population, including 84 percent of the U.S. population, lives in urban areas, and those numbers are only projected to increase. Moreover, local governments have authority over many decisions that are directly related to sustainability, including land use, transportation, housing, local food policy, energy efficiency, and the character of local economic development. In this course we examine these and related issues from a community-level and institutions perspective in order to assess how social and governmental structures, priorities, pressures and constraints influence the prospect for urban sustainability. A particular focus is placed on understanding how local and regional governments implement and manage sustainability.

**PUAD 861. Data Analytics. 3 Credits.**

The course is an introduction to data analytics in public administration and policy analysis. It teaches basic programming in R and SAS, covers basic applications of data analytics such as regression analysis and machine learning, and teaches basic tools of data visualization, including GIS. The course also reviews the political, legal, organizational, and ethical challenges of data analytics usage and the professional responsibilities public administrators have in using these tools. Students are expected to be familiar with basic statistical analysis and have already taken MPA-level statistics or an equivalent course. This course satisfies an elective requirement for students who are completing the Performance Management certificate. Prerequisite: PUAD 836 or equivalent academic engagement that includes quantitative analysis up to multi-variate regression.

**PUAD 862. Emergency Management in the United States: Theory and Practice. 3 Credits.**

This course covers the history, context, and practice of emergency management, blending in the theory and concepts of intergovernmental relations and collaborative leadership methods that are essential to the practice. The course will cover emergency management, as practiced in the United States, the National Incident Management System (NIMS), and the intergovernmental relationships that must be cultivated among all branches of government, non-profits, and private sector entities to plan, mitigate, respond to and recover from all disasters both natural and manmade.

**PUAD 863. Program Evaluation. 3 Credits.**

In this course, students learn the designs and methods used to evaluate the performance of public programs, policies, and organizations. Evaluation is rooted in trying to understand cause and effect relationships in complex situations and correctly attributing impact to intervention. Emphasis is placed on approaches to measure social outcomes. Through a series of evaluation case studies, students will use evidence and empirical methods to assess whether public action achieves its desired outcomes. Prerequisite: The completion of a graduate-level statistics class or instructor approval is required to enroll.

**PUAD 892. Internship Experience in Local Government Administration. 1-3 Credits.**

This course is to supplement and enhance a part-time internship or current work experience in a local government or non-profit agency. It challenges students to examine their work experience to provide them the knowledge, background, and skills needed to successfully lead and manage in a local government or non-profit organization. The course requires students to reflect, write, and discuss their part-time internship (or current work experience) and study how the experience relates to public administration theory, leadership, and management competencies. As this course focuses on local government management, all students are required to attend a professional conference designated by the instructor. Graded on a satisfactory/unsatisfactory basis.

**PUAD 893. Directed Readings. 1-3 Credits.**

Designed to meet the needs of advanced students whose study in public administration cannot be met with current course work.

**PUAD 894. Professional Development Seminar I: Public Admin Contemporary Issues & Competency Assessment. 3 Credits.**

This intensive seminar examines students' current experiences as full time interns and considers workplace and community concerns within the context of contemporary issues. The transition from an academic to a professional work setting is emphasized in discussion and reflective assignments. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Open only to MPA students who are required to complete a full-time internship in their second year of study.

**PUAD 895. Professional Development Seminar II: Leading to Create a Culture for High Performance. 3 Credits.**

In this intensive week-long seminar students will examine what high performance means, how performance happens in an organization and the various principles of public leadership that most effectively guide organizational culture. The course is intended to stimulate thoughts and learnings about high-performance organizations, organizational values, and explores strategies that can create the type of culture that inspires and enables employees to excel. The seminar format provides an opportunity for introspection in individual beliefs and characteristics, group discussion for the exchange of diverse views, and classroom instruction to explore the latest thinking in public sector leadership. Ultimately, the seminar is designed to train and empower public administrators to live the Athenian oath in their organization and community.

**PUAD 897. Public Administration Contemporary Issues and Competency Assessment. 3 Credits.**
This course exposes students to the contemporary issues in public management and analysis of competencies for public management in four theme areas. Students will participate in discussions of issues and in three assessments of their preparation to lead public organizations. Students will complete the MPA Final Essay which focuses on integration of course and work experience in relation to the values theme of the MPA program. Graded on a satisfactory/unsatisfactory basis.

**PUAD 898. Leading to Create a Culture for High Performance. 3 Credits.**

In this intensive week-long seminar students will examine what high performance means, how performance happens in an organization and the various principles of public leadership that most effectively guide organizational culture. The course is intended to stimulate thoughts and learnings about high-performance organizations, organizational values, and explores strategies that can create the type of culture that inspires and enables employees to excel. The seminar format provides an opportunity for introspection in individual beliefs and characteristics, group discussion for the exchange of diverse views, and classroom instruction to explore the latest thinking in public sector leadership. Ultimately, the seminar is designed to train and empower public administrators to live the Athenian oath in their organization and community.

**PUAD 930. Research Seminar in Public Administration and Democracy. 3 Credits.**

This course focuses on the democratic context of public administration. Topics could include how democracy shapes the practice of public administration; the functioning of public administration in a constitutional democracy; issues relating to control and discretion of public administrators; citizenship and representative bureaucracy; theories of bureaucratic values such as equity, justice and efficiency, ethics and accountability; theories of institutions.

**PUAD 931. Research Seminar in Public Management. 3 Credits.**

This course, on the topic which increasingly is approached as an interdisciplinary field, focuses on the management of public and nonprofit agencies. Topics could include: the nature of public agencies and the roles of public executives, managers, and professionals; distinctions between public, private, and nonprofit agencies in America and internationally; creating and managing organizational networks; leadership; work motivation; and the ethics of decision-making.

**PUAD 932. Seminar in the Intellectual History of Public Administration. 3 Credits.**

This course will analyze the intellectual currents that undergird the theories and concepts in public administration. There are three primary perspectives crosscutting the topics. They are historical, cultural and analytical.

**PUAD 934. Research Methods in Public Administration. 3 Credits.**

The course examines issues of research and epistemology with an emphasis on connecting theory and research and doing research in field settings.

**PUAD 935. Advanced Quantitative Methods for Public Administration. 3 Credits.**

This seminar will assist students to develop a thorough competence in both theory and application of multivariate statistical models of the types that are commonly used to study questions of organization and policy in the public sector. These will include inference for the general linear regression model under a wide variety of specifications, as well as a consideration of path models and systems of simultaneous equations. The principal goal of this course is to strengthen the ability of doctoral students in public administration to work methodologically as independent scholars using relatively advanced designs and technique in their work.

**PUAD 936. Policy Analysis and Program Evaluation. 3 Credits.**

This course examines the theoretical foundations and analytical components of policy analysis and program evaluation, common tools for assessing alternative courses of public action and program effectiveness. This examination will include a review and critique of common quantitative and qualitative approaches, including cost-benefit analysis, cost-effectiveness analysis, and quasi-experimental design.

**PUAD 937. Qualitative Methods in Public Administration. 3 Credits.**

This course examines the concepts and practices of qualitative research. The focus will be on field research and the collection of "textual data" through observation, interviewing, and documents. The course will also examine the interpretation and analysis of qualitative data and how to present qualitative findings.

**PUAD 939. Topics in Public Administration: _____ 1-3 Credits.**

A study of selective topics in public administration. Course may be taken more than once.

**PUAD 943. Constitutional Foundations of Public Administration. 3 Credits.**

This course provides grounding in the constitutional premises of public administration including executive, legislative, and judicial powers, and federalism, and those issues associated with the development of economic institutions and processes such as taxation, employment regulation, and commerce controls.

**PUAD 949. Law, Courts, and Public Policy. 3 Credits.**

This course provides an in-depth analysis of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. As part of the course requirements, students will conduct original empirical research.

**PUAD 998. Directed Reading on Public Administration. 1-6 Credits.**

Designed to meet the needs of graduate students whose study in public administration cannot be met with present course. Prerequisite: consent of instructor.

**PUAD 999. Dissertation. 1-15 Credits.**

Enrollment for writing doctoral dissertations. Graded on a satisfactory progress/limited progress/no progress basis.

**Public Affairs & Adm, School Courses**

**SPAA 691. Internship Experience. 1-3 Credits. S**

Designed to provide students an applied learning experience in a relevant public, non-governmental, or nonprofit organization. Students are required to critically reflect on their experience through a variety of academic assignments throughout their internship experience. Prerequisite: Permission of academic unit.

**SPAA 692. Research Experience. 1-3 Credits. S**

Designed for advanced undergraduate students. Students enhance their research skills by working one-on-one with a faculty member on an independent scholarly project. Students are required to complete a final project or presentation, through advising and consultation with the designated faculty member. Prerequisite: Permission of academic unit.

**SPAA 693. Directed Readings. 1-3 Credits. S**
For advanced undergraduate students who wish to study a specific topic of interest that is not covered in the curriculum. Each student must complete a proposal outlining his or her topic request and submit to the Undergraduate Coordinator. Prerequisite: Permission of the academic unit.

Public Affairs & Adm, School Courses

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

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

UBPL 407. Sustainability and the Future of Transportation. 3 Credits.
This course examines the worldwide impact of how we travel, and how that is changing with the development of new technologies in transportation. Our study starts with an overview of different modes of transportation and their use across the globe, then moves into the environmental, economic, equity, and energy factors that influence the sustainability of our ways of travel. Once we examine our present reality, we then peer into the future and examine the potential of evolving developments in transportation, including electric vehicles, autonomous cars, shared mobility, and the COVID-19 pandemic. Topic areas include worldwide differences in the use of modes of transportation, spatial relations and interactions between transportation and land use, and how sustainability principles interact with policy, market forces, and personal behavior in transportation. Upon completion of the course, students will be able to 1) evaluate the sustainability of transportation proposals and developments, 2) develop transportation improvements that contribute to enhancing equity in transportation while mitigating environmental impacts and energy use, and 3) practice enhanced critical thinking, logic, reasoning, and professional communication abilities. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 707.

UBPL 410. Housing Policy and Planning. 3 Credits.
This course explores contemporary U.S. housing issues and introduces the various methods used by the public sector as it intervenes in housing markets. Governments at all levels employ many different approaches to achieve housing goals. This course will examine many of these approaches to help students understand what these housing programs are supposed to accomplish and how well they work. In all cases, the objective of the course is to educate planners so that they have a firm understanding of housing programs that exist and a grasp of the methods used to select housing strategies for implementation by the public sector. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 710.

UBPL 420. Sustainable Land Use Policy and Planning. 3 Credits.
This course introduces students to the issues that planners and decision makers face as they strive to promote sustainability, especially within the context of land use planning. Emphasis will be placed on the theoretical and policy considerations that guide the work of planners. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 720.

UBPL 425. Environmental Planning Techniques. 3 Credits.
An understanding of natural processes is an essential aspect of developing appropriate and effective environmental plans and policies, and creating context- and ecosystem-sensitive site designs. The course covers a variety of topics within environmental and sustainable land use planning. Each topic is examined with respect to the scope of the issues, the methods of analyzing and/or measuring those issues, and the ways those issues can be addressed to avoid or mitigate environmental problems. The main topics will include 1) soils, 2) water and land use, 3) urban ecology, wildlife habitats, and urban biodiversity, and 4) energy, climate change, and natural hazards. The primary purposes of this course are to: 1) Gain an overview of the range of environmental topics and challenges involved in sustainable land use planning; 2) Develop familiarity with common principles and datasets used in environmental planning analysis; and 3) Apply techniques of environmental analysis to build skills applicable in practice. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 725.

UBPL 450. Transportation Policy and Planning. 3 Credits.
This course is designed to provide a broad overview of urban transportation. The role which transportation systems and networks play in facilitating the movement of people as motorists, cyclists, and pedestrians is explored. Methods through which transportation systems are planned for and evaluated are discussed as are major policy issues confronting decision makers within the field. Upon completion of this course, students will be able to 1) comprehend transportation plans and policy documents, 2) evaluate the broader impacts of transportation decisions, and 3) develop and evaluate transportation planning and policy interventions which address current and future issues. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 750.

UBPL 480. Climate Change and Hazards Planning. 3 Credits.
This course covers planning for climate change and disasters. Floods, heat waves, droughts, extreme storms, sea level rise, and the wide range of other climate-related hazards are (or soon will) impact virtually every aspect of the social, economic, and environmental systems on which we all depend. While the challenges of making our communities more sustainable and resilient are daunting, innovative plans, policies, programs, and projects are being developed and implemented all around the world. This course will cover four main topics: 1) the basic science and concepts of climate change and disasters, 2) learning from decades of knowledge about planning for natural hazards, 3) mitigating climate change by reducing greenhouse gas emissions, and 4) adapting to the impacts of climate change. Each topic will be addressed primarily at the local (city, county or regional) scale, with a primary focus on planning in the United States. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 780.

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

UBPL 705. Urban Economic Theory and Analysis. 3 Credits.
This course examines the economic forces which shape and affect cities. In the first part of the course, theories of location are considered. With the help of these theories our objectives are to understand why cities exist, why they are located where they are, the distribution of city sizes, the causes of regional and metropolitan growth and decline, and the spatial distribution of alternative activities within cities. Part two of this course introduces analysis methods which aid in the comprehension of local and regional economic characteristics and in decision-making concerning the distribution of resources within cities.

UBPL 707. Sustainability and the Future of Transportation. 3 Credits.
This course examines the worldwide impact of how we travel, and how that is changing with the development of new technologies in transportation. Our study starts with an overview of different modes of transportation and their use across the globe, then moves into the environmental, economic, equity, and energy factors that influence the sustainability of our ways of travel. Once we examine our present reality, we then peer into the future and examine the potential of evolving developments in transportation, including electric vehicles, autonomous cars, shared mobility, and the COVID-19 pandemic. Topic areas include worldwide differences in the use of modes of transportation, spatial relations and interactions between transportation and land use, and how sustainability principles interact with policy, market forces, and personal behavior in transportation. Upon completion of the course, students will be able to 1) evaluate the sustainability of transportation proposals and developments, 2) develop transportation improvements that contribute to enhancing equity in transportation while mitigating environmental impacts and energy use, and 3) practice enhanced critical thinking, logic, reasoning, and professional communication abilities. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 407.

UBPL 710. Housing Policy and Planning. 3 Credits.
This course explores contemporary U.S. housing issues and introduces the various methods used by the public sector as it intervenes in housing markets. Governments at all levels employ many different approaches to achieve housing goals. This course will examine many of these approaches to help students understand what these housing programs are supposed to accomplish and how well they work. In all cases, the objective of the course is to educate planners so that they have a firm understanding of housing programs that exist and a grasp of the methods used to select housing strategies for implementation by the public sector. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 410.

UBPL 715. Community and Neighborhood Revitalization. 3 Credits.
The course introduces students to a range of community development concepts and approaches in the context of urban change in the United States. In this context, this course helps students understand the various theories of neighborhood change, community development strategies, and a range of principles for developing neighborhood revitalization initiatives focusing on revitalization strategies for inner-city neighborhoods. In this course, community development interventions are understood as facilitating, strengthening, and improving less-advantaged communities.

UBPL 716. Neighborhood Analysis and Evaluation. 3 Credits.
This course explores social theories of Community, how those theories have influenced concepts for neighborhood development, and how to apply the idea of Community to local neighborhood planning and community development. It also teaches how to analyze neighborhood conditions to understand and describe neighborhoods and inform neighborhood improvement strategies. It explores ways to analyze and interpret quantitative indicators-demographic, economic, physical, and social conditions-which exist at the neighborhood level. It teaches students how to investigate and analyze opportunities, assets, and challenges confronting the neighborhood. It introduces students to community asset mapping.

UBPL 720. Sustainable Land Use Policy and Planning. 3 Credits.
This course introduces students to the issues that planners and decision makers face as they strive to promote sustainability, especially within the context of land use planning. Emphasis will be placed on the theoretical and policy considerations that guide the work of planners. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 420.

UBPL 725. Environmental Planning Techniques. 3 Credits.
An understanding of natural processes is an essential aspect of developing appropriate and effective environmental plans and policies, and creating context- and ecosystem-sensitive site designs. The course covers a variety of topics within environmental and sustainable land use planning. Each topic is examined with respect to the scope of the issues, the methods of analyzing and/or measuring those issues, and the ways those issues can be addressed to avoid or mitigate environmental problems. The main topics will include 1) soils, 2) water and land use, 3) urban ecology, wildlife habitats, and urban biodiversity, and 4) energy, climate change, and natural hazards. The primary purposes of this course are to: 1) Gain an overview of the range of environmental topics and challenges involved in sustainable land use planning; 2) Develop familiarity with common principles and datasets used in environmental planning analysis; and 3) Apply techniques of environmental analysis to build skills applicable in practice. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 425.

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

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

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

UBPL 741. Foundations of Compassionate Critical Thinking. 3 Credits.
This course engages students with research methods (research design, inferential statistics, and survey methods) within the broad suite of relationship skills on which successful planning analysis and public service careers depend. These relationship skills ironically are commonly referred to as ‘soft skills;’ in spite of, the hard work they often require. By embedding ‘soft skills’ within ‘hard skills’ (quantitative methods), we will examine a variety of motivations for public service and planning through a consistent lens of advancing equity. We use compassion as a framework for integrating science and practice related to a) emotions, relationships, and self-care, b) reasoning and cognitive biases, c) networks of relationships, and d) broader social, economic, and political systems. We pay particular attention to countering racism, sexism, and other forms of exclusion and oppression which can be hidden within seemingly technical/rational research methods and analyses. Through the course, we consider how planners can use research and communication to help the public and decision makers in the near term, even as there is great uncertainty about the future.

UBPL 742. Applied Data and Spatial Analysis. 3 Credits.
Planners work with quantitative data, much of which are spatial in nature. They use quantitative information to address questions they encounter in planning and policymaking and make decisions. Planners gather, summarize, analyze, and present data they have collected themselves or have obtained from secondary sources. Planners may also review and assess quantitative analyses prepared by others. This course is designed to prepare students to critically review analyses prepared by others and conduct basic statistical analysis of data. It introduces students to key concepts and tools in quantitative analysis and research methods relevant to urban planning and policy. It prepares students to understand, interpret, and more importantly, critically assess quantitative data analyses and results they would encounter in urban planning and allied disciplines.

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

UBPL 750. Transportation Policy and Planning. 3 Credits.
This course is designed to provide a broad overview of urban transportation. The role which transportation systems and networks play in facilitating the movement of people as motorists, cyclists, and pedestrians is explored. Methods through which transportation systems are planned for and evaluated are discussed as are major policy issues confronting decision makers within the field. Upon completion of this course, students will be able to 1) comprehend transportation plans and policy documents, 2) evaluate the broader impacts of transportation decisions, and 3) develop and evaluate transportation planning and policy interventions which address current and future issues. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 450.

UBPL 756. Data Driving Transportation. 3 Credits.
The transportation systems of the world are the product of many decisions, all of which are heavily influenced by the methods we use to study and create those systems. This course explores the research methods that can be employed in planning and analyzing transportation. Content areas include history and theory of transportation planning and modeling, traditional and recent advancements in transportation modeling, and analyzing land-use/transportation interaction, freight travel, public transportation, and non-automotive travel demand, including public transit and non-motorized modes. Upon completion of this course, students will be able to 1) practice advanced skills in descriptive, graphical, GIS, and quantitative analytical methods for transportation, 2) evaluate the impact of transportation investments using those methods and 3) apply enhanced critical thinking, logic, reasoning, and professional communication abilities.

UBPL 758. Transportation for Livable Cities. 3 Credits.
Transit use, walking, and cycling are becoming increasingly important in efforts to promote health, sustainability, social equity, and livability in cities. This course will introduce students to current practices associated with planning for and delivering public transit service and bicycle/pedestrian infrastructure. Upon completion of this course, students will be able to 1) assess the ability of the transportation network to serve transit users, pedestrians, and cyclists; 2) identify how to introduce various modes of transportation; and 3) develop ideas to promote complete, safe, and equitable transportation networks.

UBPL 763. Politics and Public Management. 3 Credits.
Planners and public administrators operate within highly technical yet political environments. Planners and administrators often try to bring consensus, efficiency, effectiveness, and action-taking to communities, but the very structure of our democracies promotes conflict and stalemate. Understanding how to manage power, structure, and agency in policy making will help planners and administrators become savvier as they balance their roles as advisors, educators, facilitators, advocates, managers, and leaders. The course includes theories of policy making and leadership. Students apply those theories to specific case studies associated with different policy areas (transportation, economic development, hazard mitigation, sustainability, historic preservation, etc.). Through research and case studies this class explores the trials, tribulations, and triumphs of planners and administrators as they seek to manage politics in their careers.

UBPL 764. Real Estate Development. 3 Credits.
This course is designed to provide a working knowledge of the mechanics of real estate development for those in the public sector, particularly for urban planners and public administrators. Topics covered include: development analysis; project planning, design, and construction; finance and debt structuring; implementation; understanding debt and equity; and the impact of public policies, such as, policies for affordable housing and historic preservation. Projects developed within the region will be examined to illustrate and explore how public sector programs guide and direct the real estate development process.

UBPL 777. Equity, Justice, and American Cities. 3 Credits.
In U.S. cities, many groups are marginalized by inequitable conditions and access to services such as quality housing, transportation, employment opportunities, education, and health care. Social inequalities of race, class, and gender shape and are shaped by social conflicts and processes of uneven urban development and resource distribution. This class is intended to be a place where students think critically about urban social relations and gain a better understanding of social justice, inequality, access, and privilege as they relate to urban space. Strategies in which to address inequality via urban planning and policy development efforts are explored and evaluated.
UBPL 780. Climate Change and Hazards Planning. 3 Credits.
This course covers planning for climate change and disasters. Floods, heat waves, droughts, extreme storms, sea level rise, and the wide range of other climate-related hazards are (or soon will be) impacting virtually every aspect of the social, economic, and environmental systems on which we all depend. While the challenges of making our communities more sustainable and resilient are daunting, innovative plans, policies, programs, and projects are being developed and implemented all around the world. This course will cover four main topics: 1) the basic science and concepts of climate change and disasters, 2) learning from decades of knowledge about planning for natural hazards, 3) mitigating climate change by reducing greenhouse gas emissions, and 4) adapting to the impacts of climate change. Each topic will be addressed primarily at the local (city, county or regional) scale, with a primary focus on planning in the United States. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 480.

UBPL 785. History and Theory of Planning. 3 Credits.
The course serves as an introduction to the history of city planning and "how to plan" in general. Planners are particularly concerned with future consequences of current action. In looking to the future, knowing past history is a good place to start. Also, planning theorists have thought deeply about how best to plan and their thoughts and advice can serve planners and decision-makers well when they are facing unknowns.

UBPL 802. Special Topics in Urban Planning: ______. 3 Credits.
Study of selected topics in urban planning.

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

Religious Studies Courses

REL 100. Introduction to Religious Ethics. 3 Credits. H
In this class we will learn how religious values are used to make ethical judgments, but we will also ask if and how those judgments influence practices or the behavior of people in their everyday lives. What causes a disjunction between norms and behavior? What is the tension between different values when deciding how to act? What about differences of opinion between and even within different religious traditions? What happens when societal expectations conflict with religious values or vice versa? Or when ethical reasoning leads to two different conclusions about how to act? Using specific cases, such as human rights, environmental and sexual ethics, race and violence students will learn how ethical reasoning unfolds in different religious traditions, what values support that reasoning and what happens in society when those values compete.

REL 102. Violence and Religious Ethics. 3 Credits. H
This course will examine the connection between violence and religion from an ethical perspective. It will focus primarily on Jewish, Christian and Muslim ethical theories, which will be compared and applied to specific cases. We will also consider the ethical justifications for inter-religious conflict and the impact violence has had on targeted religious communities. The course will begin with an interrogation of the meaning of religion, ethics and religious violence-exploring questions like: Are religions inherently violent? Are theories derived from religious ethics used to justify violence? How are acts of violence morally justified? We will then consider these questions in more depth by comparing ethical theories within Judaism, Christianity and Islam, such as just war theory and jihad theory, to see whether religions encourage or seek to curb violence. In addition, each moral theory will be studied in light of specific historical or present cases. Case studies include the Crusades, Medieval Spain, ISIS, white nationalism in America, and recent killings in places of worship. The course will end on a positive note, by examining ethical theories within religions that promote peace, and comparing theories that justify peace with theories that justify war.

REL 104. Introduction to Religious Studies. 3 Credits. HR H
This course introduces students to the academic study of religions. It acquaints students with key methods and issues in religious studies, and provides an introductory survey of selected religions. Not open to students who have taken REL 105.

REL 105. Introduction to Religious Studies, Honors. 3 Credits. HR H
This course introduces students to the academic study of religions. It acquaints students with key methods and issues in religious studies, and provides an introductory survey of selected religions. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 104.

REL 106. Asian Religions. 3 Credits. HR/NW H/W
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. (Same as EALC 105.)

REL 107. Jews, Christians, Muslims. 3 Credits. HR H
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken JWSH 109. (Same as JWSH 107.)

REL 124. Understanding the Bible. 3 Credits. HR H
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as JWSH 124.)

REL 125. Understanding the Bible, Honors. 3 Credits. HR H
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as JWSH 125.)

REL 130. Myth, Legend, and Folk Belief in East Asia. 3 Credits. NW H/W
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the world view of the ordinary peoples of East Asia. (Same as ANTH 293, EALC 130.)

REL 137. Religious Ethics and Moral Decisions. 3 Credits. H
When faced with ethical dilemmas how do we decide what is the right course of action? In what ways are our decisions affected by religious ideas about morality? In this class we examine the ethical problems we encounter every day in light of the solutions offered from various religious traditions. Cases to be examined include issues of life and death, war and peace, sexual morals, torture, the treatment of animals and the environment.

REL 138. Religion and Moral Decisions, Honors. 3 Credits. H
Honors version of REL 137. Introduction to religious viewpoints on individual and social ethics. This course examines the influence of religious thought on the making of moral decisions, and on value development in relation to specific moral issues. Open only to students who have been admitted to the University Honors Program or by permission of instructor.
REL 171. Religion in American Society. 3 Credits. HR H
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. (Same as AMS 290.)

REL 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Religious Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

REL 200. Study Abroad Introductions to: _____ 1-4 Credits. H
This course is designed for the study of special topics in Religious Studies. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

REL 306. God, Buddhism, and the Good Life. 3 Credits. HR
This course introduces students to rigorous philosophical debates about some gripping existential questions surrounding the value of religion with God, a religion without God (focusing on Buddhism), and atheism. We will explore arguments for opposing answers regarding topics such as: whether atheism threatens the value of life; differences in how the self is viewed in Western and Eastern religions; and differences in how morality is grounded in these different traditions. We will examine the compatibility of atheism with Buddhism, and of Buddhism with belief in God. (Same as PHIL 306.) Prerequisite: A 100-level Philosophy course or permission of instructor.

REL 315. Miracles, Martyrs, and Heretics. 3 Credits. H/W
A study of ancient Christian culture and religion employing the popular categories of miracles, martyrs and heretics as entry points into the basic features of religious thought and practice. Prerequisite: An undergraduate course in the humanities.

REL 316. Ancient Magic and Witches. 3 Credits. H
This course provides a survey of magic and witchcraft in ancient Greece and Rome and interprets these practices through anthropological theories of magic and witchcraft. Emphasized topics may include magicians, witches, ghosts, spirits, demons, divination, and spells. This course considers issues such as how magic works, how people engage with the divine, the marginalization of magical practitioners, and the difference between magic, witchcraft and religion. All readings will be in English; no knowledge of any ancient languages is required. (Same as CLSX 316.)

REL 320. The Bible Then and Now. 3 Credits.
An introduction and survey of the history and interpretation of the Jewish and Christian bibles from their first formation to the present day. Students will explore the way the text, interpretation and format of the Bible have adjusted over time to accommodate religious, political, social and technological changes. Class will occasionally meet in the university's rare book collection to study rare bibles. (Same as JWSH 320.)

REL 323. The Jewish World of Jesus. 3 Credits. H
An introduction to the figure of Jesus in his ancient Jewish context. What was Jewish life like in Jesus's time? What did the early Jesus movement share with other forms of Judaism, and how did it differ? Evidence from the New Testament, the Dead Sea Scrolls, and other textual and archaeological sources will be used to explore the first-century Jewish society of which both Jesus and the first Christians were a part. (Same as JWSH 323.)

REL 325. Introduction to Judaism. 3 Credits. H
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as JWSH 325.)

REL 326. The Talmud: Its Origins, Nature, and Evolution. 3 Credits. H
This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as JWSH 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of the instructor.

REL 327. Religious Zionisms. 3 Credits. H
A survey of the many types of Religious Zionism, from the origins of the movement to the present, from Left to Right, and from Jewish to Christian. The class asks questions about the relationship between religion and politics in Israel using case studies as examples, and also considers the views of religious Jewish anti-Zionists. No previous knowledge of Judaism or Israeli history is required.

REL 329. Mystical Tradition in Judaism. 3 Credits. H
Mystical experiences and supernatural encounters in Jewish texts and tradition: Dybbuks and demons, angels and Elijah; from ecstatic enlightenment to succumbing to satan - Jewish texts and tradition are riddled with the arcane, the occult and the mystical. This course will mine the sources for a deep exploration of these aspects of Judaism that are most often obscured by “normative” teachings and practices, yet remain deeply embedded in the customs and beliefs of Jews around the world. (Same as JWSH 330.)

REL 330. Native American Religions. 3 Credits. NW H
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (myth), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Not open to students who have completed REL 331.

REL 331. Native American Religions, Honors. 3 Credits. NW H
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (myth), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have completed REL 330.

REL 333. Magic, Mysteries, Mummies in Ancient Egypt. 3 Credits. H
A study of ancient Egyptian culture and religion employing the popular categories of magic, mysteries and mummies as entry points into the basic features of religious belief and practice. Prerequisite: Any course in the Humanities or Social Sciences.

REL 334. Studies in Ritual: _____ 3 Credits. H
A study of ritual theory and a comparative study of ritual activity among selected religious traditions. May be repeated if topic varies.

REL 339. History of Religion in America. 3 Credits. H
Survey of the development of religious institutions and ideas in America from colonial times to the present. Emphasis is given to the mainstream religious traditions (Protestant, Catholic, Jewish), but attention is also paid to other phenomena, including nonwestern and native American religions.

REL 341. Mysticism. 3 Credits. H
The nature of mystical experience and reflection as expressed in selected mystical literature of the world's religions.
REL 345. Christianity. 3 Credits. H
An introductory examination of the history, doctrines, and practices of Christianity. Selected readings from the creeds, papal decrees, and major Christian theologians.

REL 350. Islam. 3 Credits. NW H/W
Islam's Origins, the prophet Muhammad, the Holy Koran, religious symbols and moral mandates, and historical developments. (Same as AAAS 349.)

REL 355. Muslim Societies. 3 Credits. H
In this class we study Muslim societies throughout the world. We examine variation between regions by looking at Muslim history and culture in different countries, such as Pakistan, Indonesia, Mali, Bosnia, Egypt, Yemen, and others.

REL 357. Women and Gender in Islam. 3 Credits. H
Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. Also examines how Muslim women have impacted those developments. (Not open to students who have taken REL 657.)

REL 360. The Buddhist Tradition in Asia. 3 Credits. W
A historical and geographical survey of the Buddhist tradition from its origins in India to modern day developments in the three major regional Buddhist cultures of Southeast Asia, Tibet, and East Asia (China, Korea, and Japan). Prerequisite: Prior coursework in Asian studies or permission of instructor.

REL 373. The Supreme Court and Religious Issues in the United States. 3 Credits. H
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Not open to freshmen. (Same as HIST 373.)

REL 374. Religious Perspectives on Selfhood and Sexuality. 3 Credits. H
The nature of the self in its individual and social dimensions. Self experienced and expressed in sexuality. Survey of viewpoints in religious literature. (Same as WGSS 374.)

REL 376. American Judaism: Life and Thought. 3 Credits. H
A study of the conflicts between secularists and religiousists, between Zionists and synagogue representatives, and the patterns of compromise in American Jewish life. Questions of Americanism and Jewish survival, support for the State of Israel, and the bureaucratic structure of rabbinical training and philanthropy in America will be raised.

REL 379. Prophets and Profits. 3 Credits. H
The course will examine what religious traditions have had to say about controversies in economic ethics, focusing on how religious thinkers develop arguments on the basis of methods particular to their traditions. At the same time, it presents these traditions alongside secular approaches to economic ethics. Judaism, Christianity, Islam, Hinduism, and Buddhism will be considered, as will liberalism, Marxism, feminism, and natural law theory. Topics include economic inequality, wealth accumulation, licit and illicit commerce, slavery, and profit. Attention will also be paid to the methodological challenges of the study of the topic, which necessarily brings together political economy, ethics, economic history, and hermeneutics. Students will work with a diverse array of primary sources, from ancient scriptures to modern thinkers. The ultimate goal will be to understand how it is possible for thinkers within the same religious tradition to take differing stances on economic ethics, while considering themselves wholly grounded in tradition, depending on their relationships to the modern secular approaches we discuss.

REL 380. Philosophical Issues in Religion. 3 Credits. H
This course will consider, from a philosophical perspective, some of the problems in religion which arise in the development of "Natural Theology" broadly conceived. (Same as PHIL 350.)

REL 382. Jerusalem Through the Ages. 3 Credits. H
As a prominent site in the religious and cultural histories of Judaism, Christianity, and Islam, Jerusalem is uniquely situated as one of the world's most sacred cities. For more than 3,000 years, this city has been a focal point of religious and political activity. Through the critical reading of historical and religious texts, and archaeological data, this course will explore the historical development of Jerusalem as a sacred place in Judaism, Christianity, and Islam. (Same as CLSX 382, HIST 382 and JWSH 382.)

REL 387. Enemies of Ancient Israel. 3 Credits. H
An exploration of the social world of the Bible through its antagonists and their cultures. We will examine the so-called "Bad Guys of the Bible" using the lenses of history, archaeology, geography, and religion to better understand their cultures and how they are portrayed in the biblical text. (Same as HIST 381 and JWSH 387.)

REL 400. Study Abroad Special Topics: ______. 1-4 Credits. H
This course is designed for the study of special topics in Religious Studies equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

REL 404. Undergraduate Seminar in Religion: ______. 1-3 Credits. H
Topic, instructor, prerequisite and hours of credit to be announced in Schedule of Classes. Particular subject matter any given semester responding to student interest and taking advantage of special faculty competence. Class discussion, readings, and individual projects.

REL 405. Directed Study in Religion. 1-4 Credits. H
Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. May be repeated, with maximum cumulative credit of four hours. Course taken for one hour of credit may not be used to fulfill College distribution requirement. Prerequisite: One previous course in religious studies at the University of Kansas and permission of instructor.

REL 425. Religion and Film. 3 Credits. H
An examination of the treatment of religious themes through the medium of film and an examination of the attitudes of religious organizations toward films and film production. Selected films will be viewed and analyzed from the perspectives taken within religious studies.

REL 450. Popular Culture in the Muslim World. 3 Credits. NW H
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as AAAS 450.)

REL 477. Gender and Religion. 3 Credits. H
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as HUM 477 and WGSS 477.) Prerequisite: An introductory course in Humanities, Religious Studies or Women, Gender & Sexuality Studies.

REL 490. Senior Seminar in Theories and Methods. 3 Credits. H
A capstone course for religious studies majors to survey methods and theories in religious studies. Prerequisite: Religious Studies major or permission of the instructor.

REL 494. Research Internship. 1-3 Credits. S
Practical research experience in Religious Studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. Credit hours are graded by faculty on a satisfactory/unsatisfactory basis. May be used as a component of the Research Experience Program (REP). Prerequisite: Permission of the instructor.

REL 499. Undergraduate Honors Research. 1-3 Credits. H
Required for Departmental Honors. May be taken more than once; total credit not to exceed 6 hours. Prerequisite: Open only to candidates for degree with departmental honors and with consent of the student’s research supervisor.

REL 500. Readings in Non-English Religious Texts. 1-4 Credits.
This course provides directed readings for students in either primary or secondary texts related to religious studies utilizing material in languages other than English.

REL 502. Special Topics in Religion: . 3 Credits. H
Topic and instructor to be announced in Schedule of Classes. May be offered by different instructors under different subtitles, and may be taken more than once if subject matter varies sufficiently. Prerequisite: One previous course in Religious Studies or instructor permission.

REL 507. Religion in India. 3 Credits. NW H/W
Survey of religious thought and practice in India from the Vedic period to the present.

REL 509. Religion in Japan. 3 Credits. NW H/W
Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as EALC 509.)

REL 510. Religion in Korea. 3 Credits. W
Survey of religious thought and practice in Korea from the Three Kingdoms period to the present. Prerequisite: REL 106/EALC 105; EALC 104; or permission of instructor.

REL 511. Buddhist Art of Korea. 3 Credits. H
Introduction to the history of Buddhist architecture, painting, sculpture and illuminated scriptures in Korea from the 4th through the 19th centuries, with particular emphasis on their stylistic, geographical, social, devotional and literary contexts. Not open to students who have taken HA 561 or HA 561. Work requirements will be greater for graduate students. (Same as HA 561.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

REL 523. The Dead Sea Scrolls. 3 Credits. H
A study of the archeological evidence and texts from the Dead Sea area that provide primary evidence for Jewish religious belief and practice in the Greek and Roman periods (ca. 250 B.C.E. - 135 C.E.). Prerequisite: REL 124 or JWSH 124 or consent of instructor.

REL 525. Jews and Christians. 3 Credits. H/W
This course examines the ways Jews and Christians have interacted with and characterized one another at various points in their histories. Special emphasis is placed on the gradual separation of the two religious traditions in the 1st-4th centuries. (Same as JWSH 525.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor.

REL 557. Modern Islamic Reform Movements. 3 Credits. H
This course examines movements of renewal and reform in the Islamic world today. Also studies the conditions that gave rise to calls for reform throughout the Muslim majority world, as well as the impact reform movements have had on the practices and beliefs of Muslims today.

REL 560. Modern Jewish Thought. 3 Credits. H
This course examines how a number of prominent Jewish thinkers from the seventeenth century through the present have encountered and engaged the special challenges posed by modernity to religious traditions, including the challenge of science to the validity of miracles, the challenge of the secular state to religious authorities, and the challenge of historical studies to the integrity of scripture. Thinkers covered may include Spinoza, Mendelssohn, Frankel, Hirsch, Geiger, Hermann Cohen, Buber, Rosenzweig, Arendt, Scholem, Leo Strauss, Levinas, and Derrida. Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor.

REL 570. Studies in Judaism. 3 Credits. H
A study of the major intellectual sources of the Jewish tradition from the Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the Shulchan Aruch. Prerequisite: A course in Religious Studies or Jewish Studies numbered 300 or above.

REL 571. Judaism and Political Theology. 3 Credits. H
A consideration of the relationship between religion and politics in Judaism, and of the relevance of Judaism to broader discussions about religion and politics. Topics will include sovereignty, secularization, pluralism, democracy, and revolution. (Same as JWSH 562.) Prerequisite: At least one course in Jewish Studies or Religious Studies, or permission of instructor.

REL 573. Judaism and Sexuality. 3 Credits. H
An exploration of the complex interactions of Judaism, Jewishness, and sexuality. The course serves as a basic introduction to traditional Jewish understandings of gender and power, love and sex, and the body and embodiment. It also introduces the changes undergone by this tradition under the impact of contemporary feminism and queer theory. Prerequisite: At least one course in Jewish Studies or Religious Studies, or permission of instructor.

REL 585. New Religious Movements (Western). 3 Credits. H
A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, rooted primarily in Christianity and Judaism.

REL 586. New Religious Movements (Nonwestern). 3 Credits. H/W
A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, which have developed primarily from sources other than Christianity and Judaism.

REL 650. Sufism. 3 Credits. NW H
A survey of developments in Sufi (Islamic Mystical) thought, poetry, and ritual throughout Muslim history and across the Muslim world. Prerequisite: AAAS 349/REL 350 or permission of instructor.

REL 657. Women and Gender in Islam. 3 Credits. W
Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. Also examines how Muslim women have impacted those developments. (Not open to students who have taken REL 357.) (Same as AAAS 657.) Prerequisite: AAAS 349/REL 350, graduate standing, or permission of instructor.

REL 671. American Communes. 3 Credits. H
An examination of utopian communities in North America from the seventeenth century to the present. The course will survey the history, literature, and social dynamics of representative communal societies and movements including the Shakers, the Hutterites, the Oneida Community,
Catholic religious communities, egalitarian communities, and other religious and secular communities.

REL 701. Approaches to the Study of Religion. 3 Credits.
An introduction to the various methods by which social scientists, historians, philosophers, and theologians study the meaning, influence, and significance of religion as an integral part of society and its cultural heritage. Prerequisite: Graduate student or permission of instructor.

REL 704. Russian Orthodoxy in Historical Perspective. 3 Credits.
This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and laity; institutional structures; the relationships between Church and State; interactions with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REES 704.)

REL 724. Magic and Myth in Ancient Egypt. 3 Credits.
A study of the basic features of ancient Egyptian culture and religion, with an emphasis on magic, myth and archaeology. Prerequisite: An introductory course in Religious Studies or consent of instructor.

REL 731. Studies in Christianity. 3 Credits.
Study of religious thought, practice, and institutions of Christianity with an emphasis on the examination of primary documents.

REL 734. Studies in Ritual: _____ 3 Credits.
A study of ritual theory and a comparative study of ritual activity among selected religious traditions. May be taken more than once if topic varies.

REL 761. Seminar in Western Religious Thought: _____ 3 Credits.
An analysis of the thought of selected thinkers of the Christian, Jewish, and/or Islamic traditions. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 539, or REL 570 or permission of the instructor.

REL 800. Readings. 1-4 Credits.
REL 827. Seminar in Religion, Text and Textuality. 3 Credits.
This seminar explores issues surrounding the production and use of authoritative religious texts (sacred texts) in religious traditions, including such topics as scripturality and canon, scriptural hermeneutics, and material and ritual dimensions of scriptural practice. Specific case studies and content to be selected by the instructor.

REL 837. Seminar in Religion, Media and Performance. 3 Credits.
This seminar explores aspects of performance and the media of performance in lived religion, which might include such topics as ritual, the body, mass media and the internet, and visual and material culture. Specific case studies and content to be selected by the instructor.

REL 847. Seminar in Religion, Society and Social Change. 3 Credits.
This seminar explores issues regarding the social dimensions of religiosity/lived religion, ranging from aspects of religious institutionalization, authority, and normativity to alternative religiousities and alterity. Specific case studies and content to be selected by the instructor.

REL 857. Seminar in Religious Subjectivity, Experience, and Narrative. 3 Credits.
This seminar explores issues regarding the subjective and experiential dimension of lived religiosity, including such things as religious experience and mysticism, modes of personal religious expression and embodiment, and dynamics of personal and collective religious narrative and identity. Specific case studies and content to be selected by the instructor.

REL 899. Thesis. 1-3 Credits.
A multidisciplinary introduction to Russia and Eastern Europe. The course explores the geography, history, and politics of this complex region, as well as the diverse cultures, ethnicities, languages, and religions. A special focus of the course is the current socio-political situation in Russia and Eastern Europe in the context of the fall of communism nearly 30 years ago and the ongoing post-communist transition. Students in the course watch one feature film from Russia or Eastern Europe per week as a visual representation of issues discussed via scholarly articles and chapters, newspaper articles and news clips, video lectures, documentary and animated films, music videos, and literature. This course is offered at the 100 and 300 level with additional assignments at the 300 Level. Not open to students with credit in REES 110.

REES 311. Understanding Russia and Eastern Europe, Honors. 3 Credits. SC S
A multidisciplinary introduction to Russia and Eastern Europe. The course explores the geography, history, and politics of this complex region, as well as the diverse cultures, ethnicities, languages, and religions. A special focus of the course is the current socio-political situation in Russia and Eastern Europe in the context of the fall of communism nearly 30 years ago and the ongoing post-communist transition. Students in the course watch one feature film from Russia or Eastern Europe per week as a visual representation of issues discussed via scholarly articles and chapters, newspaper articles and news clips, video lectures, documentary and animated films, music videos, and literature. This course is offered at the 100 and 300 level with additional assignments at the 300 Level. Not open to students with credit in REES 111.

REES 480. Topics in Russian and East European Studies: ____ 1-3 Credits. H
Interdisciplinary examination of topics involving two or more disciplines in Russian, East European, and Eurasian studies.

REES 492. Research Methods in Russian, East European, and Eurasian Studies. 3 Credits. H
Development of interdisciplinary research skills and familiarity with resources and issues in the study of Russian, East European, and Eurasian Studies. Preparation for REES 496.

REES 496. Capstone Research Seminar in Russian and East European, and Eurasian Studies. 3 Credits. H
Interdisciplinary original research conducted using at least one REES language and resulting in a research paper. Prerequisite: REES 492.

REES 498. Directed Readings. 1-3 Credits. H
Individual and supervised readings in selected areas of Russian, East European, and Eurasian Studies. Prerequisite: Prior permission of instructor and either CREES director or associate director.

REES 499. Capstone Research Seminar in Russian, East European, and Eurasian Studies, Honors. 3 Credits. H
Research and writing of a substantial paper, involving interdisciplinary original research and use of sources in at least one REES language, and presentation of this paper to an Honors committee of three REES faculty members. This thesis must be substantially different from any other Honors thesis. Prerequisite: REES 492.

REES 510. Understanding Central Asia. 3 Credits. NW S/W
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in REES 710. (Same as GEOG 590.) Prerequisite: One previous interdisciplinary area studies course or the instructor’s permission.

REES 704. Russian Orthodoxy in Historical Perspective. 3 Credits.
This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and laity; institutional structures; the relationships between Church and State; interactions with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REL 704.)

REES 710. Understanding Central Asia. 3 Credits.
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in REES 510 or GEOG 590.

REES 799. Directed Readings in Russian and East European Studies. 1-5 Credits.

REES 895. Special Problems in Area Studies: ____ 3 Credits. H
Interdisciplinary examination of topics involving two or more of the cooperating disciplines in Russian and East European studies.

REES 897. Research. 1 Credits.
Enrollment to fulfill Masters continuous enrollment rule. Prerequisite: Completion of all degree requirements except submission of seminar paper or comprehensive examination.

REES 898. Seminar in Russian and East European Studies. 3 Credits.
Mastery of interdisciplinary research skills, and knowledge of resources and scholarship on the study of Russian, east European, and Eurasian Studies.

REES 899. Capstone Research Seminar in Russian, East European, and Eurasian Studies. 3 Credits.
Research, write, and present a professional-quality paper, involving interdisciplinary original research, consultation with REES faculty, and substantial use of sources in at least one REES language. Prerequisite: REES 898.

Slavic, German, and Eurasian Studies Courses

BCRS 104. Elementary Bosnian/Croatian/Serbian I. 5 Credits. U F1
Beginning language course. Development of basic communicative and cultural competencies with interactive approach. Students acquire communicative skills for elementary personal and social needs. They are introduced to the basic Bosnian/Croatian/Serbian language rules and to the cultural context in which Bosnian/Croatian/Serbian discourse occurs. Through regular engagement with authentic multimedia materials they learn to recognize differing aspects of Bosnian/Croatian/Serbian and American life, culture, and values.

BCRS 105. Elementary Bosnian/Croatian/Serbian I, Honors. 5 Credits. U F1
Similar to BCRS 104 but with additional work aimed at accelerating the student’s progress to proficiency and widening understanding of cultural
context. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor.

**BCRS 108. Elementary Bosnian/Croatian/Serbian II. 5 Credits. U F2**

Second-semester language course, continuation of BCRS 104. Further development of basic communicative and cultural competencies with interactive approach. Students continue the acquisition of communicative skills for elementary personal and social needs and their introduction to the basic Bosnian/Croatian/Serbian language rules and cultural context in which Bosnian/Croatian/Serbian discourse occurs. Through regular engagement with authentic multimedia materials they learn to recognize differing aspects of Bosnian/Croatian/Serbian and American life, culture, and values. Prerequisite: BCRS 104 or BCRS 105, or placement by examination.

**BCRS 109. Elementary Bosnian/Croatian/Serbian II, Honors. 5 Credits. U F2**

Continues BCRS 105. Similar to BCRS 108 but with additional work aimed at accelerating the student’s progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 104 or 105. Open only to students admitted to the University Honors Program, or by permission of instructor.

**BCRS 150. Beginning Bosnian/Croatian/Serbian I. 3 Credits. H**

Fundamentals of B/C/S grammar, reading, speaking, and writing. Introduction to the cultural context in which B/C/S discourse occurs. Online course, designed to accommodate the needs of students regardless of age, educational background, or occupation who want to acquire some basic communicative skills in B/C/S. No previous knowledge of BCS or other foreign languages required. The course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Not open to students with credit in BCRS 104 or BCRS 105.

**BCRS 177. First Year Seminar: _____. 3 Credits. U**

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Bosnian/Croatian/Serbian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**BCRS 204. Intermediate Bosnian/Croatian/Serbian I. 3 Credits. U F3**

Second-year language course. Further development of communicative and cultural competencies with a content-based, interactive approach. Students develop the ability to understand and produce short written and spoken texts in BCS through engagement with a variety of authentic materials representative of cultural diversity of the studied area. They contrast and compare features of individual BCS-speaking countries and their cultures as well as differing aspects of B/C/S and American life, culture, and values. Prerequisite: BCRS 108 or permission of the instructor.

**BCRS 205. Intermediate Bosnian/Croatian/Serbian I, Honors. 3 Credits. U F3**

Similar to BCRS 204 but with additional work aimed at accelerating the student’s progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students who have received an A in BCRS 108 or an A or B in BCRS 109, and who are admitted to the University Honors Program, or by permission of instructor.

**BCRS 208. Intermediate Bosnian/Croatian/Serbian II. 3 Credits. U F4**

A continuation of BCRS 204. Prerequisite: BCRS 204.

**BCRS 209. Intermediate Bosnian/Croatian/Serbian II, Honors. 3 Credits. U F4**

Similar to BCRS 208 but with additional work aimed at accelerating the student’s progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 204 or 205. Open only to students admitted to the University Honors Program, or by permission of instructor.

**BCRS 380. Intensive Croatian. 6 Credits. U**

This program consists of a six-week intensive language course in intermediate and advanced Croatian phonetics, conversation, and grammar, and is offered each summer in Croatia. In addition to the practical language work, there is a program of lectures on modern Croatian history, literature, and other cultural topics. Various excursions and tours bring the students into first-hand contact with the people, natural beauty and culture of Croatia. This program is a cooperative effort between the University of Kansas and faculty of the University of Zadar.

**BCRS 504. Advanced Bosnian/Croatian/Serbian I. 3 Credits. H/W FP**

A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 208, or equivalent.

**BCRS 508. Advanced Bosnian/Croatian/Serbian II. 3 Credits. H/W FP**

A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two and one-half or more years of Bosnian/Croatian/ Serbian language. Prerequisite: BCRS 504, or equivalent.

**BCRS 675. Readings in Bosnian/Croatian/Serbian. 1-6 Credits. H/W FP**

Individually tailored readings and independent work in Bosnian/Croatian/ Serbian language and culture. Prerequisite: Two years of Bosnian/ Croatian/Serbian, and consent of instructor.

**Slavic, German, and Eurasian Studies Courses**

**CZCH 104. Elementary Czech I. 5 Credits. U F1**

First semester. Essentials of grammar, practice in speaking and writing Czech. Simple readings from selected texts.

**CZCH 108. Elementary Czech II. 5 Credits. U F2**

Second semester. A continuation of CZCH 104. Prerequisite: CZCH 104.

**CZCH 177. First Year Seminar: _____. 3 Credits. U**

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Czech. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**CZCH 204. Intermediate Czech I. 3 Credits. U F3**

Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: CZCH 108.

**CZCH 208. Intermediate Czech II. 3 Credits. U F4**

A continuation of CZCH 204. Prerequisite: CZCH 204.

**CZCH 675. Readings in Czech. 1-6 Credits. H/W FP**

Prerequisite: Reading knowledge of Czech language, and consent of instructor.
Slavic, German, and Eurasian Studies Courses

PERS 110. Elementary Iranian/Dari/Tajik Persian I. 5 Credits.  U F1
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Five hours of class per week.

PERS 120. Elementary Iranian/Dari/Tajik Persian II. 5 Credits.  F2
Continuation of PERS 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Five hours of class per week. Prerequisite: PERS 110 or departmental permission.

PERS 210. Intermediate Iranian/Dari/Tajik Persian I. 3 Credits.  U F3
A continuation of PERS 120. Course emphasizes oral and written work in Persian. Systematic review of grammar and introduction to reading in cultural texts. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Prerequisite: PERS 120 or departmental permission.

PERS 220. Intermediate Iranian/Dari/Tajik Persian II. 3 Credits.  U F4
A continuation of PERS 210. Course emphasizes oral and written work in Persian. Systematic review of grammar and introduction to reading in cultural texts. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Prerequisite: PERS 210 or departmental permission.

PERS 310. Advanced Iranian/Dari/Tajik Persian I. 3 Credits.  U FP
Enhancement of speaking, comprehension, reading and writing abilities in Persian. Readings from Persian literature introduced. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Prerequisite: PERS 220 or placement exam that establishes a level of proficiency in Persian suited to Advanced Persian I.

PERS 320. Advanced Iranian/Dari/Tajik Persian II. 3 Credits.  U FP
Enhancement of speaking, comprehension, reading and writing abilities in Persian. Readings from Persian literature introduced. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Prerequisite: PERS 310 or placement exam that establishes a level of proficiency in Persian suited to Advanced Persian II.

PERS 593. Directed Study in Persian Culture and Literature: ______. 1-3 Credits.  U FP
This course is designed for students seeking proficiency in Persian beyond PERS 320. The instructor directs the student through readings and materials in Persian that add to the student’s substantive knowledge of Persian culture in Iran, Afghanistan, and Tajikistan. May be taken multiple semesters for credit with varying content. Prerequisite: PERS 320 and consent of instructor.

Slavic, German, and Eurasian Studies Courses

PLSH 104. Elementary Polish I. 5 Credits.  U F1
First Semester. Essentials of grammar, practice in reading, writing, and speaking Polish.

PLSH 105. Elementary Polish, Honors. 5 Credits.  U
Honors version of PLSH 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor.

PLSH 108. Elementary Polish II. 5 Credits.  U F2
Second semester. A continuation of PLSH 104. Prerequisite: PLSH 104.

PLSH 109. Elementary Polish II, Honors. 5 Credits.  U
A continuation of PLSH 105. Honors version of PLSH 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: PLSH 104 or PLSH 105. Open only to students admitted to the University Honors Program, or by permission of instructor.

PLSH 177. First Year Seminar: ______. 3 Credits.  U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Polish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

PLSH 204. Intermediate Polish I. 3 Credits.  U F3
Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: PLSH 108.

PLSH 208. Intermediate Polish II. 3 Credits.  U F4
A continuation of PLSH 204. Prerequisite: PLSH 204.

PLSH 504. Advanced Polish I. 3 Credits.  H/W FP
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two or more years of Polish language. Prerequisite: PLSH 208 or equivalent.

PLSH 508. Advanced Polish II. 3 Credits.  H/W FP
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two and one-half or more years of Polish. Prerequisite: PLSH 504 or equivalent.

PLSH 675. Readings in Polish Language and Literature. 1-6 Credits.  H/W FP
Directed individual readings on various topics concerning Polish literature and/or language. Prerequisite: Two years or four semesters of Polish, and consent of instructor.

Slavic, German, and Eurasian Studies Courses

RUSS 104. Elementary Russian I. 5 Credits.  U F1
First semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian.

RUSS 105. Elementary Russian I, Honors. 5 Credits.  U
Honors version of RUSS 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor.

RUSS 108. Elementary Russian II. 5 Credits. U F2
Second semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian. A continuation of RUSS 104. Prerequisite: RUSS 104.

RUSS 109. Elementary Russian II, Honors. 5 Credits. U
A continuation of RUSS 105. Honors version of RUSS 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: RUSS 104 or RUSS 105. Open only to students admitted to the University Honors Program, or by permission of instructor.

RUSS 110. Intensive Elementary Russian. 10 Credits. U F1/F2
Intensive course in elementary Russian providing the student with a complete survey of Russian grammar, and proficiency in understanding, reading, and speaking basic Russian. Twenty contact hours per week. Same content as RUSS 104 and RUSS 108 combined.

RUSS 150. Beginning Russian I. 3 Credits. U
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. No previous knowledge of Russian or other foreign languages required.

RUSS 152. Beginning Russian II. 3 Credits. U
Continuation of RUSS 150. Does not fulfill BA foreign language requirement. Prerequisite: RUSS 150 or equivalent.

RUSS 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment seminar course for first-time freshmen, addressing current issues in Russian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

RUSS 204. Intermediate Russian I. 5 Credits. U F3
This course is designed to develop speaking, reading, and listening proficiency within the context of a review of grammar. Prerequisite: RUSS 108, RUSS 110, or equivalent.

RUSS 208. Intermediate Russian II. 5 Credits. U F4
Continuation of RUSS 204.Completes the undergraduate foreign language requirement. The course is designed to develop speaking, reading, and listening proficiency within the context of detailed grammatical review. Prerequisite: RUSS 204 or equivalent.

RUSS 212. Second Year Russian I. 3 Credits. U F3
A review of Russian and further development of all four language skills. This course is intended for non-specialists and for students fulfilling the language requirement. Prerequisite: RUSS 108 or RUSS 110.

RUSS 216. Second Year Russian II. 3 Credits. U F4
Continuation of RUSS 212. More focused development of students' oral skills and reading abilities. This course fulfills the college foreign language requirement. Prerequisite: RUSS 204 or RUSS 212.

RUSS 250. Continuing Russian I. 3 Credits. U
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 152 or equivalent.

RUSS 252. Continuing Russian II. 3 Credits. U
A continuation of RUSS 250. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 250 or equivalent.

RUSS 504. Advanced Russian I. 3 Credits. H/W FP
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had four semesters of Russian. Prerequisite: RUSS 208 or RUSS 216.

RUSS 508. Advanced Russian II. 3 Credits. H/W FP
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had two and one-half or more years of Russian language. Prerequisite: RUSS 504.

RUSS 512. Russian for the Professions I. 3 Credits. U FP
This course focuses on the active mastery of language structures and vocabulary needed for people using Russian in professional capacities, particularly such as business and journalism. Materials will be drawn from the current Russian press and electronic media. Designed for students who have had basic language training and want to develop specialized language skills. Prerequisite: RUSS 208 or RUSS 216.

RUSS 516. Russian for the Professions II. 3 Credits. U FP
A continuation of RUSS 512. Prerequisite: RUSS 504, RUSS 512, or RUSS 522.

RUSS 522. Problems in Translating Russian into English I. 3 Credits. H/W FP
Introduction to the process of translating texts from Russian, focusing on kinds of translation, lexical and textual factors, and the revision process. Prerequisite: Two years minimum of Russian language courses.

RUSS 550. Advanced Conversation, Composition, and Grammar in Russia: Summer Program. 6 Credits. H/W FP
Held in Russia. Twenty-four hours of class work weekly, plus lectures and excursions, for six weeks at St. Petersburg University. Prerequisite: RUSS 208 or the equivalent of twenty-two hours of Russian language courses.

RUSS 675. Readings in Russian. 1-6 Credits. H/W FP
Prerequisite: Two years of Russian, and consent of instructor.

RUSS 700. Classics of Russian Culture. 3 Credits.
This advanced Russian language class explores the monuments of Russian culture (1700-1980) in the context of the 'country's history, customs, artistic traditions and literary trends. It is designed to develop reading, writing, and speaking skills of advanced language students and includes the preparation of written and oral reports in Russian. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

RUSS 704. Contemporary Russian Culture. 3 Credits.
This advanced Russian language class explores issues in contemporary Russian culture (literature and the arts, societal trends and issues, politics, and national life) based on Russian film, television, and print materials. It is designed to develop reading, writing, and speaking skills of advanced language students who wish to develop high levels of fluency, accuracy, and idiomatic expressiveness. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

RUSS 708. Russian Phonetics and Grammar. 3 Credits.
A survey of fundamental issues in Russian phonetics, morphology, and syntax. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major linguistic categories of Russian. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

RUSS 712. Introduction to Russian Literature. 3 Credits.
Readings for this advanced Russian language class will be drawn from representative prose, poetry, and drama of 19th or 20th century authors. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major texts and literary trends of the Russian tradition. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

RUSS 716. Stylistics. 3 Credits.
Practical examination of the features of stylistic registers available in contemporary Russian, ranging from slang to colloquial speech to educated journalistic, scientific, and literary styles. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing stylistic registers. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

Slavic, German, and Eurasian Studies Courses

SLAV 101. Introduction to Slovene. 1 Credits. H
Teaches skills for survival communication in Slovene and basic orientation in Slovene culture. Blended short course, designed to give a student rudimentary linguistic and cultural preparation for functioning in Slovene-speaking environment. Recommended for participants of study abroad in Slovenia. No previous knowledge of Slovene or other foreign languages required. The course does not count toward undergraduate language requirement.

SLAV 104. Elementary Slavic Language I: _____, 5 Credits. U F1
First semester. Essentials of grammar, practice in speaking and writing a Slavic language. Simple readings from selected texts. Course may be used to teach the fundamentals of any Slavic language, for example, Slovenian, Macedonian, Slovak, etc.

SLAV 140. Understanding Russia. 3 Credits. HT H/W
An introduction to literature, history, political systems, spirituality, and the visual arts from a Russian perspective.

SLAV 141. Understanding Russia, Honors. 3 Credits. HT H/W
An introduction to literature, history, political systems, spirituality, and the visual arts from a Russian perspective.

SLAV 144. Survey of Russian Literature in Translation. 3 Credits. HL H/W
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others.

SLAV 145. Survey of Russian Literature in Translation, Honors. 3 Credits. HL H/W
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others.

SLAV 148. Introduction to Slavic Folklore. 3 Credits. HL H/W
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries.

SLAV 149. Introduction to Slavic Folklore, Honors. 3 Credits. HL H/W
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries.

SLAV 152. Robots, Rockets, Radios: Progress and Technology in 20th-Century Slavic Literatures. 3 Credits. HL
This course introduces students to masterworks of literature written in response to the technological advancements of the 20th century by some of the best authors in Czech, Polish, Russian, Ukrainian, and formerly Yugoslav literatures. The writers covered include Karel Capek, Yuri Olesha, Valerian Pidmohylny, Ivo Andric, Stanislav Lem, Vaclav Havel, and Oksana Zabuzhko. Literary readings are supplemented with screenings of several films from the region. The course analyzes the ideological contexts in which these texts appeared, such as Soviet communism’s dependence on technology and industrialization, post-WWII disillusionment with ideas of progress, and the Space Race.

SLAV 177. First Year Seminar: _____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Slavic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

SLAV 205. Muslim Lives: Politics, Culture, and Society. 3 Credits. S
The course provides a general introduction to Muslim communities and societies by surveying some of the major aspects of Muslims’ lived experiences from the early Islamic period to the modern globalized world. It will challenge the essentialized notion of a “Muslim world,” which is usually presented as a monolithic society. Through the course, students will develop a basic understanding of the rich diversity of Muslim communities in terms of cultural mores, religious practices, and sociopolitical conditions. Religious and sociopolitical practices will be analyzed in their ethical and moral perspectives. (Same as GIST 205.)

SLAV 230. The Vampire in Literature, Film, and Television. 3 Credits. H
The vampire has been a fascinating and terrifying imagined other in human society for centuries. This course begins with the historical development of the vampire legend in Eastern Europe leading up to its contemporary Russian and English literary and cinematic variations. We will contextualize the various incarnations of the vampire and endeavor to consider the ethical significance of such a figure, through questions such as: What are the moral implications of becoming or being a vampire subject? Are there different ethical rules at play? Are vampires always unethical?

SLAV 250. Introduction to Translation and Translation Theory. 3 Credits. H
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as AAAS 250, GERM 240, LING 250 and SPAN 202.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

SLAV 305. Language, Gender, and Sexuality. 3 Credits. S
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how
are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as ANTH 325, GIST 303, JWSH 305 and WGSS 325.)

SLAV 310. Modern Turkey: Culture and Society. 3 Credits. H/W
As a country that is geographically in the middle of a strategic global region, a key NATO ally, a candidate for EU membership, and representing a mix of democratic traditions, military coups, and authoritarian leaders combined with periods of rapid and drastic socioeconomic transformation, for one reason or another, Turkey seems to always be a country under the spotlight. This course is designed to give an overview of Modern Turkey and familiarize the student with its history, society and culture. Topics to be covered include the early republican period, ethnic and religious minorities, religion and secularism, music, cuisine, women, gender and sexuality, religious and national holidays, cinema and TV, among others. The primary purpose of this course is to help students develop necessary analytical and interpretive skills to identify, compare, and analyze Turkish cultural practices, products and perspectives as they relate to basic social, political, and historical contexts. No background knowledge of Turkey or the Turkish language is required. (Same as GIST 310 and TURK 310.)

SLAV 316. The Peoples and Cultures of Southeastern Europe Through Film. 3 Credits. HL H
This course presents an introduction to the study of the culture of the South Slavs and other peoples of Southeastern Europe, combining background modules in geography, linguistic culture, history, folklore and contemporary cultural criticism with critical viewings of artistic films. The course serves as an introduction to humanistic inquiry about the peoples and cultures of Southeastern Europe.

SLAV 317. The Peoples and Cultures of Southeastern Europe Through Film, Honors. 3 Credits. HL H
This course is similar in content to SLAV 316, but with an additional honors project. Prerequisite: Eligibility for or admission to the university Honors Program.

SLAV 318. Jews and Slavs in Eastern Europe. 3 Credits. H
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups have shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. "Jews and Slavs" examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as JWSH 318.)

SLAV 320. Graphic Novels as Memory. 3 Credits. H
This course examines the interaction between literature and memory, in particular how authors respond to major historical events and contribute to shaping the collective memory of those events. Students will read graphic novels inspired by memories of the Holocaust and Communism. Through the visual and textual mix of the graphic novel, we will consider the impact of historical upheavals on the lives of ordinary individuals, drawing connections to contemporary national and global socio-political problems. Students will write on these topics in a variety of academic and non-academic genres, including: journal, article summary, synthetic essay, analytical essay, and reflection essay/creative writing. (Same as GIST 321.)

SLAV 322. Soviet and Post-Soviet Russian Cinema. 3 Credits. H
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences) and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. (Same as FMS 322.)

SLAV 330. Russian Business Culture. 3 Credits. H
The course examines how geography, history, and traditions of Russia impact its contemporary business practices. It addresses influence of Russian culture on business communication (verbal and nonverbal), relationship building, the role of manager, the functioning of teams, negotiation, and decision making. Topics also include cultural aspects of relationship between businesses and the state, entrepreneurialism, advertising, and consumerism. Students examine business practices that foreign businessmen encounter in Russia.

SLAV 340. The Language Landscape of Eastern Europe. 3 Credits. H/W
This course presents an introduction to the study of the culture of the South Slavs and other peoples of Southeastern Europe, combining background modules in geography, linguistic culture, history, folklore and contemporary cultural criticism with critical viewings of artistic films. The course serves as an introduction to humanistic inquiry about the peoples and cultures of Southeastern Europe.

SLAV 341. The Language Landscape of Eastern Europe, Honors. 3 Credits. HT H
Topics include current events, such as the resurgence of ethnonationalism, in which language and identity projects are aided by the internet and social media as well as case studies of emergent language-based nations. Students will gain an appreciation of the key role that languages play in creating a diverse Eastern Europe. This course will help prepare students for careers in international business, diplomacy, and politics, among others. This course is offered at the 300 and 500 level with additional assignments as the 500 level. Not open to students with credit in SLAV 341 or SLAV 540.

SLAV 370. War and Violence Russian Literature and Film. 3 Credits. H
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level.

SLAV 379. Topics in: _______. 1-3 Credits. H
Exploration of Slavic cultural forms such as literature, film, linguistics, arts, and press. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies.

**SLAV 494. Research Internship. 1-3 Credits. H**
Practical research experience in Slavic Studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or digital project. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Declaration of a Slavic Languages and Literatures major and permission of instructor.

**SLAV 495. Senior Capstone Seminar. 3 Credits. H**
The Senior Capstone Seminar offers undergraduate majors an opportunity to define, design and execute a substantial research/creative project under the mentorship of a faculty member. The project integrates the knowledge and skills gained in the coursework for the major and across the undergraduate curriculum, and demonstrates the students competence in the field of Slavic studies. Prerequisite: Slavic major status, senior standing.

**SLAV 499. Honors Thesis. 3 Credits. H/W**
Independent study and preparation of honors thesis. Required of all students working for a degree with honors in Slavic languages and literatures.

**SLAV 500. Russia Today. 3 Credits. H/W**
Study and discussion of contemporary problems in Russia and the former Soviet Union; readings in Russian, based on articles in newspapers, journals, etc. Conducted in Russian. Prerequisite: RUSS 208 or equivalent.

**SLAV 503. Post-Soviet Communication. 3 Credits. H**
The course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as COMS 503).

**SLAV 506. Masterworks of Polish and Czech Literature. 3 Credits. H/W**
A survey of West Slavic Literature and Civilization (Polish and Czech) from its beginnings to the present with emphasis on the most important trends: Renaissance, Romanticism, Positivism/Realism, Modernism and Avant-guard; Socialist realism, and Post-modernism. The course combines lecture, discussion and small group activities. Movie clips, recordings, and slides are used to reflect various cultural dimensions of West Slavic Civilization. No knowledge of Polish or Czech is required. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 706. Prerequisite: Any previous course in SLAV or RUSS.

**SLAV 508. South Slavic Literature and Civilization. 3 Credits. NW H/W**
An introductory survey of the literature and culture of the South Slavic peoples: the Slovenes, Croats, Bosniacs, Serbs, Montenegrins, Macedonians and Bulgarians. No language required.

**SLAV 510. The Russian Literary Genius. 3 Credits. H/W**
Topics and problems in Russian cultural history as treated in the masterworks of Russian literature. Readings selected from the works of Pushkin, Tolstoy, Dostoevsky, Pasternak, Bulgakov, Solzhenitsyn, and other great Russian writers. Readings in English, no prerequisite for non-Russian majors. Russian majors will do some of the readings in Russian.

**SLAV 516. Love, Lust and Liberty: Polish and Czech Film Adaptations. 3 Credits. H**
A comparative study of several most representative and best works of 19th- and 20th-century Polish and Czech fiction and drama and their film adaptations. By providing a broad cultural and historical background of the works, the course offers a thorough introduction to modern culture of Poland and the Czech Republic. Readings and discussions are in English, and no knowledge of Polish or Czech is required.

**SLAV 522. The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings. 3 Credits. H/W**
This course covers the main grammatical categories of Russian, including word formation, case, animacy, voice and reflexive verbs, imperatives, aspect, and word order. It is intended not only for linguists but anyone seeking a better understanding of the grammatical systems of Russian. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 722. Prerequisite: Two years of Russian language study or the equivalent.

**SLAV 526. The Pragmatics of Slavic Languages. 3 Credits. H**
This course introduces students to the study pragmatics: the relationship between utterances, the contexts in which these utterances were produced, and their reception and interpretation by the speakers. It investigates how grammatical choices on the sentence level (such as case, aspect, impersonalization, and more) affect and are influenced by the context in which utterances are produced, and how social variables such as gender, age, peer pressure, institutional power, and other factors are influential in production and interpretation of meaning. Other topics include extra-linguistic elements such as gesture and prosody, (im)politeness expressions, the pragmatics of narratives, and cross-cultural differences in contexts and reception of specific speech genres. Prerequisite: RUSS 508 or consent of instructor.

**SLAV 530. Introduction to Russian Poetry. 3 Credits. H/W**
An introduction to the principles of Russian versification and to masterpieces of Russian poetry selected from the 18th, 19th, and 20th centuries. Students will learn to read, translate, and analyze poems in terms of rhyme, meter, euphony, metaphor, and other prosodic features. Emphasis will be placed upon preparing students for independent study and appreciation of Russian poetry in the original. Prerequisite: Language proficiency.

**SLAV 532. Dostoevsky. 3 Credits. H/W**
A study of the life and works of Fyodor Dostoevsky. In translation. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 732. Prerequisite: Any previous course in SLAV or RUSS.

**SLAV 534. Tolstoy. 3 Credits. H/W**
A study of the life and works of Leo Tolstoy. In translation. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 734. Prerequisite: Any previous course in SLAV or RUSS.

**SLAV 540. The Language Landscape of Eastern Europe. 3 Credits. H**
Topics include current events, such as the resurgence of ethnonationalism, in which language and identity projects are aided by the internet and social media as well as case studies of emergent language-based nations. Students will gain an appreciation of the key role that languages play in creating a diverse Eastern Europe. This course will help prepare students for careers in international business, diplomacy, and politics, among others. This course is offered at the 300 and 500 level with
additional assignments as the 500 level. Not open to students with credit in SLAV 340 or SLAV 341.

SLAV 550. The Russian Novel in the Age of Realism. 3 Credits. H/W
This course traces the evolution of the Russian novel from its beginnings with Pushkin and through the novels of Turgenev, Goncharov, Dostoevsky, Tolstoy, and others. In translation. Russian majors will read most works in Russian. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 760. Prerequisite: Two years of Russian language or consent of the instructor.

SLAV 558. Readings in Slovene. 1-6 Credits. H
Individually tailored coursework in Slovene, from beginning to advanced level. Can include development of all four skills depending on the needs of the student. Prerequisite: Consent of instructor.

SLAV 564. The Woman Question in Nineteenth-Century Russian Literature. 3 Credits. H
An exploration of the "woman question" in nineteenth-century Russia as treated in literary texts. Authors to be included are: Tolstoy, Turgenev, Dostoevsky, Chekhov, as well as women writers such as Karolina Pavlova and Evgenia Tur, and prominent literary and social critics. Readings in English. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 764. Prerequisite: Any previous course in SLAV or RUSS.

SLAV 567. Post-Soviet Literature. 3 Credits. H
A survey of post-Soviet literary art, from approximately 1985 to the present, dealing with a range of subjects including the emergence of literature from the strictures of socialist realism and its relationship to concepts of postmodernism and postcolonialism. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 767. Prerequisite: Any previous course in SLAV or RUSS.

SLAV 570. War and Violence Russian Literature and Film. 3 Credits. H
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level.

SLAV 572. Russian and East European Science Fiction. 3 Credits. H
A comprehensive introduction to Russian, Soviet, and East European science fiction as it emerged in dialogue with utopian thinking, fantasy writing, and other cultural trends, and to how it responded to wider social contexts. Particular emphasis will be placed on the unique features of the Slavic science fiction tradition and its relationship to the dominant Western forms of the genre. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 772. Prerequisite: Any previous course in SLAV or RUSS.

SLAV 600. Biography of a City: _____. 3 Credits. H/W
Examination in depth of the historical, social, intellectual, and artistic development of one or more major Slavic urban centers.

SLAV 626. The Cultural Impact of Ottoman Empire on the South Slavs. 3 Credits. H
An examination of the cultural development of the South Slavs in the context of the Ottoman invasions and subsequent rule (14th-19th century), focusing on the frontier aspects of the Balkans, military culture, religion, economics and banditry, as well as other aspects of material and folk culture. No language requirement. Prerequisite: SLAV 316 or SLAV 508; or consent of instructor.

SLAV 630. Slavic Folklore. 3 Credits. H/W
Introduction to the phenomena and problems of Slavic folklore. Prerequisite: Two years of Russian on the college level.

SLAV 664. Soviet Russian Literature: 1930-1990. 3 Credits. H/W
Readings in the period, in all genres. In translation; no prerequisite for non-Russian majors. Russian majors are required to have senior standing and read most works in Russian.

SLAV 668. Nabokov. 3 Credits. H/W

SLAV 675. Readings in Slavic Studies (English). 1-3 Credits. H
Directed readings on Slavic culture in English. For non-majors. Prerequisite: Instructor permission.

SLAV 678. Readings in Slavic Linguistics. 1-6 Credits. H/W
Directed individual readings on various topics concerning Slavic linguistics. Prerequisite: Proficiency in at least one Slavic language, and consent of instructor.

SLAV 679. Topics in: _____. 1-6 Credits. H
Intensive study of a selected topic from Slavic languages, literatures, linguistics, or pedagogy.

SLAV 706. Masterworks of Polish and Czech Literature. 3 Credits.
A survey of West Slavic Literature and Civilization (Polish and Czech) from its beginnings to the present with emphasis on the most important trends: Renaissance, Romanticism, Positivism/Realism, Modernism and Avant-guard; Socialist realism, and Post-modernism. The course combines lecture, discussion and small group activities. Movie clips, recordings, and slides are used to reflect various cultural dimensions of West Slavic Civilization. No knowledge of Polish or Czech is required. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 506.

SLAV 710. Introduction to Slavic Languages and Linguistics. 3 Credits.
The Slavic languages and peoples, including briefly: their origin, prehistory, and early culture. Basic linguistic methodology as applied to Slavic material from the beginnings of Slavic linguistics to the present.

SLAV 712. Russian Poetry: Twentieth Century. 3 Credits.
Readings from the works of the major poets, in Russian. Prerequisite: Language proficiency.

SLAV 722. The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings. 3 Credits.
This course covers the main grammatical categories of Russian, including word formation, case, animacy, voice and reflexive verbs, imperatives, aspect, and word order. It is intended not only for linguists but anyone seeking a better understanding of the grammatical systems of Russian. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 522. Prerequisite: Two years of Russian language study or the equivalent.

SLAV 723. Soviet and Post-Soviet Russian Cinema. 3 Credits.
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences)
and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. Not open to students with credit in SLAV 322/FMS 322. (Same as FMS 722.) Prerequisite: Graduate standing or instructor permission.

SLAV 726. Chekhov. 3 Credits.
A study of the life and works of Anton Chekhov. Open to senior Russian majors and graduate students. Readings in Russian. Prerequisite: Three years of Russian or the equivalent.

SLAV 732. Dostoevsky. 3 Credits.
A study of the life and works of Fyodor Dostoevsky. In translation. No prerequisite. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 532.

SLAV 734. Tolstoy. 3 Credits.
A study of the life and works of Leo Tolstoy. In translation. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 534.

SLAV 740. Introduction to Graduate Studies in Slavic Languages and Literatures. 3 Credits.
This course is an introduction to the skills required of students doing graduate degrees in Slavic languages and literatures; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to 10-page conference paper.

SLAV 748. Old Church Slavic. 3 Credits.
A course in the first written language of the Slavs (9-12 centuries AD), with discussion of Indo-European, Baltic and Common Slavic background. Prerequisite: Two years of Russian or the study of another ancient Indo-European language.

SLAV 754. Seminar in Slavic Verbal Aspect. 3 Credits.
A detailed examination of the morphology and usage of verbal aspect in Russian and other Slavic languages, which is a particularly troublesome area for foreign learners of Russian. Prerequisite: SLAV 522.

SLAV 760. The Russian Novel in the Age of Realism. 3 Credits.
This course traces the evolution of the Russian novel from its beginnings with Pushkin and through the novels of Turgenev, Goncharov, Dostoevsky, Tolstoy, and others. In translation. Russian majors will read most works in Russian. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 550. Prerequisite: Two years of Russian language or consent of the instructor.

SLAV 762. Russian Theatre and Drama from Stanislavski and Chekhov to the Present. 3 Credits.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as THR 725.)

SLAV 764. The Woman Question in Nineteenth-Century Russian Literature. 3 Credits.
An exploration of the “woman question” in nineteenth-century Russia as treated in literary texts. Authors to be included are: Tolstoy, Turgenev, Dostoevsky, Chekhov, as well as women writers such as Karolina Pavlova and Evgenia Tur, and prominent literary and social critics. Readings in English. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 564.

SLAV 767. Post-Soviet Literature. 3 Credits.
A survey of post-Soviet literary art, from approximately 1985 to the present, dealing with a range of subjects including the emergence of literature from the strictures of socialist realism and its relationship to concepts of postmodernism and postcolonialism. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 567.

SLAV 772. Russian and East European Science Fiction. 3 Credits.
A comprehensive introduction to Russian, Soviet, and East European science fiction as it emerged in dialogue with utopian thinking, fantasy writing, and other cultural trends, and to how it responded to wider social contexts. Particular emphasis will be placed on the unique features of the Slavic science fiction tradition and its relationship to concepts of postmodernism and postcolonialism. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 572.

SLAV 804. Comparative Slavic Linguistics. 3 Credits.
An examination of the development of the Slavic languages from the Common Slavic period to the present, proceeding from Indo-European. Prerequisite: Graduate standing in Russian.

SLAV 824. Proseminar in Methods of Teaching Slavic Languages I. 1-3 Credits.
Required for all teaching assistants, assistant instructors engaged in the teaching of Slavic languages and persons planning for careers in teaching Slavic languages. Combines discussion of theoretical teaching concepts with practical solution of problems arising concurrently in Slavic language courses. Students enrolled for two or three hours will study advanced Slavic grammar topics and stylistics as they apply to the teaching of Slavic languages.

SLAV 899. Ph.D. Seminar Slavic Linguistics. 3 Credits.
Topics in Slavic linguistics. Content will vary. May be repeated. Prerequisite: Ph.D. student in Slavic Languages and Literatures.

SLAV 999. Dissertation. 1-9 Credits.
Dissertation Hours. Graded on a satisfactory progress/limited progress/no progress basis.

Slavic, German, and Eurasian Studies Courses

TURK 104. Elementary Turkish I. 5 Credits. U F1
Basic language acquisition, including essentials of grammar, speaking, and writing standard (Osmanli) Turkish.

TURK 108. Elementary Turkish II. 5 Credits. U F2
Continuation of TURK 104. Prerequisite: TURK 104.

TURK 177. First Year Seminar: . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Turkish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**TURK 204. Intermediate Turkish I. 3 Credits. U F3**
Second-year course in Turkish language with emphasis on reading, composition, and conversation. Prerequisite: TURK 108.

**TURK 208. Intermediate Turkish II. 3 Credits. U F4**
Continuation of TURK 204. Prerequisite: TURK 204.

**TURK 310. Modern Turkey: Culture and Society. 3 Credits. H/W**
As a country that is geographically in the middle of a strategic global region, a key NATO ally, a candidate for EU membership, and representing a mix of democratic traditions, military coups, and authoritarian leaders combined with periods of rapid and drastic socioeconomic transformation, for one reason or another, Turkey seems to always be a country under the spotlight. This course is designed to give an overview of Modern Turkey and familiarize the student with its history, society and culture. Topics to be covered include the early republican period, ethnic and religious minorities, religion and secularism, music, cuisine, women, gender and sexuality, religious and national holidays, cinema and TV, among others. The primary purpose of this course is to help students develop necessary analytical and interpretive skills to identify, compare, and analyze Turkish cultural practices, products and perspectives as they relate to basic social, political, and historical contexts. No background knowledge of Turkey or the Turkish language is required. (Same as GIST 310 and SLAV 310.)

**TURK 314. Turkish Culture Through Film and Literature. 3 Credits. H**
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey’s geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level.

**TURK 514. Turkish Culture Through Film and Literature. 3 Credits. H**
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey’s geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: REES 550 or permission of instructor.

**TURK 675. Readings in Turkish: _____ 3 Credits. U FP**
Prerequisite: Two years of college-level Turkish and consent of instructor. May be repeated for credit if content varies.

**Slavic, German, and Eurasian Studies Courses**

**UKRA 104. Elementary Ukrainian I. 5 Credits. U F1**
First semester. Five hours per week of recitation and drill in the spoken language. Essentials of grammar, practice reading, writing and speaking Ukrainian.

**UKRA 108. Elementary Ukrainian II. 5 Credits. U F2**
Second semester. Continuation of UKRA 104. Prerequisite: UKRA 104.

**UKRA 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Ukrainian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**UKRA 204. Intermediate Ukrainian I. 3 Credits. U F3**
Second year course in Ukrainian language with emphasis on reading, composition, and conversation. Prerequisite: UKRA 108.

**UKRA 208. Intermediate Ukrainian II. 3 Credits. U F4**
Second semester. Continuation of UKRA 204. Prerequisite: UKRA 204.

**UKRA 504. Advanced Ukrainian I. 3 Credits. H**
This is a practical Ukrainian language course that will help students acquire advanced-level proficiency in the skills of speaking, reading, writing, and listening. Cultural understanding and pragmatic competence are given special emphasis. Taught in Ukrainian. Designed for students who have had two or more years of Ukrainian language. Prerequisite: UKRA 208 or consent of instructor.

**UKRA 508. Advanced Ukrainian II. 3 Credits. H**
This is a practical Ukrainian language course that will help students acquire advanced-level proficiency in the skills of speaking, reading, writing, and listening. Cultural understanding and pragmatic competence are given special emphasis. Taught in Ukrainian. Designed for students who have had two-and-a-half or more years of Ukrainian language. Prerequisite: UKRA 504 or consent of instructor.

**UKRA 675. Readings in Ukrainian Language. 1-6 Credits. H FP**
Directed individual readings on various topics concerning the Ukrainian language. Prerequisite: Two years of Ukrainian.

**Sociology Courses**

**SOC 104. Elements of Sociology. 3 Credits. SC S**
The study of social life, including how human groups are organized, how they change, and how they influence individuals. Consideration is given to a variety of human organizations and social institutions and how these groups and institutions both determine, and are determined by, human beings. This course may not be taken for credit by those who have taken SOC 304.

**SOC 105. Elements of Sociology, Honors. 3 Credits. SC S**
The study of social life, including how human groups are organized, how they change, and how they influence individuals. Consideration is given to a variety of human organizations and social institutions and how these groups and institutions both determine, and are determined by, human beings. Open only to students on dean's honor roll or enrolled in Honors Program, or consent of instructor. May not be taken by those who also have credit for SOC 304.

**SOC 130. Comparative Societies. 3 Credits. NW S/W**
Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western civilization.

**SOC 131. Comparative Societies, Honors. 3 Credits. NW S**
Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western Civilization. Open only to students enrolled in the University Honors program or by consent of instructor. May not be taken by students who have credit in SOC 130.

**SOC 150. Self and Society. 3 Credits. SI S**
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. May not be taken by anyone who has completed SOC 305 or its equivalent.

SOC 160. Social Problems and American Values. 3 Credits. SF S
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. May not be taken by anyone who has already completed SOC 306 or its equivalent.

SOC 161. Social Problems and American Values, Honors. 3 Credits. SF S
Explores competing explanations for the causes of, and cures for, the enduring problems of American society. Critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course may not be taken for credit by those who have taken SOC 160 or SOC 306. Open only to students admitted to the University Honors Program or by consent of instructor.

SOC 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Sociology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

SOC 199. Data I: Dealing with Data. 3 Credits. S
Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to derive knowledge and insights from data. This course teaches students the core concepts of inference and computing, working with real behavioral, economic, geographic, physical, social, and text data. Students obtain basic statistics training from a computational perspective using simulation to answer questions, explore problems, and delve into social issues surrounding data analysis such as privacy and design. (Same as ECON 199, POLS 199 and PSYC 199.)

SOC 200. Sociological Introduction to: _____ 3 Credits. S
A sociological introduction to selected topics of current interest in Sociology. Please refer to the schedule of classes for current topics offered. Check the Sociology Department website for course descriptions of current special topics course offerings. May be repeated for credit as topics vary.

SOC 220. Sociology of Families. 3 Credits. SC S
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. May not be taken by anyone who has already taken SOC 308 or its equivalent.

SOC 230. Introduction to Social Inequality in the U.S.. 3 Credits. S
By the end of this course, students will be able to describe the major dimensions of inequality in the U.S. (including race, class, and gender), understand the structural basis of inequality, critically assess how inequality exists in major social institutions, and understand how inequalities in race, class, and gender shape social interaction.

SOC 280. Introduction to Social Research. 3 Credits. S
An introduction to the nature and methods of social research, including both qualitative and quantitative approaches. Topics may include: hypothesis formulation and testing; how to design a research project, collect and analyze data; elementary statistical procedures; and ethical issues. Prerequisite: Six hours of Sociology credit, including SOC 104/ SOC 105/SOC 304. A minimum GPA of 2.3 in all Sociology courses is strongly recommended for students planning to enroll in this course.

SOC 295. Study Abroad Topics in: ____. 1-6 Credits. S
This course is designed for the study of special topics in Sociology at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor.

SOC 304. Principles of Sociology. 3 Credits. SC S
An introduction to sociological concepts, methods, and substantive findings more intensive than that provided in SOC 104. Students may take this course in lieu of SOC 104 to satisfy requirements for the major and the minor. This course may not be taken for credit by those who have taken SOC 104.

SOC 305. Principles of Self and Society. 3 Credits. SI S
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. This course provides a more intensive coverage of the subject matter than that provided in SOC 150. May not be taken by anyone who has already taken SOC 150 or its equivalent.

SOC 306. Principles of Social Problems. 3 Credits. SF S
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course provides a more intensive coverage of the subject matter than that provided in SOC 160. May not be taken by anyone who has already completed SOC 160 or its equivalent.

SOC 308. Principles of Family Sociology. 3 Credits. SC S
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. This course provides a more intensive coverage of the subject matter than that provided in SOC 220. May not be taken by anyone who has already taken SOC 220 or its equivalent.

SOC 312. Population and Society. 3 Credits. S
An examination of the causes and consequences of population change in the United States and around the world with special focus on the impact of changes in populations on social institutions. We use social demographic perspectives to explore patterns of birth, illness, death, population concentration, population migration and immigration, and changes in these over time. Prerequisite: One of the following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220.

SOC 320. Organizations in Society. 3 Credits. S
An analysis of complex organizations in modern societies. Attention is given to the rise of bureaucracy in business and government; the way organizations influence and respond to their social cultural environments; and the various roles that individuals play in organizations. Prerequisite: A principal course in sociology.
SOC 321. Wealth, Power, and Inequality. 3 Credits. S
This class focuses on economic inequality and the political and social forces that create and sustain it in the United States and internationally. The variables of race, ethnicity, status, and gender are analyzed as they relate to the differences in the distribution of wealth and power, and attention is paid to how these multiple variables shape opportunities.

SOC 324. Being Deviant in America. 3 Credits. S
In this course students will study traits, conditions, actions, and behaviors that violate social norms and elicit negative societal reactions. This includes the social, cultural, and individual factors that explain deviance; motivations behind deviant behavior; and efforts by society to control deviants. In short, you will undertake a sociological examination of those on the margins of society and societal efforts to “deal with” them. (Same as AMS 324.)

SOC 326. Health, Gender, and Society. 3 Credits. S
Comparative examination of the health status of men and women in relation to key elements of contemporary societies, including not only medicine and health care services, but also systems of social inequality and stratification, cultural constructions of gender, and social policies. Emphasis will be placed on the U.S.; however, the course also will provide international comparisons and an overall global context.

SOC 330. American Society. 3 Credits. S
The social structure and organization of American society with special reference to long-term and recent social changes. (Same as AMS 330.) Not open to students with credit for SOC 132. Prerequisite: A principal course in sociology.

SOC 332. The United States in Global Context. 3 Credits. S
Examines the influence abroad of US culture, policies and practices and the impact of other countries on US culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as AMS 332).

SOC 335. American Society, Honors. 3 Credits. SC S
The social structure and organization of American society with special reference to long-term and recent social changes. Not open to students who have credit for AMS 330 or SOC 330. Open to students in the University Honors Program, students on the dean’s honor roll, and by permission of the department.

SOC 340. The Community. 3 Credits. S
Structures, functions, and processes of change in local communities; interrelations of towns and small cities with rural areas and metropolitan centers with their hinterlands. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308.

SOC 341. Urban Sociology. 3 Credits. S
Examination of the process of urbanization in modern societies, including the size, growth, functions, and ecology of cities and systems of cities; such urban social institutions as the economy, politics, and the family; and major contemporary urban policies and problems. Each topic will be analyzed from several sociological perspectives. Prerequisite: A principal course in sociology.

SOC 342. Sociology of Immigration. 3 Credits. S
International migration reshares politics, economics, social relations, and racial/ethnic identities. Using the United States and other countries as case studies, we explore the variations among immigrant groups and their experiences in social institutions such as the family, religion, education, labor market, and government. We consider the influence of national origin, gender, class, and culture on immigration and reception experiences, as well as issues of assimilation, transnationalism and identity. Prerequisite: SOC 104.

SOC 343. American Racial and Ethnic Relations. 3 Credits. S
Race is an ever-present feature of American life. It is a polarizing topic in our politics and a prism through which we perceive social differences. In this course, we examine the major institutions and societal forces that shape the reality of race in thought and in material reality. Moving from past to present, we consider how slavery, segregation, the urban ghetto, and mass incarceration contribute to the social construction of race. By reviewing traditions of research on race in the U.S. and abroad, students will analyze how legacies of race and racism in the U.S. continue to influence our identities, culture, politics, and relations of power and inequality.

SOC 350. Transnational Migration. 3 Credits. S
A historically-conscious, sociological exploration of political, cultural and health issues involved in transnational migration, this course invites the student to situate current transnational migration within specific historical social processes within both postcolonial Africa and the postcolonial West. The course examines parallels from the experience of migration in other parts of the world, specifically Asia and Latin America. The aim is an understanding and appreciation of both the interconnectedness of the world’s peoples and, crucially, of the world’s histories.

SOC 352. Sociology of Sex Roles. 3 Credits. S
An examination of sex roles, sex stereotypes, and major issues involved in sex-role research. Emphasizes explanations of inequality between American males and females in the family and at work. The course is designed around lectures, panels, workshops, and films.

SOC 355. Protest, Activism, and Dissent. 3 Credits. S
This course explores theories and concepts related to collective behavior and social movements. We will examine why people protest, what strategies and tactics activists use and why, and the conditions under which protest succeeds or fails. We will focus on contemporary social movements in the United States, examining dissent and activism of both the political left and right.

SOC 360. Sociology of Social Control. 3 Credits. S
This course examines changing methods of social control in society. Social control can be formal (e.g., law and criminal justice system) or informal (e.g., families, peer groups). This course examines the ways that, as a society, attempt to respond to matters such as deviance, illness, crime, and poverty. This course will survey the many varieties of formal and informal social control faced by individuals in society, and the ways in which individuals resist and conform to various disciplinary and control regimes. Prerequisite: a principal course in Sociology.

SOC 363. The Sociology of Culture. 3 Credits. S
This class explores the role of cultural forms (music, film, fashion, food, and art) in everyday life. Throughout the semester, we will critically engage with core topics in cultural sociology, including, how culture reflects the social order, the role of culture in reproducing race, gender, and class inequality, the processes by which cultural forms are socially created and received, and the relationship between culture and historical change.

SOC 364. Society, Popular Culture, and the Media. 3 Credits. S
An overview of sociological theory and research on culture created and distributed through the mass media and its role in shaping our common sense interpretations of our daily lives. Topics include the social organization of the media, the relation between popular culture and the media, themes communicated in various elements of popular culture, and how various groups interpret cultural messages and incorporate them in their lives.
SOC 380. Elementary Statistics and Data Analysis. 3 Credits. S
An introduction to social scientific data analysis, with an emphasis on
descriptive and inferential statistics. Specific topics include sampling,
measures of association and correlation, significance testing, the logic
of causal inference, the use of computer programs for data analysis,
multivariate analysis, and the critical evaluation of social science research
findings. Prerequisite: MATH 101.

SOC 385. Environmental Sociology. 3 Credits. S
This course invites students to study society and its impact on the
environment. Environmental problems are social problems. This course
will address such items as social paradigms, theories, inequalities,
movements, and research. (Same as EVRN 385.)

SOC 386. Sociology of Global Food. 3 Credits. U
The Sociology of Global Food offers a critical examination of the
global food system since the Industrial Revolution. Topics include the
industrialization of agriculture, sustainable agriculture, and the role of
food and agriculture in organizing society. This course discusses the
emergence of current debates around food and agriculture including food
activism, technological developments, human/environmental relationships,
and labor issues. There is a lab component to this course. (Same as
EVREN 386.) Prerequisite: Junior standing.

SOC 400. Sociology Special Topics: ______. 3 Credits. S
The study of selected topics of current interest in Sociology. Check the
notes section in the schedule of classes for the description of this course.
May be repeated for credit as topics vary.

SOC 401. Sociology Special Topics, Honors: ______. 3 Credits. S
The study of selected topics of current interest in Sociology. Contact
department for course descriptions of current offerings. May be repeated
for credit as topics vary. Open only to students in the University Honors
Program, or consent of the instructor. Prerequisite: Enrollment in the
University Honors Program, or consent of the instructor.

SOC 405. Sociology of Aging and the Life Course. 3 Credits. S
A survey of theory and research in social gerontology, giving primary
attention to aging and the aged as affected by social organization,
including such social institutions as familial, economic, political, and health
care; organizational processes such as social stratification; and living
environments including community and housing. In these contexts, certain
demographic, cross-cultural, social-psychological, and physiological
aspects of aging will also be considered.

SOC 410. Sociology of Death and Dying. 3 Credits. S
The primary purpose of this course is to provide an understanding of
the ways in which the experiences of death and dying are shaped by
social structures. This course will also acquaint the student with the social
implications of death and dying and to examine death-related behaviors,
both individual and collective, through which these aspects of life are
experienced. This course covers theoretical, practical, cross-cultural and
historical aspects of death and dying. Social, psychological, biomedical,
economic and legal issues surrounding death and dying are explored.
Students examine their own ideas, feelings and attitudes towards death
and dying, and reflect on the origins and significance of those beliefs.
Prerequisite: Junior or Senior Standing.

SOC 424. Sociology of Health and Medicine. 3 Credits. S
This introductory course in medical sociology examines how social factors
influence health and the organization of medical services. Students
explore the distribution and experiences of illnesses across key social
categories (e.g., gender, social class, etc.) The course also addresses
contemporary issues in health and medicine, such as how health care
systems vary cross-nationally, the training of health care workers, patient-
physician relationships, and the use of medical technologies.

SOC 425. Sociology of Global Health. 3 Credits. S
The course explores social dimensions of health throughout the world.
It examines how infectious and degenerative diseases have reflected
and affected the demographics, social structure, economy, and culture of
societies, and how societies have mobilized their political, economic,
social and cultural resources to deal with health challenges. It focuses in
particular on the role of socioeconomic inequality-both within and across
countries-in shaping the emergence, spread, prevention, and treatment of
disease. Prerequisite: A sociology course at the 100 or 200-level.

SOC 427. School and Society. 3 Credits. S
This course examines education as a social institution and the reciprocal
relationship between schools and society. It focuses particularly on the
relationship between education and inequality and on education in the
U.S., but also includes international comparisons. Prerequisite: Junior or
Senior standing or permission of instructor.

SOC 430. Cross-Cultural Sociology. 3 Credits. W
A systematic introduction to cross-cultural issues from the standpoint of
sociology, designed to acquaint students with the full range of substantive
and methodological issues that arise in comparative sociological inquiry,
with a primary focus on non-western societies. Specific topics to be
addressed may include war and peace, stratification and inequality, race
and ethnicity, and political authority and power, all viewed in the light of
cross-cultural research and theory.

SOC 436. Ethnicity in the United States: ______. 3 Credits. S
An examination of the history, sociology, and culture of U.S. ethnic
categories (e.g., American Indians, Latinos, Asian Americans, Jewish
Americans, Irish Americans). The specific group studied varies from
semester to semester. Course may be repeated for credit with different
topics. (Same as AMS 436.)

SOC 437. Global Ethnic and Racial Relations. 3 Credits. W
This course uses written and visual materials to examine race, ethnicity,
and nationalism around the world. Emphasis is on ways in which social
forces, gender roles, sexual practices, cultural patterns, and political
organization work together to construct and reinforce ethnic, racial, and
national identities, boundaries, movements, and conflicts. Historical and
contemporary comparisons are made between the U.S. and countries in
Africa, Asia, the Americas, the Caribbean, Europe, the Pacific Islands,
and the Middle East. (Same as AAAS 437 and AMS 437.)

SOC 450. Gender and Society. 3 Credits. S
An overview of sociological theory and research on the social practices
constructing men and women as "opposites" and creating systematic
inequality between them in class-, race-, and nation-specific ways. We
consider arguments and evidence that gender is something we are,
something we do, a part of every social institution, and a major aspect of
how we are organized as a society.

SOC 454. Women and Work. 3 Credits. S
Sociological investigation of women's changing relationship to paid
and unpaid labor in the economy and the family. Several theories are
compared in these contexts: Characteristics of employed women,
including occupational distribution and pay; women's experiences in
"traditional" and "nontraditional" occupations, including professions and
management; socialization and education for employment; integration
of marriage, housework, and child care; anti-discriminatory laws and
policies. Prerequisite: A principal course in Sociology.

SOC 455. Society and the Economy. 3 Credits. S
An analysis of how economic organizations such as firms and markets
are embedded within broader social structures with attention being
given to such topics as: world economic crises and their social bases;
capitalist and socialist economies; primitive and advanced economic
SOC 461. Competing Perspectives on Crime and Deviance. 3 Credits. S
Advanced analysis of the social organization and cultural processes of
device, including crime, violence, and social control. The course
surveys and applies sociological, as well as criminological, theoretical
perspectives in deviance. Particular attention is paid to the economic,
gender, sexual, and racial inequalities and diversity of experience that
shapes, and is shaped by, deviance in American society.

SOC 462. Violence and Society. 3 Credits. S
This class applies a sociological perspective to the various forms
of violence that beset modern society. We will consider a range of
behavior and practices commonly considered violent, including suicide,
harassment, sexual assault, street crime, gun violence, terrorism,
and genocide. We will address the extent, impact, and sociological
significance of these forms of violence. We will also consider the failures
and successes of various organizational, institutional, and legal solutions
to violence.

SOC 463. Sociology of Surveillance. 3 Credits. S
An overview of social science theory and research on the practices for
keeping close watch on people. Surveillance strategies are adopted in the
interests of security, governance, and commerce, but also for personal
care, empowerment, resistance, and even play. We consider a host
of social, political, ethical, and legal questions related to long-standing
notions of privacy, civil liberties, and personal autonomy.

SOC 480. Sociological Theory. 3 Credits. S
An introduction to the principal texts in sociological theory and the ideas
that made them important. Primary materials are emphasized, ranging
from medieval to the current age. The goal of the course is to show
continuity and change in the theoretical tradition of sociology, and to
demonstrate the continued importance of classical ideas. Prerequisite:
SOC 104 or SOC 105 or SOC 304 or permission of instructor.

SOC 490. Internship in Sociology. 3 Credits. S
The purpose of this course is to encourage students to think sociologically
about social issues by working as volunteer interns for non-profit
community or campus organizations. Enrollment must be approved by a
faculty mentor and the departmental Undergraduate Studies Committee.
For additional information go to the Sociology department website.
Prerequisite: 21 credits in sociology with a 3.0 GPA and permission of the
instructor.

SOC 495. Study Abroad Advanced Topics in: _____. 1-6 Credits. S
This course is designed for the study of special topics in Sociology at the
junior/senior level. Course work must be arranged through the Office of
KU Study Abroad. May be repeated for credit if content varies. No more
than 6 hours of SOC 295 or SOC 495 may count towards the Sociology
major or minor.

SOC 499. Honors Course. 3-6 Credits. S
Intensive study and research under faculty direction including the writing
of a thesis. Enrollment may be split between two semesters, but no
grade will be given until completion of the thesis. Admission to honors
candidacy is open only to majors who have shown a marked capability for
independent study and have completed either SOC 280 or SOC 480.

SOC 525. Sociology of Work. 3 Credits. S
A consideration of problems in the conceptual and empirical definition
of occupations and professions. It will involve the examination of the
process of professionalization, the differentiation and integration of labor,
career patterns, the work situation, the study of leisure, and the social
consequences of changes in occupations and professions. Prerequisite: A
principal course in sociology.

SOC 529. Globalization. 3 Credits. S
Addresses sociological aspects of the growth of transnational economic,
cultural, institutional, and political interconnections, the freer and
faster movement of goods, images, ideas, people, and institutional
forms across national borders, and the consequences and problems of
these processes. The focus is on recent (later 20th century to the
present) global restructuring in the context of historical shifts in capitalist
development. (Same as GIST 529.) Prerequisite: SOC 104 or GIST 220.

SOC 532. Sociology of the Middle East. 3 Credits. NW S
The sociological analysis of social, historical, and contemporary issues
pertaining to the Middle East and to relations between the Middle
East and other regions of the world. We use sociological theoretical
perspectives to address such topics as nationalism and identity; religion,
race and ethnicity; gender, socioeconomic development, and sociopolitical
and economic relations with the United States. Prerequisite: One of the
following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220.

SOC 560. Law and Criminal Justice. 3 Credits. S
An analysis of the sources and procedures of development of the criminal
law and analysis of the practices of law enforcement, prosecution, and
judicial action, principally in the United States. Prerequisite: A principal
course in sociology.

SOC 600. Sociological Perspectives: _____. 3 Credits. S
Analysis of various sociological perspectives and/or the application of
various perspectives to a given social phenomenon. May be repeated as
topics vary. Prerequisite: A principal course in sociology.

SOC 617. Women and Health Care. 3 Credits. S
Critical analysis of the current health status and health needs of women,
exploring how lay, medical, and research assumptions have influenced
both the clinical/scientific literature and the organization of health services.
The course includes a focus on historical patterns in women's health
issues and social change actions. (Same as HP&M 620.)

SOC 619. Political Sociology. 3 Credits. S
The study of politics and society in the United States and abroad,
including power and authority-who has them, how are they acquired,
when are they challenged; state formation, the expansion of central
governments, and patterns of political domination; political and nationalist
movements; the politics of gender, class, race, and ethnicity; political
culture and ideology; ethnic and nationalist conflict; revolution and political
change. Prerequisite: A principal course in sociology or consent of
instructor.

SOC 625. Work Roles in Health and Medicine. 3 Credits. S
A sociological examination of medical and health-care occupations and
professions. The selection of careers, socialization processes, and the
development of professional identities. Interactions among practitioners,
health-care teams, consumers, and professional and community power
structures. Control and coordination of work. The impact of increasing
specialization and changes in the demographic makeup of client and
professional populations. Coping with medical failure and other problems
inherent in medical and health-care work.

SOC 629. Sociology of Sport. 3 Credits. S
Examination of organized sport as a social institution and its relation
to other social institutions (e.g., political, economic, educational, and
religious), with special emphasis on American society. Analysis of the
social correlates of sports participation and a consideration of the role
of sport in social change. Prerequisite: A principal course in American
studies or sociology, or consent of instructor.
SOC 640. Islam and Politics. 3 Credits. W
This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as GIST 667 and POLS 667.) Prerequisite: A principal course in sociology, POLS 150, or consent of instructor.

SOC 660. Sociology of Mental Illness. 3 Credits. S
The sociology of mental illness concerns itself with the study of mental disorders as social phenomena. The course will be concerned with (1) the social factors and social processes that contribute to mental disorders, (2) the social definitions of mental disorders as forms of social deviance, (3) the social facets in the treatment and care of disordered persons, and (4) the social aspects of the prevention of mental disorders. Prerequisite: A principal course in sociology.

SOC 662. Corrections. 3 Credits. S
Legal systems for handling offenders and the development of the laws creating these systems. Emphasis on the various parts (police, courts, probation, penal institutions, and parole) of the system will vary. Prerequisite: A principal course in sociology.

SOC 698. Individual Undergraduate Research. 1-12 Credits. S
Library or field research either as part of an ongoing project or as an independent study project. One to twelve hours. May be taken from one or more faculty during one or more semesters, the total hours not to exceed 12. No more than 3 credits may be applied to satisfy requirements for the sociology major. Prerequisite: Two courses in sociology and consent of instructor.

SOC 707. Seminar in Historical Sociology. 1-4 Credits.
Each seminar will explore problems at the intersection of sociology and history. Topic, instructors, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics and students may take more than one topic. No prerequisite.

SOC 722. Sociology of Gender. 3 Credits.
This course will offer a range of sociological perspectives on the role of gender in society. The particular substantive focus will vary each semester to allow flexibility for in-depth analysis of gender relationships in such areas as politics, health and aging, and work.

SOC 760. Social Inequality. 3 Credits.
A comprehensive review of the major theoretical and empirical approaches used in the study of institutionalized social inequality. Reference to the origins, forms, cultural and structural variations and their changes over time, consequences and ideologies of social inequality. Prerequisite: A distribution course in sociology.

SOC 767. Multidisciplinary Perspectives on Gerontology and Aging. 3 Credits.
A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, COMS 787, and PSYC 787.)

SOC 780. Advanced Topics in Sociology: _____ 3 Credits.
Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics.

SOC 802. Classical Social Theory. 3 Credits.
This seminar will focus on the later 19th and early 20th century "theories of society," addressing the origins and developmental tendencies of Western modernity and their relation to premodern social orders. Primary texts of the major theorists (e.g. Marx, Durkheim, Nietzsche, Weber, Simmel, and Mead) will be studied in historical context. The tradition's analytical and critical resources and problematic features will also be explored. Finally, the connections between this tradition and contemporary sociological approaches will be explored.

SOC 803. Issues in Contemporary Theory: ______. 3 Credits.
A critical examination of recent trends and debates in sociological theory. This is a thematically oriented course in which classical as well as contemporary views will be explored. Attention will be directed to theoretical issues under discussion in fields such as symbolic interactionism, semiology, ethnmethodology, critical theory, macrosociology, and others.

SOC 810. Sociological Inquiry. 3 Credits.
The goals of this course are to understand the characteristics of sociologically interesting and rigorous research and to design a research proposal that shares those characteristics. Students will read books and articles representing a variety of research approaches (ethnographies, surveys, interviews, document analyses, historical studies, comparative research, etc.), and will analyze those approaches in order to understand their theoretical and methodological significance. Students will also distribute their proposals to the other students in the course for comment and critique. Assignments will include a research proposal such as a draft for an external grant proposal, M.A. thesis proposal for students at the M.A. level or a dissertation proposal draft for students at the Ph.D. level. Course may be repeated for credit toward graduate degree. Prerequisite: The course is open only to students enrolled in the Sociology graduate program.

SOC 811. Sociological Research. 3 Credits.
The use of the scientific method to study social phenomena including: the formulation and testing of hypotheses; techniques for collecting data; measuring social variables; interpreting research findings; the relationship of theory and facts. Course may be repeated for credit toward graduate degree. Prerequisite: The course is open only to students enrolled in the Sociology graduate program.

SOC 812. Analytic Methods in Sociology. 3 Credits.
Consideration of quantitative methods of analysis including both parametric and non-parametric techniques. Prerequisite: A course in statistics.

SOC 820. Political Sociology. 3 Credits.
This course offers an overview of the different perspectives and key arguments comprising the field of political sociology, including both classical and contemporary readings. The issues studied in this field include the nature of power and the nature of the state, relations between state and society, and social movements, political organization and civic participation, political culture, voting behavior, comparative political systems, warfare, democracy and economic development, citizenship, nationalism, revolutions, and globalization.

SOC 824. Health and Social Behavior. 3 Credits.
This course provides students with an analytic understanding of the organization, professional, and interpersonal behavior that characterizes contemporary health and health care. Emphasis is placed on examination and integration of conceptual frameworks theories, and research findings bearing on basic behavioral/managerial issues such as authority relations
in health care settings, models of illness behavior and health services utilization, the impact of organizational structure on employee and client attitudes and behavior, and the culture of professional medicine in relation to patient care.

SOC 873. **International Political Economy.** 3 Credits.
Provides a broad survey of major developments in the field. Topics include the intellectual origins of international political economy; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., International Monetary Funds, World Bank, Multinational Corporations, etc.). (Same as POLS 973.)

SOC 891. **Individual Master’s Readings.** 1-6 Credits.
Individual study of special topics or problems by students working on a master’s degree.

SOC 892. **Teaching Seminar.** 1-3 Credits.
Seminar on sociology course design and development. Topics covered include syllabus design, exam strategies and design, course design, content of and approaches to teaching introductory and other sociology courses, student grading and evaluation. Required of all teaching assistants assigned to courses in sociology. May not be repeated for credit toward graduate degree.

SOC 893. **Leading Discussion Sections in Sociology.** 1 Credits.
This course covers matters relating to the teaching of discussion sections in sociology. Topics covered will include the current week’s reading assignments, material that will be covered in the lecture, upcoming exams or other assignments, and potential activities for discussion sections. This course does not count toward completion of 54 hours of graduate credit hours required for the PhD program in sociology. Graded on a satisfactory/unsatisfactory basis. Prerequisite: A current GTA appointment to lead discussion sections in sociology.

SOC 899. **Thesis.** 1-8 Credits.
Thesis hours. Graded on a satisfactory progress/limited progress/no progress basis.

SOC 900. **Seminar on Special Topics in Theory: _____**. 1-4 Credits.
Each seminar will explore problems of theory in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic.

SOC 902. **Contemporary Social Theory.** 3 Credits.
The focus of the course is on prominent late twentieth and early twenty-first century social theorists (e.g., Daniel Bell, Pierre Bourdieu, Michel Foucault, Anthony Giddens, Nancy Fraser, David Harvey, Alex Honneth, Jean Baudrillard), who have had substantial impact on North American social thought and sociology and often in other parts of the globe as well. The texts focus on large-scale, national and global sociocultural and socioeconomic structures, cultural formations, and social changes. The course stresses primary readings but also addresses the various approaches in historical, intellectual, and political context, their relations to earlier classical theories, and connections to more specialized sociological practices.

SOC 910. **Seminar on Special Topics in Methods: _____**. 1-4 Credits.
Each seminar will explore problems of methods in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic.

SOC 920. **Seminar on Special Topics in Social Organizations: _____**. 1-4 Credits.
Each seminar will explore problems of social organization in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic.

SOC 991. **Individual Doctoral Readings.** 1-6 Credits.
Individual study of special topics or problems by students working on a doctorate.

SOC 995. **Professionalization Proseminar.** 3 Credits.
The main objective of this course is to help students understand and deal with several “nuts and bolts” professional issues regarding the discipline of sociology and being a professional sociologist. This course is for advanced doctoral students who are close to being on the job market, whether they are pursuing academic or non-academic careers.

SOC 999. **Dissertation.** 1-12 Credits.
Dissertation hours. Graded on a satisfactory progress/limited progress/no progress basis.

### Spanish & Portuguese Courses

PORT 104. **Elementary Brazilian Portuguese I.** 5 Credits. U F1
This course introduces students to the essential vocabulary and fundamentals of grammar of Brazilian Portuguese through practice in speaking, listening comprehension, reading and writing. Active preparation and participation required. Classes conducted in Portuguese. Emphasis on conversation.

PORT 106. **Elementary Brazilian Portuguese, Accelerated I.** 3 Credits. U F1
Designed for students with intermediate proficiency in Spanish (or with previous work in Portuguese) to acquire proficiency in Portuguese more rapidly. Covers the same material as PORT 104 and PORT 108 and prepares students to intermediate level study of Portuguese. Prerequisite: SPAN 111 or Span 108 or consent of instructor.

PORT 108. **Elementary Brazilian Portuguese II.** 5 Credits. U F2
A continuation of PORT 104. Prerequisite: PORT 104.

PORT 110. **Elementary Brazilian Portuguese, Accelerated II.** 3 Credits. U F2
A continuation of PORT 106. Prerequisite: PORT 106.

PORT 177. **First Year Seminar: _____**. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Portuguese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

PORT 212. **Intermediate Brazilian Portuguese I.** 3 Credits. U F3
A review of Brazilian Portuguese grammar, with practice in reading, composition, and conversation. Prerequisite: PORT 108 or PORT 110 or consent of instructor.

PORT 216. **Intermediate Brazilian Portuguese II.** 3 Credits. U F4
A continuation of PORT 212. Prerequisite: PORT 212.

PORT 220. **Intensive Intermediate Brazilian Portuguese.** 3-6 Credits. U F3/F4
The course is designed for students who have completed the first year of Portuguese language studies at KU or equivalent. This course covers the same material as PORT 212 and PORT 216. Prerequisite: PORT 110, PORT 108, or consent of the instructor.

PORT 300. **Brazilian Culture.** 3 Credits. HT H
Prehistoric and colonial Portuguese origins of Brazil and its independent development in the nineteenth and twentieth centuries. Key aspects of economic, political, and social factors; special attention to intellectual history. Readings in English. 

PORT 320. Introduction to Portuguese and Brazilian Literatures. 3 Credits. H/W FP
Advanced reading course and an introduction to the study of Lusophone-Brazilian literature. Discussions in Portuguese. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 340. Textual Analysis and Critical Reading. 3 Credits. HL H FP
Introduction to Brazilian cultural and literary studies. Critical readings and interpretation of Brazilian cultural expressions with emphasis on acquiring the skills and vocabulary for discussing and writing critical analyses. Conducted in Portuguese. Not open to students who have taken PORT 540. Prerequisite: Grade of A or B in PORT 216 or consent of instructor.

PORT 347. Brazilian Studies: _____. 3 Credits. H FP
A topics course dedicated to the study of special historical moments, authors, or themes in Brazilian literary and cultural history. Topics studied include an examination of Brazilian culture and society through the critical study of literature, film, and music, in contrast with aspects of U.S. culture or other Latin American societies. Although the course may cover multiple genres and periods, it always emphasizes the plurality of Brazilian society, its history of slavery and immigration, diverse ethnic composition, rich religious milieu, and complex class system. Students also discuss the differences between the geographical regions in the country, and discuss controversial topics such as racism and religion.
Given the historical similarities between the two societies, students must confront the experiences they learn about in Brazil to similar ones in the United States. Course conducted in Portuguese and may be repeated for credit as the topic varies. Not open to students who have taken PORT 547. Prerequisite: PORT 216 or consent of instructor.

PORT 348. Portuguese Language and Brazilian Culture for Business. 3 Credits. H FP
Cultural studies approach to contemporary Brazilian society for students interested in business. Explores how Brazilians negotiate their place in a global cultural context and how they perceive business. Readings include selections from literature, history, journalism, social analysis, and popular culture and business. Exercises help English speakers develop the skills and vocabulary for discussing and writing critical analyses. Given in Portuguese or English. May be repeated for credit as topic varies. Not open to students who have taken PORT 548. Prerequisite: PORT 216 or consent of instructor.

PORT 365. Studies in Brazilian Film: _____. 3 Credits. H FP
A theoretical and historical approach to Brazilian film with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Given in Portuguese or English. May be repeated for credit as topic varies. Students will be expected to attend film screenings in addition to regular class meetings. Not open to students who have taken PORT 565. Prerequisite: Consent of instructor.

PORT 388. Intermediate Brazilian Portuguese Conversation. 1 Credits. U
Conversational reinforcement with an emphasis on oral communication skills in a cultural context. Two class meetings per week. Prerequisite: PORT 212 or consent of instructor.

PORT 394. Special Readings in Brazilian Studies. 1-3 Credits. H FP
Direct readings in (a) fields not covered by student's course work, and/or (b) field of student's special interest approved by the department. May be repeated for credit if content varies. Prerequisite: PORT 216 and three-hours upper-division credit in Portuguese, or consent of instructor.

PORT 471. Studies in Brazilian Culture and Civilization: _____. 1-3 Credits. H FP
A study of Brazilian culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies.

PORT 475. Studies in Brazilian Literature: _____. 1-3 Credits. H FP
A study of the literature of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies.

PORT 488. Advanced Brazilian Portuguese Conversation. 1 Credits. U
Two recitations weekly. More advanced than PORT 388. Prerequisite: PORT 216 or consent of instructor.

PORT 490. Intensive Advanced Portuguese. 3-6 Credits. H/W FP
This is a composition course for students with an intermediate level of the language to develop control of written communication at an advanced level. Advanced composition, conversation, and stylistics, plus an introduction to Brazilian literature. Prerequisite: Four semesters of Portuguese, or consent of instructor.

PORT 509. Portuguese Phonetics and Phonology. 3 Credits. H/W FP
An analytical and practical study of contemporary Portuguese phonetics. Prerequisite: PORT 490 and PORT 488, or consent of instructor.

PORT 540. Textual Analysis and Critical Reading. 3 Credits. HL H FP
A more intensive treatment of the content of PORT 340. Not open to students who have taken PORT 340. Prerequisite: Consent of instructor.

PORT 547. Brazilian Studies: _____. 3 Credits. H FP
A more intensive treatment of the content of PORT 347. Not open to students who have taken PORT 347. Prerequisite: PORT 216 or consent of instructor.

PORT 548. Portuguese Language and Brazilian Culture for Business. 3 Credits. H FP
A more intensive treatment of the content of PORT 348. Course conducted in Portuguese. Not open to students who have taken PORT 348. Prerequisite: Consent of instructor.

PORT 560. Survey of Portuguese Literature. 3 Credits. H/W FP
Emphasis on Gil Vicente, Camoes, Eca de Queiroz, and Fernando Pessoa. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 565. Studies in Brazilian Film: _____. 3 Credits. H FP
A more intensive treatment of the content of PORT 365. Not open to students who have taken PORT 365. Prerequisite: Consent of instructor.

PORT 611. Accelerated Basic Portuguese for Spanish Speakers. 3 Credits. U
Contrastive phonological and morphological analysis of standard Spanish and the major dialect of Brazilian Portuguese, followed by a presentation of major grammatical and phonological stumbling blocks for Spanish speakers. Drills on grammar, syntax, and pronunciation emphasize those areas in which Brazilian Portuguese differs most significantly from Spanish. Prerequisite: Graduate student status in
Spanish. Undergraduates in Spanish may be admitted with consent of instructor.

PORT 612. Accelerated Basic Portuguese for Spanish Speakers II. 3 Credits. U
A continuation of PORT 611, with special emphasis on reading and writing skills. Prerequisite: PORT 611.

PORT 740. Survey of Brazilian Literature. 3 Credits.
A survey of Brazilian literature from 1500 to present. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 742. The Brazilian Novel. 3 Credits.
The development of the novel in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 746. The Brazilian Short Story. 3 Credits.
The development of the short story in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 750. Brazilian Poetry. 3 Credits.
a study of the principal movements and an analysis of representative works from the colonial period to the present. Emphasis on modernists and post-modernists. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 760. Contemporary Brazilian Literature. 3 Credits.
A survey of Brazilian cultural expressions and literature in the Twentieth Century. Conducted in Portuguese. Prerequisite: PORT 216 or consent of instructor.

PORT 780. Special Readings in Portuguese and Brazilian Literature. 1-3 Credits.
May be taken more than once; total credit not to exceed five hours. Directed private readings with conferences with instructor. Prerequisite: Consent of department.

PORT 785. Special Topics in Brazilian Cultural and Literary Studies: _____. 3 Credits.
Topics vary by semester. The course may be taken more than once, with full credit, provided there is no duplication in the material covered. Conducted in Portuguese.

PORT 970. Seminar in Brazilian Literature: _____. 3 Credits.

Spanish & Portuguese Courses

SPAN 100. Spanish Reading Course. 3 Credits. U
A special course for candidates for advanced degrees designed to aid them in obtaining a reading knowledge of Spanish. Intensive study of the fundamentals of grammar, proceeding to the reading of material of medium difficulty. Open to graduate students and to seniors who are applying for entrance to a graduate school. The course does not satisfy any part of the undergraduate language requirement. This course is primarily for graduate students who are fulfilling their language requirement(s) for advanced degrees.

SPAN 101. Orientation Seminar in Spanish and Portuguese. 1 Credits. H
Provides an overview of the field of Hispanic Studies. Emphasizes developing an understanding of opportunities in Spanish and Portuguese at KU and the Spanish and Portuguese program curricula, exploring service-learning and other extracurricular options available at KU and beyond, and helping students plan goals for their education through an understanding of their personal values and aspirations as they relate to the field. Graded on a satisfactory/unsatisfactory basis.

SPAN 104. Elementary Spanish I. 5 Credits. U F1
For beginning students of Spanish who do not place into SPAN 111. Active preparation and participation required. Classes conducted in Spanish. Not open to native speakers of Spanish.

SPAN 107. Elementary Spanish Conversation. 1-4 Credits. U
Activities to improve elementary level conversation skills. Does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Available only to study abroad participants.

SPAN 108. Elementary Spanish II. 5 Credits. U F2
Only for students who have completed SPAN 104 at the University of Kansas. This course prepares students for Intermediate level study of Spanish. Active preparation and participation is required. Classes conducted in Spanish. Not open to native speakers of Spanish. Offered in spring semester. Prerequisite: SPAN 104.

SPAN 111. Intensive Elementary Spanish. 5 Credits. U F1/F2
For students who have had some previous study of Spanish, but who do not place into the Intermediate level. This course prepares students for Intermediate level study of Spanish. Active preparation and participation is required. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: At least one previous high school or college course in Spanish or placement. See departmental guidelines.

SPAN 170. Hispanic Language, Culture and Civilization I-A:
______. 1-3 Credits. U
For students in their first year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies.

SPAN 171. Hispanic Language, Culture and Civilization I-B:
______. 1-3 Credits. U
A continuation of SPAN 170. For students in their first year of language study or the equivalent. An intensive orientation of the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies.

SPAN 177. First Year Seminar: ____. 3 Credits. HL
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in Spanish. May not contribute to major requirements in Spanish. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

SPAN 202. Introduction to Translation and Translation Theory. 3 Credits. H
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as AAAS 250, GERM 240, LING 250 and SLAV 250.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

SPAN 212. Intermediate Spanish I. 3 Credits. U F3
A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks
that promote critical exploration of the Spanish-speaking world and the
development of listening, reading, speaking, writing, and intercultural
competencies. Classes conducted in Spanish. Not open to native
speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 or placement.
See departmental guidelines.

SPAN 213. Honors Intermediate Spanish I. 3 Credits. U F3
Not open to native speakers of Spanish. Prerequisite: SPAN 108 or
SPAN 111 with grade of A, or permission of the department

SPAN 216. Intermediate Spanish II. 3 Credits. U F4
A continuation of SPAN 212. A fully integrated content-based and form-
focused approach to intermediate-level Spanish. Students process
and practice a wide range of vocabulary and grammatical structures in
order to complete tasks that promote critical exploration of the Spanish-
speaking world and the development of listening, reading, speaking,
writing, and intercultural competencies. Emphasis on process writing.
Classes conducted in Spanish. Not open to native speakers of Spanish.
Prerequisite: SPAN 212 or placement.

SPAN 217. Honors Intermediate Spanish II. 3 Credits. U F4
Not open to native speakers of Spanish. Prerequisite: SPAN 212 or
SPAN 213 with a grade of A, or permission of the department.

SPAN 220. Intensive Intermediate Spanish. 6 Credits. U F3/F4
This course is designed for students who would like to acquire proficiency in
Spanish more rapidly. The material covered in the course is the same
as in SPAN 212 and 216. Not open to native speakers of Spanish.
Prerequisite: SPAN 108 or SPAN 111, with a grade of A or B.

SPAN 270. Hispanic Language, Culture and Civilization II-A:_____ 1-3 Credits. U
For students in their second year of language study or the equivalent.
An intensive orientation to the culture of Spanish-speaking countries.
Includes elements of grammar, conversation, and composition. Available
only to study abroad participants. Will not count toward the Spanish
major nor the language requirement. May be repeated for credit if content
varies.

SPAN 271. Hispanic Language, Culture and Civilization II-B:_____ 1-3 Credits. U
A continuation of SPAN 270. For students in their second year of
language study or the equivalent. An intensive orientation to the culture of
Spanish-speaking countries. Includes elements of grammar, conversation,
and composition. Available only to study abroad participants. Will not
count toward the Spanish major nor the language requirement. May be
repeated for credit if content varies.

SPAN 300. Developments in Hispanic Cultures. 3 Credits. HL H
The development of social and cultural patterns in the Spanish-speaking
world, including the intersection of those patterns with issues related
to politics, economics and/or personal values. Assigned readings may
be in English or in Spanish. Does not count toward the Spanish major.
Prerequisite: SPAN 108, SPAN 109, or SPAN 111; or two years of high
school Spanish.

SPAN 302. The Spanish Inquisition. 3 Credits. H
A broad historical study of the Spanish Inquisition from 1478 to its
afterlife in modern culture, including its use in political debates and its
depiction in popular culture. Topics include anti-Semitism, the nature
of the inquisitorial investigation, the use of torture, censorship and the
relationship between the Inquisition, the Spanish monarchy and other
religious and lay authorities. Taught in English. Will not count toward the
Spanish major. (Same as HIST 325 and JWSH 315.)

SPAN 322. Spanish Grammar: Form and Meaning in Context. 3
Credits. U FP
Analysis of the most important morphological and syntactic phenomena
with an emphasis on their form and function through a review of salient
grammatical points in preparation for advanced work in Spanish.
Recommended for students who have completed Spanish 216, 217,
or 220 with a grade of C or higher, or placement through examination.
Course does not count toward the Major. Prerequisite: Four semesters
of college-level Spanish or the equivalent. Students who have taken
SPAN 324 or SPAN 325 may take this course with the permission of
instructor.

SPAN 323. Spanish Composition and Cultural Analysis. 3 Credits. U FP
Systematic review of writing in Spanish, intensive study of vocabulary and
stylistics for formal written communication, and development of essential
writing and analytical skills for advanced courses in Spanish. Prerequisite:
SPAN 216 or SPAN 217 or SPAN 220 with a grade of C or higher; or
SPAN 322, or consent of instructor.

SPAN 324. Grammar and Composition. 3 Credits. U FP
A comprehensive review of the Spanish language for students whose
personal or cultural ties to the language do not include extensive formal
academic study, with an emphasis on the development of skills tied to
cultural analysis and communication (written and oral) necessary for
success in more advanced courses in Spanish. Prerequisite: SPAN 216,
or SPAN 217, or SPAN 220, or appropriate placement test score as
defined by the Department of Spanish & Portuguese, or consent of the
Department of Spanish & Portuguese, or consent of instructor.

SPAN 325. Spanish for Heritage Learners. 3 Credits. H FP
This course is designed to provide students with the linguistic and
-cultural competencies necessary to communicate with and help treat
Spanish speaking patients with limited English proficiency. Includes a
general review of pertinent grammar, specific vocabulary groups relating
to assessment and care of patients, vocabulary to establish rapport,
and discussions leading to cultural competencies. Students who have
completed SPAN 424 or above may take the course with the permission
of the instructor. Prerequisite: Completion of SPAN 216 with a grade of C
or better.

SPAN 328. Intermediate Spanish Conversation. 2 Credits. U FP
Conversational reinforcement of topics presented in SPAN 323 or
SPAN 324 with an emphasis on oral communication skills in a cultural
context. Concurrent enrollment in SPAN 324 is strongly recommended.
Completion of both 324 and 328 is required for enrollment in SPAN 340 and
SPAN 346. Two class meetings per week. Not available to study
abroad participants. Prerequisite: SPAN 216 or SPAN 217 or SPAN 220
with a grade of C or higher; or SPAN 322.

SPAN 329. Intermediate Spanish Conversation II:_____. 1 Credits. U FP
Open to students who have completed SPAN 328 and heritage speakers.
Native speakers may take the course with permission of the instructor.
The course topic will focus on Spanish conversation in a particular
professional setting, such as business, theater, law, film, medicine,
and fine arts. Course may be repeated for credit if the topic varies.
Prerequisite: SPAN 328 or consent of instructor.
SPAN 330. Service Learning Internship Spanish. 1-3 Credits. U FP
An opportunity for students to utilize and improve their Spanish language skills in an internship or volunteer work in business, schools, government, hospitals, churches, and various types of service organizations. Students must have approval of instructor to register and must provide written confirmation of acceptance for volunteer work in an agency that provides service to a Spanish-speaking public before the course begins. Periodic supervisor evaluations and a reflection journal in Spanish are required, in addition to other materials requested by the instructor. Class format may be an independent internship taken for variable credit under instructor supervision. Will not count toward Spanish major. Prerequisite: Students must have completed a minimum of 12 hours of Spanish in courses at the 200-level or above, and completion of SPAN 324 with a grade of B or better.

SPAN 340. Textual Analysis and Critical Reading. 3 Credits. HL H/ W FP
Critical readings and interpretation of Hispanic literatures, with emphasis on acquiring the skills and vocabulary necessary for discussing and writing literary analyses. Taught in Spanish. Prerequisite: SPAN 323, or SPAN 324 and SPAN 328, or SPAN 325. A grade of B- or higher in SPAN 323 or SPAN 324 or SPAN 325 is strongly recommended for students enrolling in this course. Concurrent enrollment in SPAN 346 is strongly recommended.

SPAN 346. Transatlantic Hispanic Cultures. 3 Credits. H FP
This course offers an introductory overview of Hispanic cultures, focusing on the political, economic, social, linguistic, and artistic development that shaped the historical and cultural bonds between Latin America and Spain. Enhances the cultural competence acquired in previous Spanish classes and prepare students for upper-level work in the major. Taught in Spanish. Prerequisite: SPAN 323, or SPAN 324 and SPAN 328, or SPAN 325. A grade of B- or higher in SPAN 323 or SPAN 324 or SPAN 325 is strongly recommended for students enrolling in this course. Concurrent enrollment in SPAN 346 is strongly recommended.

SPAN 370. Hispanic Language, Culture and Civilization III-A: _____ 1-3 Credits. U FP
An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study-abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies.

SPAN 371. Hispanic Language, Culture and Civilization III-B: _____ 1-3 Credits. U FP
A continuation of SPAN 370. An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies.

SPAN 390. Interpretation of Hispanic Literature. 3 Credits. H
A study of selected works in literary theory that are pertinent to the field of Hispanism and of selected problems in literary interpretation and comparative literature methodology, designed to examine and apply systematically basic critical principles and approaches to the field of Hispanic literature. Discussion of these approaches is related to the previous study of literature and deepened through individual papers written by participants and presented to the group. Does not count toward the major in Spanish. Prerequisite: Completion of one junior-senior course in a language and literature department.

SPAN 424. Advanced Spanish Composition and Grammar. 3 Credits. H/W FP
Extensive practice in writing, with attention to vocabulary, grammar usage, and discourse structure. Thorough review of syntax and grammar. Conducted in Spanish. Concurrent enrollment in SPAN 428 is strongly recommended. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 428. Advanced Spanish Conversation. 2 Credits. U FP
Emphasis on developing fluid expression of opinions, ideas, and points of view through discussion of selected texts and cultural materials. Two class meetings per week. Taught in Spanish. Concurrent enrollment in SPAN 424 is recommended. Prerequisite: SPAN 340 or consent of instructor. A grade of C or higher in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 429. Spanish Phonetics. 3 Credits. H/W FP
An analytical and practical study of contemporary Spanish phonetics. Prerequisite: SPAN 424 and SPAN 428, or consent of instructor.

SPAN 440. Topics in Transatlantic Hispanic Studies: _____ 3 Credits. H/W FP
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. Readings will include selections from both Spain and the countries of Spanish America. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 441. Special Topics in Spanish Literature and Culture: _____ 1-3 Credits. H FP
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Spanish literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Spanish literature requirement. Prerequisite: SPAN 340 or consent of instructor. A grade of C or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 442. Special Topics Latin American Literature and Cultures: _____ 1-3 Credits. H FP
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Latin American literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level Latin American literature requirement. Prerequisite: SPAN 340 or consent of instructor. A grade of C or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 443. Topics in Hispanic Studies - Peninsular Emphasis: _____ 3 Credits
A topics course dedicated to the study of special historical moments, topics, authors, or themes in the Peninsular literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level Peninsular Spanish literature requirement. Prerequisite: SPAN 340 or consent of instructor. A grade of C or better in SPAN 340 is strongly recommended for students enrolling in this course.
SPAN 444. Topics in Hispanic Studies - Latin American Emphasis: _____. 3 Credits.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. Readings may include selections from both Spain and the countries of Spanish America, but the Spanish American content will be significant and the course will count toward the Latin American literature requirement in the Spanish major. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 446. Spanish Culture. 3 Credits. H/W FP
A study of the development of Spanish culture with particular emphasis on history, customs and traditions, and literary trends and artistic tendencies that constitute Spain's specific contribution to Western civilization. Conducted in Spanish. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 447. Latin American Cultures: _____. 3 Credits. H/W FP
The description and interpretation of Latin American cultures, with particular attention to history, ethnology, folklore, and the arts. The course may focus on particular countries or geographical areas. Conducted in Spanish. May be repeated for credit as topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 448. Spanish Language and Culture for Business. 3 Credits. H FP
Cultural studies approach to contemporary Spanish American societies for students with an interest in business. Explores how individuals from Spanish American countries negotiate their place in a new cultural context, and how different groups in Spanish America perceive business (negocios). Readings include selections from literature, history, journalism, social analysis, and popular culture. Exercises help non-native speakers develop analytical skills as well as vocabulary and communication skills related to international business and professional life. Conducted in Spanish. Prerequisite: SPAN 323, or SPAN 324 and SPAN 328, or SPAN 325, or consent of instructor. A grade of B- or higher in SPAN 323, 324 or 325 is strongly recommended for students enrolling in this course.

SPAN 450. Medieval Spanish Studies: _____. 3 Credits. H FP
Reading and analysis of Spanish literature and culture to 1500. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 451. Early Modern Spanish Studies: _____. 3 Credits. H FP
Reading and analysis of Spanish literature and culture from 1500 to 1800. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 452. Nineteenth Century Spanish Studies: _____. 3 Credits. H FP
Reading and analysis of the literature and culture of Spain of the 1800s. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 453. Twentieth Century Spanish Studies: _____. 3 Credits. H FP
Reading and analysis of the literature and culture of Spain from 1900 to the present. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of "C" or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 454. Studies in Spanish Culture and Civilization: _____. 1-3 Credits. H FP
A study of Spanish culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. Maybe repeated for credit if content varies.
SPAN 471. Studies in Spanish-American Culture and Civilization: _____ 1-3 Credits. H FP
A study of Spanish American national or regional culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies.

SPAN 474. Studies in Spanish Literature and Culture: _____ 1-3 Credits. H FP
A study of the literature and cultural production of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies.

SPAN 475. Studies in Latin-American Literature and Culture: _____ 1-3 Credits. H FP
A study of the literature and cultural production of a particular author, group of authors, period, genre, country, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies.

SPAN 494. Special Readings in Spanish. 1-3 Credits. H/W FP
Directed reading in (a) fields not covered by student's course work, and/or (b) field of student's special interest approved by the department. Conferences. May be repeated for credit if content varies. Prerequisite: Twenty-five hours of Spanish.

SPAN 496. Honors in Spanish. 3 Credits. H/W FP
Honors seminar. May be repeated for credit. Required of all students working for a degree with honors in Spanish.

SPAN 500. Hispanic Literature in Translation: _____ 3 Credits. H
A study of the literature in English translation of a particular author, period, genre, country, region, or theme. Discussion in English and frequent critical papers. All course readings and writing assignments are also in English. May be repeated for credit as the topic varies. Will not count toward the Spanish major. Prerequisite: Completion of one junior-senior level literature course in any language.

SPAN 501. Studies in Hispanic Literature: _____ 3 Credits. H
A study of the literature of a particular author, period, genre, country, region, or theme. May be repeated for credit as the topic varies. May be taken for elective credit in the Spanish major. Will not count toward the Latin American literature requirement in the Spanish major. Prerequisite: SPAN 340, plus completion of one junior-senior level literature course in any language.

SPAN 520. Structure of Spanish. 3 Credits. H/W FP
A study of the Spanish language as it is spoken today, from perspectives of contemporary linguistics. Reading and analysis of recent publications in the field. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor.

SPAN 522. Advanced Studies in Spanish Language: _____ 3 Credits. H/W FP
Extensive language analysis and practice on one topic such as stylistics, translation, conversation/spoken discourse, or creative writing. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor.

SPAN 540. Colloquium on Hispanic Studies: _____ 3 Credits. H FP

An advanced course dedicated to the critical study of special historical moments, topics, authors or themes in literary and cultural history. This course is designed to provide sophistication, focus, and analytical depth in literary and cultural study through exploration of secondary sources as well as theoretical material. Reading may include selections from both Spain and the countries of Spanish America and may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses.

SPAN 550. Colloquium on Spanish Film. 3 Credits. H FP
A theoretical and historical exploration of Spanish cinema. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses.

SPAN 560. Colloquium on Latin American Film. 3 Credits. H FP
An overview of Latin American cinema from its origins to the present with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses.

SPAN 570. Studies in Hispanic Linguistics: _____ 3 Credits. U FP
Theoretical and applied analysis of one or more of the following components of the Spanish language: phonology/phonetics, morphology, syntax, semantics, pragmatics. May be repeated for credit if content varies. Prerequisite: SPAN 424 and SPAN 428.

SPAN 681. Language Teaching for Oral Proficiency. 1 Credits. U FP
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in German.)

SPAN 722. Special Topics in Spanish Literature: _____ 2-3 Credits.
The content of this course will vary, and the course may be taken more than once with full credit, provided there is no duplication in the material studied. Prerequisite: A survey course in Spanish peninsular literature taught in Spanish.

SPAN 730. Topics in the Literature of 13th- and 14th-Century Iberia: _____ 3 Credits.
A theoretically informed study of representative works from 13th- and 14th-century Iberia. Course may be repeated for credit provided that the topic changes.

SPAN 733. Print Culture in Early Modern Spain. 3 Credits.
A study of the literature produced during the period of early printed books with emphasis on the diffusion of new literary forms during the late 15th- and early 16th-centuries.

SPAN 739. Topics in Early Modern Spanish Drama: _____ 3 Credits.
Selected plays of such authors as Lope de Vega, Tirso de Molina, Calderón, and Maria de Zayas. Course may be repeated for credit provided that the topic changes.

SPAN 745. Don Quixote. 3 Credits.
Linguistic and literary study. Examination of traditional interpretations. The life and thought of Cervantes. Theoretical readings.

SPAN 755. 19th Century Spanish Novel. 3 Credits.
The rise and development of realism. Prerequisite: A survey course in Spanish literature from the 18th century to the present.

SPAN 762. The Spanish Novel Since the Civil War. 3 Credits.
A study of the major works and movements occurring since the Spanish Civil War.
SPAN 764. Modern Spanish Poetry. 3 Credits.
Modern poetry of Spain, beginning with Becquer and ending with the
“Generation of the 1920’s.” Close study of the works of the major poets;
readings in poetic theory. Prerequisite: A general survey course of the
literature of Spain of the 18th, 19th, and 20th centuries.

SPAN 770. Spanish-American Drama. 3 Credits.
Study of several exceptional plays of 20th century Spanish America
in light of critical methodologies, national theatre movements, and
performance aspects.

SPAN 772. The Modern Spanish-American Novel, 1900-1950. 3
Credits.
A study of selected novels in Spanish America from the 1900 to 1950.
Topics may vary. Prerequisite: A survey course in Spanish American
literature.

SPAN 774. Spanish-American Poetry. 3 Credits.
A study of the twentieth century poetic tradition in Spanish America,
including major movements and a range of poets who represent the
variety of writing in the genre until the 21st century.

SPAN 780. Introduction to Hispanic Studies. 3 Credits.
What does the field of Hispanic Studies encompass? How do we
understand our roles as scholars, as teachers, and as members of our
communities? How does the field of Hispanic Studies reflect and act
upon the dialectics between our thoughts, our actions, our words, and
our worlds? With specific attention to incoming graduate students, this
course sets out to show how Hispanic Studies is a venue to engage in
transdisciplinary work and through a variety of methods and approaches.
SPAN 780 invites students to reflect on their current career path, and on
their role as beginning scholars in Hispanic Studies. The course combines
theoretical texts with various forms of cultural expression -including the
literary- providing incoming graduate students with a glimpse at the
multiple directions and possibilities in the field. In addition, it exposes
incoming students to resources available to them at KU, both in and
outside the department. Prerequisite: Graduate student status in Spanish.
Undergraduates in Spanish may be admitted with consent of instructor.

SPAN 781. Colonial Identities. 3 Credits.
This course centers on the dynamics of identity of Creoles, Amerindians,
Blacks and members of the castes in colonial Spanish America. It
concentrates on how members of these racial and ethnic groups relate to
coloniality, space, place and gender.

SPAN 785. Special Topics in Spanish-American Literature:
_____. 2-3 Credits.
The content of this course will vary, and the course may be taken more
than once, with full credit provided there is no duplication in the material
covered. Prerequisite: A survey course in Spanish American literature.

SPAN 795. Literary Theory and Criticism. 3 Credits.
Systematic study of the development of theories of literature. Emphasis
usually placed on twentieth century although scope may vary.
Prerequisite: 700-level course in Spanish or concurrent enrollment.

SPAN 801. Teaching Spanish in Institutions of Higher Learning. 3
Credits.
Required of all teaching assistants who teach beginning Spanish at the
University of Kansas for the first time. Instruction in classroom procedures
for first year Spanish, demonstration of teaching techniques, and survey
of current methodology.

SPAN 802. Colloquium in Methods of Teaching Spanish
Language. 1-3 Credits.
Combines discussion of theoretical teaching concepts and development
of pedagogical materials with practical solutions arising concurrently in
Spanish languages courses.

SPAN 898. Investigation and Conference. 1-10 Credits.
Individually directed work to fill the student's needs not met by available
organized courses. One to three hours of credit in any semester.
Maximum total credit for the M.A. degree is three hours. May be taken
with full credit as often as recommended by department.

SPAN 922. Seminar in Spanish Literature and Culture: _____ 3
Credits.
An intensive investigation of a particular topic in Spanish Literature and
Culture; content will vary in terms of topics, genres, and time periods
covered. The course may be taken more than once with full credit,
provided there is no duplication. Prerequisite: Graduate standing.

SPAN 940. Seminar in Trans-Atlantic Literatures and Cultures:
_____ 3 Credits.
An intensive investigation of a particular topic in Spanish and Latin
American Literatures and Cultures; content will vary in terms of topics,
genres, and time periods covered. The course may be taken more
than once, with full credit provided there is no duplication. Prerequisite:
Graduate standing.

SPAN 950. Seminar: Spanish Drama: _____ 3 Credits.

SPAN 961. Seminar: Medieval Literature: _______ 3 Credits.

SPAN 962. Seminar: Cervantes: ____ 3 Credits.

SPAN 970. Seminar: Spanish American Drama: _____ 3 Credits.

SPAN 985. Seminar in Spanish American Literature and Culture:
_____ 3 Credits.
An intensive investigation of a particular topic in Spanish American
Literatures and Cultures; content will vary in terms of topics, genres, and
time periods covered. The course may be taken more than once, with full
credit provided there is no duplication. Prerequisite: Graduate standing.

SPAN 999. Dissertation. 1-12 Credits.
Dissertation hours. Graded on a satisfactory progress/limited progress/no
progress basis.

Speech-Language-Hearing Courses

SPLH 161. Survey of Communication Disorders. 3 Credits. SI S
Provides a general understanding of normal and deviant speech,
language, and hearing in adults and children. This course considers
the normal development of communication behavior, the nature of
communication disorders, and the interaction of speech pathology and
audiology with allied fields (e.g., education, medicine, psychology, special
education).

SPLH 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing
current issues in Speech-Language and Hearing. Course is designed
to meet the critical thinking learning outcome of the KU Core. First-Year
Seminar topics are coordinated and approved by the Office of First-Year
Experience. Prerequisite: First-time freshman status.

SPLH 220. The Physics of Speech. 4 Credits. N
An introduction to the acoustic structure of speech intended for
non-science majors. Emphasis will be placed on the methods and
standards by which scientists measure and evaluate the physical
characteristics of speech. Topics will include: simple harmonic motion, the
propagation of sound waves, aerodynamic aspects of vocal fold vibration,
resonance, digital speech processing, frequency analysis, and speech
A course designed to enhance international experience in topic areas related to speech-language-hearing at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

**SPLH 418. Introduction to Cognitive Science. 3 Credits. S**

Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and PSYC 418.) Prerequisite: Consent of instructor.

**SPLH 430. Communication in Autism. 3 Credits.**

This course will provide you with an introduction to the characteristics and communication of individuals with Autism Spectrum Disorder (ASD). This course will focus on diagnostic criteria, early identification, communication assessment and intervention considerations, and partnering with families who have family members with ASD. This course is offered at the 400 and 800 levels with additional assignments at the 800 level. Not open to students with credit in SPLH 830.

**SPLH 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N LFE**

This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primateology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, BIOL 449, and PSYC 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

**SPLH 450. Study Abroad Topics in: _____ 1-5 Credits. S**

A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

**SPLH 451. Directed Study Abroad in Speech-Language-Hearing. 1-3 Credits. S**

An independent study designed to enhance international experience in topic areas related to speech-language hearing. Investigation of special topic or project selected by the student with advice, approval, and supervision by a KU SPLH instructor and an authorized agent of the study abroad site. Experience must be arranged through the Office of KU Study Abroad. Such study may take the form of directed reading and/or directed research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor

**SPLH 452. Examining Global Perspectives in Speech-Language-Hearing: _____ 3 Credits.**

For students enrolled in an SPLH-sponsored Study Abroad program. Students participate in 12 hours of meetings in preparation for the Study Abroad experience. Pre-trip meetings focus generally on multi-cultural issues relevant to speech-language-hearing practice as well as specific cultural, linguistic, and service delivery issues for the target country. Students spend two weeks abroad, visiting sites to observe different types of service delivery for people with disabilities and places that are culturally and historically relevant. Periodic debriefing and small group discussions are conducted during the time abroad. A daily journal and post-visit reflection paper is required. Prerequisite: Consent of instructor.

**SPLH 462. Principles of Speech Science. 3 Credits. N**

Survey of the physiology of speech production, and the physics of sound. Emphasis upon methodologies in the laboratory study of normal speech. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120 or consent of instructor.

**SPLH 463. Principles of Hearing Science. 3 Credits. N**

This class discusses the concepts and principles relevant to normal hearing processing: anatomy, psychophysical methods, and basic subjective correlates of the auditory system. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120, or consent of instructor.

**SPLH 464. Undergraduate Seminar in: _____ 1-3 Credits. S**

Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two-three hours only.)

**SPLH 465. Fundamentals of Clinical Phonetics. 1 Credits. S**

Introduction to classification of American English speech sounds based on articulatory phonetics. Practice in phonetic transcription and analysis of normal and abnormal speech. Laboratory exercises to give students hands-on experience with selected topics from lecture. Prerequisite: Corequisite: SPLH 120.

**SPLH 466. Language Science. 3 Credits. S**

Introduction to structure/function of human languages as it relates to language development and disorders; processes involved in the expression and reception of language and the methodologies employed to study these processes.

**SPLH 497. Mentored Research Experience. 2-8 Credits. S**

Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor's guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially meets the requirements for Research Experience Certification. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Research Experience Coordinator.

**SPLH 498. Departmental Honors Research. 2-8 Credits. S**

Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor's guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of
the research. This final product partially fulfills the requirements for Departmental Honors. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Honors Coordinator.

SPLH 499. Directed Study in Speech-Language-Hearing. 1-3 Credits. S Investigation of special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading and/or directed research/clinical observation. Individual reports and conferences. (Distribution credit given for two-three hours only.) A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Prerequisite: Consent of instructor.

SPLH 516. Speech Perception. 2 Credits. S Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. Prerequisite: SPLH 120 Physics of Speech. Prerequisite or Corequisite: SPLH 463 Principle of Hearing Science.

SPLH 556. Language Sample Analysis Lab. 1 Credits. S The study of the analysis of language produced by children with respect to its phonological, lexical, morphological, syntactic, and pragmatic characteristics. Prerequisite: Corequisite: SPLH 566.

SPLH 566. Language Development. 3 Credits. SI S Study of language acquisition in children, including phonologic, morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use are included. May be taught in lecture or online format.

SPLH 568. Introduction to Audiological Assessment and Rehabilitation. 4 Credits. U Introduction to methods for assessing and treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. Prerequisite: SPLH 463.

SPLH 571. Introduction to Speech-Language Pathology. 4 Credits. U This course provides training in clinical management of communicative disorders in children and adults. Principles of evaluation, application of diagnostic information, intervention planning, intervention process, data collection and application, report writing, and interactions with parents and other professionals are examined. Participation in observation and laboratory activities is required.

SPLH 588. Multicultural Considerations in Speech-Language-Hearing I. 1 Credits. S This course introduces foundational concepts of culture and diversity, bilingualism, bias, and components and processes leading to cultural competency. Students explore health and educational disparities in the United States and beyond. Students will reflect on their cultural identity, and how their experiences and perspectives may differ from others, and how their experiences can influence service delivery in speech-language pathology and audiology. Prerequisite: SPLH 566 or LING 415 or consent of instructor.

SPLH 589. Multicultural Considerations in Speech-Language-Hearing II. 1 Credits. S This course builds on foundational concepts from SPLH 588 by exploring potential cultural and linguistic characteristics of populations that are typically underrepresented in many sectors of the Unites States, including education and health care. Case studies are implemented to examine cultural and linguistic influences on assessment and treatment processes in speech-language pathology and audiology. Prerequisite: SPLH 588.

SPLH 620. The Communicating Brain: The Ultimate Personal Computer. 3 Credits. U This course introduces the study of human neuroscience with a particular focus on human communication. The course provides an overview of the relevant anatomical structures and function along with an introduction to the basic methods used to investigate central nervous system function. Students are introduced to the study of perceptual, motor, and language function in the nervous system through a series of examples drawn from normal function and clinical cases. The examples are selected to highlight how these systems develop and are influenced by experience, implantable devices developed to interface with the nervous system, and how computers and animals are used as models to learn about nervous system function. Prerequisite: A 400-level course in SPLH, or consent of instructor.

SPLH 660. Research Methods in Speech-Language-Hearing. 3 Credits. Research Methods is about the methods used to conduct, describe and evaluate science in communication disorders. Goals for learner outcomes include: 1) evaluation of research including adequacy of research to address scientific and clinical problems, 2) reading, summarizing and describing research through a literature review, 3) describing a hypothetical research study that addresses a specific question or hypothesis identified by the student, and 4) providing constructive peer reviews of research paper drafts. Prerequisite: 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor.

SPLH 668. Introduction to Audiological Rehabilitation. 2 Credits. Introduction to methods for treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. This course should only be taken by graduate students in SPLH who have not completed this prerequisite. Not open to students with credit in SPLH 568. Prerequisite: Graduate standing.

SPLH 670. Beginning Clinical Practice in Audiology. 1-3 Credits. N Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. Prerequisite: SPLH 568, or concurrent enrollment in SPLH 568, overall GPA 3.0 and consent of instructor.

SPLH 672. Clinical Practice in Speech-Language Pathology. 3 Credits. S Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 571 and overall GPA of 3.0.

SPLH 716. Speech Perception. 2 Credits. Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. (Same as AUD 816.)

SPLH 736. Foundations of Early Intervention. 3 Credits. This course explores evidence-based principles and practices of providing early intervention services, including requirements of IDEA Part C, mission and key principles of early intervention and recommended practices and standards. Students will engage in guided field observations.
of assessment, intervention and collaborative practices, reflective practice and teaming/coaching activities. (Same as SPED 736.)

SPLH 737. Infants and Toddler with Significant Needs. 3 Credits.
This course explores the challenges infants and toddlers with significant developmental needs face and how to best support their participation in daily activities. Challenges faced by medical, physical, communication, social-emotional, hearing, vision, and mental health issues will be discussed along with how to support these needs across disciplines and in the home and community activities. This course will provide in-depth review of the unique challenges these children and families face and how providers from various backgrounds can work together to best support children and families. Environmental adaptations and direct instructional techniques to maximize independence tailored to the infant and toddler’s strengths and needs will be explored. Information is also provided on assistive technology designed to provide supports. Functional behavioral assessment procedures, proactive intervention strategies and psycho-educational approaches as well as the development of collaborative support plans will be studied. (Same as SPLH 737.)

SPLH 752. Examining Global Perspectives in Speech-Language-Hearing: ______. 3 Credits.
For students enrolled in an SPLH-sponsored Study Abroad program. Students will participate in 12 hours of meetings in preparation for the Study Abroad experience. Pre-trip meetings will focus generally on multicultural issues relevant to speech-language-hearing practice as well as specific cultural, linguistic, and service delivery issues for the target country. Students may be required to facilitate discussions or prepare presentations for these meetings. Students will spend two weeks abroad, visiting sites to observe different types of service delivery for people with disabilities and places that are culturally and historically relevant. Students may partner with undergraduates to facilitate any clinically focused experiences. Periodic debriefing and small group discussions will be conducted during the time abroad. A daily journal and post-visit reflection paper will be required.

SPLH 764. Seminar in: ______. 1-3 Credits.
The subject matter of this seminar will be special topics from speech pathology and audiology. Special prerequisite may be established for a given topic.

SPLH 799. Proseminar in Child Language. 2 Credits.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, CLDP 799, LING 799 and PSYC 799.)

SPLH 816. Language Development. 3 Credits.
Study of language acquisition in children, including the morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatc aspects of language use will be included. Not open to students who have credit for SPLH 566. Laboratory by appointment.

SPLH 820. Developmental Phonological Disorders. 2 Credits.
Focuses on speech and non-speech characteristics of children with developmental phonological disorders. Emphasis placed on collection and phonetic transcription of speech samples, phonological analysis of transcribed data, and decision-making processes in assessment and intervention.

SPLH 822. Dysarthria/Apraxia. 2 Credits.
This course describes the neuroanatomic bases of motor-speech processes, the diagnosis, classification, assessment, prognosis, and treatment of dysarthria(s) and apraxia(s).

SPLH 824. Fluency Disorders. 2 Credits.
The nature of stuttering in children and adults is discussed. Theories regarding etiology, development, and maintenance of the disorder are presented. Emphasis is placed on various clinical approaches to assessment, measurement, and treatment.

SPLH 826. Phonatory Disorders. 2 Credits.
This course reviews the function of the laryngeal and respiratory mechanisms including the parameters and processes of phonation. Primary content addresses diagnosis, description, and treatment of organic and non-organic disorders of phonation.

SPLH 828. Speech Disorders in Special Populations. 2 Credits.
This course reviews anatomy and physiology of the velopharyngeal mechanism. Diagnosis and management of velopharyngeal dysfunction and associated problems considered. Anatomy, physiology, and rehabilitation associated with certain oral, pharyngeal, and laryngeal abnormalities discussed. Emphasis is on the speech problems of adults following medical management. Populations include individuals with laryngeotomies, glossectomies, and tracheotomies.

SPLH 830. Communication in Autism. 3 Credits.
This course will provide an introduction to the characteristics and communication of individuals with Autism Spectrum Disorder (ASD). This course will focus on diagnostic criteria, early identification, communication assessment and intervention considerations, and partnering with families who have family members with ASD. This course is offered at the 400 and 800 levels with additional assignments at the 800 level. Not open to students with credit in SPLH 430.

SPLH 832. Dysphagia. 2 Credits.
This course covers normal and disordered swallowing. Evaluation and treatment of swallowing disorders, the dysphagia team, and dysphagia in special populations are considered.

SPLH 833. Dysphagia Treatment in Adults. 2 Credits.
This course is designed to build critical thinking and analysis skills for developing and implementing appropriate treatment plans for adults with dysphagia. Foundations of non-instrumental swallowing assessment, rehabilitation, and compensation will be addressed. This course will also cover issues of ethics, cultural considerations in dysphagia management, and professional communication. Learning experiences will include evidence-based curriculum, hands-on practice, and critical thinking activities. Prerequisite: SPLH 832.

SPLH 834. Augmentative and Alternative Communication and Literacy. 2 Credits.
This course is designed to provide resources and information to prepare students to collaborate with others in increasing the literacy opportunities and skills of individuals with complex communication needs, particularly those who use augmentative and alternative communication.

SPLH 838. Augmentative and Alternative Communication in Schools. 2 Credits.
This course provides information about augmentative and alternative communication (AAC) services in school settings. Students will participate in readings and activities that will provide information concerning the roles, responsibilities, and contributions of school speech-language pathologists relative to AAC.

SPLH 840. Language Disorders of Children: Infants and Toddlers. 2 Credits.
This course examines factors relating to language disorders in the birth to three population. At-risk populations, as well as those with known etiologies, are considered. Information on assessment, intervention, and service delivery models is addressed. Issues relating to Public Law 99-457 are also examined.
SPLH 842. Language Disorders of Children: Preschool. 2 Credits.

This course examines language disorders of preschool-age children in the late preschool years. The course includes information on incidence, characteristics, assessment, and intervention. Theoretical issues and their implication for language intervention are also examined.

SPLH 844. Language Disorders of Children: School Age. 2 Credits.

This course examines language development during the school years and how problems in this development interact with school performance. Emphasis is placed on the role of the speech-language pathologist in the early identification, assessment, and remediation of language-learning problems.

SPLH 846. Language Disorders of Adults. 2 Credits.

Neurological aspects of language processes, classification of aphasia, and assessment of language deficits are discussed. Management approaches including intervention strategies and rehabilitation are also considered.

SPLH 848. Language Disorders of Special Populations. 2 Credits.

This course focuses on communication differences in individuals with intellectual disabilities, autism, cerebral palsy, dual sensory impairments, and other conditions affecting communication competence. Communication characteristics as well as assessment and intervention strategies are studied.

SPLH 850. Cognitive-Linguistic Disorders of Adults. 2 Credits.

This course will prepare students to work with adults with acquired cognitive-linguistic disorders, with a focus on: Alzheimer's Disease, Traumatic Brain Injury, and Right Hemisphere Disorder, including etiologies and disease processes. Theoretical and practical knowledge will be presented regarding the primary cognitive domains of attention, memory, and executive function, as well as their impact on discourse-level language. The course will cover neuroanatomy, assessment procedures, interventions, family/communication partner training, and psychosocial aspects of cognitive-linguistic disorders.

SPLH 852. Augmentative and Alternative Communication. 2 Credits.

This course describes augmentative and alternative communication (AAC) assessment and intervention issues as they apply to children and adults with both congenital and acquired speech and/or language disabilities. Areas of study include AAC systems, assessment strategies and procedures, intervention strategies, and AAC information resources.

SPLH 853. Augmentative and Alternative Communication and Adult Acquired Disorders. 2 Credits.

This course will discuss the concepts and evidence related to assessment and intervention in the area of augmentative and alternative communication for adults with acquired disorders. Content will be related specifically to adults with acquired communication disorders and focus more on high tech than low tech but information and evidence related to both will be presented. Information about AAC systems appropriate for adults, assessment protocols, approaches to intervention, and advocacy will be applied in a case-based format.

SPLH 854. Reading Disorders. 2 Credits.

This course addresses the perceptual, linguistic, and cognitive processes utilized in written communication. Acquired and developmental disorders of written language are examined in relation to issues concerning characteristics, etiology, early identification, assessment, and remediation.

SPLH 860. Evaluation of Speech and Language. 2 Credits.

Provides a general framework for speech and language evaluations. Issues related to initiation and termination of treatment are discussed. Practice is provided in evaluating norm- and criterion-referenced information used in diagnostic, referral, and treatment decisions.

SPLH 861. Seminar in Research Methodology in Speech Pathology and Audiology. 3 Credits.

This seminar is concerned with the design, instrumentation, execution, and reporting of research in audiology and speech pathology. SPLH 760 or its equivalent and some statistics are recommended before entering this seminar.

SPLH 862. Clinical Processes. 1 Credits.

Orients student to clinical procedures, policies, requirements, and expectations of program. Therapy models, planning, and philosophies are discussed along with implementation and evaluation of therapy procedures. Professional issues are also considered. May be repeated for credit.

SPLH 864. Advanced Clinical Practice in Speech-Language Pathology. 1-6 Credits.

Students conduct supervised clinical work in a variety of settings. May be repeated for credit. Prerequisite: Department approval. Group and individual conferences with staff required.

SPLH 866. Field Study in Speech-Language Pathology. 5-12 Credits.

The field study provides work experiences in clinical and/or research activities. The student takes this course near the end of the degree program. Assignments include supervised work in a variety of approved settings. May be repeated for credit. Prerequisite: Advisor's consent.

SPLH 868. Professional Issues. 1 Credits.

Forum for the presentation and discussion of scientific and professional issues by faculty and advanced graduate students. May be repeated for credit.

SPLH 874. Master's Research Practicum. 1-3 Credits.

This course is designed to give students experience in conducting research. Students apply and extend their knowledge and skills by participating in a research project under the supervision of a mentor. Students may assist with or independently conduct research in speech, language, or hearing. Prerequisite: SPLH 660 or equivalent research methods course.

SPLH 876. Independent Study in Problems of Speech, Language, and Hearing. 1-6 Credits.

Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor.

SPLH 888. Multicultural Considerations in Speech-Language-Hearing I. 1 Credits.

This course introduces foundational concepts of culture and diversity, bilingualism, bias, and components and processes leading to cultural competency. Students explore health and educational disparities in the United States and beyond. Students will reflect on their cultural identity, and how their experiences and perspectives may differ from others, and how their experiences can influence service delivery in speech-language pathology and audiology. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level.

SPLH 889. Multicultural Considerations in Speech-Language-Hearing II. 1 Credits.

This course builds on foundational concepts from SPLH 888 by exploring potential cultural and linguistic characteristics of populations that are typically underrepresented in many sectors of the Unites States, including education and health care. Case studies are implemented to examine
cultural and linguistic influences on assessment and treatment processes in speech-language pathology and audiology. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level. Prerequisite: SPLH 888 or consent of instructor.

SPLH 899. Master’s Thesis. 1-6 Credits.
Thesis Hours. Graded on a satisfactory progress/limited progress/no progress basis.

SPLH 900. Proseminar in Communicative Disorders. 1 Credit.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communicative disorders and related fields. May be repeated for credit. Limited to two hours credit counted toward an MA or AuD degree. Limited to four hours credit counted toward the PhD degree. Graded on a satisfactory/unsatisfactory basis.

SPLH 964. Seminar in: _____, 1-3 Credits.
The subject matter of this seminar will be special topics from speech pathology and audiology, including those related to research methodology and research or academic careers. Special prerequisites may be established for a given topic.

SPLH 970. Independent Study in Problems of Speech and Hearing. 1-6 Credits.
Investigation of special topics by individual students. Paper required.

SPLH 974. Doctoral Research Practicum. 1-6 Credits.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech or hearing.

SPLH 975. Directed Teaching: Speech Pathology and Audiology. 1-3 Credits.
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. May be repeated up to a maximum of six semester hours.

SPLH 976. Independent Study in Grant Writing. 1-6 Credits.
Students will identify a funding agency appropriate for their research, learn the application procedures for that agency, and draft a grant application following the identified agency’s format. The faculty mentor will arrange for a review of the grant application following the agency’s review criteria and format. May be repeated up to a maximum of three credits.

SPLH 982. Issues in Scientific Conduct. 3 Credits.
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as CLDP and PSYC 982.)

SPLH 998. Investigation and Conference (For Doctoral Candidates). 1-8 Credits.
(Limited to eight hours credit towards the Ph.D. degree.) Readings, critical thinking, and scientific writing in preparation for the oral comprehensive exam.

SPLH 999. Doctoral Dissertation. 1-12 Credits.
Dissertation Hours. Graded on a satisfactory progress/limited progress/no progress basis.

Women, Gender, & Sexuality Std Courses

WGSS 101. Introduction to Women, Gender, and Sexuality Studies. 3 Credits. SC S

This course examines the extensive role of gender in human life and examines the ways that gender structures power relations among individuals and within economic, political, educational and other social structures, with special attention paid to women’s issues and movements in the United States and globally. Through readings drawn from the fields of women’s studies, gender studies, and sexuality studies, this course examines and explores alternatives to traditional and/or normative constructions of gender and sexuality, and also considers other markers of difference, such as disability, race, class, and religion, which intersect with gender identity and sexual identity.

WGSS 102. Introduction to Women, Gender, and Sexuality Studies, Honors. 3 Credits. SC S
This course examines the extensive role of gender in human life and examines the ways that gender structures power relations among individuals and within economic, political, educational and other social structures, with special attention paid to women’s issues and movements in the United States and globally. Through readings drawn from the fields of women’s studies, gender studies, and sexuality studies, this course examines and explores alternatives to traditional and/or normative constructions of gender and sexuality, and also considers other markers of difference, such as disability, race, class, and religion, which intersect with gender identity and sexual identity. Similar in content to WGSS 101. Open only to students in the University Honors Program or by consent of the instructor.

WGSS 111. Proseminar in Women’s, Gender, and Sexuality Studies. 3 Credits. S
An interdisciplinary introduction to the study of human sexuality. We will consider some of the many ways that human sexuality has been understood and explained, drawing examples from multiple historical and contemporary sources. We will discuss how these understandings have changed over time and how they can vary depending on whose sexuality is being considered.

WGSS 177. First Year Seminar:_____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Women, Gender and Sexuality Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

WGSS 196. Study Abroad Topics in:_____. 1-6 Credits. S
This course is designed for the study of special topics in Women's Studies. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

WGSS 305. Women, Gender, and Sexuality in the North American West. 3 Credits. H
This course will provide students with an overview of how the history of women have profoundly shaped and given meaning to the development of the North American West (which includes present-day states and provinces in the U.S., Canada, and Mexico). The class will examine the lives of women who represent diverse backgrounds, lands, and time periods in this western region. In addition to women, lectures, readings, and discussion will focus on the themes of gender, masculinity, class, race, ethnicity, sexuality, labor, and environment. Broad in chronological scope that spans pre-contact into the twenty-first century, this course is not a comprehensive survey. Rather, the class will examine how women and groups of women across the region defended, survived, explored, cultivated, and imagined the West as a place that defined their homes, migrations, settlement patterns, as well as sites of captivity, displacement, war, and development. (Same as HIST 405.)

WGSS 311. Sex in History. 3 Credits. HT H
This course offers a survey of the history of human sexuality in the Western world; the second half of the semester emphasizes
the American experience. Topics for consideration may include: masturbation, pornography, sex work, homosexuality, bisexuality, "perversions" (paraphilias), sex and marriage, racialized sexualities, sexual violence, trans* identities and experiences, sexuality and national identities, and colonized sexualities. The course demonstrates the various ways in which sex, specifically the social and political meanings attributed to physical acts, changes over time and shapes human experiences and interactions far beyond the bedroom. (Same as AMS 323, HIST 332, and HUM 332.)

WGSS 319. History, Women, and Diversity in the U.S.. 3 Credits. H

This survey course explores the history of being female in America through a focus on the ways differences in race, sexuality, ethnicity, class, and life cycle have shaped various aspects of women's lives. Themes to be explored could include, but are not limited to: social and political activism; intellectual developments; family; women's communities; work; sexuality; and culture. (Same as HIST 319.)

WGSS 320. From Goddesses to Witches: Women in Premodern Europe. 3 Credits. HT H

This course examines the social, cultural, and political contexts of women's spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshipping cultures, women's roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as HIST 320.)

WGSS 321. From Mystics to Feminists: Women's History in Europe 1600 to the Present. 3 Credits. HT H

This survey of women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as HIST 321.)

WGSS 322. LGBTQ U.S. History, 1600-1900. 3 Credits. H

This course will take students on the first part of an exciting journey through an alternative version of U.S. history, exploring the experiences and treatment of men who love men, women who love women, and people with unconventional sexual and gender identities, telling this story as it unfolded in the British colonies established in North America, through the revolutionary period, and in the United States over the course of the nineteenth and twentieth centuries, and into the early twenty-first century. The first part of this two course sequence begins in the colonial period and ends around 1900 as modern categories of sexuality and sexual orientation came into existence. We will examine the ways in which individuals who craved intimacy with members of the same sex understood and negotiated their desires in an often hostile world. And we will consider how Early America's remarkable diversity shaped this history of same-sex love and desire. (Same as HIST 322.)

WGSS 323. LGBTQ U.S. History, 1900-Present. 3 Credits. H

This course will take students on the second part of an exciting journey through an alternative version of U.S. history, exploring the experiences and treatment of men who love men, women who love women, and people with unconventional sexual and gender identities, telling this story as it unfolded in the British colonies established in North America, through the revolutionary period, and in the United States over the course of the nineteenth and twentieth centuries, and into the early twenty-first century. The second part of this two course sequence focuses on the twentieth and twenty-first centuries. We will examine the changing understanding of non-normative sex, love, and desire; the political tactics, framings, and fights around sexual identities and rights; and the intersection of structural inequalities including, but not limited to, race, class, ability, and gender with LGBTQ histories. Please note that WGSS 322 or HIST 322 is not a prerequisite for WGSS 323 or HIST 323, though students interested in LGBTQ history should consider taking both. (Same as HIST 323.)

WGSS 324. History of Women and the Body. 3 Credits. H

This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women's lives in relation to their bodies, and women's responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as HIST 324.)

WGSS 325. Language, Gender, and Sexuality. 3 Credits. S

How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as ANTH 325, GIST 303, JWSH 305 and SLAV 305.)

WGSS 327. Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies. 3 Credits. S

An exploration of the experiences and histories of people who identify as lesbian, gay, bisexual, and/or transgender (LGBT); of the influences on these experiences by individuals, the state, and artistic, legal and medical discourses; and of the intersections between sexual orientation, sexuality, ethnicity, class, and religion.

WGSS 329. Introduction to Queer Theory: Tools for Deconstructing Gender. 3 Credits. H

In the 1970s and 1980s, LGBT activists began questioning basic knowledge about sexuality and the body, challenging rigid identity categories, and offering new ways to think about gender. We now call this approach "queer theory," and this course will introduce students to the texts and debates that have shaped this intellectual tradition. From ancient eunuchs to drag kings and queens, queer theory highlights how gender norms operate as forms of violence and oppression. We will explore how queer theory helps us understand difference, including its intersections with theories of feminism, race, and disability.

WGSS 330. Women in Contemporary African Literature. 3 Credits. NW H

A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as AAAS 340.)

WGSS 331. Sex and Gender in New Media. 3 Credits.

How do gender and sexuality shape digital worlds, and how do these spaces shape our understanding of ourselves? This course analyzes new media like social networking sites, gaming, and dating apps. Students will explore the identities, relationships, and communities that have emerged across these platforms, with a focus on the possibilities and challenges they offer for gender and sexual expression.

WGSS 333. The Politics of Physical Appearance. 3 Credits. S
WGSS 335. History of Jewish Women. 3 Credits. H
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. There are no prerequisites for this course. (Same as HIST 335, JWSH 335.)

WGSS 339. Feminism and Social Change. 3 Credits.
How do feminists go about fighting for social change? From social media hashtags to citywide protests, what methods do they use, and how do they justify them? Where have they been effective, and what lessons can we learn from those successes? This course investigates historical and contemporary efforts to change the world, with an emphasis on movements for women's rights and queer liberation in the United States.

WGSS 344. Black Feminist Theory. 3 Credits. HL H
This course will study the critical discourse produced by black female intellectuals, writers, and activists about their race, gender, sexual, and class identities. Students will explore black women's distinct positionality through an examination of their theory as well as their praxis from the nineteenth century to the contemporary moment. By tracing the evolution of black feminist thought, the class will explore black women's initiation of and engagement with political, social, and artistic conversations in various fields of scholarly inquiry including-but not limited to-literature, history, sociology, political science, and the law. (Same as AAAS 344 and ENGL 344.) Prerequisite: WGSS 101, AAAS 104, or prior completion of one 200-level English course.

WGSS 350. Black Love and Romance. 3 Credits. H
This course will examine representations of love and romance in African American literature and culture. In addition to the romance novel genre, the course studies different kinds of cultural texts, such as art, film, and music. It explores romantic relationships among black people, including related topics such as sex, desire, marriage, and singleness, and how these interpersonal relationships build families, communities, and collective bonds. The class will consider both the content and aesthetics of diverse texts in order to think about how black people connect intimately as well as how various social and cultural politics underline the nature of those intimacies.

WGSS 351. Women and Leadership: The Legislative Process. 3 Credits. S
Examines current and historical roles and impacts of women involved in legislatures. Explores what difference women make when they are public officials. Students meet with local women legislators, lobbyists and political officials. Students learn how to analyze issues, access power, lobby, and organize at the grassroots. The course is designed to prepare students for an optional legislative internship during the subsequent semester.

WGSS 355. International Women’s Rights. 3 Credits. SC
Women face discrimination and abuse around the world: at home, in the workplace, and in the public sphere. How are these systems of oppression connected? How are women working together for change, and what can you do to support their efforts? This course will investigate what feminist solidarity looks like around the world, with an emphasis on connections across different cultural and political contexts. (Same as GiST 355.)

WGSS 361. Youth, Sex, and Romance in Post-WWII United States. 3 Credits. H
Most people don’t think of sex and romance as having a history. And youth seems just a natural stage of life. But the nature of “courtship,” the definitions of sex, and the meaning of “youth” have changed dramatically over time, and people struggle over those definitions right up to the current day. In this class we try to make historical sense of those struggles by focusing on a volatile and complicated period in U.S. history: the years from World War II through the recent past. (Same as HIST 361.)

WGSS 364. Pregnancy in Modern Literature. 3 Credits. HL
An examination of pregnancy, childbirth and reproductive control as depicted in literature from various national traditions in the twentieth and twenty-first centuries. This course draws together voices from literature, history, and feminist theory to deepen students’ understanding of the ways nationality, class, race, ability, and gender affect the aesthetics surrounding reproduction. Special attention is given to the relationship between society and the pregnant/postpartum individual. Other topics may include: eugenics, contraception, male pregnancy, and speculative reproduction. (Same as HUM 364.)

WGSS 365. Angry White Male Studies. 3 Credits. H
This course charts the rise of the “angry white male” in America and Britain since the 1950s, exploring the deeper sources of this emotional state while evaluating recent manifestations of male anger. Employing interdisciplinary perspectives this course examines how both dominant and subordinate masculinities are represented and experienced in cultures undergoing periods of rapid change connected to modernity as well as to rights-based movements of women, people of color, homosexuals and trans individuals. (Same as AMS 365, HIST 364 and HUM 365.)

WGSS 366. Fat, Food and the Body in Global Perspective. 3 Credits. H
An examination of fat and food as they relate to human embodiment in a variety of world locations. Bringing into a dialogue a number of disciplinary voices, including anthropology, fat studies, feminist theory, food studies, history, medicine, and psychology, the course applies theories of culture and embodiment to select global case studies as a means of approaching the pleasures, anxieties, health implications, and symbolic functions of ingesting food and drink. Topics may include the cultural and gender politics of fatness and thinness; anorexia and feederism; food, sex, and animality; vegetarianism, food scares and food purity movements; neoliberalism and the consuming body; and the material and symbolic aspects of fats and oils. (Same as HUM 366.)

WGSS 374. Religious Perspectives on Selfhood and Sexuality. 3 Credits. H
The nature of the self in its individual and social dimensions. Self experienced and expressed in sexuality. Survey of viewpoints in religious literature. (Same as REL 374.)

WGSS 376. Love, Sexuality and Gender in Japanese Literature. 3 Credits. HL H
An examination of Japanese attitudes toward love, sexuality and gender differences as revealed in literature from the tenth century to the present. Discussion format. Not open to students who have taken EALC 575/ WGSS 576. (Same as EALC 375.)

WGSS 380. African Art and Gender. 3 Credits. HL H
How does the rich relationship between art and gender provide an organizing metaphor for African artists across space and time? How do artists shape understandings of gender? In this course, we will examine gender in artistic practice alongside cultural binaries and consider how gender historically operated to define distinct roles for artists. We will study how formulations of gender and race intersected to impact artistic
production and classification during the colonial and postcolonial periods. We will analyze materiality and the metaphor of childbirth, gender and Islamic textiles, and the concept of "craft." (Same as AAAS 380.)

**WGSS 381. Feminism and Philosophy. 3 Credits. H**
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion and justifications for preferential treatment of women. (Same as PHIL 381.)

**WGSS 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Credits. NW W**
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Japanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, biological anthropologists, and sociocultural anthropologists. (Same as ANTH 389.)

**WGSS 396. Studies in: ____. 3 Credits. H**
The interdisciplinary study of selected and different aspects of women's studies in different semesters.

**WGSS 397. Study Abroad Topic in: ____. 1-6 Credits.**
This course is designed for the study of special topics in Women's Studies at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

**WGSS 410. Intimate Relationships. 3 Credits. S**
A social psychological perspective on adult intimate relationships, examining friendship, dating, committed relationships, and the dissolution of committed relationships. Topics include romance, jealousy, self-disclosure, power, loneliness, and social support. Discussion of heterosexual and homosexual relationships, traditional forms (e.g., marriage) of relationships as well as alternative lifestyles (e.g., cohabitation) and gender-linked differences in relationships. (Same as PSYC 410.) Prerequisite: PSYC 104.

**WGSS 418. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Credits. NW H**
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. Recommended: A course in East Asian studies. Not open to students who have taken EALC 618. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. (Same as EALC 418.) Prerequisite: One course in EALC or WGSS.

**WGSS 440. Communication and Gender. 3 Credits. S**
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as COMS 440.) Prerequisite: COMS 130, or COMS 230.

**WGSS 468. Psychology of Women. 3 Credits. S**
A survey of the psychological theories about women; similarities and differences in the behavior of women and men; the effects of biological and social factors on the behavior of women and men; and issues of concern to women of different races, sexual orientations, ages, and so forth. (Same as PSYC 468.) Prerequisite: Any previously completed course in PSYC or WGSS.

**WGSS 477. Gender and Religion. 3 Credits. H**
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as HUM 477 and REL 477.) Prerequisite: An introductory course in Humanities, Religious Studies or Women, Gender & Sexuality Studies.

**WGSS 498. Independent Study. 1-3 Credits. S**
Intensive reading or research under faculty supervision culminating in the writing of a paper or research report. Can be used in two-course sequence for departmental honors in WGSS, followed by WGSS 499. Prerequisite: Permission of instructor required.

**WGSS 499. Honors in Women, Gender and Sexuality Studies. 3 Credits. S**
An individual research or creative project under the direction of a specialist in the area of the student's interest. May be counted towards the total hours required for the major. Prerequisite: WGSS 498 with a grade of an A or B, or equivalent independent study/research credits with approval of the project adviser and the Women, Gender and Sexuality Studies honors coordinator. Majors only.

**WGSS 501. Doing Feminist Research. 3 Credits. S**
How is feminist research more than research that just focuses on women? What does it mean to do research in a feminist way? This course explores feminist critiques of traditional methods and asks how we can build knowledge that is more just, collaborative, and politically engaged. Students practice basic skills in qualitative research methods like interviewing and participant observation, and they learn how to design their own research project using these methods. Suggested for the junior year. Prerequisite: Any previous coursework in either WGSS or PSYC.

**WGSS 502. Human Sexuality. 3 Credits. S**
An introduction to the field of human sexuality. Topics to be covered include sexual anatomy and physiology, fertilization, pregnancy, birth and lactation, contraception, human sexual response, sexuality across the life cycle, love, marriage, alternatives to marriage, sexual orientation, sex differences in behavior, parenthood, sexually transmitted diseases, sex and the law, and sex education. (Same as PSYC 502.) Prerequisite: Any previous coursework in either WGSS or PSYC.

**WGSS 510. History of American Women: Colonial Times to 1870. 3 Credits. H**
A survey of women's history in the United States, which will consider women's roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial and early industrial America. (Same as AMS 510 and HIST 530.)

**WGSS 511. History of American Women: 1870 to Present. 3 Credits. H**
A survey of women's history in the United States, which includes radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and HIST 531.)

**WGSS 514. Politics of Human Trafficking. 3 Credits. S**
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most
non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 714, POLS 714, or GIST 714. (Same as GIST 471 and POLS 471.) Prerequisite: Sophomore standing or consent of instructor.

WGSS 515. Gender and Sexuality in Greek Culture. 3 Credits. H
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

WGSS 516. Gender and Sexuality in Roman Culture. 3 Credits. HL
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 516.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

WGSS 517. Policing the Womb. 3 Credits. S
Women's reproductive bodies have at times been made hypervisible, subject to medical, legal, and social surveillance and intervention, while at other times invisible. Across these practices, gender and race have been socially constructed in particularly limited ways, which the state has used to justify restrictive case law rulings and policies governing reproductive outcomes. This course is designed to critically examine the history, development, and outcomes of policies and cultural practices related to reproduction that have limited people's decisional autonomy. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 717. Prerequisite: Any previous course in WGSS.

WGSS 521. Women and Violence. 3 Credits. S
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as PSYC 521.) Prerequisite: PSYC 104.

WGSS 533. Rococo to Realism: Painting in Europe c. 1750-1848. 3 Credits. H
This course considers European painting c. 1750 to 1848 within the context of dramatic political and industrial revolutions. Exploring the power of the visual to engage with broader circumstances and to effect change, we will examine the ways in which shifting constructions of gender, empire, colonialism, race, slavery, and class were addressed by such artists as Watteau, David, Vigée-Lebrun, Delacroix, Géricault, Goya, Turner, Constable, Ingres, Daumier, Bonheur, and Courbet. Graduate students will complete additional assignments. (Same as HA 533.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

WGSS 534. Impressionism and Post-Impressionism: 1848-1900. 3 Credits. H
This course considers French painting 1848 to 1900, a period marked by unprecedented technological advancements, the restructuring of Paris, and the rise of consumer culture. As large sections of the city were leveled to make way for broad boulevards, cafés, and department stores, some artists strove to represent the ever-changing spectacle of urban life; others found their inspiration away from the city. Focusing on Manet, Degas, Caillebotte, Morisot, Cassatt, Monet, Renoir, Seurat, Gauguin, Van Gogh, and Cézanne, we will explore how artists engaged with shifting constructions of modernity, gender, fashion, public and private, empire, race, class, and consumer and leisure cultures. Graduate students will complete additional assignments. (Same as HA 534.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

WGSS 540. Skin, Sex, and Disease. 3 Credits. H
This course explores the complex historical relationships between gender, race, health, sickness, and oppression over time. Students examine the impact race and gender have on structuring experiences of health, sickness and health care; and examine the political activism surrounding definitions and concepts of health. Prerequisite: Any previous course in WGSS or by permission of instructor.

WGSS 549. History of Feminist Theory. 3 Credits. H
This discussion course will cover the development of feminist theories from the late Middle Ages to the 1970s. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as HIST 649.) Prerequisite: Any previous course in WGSS or HIST or permission of instructor.

WGSS 552. The Rhetoric of Women's Rights. 3 Credits. H
An analysis of the themes and rhetorical strategies of the women's rights movement in America. The course will view the struggle for women's rights from a historical perspective and will conclude with contemporary issues concerning the role of women in society. (Same as COMS 552.) Prerequisite: COMS 130 or COMS 230.

WGSS 553. Making a Pandemic: The History and Politics of HIV/ AIDS. 3 Credits. H
HIV/AIDS is a global pandemic fueled as much by political and historical forces as by epidemiology. This course will chart the disease's emergence, evolution of medical understanding and treatment, and spread of the pandemic through the lens of global structural inequalities, attitudes around sexuality, racism, and the lasting impact of colonialism. Through readings, assignments, films, and discussion, this course will lay bare for students the ways in which the current AIDS epidemic results as much from the disease's design itself as from the social and political world in which it operates. With HIV/AIDS as the focus, students will analyze and gain understandings of how different countries/communities/regions have experienced and responded to the disease, how those responses are informed by local cultural, historical, and political landscapes, and how larger global political forces have created the pandemic of today. Prerequisite: Any previous course in WGSS or by permission of instructor.

WGSS 560. Race, Gender and Empire. 3 Credits. NW
This course considers how colonialism has shaped race and gender, historically and today. It explores how Europeans justified colonial rule through sexist beliefs about Native peoples and how sexual exploitation was built into colonial occupation. Film, literature, and political essays help us examine the lasting legacies of these ideas and resistance against them - a field known as postcolonial studies. We use this lens to trace historical attitudes about the white man's burden into contemporary issues in international politics, asking how human rights programs and military intervention maintain global inequality and produce new kinds of empires. (Same as AAAS 560.) Prerequisite: Any WGSS or AAAS course, or permission of the instructor.

WGSS 562. Women and Politics. 3 Credits. S
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy,
gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as POLS 562.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 563. Gender, Sexuality and the Law. 3 Credits. H
This course provides a broad introduction to Western legal systems (especially the American legal system) and then focuses on how sex, gender, and sexuality operate in and are understood by those systems and how the law is a site of social and political struggle. Topics may include intimate relations, First Amendment law, sexual harassment and employment discrimination; reproduction policies and governance; rape and sexual assault; gender identity discrimination; and the legal understandings and constructions of equal protection and due process. No prior knowledge of legal concepts is necessary. Prerequisite: Any previous course in WGSS or by permission of the instructor.

WGSS 565. Gender, Culture, and Migration. 3 Credits. S
This course examines the gendered experiences of transnational migration through a combination of ethnography, literature, film, and news media. How do different people experience the desire to migrate, the logistics of movement, and life in a faraway place? How does mobility shape ideas of family, community, and nation? How do class, race, sexuality, and legal status also inflect these experiences, especially in rendering certain groups vulnerable to abuse and exploitation? Attention will also be paid to gendered thinking against migration, including the ways gender and sexuality inflect xenophobia, border enforcement, refugee recognition, deportation policy, and contemporary political debates. (Same as GIST 565.) Prerequisite: Any 100 level AAAS course, WGSS 101, AMS 100, AMS 110, or GIST 220.

WGSS 567. Native Feminisms. 3 Credits. SC H/W
This course examines the foundation of Native feminist scholarship and the history of Native feminist activism. The class will begin by considering whether feminist theory can support contemporary Native women Native Two-Spirit (LGBTQ+) in their struggles against settler colonialism and heteropatriarchy. While the course begins by examining the North American experience, the course will also cover a range of international indigenous contexts, with a focus on the Global South and the Indigenous Pacific. Topics explored include the history of settler-colonialism, cultural revitalization and gender roles, change and continuity under cycles of settler-colonialism, the connection between colonialism and sexual violence in Native communities, debates over citizenship and sovereignty, and contemporary Native gender roles and identities. During the conclusion of the course, students will learn to identity how Native feminism informs activism and practice. (Same as ISP 567.) Prerequisite: Any previous course in WGSS or ISP, or by permission of instructor.

WGSS 570. Men and Masculinities. 3 Credits. H
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HUM 570.) Prerequisite: Any upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

WGSS 575. The Body, Self and Society. 3 Credits. H
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, HUM 575.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

WGSS 576. Love, Sexuality and Gender in Japanese Literature. 3 Credits. HL H
An examination of Japanese attitudes toward love, sexuality, and gender differences as revealed in literature from the tenth century to the present. Discussion format. Not open to students with credit in EALC 375/WGSS 376. (Same as EALC 575.) Prerequisite: One course in EALC or WGSS.

WGSS 583. Love, Sex, and Globalization. 3 Credits. S
Escalating transnational flows of information, commodities, and people have created innumerable kinds of "intimate" contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotions-specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as ANTH 583.) Prerequisite: Any previous course in ANTH or WGSS.

WGSS 598. Sexuality and Gender in African History. 3 Credits. W
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as AAAS 598 and HIST 598.)

WGSS 600. Contemporary Feminist Political Theory. 3 Credits. S
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. woman of color and women of post-colonial societies. This course is a service learning course that provides students with on-site practicum, mentoring, and networking skills. (Same as POLS 600.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 601. Seminar in Women, Gender and Sexuality Studies. 3 Credits. S
Investigation of a topic related to women, gender or sexuality from an interdisciplinary perspective. Open only to majors in Women, Gender & Sexuality Studies and majors in Human Sexuality. Suggested for the senior year. Prerequisite: WGSS 501.

WGSS 618. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Credits. NW H
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. (Same as EALC 618.) Prerequisite: A course in East Asian studies. Not open to students who have taken EALC 418. This course is taught at the 400 and 600 levels with additional assignments at the 600-level.

WGSS 630. Politics of Identity. 3 Credits. S
This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, race, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as POLS 630.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 640. Politics of Reproductive Policy. 3 Credits. S
Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. This course is a service learning course that provides students with on-site practicum, mentoring, and networking skills. (Same as POLS 640.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 650. Service Learning in Women, Gender and Sexuality Studies. 3 Credits. S
This course, to be taken in the senior year, is designed to give students the opportunity to apply women's studies knowledge and ideas gained through course work to real-life situations in various agencies and women's centers. Open to Women's Studies majors and others with significant Women's Studies backgrounds. Prerequisite: Permission of instructor is required.

WGSS 652. Jazz and American Culture. 3 Credits. H
This course considers cultural and social histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americanness, and globalization in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as AMS 650.)

WGSS 653. Gender, War, and Peace. 3 Credits. S
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world--would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as POLS 653.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 662. Gender and Politics in Africa. 3 Credits. S
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women's health, gender and militarism. We also explore women's roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as AAAS 662 and POLS 662.) Prerequisite: Sophomore level or consent of instructor.

WGSS 664. Women, Health, and Healing in Africa. 3 Credits. H
The course explores the values, practices, cultural systems and social-economic conditions that influence the sickness and health of women in Africa. The focus is on theoretical and applied debates and issues including: contraception, infidelity, and reproduction; HIV/AIDS and other sexually transmitted infections; spiritual suffering and mental illness; trauma and violence; chronic illness, disability, and aging; pharmaceuticals, biotechnologies, and clinical research. Prerequisite: 6 hours of coursework in Anthropology and/or Women's Studies and/or African American Studies.

WGSS 669. Conceptual Issues in Human Sexuality. 3 Credits. S
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 669.) Prerequisite: Any previously completed course in PSYC or WGSS.

WGSS 696. Studies in: _______. 3 Credits. S
Interdisciplinary study of different aspects of women's studies in different semesters.

WGSS 701. Seminar in: _______. 3 Credits.
A research seminar in women's studies. Instructor and topic will vary.

WGSS 710. History of American Sexuality. 3 Credits.
This graduate seminar examines the history and significance of sexuality in American history from colonial times to the present. It will employ gender as an analytic category to explore the lived experiences of both men and women, as well as to question the formation of economic, political, and social institutions. Of necessity the class will examine the ways in which race, class, religion, and region, affect ideas about sexuality and its practice. Subjects will include abortion, contraception, prostitution, illegitimacy, homosexuality, rape, marriage, and the "sexual revolution." Prerequisite: Graduate standing.

WGSS 711. Feminist Jurisprudence. 3 Credits.
This seminar examines the role of law in perpetuating and remedying inequities against women. After studying the historical emergence of sexual equality law in the United States, we discuss several paradigmatic feminist legal theories, including formal equality, MacKinnon's "dominance" theory, relational/cultural feminism, intersectionality and queer theory. We then proceed to apply these analytical structures to various substantive areas of law of particular concern to women, including but not limited to pregnancy, sexual assault, domestic violence, and employment discrimination. Students will also present their own research to the class.

WGSS 713. The Politics of Marriage. 3 Credits.
This course focuses on the history and contemporary politics of the institution of marriage, concentrating primarily on the US context, but with exploration of marriage in other countries as well. We will consider how the law regulates marriage as well as the lived reality of marriage for
the couples who enter it. Topics include romance, engagement, gender roles in marriage, divorce, child marriage, arranged marriage, same-sex marriage, and polygamy. Prerequisite: Graduate standing.

WGSS 714. Politics of Human Trafficking. 3 Credits.
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in GIST 471, POLS 471, or WGSS 514. (Same as GIST 714 and POLS 714.) Prerequisite: Graduate standing.

WGSS 717. Policing the Womb. 3 Credits.
Women's reproductive bodies have at times been made hypervisible, subject to medical, legal, and social surveillance and intervention, while at other times invisible. Across these practices, gender and race have been socially constructed in particularly limited ways, which the state has used to justify restrictive case law rulings and policies governing reproductive outcomes. This course is designed to critically examine the history, development, and outcomes of policies and cultural practices related to reproduction that have limited people's decisional autonomy. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 517.

WGSS 770. Research in Men and Masculinities. 3 Credits.
An intensive examination of the history and theory of masculinities in the Western World since the sixteenth century. Students will become acquainted with some of the key theories of men and masculinities, examine in depth the interplay between manhood and modernity, and develop research projects on a topic negotiated with the instructor. May be repeated if content varies sufficiently. (Same as HUM 770.)

WGSS 775. Advanced Study in the Body and Senses. 3 Credits.
An intensive examination of the role of the human body in the creation of personal and social identities in the West since the sixteenth century. Emphasis is on understanding how contemporary theories of embodiment are applied to concrete historical or contemporary problems. May be repeated if course content varies sufficiently. (Same as HUM 775.)

WGSS 797. Directed Readings. 1-3 Credits.
Directed reading in an area of women's studies in which there is no appropriate course in the offerings of the Women's Studies Program, but in which there is a member of the cooperating graduate faculty competent and willing to direct the program of study.

WGSS 800. History of Women, Gender and Sexuality Studies. 3 Credits.
An introduction to the field of women, gender, and sexuality studies, paying particular attention to its development, its reception by and influence on academic disciplines, and its institutionalization. Prerequisite: Graduate standing and consent of the instructor.

WGSS 801. Feminist Theory. 3 Credits.
A survey of contemporary feminist theories produced within and across disciplines (including but not limited to, eco-feminism, and liberal, cultural, materialist, psychoanalytic, radical, and black feminist thought). Prerequisite: Graduate standing and consent of the instructor.

WGSS 802. Feminist Methodologies. 3 Credits.
How is feminist research more than just research on feminist topics? What, if any, implications do various feminist theories have for how we execute research and for what we count as knowledge? This graduate seminar explores the joint epistemological and methodological foundations of feminist research in the humanities and social sciences. We will practice different research methods, assess their strengths and limitations, and learn how to integrate them in project design. Prerequisite: Graduate standing and consent of the instructor.

WGSS 803. Feminist Pedagogy. 1.5 Credits.
The goal of the course is to teach students to teach. By reading core texts of feminist pedagogy, understanding critical theories, and attending seminars at the Center for Teaching Excellence selected by instructor and student, students will learn how to present knowledge and stimulate learning in the classroom, as well as such practical skills as leading discussion sections, preparing and presenting class sessions, developing syllabi, devising fair grading and helpful advising, and solving pedagogical problems like maintaining civility in the classroom and coping with academic misconduct. Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students.

WGSS 804. Professionalization Seminar in Women, Gender, and Sexuality Studies. 1.5 Credits.
The goal of this course is to train students in the skills essential to becoming effective scholars and educators, and successful members of the profession. The material to be covered by these three iterations includes 1) the ethics and practice of feminist research (e.g., protection of human subjects, conflicts of interest, confidentiality, legal strictures); 2) the practical aspects of producing knowledge (e.g., writing research papers, proper citation methods, conference presenting, responding to peer reviews); and 3) acquiring and securing a place in the work force (e.g., CV preparation, job interviews, grant writing, getting promotion [and, in the academy, tenure]). Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students.

WGSS 811. Black Feminist Theory. 3 Credits.
This course surveys black feminist theory and thought across various disciplines. It examines the critical figures, texts, investments, and debates constituting this evolving discourse, which centers black women's social, political, and cultural praxis as well as considers their intersectional positionalities. Prerequisite: Graduate standing.

WGSS 812. Affect and Queer Theory. 3 Credits.
Since the mid-1990s affect has become central to the study of affective labor, anticipatory temporality, and neoliberal biopolitics across the social sciences and humanities. Exploring feminist epistemology of the lived experience, queer theory of nonnormative temporality, and postcolonial studies of the body politic, this course interrogates the interrelation of affect, knowledge, and power in and outside scholarly knowledge production, and rethinks pervasive binaries such as epistemology/ontology, discourse/materiality, and reason/emotion. It will also examine the possibilities and limitations of dominant affect theory and seek methodology to study affect more inclusively and critically.

WGSS 821. Woman and Violence. 3 Credits.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as PSYC 821.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor.

WGSS 835. Colloquium in the History of Gender. 3 Credits.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and HIST 895.)

WGSS 889. Conceptual Issues in Human Sexuality. 3 Credits. An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 889.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor.

WGSS 999. Doctoral Dissertation. 1-12 Credits. Original research that is to be incorporated into a PhD dissertation. Graded on a satisfactory progress/limited progress/no progress basis.

Department of African and African-American Studies

Overview
Founded in 1970, the Department of African and African-American Studies (AAAS) provides an interdisciplinary space at the University of Kansas for studying historical and contemporary relationships among African and African-descended people. As a community of scholars and teachers, AAAS offers learning experiences for students to enrich their knowledge of African people on the Continent, as well as people of African descent in the Americas. Our academic wings span the humanities, the social sciences, and some professional fields. The Department's areas of emphasis include art and culture; religion and rhetoric; families, gender and sexuality; and political economy. AAAS boasts concentrations in African Studies, African-American Studies, Arabic and Islamic Studies, and Haitian/Caribbean Studies at the B.A., B.G.S., and M.A. levels.

In addition to our Undergraduate Major (https://afs.ku.edu/our-academic-programs/) and Master's Program (http://afs.ku.edu/graduate-program/), AAAS has an Undergraduate Minor (https://afs.ku.edu/our-academic-programs/) and two Graduate Certificates (http://afs.ku.edu/certificate-overview/). As part of our mission of developing students' cultural literacy from pan-Africanist, African-centered and Diasporic perspectives, the Department coordinates several languages: Amharic, Arabic, Kiswahili, Haitian Creole, Hausa, Somali, and Wolof, supported by Study Abroad opportunities. The Department also draws strength and vitality from two allied centers and an institute: the Kansas African Studies Center (http://kasc.ku.edu/), the Langston Hughes Center (http://langstonhughes.ku.edu/), and the Institute of Haitian Studies (https://haitianstudies.ku.edu/).


Given the breadth and depth of all that we offer, and the fact that we function genuinely as both an African and African-American studies unit, AAAS is the only department of its kind at a public or private university in Kansas and among the Big XII institutions. We demonstrate that a robust racial/ethnic and area studies presence attracts and retains a diverse faculty and student body, creates inclusive learning environments for the campus, produces lifelong learners, and supports KU's leadership in delivering a dynamic, forward-looking Liberal Arts education that (1) encourages an appreciation of different ways of knowing; and (2) prepares informed and productive citizens in Kansas, the region, the nation, and the globalizing community of the twenty-first century.

Undergraduate Programs

The undergraduate academic program focuses mainly on Africa, Afro-America, and Arabic, but due attention is paid to the Caribbean and Latin America. The program deepens the knowledge and enriches understanding of the history and culture of African peoples in Africa, the Middle East, and the Americas as a necessary and desirable end in itself but also as a useful background for professionals whose careers may involve them in these geographical and cultural areas. Essentially interdisciplinary, the major gives students a basis for interpreting the historical and contemporary experiences of African peoples in Africa, the Middle East, and the Americas, both broadly and in relation to a particular region, historical period, or cultural manifestation. The major, with its flexibility and opportunity for fieldwork, encourages students to engage in independent study, if possible in a relevant community. Most undergraduate courses are also open to nonmajors.

Graduate Programs

The objective of the graduate program in African and African-American Studies at the University of Kansas is to produce scholars, teachers, administrators, and other professionals who have the intellectual and scholarly capacity and skills to make ongoing contributions to the world in which they live. Our graduate program encourages students to adapt a critical perspective, requiring an integrative approach to the study of history, politics, economics, the arts, languages, culture, anthropology, and geography that does not abstract them from their political and social contexts, but rather relocates them within the social and political contexts from which they developed. Students are required to focus not only on the experiences of Africans and African-Americans, but also on the links of those experiences to the cultural, political, and economic forces of the larger world to which Africans and African-Americans have been, and are, inextricably connected.

The Department of African and African-American Studies offers interdisciplinary substantive and language courses leading to the Master of Arts degree in two areas of concentration: (1) African, and (2) African-American studies. The master's degree in African and African-American Studies has two related objectives: (1) it fulfills the educational needs of persons who seek positions with organizations in both the public and private sectors, and (2) it prepares persons who desire to pursue the terminal degrees in their field. The program emphasizes broader concepts in the humanities and the social sciences, but provides an option for concentration in either African or African-American Studies.

The Department of African and African-American Studies also offers two graduate certificates, one in African Studies and another in African-
American Studies. The Graduate Certificate programs enable graduate students to formally claim expertise in an area of the fields of African Studies or African-American Studies through completion of 12 hours of graduate coursework.

Kansas African Studies Center

The Kansas African Studies Center (http://www2.ku.edu/~kasc/) coordinates and develops the interdisciplinary interests of Africanists across the University of Kansas, and promotes the understanding and study of Africa in the university, the state, and the region. Its mission includes the enhancement of curriculum, the sponsorship of research, the organization of conferences, the promotion of special projects, the acquisition of library and related sources, the conduct of outreach programs, the seeking and acquisition of grants and special funding to make these activities possible and to assist the university in their realization.

Langston Hughes Center

The Langston Hughes Center (http://www2.ku.edu/~lhcaas/Home.html) (formerly the Langston Hughes Resource Center, founded in 1998) is an academic research and educational center that builds upon the legacy and creative and intellectual insight of African American author, poet, playwright, folklorist, and social critic, Langston Hughes. The center coordinates, strengthens, and develops teaching, research, and outreach activities in African American studies, and the study of race and culture in American society at the University of Kansas and throughout the region. The center is a hub of critical examination of black culture, history, literature, politics, and social relations. In addition, like Hughes himself, the center has a Diasporic focus, promoting research and discussions on African in the Americas, the Caribbean, and Africa. Toward these ends, the Langston Hughes Center regularly sponsors conferences, lectures, seminars, and forums on a variety of topics; coordinating activities with, among other groups, the Kansas African Studies Center and the Center of Latin American Studies and Caribbean Studies at KU.

Institute of Haitian Studies

The Institute of Haitian Studies (https://haitianstudies.ku.edu/) has as its main goal supporting and promoting Haitian Studies and Haitian culture through teaching, research, invited speakers, conferences, symposia, and community engagement activities. The center’s mission includes examining Haiti’s importance in the Americas as the first Black republic as well as its historical, geopolitical and cultural connections with the United States. The center also promotes the Haitian Creole language, the largest type of Creole spoken by Creole communities around the world through the teaching and dissemination of Haitian Creole. Through Kansas University’s Scholar Works (https://kuscholarworks.ku.edu/handle/1808/10885/), the center has made a number of materials in Haitian Creole available for the public’s use. The Center is affiliated with the Kansas African Studies Center and the Center of Latin American and Caribbean Studies.

Courses

AAAS 102. Arabic and Islamic Studies. 3 Credits. SC W
An introduction to the study of Islam and the Arabic language in relation to Islamic cultures in Africa, the Mediterranean region, and beyond. Topics covered include the historical origins of Islam in relation to the Arabic language and its cultures of origin. This course is interdisciplinary, including attention to the topic from the perspectives of historical unfolding of both the language and religion, geographic and cultural perspectives, political and economic concerns, and aesthetic perspectives, including literature and the arts.

AAAS 103. Introduction to Africa. 3 Credits. NW/SC S/W
An introduction to the interdisciplinary study of African cultures and societies focusing on contemporary life on the continent. Topics to be covered include the geography, history, politics, and economics of the continent, as well as the religion, languages and literatures, music, and the arts. The interdisciplinary perspective will provide students with a sound basis for understanding contemporary African societies.

AAAS 104. Introduction to African-American Studies. 3 Credits. SC U
Interdisciplinary introduction to the basic concepts and literature in the disciplines covered in African American Studies. Includes the social sciences, and humanities (including history, religion, and literature) as well as conceptual framework for investigation and analysis of Black history and culture and society.

AAAS 105. Introduction to African History. 3 Credits. NW H/W
An introduction to important historical developments in Africa. Topics include empires, kingdoms, the slave trade, European colonialism, liberation movements, national identities, and a return to independence. (Same as HIST 104.)

AAAS 106. The Black Experience in the Americas. 3 Credits. HT H/W
An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as HIST 109.)

AAAS 115. Introduction to African History, Honors. 3 Credits. NW H/W
An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as HIST 111.)

AAAS 116. The Black Experience in the Americas, Honors. 3 Credits. HT H
An intensive version of AAAS 106. Open only to students on Dean's Honor Roll or enrolled in Honors Program, or consent of instructor.

AAAS 160. Introduction to West African History. 3 Credits. W
This course treats West African history through the first part of the twentieth century. The student is provided with a perspective on the major historical patterns that gave rise to West Africa's development as an integral part of world history. Special attention is paid to anthropological, geographical, and technological developments that influenced West African political and socioeconomic changes. (Same as HIST 160.)

AAAS 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in African & African-American Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

AAAS 200. Directed Studies. 3 Credits. U
This course is designed for the study of special topics related to Africana at the freshman/sophomore level. It prepares students for continued practice in cultural reading and writing and for the academic rigor that awaits them at the upper levels. Prerequisite: Consent of department.

**AAAS 203. Culture and Health. 3 Credits. H/W**
This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as GEOG 201 and GIST 210.)

**AAAS 204. Culture and Health, Honors. 3 Credits. H/W**
Honors version of AAAS 203, GEOG 201 and GIST 210. This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as GEOG 202 and GIST 211.)

**AAAS 250. Introduction to Translation and Translation Theory. 3 Credits. H**
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as GERM 240, LING 250, SLAV 250 and SPAN 202.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

**AAAS 300. African Traditional Religion and Thought. 3 Credits. NW H/W**
A study of African traditional religious beliefs, systems and practices and how these have conditioned spiritual, moral and social values, attitudes, social relationships and institutions, art, literature and music. Topics covered include the African worldview, concepts of birth, life, marriage, death and reincarnation; the concurrent practice of syncretism, polytheism and the cult of ancestors; and the extent of relevance to Black societies in the New World. Prerequisite: AAAS 103 or AAAS 105 or AAAS 106 or consent of instructor.

**AAAS 301. Haiti: Culture and Identity. 3 Credits. NW/SC H/W**
This course examines Haiti's identity and culture through historical, social, political, economic, linguistic and religious lenses. Through the study of texts, films and articles, it analyzes Haiti's place and influence in history as the first Black Republic and the second independent nation in the Western hemisphere. It also highlights Haiti's connections to the United States as well as other Latin American countries. No knowledge of Haitian or French required. Students may not receive credit for both HAIT 200 and AAAS 301.

**AAAS 302. Contemporary Haiti. 3 Credits. NW**
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as HAIT 300.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor.

**AAAS 303. Peoples and Cultures of North Africa and the Middle East. 3 Credits. NW S**
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence, secularism, democratization, and gender, are also explored. (Same as ANTH 303.)

**AAAS 305. Modern Africa. 3 Credits. NW H/W**
A survey of social, political, and economic developments during the colonial era and independence struggles. Themes may include resistance, liberation, nationalism, gender issues, agriculture, genocide, and human rights. (Same as HIST 300.)

**AAAS 306. The Black Experience in the U.S. Since Emancipation. 3 Credits. H**
An interdisciplinary study of the history and culture of Black people in America from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde cultural changes. (Same as HIST 359.)

**AAAS 307. Modern Africa, Honors. 3 Credits. NW H**
An intensive version of HIST 300. A survey of social, political, and economic developments during the colonial era and independence struggles. Themes may include resistance, liberation, nationalism, gender issues, agriculture, genocide, and human rights. (Same as HIST 307.) Prerequisite: Open only to students admitted to the University Honors Program, or by consent of the instructor.

**AAAS 310. Introduction to Black Education in the US. 3 Credits.**
This course examines the educational experiences of African American children from Emancipation through more contemporary periods today. The class explores topics including intersectionality, schools and inequality, hip-hop education, post-Reconstruction, and race. The course centers education studies, children and youth studies, gender, history, social sciences, Black studies, policy, and law. The class is interdisciplinary and supports different fields of study across multiple degree programs.

**AAAS 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Credits. H**
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AMS 316 and HIST 316.)

**AAAS 320. African Studies In: _____, 3 Credits. NW H/W**
Lecture and discussion course in African area of current interest. May be repeated for credit toward the major.

**AAAS 321. African Studies In, Honors: _____, 3 Credits. H/W**
Lecture and discussion course in African area of current interest. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor.

**AAAS 322. Legal Issues and the African American. 3 Credits. H**
This course examines civil issues in African-American communities and populations, and their legal ramifications. Topics such as the penal system, court sentencing, death penalty, cultural norms, law enforcement
and civil liberties are critically examined within social and humanistic theories.

AAAS 323. African-American Studies In: _____. 3 Credits. H
Lecture and discussion course in African-American area of current interest. May be repeated for credit toward the major.

AAAS 325. Popular Black Music. 3 Credits. H
This is a comparative study of popular music produced in Africa, and the African Diaspora. The praxis, theories, histories, forms, artists and audiences are discussed.

AAAS 327. African American Culture. 3 Credits.
This course defines African American culture and seeks to identify ways in which it is distinct, both in terms of its roots and ongoing evolution.

AAAS 330. Black Leadership. 3 Credits. H
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful Black leaders will be invited to visit the class from time to time. (Same as AMS 340.)

AAAS 332. Introduction to African Literature. 3 Credits. NW H/W
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention is paid to historical development and to traditional literature. (Same as ENGL 326.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

AAAS 333. Introduction to Caribbean Literature. 3 Credits. H/W
Reading, analysis, and discussion of fiction, poetry, and drama from the Caribbean, including a small selection of Spanish, French, and Dutch Antillean works in translation. (Same as ENGL 339.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

AAAS 334. Introduction to African Dance Theatre. 2 Credits. NW U
An introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary will be supplemented by lectures on the "text" of performance. (Same as DANC 334 and THR 334.)

AAAS 336. Introduction to African Literature, Honors. 3 Credits. NW H/W
Reading, analysis and discussion of contemporary fiction, poetry, and drama from Africa. Brief attention is paid to historical development and to traditional literature. Prerequisite: Open only to students admitted to the University Honors Program or with consent of instructor. Not open to students who have taken AAAS 332.

AAAS 340. Women in Contemporary African Literature. 3 Credits.
A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as WGSS 330.)

AAAS 344. Black Feminist Theory. 3 Credits. HL H
This course will study the critical discourse produced by black female intellectuals, writers, and activists about their race, gender, sexual, and class identities. Students will explore black women's distinct positionality through an examination of their theory as well as their praxis from the nineteenth century to the contemporary moment. By tracing the evolution of black feminist thought, the class will explore black women's initiation of and engagement with political, social, and artistic conversations in various fields of scholarly inquiry including-but not limited to-literature, history, sociology, political science, and the law. (Same as ENGL 344 and WGSS 344.) Prerequisite: WGSS 101, AAAS 104, or prior completion of one 200-level English course.

AAAS 349. Islam. 3 Credits. NW H/W
Islam's Origins, the prophet Muhammed, the Holy Koran, religious symbols and moral mandates, and historical developments. (Same as REL 350.)

AAAS 351. Africa's Human Geographies. 3 Credits. NW S/W
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as GEOG 351.)

AAAS 353. Modern and Contemporary African Art. 3 Credits. H
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate dominant myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. Not open to students with credit in AAAS 569/HA 569. (Same as HA 353.)

AAAS 355. African Theatre and Drama. 3 Credits. NW H/W
A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as THR 326.)

AAAS 356. African-American Theatre and Drama. 3 Credits. H
A historical study of Black theatre in the U.S.A. from its African genesis to its contemporary Americaness. Epochs in African-American dramaturgy will be critically examined. (Same as THR 327)

AAAS 370. Introduction to the Languages of Africa. 3 Credits. NW H/W
A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g., Fula, Hausa, Maninka, Swahili, Yoruba). (Same as LING 370.)

AAAS 372. Religion, Power, and Sexuality in Arab Societies. 3 Credits. NW S
This course examines theories of religion, discourse, power, gender and sexuality in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as ANTH 372.)

AAAS 377. African Design. 3 Credits. H/W
This course examines the conceptualization of the "decorative" arts in Africa, including textiles, metals, ceramics, wall decoration, and jewelry,
and investigates the relation of this art historical category to modernism. How did such a wide range of artistic practices come to be grouped together? Are terms such as "decorative art" and "craft" still operative, and how do they reflect ideas about race and gender? How have African artists approached "traditional" design? What social factors influenced artistic processes and what is the historical symbolism of medium? To address these questions, we will consider artists' writings, art schools and apprenticeships, gender dynamics, transnational artistic exchanges, the concept of the artist-artisan, and the meaning of material and process. Our discussions will span historical and contemporary contexts, and also will examine colonial systems of classification, gender norms and laws, practices of appropriation, and tourism. Not open to students with credit in AAAS 677/HA 677. (Same as HA 377.) Prerequisite: An Art History course 100 level or above, or consent of instructor.

AAAS 380. African Art and Gender. 3 Credits. HL H
How does the rich relationship between art and gender provide an organizing metaphor for African artists across space and time? How do artists shape understandings of gender? In this course, we will examine gender in artistic practice alongside cultural binaries and consider how gender historically operated to define distinct roles for artists. We will study how formulations of gender and race intersected to impact artistic production and classification during the colonial and postcolonial periods. We will analyze materiality and the metaphor of childbirth, gender and Islamic textiles, and the concept of "craft." (Same as WGSS 380.)

AAAS 388. The Black Woman. 3 Credits. S/W
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Prerequisite: One course in the social sciences and/or humanities or consent of instructor.

AAAS 400. Readings in: ______. 3 Credits. U
Investigation of a subject selected by a student in consultation with a departmental adviser and conducted under supervision. Individual reports and conferences. Open only to students who have completed at least six credit hours in African and African-American studies. Cannot be repeated for credit. Prerequisite: Consent of instructor.

AAAS 415. Women and Islam. 3 Credits. H/W
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women's social roles. Focusing principally on social change in the 20th century, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th century life mediated? The course will draw on texts from history, sociology, and literature. Prerequisite: REL 107 or AAAS 349/REL 350 or consent of instructor.

AAAS 420. Intercultural Communication: The Afro-American. 3 Credits. H/W
An examination of the barriers to effective communication between black Americans and non-black Americans. (Same as COMS 447.) Prerequisite: COMS 130 or COMS 230.

AAAS 429. Postcolonial Theatre and Drama. 3 Credits. NW H
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre within theatre by exploring how the "colonial project" has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as THR 429.)

AAAS 432. Francophone African Literature. 3 Credits. NW H/W
This course is an introduction to 20th century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as FREN 432.) Prerequisite: ENGL 102 and a 200-level English course.

AAAS 433. Islamic Literature. 3 Credits. NW H/W
This course focuses on literature that reflects Islamic culture from its inception to contemporary times. Beginning with attention to the importance of the spoken word in the establishment of Islam, course readings and lectures follow the place of literary works in confirming Islamic perspectives. Readings include selections from the Qur'an, classical works of poetry and narrative, and contemporary autobiography. Authors are from Africa and the region of the Golden Age of Islam, including the best known: al-Ghazali (d.1111 C.E.), Attar (d. circa 1193-1235), Ibn Arabi (d. 1240 C.E.), Rumi (d. 1273), Saadi (d.1291), Hafiz (d. 1389 C.E.), and Shah (contemporary), as well as readings by and about less well known Muslim women scholars and Sufis in all historical periods. Readings are all in English translations.

AAAS 434. African Women Writers. 3 Credits. NW H/W
This course focuses on four decades of African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks.

AAAS 435. Muslim Women's Autobiography. 3 Credits. NW H/W
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover the nineteenth and twentieth centuries.

AAAS 437. Global Ethnic and Racial Relations. 3 Credits. W
This course uses written and visual materials to examine race, ethnicity, and nationalism around the world. Emphasis is on ways in which social forces, gender roles, sexual practices, cultural patterns, and political organization work together to construct and reinforce ethnic, racial, and national identities, boundaries, movements, and conflicts. Historical and contemporary comparisons are made between the U.S. and countries in Africa, Asia, the Americas, the Caribbean, Europe, the Pacific Islands, and the Middle East. (Same as AMS 437 and SOC 437.)

AAAS 442. The Politics of Racial Injustice in the United States. 3 Credits.
In this course, students will examine, in detail, four historical eras in which the American people struggled over anti-Black racial injustice in the United States. While the role and efficacy of social change movements and grass-roots activism in that struggle will be analyzed, the course will emphasize political, policy, and institutional responses and remedies to the problem of American racism. In particular, discussions, readings, and assignments will evaluate the successes and failures of specific legislative, judicial, administrative, and organizational interventions. How and why these responses developed and fared as they did-as well as the debates over their efficacy-will be the focal point of this course. (Same as HIST 442.)

AAAS 445. Arab Thought and Identity. 3 Credits. NW N/W
### AAAS 450. Popular Culture in the Muslim World. 3 Credits. NW H
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as REL 450.)

### AAAS 460. Topics and Problems in African and African-American Studies. 1-3 Credits. H/W
Individual investigation of special topics in African and African-American studies. May not be repeated for credit toward the major. Prerequisite: Six hours in African and African-American studies or consent of instructor.

### AAAS 470. Language and Society in Africa. 3 Credits. NW H/W
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning; writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as LING 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor.

### AAAS 496. Field Experience. 3 Credits. H/W
A supervised placement in practical situations where students actively participate in organized work within the community, to be completed with an acceptable paper. The course may be taken in the United States, Caribbean, or Africa to meet the B.A. degree requirement in African and African-American Studies. Open only to junior and senior majors or by consent of the department.

### AAAS 501. Regional History: _____ 3 Credits. H/W
A survey of the major political, social, economic and intellectual trends in a region of Africa or the Americas. Prerequisite: Five hours of distribution courses in history.

### AAAS 502. Directed Language Study: _____ 5 Credits. U
Study of an African language at Elementary I and Elementary II levels under individual supervision and with the aid of self-instructional material. Open to juniors and seniors in good standing and graduate students only and with permission of the department. May be repeated for up to 10 credit hours. Cannot be used to fulfill BA foreign language requirement.

### AAAS 503. Directed Language Study: _____ 3 Credits. U
Study of an African language at Intermediate I and Intermediate II levels under individual supervision and with the aid of self-instructional material. Open to juniors and seniors in good standing and graduate students only and with permission of the department. May be repeated for up to 6 credit hours. Cannot be used to fulfill BA foreign language requirement.

### AAAS 504. Directed Language Study I: _____ 3 Credits. U
Study of an African language at Advanced I and Advanced II levels under individual supervision and with the aid of self-instructional material. Open only to juniors and seniors in good standing, graduate students and with permission of the department. May be repeated for up to 6 credit hours. Cannot be used to fulfill BA language requirement.

### AAAS 505. Directed Language Study II: _____ 3 Credits. U
Designed for native and near native speakers, this course involves reading of materials published in an African language intended for conversation, oral presentation, and writing by native speakers. May be repeated for up to 6 credit hours. Prerequisite: Native or near native speaker proficiency or consent of instructor.

### AAAS 511. The Civil Rights Movement. 3 Credits. H
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. (Same as HIST 514.)

### AAAS 520. African Studies In: _____ 3 Credits. NW H/W
Upper level lecture and discussion courses in African area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing.

### AAAS 521. African Studies In, Honors: _____ 3 Credits. H/W
Upper level lecture and discussion courses in African area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/senior in good standing.

### AAAS 523. African-American Studies In: _____ 3 Credits. H
Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Prerequisite: Junior/Senior in good standing.

### AAAS 524. African-American Studies In, Honors: _____ 3 Credits. H
Upper level lecture and discussion courses in African-American area of current interest and/or taking advantage of faculty resources in topics relevant to the major. May be repeated for credit toward the major. Only open to students admitted to the University Honors Program or with permission of the instructor. Prerequisite: Junior/senior in good standing.

### AAAS 532. Studies in Islam. 3 Credits. H
Study of religious thought, practice, and institutions of Islam with an emphasis on the examination of primary documents.

### AAAS 534. The Rhetoric of Black Americans. 3 Credits. H
A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. Prerequisite: COMS 130. Skills in basic composition essential.

### AAAS 536. Islamic Art and Architecture in Africa. 3 Credits. N
Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamicized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade
and commerce, ritual and political power, and contemporary expression. (Same as HA 536.) Prerequisite: AAAS 102, AAAS 103, HA 100, or HA 150; or permission of instructor.

AAAS 542. The History of Islam in Africa. 3 Credits. NW H/W
A study of the history and institutions of Islam in Africa. Emphasis will be placed on the impact of Islam on African traditional religions and African civilizations in general; the historiographical traditions of Islam in Africa. Prerequisite: Five hours of distribution courses in the humanities.

AAAS 543. Language and Culture in Arabic-Speaking Communities. 3 Credits. W
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g., linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as LING 543.)

AAAS 545. Unveiling the Veil. 3 Credits. NW H
This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery.

AAAS 550. Senior Seminar in: ____. 3 Credits. H/W
Small discussion groups, each designed to consider a specific, clearly defined topic, using an interdisciplinary approach and requiring the demonstration of a comprehensive knowledge of the fundamentals in the field as appropriate to the topic. Class discussion based on student presentations. Prerequisite: Senior majors; special departmental permission for other seniors.

AAAS 551. Environmental Issues in Africa. 3 Credits. S
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as GEOG 550.) Prerequisite: GEOG 104 or permission of instructor.

AAAS 552. Classical Islamic Literature. 3 Credits. NW H
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them.

AAAS 553. Geography of African Development. 3 Credits. W
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as GEOG 553.)

AAAS 554. Contemporary Health Issues in Africa. 3 Credits. S
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected per semester to examine in detail the full array of epidemiological factors contributing to patterns of specific diseases. AIDS, childhood diseases, and reproductive health of African women are among possible topics. Course material will be selected from scholarly and medical publications, as well as coverage in the popular media. The use of a variety of sources will enhance understanding of the biological and cultural issues involved, and will help students identify possible bias and misinformation in popular coverage of events such as famine or epidemic in African settings. (Same as ANTH 545.) Prerequisite: An introductory course in either Anthropology or African Studies.

AAAS 555. African Film. 3 Credits. W
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as FMS 544.)

AAAS 560. Race, Gender and Empire. 3 Credits. NW
This course considers how colonialism has shaped race and gender, historically and today. It explores how Europeans justified colonial rule through sexist beliefs about Native peoples and how sexual exploitation was built into colonial occupation. Film, literature, and political essays help us examine the lasting legacies of these ideas and resistance against them - a field known as postcolonial studies. We use this lens to trace historical attitudes about the white man's burden into contemporary issues in international politics, asking how human rights programs and military intervention maintain global inequality and produce new kinds of empires. (Same as WGSS 560.) Prerequisite: Any WGSS or AAAS course, or permission of the instructor.

AAAS 561. Liberation in Southern Africa. 3 Credits. W
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as HIST 561 and POLS 561.)

AAAS 569. Modern and Contemporary African Art. 3 Credits. H
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. Not open to students with credit in AAAS 353/HA 353. (Same as HA 569.) Prerequisite: Junior/Senior standing and at least one course at the 100-level or above in AAAS or HA.

AAAS 574. Slavery in the New World. 3 Credits. H/W
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. (Same as HIST 574.)

AAAS 583. Migration, Diasporas and Development. 3 Credits. S
This course introduces students to key concepts in global migration and its implications on development in migrant sending states particularly
those on the African continent. It will explore the various migration patterns from Africa (e.g., migration between North Africa and Europe in the aftermath of the Arab Spring), South-South migration, the “brain drain” of skilled professionals and its implications for development, and the role of diasporas in development. The course will also assess the integration of migrants in major migrant destination regions. Finally, the course will provide students with an opportunity to critically examine the relationship between migration and development in a particular national context of their choice. (Same as GEOG 583.) Prerequisite: GEOG 102 or consent of instructor.

AAAS 584. Black American Literature. 3 Credits. H
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetic, and fictional works.

AAAS 598. Sexuality and Gender in African History. 3 Credits. W
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as HIST 598 and WGSS 598.)

AAAS 600. Politics in Africa. 3 Credits. W
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as POLS 665.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor.

AAAS 611. History of the Black Power Movement. 3 Credits. H
Examines the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the African American Freedom Movement of the 1960s; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. The course also examines the Black Arts Movement and its influence on the Black Power Movement and vise versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Prerequisite: AAAS 511 not required but recommended.

AAAS 630. The Life and Intellectual Thought of W.E.B. Du Bois. 3 Credits. H
A critical examination of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer. Moreover, the course deals with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as, Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall.

AAAS 657. Women and Gender in Islam. 3 Credits. W
Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. Also examines how Muslim women have impacted those developments. (Not open to students who have taken REL 357.) (Same as REL 657.) Prerequisite: AAAS 349/REL 350, graduate standing, or permission of instructor.

AAAS 662. Gender and Politics in Africa. 3 Credits. S
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women’s political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women’s health, gender and militarism. We also explore women’s roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as POLS 662 and WGSS 662.) Prerequisite: Sophomore level or consent of instructor.

AAAS 677. African Design. 3 Credits. NW H/W
This course examines the conceptualization of the “decorative” arts in Africa, including textiles, metals, ceramics, wall decoration, and jewelry, and investigates the relation of this art historical category to modernism. How did such a wide range of artistic practices come to be grouped together? Are terms such as “decorative art” and “craft” still operative, and how do they reflect ideas about race and gender? How have African artists approached “traditional” design? What social factors influenced artistic processes and what is the historical symbolism of medium? To address these questions, we will consider artists’ writings, art schools and apprenticeships, gender dynamics, transnational artistic exchanges, the concept of the artist-artisan, and the meaning of material and process. Our discussions will span historical and contemporary contexts, and also will examine colonial systems of classification, gender norms and laws, practices of appropriation, and tourism. Not open to students with credit in AAAS 377/HA 377. (Same as HA 677.) Prerequisite: An Art History course 100 level or above, or consent of instructor.

AAAS 680. Introduction to Modern Africa. 3 Credits. H/W
An interdisciplinary approach to cross-cultural understanding of Africa’s place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Prerequisite: Consent of instructor.

AAAS 690. Investigation and Conference. 1-3 Credits. H/W
Individual and supervised readings in selected areas of African and African-American studies which will be an investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Prerequisite: Seniors and consent of department.

AAAS 695. Honors Project in: _____ 3 Credits. H
An individual research project in African-American or African studies under the direction of a specialist in the area of the student’s interest, the results of the project to be presented in written form and to be defended before a committee of three faculty members as provided for under the requirements for Honors. Majors only and permission of instructor.

AAAS 700. Africa in World Politics. 3 Credits.
A 20th-century and 21st-century study of the combined internal and external forces that precipitated the rise of Africa, the major African issues in international relations, and Africa's impact on the modern world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 701. Politics in Africa. 3 Credits.
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 715. Seminar in African Art. 3 Credits.
A concentrated study of a special topic relating to African Art studies. Different topics are offered in different semesters. Prerequisite: Nine hours of Art History and/or consent of instructor.

AAAS 716. Women in Islam. 3 Credits.
Addresses the widely-held stereotype of Muslim women as pawns in a patriarchal socio-religious context. Investigating the Muslim cultures of certain regions, the course will examine the manner in which indigenous culture was influenced by the introduction of Islam and the historical impact of Islam on women's social roles. Focusing principally on contemporary social change, the course will consider how socio-political change affects religious roles where religion is integrally involved in daily life. To what extent is individualism valued, and how are the pressures of late 20th-century and early 21st-century life mediated? The course will draw on texts from history, sociology, and literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 720. Intercultural Communication: The Afro-American. 3 Credits.
An examination of the barriers to effective communication between Black Americans and non-Black Americans. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 723. Special Topics in Africana Studies: _____ . 3 Credits.
Seminar in an area of current interest in African and African-American Studies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 727. African-American Culture. 3 Credits.
This course defines African American culture and identifies ways in which it is distinct. The course identifies the roots of African American culture, as well as the transformations occurring over time. The course covers identity issues and considers the possibility of complex, multi-identity structures. The course addresses the issues of whether there is a common narrative or a common root metaphor for African American culture, how this is known epistemologically, internally and externally, and how epistemological "knowledge" is appropriated. Course pedagogy includes text readings, case studies, performance events, and media events.

AAAS 730. Black Leadership. 3 Credits.
The course focuses on the concept of leadership and on Black leadership in the United States. An in-depth analysis of selected case studies of Black leaders both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful Black leaders will be invited to visit the class from time to time. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 731. African Literature. 3 Credits.
Introduction to African Literature. Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 732. Francophone African Literature. 3 Credits.
This course is an introduction to 20th-century and modern Francophone African literature covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negritude, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 733. Islamic Literature. 3 Credits.
Contemporary literature that is set in the context of Muslim cultures provides for an examination of Muslim identity on its own terms. This course focuses on the literary examination of works by Muslim authors from Egypt, Sudan, Senegal, Guinea, Mali, Morocco, Nigeria, and Niger. From the perspective of both male and female authors, the issue of what it means to be a Muslim is considered through fictional accounts set in contemporary contexts. Some works will be read in translation from Arabic or French; others are written originally in English. Cultures considered in this course vary widely in their origins and customs, which allows for a focus on the one pervasive element they share in common: Islam as it shapes people's lives. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 734. African Women Writers. 3 Credits.
This course focuses on African women's writing from all regions of the continent. Works included deal with a wide variety of issues relevant to African women, as well as universal issues of conceptions of gender roles, and the struggle to attain personal rights and freedom within traditional cultural frameworks. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 735. Muslim Women's Autobiography. 3 Credits.
This course examines the realities of Muslim women's experiences as conveyed in their own voices. Works are drawn from all over the world, from Africa and the Middle East to Europe and the U.S. and cover from the 19th-century to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 745. Arab Thought and Identity. 3 Credits.
The intention of this course is to present a comprehensive portrait and a deeper understanding of the Arab society and its cultural background. We will focus on the debate that is still raging about traditionalism versus modernity, and authenticity (assala) and specificity (Khususiyya) versus westernization. Moreover, we will discuss the question of Arab identity which manifests itself through a sense of belonging and diversity of affiliations, and relies as well on shared culture and its variations, and shared place in history and common experiences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 749. Islam. 3 Credits.
Islam's origins, the prophet Muhammed, the Holy Koran, religious symbols and moral mandates, and historical developments. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 750. Popular Culture in the Muslim World. 3 Credits.
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims' sense of humor, tragedy, aesthetics, and pertinent issues of the day.

AAAS 760. Topics and Problems in African and African-American Studies. 3 Credits.
Individual investigation of special topics in African and African-American studies. May not be repeated for credit. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 770. Language and Society in Africa. 3 Credits.
Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning, writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 774. Topics in Literatures of Africa and the African Diaspora: 3 Credits.
An intensive study of the literatures of Africa and/or African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular period, genre, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Negritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as ENGL 774.)

AAAS 788. The Black Woman. 3 Credits.
An interdisciplinary study of the role of Black women in our society, from the African background through the plantation experience to the present. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 801. Introduction to Africana Studies: African-American. 3 Credits.
An introduction to, and overview of, the historical, intellectual, and professional foundations of African-American Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 802. Introduction to Africana Studies: African. 3 Credits.
An introduction to, and overview of, the historical, intellectual, and professional foundations of African Studies; a multidisciplinary examination of the key texts and issues in the field. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 803. Research Methods in Africana Studies. 3 Credits.
A multidisciplinary introduction to the range of research methods employed to examine African and African-American history, cultures, and societies. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 804. Seminar in Africana Studies. 3 Credits.
An interdisciplinary, comparative exploration of the histories, cultures, and societies of Africans and peoples of African descent. Students will be required to utilize the skills gained in AAAS 801 and AAAS 802 to design and implement a project that will be critically assessed in the seminar. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description. Prerequisite: AAAS 801 and AAAS 802 or consent of instructor.

AAAS 810. Comparative Racial and Ethnic Relations. 3 Credits.
An examination of constructions of race and ethnicity around the world. Emphasis is on the social, political, historical, cultural and economic factors that lead to the creation of ethnic and racial identities, ethnic conflict and accommodation, ethnic movements, and ethnic political organization. Racial and ethnic relations in the U.S. are compared with other countries. Major focus is placed on ethnicity in Africa, Asia, Latin America, the Caribbean, and/or the Middle East. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 811. The Civil Rights Movement. 3 Credits.
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 812. The Black Power Movement. 3 Credits.
This course will examine the Black Power Movement in its many manifestations, beginning with a discussion of its political and cultural background: the transition from Civil Rights to Black Power in the Afro-American freedom movement of 1960’s; the impact on African Americans of African decolonization and the spread of anti-colonial and anti-imperialist movements throughout other parts of the globe. There will also be some examination of the Black Arts Movement and its influence on the Black Power Movement and vice versa. Therefore, some attention will also be paid to the music, literature, theater, and the graphic arts of the period, and the aesthetic and political critiques of these artistic forms. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 827. Popular Culture in Africa. 3 Credits.
This course examines multiple expressions of popular culture in contemporary Africa, focusing on the aesthetics of forms such as music, theatre, dress, street art, and popular literary genres, as well as the social themes they deal with and the societies that produce them. The approach will be based on a critical reconsideration of notions such as traditional versus modern culture, elite versus folk art, westernization, and cultural hybridity, in order to find better ways of discussing the cultural vibrancy of everyday life in contemporary Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 830. The Life and Times of W.E.B. Du Bois. 3 Credits.
A critical examination of the life and thought of W. E. B. Du Bois, paramount black scholar and activist whose massive body of scholarly work spans the period from late 19th through the mid-20th centuries. Course covers the major works of Du Bois. Topics include Du Bois as sociologist, historian, propagandist, and creative writer, taking into account his often shifting views on art and culture, politics, leadership, civil rights and the color line, trade unionism, Pan-Africanism, socialism, internationalism, and, of course, double consciousness, among other issues. Moreover, the course will deal with Du Bois as an intellectual in conversation with other black thinkers, including individuals such as Booker T. Washington, Alexander Crummell, Anna Julia Cooper, Ida B. Wells-Barnett, Marcus Garvey, E. Franklin Frazier, Walter White and Thurgood Marshall. Additional advanced-level coursework is required for
students in this course beyond lower-level courses of the same name and/or description.

AAAS 832. Comparative Black Literature. 3 Credits.
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from Africa, the Caribbean, and the United States. Brief attention will be paid to historical development and to traditional literature. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 834. The Rhetoric of Black Americans. 3 Credits.
A study of the rhetoric of Black Americans, from their earliest protest efforts to the contemporary scene, with the focus on the methods and themes employed to alter their status in American society. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 843. Language and Culture in Arabic-Speaking Communities. 3 Credits.
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bilingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g., linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 845. Unveiling the Veil. 3 Credits.
This course seeks to unveil a complex cultural practice that has been misconstrued by many scholars. It explores the versatility of the meaning of the veil. It examines the ways in which the veil has become a symbol of privacy, cultural identity, religious assertion, resistance and liberation, besides being a symbol of constraint, oppression, backwardness, and sexual mystery. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 851. Environmental Issues in Africa. 3 Credits.
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, and the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 852. Classical Islamic Literature. 3 Credits.
An examination of major developments in classical Islamic literature in the Middle East and beyond, with attention to the poetic and prose works (in translation) that emerged from them. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 853. Geography of African Development. 3 Credits.
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 855. African Film and Video. 3 Credits.
A critical study of Africa and its peoples as depicted in films and videos. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films and videos will be examined. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 874. Slavery in the New World. 3 Credits.
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 880. Introduction to Modern Africa. 3 Credits.
An interdisciplinary approach to cross-cultural understanding of Africa's place in the modern world. Specific emphasis will be given to the role of Africa in world history, African cultures, modern African history, and problems of development and nation building in Africa. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 884. Black American Literature. 3 Credits.
A study of the literature written by Black Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of Black literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 885. Race and the American Theatre. 3 Credits.
The representation(s) of race in significant texts and performance styles in American theatre analyzed according to political ideologies, dramatic movements and the impact of these factors on the representation of the "other" in the theatre.

AAAS 890. The Rise and Fall of Apartheid. 3 Credits.
This course will deal with the fifty years of South African history during which apartheid came to be formulated, supported, and perpetuated, and the forces that were responsible for its disintegration by 1990. Reference will also be made to the transformation process since April 1994. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 898. Sexuality and Gender in African History. 3 Credits.
An examination of the history of sexuality and gender in Africa focused on the 19th-century to the present. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Additional advanced-level coursework is required for students in this course beyond lower-level courses of the same name and/or description.

AAAS 899. Thesis. 1-6 Credits.
Investigation and research of a topic for a master's thesis. A maximum of 6 thesis hours may be counted toward the 33 hours required for the degree.
Courses

**AMHR 110. Elementary Amharic I. 5 Credits. U F1**
Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Amharic.

**AMHR 120. Elementary Amharic II. 5 Credits. U F2**
A continuation of AMHR 110. Readings in cultural texts. Prerequisite: AMHR 110.

**AMHR 177. First Year Seminar: _____. 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Amharic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**AMHR 210. Intermediate Amharic I. 3 Credits. U F3**
Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Amharic texts and discussion in Amharic. Prerequisite: AMHR 120.

**AMHR 220. Intermediate Amharic II. 3 Credits. U F4**
Continuation of AMHR 210. Discussion in Amharic of texts studied. Prerequisite: AMHR 210.

Courses

**ARAB 101. Introduction to Modern Standard Arabic. 3 Credits. NW**
The goal of this course is to begin developing reading, speaking, listening, writing, and the essentials of Modern Standard Arabic grammar. This course will also provide an introduction to the culture of the Arabic speaking world. Three hours of class per week delivered face-to-face plus outside use of recorded text materials. This course does not satisfy any KU language requirement. Prerequisite: Instructor permission required.

**ARAB 102. Introduction to Modern Standard Arabic II. 3 Credits. NW**
Continuation of ARAB 101. Further development of basic familiarity with the Modern Standard Arabic language, focusing on speaking, listening, reading, writing, and the essentials of Arabic grammar. Continued exploration of the culture of the Arab-speaking world. Three hours of class per week delivered face-to-face plus outside use of recorded text materials. This course does not satisfy any KU language requirement. Prerequisite: ARAB 101.

**ARAB 110. Elementary Arabic I. 5 Credits. U F1**
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Arabic.

**ARAB 120. Elementary Arabic II. 5 Credits. U F2**
Five hours of class per week. A continuation of ARAB 110. Readings in cultural texts. Prerequisite: ARAB 110.

**ARAB 177. First Year Seminar: _____. 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Arabic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**ARAB 210. Intermediate Arabic I. 3 Credits. U F3**
Three hours of class conducted in Arabic. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Arabic texts and discussion in Arabic. Prerequisite: ARAB 120.

**ARAB 220. Intermediate Arabic II. 3 Credits. U F4**
Three hours of class conducted in Arabic. Continuation of ARAB 210. Discussion in Arabic of texts studied. Prerequisite: ARAB 210.

**ARAB 310. Advanced Arabic I. 3 Credits. U FP**
A practical Arabic language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Arabic. Designed for students who have had two or more years of Arabic study. Open to native speakers. Prerequisite: ARAB 220 or consent of instructor.

**ARAB 320. Advanced Arabic II. 3 Credits. FP**
A continuation of ARAB 310. Prerequisite: Satisfactory completion of ARAB 310 or consent of instructor.

**ARAB 401. Readings in Arabic I. 3 Credits. U FP**
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

**ARAB 402. Readings in Arabic II. 3 Credits. U FP**
Continuation of ARAB 401.

Courses

**HAIT 110. Elementary Haitian I. 3 Credits. U F1**
Beginning course in the vernacular language of Haiti, Martinique, Guadeloupe and other areas of the Caribbean and the Indian Ocean. Conversational approach, with essentials of grammar. Reading of basic texts. Special attention to folk culture as expressed by language. No previous knowledge of another foreign language is required.

**HAIT 120. Elementary Haitian II. 3 Credits. U F2**
Continuation of HAIT 110, with further readings in Haitian literature. Prerequisite: HAIT 110 or consent of instructor.

**HAIT 177. First Year Seminar: _____. 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Haitian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**HAIT 230. Intermediate Haitian I. 3 Credits. U F3**
Continued practice in conversation and composition; intensive and extensive readings from contemporary press, short story, poetry, and folk tales. Prerequisite: HAIT 120 or consent of instructor.

**HAIT 240. Intermediate Haitian II. 3 Credits. U F4**
Continuation of HAIT 230, with additional readings from theatre, novel, and historical texts. Prerequisite: HAIT 230 or consent of instructor.

**HAIT 300. Contemporary Haitian. 3 Credits. NW H**
Detailed analysis of recent Haitian history. The focus will include interactions between religion, social structure, politics, economics and international relations. (Same as AAAS 302.) Prerequisite: AAAS 301/HAIT 200, or consent of instructor.

**HAIT 350. Advanced Haitian I. 3 Credits. U FP**
Course objective is a sophisticated command of understanding, speaking, reading, and writing Haitian. Texts include newspapers and other Haitian publications as well as spoken material produced essentially for native speakers. Conversation and oral presentations. Keeping of personal journal in Haitian.
HAUS 320. Advanced Hausa I. 3 Credits. U FP
A practical Hausa language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Hausa. Designed for students who have had two or more years of Hausa study. Open to native speakers. Prerequisite: HAUS 220 or consent of instructor.

HAUS 402. Readings in Hausa II. 3 Credits. U FP
Continuation of HAUS 401. Prerequisite: Satisfactory completion of HAUS 310 or consent of instructor.

HAUS 401. Readings in Hausa I. 3 Credits. U FP
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentation, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

HAUS 310. Advanced Hausa I. 3 Credits. U FP
A continuation of HAUS 310. Prerequisite: Satisfactory completion of HAUS 310 or consent of instructor.

HAUS 210. Intermediate Hausa I. 3 Credits. U F3
Three hours of class conducted in Hausa. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Hausa texts and discussion in Hausa. Prerequisite: HAUS 120.

HAUS 220. Intermediate Hausa II. 3 Credits. U F4
Three hours of class conducted in Hausa. Discussion in Hausa of texts studied. Prerequisite: HAUS 210.

HAUS 301. Advanced Hausa I. 3 Credits. U FP
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

HAUS 402. Readings in Hausa II. 3 Credits. U FP
Continuation of HAUS 401.

KISW 110. Elementary KiSwahili I. 5 Credits. U F1
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of KiSwahili.

KISW 310. Advanced KiSwahili I. 3 Credits. U FP
A practical KiSwahili language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in KiSwahili. Designed for students who have had two or more years of KiSwahili study. Open to native speakers. Prerequisite: KISW 220 or consent of instructor.

KISW 210. Intermediate KiSwahili I. 3 Credits. U F3
Three hours of class conducted in KiSwahili. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern KiSwahili texts and discussion in KiSwahili. Prerequisite: KISW 120.

KISW 220. Intermediate KiSwahili II. 3 Credits. U F4
Three hours of class conducted in KiSwahili. Discussion in KiSwahili of texts studied. Prerequisite: KISW 210.

KISW 301. Advanced KiSwahili I. 3 Credits. U FP
A practical KiSwahili language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in KiSwahili. Designed for students who have had two or more years of KiSwahili study. Open to native speakers. Prerequisite: KISW 220 or consent of instructor.

KISW 320. Advanced KiSwahili II. 3 Credits. U FP
A continuation of KISW 310. Prerequisite: Satisfactory completion of KISW 310 or consent of instructor.

KISW 401. Readings in KiSwahili I. 3 Credits. U FP
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

KISW 402. Readings in KiSwahili II. 3 Credits. U FP
Continuation of KISW 401.

KISW 410. Advanced KiSwahili. 3 Credits. U
The course objective is a sophisticated command of speaking, listening, reading, and writing in KiSwahili. Texts used include newspapers and other KiSwahili publications not expressly for language learners, and spoken material intended for native speakers is introduced. Conversation and oral presentations. Advanced grammar. Available for elective credit in the major. Prerequisite: Native, near-native or second
language competence or satisfactory completion of fourth level language proficiency.

Courses

SOMI 110. Elementary Somali I. 5 Credits.  U F1
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Somali.

SOMI 120. Elementary Somali II. 5 Credits.  U F2
Five hours of class per week. A continuation of SOMI 110. Readings in cultural texts. Prerequisite: SOMI 110.

SOMI 210. Intermediate Somali I. 3 Credits.  U F3
Three hours of class conducted in Somali. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Somali texts and discussion in Somali. Prerequisite: SOMI 120.

Courses

WOLO 110. Elementary Wolof I. 5 Credits.  H F1
Five hours of class per week. Basic level of oral fluency and aural comprehension. Vocabulary acquisition, pronunciation, grammar, and writing. Reading of simple texts. Not open to native speakers of Wolof.

WOLO 120. Elementary Wolof II. 5 Credits.  U F2
Five hours of class per week. A continuation of WOLO 110. Readings in cultural texts. Prerequisite: WOLO 110.

WOLO 177. First Year Seminar: ______. 3 Credits.  U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Wolof. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

WOLO 210. Intermediate Wolof I. 3 Credits.  U F3
Three hours of class conducted in Wolof. Intermediate oral proficiency and aural comprehension. Systematic review of grammar. Writing skills beyond the basic level. Introduction to modern Wolof texts and discussion in Wolof. Prerequisite: WOLO 120.

WOLO 220. Intermediate Wolof II. 3 Credits.  U F4

WOLO 310. Advanced Wolof I. 3 Credits.  U FP
A practical Wolof language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Wolof. Designed for students who have had two or more years of Wolof study. Open to native speakers. Prerequisite: WOLO 220 or consent of instructor.

WOLO 320. Advanced Wolof II. 3 Credits.  U FP
A continuation of WOLO 310. Prerequisite: Satisfactory completion of WOLO 310 or consent of instructor.

WOLO 401. Readings in Wolof I. 3 Credits.  U FP
Designed for native and near-native speakers, this course involves reading newspapers and other publications in the language intended for native speakers, conversation, oral presentations, and advanced grammar. Prerequisite: Native or near-native speaker proficiency or consent of instructor.

WOLO 402. Readings in Wolof II. 3 Credits.  U FP
Continuation of WOLO 401.

WOLO 420. Advanced Wolof II. 3 Credits.  U
Aspects of Wolof literature are examined at an advanced level, including differences between oral and written narrative, oral and poetic modes, varieties of registers as determined by gender and socio-economic level, and the effect of medium on literary style. Prerequisite: Native, near-native or second language competence, or satisfactory completion of fourth level language proficiency.

Bachelor of Arts and Bachelor of General Studies in African and African-American Studies

The Department of African & African-American Studies (AAAS) will provide you with a unique center for studying the relationships among and between all people of African descent. In order to fulfill the mission of the AAAS department, you will investigate the connections between US and global histories, culture, and social and economic systems. Black Studies, or Africana Studies more broadly, is an interdisciplinary and multi-disciplinary approach to studying the experiences of African people, and African-descended people across the Diaspora. It grew most directly out of campus demands made by black students, and their allies and supporters, during the mass protest movement of the late 1960's and early 1970's.

From the outset, the goal of Africana Studies was to transform higher education, chiefly by addressing the lack of faculty and staff diversity; altering traditional curricula limited by Eurocentric paradigms; linking academic teachings and scholarship with social and civic engagement; and raising critical questions about the overall missions of higher education.

The department area of emphasis include art and culture, religion and rhetoric, families, gender and sexuality; and political economy. Through scholarship, teaching, campus and community service, and public programming, the department promotes not only critical thinking and creative problem-solving, but also expands our understanding of citizenship in a rapidly changing, multicultural, global society.

The Department also draws strength and vitality from three other units: the Kansas African Studies Center (http://kasc.ku.edu/), The Langston Hughes Center (https://langstonhughes.ku.edu/) and the Institute for Haitian Studies (http://haitianstudies.ku.edu/)

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

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.
Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

African & African-American Studies Major Requirements

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<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td><strong>African Language Proficiency (required for BA degree only)</strong></td>
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<tr>
<td>Students pursuing the AAAS BA degree must complete proficiency in an approved African language. Satisfied by one of the following:</td>
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<tr>
<td>ARAB 220</td>
<td>Intermediate Arabic II</td>
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<td>HAIT 240</td>
<td>Intermediate Haitian II</td>
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<td>KISW 220</td>
<td>Intermediate KiSwahili II</td>
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<td>WOLO 220</td>
<td>Intermediate Wolof II</td>
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<td>or other approved African language</td>
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</table>

Required Electives 15

Select five of the following courses not fulfilling a requirement above. One course may be numbered 100-299 for this requirement; the rest must be 300 or higher. Two courses may be Advanced Language courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AAAS 177</td>
<td>First Year Seminar: _____</td>
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<tr>
<td>AAAS 301</td>
<td>Haiti: Culture and Identity</td>
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<td>AAAS 302/</td>
<td>Contemporary Haiti</td>
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<td>HAIT 300</td>
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<tr>
<td>AAAS/ANTH</td>
<td>Peoples and Cultures of North America and</td>
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<td>303</td>
<td>the Middle East</td>
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<tr>
<td>or AAAS 307</td>
<td>Modern Africa, Honors</td>
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<tr>
<td>or HIST 307</td>
<td>Modern Africa, Honors</td>
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<tr>
<td>AAAS 306/</td>
<td>The Black Experience in the U.S. Since</td>
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<td>HIST 359</td>
<td>Emancipation</td>
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<tr>
<td>AAAS/AMS/</td>
<td>Ministers and Magicians: Black Religions</td>
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<tr>
<td>316</td>
<td>from Slavery to the Present</td>
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<tr>
<td>or HIST 307</td>
<td>Modern Africa, Honors</td>
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<tr>
<td>AAAS 306/</td>
<td>The Black Experience in the U.S. Since</td>
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<tr>
<td>HIST 359</td>
<td>Emancipation</td>
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<tr>
<td>316</td>
<td>from Slavery to the Present</td>
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<tr>
<td>or HIST 307</td>
<td>Modern Africa, Honors</td>
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<tr>
<td>AAAS 300</td>
<td>African American Women: Colonial Era to the</td>
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<tr>
<td>HIST 317</td>
<td>Present</td>
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<tr>
<td>AAAS 320</td>
<td>African Studies In: _____</td>
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<td>or AAAS 321</td>
<td>African Studies In, Honors: _____</td>
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<tr>
<td>AAAS 322</td>
<td>Legal Issues and the African American</td>
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<td>AAAS 323</td>
<td>African-American Studies In: _____</td>
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<td>AAAS 325</td>
<td>Popular Black Music</td>
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<tr>
<td>AAAS 327</td>
<td>African American Culture</td>
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<td>AAAS 330/</td>
<td>Black Leadership</td>
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<tr>
<td>AAAS 332/</td>
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<tr>
<td>ENGL 326</td>
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<tr>
<td>or AAAS 336</td>
<td>Introduction to African Literature, Honors</td>
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<td>AAAS 333/</td>
<td>Introduction to Caribbean Literature</td>
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<td>THR 334</td>
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<td>AAAS 340/</td>
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<tr>
<td>WGSS 330</td>
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<td>AAAS/WGSS/</td>
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<td>Islam</td>
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<tr>
<td>REL 350</td>
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<tr>
<td>AAAS/GEOG/</td>
<td>Africa's Human Geographies</td>
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<tr>
<td>351</td>
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<tr>
<td>AAAS/HA 353</td>
<td>Modern and Contemporary African Art</td>
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</tbody>
</table>
or AAAS 565: Modern and Contemporary African Art
or HA 569: Modern and Contemporary African Art

AAAS 355/THR 326: African Theatre and Drama
AAAS 356/THR 327: African-American Theatre and Drama
AAAS/LING 370: Introduction to the Languages of Africa
AAAS/ANTH 372: Religion, Power, and Sexuality in Arab Societies
AAAS/HA 377: African Design
or AAAS 677: African Design
or HA 677: African Design
AAAS 388: The Black Woman
AAAS 415: Women and Islam
AAAS 420/COMS 447: Intercultural Communication: The Afro-American
AAAS/THR 429: Postcolonial Theatre and Drama
AAAS/FREN 432: Francophone African Literature
AAAS 433: Islamic Literature
AAAS 434: African Women Writers
AAAS 435: Muslim Women's Autobiography
AAAS/SOC/AMS 437: Global Ethnic and Racial Relations
AAAS 445: Arab Thought and Identity
AAAS/REL 450: Popular Culture in the Muslim World
AAAS 460: Topics and Problems in African and African-American Studies
AAAS/LING 470: Language and Society in Africa
AAAS 501: Regional History: _____
AAAS 502: Directed Language Study: _____
AAAS 503: Directed Language Study: _____
AAAS 504: Directed Language Study I: _____
AAAS 505: Directed Language Study II: _____
AAAS 511: The Civil Rights Movement
AAAS 520: African Studies in: _____
or AAAS 521: African Studies in, Honors: _____
AAAS 527: Popular Culture in Africa
AAAS 532: Studies in Islam
AAAS 534: The Rhetoric of Black Americans
AAAS/HA 536: Islamic Art and Architecture in Africa
AAAS 542: The History of Islam in Africa
AAAS/LING 543: Language and Culture in Arabic-Speaking Communities
AAAS 545: Unveiling the Veil
AAAS 551/GEOG 550: Environmental Issues in Africa
AAAS 552: Classical Islamic Literature

AAAS/GEOG 553: Geography of African Development
AAAS 554/ANTH 545: Contemporary Health Issues in Africa
AAAS 555: African Film
AAAS/WGSS 560: Race, Gender and Empire
AAAS/POLS/HIST 561: Liberation in Southern Africa
AAAS/HIST 574: Slavery in the New World
AAAS/GEOG 583: Migration, Diasporas and Development
AAAS 584: Black American Literature
AAAS/WGSS/HIST 598: Sexuality and Gender in African History
AAAS 600/POLS 665: Politics in Africa
AAAS 611: History of the Black Power Movement
AAAS 630: The Life and Intellectual Thought of W.E.B. Du Bois
AAAS 657: Women and Gender in Islam
AAAS/WGSS/POLS 662: Gender and Politics in Africa
AAAS 680: Introduction to Modern Africa

Advanced Language Courses
ARAB 310: Advanced Arabic I
ARAB 320: Advanced Arabic II
ARAB 401: Readings in Arabic I
ARAB 402: Readings in Arabic II
HIST 338: African American Urban Community and Class in the Midwest
KISW 310: Advanced KiSwahili I
KISW 320: Advanced KiSwahili II
KISW 401: Readings in KiSwahili I
KISW 402: Readings in KiSwahili II
KISW 410: Advanced KiSwahili
HAIT 350: Advanced Haitian I
HAIT 360: Advanced Haitian II
SOMI 210: Intermediate Somali I
WOLO 310: Advanced Wolof I
WOLO 320: Advanced Wolof II

Capstone Requirements
Students must complete both of the following:
AAAS 496: Field Experience 3
or AAAS 690: Investigation and Conference
AAAS 550: Senior Seminar in: _____ 3

Fieldwork
Field experience is a junior/senior option for majors. Fieldwork may be done anywhere in the U.S. or abroad. Careful arrangements must be made long in advance. Consult the department a full semester before enrollment.
**Major Hours**

Satisfied by 33 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator.

Sample 4-year plans for the BA degree in African and African-American Studies can be found here (p. 1065) or by using the left-side navigation.

Sample 4-year plans for the BGS degree in African and African-American Studies can be found here (p. 1066) or by using the left-side navigation.

**Departmental Honors**

For graduation with honors, an undergraduate must maintain a minimum grade-point average of 3.5 in the major and must complete 3 additional hours by enrolling in AAAS 695. AAAS 695 is evaluated by a committee composed of the instructor plus two other faculty members approved by the chair. An affirmative recommendation by this committee is essential to graduation with honors, provided that the other requirements have been met. A student who plans to graduate with honors must file a declaration of intent form with the departmental honors coordinator, preferably during his or her junior year, but no later than at enrollment for the final undergraduate semester.

The department encourages majors in the African studies and Arabic and Islamic studies concentrations to spend a semester or an academic year in the Caribbean. Consult the department and the Office of Study Abroad (http://www.studyabroad.ku.edu/).

**BA in African and African-American Studies**

Below is a sample 4-year plan for students pursuing the BA in African and African-American Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
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</tr>
<tr>
<td>AAAS 100+ Introductory Course - 1 of 2</td>
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### Sophomore

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Fall Hours</th>
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</thead>
<tbody>
<tr>
<td>Goal 2.2</td>
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<td>3</td>
</tr>
<tr>
<td>AAAS 300+ Advanced Core Knowledge and Skills (Historical Context)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>African Language 1st Semester (Major Requirement)</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Goal 3 Natural Science</td>
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<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
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### Junior

<table>
<thead>
<tr>
<th>Course Description</th>
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</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility and Ethics</td>
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<tr>
<td>AAAS 300+ Elective (2 of 5)</td>
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<tr>
<td>Arabic Language 3rd semester (Major Requirement)</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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### Senior

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>AAAS 690 or 496 (Goal 6 Integration &amp; Creativity )</td>
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<tr>
<td>AAAS Elective 300+ (5 of 5)</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tbody>
</table>

**Total Hours 120**
The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

African or African Diasporic languages include: Arabic, Haitian, Kiswahili, Somali, and Wolof - possibly others by availability and faculty approval. Total hours in language sequence may vary. Work with your advisor for specific degree mapping to meet all minimum hours requirements.

Students must select from one of two areas.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Many of the AAAS introductory options fulfill KU Core Goals:
Arabic & Islamic Studies: AAAS 102 (3H, 3S, 4.2)
African Studies: AAAS 103 (3S), AAAS 105/AAAS 115 (1.1, 3H), AAAS 160 (3H, 4.2)
African-American Studies: AAAS 104 (4.1), AAAS 106/AAAS 116 (4.1)

BGS in African & African-American Studies

Below is a sample 4-year plan for students pursuing the BGS in African and African-American Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 or 105 (Goal 2.1 Written Communication (2 of 2))</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<tr>
<td>AAAS 100+ Introductory Course - 1 of 2³</td>
<td>3</td>
<td>AAAS 100+ Introductory Course - 2 of 2³</td>
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</tr>
<tr>
<td>Goal 3 Social Science</td>
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<td>Goal 3 Arts &amp; Humanities</td>
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### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
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<tr>
<td>AAAS 300+ Advanced Core Knowledge and Skills (Historical Context)</td>
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<td>AAAS 300+ Advanced Core Knowledge and Skills (Contemporary Context)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>AAAS Elective 100+ (1 of 5)¹</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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### Junior

<table>
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<th>Fall</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Goal 5 Social Responsibility and Ethics</td>
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<td>AAAS Elective 300+ (3 of 5)¹</td>
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<tr>
<td>AAAS Elective 300+ (2 of 5)¹</td>
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<td>AAAS Elective 300+ (4 of 5)¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<tr>
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### Senior

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>AAAS 690 or 496 (Goal 6 Integration and Creativity)</td>
<td>3</td>
<td>AAAS 550 (AAAS Capstone SPRING ONLY)</td>
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<tr>
<td>AAAS Elective 300+ (5 of 5)¹</td>
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<td>BGS Career Course (BGSC)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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</table>

### Total Hours 120

¹ Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.
Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Students must select from one of two areas.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Many of the AAAS introductory options fulfill KU Core Goals:
- Arabic & Islamic Studies: AAAS 102 (3H, 3S, 4.2)
- African Studies: AAAS 103 (3S), AAAS 105/AAAS 115 (1.1, 3H), AAAS 160 (3H, 4.2)
- African-American Studies: AAAS 104 (4.1), AAAS 106/AAAS 116 (4.1)

BGS students in AAAS are not required to study African or African-diasporic language, but they can.

### Minor in African and African-American Studies

African and African-American Studies offers two minors: the African & African-American Studies minor and the African & African Diasporic Languages minors. These minors make excellent cultural studies companions to all of the professional degrees on campus, as well as other College programs. Please review the "requirements" tab for further details. Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your advisor for details). Other years' catalogs: [http://catalogs.ku.edu/](http://catalogs.ku.edu/)

### African & African-American Studies Minor Requirements

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
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<td><strong>Introductory Knowledge</strong></td>
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<tr>
<td>AAAS 102</td>
<td>Arabic and Islamic Studies</td>
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<td>AAAS 103</td>
<td>Introduction to Africa</td>
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<td>AAAS 105/</td>
<td>Introduction to African History</td>
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<tr>
<td>HIST 104</td>
<td>or AAAS 115Introduction to African History, Honors</td>
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<td>or HIST 111</td>
<td>Introduction to African History, Honors</td>
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<tr>
<td>AAAS/HIST160</td>
<td>Introduction to West African History</td>
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<tr>
<td>AAAS 104</td>
<td>Introduction to African-American Studies</td>
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<tr>
<td>AAAS 106/</td>
<td>The Black Experience in the Americas</td>
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<tr>
<td>HIST 109</td>
<td>or AAAS 116The Black Experience in the Americas, Honors</td>
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<tr>
<td>HIST 359</td>
<td>Emancipation</td>
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<tr>
<td>AAAS 433</td>
<td>Islamic Literature</td>
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</tr>
<tr>
<td>AAAS 542</td>
<td>The History of Islam in Africa</td>
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</tbody>
</table>

#### Historical Context

Select one course from the following:
- AAAS 300 African Traditional Religion and Thought
- AAAS 301 Haiti: Culture and Identity
- AAAS 306/HIST 359 The Black Experience in the U.S. Since Emancipation
- AAAS 433 Islamic Literature
- AAAS 542 The History of Islam in Africa

#### Contemporary Context

Select one course from the following:
- AAAS 302/HAIT 300 Contemporary Haiti
- AAAS/ANTH Peoples and Cultures of North Africa and the Middle East
- AAAS 305/HIST 300 Modern Africa
- or AAAS 307 Modern Africa, Honors
- or HIST 307 Modern Africa, Honors
- AAAS 306/HIST 359 The Black Experience in the U.S. Since Emancipation
- AAAS/AMS/HIST 316 Ministers and Magicians: Black Relegions from Slavery to the Present

#### Electives

Select 6 additional hours of AAAS courses numbered 300 or higher not fulfilling a requirement above. Up to two courses may be advanced language courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AAAS 300</td>
<td>African Traditional Religion and Thought</td>
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<tr>
<td>AAAS 301</td>
<td>Haiti: Culture and Identity</td>
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<td>AAAS 302/HAIT 300</td>
<td>Contemporary Haiti</td>
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<td>AAAS/ANTH 303</td>
<td>Peoples and Cultures of North Africa and the Middle East</td>
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<td>AAAS 305/HIST 300</td>
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<td>or AAAS 307 Modern Africa, Honors</td>
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<td>or HIST 307 Modern Africa, Honors</td>
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<tr>
<td>AAAS 306/HIST 359</td>
<td>The Black Experience in the U.S. Since Emancipation</td>
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<tr>
<td>AAAS/AMS/HIST 316</td>
<td>Ministers and Magicians: Black Relegions from Slavery to the Present</td>
<td>3</td>
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<td>HIST 317</td>
<td>African American Women: Colonial Era to the Present</td>
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<td>AAAS 320</td>
<td>African Studies In: _____</td>
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<td>AAAS 322</td>
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<td>AAAS 327</td>
<td>African American Culture</td>
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<td>AAAS 333/</td>
<td>Introduction to Caribbean Literature</td>
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<tr>
<td>ENGL 339</td>
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</tr>
<tr>
<td>AAAS 340/WGSS 330</td>
<td>Women in Contemporary African Literature</td>
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</tr>
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<td>AAAS/WGSS/ENGL 344</td>
<td>Black Feminist Theory</td>
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<tr>
<td>AAAS 349/REL 350</td>
<td>Islam</td>
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</tr>
<tr>
<td>AAAS/GEOG 351</td>
<td>Africa's Human Geographies</td>
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<td>AAAS/HA 353</td>
<td>Modern and Contemporary African Art</td>
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<tr>
<td>AAAS 355/THR 326</td>
<td>African Theatre and Drama</td>
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<td>AAAS 356/THR 327</td>
<td>African-American Theatre and Drama</td>
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<td>AAAS/LING 370</td>
<td>Introduction to the Languages of Africa</td>
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<td>AAAS/ANTH 372</td>
<td>Religion, Power, and Sexuality in Arab Societies</td>
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<td>African Design</td>
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<td>The Black Woman</td>
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<td>AAAS 415</td>
<td>Women and Islam</td>
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<tr>
<td>AAAS 420/COMS 447</td>
<td>Intercultural Communication: The Afro-American</td>
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<td>AAAS/THR 429</td>
<td>Postcolonial Theatre and Drama</td>
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<td>AAAS/FREN 432</td>
<td>Francophone African Literature</td>
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<td>AAAS 433</td>
<td>Islamic Literature</td>
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<td>Muslim Women's Autobiography</td>
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<td>Global Ethnic and Racial Relations</td>
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<td>AAAS 445</td>
<td>Arab Thought and Identity</td>
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<td>AAAS 460</td>
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<td>Language and Society in Africa</td>
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<td>AAAS 511</td>
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<td>Popular Culture in Africa</td>
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<td>Studies in Islam</td>
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<td>AAAS 534</td>
<td>The Rhetoric of Black Americans</td>
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<td>AAAS/HA 536</td>
<td>Islamic Art and Architecture in Africa</td>
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<td>The History of Islam in Africa</td>
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<td>Language and Culture in Arabic-Speaking Communities</td>
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<td>Unveiling the Veil</td>
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<td>AAAS 551/GEOG 550</td>
<td>Environmental Issues in Africa</td>
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<td>Classical Islamic Literature</td>
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<td>AAAS/WGSS 560</td>
<td>Race, Gender and Empire</td>
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<td>AAAS/HIST/POLS 561</td>
<td>Liberation in Southern Africa</td>
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<td>AAAS/HA 569</td>
<td>Modern and Contemporary African Art</td>
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<td>AAAS/HIST 574</td>
<td>Slavery in the New World</td>
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<tr>
<td>AAAS/GEOG 583</td>
<td>Migration, Diasporas and Development</td>
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<td>AAAS 584</td>
<td>Black American Literature</td>
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<td>Sexuality and Gender in African History</td>
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<td>AAAS 600/POLS 665</td>
<td>Politics in Africa</td>
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<td>AAAS 611</td>
<td>History of the Black Power Movement</td>
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<td>AAAS 630</td>
<td>The Life and Intellectual Thought of W.E.B. Du Bois</td>
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<td>Women and Gender in Islam</td>
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<td>AAAS 680</td>
<td>Introduction to Modern Africa</td>
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<tr>
<td>ARAB 310</td>
<td>Advanced Arabic I</td>
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<td>ARAB 320</td>
<td>Advanced Arabic II</td>
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<td>HAIT 350</td>
<td>Advanced Haitian I</td>
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<td>HIST 338</td>
<td>African American Urban Community and Class in the Midwest</td>
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<td>KISW 310</td>
<td>Advanced Kiswahili I</td>
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<td>WOLO 310</td>
<td>Advanced Wolof I</td>
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<tr>
<td>WOLO 320</td>
<td>Advanced Wolof II</td>
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</table>

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**

Satisfied by a minimum of 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
**Minor in African and African Diasporic Languages**

The African & African Diasporic Languages minor is offered through the Department of African & African-American Studies. It is an excellent cultural studies companion to all of the professional degrees on campus, as well as other College programs. The minor allows advanced study in one of the following languages: [Arabic](https://afs.ku.edu/arabic/), [Haitian-Creole](https://afs.ku.edu/haitian-creole/), [Kiswahili](https://afs.ku.edu/kiswahili/) and [Wolof](https://afs.ku.edu/wolof/). Some advanced language study may be eligible for Foreign Language & Area Studies Fellowships. ([https://flas.ku.edu/apply/](https://flas.ku.edu/apply/)) Additional information on each language can be found by clicking the appropriate link above.

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

### Prerequisite Knowledge

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<tr>
<th>Code</th>
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<td>HAIT 110 &amp; HAIT 120</td>
<td>Elementary Haitian I and Elementary Haitian II</td>
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<td>KISW 110 &amp; KISW 120</td>
<td>Elementary KiSwahili I and Elementary KiSwahili II</td>
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<td>WOLO 110 &amp; WOLO 120</td>
<td>Elementary Wolof I and Elementary Wolof II</td>
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### Requirements for the Minor

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<td>HAIT 230</td>
<td>Intermediate Haitian I</td>
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<td>KISW 210</td>
<td>Intermediate KiSwahili I</td>
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<td>WOLO 210</td>
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<td>ARAB 220</td>
<td>Intermediate Arabic II</td>
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<td>WOLO 220</td>
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<td>KISW 310</td>
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<td>WOLO 310</td>
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### Electives 6

Choose two additional AAAS courses numbered 300 or higher, or additional language courses past Advanced Language II.

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<td>ARAB 402</td>
<td>Readings in Arabic II</td>
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<td>HAIT 500</td>
<td>Directed Studies in Haitian Language and Literature</td>
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<td>KISW 401</td>
<td>Readings in Haitian II</td>
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<td>KISW 402</td>
<td>Readings in Haitian II</td>
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<td>WOLO 401</td>
<td>Readings in Wolof II</td>
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<td>AAAS 300</td>
<td>African Traditional Religion and Thought</td>
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<td>AAAS 301</td>
<td>Haiti: Culture and Identity</td>
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<td>AAAS 302</td>
<td>Contemporary Haiti</td>
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<td>AAAS/ANTH 303</td>
<td>Peoples and Cultures of North Africa and the Middle East</td>
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<td>AAAS 307</td>
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<td>HIST 307</td>
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<td>AAAS 306/HIST 359</td>
<td>The Black Experience in the U.S. Since Emancipation</td>
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<td>AAAS/AMS/HIST 316</td>
<td>Ministers and Magicians: Black Religions from Slavery to the Present</td>
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<td>HIST 317</td>
<td>African American Women: Colonial Era to the Present</td>
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<td>Legal Issues and the African American</td>
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<td>African American Culture</td>
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<td>Introduction to African Dance Theatre</td>
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<td>Women in Contemporary African Literature</td>
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**AAAS/GEOG 351**  
Africa's Human Geographies

**AAAS/HA 353**  
Modern and Contemporary African Art  
or **AAAS 556**  
Modern and Contemporary African Art  
or **HA 569**  
Modern and Contemporary African Art

**AAAS 355/THR 326**  
African Theatre and Drama

**AAAS 356/THR 327**  
African-American Theatre and Drama

**AAAS/LING 370**  
Introduction to the Languages of Africa

**AAAS/ANTH 372**  
Religion, Power, and Sexuality in Arab Societies

**AAAS/HA 377**  
African Design  
or **AAAS 677**  
African Design  
or **HA 677**  
African Design

**AAAS 380**  
African Art and Gender

**AAAS 388**  
The Black Woman

**AAAS 415**  
Women and Islam

**AAAS 420/COMS 447**  
Intercultural Communication: The Afro-American

**AAAS/THR 429**  
Postcolonial Theatre and Drama

**AAAS/FREN 432**  
Francophone African Literature

**AAAS 433**  
Islamic Literature

**AAAS 434**  
African Women Writers

**AAAS 435**  
Muslim Women's Autobiography

**AAAS/SOC/AMS 437**  
Global Ethnic and Racial Relations

**AAAS 445**  
Arab Thought and Identity

**AAAS/REL 450**  
Popular Culture in the Muslim World

**AAAS 460**  
Topics and Problems in African and African-American Studies

**AAAS/LING 470**  
Language and Society in Africa

**AAAS 496**  
Field Experience

**AAAS 501**  
Regional History: ________

**AAAS 511**  
The Civil Rights Movement

**AAAS 520**  
African Studies in: ________  
or **AAAS 521**  
African Studies in, Honors: ________

**AAAS 523**  
African-American Studies in: ________  
or **AAAS 524**  
African-American Studies in, Honors: ________

**AAAS 527**  
Popular Culture in Africa

**AAAS 532**  
Studies in Islam

**AAAS 534**  
The Rhetoric of Black Americans

**AAAS/HA 536**  
Islamic Art and Architecture in Africa

**AAAS 542**  
The History of Islam in Africa

**AAAS/LING 543**  
Language and Culture in Arabic-Speaking Communities

**AAAS 545**  
Unveiling the Veil

**AAAS 550**  
Senior Seminar in: ________

**AAAS 551/GEOG 550**  
Environmental Issues in Africa

**AAAS 552**  
Classical Islamic Literature

**AAAS 553**  
Geography of African Development

**AAAS 554**  
Contemporary Health Issues in Africa

**AAAS 555/FMS 544**  
African Film

**AAAS/WGSS 560**  
Race, Gender and Empire

**AAAS/HIST/POLS 561**  
Liberation in Southern Africa

**AAAS/HIST 574**  
Slavery in the New World

**AAAS/GEOG 583**  
Migration, Diasporas and Development

**AAAS 584**  
Black American Literature

**AAAS/HIST/WGSS 598**  
Sexuality and Gender in African History

**AAAS 600/POLS 665**  
Politics in Africa

**AAAS 611**  
History of the Black Power Movement

**AAAS 630**  
The Life and Intellectual Thought of W.E.B. Du Bois

**AAAS/REL 657**  
Women and Gender in Islam

**AAAS/WGSS/POLS 662**  
Gender and Politics in Africa

**AAAS 680**  
Introduction to Modern Africa

### Minor Hours

Satisfied by at least 18 hours of minor courses.

### Minor Hours in Residence

Satisfied by a minimum of 9 hours of junior/senior (300+) hours completed at KU.

### Minor Junior/Senior (300+) Hours

Satisfied by a minimum of 12 hours from courses numbered 300 or higher in the minor.

### Minor Graduation GPA

Satisfied by a minimum of a 2.00 GPA in all minor courses. GPA calculations include all courses in the field of study, included F’s and repeated courses.

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**Undergraduate Certificate in African and African Diasporic Languages**

The Certificate in African and African Diasporic Languages is offered through the Department of African & African-American Studies. The Certificate Program enables students to formally claim expertise in one of our languages, Arabic (https://afs.ku.edu/arabic/), Haitian-Creole (https://afs.ku.edu/haitian-creole/), Kiswahili (https://afs.ku.edu/kiswahili/) and Wolof (https://afs.ku.edu/wolof/), after completion of the elementary and intermediate level course sequences. It is an excellent
The Department of African and African-American Studies offers interdisciplinary substantive and language courses leading to the Master of Arts in African and African-American Studies. The African and African-American Studies M.A. program takes 2 years of full-time study. Nine upper-division and graduate courses, in addition to full-time study. Nine upper-division and graduate courses, in addition to 3

**Master of Arts in African and African-American Studies**

The Department of African and African-American Studies offers interdisciplinary substantive and language courses leading to the Master of Arts degree in two areas of concentration: (1) African, and (2) African-American studies.

The master's degree in African and African-American Studies has two related objectives: (1) it fulfills the educational needs of persons who seek positions with organizations in both the public and private sectors, and (2) it prepares persons who desire to pursue the terminal degrees in their field. The program emphasizes the broader concepts in the humanities and the social sciences but provides an option for concentration in either African or African-American Studies.

The integrative focus of the curriculum is an important characteristic of the interdisciplinary nature of this program. In this regard, the candidate should develop the capacity to continue as a self-educator throughout their career. Broad background study in this field enables the graduate to assimilate newly-acquired skills and methodologies quickly. Graduates should be prepared to cope with the rapid changes in Africa and the African diaspora. The program places considerable emphasis on both the internal and external forces which affect African and African-American societies. The continuity and change in Africa and their impact on world civilizations are emphasized in both the required courses and through electives.

Students may further refine their studies by selecting courses under the African Studies concentration for Arabic and Islamic Studies and under the African-American Studies concentration for Haitian Studies. Accommodation also exists for members of the Armed Forces to complete their studies on any and all regions of the African continent in less than 2 years if they are willing to study through summer.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog. Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission to the M.A. Program**

Prospective students are admitted to the M.A. program for the fall or spring semester. The Department accepts applications on a rolling basis, but the priority deadline to submit applications for funding consideration is May 1st for fall admission and October 1st for spring admission.

Eligibility criteria for admission to the M.A. program follow Graduate Studies' admission policy. To be considered for admission, a student must hold a bachelor's degree. A full list of the required application materials can be found on the Department's website (http://afs.ku.edu/admission/).

Non-native speakers of English must meet Graduate Studies' English proficiency requirements (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

**M.A. Degree Requirements**

The African and African-American studies M.A. program takes 2 years of full-time study. Nine upper-division and graduate courses, in addition to

### Choose one sequence below.

#### Haitian Creole sequence:

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<tr>
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<tr>
<td>HAIT 110</td>
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<td>HAIT 120</td>
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<td>HAIT 230</td>
<td>Intermediate Haitian I</td>
<td>3</td>
</tr>
<tr>
<td>HAIT 240</td>
<td>Intermediate Haitian II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Course available online**

#### Wolof sequence:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOLO 110</td>
<td>Elementary Wolof I</td>
<td>5</td>
</tr>
<tr>
<td>WOLO 120</td>
<td>Elementary Wolof II</td>
<td>5</td>
</tr>
<tr>
<td>WOLO 210</td>
<td>Intermediate Wolof I</td>
<td>3</td>
</tr>
<tr>
<td>WOLO 220</td>
<td>Intermediate Wolof II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Courses available online**

#### Arabic sequence:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAB 110</td>
<td>Elementary Arabic I</td>
<td>5</td>
</tr>
<tr>
<td>ARAB 120</td>
<td>Elementary Arabic II</td>
<td>5</td>
</tr>
<tr>
<td>ARAB 210</td>
<td>Intermediate Arabic I</td>
<td>3</td>
</tr>
<tr>
<td>ARAB 220</td>
<td>Intermediate Arabic II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Courses available face-to-face**

#### Kiswahili sequence:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KISW 110</td>
<td>Elementary KiSwahili I</td>
<td>5</td>
</tr>
<tr>
<td>KISW 120</td>
<td>Elementary KiSwahili II</td>
<td>5</td>
</tr>
<tr>
<td>KISW 210</td>
<td>Intermediate KiSwahili I</td>
<td>3</td>
</tr>
<tr>
<td>KISW 220</td>
<td>Intermediate KiSwahili II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Courses available face-to-face**

Generally, completion of two elementary and two intermediate language courses in a single AAAS language. The table below shows the courses that will be part of this certificate. The actual course list will be maintained on a website so that the courses counting toward the certificate can be updated routinely as the languages available at KU change, which could occur with changes in Title VI funding and with changes in departmental faculty. Any language taught by the department will be added to the website list of languages that satisfy the requirements of this certificate.

Full PDF 2022-23
In consultation with their advisors and to the satisfaction of the department, students must demonstrate that their choice of a language or research skill is appropriate for their specific research interest in the field of African-American studies.

**Course Level Requirement**

Students pursuing an M.A. in African & African-American Studies must take 50% or more of their coursework at the 700 level or above. Core courses and thesis hours (if applicable) count toward this requirement.

**Handbook for Graduate Students**

Detailed information, application deadlines, and general information may be found in the Graduate Student Handbook.

**Plan of Study**

Students are expected to discuss their plans of study with the graduate advisor. The information that follows is only a guide toward that discussion, using fall admission as an example:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Semester</th>
<th>Hours</th>
<th>Semester</th>
<th>Hours</th>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 801 (required)</td>
<td>3</td>
<td>AAAS 802 (required)</td>
<td>3</td>
<td>AAAS 803 (required)</td>
<td>1</td>
<td>AAAS 804 (required)</td>
<td>3</td>
</tr>
<tr>
<td>electives</td>
<td>2</td>
<td>electives</td>
<td>6</td>
<td>elective</td>
<td>1</td>
<td>thesis hours or 2 elective courses for non-thesis option</td>
<td>6</td>
</tr>
</tbody>
</table>

**Non-thesis Option**

A non-thesis option of 6 credit hours of course work and research papers in one’s area of concentration is also available. If this option is chosen, the student will take 2 more 3-hour courses, each of which will have 2 large research-oriented essays for their final projects.

**Research Skills**

Students will fulfill a language/research skills requirement in accordance with the concentration chosen. Language/research skills courses must be at the 500 level or above to be counted toward the 33 hours required for the degree.

1. A master’s degree in African and African-American studies with an African studies concentration requires proficiency in an African language. Proficiency may be fulfilled by 1 of the following:
   - Completing 2 years of college-level language study at KU, at an equivalent institution, or through an intensive course. Language courses offered on a regular basis at KU that count toward proficiency are Amharic, Arabic, Hausa, Kiswahili, Somali, Wolof and any one of the number of African languages for which the Kansas African Studies Center has pedagogical materials and proficiency-testing capabilities.
   - The equivalent of 2 years of an approved language.
   - Proof that the student is a native speaker of an African language.

2. A master’s degree in African and African-American studies with an African-American Studies concentration requires that a student
   - Fulfill the African language requirement outlined above, or
   - Fulfill Haitian Creole or any other non-African language requirement employing standards comparable to those governing the African language requirement outlined above, or
   - Demonstrate competence in a research skill relevant to the student’s specific concentration in African-American studies. Competence in a research skill is certified by the department’s graduate studies director.

**Dual Degree: MA in Museum Studies and African and African-American Studies**

Museum Studies and African and African-American Studies offer dual master’s degrees with coordinated curricula so students are able to complete 2 M.A. degrees in 3 years. 15 graduate credit hours are applied to both programs, allowing students to complete a 33-credit-hour AAAS degree and a 36-credit-hour Museum Studies degree with just 54 graduate credits.

This program of study is designed to enhance and diversify opportunities for graduate students who are motivated to enter the cultural heritage field as specialists in African and African-American Studies. This 3-year dual
program allows students expand their contacts with faculty, enhance their professional networks, and deepen their knowledge of both fields of study.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Students seeking admission to the dual degree will complete just one application but must meet the admission requirements for both programs.

Museum Studies M.A. - Admission Requirements (http://museums.ku.edu/how-apply/)
African & African-American Studies - Admission Requirements (http://afs.ku.edu/admission/)

Students who have begun coursework in either Museum Studies or African & African-American Studies can apply to be a dual degree student prior to completing all coursework requirements for the first degree. In consultation with each department's Director of Graduate Studies, they may be able to receive credit for coursework already completed. However, the student may be required to take more than the required 54 credit hours of coursework to obtain both degrees if the application for admission to the second degree program is submitted after the student has completed courses that will not count toward the second program's requirements.

Please see the Admission to Graduate Study (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/) policy for additional information on admission requirements.

Students completing the dual degree take all of the required courses in each of the respective programs, as well as fulfilling each program's requirements to gain a breadth of knowledge. Coordination in advising between the two programs enables students to take courses that satisfy the degree needs for both programs. To earn both degrees, students complete 54 graduate credit hours, 15 of which are applied to both degrees. Because the required courses are offered regularly, students are able to complete the required courses in the first four semesters of the program, using the final two semesters to complete the remaining credit hour requirements. The programs' curricular requirements follow; further details on program expectations are available in the respective Graduate Student Handbooks.

**Museum Studies Requirements for Dual M.A.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Museum Studies Core</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

The Museum Studies Core ensures that all Museum Studies students gain a comprehensive understanding of the theories, history, techniques, and problems common to museums, historical agencies and related institutions. MUSE 803, taken in the student’s third semester of study, is a research course that enables students to conduct research or other creative activities that advance the discipline of museum studies.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 801</td>
<td>The Nature of Museums</td>
<td></td>
</tr>
<tr>
<td>MUSE 802</td>
<td>Culture of Museums</td>
<td></td>
</tr>
<tr>
<td>MUSE 803</td>
<td>Seminar in Current Museum Topics</td>
<td></td>
</tr>
</tbody>
</table>

2. **Museum Professional Areas** 9

Students will develop expertise in the principal specialties of museum work by completing at least three professional areas courses (9 credit hours), at least one of which must be a Museum Studies (MUSE) course. Many courses in other departments may fulfill requirements; it is the responsibility of students, and their advisors, to ensure that individual courses meet program requirements based on the general relevance of the course and assurance that the student's work in the class will be applicable to museum studies by meeting with instructors and examining syllabi. Courses taken must be at the 500 level or above. A list of available professional area courses can be found on the Museum Studies website.

3. **Museum Experience** 3

While enrolled in the Museum Studies M.A. Program, students are required to gain at least 500 hours of museum experience, of which at least 250 hours must be in an approved, professionally supervised internship. Students enroll in 3 credit hours of MUSE 799: Museum Internship to meet this requirement.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 799</td>
<td>Museum Internship</td>
<td></td>
</tr>
</tbody>
</table>

**African & African-American Studies Requirements for Dual M.A.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 801</td>
<td>Introduction to Africana Studies: African-American</td>
<td></td>
</tr>
<tr>
<td>AAAS 802</td>
<td>Introduction to Africana Studies: African</td>
<td></td>
</tr>
<tr>
<td>AAAS 803</td>
<td>Research Methods in Africana Studies</td>
<td></td>
</tr>
<tr>
<td>AAAS 804</td>
<td>Seminar in Africana Studies</td>
<td></td>
</tr>
</tbody>
</table>

5. **African & African-American Studies Area of Specialization** 6

Students are expected to choose 2 courses in their area of specialization. Courses must be numbered 500 level or above and have an AAAS course number.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

**Shared Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Dual Degree Electives</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Any graduate-level MUSE or AAAS course may count as an elective. Out-of-field courses must be approved by the Directors of Graduate Study for both programs.

7. **Final Project or Thesis**

Students completing the dual degree program are required to defend either a final project or thesis in their final semester. The student should consult with their African & African-American Studies and Museum Studies faculty advisors to identify a project or thesis topic that effectively incorporates both areas of study. Faculty advisors from both programs will oversee and evaluate the project or thesis. Students who choose to complete a thesis must enroll in 3 credit hours of AAAS 899 in their final semester in lieu of an elective course. Students who choose to complete a final project will take 15 credit hours of dual degree electives as described above.
Each student will successfully defend their final project or thesis as their final master's examination. The final exam committee, chosen by the student, must have at least four members; at least two from the Museum Studies area and at least two from the African & African-American Studies area.

If a student decides to complete only the MUSE M.A. or AAAS M.A. and withdraw from the other program, they must complete all requirements for the stand-alone degree.

Course Level Requirement

Students pursuing a Dual M.A. in Museum Studies and African & African-American Studies must take 50% or more of their coursework at the 700 level or above. Core courses and thesis hours (if applicable) count toward this requirement.

Graduate Certificate in African Studies

Academic goals of the program

The central objective of the Department of African & African-American Studies (AAAS) and The Kansas African Studies Center (KASC) in this certificate program is to formally recognize the expertise students in a range of disciplines already obtain in African Studies, in a manner that enhances students' career opportunities. The Graduate Certificate in African Studies enables graduate students to formally claim expertise in an area of the field of African Studies, through completion of 12 hours of graduate coursework.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admissions criteria

Eligibility criteria for admission to the certificate program follow Graduate Studies' admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission, an applicant must hold a bachelor's degree.

Application requirements differ for current KU students versus non-KU students. Please visit the Department's website (http://afs.ku.edu/applying/) for a full list of the required application materials. Non-native speakers of English must meet Graduate Studies' English proficiency requirements (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

Requirements for the Graduate Certificate in African Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General requirements</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>credit hours to be distributed as follows</td>
<td></td>
</tr>
<tr>
<td>AAAS 802</td>
<td>Introduction to Africana Studies: African</td>
<td>3</td>
</tr>
<tr>
<td>Additional 9 hours or three courses of electives</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

All courses, including language course work, must be at the 500-level or above. At least one of these courses (three credit hours) must be taken at the 700-level or above. Only courses with an Africa focus may count toward the required hours. No more than three hours of directed readings or independent study may be counted.

Graduate Certificate in African-American Studies

Academic goals of the program

The central objective of the Department of African & African-American Studies (AAAS) in this certificate program is to formally recognize the expertise students in a range of disciplines already obtain in African-American Studies in a manner that enhances students' career opportunities. The Graduate Certificate in African-American Studies enables graduate students to formally claim expertise in an area of the field of African-American Studies through completion of 12 hours of graduate coursework.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admissions criteria

Eligibility criteria for admission to the certificate program follow Graduate Studies' admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission, an applicant must hold a bachelor's degree.

Application requirements differ for current KU students versus non-KU students. Please visit the Department's website (http://afs.ku.edu/applying/) for a full list of the required application materials. Non-native speakers of English must meet Graduate Studies' English proficiency requirements (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General requirements</td>
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<tr>
<td>12</td>
<td>credit hours to be distributed as follows</td>
<td></td>
</tr>
<tr>
<td>AAAS 801</td>
<td>Introduction to Africana Studies: African-American</td>
<td>3</td>
</tr>
<tr>
<td>Additional 9 hours or three courses of electives</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>
In close consultation with their advisor, a student designs a coherent sequence of three elective courses. All courses must be taken at the 500-level or above. At least one of the elective courses (three credit hours) must be taken at the 700-level or above. Only courses with an African-American focus may count toward the required hours. No more than three hours of directed readings or independent study may be counted. A list of graduate-level courses with an African-American focus, offered in AAAS and in other departments, can be found on the AAAS website (https://afs.ku.edu/courses/#aasce).

Department of American Studies

American Studies at the University of Kansas is an interdisciplinary department whose faculty and students think critically about community, identity, and social justice in American culture, politics, and society. We study the multiple and contested meanings of “American” both nationally and transnationally, in terms of race, gender, ethnicity, religion, class, region, age, and sexuality. To prepare students to engage a diverse and globalized society, we must learn from and about communities who have been too often marginalized in society and in the academy.

Such an inclusive definition of “American” requires an equally capacious understanding of scholarship. Recognizing the critical impact of difference and power on the formation of traditional scholastic disciplines, American Studies embraces research methods that combine, cross, and stretch conventional academic boundaries. We encourage scholars to advance civic discourse at the local, national, and global levels. Through rigorous analysis of historical and current events, encompassing official institutions, social and religious movements, popular and media culture, and other areas, we illuminate the complex formations of American community and identity, both within and beyond US borders.

American Studies produces undergraduate and graduate students who are global citizens and understand the meanings of America and its populations, its cultural and social history and diversities, and its dynamic place among other nation-states. Our undergraduate majors and minors develop practical and intellectual skills that support their careers in a range of public sector and private sector areas such as public humanities, advocacy and non-profit organizations, marketing and human resources, education, mediation, social services, and the law. Our graduate students go on to varied and successful careers as university faculty members and administrators, as well as staff members and directors of non-profit organizations such as museums and historical societies.

Undergraduate Programs

American studies offers an interdisciplinary undergraduate program in which faculty and students think critically about the many institutional and cultural meanings of America, popular culture, society, and identity. Through studying topics such as film, jazz, literature, visual culture, gender, race, and religion, American studies investigates America in the present and the past, beyond both disciplinary and national boundaries. Given our recognition of the critical impact of difference and power in American life, we insist that a student’s program consider the profound impact of diversity on society and address differential power structures in American life and social relations. Motivated advanced students have the opportunity to work independently on research and service projects.

Graduate Programs

American studies is an interdisciplinary program offering graduate work on society and culture in the United States — past, present, and in global context. It accommodates a variety of individual academic objectives. All students are asked to define 3 concentrations — such as historical periods, conceptual problems, or topical subjects — and to draw on appropriate university resources relating to those areas. Students must demonstrate coherence in their graduate work and be able to show relationships between their concentrations and the wider sociocultural system. To accomplish this, students must develop knowledge (including historical perspective) in the humanities and social sciences.

For a current list of participating faculty members, please visit the department’s website (http://americanstudies.ku.edu/faculty/).

Students who are interested in enrolling in graduate-level coursework in the Department of American Studies without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s admission webpage (https://americanstudies.ku.edu/admission/) for further details.

Courses

AMS 100. Introduction to American Studies. 3 Credits. HT H
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 101.

AMS 101. Introduction to American Studies, Honors. 3 Credits. HT H
An introduction to the history and key concepts of American Studies. Students explore major changes in American culture through the critical reading and analysis of primary and secondary source material. Not open to students who have taken AMS 100. Prerequisite: Membership in the University Honors Program or approval by the American Studies Program.

AMS 110. American Identities. 3 Credits. SC S
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 112.

AMS 112. American Identities, Honors. 3 Credits. SC S
An interdisciplinary introduction to individual and group identities over time. Students explore theories and methods relating to identity from various perspectives, such as race, class, gender, sexuality, age, religion, and region. Not open to students who have taken AMS 110. Prerequisite: Membership in the University Honors Program or approval by the American Studies Program.

AMS 177. First Year Seminar: _____ . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Americna Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

AMS 260. America’s Latinos/Latinas. 3 Credits. U
An introduction to the Latino/a population (Mexican-Americans, Puerto Ricans, Cuban-Americans, Dominican-Americans, and Central and South Americans) in the US. Students discuss how US and Latin American societies have shaped Latino incorporation into the United States. We also discuss contemporary political, cultural and social issues that pertain to Latinos/as in the US.

AMS 290. Religion in American Society. 3 Credits. HR H
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics...
covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. (Same as REL 171.)

AMS 312. American Culture, 1877 to the Present. 3 Credits. H
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from 1877 to the present. In addition to tracing developments in literature, architecture, drama, music, and the visual arts, this course will investigate patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as HIST 312.)

AMS 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Credits. H
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and HIST 316.)

AMS 320. Border Patrolled States. 3 Credits. H
Examines the politics of immigrant, citizenship and space through official, intellectual and popular responses to the growth of Latino/a populations in the U.S. and to international migration to and from Mexico and Central America. Topics include consideration of how responses to immigration articulate racialized and culturally specific (including linguistic and religious) concepts of the nation, and how questions of citizenship and residency dovetail with issues of community "voice", public space, and diverse notions of "security".

AMS 323. Sex in History. 3 Credits. HT H
This course offers a survey of the history of human sexuality in the Western world; the second half of the semester emphasizes the American experience. Topics for consideration may include: masturbation, pornography, sex work, homosexuality, bisexuality, "perversions" (paraphilias), sex and marriage, racialized sexualities, sexual violence, trans* identities and experiences, sexuality and national identities, and colonized sexualities. The course demonstrates the various ways in which sex, specifically the social and political meanings attributed to physical acts, changes over time and shapes human experiences and interactions far beyond the bedroom. (Same as HUM 332, HIST 332 and WGSS 311.)

AMS 324. Being Deviant in America. 3 Credits. S
In this course students will study traits, conditions, actions, and behaviors that violate social norms and elicit negative societal reactions. This includes the social, cultural, and individual factors that explain deviance; motivations behind deviant behavior; and efforts by society to control deviants. In short, you will undertake a sociological examination of those on the margins of society and societal efforts to "deal with" them. (Same as SOC 324.)

AMS 330. American Society. 3 Credits. H
The social structure and organization of American society with special reference to recent social changes. (Same as SOC 330.) Prerequisite: An introductory course in sociology or American studies.

AMS 332. The United States in Global Context. 3 Credits. S
Examines the influence abroad of US culture, policies and practices and the impact of other countries on US culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as SOC 332.)

AMS 340. Black Leadership. 3 Credits. H/W
The course focuses on the concept of leadership and on black leadership in the United States; an in-depth analysis of selected case studies on black leaders, both historical and contemporary. Some attention will be given to the dispersion of Africans into the Americas and the leadership that emerged, conditioned both by environmental factors and the psychology engendered by the system of slavery. Selected successful black leaders will be invited to visit the class from time to time. (Same as AAAS 330.)

AMS 344. Case Study in American Studies: ______. 3 Credits. H
This course examines in depth a specific American studies or theme.

AMS 360. Theory and Method. 3 Credits. H
An introduction through a topical theme to theories and methods currently used in American Studies. Prerequisite: AMS 100, AMS 110 and AMS 332 or their equivalent, or consent of instructor.

AMS 365. Angry White Male Studies. 3 Credits. H
This course charts the rise of the "angry white male" in America and Britain since the 1950s, exploring the deeper sources of this emotional state while evaluating recent manifestations of male anger. Employing interdisciplinary perspectives this course examines how both dominant and subordinate masculinities are represented and experienced in cultures undergoing periods of rapid change connected to modernity as well as to rights-based movements of women, people of color, homosexuals and trans individuals. (Same as HIST 364, HUM 365 and WGSS 365.)

AMS 390. Geography of the United States and Canada. 3 Credits. S
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as GEOG 390.) Prerequisite: An introductory geography course, or background in United States or Canadian history, social science, or culture, or consent of instructor.

AMS 436. Ethnicity in the United States: ______. 3 Credits. S
An examination of the history, sociology, and culture of U.S. ethnic categories (e.g., American Indians, Latinos, Asian Americans, Jewish Americans, Irish Americans). The specific group studied varies from semester to semester. Course may be repeated for credit with different topics. (Same as SOC 436.)

AMS 437. Global Ethnic and Racial Relations. 3 Credits. W
This course uses written and visual materials to examine race, ethnicity, and nationalism around the world. Emphasis is on ways in which social forces, gender roles, sexual practices, cultural patterns, and political organization work together to construct and reinforce ethnic, racial, and national identities, boundaries, movements, and conflicts. Historical and contemporary comparisons are made between the U.S. and countries in Africa, Asia, the Americas, the Caribbean, Europe, the Pacific Islands, and the Middle East. (Same as AAAS 437 and SOC 437.)

AMS 494. Topics in: ______. 1-4 Credits. H
Interdisciplinary study of selected aspects of American society or culture or of the American experience.

AMS 496. Social Justice Perspectives and Experiences. 3 Credits. S
An experiential learning course in which students select and participate in public/civic engagement activities in a selected area undertaken in consultation with and under the direction of a faculty member. Students
meet regularly to discuss and evaluate their field experiences and to collectively problem solve identified challenges to the justice work with which they are engaged. Students produce a final project on the experience that integrates the engagement experience and academic materials. Prerequisite: AMS 100 and AMS 110.

AMS 510. History of American Women--Colonial Times to 1870. 3 Credits. H
A survey of women's roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial, and early industrial America. (Same as HIST 530 and WGSS 510.)

AMS 511. History of American Women--1870 to Present. 3 Credits. H
A survey of women's history in the United States that will include radical and reform movements, the impact of war and depression, professionalization, immigration, women's work and the biographies of leading figures in women's history. (Same as HIST 531 and WGSS 511.)

AMS 518. Capitalism and the Black Experience. 3 Credits. H
This is an upper level course designed to analyze the experiences that define the African American relationship to the American economy. The course begins with the slave trade and ends in the present. It explores and explains how African American economic development intimately intertwined with the movement for freedom. Students will learn how African Americans addressed issues around slavery, housing, banking, capitalism/socialism, underground economy, and gentrification. This course is chronological in nature with thematic elements. Lectures will provide brief histories and conceptual framework for readings. This background will help students understand and explore how black identity, culture, and politics interact with economy. However, the bulk of the course will operate as a seminar. By the end of the course, students will be able to summarize African American past experiences with capitalism and its relevance to contemporary economic issues affecting African American people today. (Same as HIST 518.) Prerequisite: Any American Studies or History Courses on American History.

AMS 550. Research Seminar in:_____ 3 Credits. H
A seminar exploring a specific American studies theme. A research paper or equivalent project is required. Prerequisite: AMS 360 (a grade of C or better is recommended) or consent of instructor. Cannot be taken concurrently with AMS 551, AMS 552 or AMS 553.

AMS 551. Research Project in American Studies. 3 Credits. H
Independent research on a selected topic under the direction of a faculty member. Students write an original research paper or complete an equivalent project in another medium, grounded in primary as well as secondary sources. Prerequisite: AMS 550 or consent of instructor.

AMS 552. Public Service in American Studies. 3 Credits. H
Independent public service in a selected area undertaken in consultation with and under the direction of a faculty member. Students produce a final written project on the experience that integrates the public service experience and academic materials, or complete an equivalent project in another medium. Prerequisite: AMS 550 or consent of instructor.

AMS 553. Honors in American Studies. 3 Credits. H
Honors equivalent of AMS 551. May be taken twice for credit. Three hours of AMS 553 may be substituted for a course in an appropriate category in the American Studies major. Prerequisite: AMS 550, eligibility for departmental honors, or consent of instructor.

AMS 650. Jazz and American Culture. 3 Credits. H
This course considers cultural and social histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americanness, and globalization in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as WGSS 652.)

AMS 694. Directed Readings. 1-4 Credits. H
Consent of instructor is required.

AMS 696. Studies in:_____. 3 Credits. H
Interdisciplinary study of different aspects of the American experience in different semesters.

AMS 700. Introduction to Museum Exhibits. 3 Credits.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as BIOL 787, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 714. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as BIOL 700, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 730. Introduction to Collections Management and Utilization. 3 Credits.
This course will consider the role of collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, BIOL 798, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 731. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as BIOL 785, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 737. Music in America. 3 Credits.
A survey of historical developments from the Pilgrims to the present. (Same as MUSC 759.) Prerequisite: One course in the field of music history and literature or consent of instructor.

AMS 767. Multidisciplinary Perspectives on Gerontology and Aging. 3 Credits.
A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, COMS 787, PSYC 787, and SOC 767.)

AMS 797. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as BIOL 784, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

AMS 799. Museum Internship. 1-6 Credits.
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. Graded on a satisfactory/unsatisfactory basis. (Same as ANTH 799, GEOL 723, and MUSE 799.)

AMS 801. Introduction to American Studies. 3 Credits.
An introduction to the field of American Studies through an examination of some of the classic and innovative works, issues, debates, and controversies in the history and the literature of American Studies.

AMS 802. Theorizing America. 3 Credits.
Drawing from a broad range of perspectives (e.g., cultural theory, social theory, literary theory, etc.), this course will introduce students to current theoretical debates in American studies and the concepts that inform them.

AMS 803. Research Methods in American Studies. 3 Credits.
An introduction to the range of interdisciplinary research methods in American studies. Emphasis will be placed on the understanding of the assumptions, logics, and procedures involved in various approaches to understanding American society and culture.

AMS 804. Research Seminar. 3 Credits.
An intensive application of theoretical and methodological issues to the development of specific substantive research problems. Students will be expected to design and implement a study that will be critically assessed in the seminar.

AMS 805. American Pluralism: Race, Ethnicity, and Religion in American Life. 3 Credits.
Analysis of the dynamics of intercultural and intergroup relations in America with special emphasis on the examination of major conceptual perspectives that have characterized the study of race, ethnicity, and religion in American life.

AMS 808. Studies in: _____ 3 Credits.
Interdisciplinary study of different aspects of the American experiences in different semesters.

AMS 835. Colloquium in the History of Gender. 3 Credits.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as HIST 895 and WGSS 855.)

AMS 896. Examination Preparation. 1-6 Credits.
Directed and independent study in preparation for the M.A. examination. May be repeated.

AMS 899. Thesis. 1-6 Credits.
Investigation of a topic for master's thesis. Total enrollment in this course may not exceed six hours of credit. Graded on a satisfactory/limited progress/no progress basis.

AMS 900. Teaching Seminar. 1-6 Credits.
This seminar is designed to assist students in the preparation, presentation, and evaluation of teaching in American Studies. Graded on a satisfactory/unsatisfactory basis.

AMS 996. Examination Preparation. 1-9 Credits.
Directed and independent study in preparation for the doctoral comprehensive examinations. May be repeated.

AMS 997. Directed Readings. 1-4 Credits.
Directed reading in an area of American culture in which there is no appropriate course in the offerings of the American Studies program or of the cooperating departments, but in which there is a member of the graduate faculty competent and willing to direct a program of study.

AMS 998. Seminar in: _____ 3 Credits.
Topics vary from semester to semester. Graduate students are consulted in selecting topics.

AMS 999. Dissertation. 1-12 Credits.
Dissertation Credit. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts and Bachelor of General Studies in American Studies

Career Opportunities

American Studies graduates are prepared for a broad array of occupations. Recently our graduates have entered jobs in museums, libraries, social policy, government, politics, journalism and education. Many have entered graduate work in American studies or disciplines in their concentrations. See an advisor for a list of American studies courses that may meet teacher licensure requirements in history and social sciences.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.
Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. or B.G.S. Major

American Studies Core Knowledge and Skills

Majors must complete a course in each of the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 100</td>
<td>Introduction to American Studies</td>
<td>3</td>
</tr>
<tr>
<td>or AMS 101</td>
<td>Introduction to American Studies, Honors</td>
<td></td>
</tr>
</tbody>
</table>

American Identities

Satisfied by the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 110</td>
<td>American Identities</td>
<td>3</td>
</tr>
<tr>
<td>or AMS 112</td>
<td>American Identities, Honors</td>
<td></td>
</tr>
</tbody>
</table>

The United States in Global Context

Satisfied by the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 332</td>
<td>The United States in Global Context</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 332</td>
<td>The United States in Global Context</td>
<td></td>
</tr>
</tbody>
</table>

Theory and Method

Satisfied by the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>AMS 360</td>
<td>Theory and Method</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one additional course that explores methodological and theoretical approaches used in American studies. See your advisor for appropriate options or select from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS/WGSS 560</td>
<td>Race, Gender and Empire</td>
<td></td>
</tr>
<tr>
<td>HIST 301</td>
<td>The Historian’s Craft</td>
<td></td>
</tr>
<tr>
<td>POLS 301</td>
<td>Introduction to Political Theory</td>
<td></td>
</tr>
<tr>
<td>POLS 306</td>
<td>Political Science Methods of Inquiry</td>
<td></td>
</tr>
<tr>
<td>POLS 320</td>
<td>Introduction to Public Policy</td>
<td></td>
</tr>
<tr>
<td>POLS/WGSS 600</td>
<td>Contemporary Feminist Political Theory</td>
<td></td>
</tr>
<tr>
<td>HIST 649/ WGSS 549</td>
<td>History of Feminist Theory</td>
<td></td>
</tr>
<tr>
<td>ENGL 508</td>
<td>Contemporary Literary Theory</td>
<td></td>
</tr>
<tr>
<td>POLS 609</td>
<td>Topics in Political Theory</td>
<td></td>
</tr>
<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
<td></td>
</tr>
<tr>
<td>PSYC 200</td>
<td>Research Methods in Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC/WGSS 468</td>
<td>Psychology of Women</td>
<td></td>
</tr>
<tr>
<td>SOC 280</td>
<td>Introduction to Social Research</td>
<td></td>
</tr>
<tr>
<td>SOC 380</td>
<td>Elementary Statistics and Data Analysis</td>
<td></td>
</tr>
<tr>
<td>SOC 480</td>
<td>Sociological Theory</td>
<td></td>
</tr>
</tbody>
</table>

American Studies Required Electives/Emphases

Majors must select 1 of 7 special emphases or design their own. Self-designed emphases must be approved in their entirety by an American studies advisor and the undergraduate studies director before implementation. Meet with your academic advisor to determine course options that best meet your interests in this option. Prepare for this advising session by completing a key word search in the Schedule of Classes (https://classes.ku.edu/).

- **American Cultural Studies.** Satisfied by 4 courses, 3 of which are at 300+ level (possible key words: American culture).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 312</td>
<td>American Culture, 1877 to the Present</td>
<td></td>
</tr>
<tr>
<td>AMS 650</td>
<td>Jazz and American Culture</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 320</td>
<td>American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 322</td>
<td>American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 336</td>
<td>Jewish American Literature and Culture</td>
<td></td>
</tr>
<tr>
<td>ENGL 337</td>
<td>Introduction to U.S. Latino/a Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Introduction to African-American Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Introduction to Caribbean Literature</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of:</td>
<td></td>
</tr>
<tr>
<td>HA 370</td>
<td>American Art</td>
<td>3</td>
</tr>
<tr>
<td>HA 582</td>
<td>American Art 1860-1900: Gilded Age</td>
<td>3</td>
</tr>
<tr>
<td>HIST 312</td>
<td>American Culture, 1877 to the Present</td>
<td></td>
</tr>
<tr>
<td>HIST 347</td>
<td>Environmental History of North America</td>
<td></td>
</tr>
<tr>
<td>HIST 353</td>
<td>Indigenous Peoples of North America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 631</td>
<td>The Contemporary Afro-American Experience</td>
<td></td>
</tr>
<tr>
<td>LAC 505</td>
<td>U.S. Latino and Latin American Film and Literature</td>
<td></td>
</tr>
<tr>
<td>REL 339</td>
<td>History of Religion in America</td>
<td>3</td>
</tr>
<tr>
<td>THR 327</td>
<td>African-American Theatre and Drama</td>
<td>3</td>
</tr>
<tr>
<td>THR 380</td>
<td>Popular Culture:</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Race Ethnicity.** Majors must complete the following (possible key words: race, ethnicity, stereotyping, cultural diversity, slavery, ethnic relations, black experience):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 306</td>
<td>The Black Experience in the U.S. Since Emancipation</td>
<td></td>
</tr>
<tr>
<td>AAAS 460</td>
<td>Topics and Problems in African and African-American Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 336</td>
<td>Jewish American Literature and Culture</td>
<td></td>
</tr>
<tr>
<td>AMS/AAS 437</td>
<td>Global Ethnic and Racial Relations</td>
<td></td>
</tr>
<tr>
<td>ENGL 337</td>
<td>Introduction to U.S. Latino/a Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Introduction to African-American Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Introduction to Caribbean Literature</td>
<td></td>
</tr>
<tr>
<td>HIST 353</td>
<td>Indigenous Peoples of North America</td>
<td></td>
</tr>
<tr>
<td>HIST 574</td>
<td>Slavery in the New World</td>
<td></td>
</tr>
<tr>
<td>HIST 631</td>
<td>The Contemporary Afro-American Experience</td>
<td></td>
</tr>
</tbody>
</table>
Race and Ethnicity Group B
Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: American documentary, American art, American theater, American film).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 611</td>
<td>History of the Black Power Movement</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 301</td>
<td>Anthropology Through Films</td>
<td>3</td>
</tr>
<tr>
<td>HA 370</td>
<td>American Art</td>
<td>3</td>
</tr>
<tr>
<td>HA 525</td>
<td>Aegean Archaeology and Art</td>
<td>3</td>
</tr>
<tr>
<td>HA 582</td>
<td>American Art 1860-1900: Gilded Age</td>
<td>3</td>
</tr>
<tr>
<td>FMS 310</td>
<td>History of the Silent Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 311</td>
<td>History of the American Sound Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 314</td>
<td>History of African-American Images in Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of:</td>
<td>3</td>
</tr>
<tr>
<td>THR 327</td>
<td>African-American Theatre and Drama</td>
<td>3</td>
</tr>
<tr>
<td>THR 380</td>
<td>Popular Culture:</td>
<td>3</td>
</tr>
<tr>
<td>THR 528</td>
<td>History of U.S. Theatre and Drama</td>
<td>3</td>
</tr>
</tbody>
</table>

Race and Ethnicity Required Electives
Satisfied by 2 electives, at least 1 at the 300+ level, from the following related to race and ethnicity: AAAS, AMS, ANTH, ENGL, HIST, POLS, SOC, WS.

- Visual Culture. Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: American culture, popular literature, sport, conspiracies).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 344</td>
<td>Case Study in American Studies:</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 325</td>
<td>Recent Popular Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 506</td>
<td>Science Fiction</td>
<td>3</td>
</tr>
<tr>
<td>HIST 312</td>
<td>American Culture, 1877 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of:</td>
<td>3</td>
</tr>
<tr>
<td>SOC 363</td>
<td>The Sociology of Culture</td>
<td>3</td>
</tr>
<tr>
<td>SOC 364</td>
<td>Society, Popular Culture, and the Media</td>
<td>3</td>
</tr>
<tr>
<td>THR 327</td>
<td>African-American Theatre and Drama</td>
<td>3</td>
</tr>
<tr>
<td>THR 380</td>
<td>Popular Culture:</td>
<td>3</td>
</tr>
</tbody>
</table>

- Local and Global. Majors must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS/SOC 437</td>
<td>Global Ethnic and Racial Relations</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Introduction to Caribbean Literature</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 396</td>
<td>East Asia</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 591</td>
<td>Geography of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 300</td>
<td>Modern Africa</td>
<td>3</td>
</tr>
<tr>
<td>HIST 331</td>
<td>Age of Empires-The Atlantic 1400-1800</td>
<td>3</td>
</tr>
<tr>
<td>HIST 343</td>
<td>The Holocaust in History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 350</td>
<td>The Korean War, 1950-1953</td>
<td>3</td>
</tr>
<tr>
<td>HIST 365</td>
<td>Invention of the Tropics</td>
<td>3</td>
</tr>
<tr>
<td>HIST 371</td>
<td>Tequila, Tango, Carnival, City</td>
<td>3</td>
</tr>
<tr>
<td>HIST 397</td>
<td>From Mao to Now: China's Red Revolution</td>
<td>3</td>
</tr>
<tr>
<td>HIST 398</td>
<td>Introduction to History of Japan: Anime to Zen</td>
<td>3</td>
</tr>
<tr>
<td>HIST 574</td>
<td>Slavery in the New World</td>
<td>3</td>
</tr>
<tr>
<td>SOC 430</td>
<td>Cross-Cultural Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

Race and Ethnicity Required Electives
Satisfied by 2 electives, at least 1 at the 300+ level, from the following related to race and ethnicity: AAAS, AMS, ENGL, GEOG, HA, HIST, LAC, POLS, SPAN.

- Popular Culture. Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: popular culture, American culture, popular literature, sport, conspiracies).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 511</td>
<td>History of American Women--1870 to Present</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 359</td>
<td>Anthropology of Sex</td>
<td>3</td>
</tr>
<tr>
<td>HIST 531</td>
<td>History of American Women--1870 to Present</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 504</td>
<td>Philosophy of Sex and Love</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 410</td>
<td>Intimate Relationships</td>
<td>3</td>
</tr>
<tr>
<td>REL 374</td>
<td>Religious Perspectives on Selfhood and Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>SOC 352</td>
<td>Sociology of Sex Roles</td>
<td>3</td>
</tr>
<tr>
<td>SOC 343</td>
<td>American Racial and Ethnic Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOC 617</td>
<td>Women and Health Care</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 333</td>
<td>The Politics of Physical Appearance</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 440</td>
<td>Communication and Gender</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 468</td>
<td>Psychology of Women</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 562</td>
<td>Women and Politics</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 563</td>
<td>Gender, Sexuality and the Law</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 653</td>
<td>Gender, War, and Peace</td>
<td>3</td>
</tr>
</tbody>
</table>
• Religion. Satisfied by 4 courses from at least 2 departments, 3 of which are at the 300+ level (possible key words: American religion):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 300</td>
<td>African Traditional Religion and Thought</td>
<td>3</td>
</tr>
<tr>
<td>AMS 290</td>
<td>Religion in American Society</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 484</td>
<td>Magic, Science, and Religion</td>
<td>3</td>
</tr>
<tr>
<td>HIST 373</td>
<td>The Supreme Court and Religious Issues in the United States</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 350</td>
<td>Philosophical Issues in Religion</td>
<td>3</td>
</tr>
<tr>
<td>REL 330</td>
<td>Native American Religions</td>
<td>3</td>
</tr>
<tr>
<td>REL 339</td>
<td>History of Religion in America</td>
<td>3</td>
</tr>
<tr>
<td>REL 671</td>
<td>American Communes</td>
<td>3</td>
</tr>
</tbody>
</table>

Students considering graduate study should take at least 2 courses beyond major requirements. These should be selected in consultation with a faculty advisor.

Capstone experience
Majors must complete 1 of the following:
• Research Seminar in: ______. Satisfied by AMS 550.
• By application, advanced students may pursue a focused project of research or service under the supervision of a faculty member. Satisfied by AMS 551, AMS 552, or AMS 553.

American Studies Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

- **Major Hours**
  Satisfied by 30 hours of major courses.

- **Major Hours in Residence**
  Satisfied by a minimum of 15 hours of KU resident credit in the major.

- **Major Junior/Senior (300+)+ Hours**
  Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

- **Major Junior/Senior (300+)+ Graduation GPA**
  Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

- **Major Junior/Senior Major Attempts**
  Summary includes American Studies junior/senior (300+) hours attempted, including F’s and incompletes.

Graduation Plan
With careful planning and commitment to a full-time course load, you can graduate in 4 years. Download a sample 4-year plan (p. 1081) for American studies.

Double Majors
American studies majors are encouraged to take a second major in a related field, such as history, English, political science, sociology, anthropology, religious studies, African and African-American studies, economics, or art history. Because the major is interdisciplinary, a second major is relatively easy to achieve during the usual 4 years of undergraduate study.

Opportunities for Original Projects
By application, advanced students may pursue a focused project of research or service under the supervision of a faculty member. AMS 551, AMS 552, and AMS 553 function as independent research and service project electives.

A sample 4-year plan for the BA degree in American Studies can be found here: American Studies (p. 1081), or by using the left-side navigation.
A sample 4-year plan for the BGS degree in American Studies can be found here: American Studies (p. 1082), or by using the left-side navigation.

Departmental Honors
An honors program allows seniors to do independent work under faculty direction toward completion of an honors thesis. Enrollment in AMS 553 is required. By special arrangement, students may design independent study programs to meet concentration requirements. Graduation with honors is awarded to students who meet College honors requirements, which, in addition to the course requirements includes a major GPA of 3.5.

BA in American Studies
Below is a sample 4-year plan for students pursuing the BA in American Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)¹</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)¹</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)²</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>First Year Seminar or Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>AMS 110 (Goal 3 Social Science)³</td>
<td>3</td>
<td>AMS 100 (Goal 3 Arts and Humanities)³</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
<td><strong>Total</strong></td>
<td>17</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)⁷</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity⁴</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>AMS 332 (Goal 4.2 Global Awareness)</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
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</tbody>
</table>

¹, ², ³, ⁴, ⁵, ⁶, ⁷ Refer to specific course codes and descriptions.
### Total Hours 120

<table>
<thead>
<tr>
<th>Second Area of Study/ Elective/Degree/Junior-Senior Hours</th>
<th>3 AMS Emphasis Area Course (1 of 4)</th>
<th>3</th>
<th>15</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
<td>Hours</td>
<td></td>
</tr>
<tr>
<td>AMS 360 (TYPICALLY FALL ONLY)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>AMS Emphasis Area Course 300+ (2 of 4)</td>
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<td>AMS Emphasis Area Course 300+ (3 of 4)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
<td>Hours</td>
<td></td>
</tr>
<tr>
<td>AMS Theory and Method Course (see advisor) (Major Requirement)</td>
<td>3</td>
<td>AMS 550 (Goal 6 Integration &amp; Creativity, Major Requirement, SPRING ONLY)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AMS Emphasis Area Course 300+ (4 of 4)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### Please note:

- All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.
- The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in American Studies

Below is a sample 4-year plan for students pursuing the BGS in American Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>AMS 110 (Goal 3 Social Science)</td>
<td>3</td>
<td>AMS 100 (Goal 3 Arts and Humanities)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar or Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>AMS 332 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>AMS Emphasis Area Course (1 of 4)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>
Second Area of Study/ Elective/Degree/Junior-Senior Hours

3 Second Area of Study/ Elective/Degree/Junior-Senior Hours

3

15

5

Junior

Fall

Hours

Spring

Hours

AMS 360 (Major Requirement TYPICALLY FALL ONLY)

3

Goal 5 Social Responsibility and Ethics

3

AMS Emphasis Area Course 300+ (2 of 4)^4

3

AMS Emphasis Area Course 300+ (3 of 4)^4

3

Second Area of Study/ Elective/Degree/Junior-Senior Hours^2

3

Second Area of Study/ Elective/Degree/Junior-Senior Hours^2

3

Second Area of Study/ Elective/Degree/Junior-Senior Hours^2

3

BGS Career Course (BGSC)

3

Senior

Fall

Hours

Spring

Hours

AMS Theory and Method Course (see advisor) (Major Requirement)^1

3

AMS 550 (Goal 6 Integration & Creativity, Major Requirement, SPRING ONLY)

3

Second Area of Study/ Elective/Degree/Junior-Senior Hours^2

3

Second Area of Study/ Elective/Degree/Junior-Senior Hours^2

3

Second Area of Study/ Elective/Degree/Junior-Senior Hours^2

3

Second Area of Study/ Elective/Degree/Junior-Senior Hours^2

3

Second Area of Study/ Elective/Degree/Junior-Senior Hours^2

3

Total Hours 120

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal.

Minor in Latino/a Studies

Why study American studies?

Because American studies offers a creative environment to learn, think, and reflect about American culture, history, and communities from both a national and global perspective.

Requirements for the Minor

Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Core Courses</strong></td>
<td></td>
</tr>
<tr>
<td>AMS 260</td>
<td>America's Latinos/Latinas</td>
<td>12</td>
</tr>
<tr>
<td>ANTH 562</td>
<td>Mexamérica</td>
<td></td>
</tr>
<tr>
<td>LAC 302</td>
<td>Topics in Latin American Area Studies: _______</td>
<td></td>
</tr>
<tr>
<td>LAC 602</td>
<td>Topics in Latin American Studies: _______</td>
<td></td>
</tr>
<tr>
<td>ENGL 337</td>
<td>Introduction to U.S. Latino/a Literature</td>
<td></td>
</tr>
<tr>
<td>POLS 619</td>
<td>Topics in American Politics: _______ (Latino Politics)</td>
<td></td>
</tr>
<tr>
<td>SPAN 464</td>
<td>Reading and Analysis of U.S. Latino/a Literatures: ____ (conducted in Spanish)</td>
<td></td>
</tr>
<tr>
<td>SW 455</td>
<td>Topics in Social Welfare: ____ (Social Work with Latinos)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The following topics courses also may count toward the minor, if the particular topic offered in a given semester focuses on U.S. Latino/as:</td>
<td></td>
</tr>
<tr>
<td>AMS 344</td>
<td>Case Study in American Studies: _______</td>
<td></td>
</tr>
<tr>
<td>AMS 494</td>
<td>Topics in: _____</td>
<td></td>
</tr>
<tr>
<td>AMS 551/553</td>
<td>Research Project in American Studies (if the research focuses on U.S. Latino/as)</td>
<td></td>
</tr>
<tr>
<td>SPAN 440</td>
<td>Topics in Transatlantic Hispanic Studies: ____ (conducted in Spanish)</td>
<td></td>
</tr>
<tr>
<td>SPAN 540</td>
<td>Colloquium on Hispanic Studies: _____ (conducted in Spanish)</td>
<td></td>
</tr>
<tr>
<td>SW 555</td>
<td>Diversity, Equity and Inclusion in Social Work Practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Latino/a Studies Required Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A course with a service-learning component, such as one of the following, may also count in this category, with permission of the Latino/a studies advisor, if the service learning component is in a Latino/a community in the U.S.:</td>
<td></td>
</tr>
<tr>
<td>AMS 552</td>
<td>Public Service in American Studies</td>
<td></td>
</tr>
<tr>
<td>SPAN 330</td>
<td>Service Learning Internship Spanish (variable credit)</td>
<td></td>
</tr>
<tr>
<td>SOC 490</td>
<td>Internship in Sociology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other courses with at least 75 percent U.S. Latino/a content may count toward the minor with permission of the Latino/a studies advisor.</td>
<td></td>
</tr>
</tbody>
</table>

^1 See the Degree Requirements tab for a list of courses that fulfill this major requirement.

^2 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

^3 These AMS courses can fulfill different KU Core Goals. Individual degree mapping is done in partnership with your advisor.

^4 AMS majors complete one special emphasis, totaling 12 hours (4 classes) within the major. Three of four courses must be 300+. Majors select from options in the catalog and work with a faculty advisor to develop their emphasis and select classes. Emphasis allows deeper study of a student’s area of interest before taking senior seminar (AMS 550) in their final spring term.
Students selecting this minor must complete 2 additional courses (6 hours) from any course above not used to satisfy the requirement and any of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 110</td>
<td>American Identities</td>
<td>3</td>
</tr>
<tr>
<td>AMS 112</td>
<td>American Identities, Honors</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 340</td>
<td>Topics in U.S. Ethnic Literature: _____ (if the topic includes U.S. Latino/a literature)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 591</td>
<td>Geography of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 574</td>
<td>Slavery in the New World</td>
<td>3</td>
</tr>
<tr>
<td>HIST 575</td>
<td>The Many Faces of Mexico</td>
<td>3</td>
</tr>
<tr>
<td>HIST 576</td>
<td>History of the Caribbean and Central America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 580</td>
<td>Economic History of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>LAC 100</td>
<td>Latin American Culture and Society</td>
<td>3</td>
</tr>
<tr>
<td>LAC 302/602</td>
<td>Topics in Latin American Area Studies: _____ (Sports and Politics in Latin America)</td>
<td>3</td>
</tr>
<tr>
<td>LAC 302/602</td>
<td>Topics in Latin American Area Studies: _____ (The Latin American Left)</td>
<td>3</td>
</tr>
<tr>
<td>LAC 332</td>
<td>Language and Society in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>POLS 658</td>
<td>Theories of Politics in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>POLS 659</td>
<td>Political Dynamics of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>POLS 670</td>
<td>United States Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>SOC/AMS 332</td>
<td>The United States in Global Context</td>
<td>3</td>
</tr>
<tr>
<td>SOC 343</td>
<td>American Racial and Ethnic Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOC 437</td>
<td>Global Ethnic and Racial Relations</td>
<td>3</td>
</tr>
<tr>
<td>or AMS 437</td>
<td>Global Ethnic and Racial Relations</td>
<td>3</td>
</tr>
<tr>
<td>or AAAS 437</td>
<td>Global Ethnic and Racial Relations</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 447</td>
<td>Latin American Cultures: _____ (conducted in Spanish)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 460</td>
<td>Colonial Spanish-American Studies: _____ (conducted in Spanish)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 461</td>
<td>Nineteenth Century Spanish-American Studies: _____ (conducted in Spanish)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 462</td>
<td>Twentieth Century Spanish-American Studies: _____ (conducted in Spanish)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 463</td>
<td>National Traditions in Spanish America: _____ (conducted in Spanish)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 471</td>
<td>Studies in Spanish-American Culture and Civilization: _____ (conducted in Spanish)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 475</td>
<td>Studies in Latin-American Literature and Culture: _____ (conducted in Spanish)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 560</td>
<td>Colloquium on Latin American Film (conducted in Spanish)</td>
<td>3</td>
</tr>
<tr>
<td>SW 560</td>
<td>Study Abroad Topics: _____ (International Social Work (when in Costa Rica))</td>
<td>3</td>
</tr>
<tr>
<td>SW 560</td>
<td>Study Abroad Topics: _____ (Intercultural Community Social Service (when in Costa Rica))</td>
<td>3</td>
</tr>
</tbody>
</table>

Other appropriate courses on Latin America, its cultures, countries, geography, history, politics, economy, and/or people, or other relevant courses on the U.S., may also count toward this requirement, with the approval of the Latino/a studies advisor.

**Latino/a Minor Discipline Breadth**

Satisfied by courses from at least 3 departments.

**Latino/a Studies Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Minor in American Studies**

The minor in American Studies offers students an opportunity to incorporate American Studies as an interdisciplinary field of study along with their chosen major and degree. The minor is open to all students. Many students who minor in our program do so because they want to pair their interest in the humanities and social justice with their work in STEM fields. Others find our major to be a particularly complimentary field of study for those who are currently majoring in other fields within the humanities, social sciences, or natural sciences.

**Requirements for the Minor**

Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 100</td>
<td>Introduction to American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AMS 101</td>
<td>Introduction to American Studies, Honors</td>
<td>3</td>
</tr>
<tr>
<td>AMS 110</td>
<td>American Identities</td>
<td>3</td>
</tr>
<tr>
<td>AMS 112</td>
<td>American Identities, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

**Choose one introductory course from the following:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 177</td>
<td>First Year Seminar: _____</td>
<td>3</td>
</tr>
<tr>
<td>AMS 260</td>
<td>America’s Latinos/Latinas</td>
<td>3</td>
</tr>
<tr>
<td>AMS 290</td>
<td>Religion in American Society</td>
<td>3</td>
</tr>
<tr>
<td>or REL 171</td>
<td>Religion in American Society</td>
<td>3</td>
</tr>
<tr>
<td>AMS 312</td>
<td>American Culture, 1877 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 312</td>
<td>American Culture, 1877 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>AMS 330</td>
<td>American Society</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 330</td>
<td>American Society</td>
<td>3</td>
</tr>
</tbody>
</table>

**Choose one course from the following:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 332</td>
<td>The United States in Global Context</td>
<td>3</td>
</tr>
</tbody>
</table>

**Choose four American Studies courses (any course with an AMS prefix or courses cross-listed with AMS courses) (12 hours) at the junior/senior level**
Note: Only 1 course in the minor may be shared with your major.

Minor Hours & GPA
While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 GPA in all courses in the minor. GPA calculations include all courses in the field of study including Fs and repeated courses.

Minor in Social Justice in the U.S.

What is Social Justice?
Social justice refers to fair and equal institutions, laws, practices, and social relationships. It allows all of us to participate fully in and contribute to our communities and to realize our full potential as members of society and human beings. Issues of social justice affect educational and employment access and outcomes, health and welfare, everyday living and the general well being of our society. This minor invites you to investigate and reflect on the history and current state of social justice, on social relations as affected by race and ethnicity, economic class, gender, sexuality, religion, ability, and other forms of diversity. This minor also supports and encourages the study of activism and advocacy for social justice. It will help you to recognize and address persistent inequalities that are detrimental to the overall quality of life of this increasingly diverse US society of the 21st century, and thus gives you the potential to contribute directly to the realization of social justice.

Who will benefit from the Social Justice Minor?
This minor will complement undergraduate majors in the professional schools and all divisions of the College, from the traditional disciplines such as history, sociology and geography to interdisciplinary majors such as human biology, African and African American studies, Women, Gender, and Sexuality Studies, Education, and Social Work—to name just a few.

The minor will bring a depth to your profile for a wide range of specialized private and public sector positions, whether you proceed directly into the workforce upon graduation or pursue advanced degrees leading to careers in government, education, business, public service, law, medicine, or emerging areas of research. Regardless of the area you choose, you will be served well by the Social Justice Minor.

What skills and knowledge will I gain?
You will:

Develop the analytical and communication skills so that you are able to offer informed and practical contributions to your workplace policies and practices.

Develop the intellectual foundation to contribute to and thus to help build a more just and fair society.

Understand how inequality works as a persistent part of our society rather than merely as a matter of prejudice and misunderstanding.

Be a better informed member of society and participant in both your work and living communities.

Better understand and be able to explain structural inequities and injustices related to race/ethnicity, gender and sexuality, economic class, institutional barriers, and other aspects of diversity in the U.S. and transnationally.

Understand ways various groups of activists and organizers have worked to democratize society more fully and realize the meanings of citizenship and freedom.

Apply your knowledge to real life issues of social justice and fairness.

I. 9 Hours Core

a. AMS 110: American Studies Identities (3) SC S (offered Spring/Fall) (available on-line as of Sum 15)
   or AMS 112/SOC 112: American Identities, Honors (3) SC S

b. AMS 100: Introduction to American Studies (3) HT H (Offered Spring/Fall/Summer) (available on-line as of Sum 15)
   or AMS 101: Introduction to American Studies, Honors (3) HT H

c. AMS 496 (in approval process) (3 hours): New course titled, “Perspectives and Experiences in Social Justice” (This proposed course requires students to engage in social justice work on or off campus and to engage in regular classroom activities and readings). Prerequisite AMS 100 (AMS 101) and AMS 110 (AMS 112/SOC 112).

II. 9 Hours of Electives Selected from 6 Social Justice Pathways
Select 9 Hours from 1 or more of the 6 Pathways courses approved List of Courses (Courses not listed may be considered for approval upon consultation with your AMS advisor/Director of Undergraduate Studies).

3 hours (1 course) may be shared with the major. 3 hours (1 course) may be shared with another minor. (see attached list of Pathways courses)

Minor Hours & GPA
While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

Minor in Social Justice in the U.S.

What is Social Justice?
Social justice refers to fair and equal institutions, laws, practices, and social relationships. It allows all of us to participate fully in and contribute to our communities and to realize our full potential as members of society and human beings. Issues of social justice affect educational and employment access and outcomes, health and welfare, everyday living and the general well being of our society. This minor invites you to investigate and reflect on the history and current state of social justice, on social relations as affected by race and ethnicity, economic class, gender, sexuality, religion, ability, and other forms of diversity. This minor also supports and encourages the study of activism and advocacy for social justice. It will help you to recognize and address persistent inequalities that are detrimental to the overall quality of life of this increasingly diverse US society of the 21st century, and thus gives you the potential to contribute directly to the realization of social justice.

Who will benefit from the Social Justice Minor?
This minor will complement undergraduate majors in the professional schools and all divisions of the College, from the traditional disciplines such as history, sociology and geography to interdisciplinary majors such as human biology, African and African American studies, Women, Gender, and Sexuality Studies, Education, and Social Work—to name just a few.

The minor will bring a depth to your profile for a wide range of specialized private and public sector positions, whether you proceed directly into the workforce upon graduation or pursue advanced degrees leading to careers in government, education, business, public service, law, medicine, or emerging areas of research. Regardless of the area you choose, you will be served well by the Social Justice Minor.

What skills and knowledge will I gain?
You will:

Develop the analytical and communication skills so that you are able to offer informed and practical contributions to your workplace policies and practices.

Develop the intellectual foundation to contribute to and thus to help build a more just and fair society.

Understand how inequality works as a persistent part of our society rather than merely as a matter of prejudice and misunderstanding.

Be a better informed member of society and participant in both your work and living communities.

Better understand and be able to explain structural inequities and injustices related to race/ethnicity, gender and sexuality, economic class, institutional barriers, and other aspects of diversity in the U.S. and transnationally.

Understand ways various groups of activists and organizers have worked to democratize society more fully and realize the meanings of citizenship and freedom.

Apply your knowledge to real life issues of social justice and fairness.

I. 9 Hours Core

a. AMS 110: American Studies Identities (3) SC S (offered Spring/Fall) (available on-line as of Sum 15)
   or AMS 112/SOC 112: American Identities, Honors (3) SC S

b. AMS 100: Introduction to American Studies (3) HT H (Offered Spring/Fall/Summer) (available on-line as of Sum 15)
   or AMS 101: Introduction to American Studies, Honors (3) HT H

c. AMS 496 (in approval process) (3 hours): New course titled, “Perspectives and Experiences in Social Justice” (This proposed course requires students to engage in social justice work on or off campus and to engage in regular classroom activities and readings). Prerequisite AMS 100 (AMS 101) and AMS 110 (AMS 112/SOC 112).

II. 9 Hours of Electives Selected from 6 Social Justice Pathways
Select 9 Hours from 1 or more of the 6 Pathways courses approved List of Courses (Courses not listed may be considered for approval upon consultation with your AMS advisor/Director of Undergraduate Studies).

3 hours (1 course) may be shared with the major. 3 hours (1 course) may be shared with another minor. (see attached list of Pathways courses)

Minor Hours & GPA
While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.
Minimum 2.0 KU GPA in coursework applied to the certificate.

One course from a Professional School (e.g. Social Work) may be applied through AMS, for the other courses to be counted towards the certificate.

Institutions may substitute one course only in the instance that the course settings. Students who complete certificate requirements at other institutions must hold a bachelor's degree in class or in online and repeated courses.

Undergraduate Certificate in Race and Ethnicity in the U.S.

Certificate in Race and Ethnicity in the U.S.

Available to All Degree Seeking, Non Degree Seeking Students, and All Majors

Why is a Certificate in Race and Ethnicity in the U.S. important for you?

Events in recent years have highlighted the importance of multiculturalism and diversity across all institutions of US society. Race has long been a central marker of difference in the United States. Though its rules have changed over time, and many of the worst applications of racial and ethnic discrimination have been undone, these categories nonetheless remain vital descriptors of life outcomes, wealth, education, and health in the US, and reveal continuing patterns of inequality. At the same time, racial and ethnic pluralism is one of the aspects of US society most responsible for the vitality of its culture - history, music, literature, language, art, dance, and foodways. As members of this society, an ability to navigate a multicultural and multiracial landscape is essential. In the world of work, a demonstrated level of competence in the understanding of race and ethnicity will enhance your capacity to seek employment, do research, and participate in an increasingly diverse local, regional, national and transnational world. A national survey of business and nonprofit leaders reported that “more than 9 in 10 of those surveyed say it is important that those they hire demonstrate among other characteristics, “intercultural skills” (Association of American Colleges and Universities (http://www.aacu.org/leap/presidentstrust/compact/2013SurveySummary/)). This certificate will provide an opportunity to deepen your exploration of the multiplicity of cultures that come with a multi racial and multi ethnic society, and to learn from the courageous struggles against injustice fought by those who were brought to, live in, or have come to this land.

The curriculum for the Certificate includes breadth and depth of knowledge and a basic analytical skill set for understanding race and ethnicity in the U.S.

Minimum of 12 total credit hours, 6 hours must be at the JR/SR level. All Certificate coursework must be completed at KU in class or in online course settings. Students who complete certificate requirements at other institutions may substitute one course only in the instance that the course is a direct transfer articulation equivalent to KU. Students may petition, through AMS, for the other courses to be counted towards the certificate.

One course from a Professional School (e.g. Social Work) may be applied to the Certificate.

Minimum 2.0 KU GPA in coursework applied to the certificate.

Curriculum

I. General Knowledge/Analytical Skills (3 hours)

Basic theoretical concepts, key terms, and introduction to multidisciplinary and interdisciplinary subfields of study

- AMS 110/111 American Identities, or
- AMS 100/101 Introduction to American Studies

II. Depth of Knowledge at the 300 level (6 hours)

These courses emphasize a greater mastery of knowledge beyond the core that focuses on one or more subfields of study and enables the application of key concepts, theoretical, and analytical knowledge and skills to multidisciplinary and interdisciplinary subfields of study on race and ethnicity in the United States. See attached list for courses.

III. Elective from General or Depth of Knowledge list of courses (3 hours)

Courses that do not appear on the approved list must be approved by the AMS undergraduate advisor. Courses approved for exceptions will be approved for all students. (Edits approved by Jennifer Hamer 2.22.16)

Master of Arts in American Studies

American Studies is an interdisciplinary program offering graduate work on society and culture in the United States--past, present, and in global context. It accommodates a variety of individual academic objectives. All students are asked to define a concentration--a period or problem--and to draw on appropriate university resources relating to that area. Students must demonstrate coherence in their graduate work and be able to show relationships between their concentrations and the wider socio cultural system. To accomplish this, students must develop knowledge (including historical perspective) in the humanities and social sciences.

The Master of Arts in American Studies is a free-standing degree. Students admitted to the M.A. program may hold bachelor’s degrees in any field and will be considered for admission based on the merit of their application. Students nearing completion of the M.A. program may apply to the Ph.D. program through an in-department application process.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A. in American Studies

Eligibility criteria for admission to the M.A. program follow Graduate Studies' admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission, a student must hold a bachelor's degree. Admission is based primarily on the
applicant’s statement of academic objectives, record of prior studies at
the undergraduate or graduate level, and references from persons familiar
with the applicant’s work. Evidence of preparation for graduate study may
include substantial work in American Studies or related fields, such as
American history, literature, art, media, sociology, anthropology, political
science, journalism, or interdisciplinary studies.

A full list of the required application materials can be found on
the American Studies website (https://americanstudies.ku.edu/admission/).

Non-native speakers of English must meet Graduate Studies’ English
proficiency requirements. (https://policy.ku.edu/graduate-studies/english-
proficiency-international-students/)

M.A. Degree Requirements

The Master of Arts in American Studies requires 30 credit hours, including
courses and the completion of a research article or thesis.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 801</td>
<td>Introduction to American Studies (offered every fall)</td>
<td>3</td>
</tr>
<tr>
<td>AMS 802</td>
<td>Theorizing America (offered every fall)</td>
<td>3</td>
</tr>
<tr>
<td>AMS 803</td>
<td>Research Methods in American Studies (offered every spring)</td>
<td>3</td>
</tr>
<tr>
<td>AMS 804</td>
<td>Research Seminar (offered every fall)</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Methods
1 course selected by the student and advisor provides methodological
support for the student’s research.

Elective Topics
Three courses constitute a coherent concentration, including
historical depth in a defined area that prepares the student for either
the master’s thesis or publishable article.

Thesis Hours
After completing required courses, the student enrolls in AMS 899
and continues enrolling in thesis hours until their article or thesis is
accepted by their committee.

Research Project and Defense
Students complete a project of original research, resulting in a thesis
or scholarly article. A committee of three faculty members evaluates
the project, and the student provides an oral defense.

Course Level Requirement

Students pursuing an M.A. in American Studies must take 50% or more of
their coursework at the 700 level or above. Core courses and thesis hours
count toward this requirement.

Handbook
Further details about meeting the degree requirements can be found in
the Department’s Graduate Handbook.

Transition from the MA Program

Students admitted to the MA Program in American Studies at KU must
petition the Department if they wish to continue for the PhD. This requires
an internal application process, including the submission of a research
statement and letter of support from a KU American Studies faculty
member. All admissions to the PhD program are at the discretion of the
Graduate Committee.

Dual Master of Urban Planning
and Master of Arts in American Studies

Dual Master of Urban Planning
and Master of Arts in American Studies

This program combines the two-year Master of Urban Planning degree
and the two-year Master of Arts degree in American Studies into a two
and half year program. This program is designed for students interested in
careers in policy planning and research involving the arts, social planning,
cultural activities and facilities, and historic preservation.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be
admitted as either a degree-seeking or non-degree seeking student.
Policies and procedures of Graduate Studies govern the process of
Graduate admission. These may be found in the Graduate Studies
(p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the
online catalog for information regarding program-specific admissions
criteria and requirements. Special admissions requirements pertain to
Interdisciplinary Studies degrees, which may be found in the Graduate
Studies section of the online catalog.

Admission to the Dual M.A./M.U.P.

Students seeking admission to the dual degree must meet the admission
requirements for both programs. Please see the American Studies
(https://americanstudies.ku.edu/admission/) and Urban Planning (https://
urbanplanning.ku.edu/application/) websites for their respective admission
requirements.

Eligibility criteria for admission follow Graduate Studies’ admission
policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-
study/). To be considered for admission, a student must hold a
bachelor’s degree.

Non-native speakers of English must meet Graduate Studies’ English
proficiency requirements (https://policy.ku.edu/graduate-studies/english-
proficiency-international-students/).

M.U.P. Degree Requirements

The M.U.P portion of the dual degree requires 36 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>24</td>
</tr>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td></td>
</tr>
<tr>
<td>UBPL 741</td>
<td>Foundations of Compassionate Critical Thinking</td>
<td></td>
</tr>
<tr>
<td>UBPL 742</td>
<td>Applied Data and Spatial Analysis</td>
<td></td>
</tr>
<tr>
<td>UBPL 763</td>
<td>Politics and Public Management</td>
<td></td>
</tr>
<tr>
<td>UBPL 777</td>
<td>Equity, Justice, and American Cities</td>
<td></td>
</tr>
</tbody>
</table>
Policies and procedures of Graduate Studies govern the process of admission as either a degree-seeking or non-degree seeking student. An applicant seeking to pursue graduate study in the College may be considered for admission to Graduate Studies in independent programs of study while directing and enabling students' research. We emphasize the development of an intellectual community of students and faculty within the department inside and outside of the academy. We do this by providing advanced innovative contributions to American Studies and related fields, both in American Studies or related fields, such as American history, literature, art, media, sociology, anthropology, political science, journalism, or interdisciplinary studies.

Admission to the Ph.D. in American Studies

Eligibility criteria for admission to the Ph.D. program follow Graduate Studies' admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission, a student must hold a bachelor's degree. Preference may be granted to students who hold a master's degree in American Studies or a related field. Admission is based primarily on the applicant's statement of academic objectives, record of prior studies at the undergraduate or graduate level, and references from persons familiar with the applicant's work. Evidence of preparation for graduate study may include substantial work in American Studies or related fields, such as American history, literature, art, media, sociology, anthropology, political science, journalism, or interdisciplinary studies.

A full list of the required application materials can be found on the American Studies website (https://americanstudies.ku.edu/admission/).

Non-native speakers of English must meet Graduate Studies' English proficiency requirements (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

Ph.D. Degree Requirements

The Doctor of Philosophy in American Studies requires the completion of eight courses (24 credit hours), the comprehensive examination, enrollment in dissertation hours, and the dissertation. In consultation with the faculty advisor, the student develops a plan of work that will provide expertise in three concentration fields of study. The comprehensive examination certifies the student’s preparation in the concentration fields, and readiness to conduct research at a professional level. PhD students may choose to earn the MA in American Studies while pursuing the doctorate, upon completion of their course requirements and the defense of a publishable article. The PhD program culminates in the completion and defense of the dissertation.

Doctor of Philosophy in American Studies

The Ph.D. is the terminal degree in American Studies. In the Ph.D. program, we seek to educate, mentor, and place scholars who will make innovative contributions to American Studies and related fields, both inside and outside of the academy. We do this by providing advanced training and practice in interdisciplinary research as well as by fostering an intellectual community of students and faculty within the department and across the wider University. We emphasize the development of independent programs of study while directing and enabling students' professionalization as researchers and teachers.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

M.A. in American Studies Degree Requirements

The American Studies M.A. portion of the dual degree requires 24 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 801</td>
<td>Introduction to American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AMS 802</td>
<td>Theorizing America</td>
<td>3</td>
</tr>
<tr>
<td>AMS 803</td>
<td>Research Methods in American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AMS 804</td>
<td>Research Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives in American Studies

These courses will serve as the student’s area of concentration, preparing them for their thesis or publishable article. Electives must have an AMS course number and must be taken at the 700-level or above.

Thesis/Article Hours

Students completing the dual degree program are required to defend either a thesis or publishable article in their final semester. After completing the AMS required coursework, the student enrolls in AMS 899 until their thesis or publishable article is accepted by their committee. An oral defense of the thesis or article will serve as the M.A. examination.

If a student decides to complete only the M.A. or M.U.P. and withdraw from the other program, they must complete all requirements for the stand-alone degree.

Course Level Requirement

Students pursuing a dual M.U.P. and M.A. in American Studies must take 50% or more of their coursework at the 700 level or above. Core courses and thesis hours (if applicable) count toward this requirement.

Doctor of Philosophy in American Studies

The Ph.D. is the terminal degree in American Studies. In the Ph.D. program, we seek to educate, mentor, and place scholars who will make innovative contributions to American Studies and related fields, both inside and outside of the academy. We do this by providing advanced training and practice in interdisciplinary research as well as by fostering an intellectual community of students and faculty within the department and across the wider University. We emphasize the development of independent programs of study while directing and enabling students’ professionalization as researchers and teachers.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.
manuscript and defend it to a committee. The committee assesses the manuscript and oral defense with a grade of Pass or No Pass, by majority vote. This defense serves as an exam for the MA in American Studies.

**Transition from the MA Program.** Students admitted to the MA in American Studies at KU must petition the Department if they wish to continue for the PhD. This requires an internal application process, including the submission of a research statement and letter of support from a KU American Studies faculty member. All admissions to the PhD program are at the discretion of the Graduate Committee.

**Comprehensive Examination.** Following the completion of required courses, the student enrolls in AMS 997 Examination Preparation to prepare for the comprehensive examination. In consultation with the faculty advisor, the student may also enroll in additional seminars or directed readings courses to prepare. When the advisor deems the student prepared, the student may apply to the Department to take the comprehensive examination, which is in two parts. The student must first sit for a time-limited, open-materials written examination to qualify for the oral. With a passing grade on the written examination, the student may sit for the oral examination before the examination committee. Candidacy is conferred after a successful oral examination.

**Dissertation.** The dissertation must be an original work of research that advances the interdisciplinary field of American Studies. The student must submit a brief prospectus of the dissertation project, including a detailed plan of work. All members of the dissertation committee must endorse the prospectus in order for the project to go forward. Upon completion of the dissertation research the student must defend the dissertation before all committee members in the "final oral examination," or dissertation defense. The student satisfies the dissertation requirement with a majority vote of "Satisfactory" by the dissertation committee. The committee may also recommend the student for Honors, which is a designation conferred by the Department at graduation.

**University Requirements.** Throughout the course of doctoral study, the student must fulfill all relevant College and University policies (http://coga.ku.edu/graduate-policies/), such as those concerning doctoral residency, time constraints, continuous enrollment, human subjects review, electronic filing, and graduation.

**Handbook.** Further details about meeting the degree requirements can be found in the Department's Graduate Handbook.

**Graduate Certificate in American Studies**

The Graduate Certificate in American Studies is designed to offer KU graduate students in the humanities and social sciences a portable credential demonstrating their engagement with the field of American Studies, including exposure to interdisciplinary theory and methods. This certificate also provides enrichment or an introductory experience to the field for non-KU students.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission to the Graduate Certificate in American Studies**

Eligibility criteria for admission to the certificate program follow Graduate Studies’ admission policy (https://policy.ku.edu/admission-graduate-study/). To be considered for admission, a student must hold a bachelor’s degree.

Application requirements differ for current KU students versus non-KU students. Please visit the American Studies website (https://americanstudies.ku.edu/admission/) for a full list of the required application materials. Non-native speakers of English must meet Graduate Studies’ English proficiency requirements (https://policy.ku.edu/english-proficiency-requirements-admission-graduate-study/).

**Graduate Certificate in American Studies**

The American Studies Graduate Certificate will require 12 hours of course work.

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1 The elective seminars must be 700 level or higher and carry an AMS catalog number. Due to their Department-specific purpose and content, AMS 804 Research Seminar and AMS 900 Teaching Seminar do not qualify as elective seminars for the certificate.

**Department of Anthropology**

The Anthropology Department at the University of Kansas

Anthropologists are concerned with the origin, history, and future of the human species. Our mission is to further our understanding of past and present human societies in their cultural, biological, and environmental contexts. As flows of people, ideas, money, and goods are crossing borders at unprecedented speeds, we are encountering human diversity now, more than ever before. The discipline provides students the knowledge and skills they will need to navigate these complex, multicultural, and rapidly changing worlds. Because we study what it is to be human, the field is one of the most wide-ranging of the academic disciplines.

There are four main subdisciplines of anthropology: Archaeology is concerned with studying the human past based on the material culture left behind. Biological or physical anthropology is concerned with human evolution and variation. Linguistic anthropology focuses on the relationship between language and culture, as well as the
Why Study Anthropology?

Students have many reasons for wanting to major in anthropology. Some are curious about the origins of the human species. Others are fascinated by the diversity of human experiences in ancient and modern periods. Some students intend to pursue international careers, where they will use languages and work in cultural contexts very different from those in which they were raised. Others plan to work in museums collecting and curating human cultural resources. Some wish to pursue graduate training in one of the field's subdisciplines, while others seek to use their anthropological training as preparation for professional schools, including law, medicine, public health, journalism, business, and engineering. There are many professions where the broad scientific, humanistic, and multicultural knowledge available through the study of anthropology can be useful—in education, healthcare, law, social work, business, human resources, public affairs, cultural resource management, or laboratory research.

Anthropological Research Opportunities at KU

- **Laboratory of Biological Anthropology (LBA):** Founded in 1975, the LBA was established as a research center of the University of Kansas. The LBA has supported graduate and undergraduate student research in biological anthropology, human genetics, and genetic epidemiology.

- **Archaeological Research Center:** Located in historic Spooner Hall on the main campus, the archaeology laboratory offers research space and support to Anthropology faculty and graduate students, Archaeology staff, Museum Studies interns, affiliate curators and research associates and visiting scholars.

- **Field Schools:** Anthropology faculty offer field schools in archaeology, biological anthropology, and cultural anthropology. Undergraduates and graduate students have conducted independent and collaborative research in the United States, including Alaska, Mexico, Central, and South America; sub-Saharan Africa; and Asia.

For specific questions about our program, please contact us:

The University of Kansas
Department of Anthropology
Undergraduate Program
1415 Jayhawk Blvd.
622 Fraser Hall
Lawrence, KS 66045
Mrs. Le-Thu Erazmus Campbell, MSE
E-mail: lerazmus@ku.edu (%20%20lerazmus@ku.edu)
Phone: (785) 864-2630
Fax: (785) 864-5224
http://anthropology.ku.edu/overview-ba-anthropology/ (http://anthropology.ku.edu/overview-ba-anthropology/)

Undergraduate Programs

Undergraduate course work in anthropology is designed for students majoring in anthropology as part of a liberal education, for students majoring in anthropology as preparation for postgraduate professional training, and for students in other areas who wish to do supplementary work in anthropology.

Courses for Nonmajors

Most courses are open to nonmajors and, depending on the course, can be used to meet College principal course distribution requirements in natural sciences, social sciences, or humanities. The department offers many courses that fulfill the non-Western culture requirement. ANTH 100 General Anthropology and ANTH 160/ANTH 360 The Varieties of Human Experience are recommended for students interested in anthropology who do not intend to major in it.

Graduate Programs

The graduate program consists of about 15 faculty members and about 40 students, giving a professor-student ratio of about 1 to 2.5 and allowing a great deal of direct interaction between faculty and students. The department awards M.A. and Ph.D. degrees and has successfully placed most recipients of graduate degrees in professional positions.

The department offers graduate training in archaeology, biological anthropology, linguistic anthropology, and social/cultural anthropology. It has expertise in applied anthropology, anthropological genetics, molecular genetics, evolutionary studies, language contact and endangerment, medical anthropology, paleoanthropology, symbolic anthropology, visual anthropology, New World and Old World prehistory, and geoarchaeology. Geographic strengths include Asia, Europe, Latin America, Native North America, the Pacific, Sub-Saharan Africa, and the contemporary United States.

The department is closely associated with the Laboratory of Biological Anthropology and the Center for Archaeological Research.

Courses

**ANTH 100. General Anthropology. 3 Credits. SC S**

This course is an introduction to the discipline of Anthropology. Our goal is to understand human diversity in the past, present, and future through the lenses of the four primary fields of Anthropology: Archaeology, Biological Anthropology, Linguistic Anthropology, and Sociocultural Anthropology. Students will be introduced to major concepts, research approaches, important findings, and critical controversies within the discipline as a whole. We will investigate such questions as: How did humans evolve? How have human cultures and languages developed? What tools, technologies, and new kinds of knowledge and expertise emerge in the face of global environmental, social, political, and economic change?

**ANTH 102. Succeeding in Anthropology. 1 Cr. S**

This course is designed to enhance students' chances for success in anthropology major and life after college. Students will learn how to maximize their possibilities for gaining academic assistance, grants, and career building, as well as design strategies for winning jobs, entry into graduate programs, and paid internships at home and abroad. Graded on a satisfactory/unsatisfactory basis.

**ANTH 106. Introductory Linguistics. 3 Credits. SC S**

Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as LING 106.)

**ANTH 107. Introductory Linguistics, Honors. 3 Credits. SC S**
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as LING 107.)

ANTH 108. Introduction to Cultural Anthropology. 3-4 Credits. SC S
An introduction to the nature of culture, language, society, and personality. Included in this survey are some of the major principles, concerns, and themes of cultural anthropology. The variety of ways in which people structure their social, economic, political, and personal lives. Emphasized are the implications of overpopulation, procreative strategies, progress and growth of cultural complexity, developments in the Third World, and cultural dynamics in Western as well as non-Western societies.

ANTH 109. Introduction to Cultural Anthropology, Honors. 3-4 Credits. SC S
An honors section of ANTH 108 for students with superior academic records.

ANTH 110. Introduction to Archaeology. 3-4 Credits. HT H
A general introduction to the history methods, theories, and principles of the study of archaeology. Lectures, and discussions sections cover the essential archaeological approaches, methods and practice: what is the material evidence that archaeologists collect, and how they collect and analyze it in order to understand humans of the past, their social organization, economy, subsistence, diet, technology, trade, exchange, symbol systems; how geological, palaeoenvironmental, paleontological, and genetic evidence contribute to archaeology and what was the effect of environmental and climate change on human evolution and global dispersal; what is the role of knowing the past, public archaeology, culture heritage preservation, and archaeological ethics in the modern world. Discussion sections will be used to examine material covered in lectures and in readings related to specific topics, and to explore relevant visual materials - archaeological artifacts, collections, and media sources.

ANTH 111. Introduction to Archaeology, Honors. 3-4 Credits. HT H
An honors section of ANTH 110 for students with superior academic records.

ANTH 115. World Prehistory. 3 Credits.
A general introduction to the evolution of human culture around the world from the Lower Paleolithic to the emergence of complex societies. This course covers what archaeology has revealed about the experience of humankind from the origins of stone tool use to the earliest urban settlements in the Middle East, Africa, Asia, Europe, and the Americas.

ANTH 150. Becoming Human. 3 Credits. N
This course examines the biological evolution and archaeological record of humanity from the earliest human origins to the origins of civilization, and asks: Where did we come from? What makes us human? Where are we going? By unraveling the fundamental connections between biological evolution and culture, our goal is to help students appreciate how knowledge of the human past is relevant to our modern lives, whether as a KU student today, or as a future parent, medical patient, consumer, or citizen. Not open to students that have taken ANTH 309.

ANTH 151. Becoming Human, Honors. 3 Credits. N
An honors section of ANTH 150 for students with superior academic records. Not open to students who have had ANTH 150. Prerequisite: Enrollment in the Honors Program.

ANTH 160. The Varieties of Human Experience. 3 Credits. NW S/W
An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world, for the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 360.

ANTH 162. The Varieties of Human Experience, Honors. 3 Credits. NW S/W
An honors section of ANTH 160 for students with superior academic records. Not open to students who have had ANTH 160 or ANTH 360.

ANTH 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Anthropology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ANTH 210. Archaeology's Greatest Hits. 3 Credits. S/W
This course is a broad survey of the most spectacular archaeological discoveries of our time. It tells the story of pioneers and scientist-adventurers in their quest for knowledge of human prehistory. These discoveries became historically significant because they embodied major theoretical advances and evolutionary leaps in our understanding of the past. While reviewing archaeology's greatest discoveries, this course will investigate many of the major events, such as the critical evaluation of evidence or the development of appropriate scientific techniques, that eventually established archaeology as a scientific endeavor.

ANTH 212. Archaeological Myths and Realities. 3 Credits. S
Archaeology is concerned with explaining mysteries of the human past ranging from the origins of human beings to the rise and fall of civilizations. This course is designed to guide students in investigations of mysteries that capture the popular imagination, but which many scientists do not wish to discuss. What is the scientific evidence for the Biblical account of Creation, the Great Flood, or the Tower of Babel? Was the Great Pyramid encoded with lost knowledge or predictions of the future? Did Chinese, Africans, Celts, or Vikings visit the Americas before Columbus? Is Stonehenge an astronomical observatory? Who built the giant statues on Easter Island? Where are the lost continents of Atlantis and Lemuria? The methods and theories of archaeology and anthropology will be used to address these and other questions. We will develop methods of evaluating information available from various published and online sources to judge when a claim represents a revolutionary new idea or a strategy for extracting money from the uninformed? Students will learn to be critical consumers of scientific and non-scientific information, and our goal will be to identify ways to be skeptical while maintaining an open mind when confronted with conflicting claims.

ANTH 291. Study Abroad Topics in: ____. 1-5 Credits. S
A course designed to enhance international experience in topic areas related to anthropology at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

ANTH 293. Myth, Legend, and Folk Beliefs in East Asia. 3 Credits. NW H/W
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the traditional world view of the peoples of East Asia. (Same as EALC 130, REL 130.)

ANTH 301. Anthropology Through Films. 3 Credits. S
An exploration of the human ways through films. Cross-cultural interpretations by filmed records of varieties of interpersonal relations seen through such aspects of culture as hunting, war, marriage, religion, sex, kinship, and death. Patterns of interactions are analyzed by examples from cultures around the world, primarily the non-Western world.

ANTH 303. Peoples and Cultures of North Africa and the Middle East. 3 Credits. NW S
This course familiarizes students with the peoples and cultures of North Africa and the Middle East. It examines the cultural, demographic, and religious diversity of the region, as well as the development of the early Islamic community and the formation of Islamic institutions. Issues such as religion and politics, inter-religious relations, nation-building, Islamic response to colonialism, Palestinian-Israeli conflict, Islamic resurgence, secularism, democratization, and gender, are also explored. (Same as AAAS 303.)

ANTH 304. Fundamentals of Biological Anthropology. 3 Credits. NB N
Biological anthropology is an exciting discipline concerned with humans as biological beings living in cultural and natural settings. We are interested in questions pertinent and important to the scientific, social, and political agendas of the world. Material covered in this class will encourage you to pursue questions about the relationship of humans to the rest of the animal kingdom, the origin, maintenance, patterning, and significance of human biological variation, the nature of heredity, and human evolution. We will discuss the human and primate fossil records, human variation, race, and genetics. Students can expect a strong emphasis on scientific literacy, that is, how the process of scientific inquiry works. When you finish this course, you will have the tools to distinguish between reliable and unreliable sources of scientific information and a solid grounding in the fundamentals of biological anthropology.

ANTH 308. Fundamentals of Cultural Anthropology. 3 Credits. SC S
This course covers the fundamental concepts, theories, and practices of cultural anthropology. It teaches students how to think anthropologically through a survey of classic and contemporary ethnographic texts, spanning a range of geographic and cultural areas. Applying a holistic lens, students will critically analyze inequality, globalization, and human cultural differences across time and space. Topics will include: fieldwork and ethnography; racism; ethnicity and nationalism; gender, sexuality, and kinship; socioeconomic class; the global economy; politics and power; religion; health and development; and art and media. This course logically follows ANTH 160/ANTH 162/ANTH 360. Not open to students who have taken ANTH 108 or ANTH 109.

ANTH 309. Becoming Human. 3 Credits. N
A more intensive treatment of ANTH 150. This course examines the biological evolution and archaeological record of humanity from the earliest human origins to the origins of civilization, and asks: Where did we come from? What makes us human? Where are we going? By unraveling the fundamental connections between biological evolution and culture, our goal is to help students appreciate how knowledge of the human past is relevant to our modern lives, whether as a KU student today, or as a future parent, medical patient, consumer, or citizen. Not open to students that have taken ANTH 150.

ANTH 310. Fundamentals of Archaeology. 3 Credits. HT S
An introduction to the history, methods, theories, and principles of archaeology. This course covers essential archaeological approaches, methods and practices to answer such questions as: What is the material evidence that archaeologists collect and how do they analyze it in order to understand humans of the past, their social organization, economy, subsistence, diet, technology, trade, exchange, and symbol systems? How do geological, palaeoenvironmental, palaeontological, and genetic evidence contribute to archaeological understandings of human biological and social evolution? What was the effect of environmental and climate change on human evolution and global dispersal? How are knowledge of the past, public archaeology, culture heritage preservation, and archaeological ethics used in the modern world? Prerequisite: ANTH 150 or permission of instructor.

ANTH 315. The Prehistory of Art. 3 Credits. S
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as HA 315.)

ANTH 317. Prehistory of Europe. 3 Credits. S
A survey of one million years of prehistory from the peopling of the European continent to the Roman Empire. The course will focus on the growth of culture, considering economy and technology, art and architecture. Topics will include the Neanderthals, the big game hunters of the Ice Age, the megalith builders, the Celts. Prerequisite: An introductory course in anthropology, history, or cultural geography.

ANTH 318. Peoples of the Great Plains. 3 Credits. S
A survey of the diverse and changing lifeways of Native Americans in the Great Plains region from the time of the earliest inhabitants more than 13,000 years ago to the modern era. Collections of prehistoric and historic Native American material culture will be used to illustrate the diversity of technologies and artistry of indigenous Great Plains peoples.

ANTH 320. Language in Culture and Society. 3 Credits. SC S
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as LING 320.)

ANTH 321. Language in Culture and Society, Honors. 3 Credits. SC S
An honors section of ANTH 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as LING 321.) Prerequisite: Membership in the University Honors Program or consent of instructor.

ANTH 322. Environmental Dynamics in India. 3 Credits. S/W
This course introduces students to the relationships the people of India have had with their landscape from ancient times to the present. Students will learn about diverse ecosystems and the indigenous peoples they have harbored from the high Himalayas altitudes to the coastal regions, from the desolate arid deserts to the rain forests of India. The class will discuss how the very nature of the relationship of the people with their land has
changed over the long course history of South Asia with specific case studies of environmental challenges, failures and successes. Examples of possible cases include: the Chipko movement led by the women of the Himalayas to save their forests from loggers; the traditions of creating lakes and water conservation lifestyles in the arid region of Rajasthan; and nature worship and cases of leopards and tigers receiving protection by the very villages they terrorize. (Same as GIST 323.)

ANTH 325. Language, Gender, and Sexuality. 3 Credits. S
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as GIST 303, JWSH 305, SLAV 305 and WGSS 325.)

ANTH 330. Forensic Anthropology. 3 Credits. S
This course focuses on the study of forensic anthropology as related to medico-legal death investigation. It includes overview of the Coroner’s System, death scene investigation techniques, DNA and Geoscience applications, statutes and laws, review of injuries and interpretations, child death investigation and its uniqueness, identification of the body, coordination with law enforcement and the legal world, how to obtain the necessary information in order to complete a case, cause vs. manner of death, types of death and how to identify, how to deal with families and the public, and social responsibilities associated with forensic science.

ANTH 340. Human Variation and Evolution. 3 Credits. N
An examination of biochemical and physical variability in contemporary human populations. Topics include: genetic basis of human diversity, evolutionary theory, population genetics, blood groups, biochemical variations, body size and shape, pigmentation, and other morphological characteristics. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

ANTH 341. Human Evolution. 3 Credits. N
The evolutionary processes and events leading to the development of humans and the humanlike forms from primate ancestors; fossil hominids and the origin of modern Homo Sapiens. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

ANTH 343. Food, Nutrition and Culture. 3 Credits. S
The course is a cross-cultural survey of human dietary practices (foodways). Students are introduced to the concepts of nutrition, diet and culture. Evolutionary and adaptive aspects of human diets and cuisines are considered. Nutritional, environmental/technological, social and ideological aspects of regional and ethnic foodways are examined. Invited lecturers from different cultural traditions offer indigenous perspectives on their foodways.

ANTH 345. Introduction to Human Evolutionary Biology. 4 Credits. N
This course takes students on the evolutionary journey of the human species: from the origin of the primate order to modern human population diversity. It examines human adaptations to extreme environments, nutrition and the role of the microbiome in human health, and human evolutionary genomics in the foundations of immunity and their intersection with public health. It evaluates our Neandertal ancestry, and tracks major human migrations and dispersals in the peopling of the world. All topics are examined through the lens of molecular evolutionary approaches to the study of human diversity. An introduction to biology or biological anthropology course is recommended.

ANTH 352. Controversies on the Living and the Dead. 3 Credits. N
A critical analysis of conflicting perspectives on scientific and anthropological research, past and present. Topics considered include the nature of science, colonialism in anthropology and biology, origin stories and human evolution, the ethics of research in ancient and contemporary populations, eugenics, biological race, and the relationship between humans and our extinct hominin relatives. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

ANTH 359. Anthropology of Sex. 3 Credits. N
An evolutionary perspective on the behavior and biology of males and females in human society. Topics will include the evolution of sexual dimorphism, social and biological issues in human reproduction, primate social patterns, human sexual behavior and taboos, sex and social structure, and the sociobiology of sex.

ANTH 360. The Varieties of Human Experience. 3 Credits. NW S/W
A more intensive treatment of ANTH 160. An introduction to basic concepts and themes in cultural anthropology by means of the comparative study of selected cultures from around the world, for the purpose of appreciating cultural diversity. Emphasis is on systems of belief and meaning. Not open to students who have taken ANTH 160.

ANTH 367. Introduction to Economic Anthropology. 3 Credits. S
This course uses ethnographic case materials to explore the ways humans provision themselves under different social and environmental conditions. It introduces the basic theories, concepts, and debates of economic anthropology and provides a foundation for more advanced courses in this subdiscipline. Prerequisite: ANTH 108 or ANTH 160/ANTH 162 or ANTH 308 or ANTH 360 or permission of instructor.

ANTH 368. The Peoples of China. 3 Credits. NW S/W
An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as EALC 368.)

ANTH 372. Religion, Power, and Sexuality in Arab Societies. 3 Credits. NW S
This course examines theories of religion, discourse, power and sexuality in their application to Arab societies. The course introduces different aspects of Arab cultures. Through canonical works, we study political domination, tribal social organization, honor, tribe, shame, social loyalty, ritual initiations and discuss how these issues speak generally to anthropological inquiry. Regionally specific works are then framed by an additional set of readings drawn from anthropological, linguistics, and social theories. (Same as AAAS 372.)

ANTH 379. Indigenous Traditions of Latin America. 3 Credits. NW S/W
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAC 634. (Same as LAC 334.)

ANTH 380. Peoples of South America. 3 Credits. NW S/W
A survey of native peoples and cultures of South America from the time of initial Western contacts to the present day.
ANTH 382. People and the Rain Forest. 3 Credits. S
An analysis of the cultural origin, diversity, and unity of the peoples of the neotropics. Emphasizing the peoples of Amazonia, the course introduces students to topics associated with the economic, political, and cultural dimensions of social life in rain forest communities.

ANTH 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Credits. NW W
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Japanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, biological anthropologists, and sociocultural anthropologists. (Same as WGSS 389.)

ANTH 391. Topics in Anthropology: ______. 3 Credits. S
This course offers students an opportunity to study classical and emerging topics in the four primary fields of Anthropology: Biological Anthropology, Linguistics, Sociocultural Anthropology, and Archaeology. Concepts and approaches to each field will be used to investigate past and present examples from around the world. Topics will be examined with an emphasis on the unity of the anthropological approach.

ANTH 397. Museum Anthropology. 3 Credits. S
An introduction to the historical background, practice, and ethical issues involved in the creation, presentation, and dissemination of anthropological information in a museum setting. Students participate in the study of a collection of material culture (artifacts) from the Museum of Anthropology, culminating in development of a script for an exhibit.

ANTH 400. Topics in Anthropology, Honors: ______. 3 Credits. H
Selected issues and theories in contemporary anthropology (cultural, linguistic, biological, archaeological) for honors students. Topic for semester to be announced. May be repeated for credit if content varies. Prerequisite: Admission to University Honors Program or permission of instructor.

ANTH 401. Integrating Anthropology. 3 Credits. S
Capstone course that integrates the primary fields of anthropology. Students apply concepts and approaches from each field to a particular topic in preparation for and presentation of a cross-disciplinary and integrative final project. Prerequisite: Completion of ANTH 150/ANTH 151 or ANTH 160/ANTH 162/ANTH 360 and any two other anthropology courses.

ANTH 406. Archaeological Research Methods. 3 Credits. S LFE
A survey of basic field methods and laboratory procedures associated with specimen acquisition, preparation, analysis, classification, and measurement of archaeological materials. In this course students will apply archaeological methods to the study of stone tools, ceramics, and animal bone, learn which field and lab methods to use in a range of research scenarios, interpret human behavior on the basis of artifacts and features recovered from archaeological sites, use introductory flintknapping techniques to produce a stone tool, study the major dating and chronological methods used in archaeology, and complete labs and projects that require analysis and interpretation of archaeological materials. Prerequisite: ANTH 110/ANTH 111 or ANTH 150/ANTH 151 or ANTH 310 or permission of instructor.

ANTH 418. Summer Archaeological Field Work. 1-8 Credits. S
Under the direction of a professional archaeologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research.

Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged.

ANTH 419. Training in Archaeological Field Work. 1-6 Credits. S
Undergraduate and graduate students are taught techniques of archaeological field work, including survey and excavation, as well as laboratory procedures, including artifact classification and curation.

ANTH 430. Linguistics in Anthropology. 3 Credits. S
The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as LING 430.)

ANTH 431. Constructed Languages. 3 Credits. S
Constructed languages are devised by individuals to facilitate international communication (Esperanto) or to enhance fictional or fantasy worlds (Lapine, Newspeak, Klingon, Elvish, Navi'i, the Common Tongue, Valyrian). Invented or constructed languages provide a means to study both the universals of linguistic expression (grammar) and the cultural contexts from which they emerge. Students will construct languages and evaluate the cultural motivations of existing Conlangs. Prerequisite: ANTH 106 or ANTH 107 recommended.

ANTH 442. Anthropological Genetics. 3 Credits. N
Principles of human genetics involved in biological anthropology. The genetics of non-Western populations considered within an evolutionary framework. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

ANTH 445. Topics in Biological Anthropology: ______. 3 Credits. N
Seminar concentrating on selected problems and issues in contemporary biological anthropology. Topic for semester to be announced. Prerequisite: An introductory course in biological anthropology, biology, or permission of instructor.

ANTH 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N LFE
This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as BIOL 449, SPLH 449, and PSYC 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

ANTH 450. Anthropology of Sex, Honors. 3 Credits. S
The course is an introduction to the evolutionary study of human sexual behavior. Using an explicitly Darwinian framework, it examines the biological basis for human mate selection, male and female mating strategies, child-birth and child-care practices, parental care, marriage, and family structure. The power of Darwinian theory to predict human sexual behavior is tested in anthropological field studies, designed and carried out by students in the class. Class time is allocated for discussion of students' research as it progresses through each stage, and results are presented in the last weeks of the semester. Prerequisite: An introductory course in biology or biological anthropology. Admission to the University Honors Program or permission of instructor.
ANTH 462. Field Methods in Cultural Anthropology. 3 Credits. S
LFE
This course introduces students to ethical considerations, methods used in ethnographic fieldwork, field notes, coding data, analysis, and write-up. Students design and carry out research projects. Prerequisite: ANTH 108 or ANTH 160 or ANTH 162 or ANTH 308 or ANTH 360 or permission of instructor.

ANTH 465. Genocide and Ethnocide. 3 Credits. S
This course provides students with a conceptual and historical synopsis of genocide and ethnocide from an anthropological perspective. Taking its lead from a human rights orientation, the course assesses why such atrocities must be confronted. This includes grappling with ethical, legal, and definitional ambiguities surrounding the concepts of genocide and ethnocide. We will explore a range of cases in the 20th and 21st centuries, while focusing on diverse conditions leading to genocide, ethnocide, population displacements, human trafficking and the modern phenomena of refugee camps. The course will analyze the role of the modern state, colonialism, political ideologies, ethnicity and nationalism as major forces underpinning ethnocide and genocidal campaigns. Based primarily on a select review of cases of ethnocide and genocide, the class examines how to spread global awareness and communal engagement by actively protecting human rights. (Same as GIST 465.)

ANTH 474. Applied Cultural Anthropology. 3 Credits. S
Applications of anthropological theory, methods, and findings in programs of community and national development, public health, international aid, and military assistance. Examination of the role of the anthropologist, of ethics and values in intervention schemes, and of the organization of planned change in applied programs. Intensive analysis of selected case studies.

ANTH 484. Magic, Science, and Religion. 3 Credits. NW S/W
A comparative study of religion and systems of value and belief in non-Western cultures.

ANTH 491. Study Abroad Topics in: ____. 1-5 Credits. SC S
A course designed to enhance international experience in topic areas related to topics in anthropology at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

ANTH 496. Reading and Research. 1-6 Credits. S
Individual investigation of special problems in anthropology. Maximum of three credit hours in any one semester. Prerequisite: Permission of instructor.

ANTH 497. Field Experience. 1-6 Credits. S
A supervised field or laboratory-based experience in the United States or abroad. Students may receive this credit for an independent or collaborative research project or in conjunction with field school participation. Students may also acquire credit for supervised placements in organizations, agencies, museums or other settings in which they apply anthropological knowledge to real-life situations and actively participate in organized work within a community. The field experience should not duplicate any other regularly available course. A contract between mentor and student is required at the beginning of the experience, and a reflection paper is required at the end of the experience. Students are strongly recommended to have completed at least one anthropology methods course prior to enrolling in Field Experience. Prerequisite: Permission and supervision by anthropology instructor required.

ANTH 499. Senior Honors Research. 3-6 Credits. S
Individual research under the direction of one or more instructors in the department. Minimum of three credit (maximum of six credit) hours in any one semester. Prerequisite: A grade-point average of 3.50 in anthropology and 3.25 in all courses, and permission of instructor.

ANTH 500. Topics in Archaeology: ____. 3 Credits. S
Seminar concentrating on selected problems and issues in contemporary archaeology. Topic for semester to be announced. Course may be repeated for a maximum of nine hours of credit. Prerequisite: Successful completion of a course in archaeology at any level, or by permission of instructor.

ANTH 501. Topics in Sociocultural Anthropology: ____. 3 Credits. S
Course concentrating on selected problems, theories, and issues in contemporary sociocultural anthropology. Topic for semester to be announced.

ANTH 502. Topics in Anthropological Linguistics: ____. 3 Credits. S
Course concentrating on selected problems, theories, and issues in contemporary anthropological linguistics. Topic for semester to be announced.

ANTH 503. Topics in Biological Anthropology: ____. 3 Credits. S
Course concentrating on selected problems, theories, and issues in contemporary biological anthropology. Topic for semester to be announced.

ANTH 504. North American Archaeology. 3 Credits. S
A general survey of the archaeology of North America. Detailed coverage of selected problems.

ANTH 505. Prehistory of Eastern North America. 3 Credits. S
A survey of the archaeological record of eastern North America from the late Pleistocene to the time of European contact. The diverse environments of eastern North America are considered in conjunction with the dynamic climatic and ecological changes which have occurred during the past 20,000 years to provide a background for study of the prehistoric groups who occupied the region. Topics will include the change in economies, technologies, and organization from the earliest hunter-gatherers through the development of pre-Colombian complex societies. Prerequisite: ANTH 110 or ANTH 150 or ANTH 151 or ANTH 310 or permission of instructor.

ANTH 506. Pre-Hispanic Mexico and Central America. 3 Credits. NW S/W
A survey of indigenous, Pre-Hispanic cultures of Mexico and Central America, including Olmecs, Teotihuacan, Mayas, Zapotecs, Toltecs, and Aztecs. This course teaches how to interpret art, architecture, artifacts, and culture change in the context of iconography and symbols, metaphorical beliefs and ritual practices, crafts and technologies, trade and exchange, social inequality and conflict resolution, and the relationships among these cultures and their environments. (Same as HIST 571 and LAC 556.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, Indigenous Studies, History, or permission of instructor.

ANTH 507. The Ancient Maya. 3 Credits. S/W
An intensive examination of current scholarship on the ancient Maya civilization of Mexico and Central America. The course will consider Maya culture from its roots in early villages of the Preclassic period to the warring city-states of the Postclassic period. Topics will include settlement and subsistence systems, sociopolitical evolution, art and architecture, myth and symbolism, and Maya hieroglyphic writing. An important theme of the course will be the relevance of the Precolumbian Maya for understanding complex societies and contemporary Latin American Culture. (Same as LAC 557.) Prerequisite: A course in Anthropology,
Latin American Studies, Art History, Museum Studies, or Indigenous Studies, or permission of instructor.

**ANTH 508. Ancient American Civilizations: The Central Andes. 3 Credits. W**
An archaeological survey of the ancient peoples of Peru and neighboring countries in South America. The origins of complex societies on the coast and in the Andean highlands will be reviewed with special consideration of the role of "vertical" environments in the development of Andean social and economic systems. Cultures such as Chavin, Moche, Nazca, Huari, Tiahuanaco, Chimú, and the rise of the imperial Inca state will be examined through artifacts, architectural remains, and ethnohistoric documents. (Same as HIST 572 and LAC 558.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, History, or Indigenous Studies, or permission of instructor.

**ANTH 509. Ancient Central America. 3 Credits. NW S**
This course will examine the Pre-Columbian cultures of the region situated between Mesoamerica to the north and the Central Andes to the south, focusing principally on the countries of Honduras, Nicaragua, Costa Rica, Panama, and Colombia. Once regarded as an "Intermediate Area" on the peripheries of the ancient civilizations to the north and south, the area of southern Central America and northern South America is now recognized as a center of innovation from very remote times up until the Spanish Conquest. The archaeological remains of stone tools, pottery, jade carvings, gold and copper ornaments, and a wide variety of structures will be interpreted within the context of information on subsistence, settlement patterns, social organization and religious ideology. Issues of the relationships with populations of regions in major culture areas to the north and south will also be considered in detail. (Same as LAC 559.) Prerequisite: ANTH 110 or ANTH 115.

**ANTH 511. Archaeology of Inequality. 3 Credits. S**
Archaeological record of funerary rites, architecture, ceremonial objects and nutritional indicators is often the sole evidence of inequality in the past, especially in the absence of written sources or unbiased historical observations. Case studies describing past small-scale and emergent complex societies worldwide are chosen to help understand the interplay between individual status and rank (achieved or ascribed), group inequality and subordination (class, caste, gender, age, race), wealth (material, embodied, relational), and the role of power and resistance in shaping these societies. Egalitarianism as a leveling mechanism in many of the past societies is also explored. Prerequisite: Junior or Senior or Graduate status, or permission of the instructor.

**ANTH 516. Hunters and Gatherers. 3 Credits. S**
The diversity of hunter-gatherer cultures documented in the ethnographic and archaeological records is considered on a global scale, with particular attention given to the relationships between environment, technology, and organization. The evolution of hunter-gatherers from the earliest hominids until their interaction with more complex societies is considered, with emphasis given to the variation and nature of change in these societies. Prerequisite: ANTH 108 or ANTH 150/151 or ANTH 160 or ANTH 162 or ANTH 308 or ANTH 310 or permission of instructor.

**ANTH 517. Geoarchaeology. 3 Credits. N**
Application of the concepts and methods of the geosciences to interpretation of the archaeological record. The course will focus primarily on the field aspects of geoarchaeology (e.g., stratigraphy, site formational processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as GEOG 532.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310.

**ANTH 519. Lithic Technology. 3 Credits. S**
An introduction to the analysis and interpretation of prehistoric stone industries. Topics discussed include origins and development of lithic technology, principles of description and typology, use and function of stone tools; interpretation of flint knapping. Prerequisite: An introductory course in archaeology.

**ANTH 520. Archaeological Ceramics. 3 Credits. S**
Practicum in the method and theory of pottery analysis in archaeology. Topics include manufacturing techniques, classification, and compositional analysis of pottery artifacts, as well as strategies for interpreting the role of ceramic vessels in food production, storage, and consumption; social and ritual activities; trade and exchange; and the communication of ideas. Prerequisite: ANTH 110 or ANTH 150 or ANTH 151 or ANTH 310 or permission of instructor.

**ANTH 521. Zooarchaeology. 3 Credits. S**
This course is intended to complement faunal identification with practical involvement in analyses and interpretation of archaeological faunal assemblages using a variety of modern methods. Students will participate in the study of specific archaeological faunal remains, development of comparative zooarchaeological collections, and in middle-range research to document the variety of agents that affect faunal remains. Prerequisite: ANTH 110 or ANTH 150 or ANTH 151 or ANTH 310 or permission of instructor.

**ANTH 523. Great Plains Archaeology. 3 Credits. S**
A survey is provided of the archaeological record and its interpretations for the Great Plains area of North America. The records from earliest human occupation, variation in hunter and gatherer societies, to horticultural and farming societies, and the historic period are reviewed. The history of archaeological research in the region, explanatory frameworks and models, and discussion of changes in economy, technology, mobility, social organization, and population movements are among the topics of concern. Prerequisite: ANTH 110, ANTH 310, or permission of instructor.

**ANTH 544. Origins of Native Americans. 3 Credits. N**
A survey of the genetic, linguistic, historic, archaeological, and morphological evidence for the origins of indigenous populations of the Americas. Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor.

**ANTH 545. Contemporary Health Issues in Africa. 3 Credits. S**
The course examines health and nutrition in African communities, using the methods of biological and medical anthropology. Fundamental to the approach taken in the course is the understanding that the health of human groups depends on interactions between biological and cultural phenomena in a particular ecological context. One topic will be selected per semester, to examine in detail the full array of epidemiological factors contributing to patterns of specific diseases. AIDS, childhood diseases, and reproductive health of African women are among possible topics. Course material will be selected from scholarly and medical publications, as well as coverage in the popular media. The use of a variety of sources will enhance understanding of the biological and cultural issues involved and will help students identify possible bias and misinformation in popular coverage of events such as famine or epidemic in African settings. (Same as AAAS 554.) Prerequisite: An introductory course in either anthropology or African studies.

**ANTH 561. Indigenous Development in Latin America. 3 Credits. S**
Surveys the history of the development enterprise since WWII, examines the marginalization and impoverishment of Latin America's indigenous peoples, and provides training to carry out projects for and with them to enhance their quality of life. Development is understood as not merely technological or economic, but also social, emotional, and educational. Students work in teams to design their own mock development project. A 3-credit non-obligatory companion course, Applied Anthropological
Field School among the Ch'orti' Maya, will follow in the intersession after each version of this course. (Same as LAC 561.) Prerequisite: ANTH 100, ANTH 108, ANTH 160 or LAC 100; or consent of instructor.

ANTH 562. Mxamerica. 3 Credits. SC H
This class surveys the relations between Mexico and the U.S. as nation-states, and among Mexicans, Mexican Americans, and Anglo Americans (to a lesser extent other U.S. citizens) in historical perspective. Issues of sovereignty, national and ethnic identity, immigration, migration, labor relations, popular culture, media, and transnational economics are covered. (Same as LAC 562.) Prerequisite: ANTH 108 or ANTH 308 or ANTH 160 or ANTH 360 or LAC 100.

ANTH 564. The Peoples of Africa. 3 Credits. NW S/W
“Peoples of Africa” examines the anthropology of Sub-Saharan Africa through selected case studies of particular societies and issues that have wider comparative relevance. Normally two to four societies are selected for the semester and studied through ethnographic, historical, and literary monographs. These case studies are examined in their pre-colonial, colonial, and postcolonial histories. Lectures, readings, and exercises emphasize three kinds of reasoning -- geographical, historical, and cultural context -- required to grasp events and issues in unfamiliar societies. The course also features major anthropological ideas that emerged in the study of African society, and tracks how anthropology has been adapted by African scholars, policy makers, and activists.

ANTH 569. Contemporary Central America and Mexico. 3 Credits. S
Mexico and Central America have formed a cultural interaction zone for thousands of years, and today share common challenges, particularly political, economic, and social ones related to the Spanish colonial legacy, U.S. involvement, and their place in the global economy. Some of the issues addressed include racism, civil war, migration, youth gangs, narco-trafficking, resource extraction, homeless children, the transition from local subsistence economies to low-income work, and struggles for indigenous rights. Prerequisite: ANTH 108 or ANTH 160 or ANTH 162 or ANTH 308 or ANTH 360 or LAC 100 or permission of instructor.

ANTH 570. Anthropology of Violence. 3 Credits. S
Introduces students to the comparative and cross-cultural study of violence. The course begins by surveying different anthropological approaches to the study of violence, with special attention paid to classical social theorists as well as ethnographic works. Topics may include (post)coloniality and identity politics, nationalism, race, religion, and political culture; geographic areas to be covered may include Africa, Europe, Latin America, the Middle East, and South Asia. (Same as GIST 570.) Prerequisite: Junior standing or above or permission of instructor.

ANTH 581. Food Systems and Sustainability. 3 Credits. S
How shall we feed ourselves? In the face of unprecedented world population growth, humanity must meet the challenge of providing minimum caloric needs while preserving the health of ecosystems for future generations. In this course, students will explore different food cultures and production strategies developed by people in societies around the world. These include foraging, horticulture, pastoralism, intensified horticulture, and industrial agriculture. We will compare the social, economic, and environmental sustainability of various food systems and technologies and their impact on larger social and ecological systems. Prerequisite: ANTH 150 or ANTH 160.

ANTH 582. Ethnobotany. 3 Credits. S
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as EVRN 542 and ISP 542.) Prerequisite: EVRN 142, EVRN 145, EVRN 148, ANTH 150/151, ANTH 160/162/360 or permission of instructor.

ANTH 583. Love, Sex, and Globalization. 3 Credits. S
Escalating transnational flows of information, commodities, and people have created innumerable kinds of “intimate” contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotions—specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as WGSS 583.) Prerequisite: Any previous course in ANTH or WGSS.

ANTH 586. Visual Anthropology. 3 Credits. U
This course takes a hands-on approach to the study of theory, ethics, and methods in visual ethnographic representation. Students also read and consider historical dimensions in this subdiscipline and complete individual and team projects in photographic and videographic media. Prerequisite: An introductory course in cultural anthropology or permission of the instructor.

ANTH 587. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Credits. S
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as LAC 587.)

ANTH 595. The Colonial Experience. 3 Credits. NW S/W
An anthropological and historical examination of the processes and dynamics of the colonial experience. Cross-cultural psychosocial phenomena that have profoundly affected the values and social organizations of both colonizers and colonized will be emphasized. Specific examples will be chosen from the former American, Japanese, and European colonial empires with emphasis on Asia.

ANTH 603. Shamanism Past and Present. 3 Credits. S
This course explores shamanism, broadly defined as the practice of gaining insight through the use of ecstatic techniques (dance, drumming, trance, vision quests, and the use of psychotropic substances) for the purpose of interpreting existence and healing illnesses, through a consideration of theories and evidence for its practice from Upper Paleolithic times to the present day. Examples from the ancient cultures of Asia, Europe, Africa, Australia, and the Americas are used to explore current theoretical approaches in order to identify shamanism and shamanism in the past. Issues of identifying shamans and shamanism in art and archaeological contexts are discussed. The course also explores
the role that shamanism plays in a wide variety of cultures. The principal
goal of the course is to provide a reasoned, critical interpretation of
shamanism in the context of contemporary debates about its definition
and active practice. Prerequisite: ANTH 108 or ANTH 110 or ANTH 150
or ANTH 151 or ANTH 160 or ANTH 162 or ANTH 308 or ANTH 310 or
ANTH 360 or permission of instructor.

ANTH 604. The First Americans. 3 Credits. S/W
This class will review the ongoing scientific debate concerning the routes
and chronologies of the earliest human migrations into the Americas. It
surveys the history of the dispute over the antiquity of archaeological sites
in North and South America, and investigates the paleontological, genetic,
geological, and archaeological records for clues to the various peopling
models and processes. As a counterpoint to the scientific approach, it also
explores public arguments over the issue, to assess the socio-cultural and
political repercussions of archaeological discoveries. Prerequisite:
ANTH 150, ANTH 310, or permission of the instructor.

ANTH 605. Mortuary Practices in the Archaeological Record. 3
Credits. S
Students study theories and methods of burial practices in the
archaeological record. They learn about past communities; attitudes
toward death and burial and how social organization, complexity,
ideology, power, gender and age roles contribute to mortuary practices.
The course examines a variety of Old and New World examples from
different chronological periods through class presentations, debates and
written assignments. The course focuses on comparisons and evaluation
of traditional and current methods and approaches. Prerequisite:
ANTH 110 or ANTH 150 or ANTH 151 or ANTH 310 or permission of
instructor.

ANTH 619. Field Concepts and Methods in Geoarchaeology. 3
Credits. S
A field course taught during the three week summer session. Involves
day excursions to different regions in order to introduce students to
a variety of archaeological landscapes and environments. Focuses on
the application of geoscientific concepts and methods in archaeological
field investigations, emphasizing natural processes such as erosion,
deposition, weathering, and biological and human activity that create
and modify the archaeological record, and on soil-stratigraphic and
geophysical approaches to landscape and site investigations.

ANTH 648. Human Osteology. 4 Credits. N LFE
This course examines the structure and function of the human skeleton
from an evolutionary and biomedical perspective. Students will learn
to identify bones comprising the human skeleton and how osteological
information aids in reconstructing sex, age, race, stature, and health
status. Major transformations of the human skeleton from hominoid
precursors, and some of the biomedical consequences of these
transformations, will be addressed. (Same as BIOL 548.) Prerequisite:
An introductory course in physical anthropology, biology, or permission of
instructor.

ANTH 652. Population Dynamics. 3 Credits. N
Examination of possible interrelationships between the demographic
structure of a population and the forces of evolution. Students are
exposed to field methods and techniques of population studies.
Prerequisite: An introductory course in anthropology, biology, or
permission of instructor.

ANTH 671. The Culture of Consumption: (E.G. United States and
Japan). 3 Credits. S
Examines the ideologies of capitalism and consumerism as they influence
social institutions and daily life. Topics for consideration grow out of
instructors' interests and may include areas such as class, religion,
advocacy, politics, gender, medicine, environment, childhood, and
education. Prerequisite: ANTH 560 or permission of instructor.

ANTH 699. Anthropology in Museums. 3 Credits. S
The course reviews the history of archaeological, ethnographic, physical
anthropological and other types of collections. It also considers current
issues facing anthropologists, such as: contested rights to collections
and the stories that accompany them; representation and interpretation
of cultures; art and artifact; conceptualization, design and building of
exhibitions; and anthropological research and education in the museum.
(Same as MUSE 699.) Prerequisite: ANTH 150 or ANTH 108 or consent
of instructor.

ANTH 701. History of Anthropology. 3 Credits.
Development of the field of anthropology and its relations with intellectual
history. Emphasis on method and theory in historical context. Prerequisite:
Consent of instructor or graduate standing.

ANTH 702. Current Archaeology. 3 Credits.
An introduction to fundamental theoretical orientations and methodological
approaches in world archaeology. Case studies illustrate data acquisition,
dating methods, culture history, paleoenvironmental models, and culture
processes. Prerequisite: Consent of instructor or graduate standing.

ANTH 703. Current Biological Anthropology. 3 Credits.
The fundamental issues, methods, and theories in contemporary
biological anthropology. Prerequisite: Consent of instructor or graduate
standing.

ANTH 704. Current Cultural Anthropology. 3 Credits.
The fundamental issues, methods, and theories in contemporary cultural
anthropology and anthropological linguistics. Prerequisite: Consent of
instructor or graduate standing.

ANTH 706. Current Linguistic Anthropology. 3 Credits.
This course will cover fundamental issues, methods, and theories in
contemporary linguistic anthropology. (Same as LING 706.) Prerequisite:
Graduate standing or consent of the instructor.

ANTH 707. Responsible Research and Scholarship in
Anthropology. 3 Credits.
This course examines a range of issues critical to responsible research,
scholarship, and practice in anthropology. Required for all doctoral
students in Anthropology. Prerequisite: Graduate standing in anthropology
or consent of instructor.

ANTH 730. Linguistics in Anthropology. 3 Credits.
The study of language as it concerns anthropology. Language systems in
relation to culture, language taxonomy, semantics, and linguistic analysis
as an ethnographic tool. (Same as LING 730.) Prerequisite: Graduate
standing.

ANTH 732. Discourse Analysis. 3 Credits.
This course focuses on linguistic frameworks for the analysis of discourse.
Discourse is a linguistic system larger than the sentence (utterance),
which connects and contextualizes speech and written text. This course
focuses on current issues and theoretical frameworks in the analysis
of discourse. Using oral and written data, students will examine how
context influences and shape linguistic form. Topics covered include
transcription systems, the structure and organization of different genres
of language, and the performance of social actions, including stancetaking, framing, and the construction of identity. Students will also have
an opportunity to perform discourse analytic research on the data of their
choice. (Same as LING 732.) Prerequisite: ANTH 706 or permission of
the instructor.

ANTH 736. Linguistic Analysis. 3 Credits.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. (Same as LING 708.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308.

ANTH 740. Linguistic Data Processing. 3 Credits.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as LING 740.) Prerequisite: LING 705 or permission of instructor.

ANTH 741. Field Methods in Linguistic Description. 3 Credits.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as LING 741.) Prerequisite: LING 705 or permission of instructor.

ANTH 748. Language Contact. 3 Credits.
Theories and case studies of languages in contact. Areal and genetic linguistics, genesis of pidgins and creoles, multilingualism. Social, political, economic, and geographic factors in language change. (Same as LING 748.) Prerequisite: A course in linguistics.

ANTH 766. Topics in Biological Anthropology: ____. 3 Credits.
Topic for semester to be announced. Students may repeat the course for different topics. Prerequisite: Consent of instructor.

ANTH 770. Research Methods in Physical Anthropology. 3 Credits.
A practical course in the use of special laboratory techniques of biological anthropological research and methods of data presentation. Prerequisite: Consent of instructor.

ANTH 775. Seminar in Cultural Anthropology: ____. 3-9 Credits.
Intensive consideration of special problems in cultural anthropology. Topic for semester to be announced.

ANTH 783. Doing Ethnography. 3 Credits.
Ethnography is both process and product. The product, a representation of a culture (or selected aspects of a culture), is based on fieldwork, the common term for the ethnographic process. This course explores how ethnographers prepare for the field, do their fieldwork, then report it.

ANTH 798. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as AMS 730, BIOL 798, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

ANTH 799. Museum Internship. 1-6 Credits.
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. Graded on a satisfactory/unsatisfactory basis. (Same as AMS 799, GEOL 723, and MUSE 799.)

ANTH 801. Proseminar I in Anthropology. 3 Credits.
This course is an introduction to graduate study in Anthropology at the University of Kansas. Students will be introduced to the history, theory, and current research in two subfields of Anthropology: archaeology and biological anthropology. Students will read foundational papers in these two fields in order to develop a framework for contextualizing more cutting-edge research by KU Anthropology faculty and other scholars. In addition, this course will provide professional development resources for graduate students with an overview of the resources available at KU to support their graduate studies, including internal and external funding sources, information about the design, ethics, and approval procedures for future research, peer review and advisor feedback on research proposals, integration into mentoring networks, and other activities focused on career and professional development. Graduate students will learn how to critically read academic papers, and begin to develop a proposal for their graduate research project.

ANTH 802. Proseminar II in Anthropology. 3 Credits.
This course continues graduate students' survey of the history and theory of each anthropological subfield with a focus on foundational readings in sociocultural and linguistic anthropology as well as current research by KU Anthropology faculty and scholars outside of the department. Students will continue to develop their professional skills by finishing their proposals for external funding, and presenting and critiquing each others' work. Students' finished proposals can form the foundation of their dissertation proposals, and all are encouraged to submit them for external funding.

ANTH 849. Seminar in Archaeology: ____. 2-4 Credits.
Subject matter of seminar to be announced for semester.

ANTH 851. Data Analysis in Archaeology: ____. 1-6 Credits.
A two-semester course designed to provide graduate students with basic principles in the analysis of archaeological data. Course content will include an introduction to archaeological systematics, analytical procedures, application of multivariate statistics, and computer applications. Topic for semester to be announced.

ANTH 853. Theory and Current Problems in Archaeology. 3 Credits.
Consideration of scientific methodology, basic assumptions of anthropological archaeology, relationship of archaeology and anthropology, and current theoretical and methodological trends in archaeology.

ANTH 876. Advanced Medical Anthropology: ____. 3-6 Credits.
This course provides advanced training in selected aspects of medical anthropology; the topic for a particular semester will reflect the current interests of the instructor. It is expected that the course content will alternate between theoretical and applied emphases. May be repeated for a total of six hours credit. Prerequisite: Consent of instructor.

ANTH 889. Summer Archaeological Field Work. 1-8 Credits.
Under the direction of a professional archaeologist, undergraduate and graduate students are taught proper procedures for the excavation and laboratory analysis of data from a prehistoric or historic archaeological site. Data gathered may be used for additional graduate research. Enrollment by application; limited to twenty students. A fee for subsistence costs will be charged.

ANTH 896. Graduate Research. 1-9 Credits.
Individual investigation of special problems in anthropology. Limit of six hours credit for the M.A. degree.

ANTH 897. Internship Research. 4-6 Credits.
Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. Students design and implement an
anthropological project under faculty supervision. Prerequisite: Graduate standing in Anthropology.

**ANTH 898. Internship Analysis. 1-6 Credits.**
Experiential learning in the application of anthropology through placement in business, government, community, research, or social service organization or agency. This course is a sequel to ANTH 897. Students finish up any remaining research and deliver their findings to the client. They also prepare a written report and a verbal presentation for the Department of Anthropology. Prerequisite: ANTH 897 and Graduate standing in Anthropology.

**ANTH 899. Master’s Thesis. 1-12 Credits.**
Limit of six hours credit for the M.A. degree. Graded on a satisfactory progress/limited progress/no progress basis.

**ANTH 996. Graduate Research. 1-9 Credits.**
Individual investigation of special problems in anthropology.

**ANTH 999. Doctoral Dissertation. 1-12 Credits.**
Dissertation hours. Graded on a satisfactory progress/limited progress/no progress basis.

# Bachelor of Arts and Bachelor of General Studies in Anthropology

## The Anthropology Department at the University of Kansas

Anthropologists are concerned with the origin, history, and future of the human species. Our mission is to further our understanding of past and present human societies in their cultural, biological, and environmental contexts. As flows of people, ideas, money, and goods are crossing borders at unprecedented speeds, we are encountering human diversity now, more than ever before. The discipline provides students the knowledge and skills they will need to navigate these complex, multicultural, and rapidly changing worlds. Because we study what it is to be human, the field is one of the most wide-ranging of the academic disciplines.

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## Why Study Anthropology?

Students have many reasons for wanting to major in anthropology. Some are curious about the origins of the human species. Others are fascinated by the diversity of human experiences in ancient and modern periods. Some students intend to pursue international careers, where they will use languages and work in cultural contexts very different from those in which they were raised. Others plan to work in museums collecting and curating human cultural resources. Some wish to pursue graduate training in one of the field’s subdisciplines, while others seek to use their anthropological training as preparation for professional schools, including law, medicine, public health, journalism, business, and engineering. There are many professions where the broad scientific, humanistic, and multicultural knowledge available through the study of anthropology can be useful—in education, healthcare, law, social work, business, human resources, public affairs, cultural resource management, or laboratory research.

## Anthropological Research Opportunities at KU

- KU Anthropological Genetics Research Laboratories (https://kuanthgen.org/): Beginning with the construction of a state-of-the-art aDNA lab in 2016, our facilities now include a contemporary DNA laboratory, and multiple teaching laboratories for molecular methods and traditional osteological and paleoanthropological classes. Our research foci are on human and non-human population histories and paleoecological reconstruction from sedimentary DNA. We prioritize ethical principles and cultural sensitivity in working in close collaboration with all partners.
- **Archaeological Research Center**: Located in historic Spooner Hall on the main campus, the archaeology laboratory offers research space and support to Anthropology faculty and graduate students, Archaeology staff, Museum Studies interns, affiliate curators and research associates and visiting scholars.
- **Field Schools**: Anthropology faculty offer field schools in archaeology, biological anthropology, and cultural anthropology. Undergraduates and graduate students have conducted independent and collaborative research in the United States, including Alaska; Mexico, Central, and South America; sub-Saharan Africa; and Asia.

For specific questions about our program, please contact us:
The University of Kansas
Department of Anthropology
Undergraduate Program
1415 Jayhawk Blvd.,
622 Fraser Hall
Lawrence, KS 66045
E-mail: kuanthro@ku.edu (%20%20kuanthro@ku.edu)
Phone: (785) 864-2630
Fax: (785) 864-5224
http://anthropology.ku.edu/overview-ba-anthropology/ (http://anthropology.ku.edu/overview-ba-anthropology/)

## Undergraduate Admission

### Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.
Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. or B.G.S. Major in Anthropology

To declare a major or minor in Anthropology, students work with the Anthropology academic advisor in the College of Liberal Arts & Sciences. Students will be assigned a faculty mentor at the time of declaration for guidance on concentrations, course selection, and careers in anthropology. Anthropology majors may pursue a degree that concentrates in General Anthropology, which allows the widest selection of courses. Anthropology majors may also select a concentration in Archaeology, Biological Anthropology, and Sociocultural Anthropology, which provide in-depth knowledge in the discipline’s subfields. Students considering graduate studies in anthropology should choose a concentration in Archaeology, Biological Anthropology, or Sociocultural Anthropology. To complete a B.A. or B.G.S. Major in Anthropology, students must complete a minimum of 30 hours in the discipline, with a 2.0 grade-point average required in anthropology courses numbered 300 and above. Up to 6 hours may be taken outside the Anthropology department with approval of a faculty mentor.

A. Concentration in General Anthropology

Students who choose the General Anthropology Concentration seek a broad, integrative Anthropology major. They may select a fundamentals course and a methods course from Archaeology, Biological Anthropology, or Sociocultural Anthropology, and may choose electives from any anthropological subfield. The Concentration in General Anthropology also allows students to design a cross-disciplinary major that does not neatly fit under a single subfield (e.g., biocultural anthropology or bioarchaeology). Students will select courses for their degree in consultation with their faculty mentor.

1. Three Required Courses for Anthropology Majors concentrating in General Anthropology (9 hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 150</td>
<td>Becoming Human</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 151</td>
<td>Becoming Human, Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 162</td>
<td>The Varieties of Human Experience, Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH 401</td>
<td>Integrating Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

2. One Required Fundamentals Course for Anthropology Majors concentrating in General Anthropology (3 hours). May be satisfied by at least one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 308</td>
<td>Fundamentals of Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Fundamentals of Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 304</td>
<td>Fundamentals of Biological Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

3. One Required Research Methods Course for Anthropology Majors concentrating in General Anthropology (3 hours). May be satisfied by at least one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 406</td>
<td>Archaeological Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 449</td>
<td>Laboratory/Field Work in Human Biology</td>
<td>1-3</td>
</tr>
<tr>
<td>ANTH 462</td>
<td>Field Methods in Cultural Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Five Anthropology Electives (15 hours):

All anthropology courses count toward the required 15 hours of Anthropology major electives. Nine of the 15 hours of electives must be numbered 300 or higher. Students concentrating in General Anthropology should consult with their faculty mentor to select appropriate courses.

B. Concentration in Archaeology

The Archaeology Concentration allows students to focus their degree on the ways past and present societies are reconstructed through investigations of human, biological, and material remains. Students select a fundamentals and methods course in archaeology and choose electives that provide them an in-depth focus on local or global contexts, concepts, theories, and methods, as well as applications of archaeological approaches and methodological tools. In consultation with their faculty mentor, they may also choose electives from other anthropological subfields that complement their interests.

1. Five required courses for Anthropology Majors concentrating in Archaeology (15 hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 150</td>
<td>Becoming Human</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 151</td>
<td>Becoming Human, Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 162</td>
<td>The Varieties of Human Experience, Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Fundamentals of Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 401</td>
<td>Integrating Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 406</td>
<td>Archaeological Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Five Anthropology Electives (15 hours):

All anthropology courses may be counted toward the required 15 hours of Anthropology major electives. Nine of the 15 hours of electives must be numbered 300 or higher. Students concentrating in Archaeology may consult with an archaeology faculty mentor to select appropriate courses. Courses within the archaeology topic subfield may also be found here (https://anthropology.ku.edu/curriculum-babgs/).

C. Concentration in Biological Anthropology

The Biological Anthropology Concentration allows students to focus their degree on the origin, maintenance, patterning, and significance of human biological variation, the nature of heredity, and human evolution. Students select a fundamentals and methods course in biological anthropology and choose electives that provide them an in-depth focus on local or global contexts, concepts, theories, and methods, as well as applications of biological anthropology’s approaches and methodological tools. In consultation...
with their faculty mentor, they may also choose electives from other anthropological subfields that complement their interests.

1. **Five required courses for Anthropology Majors concentrating in Biological Anthropology (15 hours):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 150</td>
<td>Becoming Human</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 151</td>
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<td></td>
</tr>
<tr>
<td>ANTH 401</td>
<td>Integrating Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 304</td>
<td>Fundamentals of Biological Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 449</td>
<td>Laboratory/Field Work in Human Biology</td>
<td>1-3</td>
</tr>
</tbody>
</table>

2. **Five Anthropology Electives (15 hours):**

All anthropology courses may be counted toward the required 15 hours of Anthropology major electives. Nine of the 15 hours of electives must be numbered 300 or higher. Students concentrating in Biological Anthropology may consult with a biological anthropology faculty mentor to select appropriate courses. Courses within the biological topic subfield may also be found here: Anthropology (p. 1103), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Anthropology can be found here: Anthropology (p. 1103), or by using the left-side navigation.

**Departmental Honors**

To qualify for honors, an undergraduate must achieve an in-residence and combined minimum grade-point average of 3.25 overall and 3.5 in anthropology. Students must file a declaration of intent form with the instructor with whom they choose to work. In addition to the required hours, the student must enroll in 3 to 6 hours of ANTH 499 Senior Honors Research and complete a senior thesis based on this work. It is recommended that all candidates make an oral presentation of their research results. One copy of the thesis must be bound and placed in the departmental thesis library.

**BA in Anthropology**

Below is a sample 4-year plan for students pursuing the BA in Anthropology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

- Fall Hours | Spring Hours
- ENGL 101 (Goal 2.1 Written Communication/BA Writing I)\(^1\) | ENGL 102 (Goal 2.1 Written Communication/BA Writing II)\(^1\) | 3
- Goal 1.2 Quantitative Literacy | Goal 1.2 Quantitative Reasoning (BAQR)\(^2\) | 3
- 1st Semester Language (BA Second Language) | 2nd Semester Language (BA Second Language) | 5
- Goal 1.1 First Year Seminar or Critical Thinking | Goal 3 Natural Science | 3
- ANTH 150 (Goal 3 Social Science, Major Requirement) | ANTH 160 or 162 (Goal 3 Arts and Humanities, Goal 4.2 Global Awareness, Major Requirement) | 3

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**Sophomore**

- Fall Hours | Spring Hours
- 3rd Semester Language (BA Second Language) | 4th Semester Language, or 1st semester of another Language, unless req for mjr (BA Second Language)\(^6\) | 3
- ANTH 308, 310, 304, or 340 (Major Requirement - ANTH Fundamentals) | Goal 2.2 Communication | 3
- ANTH 100+ level Elective (Major Requirement) | ANTH 100+ level Elective (Major Requirement) | 3
- Goal 2.2 Communication | ANTH 300+ level Elective (Major Requirement)\(^3\) | 3
- Goal 4.1 US Diversity | Goal 4.2 Global Awareness | 3

15

**Junior**

- Fall Hours | Spring Hours
- ANTH 300+ level Elective (Major Requirement)\(^3\) | Goal 5 Social Responsibility & Ethics | 3
- Second Area of Study/Elective/Degree/Junior-Senior Hours\(^5\) | ANTH 300+ level Elective (Major Requirement)\(^3\) | 3
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal.

This plan accounts for a student’s options with the general concentration in Anthropology. If interested in Archaeology, Biological, or Sociocultural concentrations specifically see catalog for course options.

Students considering graduate school should take at least 2 courses beyond major requirements. These courses should be chosen in consultation with a faculty advisor.

**BGS in Anthropology**

Below is a sample 4-year plan for students pursuing the BGS in Anthropology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANGL 101 (Goal 2.1 Written Communication 1 of 2)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication 2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>ANGL 150 or 151 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>ANGL 160 or 162 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours 120</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3 Refer to the Anthropology degree requirements page of the catalog for a list of courses to fulfill this requirement.

4 Students considering graduate school should take at least 2 courses beyond major requirements. These courses should be chosen in consultation with a faculty advisor.

5 Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

6 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

- The same course cannot be used to fulfill more than one KU Core Goal.
- This plan accounts for a student’s options with the general concentration in Anthropology. If interested in Archaeology, Biological, or Sociocultural concentrations specifically see catalog for course options.
- Students considering graduate school should take at least 2 courses beyond major requirements. These courses should be chosen in consultation with a faculty advisor.
Past and present human societies in their cultural, biological, and human species. Our mission is to further our understanding of the human species. Anthropologists are concerned with the origin, history, and future of the human species. If interested in Archaeology, Biological, or Sociocultural concentrations specifically, see catalog for course options.

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Students have many reasons for wanting to major in anthropology. Some are curious about the origins of the human species. Others are fascinated by the diversity of human experiences in ancient and modern periods. Some students intend to pursue international careers, where they will use languages and work in cultural contexts very different from those in which they were raised. Others plan to work in museums collecting and curating human cultural resources. Some wish to pursue graduate training in one of the field’s subdisciplines, while others seek to use their anthropological training as preparation for professional schools, including law, medicine, public health, journalism, business, and engineering. There are many professions where the broad scientific, humanistic, and multicultural knowledge available through the study of anthropology can be useful—in education, healthcare, law, social work, business, human resources, public affairs, cultural resource management, or laboratory research.

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Minor in Anthropology

The Anthropology Department at the University of Kansas

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For specific questions about our program, please contact us:
The University of Kansas
Department of Anthropology
Undergraduate Program
1415 Jayhawk Blvd.,
622 Fraser Hall
Lawrence, KS 66045
E-mail: kuantthro@ku.edu
Phone: (785) 864-2630
Fax: (785) 864-5224
http://anthropology.ku.edu/overview-ba-anthropology

Requirements for the Minor in Anthropology

A minimum of 18 hours and a 2.0 grade-point average in KU Anthropology are required. To declare a minor in Anthropology, students will work with an Academic Advisor in the College of Liberal Arts & Sciences and will seek guidance from Anthropology faculty members in course selection.

1. One Required Introductory Course (3 hours). May be satisfied by at least one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 150</td>
<td>Becoming Human</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 151</td>
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<td></td>
</tr>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 162</td>
<td>The Varieties of Human Experience, Honors</td>
<td></td>
</tr>
</tbody>
</table>

2. One Required Anthropology Fundamentals Course (3 hours). May be satisfied by at least one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 308</td>
<td>Fundamentals of Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 310</td>
<td>Fundamentals of Archaeology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 340</td>
<td>Human Variation and Evolution</td>
<td>3</td>
</tr>
</tbody>
</table>

3. Anthropology Electives (12 hours):

All anthropology courses may be counted toward the required 12 hours of Anthropology minor electives. Nine of the 12 hours of electives must be numbered 300 or higher.

Master of Arts in Anthropology

What is Anthropology?

Anthropologists are concerned with the origin, history, and future of the human species. Our mission is to further our understanding of past and present human societies in their cultural, biological, and environmental contexts. The discipline provides students the knowledge and skills they will need to navigate these complex, multicultural, and rapidly changing worlds. Because we study what it is to be human, the field is one of the most wide-ranging of the academic disciplines.

There are four main subdisciplines of anthropology. Three are currently taught in our department: Archaeology is concerned with studying the human past based on the material left behind. Biological anthropology is concerned with human evolution and variation. Sociocultural anthropology is concerned with the many ways humans organize themselves and create, reproduce, and reject meaningful patterns of life in changing local and global circumstances. Anthropologists across all of the subdisciplines apply holistic, comparative, and evolutionary perspectives and a range of methodologies in their research. We are committed to fieldwork and the application of this knowledge to helping people better understand one another.

Why study Anthropology at KU?

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in education, healthcare, law, social work, business, human resources, public affairs, cultural resource management, or laboratory research.

The Anthropology Department at the University of Kansas maintains a holistic and integrative approach to studying human beings. Our world-class program has particular strengths in the Americas in all three subdisciplines, and is committed to engaged research with community partners.

Funding is available for MA students admitted into the Anthropology program.

For specific questions about our program, please contact us:
The University of Kansas
Department of Anthropology
Corinne Butler
Graduate Program Coordinator
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Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission to the Anthropology Program

The anthropology graduate program begins at an advanced level. Preparation for the program through completion of an undergraduate
major in anthropology is encouraged but not required. Some undergraduate preparation in fields closely related to anthropology, such as biology, sociology, psychology, linguistics, economics, geography, or geology is strongly recommended. Undergraduate courses in such subjects as biology, philosophy, genetics, computer science, and history are of considerable value to the graduate student in anthropology.

Proficiency in a modern foreign language and in statistics is of special importance to candidates for graduate work in anthropology and will optimally have been acquired during the undergraduate years.

Submit your graduate application online (https://gradapply.ku.edu/apply/). Other required application materials are:

- A resume or curriculum vitae (CV)
- A writing sample of your best academic work
- A personal statement describing your academic objectives and professional goals that clearly indicates the disciplinary track of interest (i.e., archaeology, biological anthropology, or sociocultural anthropology)
- Applicants who wish to be considered for departmental financial support (GTA or GRA positions, fellowships, etc.) should clearly state this in the personal statement
- Transcripts of all undergraduate and graduate study completed
- Three letters of recommendation from faculty members or others with whom you have worked and who know your work well
- Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/) set by KU Graduate Studies
- GRE scores are optional

Most application materials can be uploaded to the online application. Applicants who are interested in working with a particular faculty member are encouraged to reach out to them directly via email.

Students who are interested in enrolling in graduate level coursework in the Department of Anthropology without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s website (http://anthropology.ku.edu/) for further details.

M.A. Degree Requirements

The M.A. program is a general curriculum for students who wish to earn an M.A. en route to the Ph.D. program in anthropology or who plan to pursue graduate studies only to the M.A. level.

Coursework

Completion of 30 credit hours of graduate work in anthropology and related disciplines is required. At least 50% of coursework for the master's degree must be at the 700 level or above. No more than 6 hours of independent research or thesis credits (ANTH 896, ANTH 897, ANTH 898, ANTH 899, ANTH 996) may count toward the 30 hour total.

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<tr>
<th>Code</th>
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<tr>
<td>ANTH 801</td>
<td>Proseminar I in Anthropology</td>
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<td>ANTH 802</td>
<td>Proseminar II in Anthropology</td>
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In addition to the two required Proseminar courses, students must demonstrate competency in a set of Core Topics, including:

1. Professionalism
2. History/Theory in the Four Fields of Anthropology
3. Knowledge in the Area of Specialization
4. Stewardship/Engaged Research
5. Research Methods

All courses must be selected in consultation with the student's faculty advisor.

Core Competencies may be fulfilled in two ways: through completion of relevant courses (with a grade of "B" or better in each), or the submission of research papers deemed satisfactory by their committees. The research paper option could include research papers written outside of regular coursework such as papers written for publication, papers written as a GRA, papers written while a graduate student at an outside institution, etc. The papers, collected in a portfolio, will be evaluated as part of the Master's Final Exam/Qualifying Exam.

Subdisciplines have specific ways from demonstrating Core Competencies, see the Graduate Handbook (http://anthropology.ku.edu/) for details.

Master's Final Exam

The M.A. degree will be awarded upon the successful completion of a Master's Final Exam. The Anthropology program offers three options for this exam, including a thesis, project defense, and a research paper.

A. Thesis Option. Students completing the thesis defense option must complete at least one and no more than six hours of ANTH 899 Thesis. The MA thesis proposal should be developed in consultation with the student's principal advisor. A completed thesis should be submitted and defended no later than the sixth semester of enrollment. Conditional on approval by the student’s M.A. committee, students must schedule and successfully complete a thesis defense open to the University community and pass an oral defense of the thesis. The oral defense will consist of a presentation of research, open to the public, followed by a period of examination by the committee in closed session. This option is particularly recommended for students that do not intend to complete a Ph.D.

B. Research Paper Option. Students must complete at least one and no more than six independent research hours of Graduate Research (ANTH 896), Internship Research (ANTH 897), Internship Analysis (ANTH 898). Students may produce or be the primary contributor (e.g. first author) to an appropriate paper publishable by a peer-reviewed journal. The M.A. project proposal must be developed in consultation with the student’s principal advisor. The paper should be defended no later than the sixth semester of enrollment. Co-authorship is permitted if the student has primary responsibility for: 1) conceiving the project; 2) collecting new data or analyzing previously collected data; and 3) completing the finished project. Conditional on approval by the M.A. committee, students must schedule and successfully complete a defense open to the University community. The oral defense will consist of a presentation of the research paper, open to the public, followed by a period of examination by the committee in closed session.

C. Other Research Project. Students must complete at least one and no more than six independent research hours of Graduate Research (ANTH 896), Internship Research (ANTH 897), or Internship Analysis (ANTH 898). A project proposal should be developed in consultation with the student’s principal advisor. A completed project such as an
edited book or monograph, or other scholarly product, such as an online resource, documentary film, or museum exhibition, should be submitted and defended no later than the sixth semester of enrollment. Conditional on approval by the M.A. committee, students must schedule and successfully complete a defense open to the University community. The oral defense will consist of a presentation of the project, open to the public, followed by a period of examination by the committee in closed session.

Continuation to the Ph.D.

Students who wish to continue in the doctoral program must complete a Qualifying Exam. The Qualifying Exam can be taken at the same time as their Master’s Final Exam or on a separate occasion (see Ph.D. in Anthropology (https://catalog.ku.edu/liberal-arts-sciences/anthropology/phd/#requirementstext) section of the catalog under the Qualifying Exam heading for additional details). Following deliberation of the student’s qualifications, the master’s committee will notify the student and Director of Graduate Studies of their recommendation regarding the student’s continuation in Ph.D. level study.

Handbook for Graduate Students

Detailed information, application deadlines, and general information may be found in the Graduate Student Handbook, available on the Anthropology website (http://anthropology.ku.edu/).

Doctor of Philosophy in Anthropology

What is Anthropology?

Anthropologists are concerned with the origin, history, and future of the human species. Our mission is to further our understanding of past and present human societies in their cultural, biological, and environmental contexts. The discipline provides students the knowledge and skills they will need to navigate these complex, multicultural, and rapidly changing worlds. Because we study what it is to be human, the field is one of the most wide-ranging of the academic disciplines.

There are four main subdisciplines of anthropology. Three are currently taught in our department: Archaeology is concerned with studying the human past based on the material culture left behind. Biological anthropology is concerned with human evolution and variation. Sociocultural anthropology is concerned with the many ways humans organize themselves and create, reproduce, and reject meaningful patters of life in changing local and global circumstances. Anthropologists across all of the subdisciplines apply holistic, comparative, and evolutionary perspectives and a range of methodologies in their research. We are committed to fieldwork and the application of this knowledge to helping people better understand one another.

Why Study Anthropology?

Students have many reasons for pursuing graduate degrees in anthropology. Some are curious about the origins of the human species. Others are fascinated by the diversity of human experiences in ancient and modern periods. Some students intend to pursue international careers, where they will use languages and work in cultural contexts very different from those in which they were raised. Others plan to work in museums collecting and curating human cultural resources. Some wish to pursue graduate training in one of the field’s subdisciplines, while others seek to use their anthropological training as preparation for professional schools, including law, medicine, public health, journalism, business, and engineering. There are many professions where the broad scientific, humanistic, and multicultural knowledge available through the study of anthropology can be useful, such as education, healthcare, law, social work, business, human resources, public affairs, cultural resource management, or laboratory research.

The Anthropology Department at the University of Kansas maintains a holistic and integrative approach to studying human beings. Our world-class program has particular strengths in the Americas in all three subdisciplines, and is committed to engaged research with community partners.

We are committed to fully funding all PhD students for at least four years.

Anthropological Research Opportunities at KU

KU Anthropological Genetics

The KU Anthropological Genetics group maintains three laboratories and computing resources for graduate and undergraduate students wishing to incorporate genetics into their research.

• The Anthropological Genetics Research Facility has laboratory spaces for contemporary genomic analyses, as well as post-PCR and NGS library purification.
• The Ancient DNA Laboratory consists of cleanroom facilities and equipment for working with ancient DNA.
• Laboratory of Biological Anthropology (LBA): Founded in 1975, the LBA was established as a research center of the University of Kansas. The LBA currently houses DNA samples and training facilities for undergraduates.

KU Archaeology

The Archaeology program at KU has a number of resources for graduate students.

• Field Schools: Anthropology faculty offer field schools in archaeology, biological anthropology, and cultural anthropology. Undergraduates and graduate students have conducted independent and collaborative research in the United States, including Alaska; Mexico, Central, and South America; sub-Saharan Africa; and Asia.
• Archaeological Research Center: Located in historic Spooner Hall on the main campus, the archaeology laboratory offers research space and support to Anthropology faculty and graduate students.
• KU Lab for Applied Archaeological Science (KLAAS). Located in Malott Hall, KLAAS applies experimental and interdisciplinary approaches to traditional questions in archaeology.
• The ODYSSEY Archaeological Research Program is run through the Kansas Geological Survey (KGS). ODYSSEY supports field-and laboratory-based research on the archaeology of the late Pleistocene and early Holocene in the Central Great Plains. ODYSSEY has supported numerous graduate and undergraduate students from the Department of Anthropology.

For specific questions about our program, please contact us:

The University of Kansas
Department of Anthropology
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Proficiency in a modern foreign language and in statistics is of special importance to candidates for graduate work in anthropology and will optimally have been acquired during the undergraduate years.

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- A resume or curriculum vitae (CV)
- A writing sample of your best academic work
- A personal statement describing your academic objectives and professional goals that clearly indicates the disciplinary track of interest (i.e., archaeology, biological anthropology, or sociocultural anthropology), and a description of your planned research
- Applicants who wish to be considered for departmental financial support (GTA or GRA positions, fellowships, etc.) should clearly state this in the personal statement
- Transcripts of all undergraduate and graduate study completed
- Three letters of recommendation from faculty members or others with whom you have worked and who know your work well
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Ph.D. Degree Requirements

The Ph.D. in anthropology is awarded to candidates who have demonstrated specialized competence in one or more of the general fields and who have contributed to the body of knowledge and theory in the specialized field through independent, original research.

Coursework

Ph.D. students in Anthropology must complete 30 credit hours prior to completion of the Ph.D. qualifying exam. No more than 6 hours of independent research or thesis credits (ANTH 896, ANTH 897, ANTH 898, ANTH 899, ANTH 996) may count toward the 30 hour total.

In addition to the required courses above, all students must also demonstrate competency in a set of Core Topics, including:

1. Professionalism
2. History/Theory in the Four Fields of Anthropology
3. Knowledge in one's Area of Specialization
4. Stewardship/Engaged Research
5. Research Methods

All courses must be selected in consultation with the student's faculty advisor.

Core competencies may be fulfilled two ways: through completion of relevant courses (with a grade of "B" or better in each), or the submission of research papers deemed satisfactory by their committees. The research paper option could include research papers written outside of regular coursework such as papers for publication, papers written as a GRA, papers written while a graduate student at an outside institution, etc. The papers, collected in a written portfolio, will be evaluated as part of the Qualifying Exam.

Subdisciplines have specific ways for demonstrating Core Competencies, see the Graduate Handbook (http://anthropology.ku.edu/) for details.

Students who complete an M.A. in Anthropology must fulfill their Core Competencies prior to the Ph.D. Qualifying Exam.

Research Skills & Responsible Scholarship Requirement (RSRS)

The University requires that every doctoral student have training in responsible scholarship pertinent to the field of research and obtain research skills pertinent to the doctoral level of research in their field(s). This requirement is satisfied by completion of ANTH 707.

Qualifying Exam

All students seeking a Ph.D. must undergo a Qualifying Exam upon completion of their coursework, ideally in the second semester of their second year of study. The Qualifying Exam is a holistic evaluation of the student's suitability for the Ph.D. program, taking into account the student's overall capacity and preparation for graduate study leading...
to the Ph.D., the student's intellectual ability, self-application, creativity, portfolio of work, and prior performance in the program.

Students have the option of undergoing the Qualifying Exam in conjunction with or shortly following their M.A. exam. Students who elect not to receive the M.A. will have a standalone oral Qualifying Exam, with exam questions drawn from topics related to the student's written portfolio, administered in a closed session. If the students fails the exam, they may attempt the exam once more in written form.

Following completion of the Qualifying Exam, students complete 18 additional graduate credit hours. Of these 18 hours, no more than 9 may be in independent study (ANTH 896, ANTH 897, ANTH 898, or ANTH 996). Dissertation hours may not count toward this requirement.

**Dissertation Proposal**

From the beginning of doctoral study, the student should plan to conduct a doctoral dissertation project. This is an independent piece of research, usually requiring fieldwork, and leading to a dissertation that contributes to anthropological knowledge. The student's doctoral committee determines the exact form of the dissertation proposal; it may vary by subdiscipline. In the proposal, the student is expected to review the state of knowledge pertinent to the topic, describe the research problem, and explain the methods to be employed in the investigation.

**Doctoral Candidacy**

All Ph.D. students must pass an Oral Comprehensive Examination by the fourth semester of post-M.A. enrollment (or completion of the Qualifying Exam). This exam will be based in part upon a dissertation proposal, which must be approved by the doctoral committee at least three weeks before the Oral Comprehensive Examination is scheduled. The exam is administered by the doctoral committee and is closed to the public (see the Graduate Handbook (http://anthropology.ku.edu/) for more details). Upon passing the exam, students are advanced to candidacy.

Following completion of the Oral Comprehensive Exam, students must continue to enroll in accordance with the Office of Graduate Studies Post-comprehensive Enrollment Policy (https://policy.ku.edu/graduate-studies/doctoral-candidacy/) until all Ph.D. requirements are met.

**Defense of the Dissertation**

When the dissertation is accepted by the doctoral committee, a final oral examination is held. The final oral examination is open to the public.

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**Department of Applied Behavioral Science**

**Why study applied behavioral science?**

The Department of Applied Behavioral Science offers a curriculum through which students learn how to examine and address problems of social importance across the lifespan. Students receive training in the application of behavioral science to improve the human condition through prevention and intervention.

**Affiliated Research and Training Programs**

For information about the Schiefelbusch Institute for Life Span Studies, Juniper Gardens Children’s Project, the Research and Training Center for Independent Living, the KU Work Group for Health Promotion and Community Development, and the Kansas Intellectual and Developmental Disabilities Research Center, visit the KU Life Span Institute (http://www.lsi.ku.edu/). For information about Clinical Child Psychology, visit the program's website (https://cdc.ku.edu/).

For information about the Center for Applied Behavioral Economics, Edna A. Hill Child Development Center, and the Performance Management Laboratory, visit the ABS department website (http://absc.ku.edu/).

**Undergraduate Programs**

The department teaches undergraduates to understand behavior and solve societal problems through evidence-based practice and critical thinking in applied behavioral science. Areas of application include early childhood education and intervention, developmental disabilities, delinquency and juvenile justice, independent living and rehabilitation, physical disabilities, health promotion and community development, organizational behavior management, and basic research and conceptual foundations.

Introductory and core courses provide a sequence of instruction in

1. The basic principles of behavior;
2. Applications of these principles for solving problems of individual and societal importance;
3. Rules of evidence for data-based decision-making in solving these problems; and
4. The conceptual, comparative, and historical foundations of modern behavioral science. Specialty courses instruct students further about the contexts of application at the individual, family, and community levels.

Recommended courses in other departments and schools provide students with an even broader appreciation for the diversity of society’s problems and an interdisciplinary perspective on their solutions (e.g., biology, psychology, sociology, political science, social welfare, special education). A practicum in the senior year integrates course requirements with supervised training or research experience.

All 100-level ABSC courses are open to nonmajors. Each fulfills a College principal course distribution requirement in the social sciences for either individual behavior or public affairs; ABSC 310/ABSC 311 also fulfills the public affairs requirement. Courses numbered from 200 to 674 are open to nonmajors who have the prerequisites. Practicum courses numbered ABSC 675 and higher are restricted to majors unless students have the instructor's permission.

**Graduate Programs**

The department’s graduate programs train scientist-practitioners and researchers in the discovery and production, translation and application, and communication of knowledge in the behavioral sciences for understanding and solving problems of individual and social importance, locally and globally. For this, the department offers a Master of Arts degree in applied behavioral science and a Doctor of Philosophy degree in behavioral psychology. In both degree programs, the department requires a sequence of courses that integrates the basic principles of
behavior, experimental methods and research design, and conceptual foundations with training in basic, applied and intervention, and prevention research. Among the areas of application are adolescence, autism, community health and development, developmental disabilities, early childhood, family enhancement, organizational behavior management, and independent living. Other areas are described in the graduate application materials available from the department and on the website (http://www.absc.ku.edu/).

Founded in 1964, the department has played a leading role in developing and advancing applications of behavioral science. In 1968, it founded the Journal of Applied Behavior Analysis. In 2000, it received the award for Enduring Programmatic Contributions to Behavior Analysis from the Society for the Advancement of Behavior Analysis. Our graduate programs are accredited by the Association for Behavior Analysis International, and our graduate curriculum is approved by the Behavior Analysis Certification Board (http://www.bacb.com/).

Courses

**ABSC 100. Introduction to Applied Behavioral Science. 3 Credits. SI S**
An introduction to the principles of behavioral science and their application to problems facing contemporary societies (e.g., autism, public health, education, juvenile delinquency, substance abuse). Students will learn how behavioral scientists analyze human behavior and how these analyses are used to inform interventions. Students will also learn about careers in the behavioral sciences and how to pursue them. Course may be offered in lecture or online format.

**ABSC 101. Introduction to Applied Behavioral Science, Honors. 3 Credits. SI S**
This course introduces students to the principles of scientific inquiry in applied behavioral science: objectivity, definitions, observation, reliability, validity, correlation and its limitations, causation, experimental design and analysis, and the interpretation of data. These principles are presented in the context of solving individual and societal problems across the lifespan, for example, in early childhood education, public health, developmental disabilities (e.g., autism), delinquency, independent living for people with disabilities, educational systems, and gerontology. Open only to students in the University Honors Program.

**ABSC 110. Applied Behavior Analysis for Practitioners. 3 Credits.**

Behavior analysis is the study of human and non-human behavior from a natural science perspective. More specifically, behavior analysis takes an observation-based approach to understanding behavior. This approach has yielded several technologies of behavior that offer hope for a variety of populations including individuals with disabilities, families, organizations, and communities. The services of qualified, nationally board-certified behavior analysts are in great demand. This course is based on the Registered Behavior Technician Task List, but is offered independent of the Behavior Analyst Certification Board (BACB). This course is designed to meet the 40-hour training requirement for the RBT credential and also includes additional material.

**ABSC 150. Community Leadership. 3 Credits. SF S**
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them.

**ABSC 151. Community Leadership, Honors. 3 Credits. SF S**
An introduction to analysis, intervention, evaluation, and leadership in contemporary problems facing local communities. Readings, lectures, and service-learning activities enable students to understand community problems and how citizens and professionals can address them. Open only to students in the University Honors Program.

**ABSC 160. Introduction to Child Behavior and Development. 3 Credits. SI S**
An introduction to child behavior and development with an emphasis on the normal developmental range of growth, intelligence, cognition, emotion, language, and social skills from birth to adolescence.

**ABSC 177. First Year Seminar: 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Applied Behavioral Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**ABSC 250. Human Development. 3 Credits. S**
This course examines the psychological, social, and physical development of humans across the lifespan from conception through infancy, childhood, adolescence, adulthood and death. The course will explore the broad array of factors that contribute to development including cognitive, emotional, social, neurological, physical, genetic, and environmental influences. (Same as PSYC 250.) Prerequisite: PSYC 104 or PSYC 105.

**ABSC 279. Study Abroad Topics in: 1-5 Credits. S**
A course designed to enhance international experience in topic areas related to applied behavioral science at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

**ABSC 302. Behavioral Assessment. 3 Credits.**
The strategies, methods, and ethics of conducting behavioral assessment are presented to support the identification and selection of socially significant behavior change goals. The types of behavioral assessment including indirect, descriptive, and functional assessment approaches are reviewed to determine the appropriate conditions and context for assessment-based interventions. The selection and use of other assessment methods common in Applied Behavior Analysis including preference assessments is introduced. The collection, review and interpretation of assessment data are discussed within the context of identifying behavior change goals and behavior-analytic services. Prerequisite: ABSC 100 or ABSC 101 with a grade of C or better.

**ABSC 304. Principles and Procedures of Behavioral Interventions. 3 Credits. S**
An examination of the application of the principles and procedures of behavior analysis in interventions used to address problems in adolescent and family life, adult behavioral issues including addictions, childhood autism, community health, early childhood education, intellectual and developmental disabilities, language development, organizational behavior management, and physical disabilities. The course focuses on fundamental elements of behavior change and specific behavior-change procedures to increase and maintain appropriate behaviors and reduce inappropriate behaviors. Issues in design, implementation, measurement, and evaluation of the effects of behavioral interventions and the ethical implications of the use of these interventions are examined. Prerequisite: ABSC 100 or ABSC 101 with a grade of C or better.

**ABSC 308. Research Methods and Application. 4 Credits. S**
Examines research methods used to identify, describe, understand, and intervene on socially important problems occurring across the lifespan (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group-care facilities, and communities). Discusses
research methods and concepts (e.g., prediction, experimental control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphical and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read primary and secondary sources, develop research questions, write and present research proposals, and assist in the conduct of research projects. Prerequisite: ABSC 100 or ABSC 101 and ABSC 304 with a grade of C or better in each course.

**ABSC 309. Child Life: Introduction to Theory and Practice. 3 Credits.**
Overview of theory and practice issues related to the Child Life Specialty, including history of the profession and its development, foundations of family centered care, scope of practice of a child life specialist, regulatory issues within the profession (e.g., ethical code, competencies, standards of practice), and historic and current perspectives on preparation of children for healthcare encounters and life-changing events.

**ABSC 310. Building Healthy Communities. 3 Credits. SF S**
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve.

**ABSC 311. Building Healthy Communities, Honors. 3 Credits. SF S**
This course teaches knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation. In a service-learning component, students apply these skills to issues that matter to them and to the communities they serve. Prerequisite: Open only to students in the University Honors Program.

**ABSC 342. Adult Development and Aging. 3 Credits. S**
An overview of environmental, cultural, and biological influences of adult development and aging. Course material is organized in terms of topics, rather than presenting a chronological account. Prerequisite: ABSC 100 or ABSC 101, ABSC 150 or ABSC 151, or ABSC 160.

**ABSC 349. Therapeutic Benefits of Play. 3 Credits. S**
Overview of therapeutic play activities for children and adolescents with a range of health issues and needs, with particular attention to classical and contemporary theories on play, play as an essential element for children's growth, development, and learning, and the influence of the environment on children's play. Special emphasis will be placed on the design and implementation of therapeutic play activities in the healthcare setting. Prerequisite: ABSC 160 or PSYC 333.

**ABSC 350. The Behavioral Treatment of Children with Autism. 3 Credits. S**
Students learn about methods of teaching children with autism and about evaluating those methods. Topics include: basic methods of teaching as applied to imitation, productive and receptive language, self-help skills, and engagement in community activities, as well as observation and measurement of behavior in community settings and evaluating consumer satisfaction. The course consists of classroom lectures, discussions, demonstrations, examinations, and completion of laboratory and observation assignments. Enrollment priority is given to majors who intend to do practicum work with children with autism. Prerequisite: ABSC 304 or instructor permission.

**ABSC 360. Drugs, Addiction, and Behavior. 3 Credits. S**
This course offers an overview of the basic and applied research in behavioral pharmacology and addictions, as well as interventions. Among the topics it covers are a history of drugs, addiction, and behavior; basic principles of drug action (e.g., pharmacodynamics); behavioral pharmacology testing paradigms (e.g., self-administration); drug action and effects (e.g., alcohol, nicotine, designer drugs, anti-depressants); behavioral deficits associated with addictions (e.g., memory); addiction treatment and recovery (e.g., maturing out, contingency management); and drugs and society. Prerequisite: ABSC 100. PSYC 104 is also recommended.

**ABSC 410. Behavioral Approaches in Working with Adolescents. 3 Credits. S**
Addresses some of the basic behavioral techniques used with juveniles who have problems in school, at home, or in the community: readings and role-playing sessions covering assessment of problems, relationship development, observing and defining behavior, teaching and contracting techniques, and counseling. Prerequisite: ABSC 304 highly recommended.

**ABSC 425. Teaching Apprenticeship in Applied Behavioral Science. 3 Credits. S**
Students read new materials, become more fluent with ABSC 100 content, and acquire tutoring skills. Course may not be repeated. Prerequisite: ABSC 100 and consent of the instructor and department chair.

**ABSC 437. Independent Living and People with Disabilities. 3 Credits. S**
A multi-disciplinary seminar exploring theory, method, research, and practice in independent living. The course reviews personal and environmental factors as they relate to everyday problems affecting people with varying disabilities. It also contains service-learning activities in which students apply skills and knowledge gained in the classroom. Prerequisite: An introductory course in social sciences or consent of the instructor.

**ABSC 441. Ethical, Legal and Professional Issues in Applied Behavioral Science. 3 Credits. S**
The course covers ethical and legal issues in the responsible conduct of basic, applied, intervention and prevention research (e.g., informed consent and assent with typical and atypical populations); inclusion of underrepresented groups, participatory action research; bias, fraud, and plagiarism, conflict of interest; reporting misconduct; authorship conflict). It also covers professional issues in behavioral consultation and training, review of the Behavior Analysis Certification Board task list on basic behavior-analytic skills, client-centered responsibilities, and foundational knowledge. This course satisfies the Behavior Analysis Certification Board requirement for 15 classroom contact hours of coursework related to Ethical Considerations in Behavior Analysis needed to take the BACB examination. This course is taught at the 400 and 800 levels, with additional assignments at the 800-level. Prerequisite ABSC 308.

**ABSC 444. Curriculum Development for Young Children. 3 Credits. S**
A survey of educational materials and activities appropriate for young children. Students explore several components of effective curriculum development (e.g., objectives, methods of activity presentation, teaching strategies) and learn to integrate them to construct curricula for a range of content and skill areas. By focusing on functional components of a curriculum, students learn to construct, critically evaluate, and modify...
curricula for typically and atypically developing children. Prerequisite: ABSC 304 or instructor permission.

**ABSC 469. Special Topics in: _____**. 1-3 Credits. S
A course designed for the study of special topics in applied behavioral science. Course content addresses major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

**ABSC 470. Organizational Behavior Management. 3 Credits. S**
This course offers detailed discussion of the organizational behavior management (OBM) literature including performance management, behavioral systems analysis, and behavior-based safety. This course also addresses empirically supported staff training procedures and research in implementation science. Prerequisite: ABSC 100.

**ABSC 479. Study Abroad Topics in: _____**. 1-5 Credits. S
A course designed to enhance international experience in topic areas related to topics in applied behavioral science at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

**ABSC 486. Issues in Parenting. 3 Credits. S**
Theoretical approaches to the study of parenting and parent-child relationships, techniques for analyzing common parenting problems, designing appropriate interventions, fostering effective communication skills, understanding issues of diversity, and promoting parent education programs. Professional collaboration and support of families and children are emphasized throughout. Students develop analytical skills through reading, discussion, and application of theoretical and empirical concepts. Prerequisite: ABSC 160 or equivalent knowledge of child development or child psychology.

**ABSC 489. Directed Readings in: _____**. 1-3 Credits. S
A course designed for directed readings in applied behavioral science. Readings address major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

**ABSC 499. Directed Research in: _____**. 1-3 Credits. S
Basic and applied research experience. The course provides training in research methods, measures, and designs, and the conduct of research, in the behavioral sciences. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

**ABSC 509. Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations. 3 Credits. S**
This course provides a survey of modern behavioral science and its applications. It reviews the field's history; integrates its sub-disciplines: situates it within the natural sciences, social sciences, and humanities; and compares and contrasts it with other perspectives. It covers recent advances in research, their implications for understanding human behavior, and their application to solving societal problems. And, it addresses the ethical implications of applied behavioral science. Prerequisite: ABSC 100 or ABSC 101 and ABSC 304 with a grade of C or better in each course.

**ABSC 519. Psychological Aspects of Death and Dying. 3 Credits.**
Students will be exposed to the historical and current cultural, psychological, spiritual/religious, and practical/legal perspectives of death and dying, with particular attention to how mental health professionals interface with systems of care to address loss across multiple developmental levels. Additional topics include ambiguous loss, suicide, transitions, palliative care, self-awareness, and professional self-care. Prerequisite: Junior or Senior standing.

**ABSC 529. Pediatric Health and Health Promotion. 3 Credits.**
An undergraduate seminar on the application of psychological theory and practice to pediatric illness and health promotion. Students will be exposed to key issues related to the health and health care of children and adolescents (and their families), with particular attention to how applied psychology interfaces with medicine and allied health to promote children's health and health care. Prerequisite: Junior or Senior standing.

**ABSC 535. Developmental Psychopathology. 3 Credits. S**
A review of contemporary psychological and developmental disorders of children and youth. Course presents current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention is given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, depression, chronic physical illness, and autism. (Same as PSYC 535.) Prerequisite: ABSC 160 or PSYC 333, or instructor permission.

**ABSC 560. The Juvenile Justice System: A Behavioral and Legal Perspective. 3 Credits. S**
An overview of the juvenile justice system, including the history, development, and current controversy over children's rights in the legal system examined in light of relevant principles of behavioral science and behavioral systems of rehabilitation. Topics include delinquency, misconceptions, status offenses, dependent-neglected children, child abuse, and juvenile court procedures and personnel (e.g., probation officers), and rehabilitative programs. Prerequisite: ABSC 100.

**ABSC 562. Behavioral Community Approaches to Addressing Social Issues. 3 Credits. S**
A seminar that provides an overview of the history and origin of behavioral community approaches to address social issues through the integration of applied behavior analysis with other disciplines including community psychology, prevention science, and public health. A multidisciplinary perspective is presented that provides a review of empirically-based behavioral interventions applied in community settings. The course is offered at the 500 and 800 levels with additional assignments required at the 800-level. Not open to students with credit in ABSC 862. Prerequisite: ABSC 100, or ABSC 150, or ABSC 310, or instructor permission.

**ABSC 599. Honors and Thesis in Applied Behavioral Science. 1-5 Credits. S**
A two-semester course combining small group discussions of selected, advanced topics in applied behavioral science with honors thesis supervision on a project of the student's own design. Students normally enroll for one or two hours in fall semester and three to five hours in spring semester. Prerequisite: ABSC 304, ABSC 308, and instructor permission.

**ABSC 606. Special Projects in the Community. 1-10 Credits. S**
Structured opportunities to develop and apply knowledge and skills (e.g., analyzing problems, strategic planning, intervention, evaluation) in a project that addresses a community problem or goal. Prerequisite: Instructor permission.

**ABSC 626. Adolescent Behavior and Development. 3 Credits. S**
Impact of factors of social environment and physical growth upon psychological development from puberty to young adulthood. (Same as PSYC 626.) Prerequisite: PSYC 104, PSYC 333, or ABSC 160.

**ABSC 632. Advanced Child Behavior and Development. 3 Credits. S**
An advanced course in child development that includes a survey of the field's principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development,
cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Same as PSYC 632.) Prerequisite: ABSC 160, PSYC 333, or instructor permission, and senior or graduate status.

**ABSC 675. Practicum in Infant-Toddler Care and Early Intervention II.** 3-5 Credits.  
Experience in a classroom-based early intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children’s skills. Prerequisite: ABSC 444 (or concurrent enrollment) and instructor permission.

**ABSC 676. Practicum in Infant-Toddler Care and Early Intervention II.** 3-5 Credits.  
An advanced practicum providing experience in classroom-based early-intervention and child-care program serving children younger than 3 years. Students gain practical experience with care-giving and teaching practices appropriate for typically and atypically developing children. Students learn to develop and implement individualized curricula based on assessments of children’s skills. Prerequisite: ABSC 444, ABSC 675, and instructor permission.

**ABSC 677. Practicum in Preschool Education and Intervention I.** 3-5 Credits.  
A one-semester practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. Prerequisite: ABSC 444 (or concurrent enrollment) and instructor permission. Must also meet special state requirements for child care employees and volunteers.

**ABSC 678. Practicum in Preschool Education and Intervention II.** 3-5 Credits.  
A one-semester advanced practicum providing opportunities for students to assume responsibility for the education and guidance of young children in an early childhood program. Regularly scheduled individual and staff conferences enable students to evaluate personal growth and progress as teachers of young children. Prerequisite: ABSC 444, ABSC 677, and instructor permission. Must also meet special state requirements for child care employees and volunteers.

**ABSC 679. Practicum in Behavior Analysis Research in Early Childhood Education.** 1-6 Credits.  
A two-semester practicum providing opportunities for supervised training in one of several ongoing research projects in the field of behavior analysis, either basic or applied. Students assist in conducting research and participate in individual and group meetings to discuss and evaluate research and related methodological issues. Prerequisite: ABSC 308 and instructor permission.

**ABSC 680. Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism.** 1-6 Credits.  
Students participate in an intensive behavioral treatment program teaching language, social skills, self-help skills, and academic skills to young children with autism. Students learn to develop and implement treatment programs; design and use of a system of data collection and analysis; and apply the principles and philosophy of community and school mainstreaming. Prerequisite: ABSC 350 and instructor permission.

**ABSC 682. Organizational Behavior Management Practicum.** 1-5 Credits.  
This practicum course is designed to provide training and support practice in addressing socially significant problems and goals of community-based organizations using behavior analysis to guide assessment and intervention. Additionally, this course promotes community-university partnerships to support change and improvement in organizations through service learning. All practicum students are required to have previously completed ABSC 100 and selected applied behavioral science as a major or minor.

**ABSC 685. Practicum in Community-based Residential or Day Treatment Programs for Disabled Adults.** 3-6 Credits.  
A one or two-semester practicum in which students are provided with the opportunity to work directly with developmentally disabled adults in either community-based residential or day treatment programs. Students are required to read relevant literature, carry out treatment programs, and participate in weekly meetings to discuss treatment goals and progress. Prerequisite: ABSC 304, ABSC 410, and instructor permission.

**ABSC 690. Practicum in Community Health and Development.** 1-6 Credits.  
A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). Prerequisite: ABSC 150, ABSC 310, and instructor permission.

**ABSC 691. Practicum in Community Health and Development, Honors.** 1-6 Credits.  
A two-semester practicum in which students engage in structured opportunities to practice core competencies related to the work of promoting community health and development (e.g., strategic planning, intervention, evaluation). In weekly group meetings, students prepare for their individual working field settings (e.g., health and human service agencies, research and advocacy organizations, community organizations). Prerequisite: Open only to students in the University Honors Program; ABSC 151, ABSC 311 and instructor permission.

**ABSC 692. Practicum in Basic Research.** 3 Credits.  
Practical supervised training in the laboratory study of human and/or animal behavior. Students assist in conducting basic research, read and discuss research articles, attend lab meetings, and acquire data analysis and presentation skills. Prerequisite: ABSC 308 (or concurrent enrollment) and permission of the instructor.

**ABSC 693. Practicum in Historical and Conceptual Foundations.** 3-6 Credits.  
Practical supervised training in the historical and conceptual foundations of applied behavioral science (e.g., behavior analysis). Students research and read primary source literatures and write papers that advance our understanding of the field's foundations (e.g., empirical, theoretical). Prerequisite: ABSC 100/101, ABSC 304, ABSC 308, and ABSC 509 (or concurrent enrollment), and permission of instructor.

**ABSC 694. Practicum in Juvenile Problems.** 3-6 Credits.  
A one-semester practicum providing opportunities for students to aid professionals in the development and implementation of behavioral treatment plans with adolescents. Regularly scheduled individual and group meetings enable the evaluation of the practicum students’ progress while working in the rehabilitative process for juveniles who have problems that can bring them into contact with the juvenile justice system. Prerequisite: ABSC 410, and instructor permission.

**ABSC 695. Special Practicum in: _____**. 3-6 Credits.  

A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Instructor permission.

ABSC 696. Special Practicum in, Honors: _________. 3-6 Credits. S
A one or two-semester practicum providing opportunities for supervised, hands-on training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Open only to students in the University Honors Program and instructor permission.

ABSC 698. Special Research Practicum in: ________. 3-6 Credits. S
A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor about this practicum early in their junior year. Prerequisite: Instructor permission.

ABSC 699. Special Research Practicum in, Honors: ________. 3-6 Credits. S
A one or two-semester research practicum providing opportunities for supervised, hands-on research training outside the existing specialty areas or their options. This practicum must be arranged with the prior approval of a faculty advisor and the department's Undergraduate Curriculum Committee. Students should see an advisor early in their junior year about the practicum and its prerequisites and requirements. Prerequisite: Open only to students in the University Honors Program and instructor permission.

ABSC 702. Curriculum Development for Young Children. 3 Credits.
A survey of educational materials and activities that are appropriate for young children (birth to age 8). Students explore several components of effective curriculum (e.g., objectives, effective methods of activity presentation, teaching strategies) and learn to combine them to construct curriculums for a range of content and skill areas. By focusing on the functional components of curriculums, students learn to construct, critically evaluate, and modify them for both typically developing children and children with special needs. A BACB® pre-approved course.

ABSC 704. Research Practicum in Clinical Child Psychology. 3 Credits.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare research for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as PSYC 704.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

ABSC 705. Pediatric Psychology. 3 Credits.
Discussion of behavior problems commonly encountered in the pediatric population, including reviews of data-based methodologies for remediation. Topics include general child rearing skills, bedtime problems, enuresis, encopresis, toilet training, self-injurious behavior, temper tantrums, behavior in community settings, child abuse, psychotropic drugs for children, adolescent behavior problems and selection of children's play materials. Prerequisite: ABSC 160 or ABSC 632.

ABSC 706. Special Topics in Clinical Child Psychology: ________. 3 Credits.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as PSYC 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

ABSC 710. Community Health and Development. 3 Credits.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply these skills to issues that matter to them and to the communities they serve. (Same as ISP 871.)

ABSC 716. Experimental Problems in Community Settings. 1-5 Credits.
Research in the experimental design and analysis of community settings. No more than 10 hours total. Prerequisite: Instructor permission.

ABSC 719. Experimental Field Work in Community Settings. 1-5 Credits.
Instruction in the methods and techniques of the experimental design and analysis of community settings through supervised participation in established research programs. Emphasizes the techniques of gathering original experimental data. No more than 10 hours total. Prerequisite: Instructor permission.

ABSC 725. Research Methods and Application. 3 Credits.
Surveys research methods used to identify, describe, understand, and intervene on socially important problems occurring across the life span (e.g., early childhood, adolescence, elders) and in varied settings (homes, classrooms, group-care facilities, and communities). Discusses research methods and concepts (e.g., prediction, control, reliability, validity) within scientific, psychological, and behavior-analytic frameworks. Presents strategies and tactics regarding descriptive and experimental methods, direct and indirect measurement, graphic and statistical analysis, and single-subject and group experimental designs. Examines ethics and social responsibility in research. Provides opportunities to read secondary and primary sources, develop research questions, write and present research proposals. Prerequisite: Instructor permission.

ABSC 735. Within Subjects Research Methodology and Direct Observation. 3 Credits.
A graduate level introduction to the logic of experimentation, direct observation strategies, and research conducted using individual (e.g., single subject) and time series experimental designs. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

ABSC 746. Introduction to Behavioral Science. 3 Credits.
This introductory course promotes knowledge and skill in analyzing behavioral problems across a range of societal issues. Special consideration is given to designing interventions, implementing, managing, and supervising applied projects. Topics include the identification and selection of problems and target populations, analysis of problems and goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research.

ABSC 765. Evaluating and Disseminating Scientific Material I. 1-3 Credits.
Intensive training in the evaluation and production of scientific critiques and reviews of current issues in the analysis of behavior, as disseminated through the media. May be repeated. Prerequisite: Instructor permission.

**ABSC 770. Within Subjects Research Methodology and Direct Observation. 3 Credits.**

A graduate level introduction to the logic of experimentation, direct observation strategies, and research conducted using individual (e.g., single subject) and time series experimental designs. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

**ABSC 771. Introduction to Applied Behavioral Science. 3 Credits.**

This introductory course promotes knowledge and skill in analyzing behavioral problems across a range of societal issues. Special consideration is given to designing interventions, implementing, managing, and supervising applied projects. Topics include the identification and selection of problems and target populations, analysis of problems and goals, designing measurement systems, developing interventions, and disseminating products from applied behavioral research. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

**ABSC 772. Conceptual Foundations of Behavior Analysis. 3 Credits.**

An advanced Master's seminar on the theoretical, philosophical, and conceptual foundations of behavior analysis. It covers the field's history and purview (e.g., natural science, historical science, applied science); its philosophy of science (e.g., empiricism, pragmatism); the nature of its science (e.g., inductive, experimental, field-theoretic); the products of its science (e.g., principles, concepts, theories); its ethical systems (e.g., humanism, naturalized ethics, personal responsibility); its relations with other fields (e.g., biology, psychology, anthropology); its contrasts with folk philosophy and folk psychology (e.g., mentalism, free will); and its comparisons with like-minded philosophies, psychologies, and cultural practices (e.g., embodied cognition, secular humanism, communitarianism.) Prerequisite: ABSC 854 or instructor permission.

**ABSC 773. Applied Behavior Analysis in Complex Organizations. 3 Credits.**

An examination of the theory, principles, and methods of behavior analysis and their applications to problems of human behavior in complex organizations such as businesses, industries, human service organizations, and governments. Prerequisite: Graduate standing or instructor permission.

**ABSC 787. Multidisciplinary Perspectives on Gerontology and Aging. 3 Credits.**

A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as AMS 767, COMS 787, PSYC 787, and SOC 767.)

**ABSC 788. Designing Early Education Environments. 3 Credits.**

This course reviews empirically-supported strategies for designing effective and socially valid care and education environments for young children with and without disabilities. Topics will include: early educational theory, individualized curricula and goal selection strategies, various instructional typologies (e.g., direct instruction, embedded teaching), specific teaching tactics (e.g., prompting, time delay, differential reinforcement), preventive and assessment-based behavioral management strategies, current best practice recommendations for design of the social and physical environment, and methods for assessing children's, caregivers', and teachers' programmatic preferences. Prerequisite: ABSC 796.

**ABSC 797. Proseminar in Child Language. 2 Credits.**

A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as CLDP 799, LING 799, PSYC 799 and SPLH 799.)

**ABSC 799. Experimental Analysis of Behavior. 3 Credits.**

This course provides an in-depth description of the basic principles of operant and respondent conditioning in the context of basic non-human and human subjects research. Students will learn various theoretical approaches to understanding effects of reinforcement and punishment. Special attention will be provided to the role of verbal processes in the learning of verbally competent individuals. Students will gain substantive experience with identifying laboratory derived principles present in the literature that are relevant to application through assigned projects.

**ABSC 800. Conceptual Foundations of Applied Behavioral Science. 3 Credits.**

A master's-level graduate seminar on the field's conceptual foundations, with special emphasis on behavior analysis and its application - applied behavior analysis. The course addresses the field's history, philosophy of science, and disciplinary purview; its advanced behavioral principles and processes; its analyses of various content domains in the behavioral, social, and cognitive sciences (e.g., emotion, language, cognition, culture); and its relation to other disciplines (e.g., biology, psychology, anthropology). It also considers professional issues in, for example, the ethical conduct of research and practice. Prerequisite: ABSC 799.

**ABSC 801. Design and Analysis of Community Development Methods. 1-6 Credits.**

An examination of principles and practices of community development and evaluation of methods used to promote community improvement. May be repeated if the content differs. Prerequisite: Instructor permission.

**ABSC 802. Behavior Analysis in Developmental Disabilities. 3 Credits.**

A graduate seminar that includes an overview of the behavioral characteristics of various developmental disabilities and examination of empirically-supported behavioral approaches to the study and treatment of developmental disabilities. Topics will include classification and etiology, motivation, methods for developing appropriate skills, assessment and treatment of behavior disorders, staff training, and legal and ethical issues related to treatment. Prerequisite: Instructor permission.

**ABSC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Credits.**

Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as PSYC 803.) Prerequisite: Graduate student in clinical psychology program.

**ABSC 804. Research in Community Health Promotion. 1-6 Credits.**

Supervised, original investigations of problems relevant to community health, such as the prevention of substance abuse or promotion of child
outcomes. As appropriate, the course is focused on any combination of: literature research, research planning, and preparation conducting research, analyzing data, writing research reports, or preparing oral reports of completed research. Prerequisite: Instructor permission.

**ABSC 805. Functional Behavioral Assessment. 3 Credits.**
The strategies, tactics, and ethics of functional assessment are presented in the larger context of behavioral assessment (e.g., nomothetic and idiographic approaches). Research articles relevant to indirect, descriptive, and experimental functional assessment approaches and assessment-based interventions are carefully reviewed to determine the appropriate conditions for each type of assessment and intervention. Prerequisite: Instructor permission.

**ABSC 806. Functional Behavioral Assessment Practicum. 1-6 Credits.**
This course provides supervised experience in the use of functional behavioral assessment in home, clinic, or educational environments with young children presenting problem behaviors. Prerequisite: ABSC 805 and instructor permission.

**ABSC 807. Design and Evaluation of Community Health Promotion Methods. 1-6 Credits.**
An examination of the methods used to develop and evaluate community health promotion programs. The course addresses topics of interest to participants, such as substance abuse, adolescent pregnancy, or child outcomes. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

**ABSC 809. Professional Issues: Clinical Child Psychology. 1 Credit.**
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues, including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Same as PSYC 809.) Prerequisite: Graduate standing in clinical child psychology.

**ABSC 810. Introduction to Developmental Assessment. 3 Credits.**
A course covering the general principles of developmental assessment from birth through adulthood, with special emphasis on the history and nature of assessment instruments and the criteria for acceptance, reliability, and stability of results. Selected assessment techniques for infants, preschool children, elementary school children, adolescents, and adults are reviewed and evaluated for their utility, limitations, and applications. A critical analysis of assessment in general and particular assessment tools is made.

**ABSC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Credits.**
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPPSI. (Same as PSYC 811.) Prerequisite: Graduate student in clinical child psychology.

**ABSC 812. Behavioral and Personality Assessment of Children. 3 Credits.**
Lecture, laboratory, field work, and supervision. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Same as PSYC 812.) Prerequisite: Graduate standing in clinical child psychology.

**ABSC 813. Behavioral Science Research Proseminar. 1-3 Credits.**
A master's level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of six credits. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 825. Social Development. 3 Credits.**
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Same as PSYC 825.) Prerequisite: A course in child psychology or development.

**ABSC 828. Research in Early Intervention with Children. 3 Credits.**
A seminar on current issues in assessment and intervention for young children who are at risk for or who have special needs. Provides foundation for evaluating and understanding research in early intervention. Includes historical, conceptual and legislative underpinnings of early intervention, risk factors affecting development, methodological issues in early intervention research, best practice standards, and applications to social, language, and pre-academic domains.

**ABSC 834. Directed Readings in Community Health Promotion. 1-5 Credits.**
Supervised readings in topical areas of community health promotion, such as the prevention of substance abuse and promotion of child outcomes. A program of study, conferences, and reports is developed by the instructor and student.

**ABSC 840. Theoretical Concepts of Human Development and Child Care Practice. 3 Credits.**
Basic introduction to treatment concepts and procedures related to child development and child-care programs. The major goal is to provide a theoretical framework that is effective in dealing with various types of child deviancy. Prerequisite: Graduate standing or instructor permission.

**ABSC 841. Ethical, Legal, and Professional Issues in Applied Behavioral Science. 3 Credits.**
The course covers ethical and legal issues in (a) the responsible conduct of basic, applied, and intervention research (e.g., informed consent and assent with typical and atypical populations; inclusion of underrepresented groups; bias, fraud, and plagiarism in data collection and reporting; conflict of interest; reporting misconduct; authorship) and (b) professional issues in teaching, research, and service (e.g., written and presented scientific communication; grant preparation; the journal review process; cultural competence; teaching; vita preparation). The course will also include instruction in the preparation of editorial reviews for manuscripts submitted for publication to in peer-reviewed journals, in partial fulfillment of the department's doctoral requirement for preparing editorial reviews. Prerequisite: Graduate standing in applied behavioral science.

**ABSC 846. Practicum in Clinical Child Psychology I. 1-3 Credits.**
Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases.
ABSC 847. Practicum in Clinical Child Psychology II. 1-3 Credits.
Intermediate practicum experience for the Clinical Child Psychology Program. Development of specific competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire specific clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic. Students develop ability to identify specific treatment goals and select therapeutic interventions that are conceptually congruent with clients' presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as PSYC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

ABSC 850. Principles of Behavior Analysis. 3 Credits.
An advanced graduate course on the basic principles of behavior, and related procedures for producing behavioral change, with both human and nonhuman subjects. The principles and procedures are presented as fundamental elements of behavior change. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

ABSC 851. Ethical, Legal, and Professional Issues in Applied Behavioral Science. 3 Credits.
The course covers ethical and legal issues in (a) the responsible conduct of basic, applied, and intervention research (e.g., informed consent and assent with typical and atypical populations; inclusion of underrepresented groups; bias, fraud, and plagiarism in data collection and reporting; conflict of interest; reporting misconduct; authorship) and (b) professional issues in teaching, research, and service (e.g., written and presented scientific communication; grant preparation; the journal review process; cultural competence; teaching; vita preparation). The course will also include instruction in the preparation of editorial reviews for manuscripts submitted for publication to in peer-reviewed journals, in partial fulfillment of the department's doctoral requirement for preparing editorial reviews. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

ABSC 852. Behavior Analysis in Developmental Disabilities. 3 Credits.
A graduate seminar that includes an overview of the behavioral characteristics of various developmental disabilities and examination of empirically-supported behavioral approaches to the study and treatment of developmental disabilities. Topics will include classification and etiology, motivation, methods for developing appropriate skills, assessment and treatment of behavior disorders, staff training, and legal and ethical issues related to treatment. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

ABSC 853. Behavioral Assessment. 3 Credits.
The strategies, tactics, and ethics of functional assessment are presented in the larger context of behavioral assessment (e.g., nomothetic and idiographic approaches). Research articles relevant to indirect, descriptive, and experimental functional assessment approaches and assessment-based interventions are carefully reviewed to determine the appropriate conditions for each type of assessment and intervention. Prerequisite: This course is reserved for students in our online program. If there are questions, please contact thecollegeonline@ku.edu.

ABSC 854. Experimental Analysis of Behavior. 3 Credits.
This course provides an in-depth description of the basic principles of operant and respondent conditioning in the context of basic non-human and human subjects research. Students will learn various theoretical approaches to understanding effects of reinforcement and punishment. Special attention will be provided to the role of verbal processes in the learning of verbally competent individuals. Students will gain substantive experience with identifying laboratory derived principles present in the literature that are relevant to application through assigned projects.

ABSC 856. An Interdisciplinary Approach to Intervention with the Handicapped. 3 Credits.
This course surveys knowledge from various disciplines that address developmental disabilities across the life span. Its focus is on designing strategies for individual intervention and treatment programs by an interdisciplinary team. Designed for students in social work, speech pathology, psychology, nutrition, audiology, special education, physical therapy, nursing, child development, behavior analysis, and related fields. Prerequisite: A basic course in child development or instructor permission.

ABSC 857. Biological Bases of Behavior. 3 Credits.
This course will examine research and theory on the biological bases of normal and abnormal behavior, including central and peripheral nervous system mechanisms of behavioral and psychological functions, and the roles of genetic and epigenetic processes in regulating behavior. The course covers biological systems that support sensory processing, motor behavior, emotion, cognition and social behavior through analysis of animal model, healthy development and patient studies. The diverse methods used to assess these biological systems also will be surveyed, including behavioral testing of animal models, neuropsychological assessment, biosample analyses, and in vivo imaging approaches. Research on altered behavioral and psychological processes will be integrated with the aim of better understanding the potential of linking knowledge of the biological mechanisms of psychiatric disorders to current clinical practice, as well as critical limitations of current methods and knowledge. Prerequisite: Instructor permission.

ABSC 861. Principles of Behavior Analysis. 3 Credits.
An advanced graduate course on the basic principles of behavior, and related procedures for producing behavioral change, with both human and nonhuman subjects. The principles and procedures are presented as fundamental elements of behavior change.

ABSC 862. Behavioral Community Approaches to Addressing Social Issues. 3 Credits.
A seminar that provides an overview of the history and origin of behavioral community approaches to address social issues through the integration of applied behavior analysis with other disciplines including community psychology, prevention science, and public health. A multidisciplinary perspective is presented that provides a review of empirically-based behavioral interventions applied in community settings. The course is offered at the 500 and 800 levels with additional assignments required at the 800-level. Not open to students with credit in ABSC 562. Prerequisite: Graduate standing or instructor permission.

ABSC 865. Applied Behavior Analysis in Complex Organizations. 3 Credits.
An examination of the theory, principles, and methods of behavior analysis and their applications to problems of human behavior in complex organizations such as businesses, industries, human service organizations, and governments. Prerequisite: Graduate standing or instructor permission.

ABSC 870. Practicum I in Behavioral Psychology. 1-6 Credits.
Instruction and supervised laboratory or field work for master's students. Practica are offered by different instructors on different topics; may
be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

ABSC 871. Practicum in Behavior Analysis: _____ 1-6 Credits. Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content differs. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

ABSC 872. Practicum in: _____ 1-6 Credits. Instruction and supervised laboratory or field work for master's students. Practica are offered by different faculty members on different topics; may be repeated for credit if the content is different. Topics and instructors are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

ABSC 873. Practicum in Educational Psychological/Rehabilitative Services: ____ 3-6 Credits. This course is for students who wish to complete practicum experiences in services related to persons with retardation, autism, or physical disabilities in programs in various settings, such as the Ann Sullivan Center in Lima, Peru and the Algeria School in Paraguay. The course is designed to give interested students opportunities to work with professionals in these programs on a semester or summer basis. The course consists of participation in professional activities associated with the practicum program and a report of these activities to the instructor. Prerequisite: Instructor permission.

ABSC 875. Practicum in Community Health Promotion. 1-6 Credits. A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community health promotion projects and their evaluation. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

ABSC 876. Practicum in Community Development. 1-6 Credits. A practicum course designed to provide students with knowledge, background, and practical experience in the implementation of community development projects and their evaluation. May be repeated for credit if the content differs. Prerequisite: Instructor permission.

ABSC 880. Early Childhood Practicum for Allied Professionals. 1-6 Credits. Professionals in fields such as journalism, social welfare, and psychology may have career interests that include work with or on behalf of young children. This practicum provides students with individualized opportunities to work with young children in a group setting in order to extend their professional skills. Prerequisite: Instructor permission.

ABSC 881. Early Childhood Care and Intervention Practicum I. 1-6 Credits. A course covering the specification of learning goals and the implementation and evaluation of curriculum design management of groups of young children. May be repeated for no more than a total of six credit hours. Prerequisite: Instructor permission.

ABSC 882. Early Childhood Care and Intervention Practicum II. 1-6 Credits. A course to assess and teach skills in diagnosis and evaluation of particular problems in the developmental process of young children (1-5 years of age), and to design and implement interventions. May be repeated for no more than a total of six credit hours. Prerequisite: ABSC 791 and instructor permission.

ABSC 883. Early Childhood Administration Practicum. 1-6 Credits. Experiences in understanding and developing parent satisfaction with care arrangements for their child(ren), providing services to personnel responsible for care and development of young children, and/or maximizing use of available services for young children on their behalf. May be repeated for no more than a total of six credit hours. Prerequisite: ABSC 791 and instructor permission.

ABSC 884. Early Childhood Early Intervention Practicum. 1-6 Credits. Laboratory teaching in an early childhood classroom that includes children who are developmentally delayed, demonstrate behavioral or learning difficulties, or have other developmental disabilities. Experience includes individualized programming for children with special needs, as well as group management and group curriculum planning. May be repeated for no more than a total of six credit hours. Prerequisite: ABSC 791 and instructor permission.

ABSC 885. Early Childhood Teacher Training Practicum. 1-6 Credits. Experience in supervising staff who work in programs for young children. Supervision includes orienting, monitoring, and evaluating staff performance; opportunities for interaction with other professionals; experience in facilitating staff communication; and consulting on research projects. Prerequisite: ABSC 791 and instructor permission.

ABSC 886. Developmental Assessment Practicum: ____ 1-6 Credits. This course provides direct experience in the developmental assessment of a selected age group, such as infants, preschool and elementary children, adolescents, or adults. It may be repeated providing the age group specification is not repeated. Prerequisite: ABSC 810 or an equivalent course.

ABSC 887. Clinical Practicum in Pediatric Psychology. 1-6 Credits. Supervised experience with pediatric patients referred for behavior problems, including, for example, temper tantrums, enuresis, encopresis, and hyperactivity. Also includes evaluation and treatment of children with commonly encountered behavior problems. In addition, students observe pediatric staff performing appropriate physical exams and observe the interaction between the medical staff and the pediatric psychologist. Prerequisite: ABSC 705 and instructor permission.

ABSC 888. Diversity Issues in Clinical Psychology. 3 Credits. Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as PSYC 888.) Prerequisite: Graduate status in clinical psychology, or consent of instructor.

ABSC 890. Seminar in: ____ 3 Credits. A seminar for master's level students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

ABSC 891. Research in: ____ 1-6 Credits. Supervised research investigations in basic or applied behavioral science for master's students. The course introduces observational measurement, research methods and designs, and the conduct of research in the behavioral sciences. May be repeated for credit if the content is different. Prerequisite: Graduate standing or instructor permission.

ABSC 892. Readings in: ____ 1-3 Credits.
An individual, supervised study of recent research and scholarship for master's students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission.

**ABSC 893. Special Topics in: ______. 1-3 Credits.**
A research and readings course for master's students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission.

**ABSC 894. Study Abroad Topics in: ______. 1-3 Credits.**
A course designed to enhance international experience in topic areas related to behavioral science for master's students. May be repeated for credit if the content differs. Prerequisite: Graduate standing or instructor permission.

**ABSC 897. Master's Thesis in Clinical Child Psychology. 1-10 Credits.**
Supervised research experience completing thesis leading to master's degree. (Same as PSYC 897.)

**ABSC 899. Master's Thesis in Applied Behavioral Science. 1-9 Credits.**
Supervised research experience for the thesis leading to a master's degree in applied behavioral science. May be repeated. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 901. Analysis of Everyday Human Behavior. 3 Credits.**
An advanced graduate seminar on the analysis of everyday human behavior, grounded in behavior-analytic principles, concepts, and theory. It covers the process and products of, for example, biological and behavioral development; sensation and perception; motivation and emotion; personality and social behavior; language, cognition, and creativity; attitudes and beliefs, consciousness and unconsciousness, and purpose, will, and values. Prerequisite: ABSC 800 or instructor permission.

**ABSC 905. Psychopathology in Children. 3 Credits.**
Diagnosis and treatment of psychological problems in childhood and adolescence. Preference given to graduate students in child clinical psychology, school psychology, and counseling psychology. (Same as PSYC 905.) Prerequisite: Fifteen hours of graduate credit in psychology or consent of instructor.

**ABSC 913. Behavioral Science Research Proseminar. 1-3 Credits.**
A doctoral level professional seminar in which faculty and students present research proposals; offer formal presentations of completed empirical research, reviews of the literature, and other areas of scholarship; and engage discussion about contemporary empirical, conceptual, and professional issues in applied behavioral science. May be repeated for a total of eight credits. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 931. The Analysis of Verbal Behavior. 3 Credits.**
An advanced graduate seminar on verbal behavior, grounded in behavior-analytic principles, concepts, and theory. Although focused on the verbal behavior of the proficient speaker, it also covers verbal behavior's evolutionary and biological bases, the development and structure of verbal behavior, the training and remediation of verbal behavior, and critiques and rebuttals to the analysis (e.g., Chomsky's.) Prerequisite: ABSC 800, advanced coursework in psycholinguistics or linguistics, or instructor permission.

**ABSC 934. Directed Readings in Clinical Child Psychology. 3-5 Credits.**
Designed to meet the needs of advanced students whose study in clinical child psychology cannot be met with present courses or for whom advanced work is desired in a specialized area of study. Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**ABSC 936. Quantitative Analysis of Behavior. 3 Credits.**
Advanced experimental course (doctoral-level) that demonstrates the operations of principles of behavior, and the quantitative models that describe them, in the context of basic research. Specific review of the methods to obtain the data necessary to permit a quantitative analysis of behavior, along with the quantitative analyses themselves, will be discussed. Students will learn the advantages and disadvantages of quantitative analyses in the behavioral sciences, along with a behavioral perspective on quantitative models of behavior. Students will obtain hands-on experience selecting data for a quantitative analysis, reviewing whether the data and proposed model meet the requisite assumptions of EAB research on quantitative models, and analyzing behavioral data using quantitative models. Prerequisite: ABSC 799.

**ABSC 941. Teaching and Conference. 3-6 Credits.**
This course is used by graduate students fulfilling the doctoral program teaching requirement. Students assist in class preparation and organization, teaching, grading, and office hours or serve as discussion section leaders or laboratory course supervisors. They meet regularly with the faculty members they are assisting. Students enroll for 3 hours for the equivalent of a 25% assistantship and 6 hours for a 50% equivalent. Prerequisite: Instructor permission.

**ABSC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Credits.**
Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as PSYC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**ABSC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Credits.**
Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., integrated case presentation), and modeling of clinical competencies for junior students. Course requirements include the development of portfolios for demonstration of clinical competencies and application to clinical internships. May be taken
in more than one semester. (Same as PSYC 944.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**ABSC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Credits.**

Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior students. May be taken in more than one semester. (Same as PSYC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**ABSC 961. Advanced Seminar in Applied Behavior Analysis: _____ 3 Credits.**

An advanced seminar examining the literature and research methods in specialized areas of applied behavior analysis (e.g., developmental disabilities, community health, organizational development). May be repeated for credit if the content differs. An ABA-accredited and BACB® pre-approved course.

**ABSC 963. Clinical Child Psychology Internship. 1 Credits.**

Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Same as PSYC 963.) Prerequisite: Completion of Ph.D. comprehensive examinations, graduate standing in clinical child psychology, and permission of clinical child psychology faculty.

**ABSC 965. Evaluating and Disseminating Scientific Material II. 1-3 Credits.**

Intensive training in the evaluation and production of scientific critiques and reviews on current issues in the analysis of behavior, as disseminated through the media. May be repeated. Prerequisite: Instructor permission.

**ABSC 970. Practicum II in Behavioral Psychology. 1-6 Credits.**

Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 870. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 971. Practicum II in Behavior Analysis: _____ 1-6 Credits.**

Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 871. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 972. Practicum II in: _____ 1-6 Credits.**

Advanced instruction and supervised laboratory or field work for doctoral students beyond ABSC 872. May be repeated for credit if the content differs. Topic and instructor are announced in the Schedule of Classes. Prerequisite: Graduate standing in applied behavioral science or instructor permission.

**ABSC 976. Therapeutic Interventions with Children. 3 Credits.**

Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. (Same as PSYC 976.) Prerequisite: Instructor permission.

**ABSC 981. History of Behavior Analysis. 3 Credits.**

An advanced graduate seminar on the history of behavior analysis from Greek naturalism to the 21st century. It covers the history and philosophy of science and psychology (e.g., evolution vs. revolutions, ontology, epistemology); the long past, short history, and recent origins of behavior analysis in cultural context (e.g., Social Progressivism); historical and conceptual relations between behavior analysis and other systems (e.g., behaviorism, psychoanalysis, phenomenology, cognitivism); and historiographic issues and methods (e.g., great person vs. Zeitgeist history, presentism vs. historicism.) Prerequisite: ABSC 800 or instructor permission.

**ABSC 989. Methods of Obtaining External Research Funding. 1-3 Credits.**

The objective of this course is to demystify this process and prepare participants to submit their first independent research grant application. Participants learn about the characteristics of different funding mechanisms and agencies, the characteristics of successful and unsuccessful application strategies, how to turn an initial research idea into a competitive application, ethical issues that influence each stage of the development and submission process, and the nuts and bolts of grant development and management. Specific activities include critiquing an actual NIH grant application, participating in a mock review panel, and developing an actual grant application.

**ABSC 990. Advanced Seminar in: _____ 3 Credits.**

An advanced seminar for doctoral students. It examines basic and applied research literatures in specialized fields of applied behavioral science. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 991. Advanced Research in: _____ 1-9 Credits.**

Advanced, supervised research in basic or applied behavioral science for doctoral students. The course may focus on any combination of a literature review, research planning and preparation, conducting research, analyzing data, writing research reports, and preparing oral reports of completed research. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 992. Advanced Readings in: _____ 1-6 Credits.**

An advanced individual, supervised study of recent research and scholarship for doctoral students. The course emphasizes current scholarship in selected areas of basic and applied behavioral science and its conceptual foundations. Designed for students whose needs cannot be met in other courses. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 993. Advanced Special Topics in: _____ 1-3 Credits.**

An advanced research and readings course for doctoral students. It allows them to concentrate their studies on selected basic and applied problems in behavioral science and carry out independent research. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

**ABSC 994. Advanced Study Abroad Topics in: _____ 1-6 Credits.**

An advanced course designed to enhance international experience in topic areas related to behavioral science for doctoral level students. May be repeated for credit if the content differs. Prerequisite: Graduate standing in behavioral psychology or instructor permission.
ABSC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Credits.
Research experience making original contribution to literature in clinical child psychology. (Same as PSYC 998.)

ABSC 999. Doctoral Dissertation in Behavioral Psychology. 1-9 Credits.
Advanced supervised research that makes an original, empirical contribution to the literature in applied behavioral science leading to a doctoral degree in behavioral psychology. May be repeated. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Graduate standing in behavioral psychology or instructor permission.

Bachelor of Arts and Bachelor of General Studies in Applied Behavioral Science

Career Opportunities
The department prepares students for careers in their specialties, as well as for graduate school and professional training. Careers include work in such fields and settings as early childhood education; early childhood intervention programs; community programs for children, youth, and adults with developmental disabilities; programs for individuals with physical disabilities; delinquency, juvenile justice, and law enforcement; public health and health care; community-based and nongovernmental organizations; and behavioral consulting, management, human services, and business. Students enter graduate and professional schools in such areas as applied behavior analysis, applied developmental psychology, behavior analysis, clinical and counseling psychology, community development, gerontology, law, medicine, organizational behavior management, public health, social welfare, and special education.

Behavior Analysis Certification
The department offers a program of study that qualifies students to become Board Certified Assistant Behavior Analysts™. Students must pass ABSC 100, ABSC 304, and ABSC 308; obtain requisite supervised or mentored experience; complete the major; complete the KU degree; and pass a national examination. The Behavior Analysis Certification Board (http://www.bacb.com/) has pre-approved ABSC 100, ABSC 304, and ABSC 308 for admission to the national examination. Students should meet with a BACB® advisor early in the junior year.

Preparation and Advising
To graduate with the major in 4 years, prospective majors should enroll in Introduction to Applied Behavioral Science (ABSC 100 or ABSC 101) and Principles and Procedures of Behavior Modification and Therapy (ABSC 304) during the first 2 years. The content of these 2 courses will give students a basic understanding of the field of Applied Behavioral Science and help students decide whether they would like to apply to be admitted to the major. By the end of the second year, they should have consulted with a faculty advisor about degree requirements, specialty areas, and career opportunities. By the end of the third year, they should have taken the prerequisite courses for the fourth-year practicum. This information may also be found in the department’s Undergraduate Handbook. By the beginning of the junior year, majors should complete the College’s Major Declaration form. They should list either ABSCA-BA or ABSCA-BGS as the major code for a Bachelor of Arts or Bachelor of General Studies degree, respectively.

Preparation and Advising
To graduate with the major in 4 years, prospective majors should enroll in Introduction to Applied Behavioral Science (ABSC 100 or ABSC 101) and Principles and Procedures of Behavior Modification and Therapy (ABSC 304) during the first 2 years. The content of these 2 courses will give students a basic understanding of the field of Applied Behavioral Science and help students decide whether they would like to apply to be admitted to the major. By the end of the second year, they should have consulted with a faculty advisor about degree requirements, specialty areas, and career opportunities. By the end of the third year, they should have taken the prerequisite courses for the fourth-year practicum. This information may also be found in the department’s Undergraduate Handbook. By the beginning of the junior year, majors should complete the College’s Major Declaration form. They should list either ABSCA-BA or ABSCA-BGS as the major code for a Bachelor of Arts or Bachelor of General Studies degree, respectively.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. or B.G.S. Major
A student must complete ABSC 100 or ABSC 101 with a C or better to enroll in ABSC 304. A student must complete ABSC 304 with a C or better to enroll in ABSC 308 or ABSC 509.

All majors must complete the introductory and core course work as well choose from 1 of the following specialty area options.

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
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<tr>
<td>or ABSC 101</td>
<td>Introduction to Applied Behavioral Science, Honors</td>
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<tr>
<td>ABSC 308</td>
<td>Applied Behavioral Sciences Core Knowledge and Skills</td>
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</table>

 Majors must complete a course in each of the following areas:
Behavioral Assessment. Satisfied by the following:
Early Childhood Education & Intervention Specialty

This option is for students interested in understanding typical and atypical child development and learning to promote healthy development in young children (ages 0-6 years). Students who choose this option are required to participate in practica in classrooms that serve toddlers and preschool children.

**Required Specialty Area Core Knowledge and Skills**

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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
<td>3</td>
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<td></td>
<td>(Students may substitute PYSC 333 Child Psychology for ABSC 160. The credit hours for PYSC 333, however, do not count toward the 33 required ABSC major hours or toward the 15 required junior/senior ABSC hours.)</td>
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</tr>
<tr>
<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
<td>3</td>
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**Specialty Area Electives**

Satisfied by completing any junior/senior-level ABSC courses except those already required as introductory, core knowledge, and required specialty courses, which include ABSC 304, ABSC 308, ABSC 444, and ABSC 509. Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations. (at least 8 hours)

**Practicum 1**

Two semesters are required. The courses are offered for 5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 350 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

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<th>Code</th>
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<tbody>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
<td>3</td>
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Select one of the following:

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<thead>
<tr>
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<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
<td>3</td>
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<tr>
<td>ABSC 676</td>
<td>Practicum in Infant-Toddler Care and Early Intervention II</td>
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<tr>
<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I</td>
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<tr>
<td>ABSC 678</td>
<td>Practicum in Preschool Education and Intervention II</td>
<td></td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
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</table>

**ABSC Early Childhood Research Specialty**

This option is for students interested in gaining research experience in early childhood possibly as preparation for graduate school or employment in educational and clinical research centers. Students who choose this option will enroll in research-oriented practica. Interested students would consult the department.

**Required Specialty Area Core Knowledge and Skills**

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<td>(Students may substitute PYSC 333 Child Psychology for ABSC 160. The credit hours for PYSC 333, however, do not count toward the 33 required ABSC major hours or toward the 15 required junior/senior ABSC hours.)</td>
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</tr>
</tbody>
</table>

**Specialty Area Electives**

Satisfied by completing any junior/senior-level courses, except those already required as introductory, core knowledge, and required specialty area courses (which include ABSC 304, ABSC 308, ABSC 350, ABSC 444, and ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 680) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations. (at least 5 hours)

**Practicum 1**

Two semesters are required. The courses are offered for 5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 350 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

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<tbody>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
<td>3</td>
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<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
<td>3</td>
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<tr>
<td>ABSC 676</td>
<td>Practicum in Infant-Toddler Care and Early Intervention II</td>
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<tr>
<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I</td>
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<tr>
<td>ABSC 678</td>
<td>Practicum in Preschool Education and Intervention II</td>
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<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
<td></td>
</tr>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
<td></td>
</tr>
</tbody>
</table>
Youth Development & Juvenile Justice Specialty

*The Youth Development & Juvenile Justice Specialty is being discontinued. No new students are currently being admitted for this specialty*

This specialty area is for students who want to work with children and adolescents who may be involved formally or informally with the juvenile justice system. It includes courses addressing issues such as juvenile law, developing relationships, counseling and problem-solving, behavioral contracting, and other techniques used when working with school-aged children and adolescents. The course sequence culminates in a yearlong practicum during which students work with children and adolescents in the Truancy Prevention and Diversion Program. The practicum is in collaboration with the school district, Social and Rehabilitation Services, the district attorney's office, and the juvenile court.

Graduates with this specialty are excellent candidates for positions as probation officers, counselors in mental health programs, intake and assessment officers, truancy prevention specialists, and treatment personnel in intervention and treatment programs for children and adolescents. Many students also pursue graduate study in social welfare, law, counseling, and psychology.

### Specialty Area Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 302</td>
<td>Behavioral Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 486</td>
<td>Issues in Parenting</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 871</td>
<td>Practicum I in Behavior Analysis: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

### Practicum

Two semesters are required. The courses are offered for 3-5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 308 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education (Students must complete at least 1 semester)</td>
<td>3</td>
</tr>
</tbody>
</table>

For the students' other required semester, students may select from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 675</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 676</td>
<td>Practicum in Infant-Toddler Care and Early Intervention II</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 677</td>
<td>Practicum in Preschool Education and Intervention I</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 678</td>
<td>Practicum in Preschool Education and Intervention II</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education (No more than 6 hours may count toward the ABSC major hours.)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
<td>3</td>
</tr>
</tbody>
</table>

### Adults with Disabilities Specialty

This specialty area is for students interested in working with people with developmental disabilities and in the development of supportive teaching programs in the community for people with developmental disabilities. The courses teach observing and defining behavior, increasing appropriate and decreasing inappropriate behavior, developing relationships, counseling, legal and ethical issues, and experimental design. The course sequence culminates in practicum work in a community-based residential service agency or day treatment program for adults with developmental disabilities.

Graduates of this specialty are excellent candidates for positions in residential treatment programs, community human service agencies, and vocational and pre-vocational teaching programs for people with disabilities. Many students also pursue graduate studies in applied behavioral analysis, special education, and psychology.

### Required Specialty Area Core Courses

Satisfied by the following. Students should plan their program with a department advisor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents (ABSC 410 must be taken prior to enrolling in the practicum. It is offered only in the spring semester.)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 560</td>
<td>The Juvenile Justice System: A Behavioral and Legal Perspective</td>
<td>3</td>
</tr>
</tbody>
</table>

### Specialty Area Electives

Select 9 hours of the following. Note: Although ABSC 160 is not required for this specialty area, it is a required prerequisite for some of the specialty area electives.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 302</td>
<td>Behavioral Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 310</td>
<td>Building Healthy Communities</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 360</td>
<td>Drugs, Addiction, and Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 470</td>
<td>Organizational Behavior Management</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 486</td>
<td>Issues in Parenting</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 562</td>
<td>Behavioral Community Approaches to Addressing Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 626</td>
<td>Adolescent Behavior and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

### Practicum

This practicum requires a two-semester commitment (enrollment in ABSC 694), beginning in the fall semester and continuing in the spring semester. Space may be limited and enrollment may depend on the date of indication of interest and performance in ABSC 410.

ABSC 694 Practicum in Juvenile Problems
Community Health & Development Specialty

This specialty area is for students interested in building healthy and well-functioning communities. They may do so through public service (e.g., AmeriCorps, Peace Corps) or in a career following graduate study in an appropriate field such as public health, public policy, law, rehabilitation, psychology, social welfare, or medicine. It provides opportunities to better understand and make a difference with important community problems and goals (e.g., substance abuse, violence, education, child and youth development, independent living of people with disabilities, well-being of older adults).

Course work and practicum experiences focus on (a) intervention methods used to address community problems and goals (e.g., strategic planning, intervention, advocacy) and (b) research methods used to study the effects of community initiatives for health and development (e.g., community assessment, evaluation). The course sequence culminates in a 2-semester practicum arranged with faculty members and representatives of community organizations or governmental agencies (e.g., in public health, child advocacy, independent living, youth development, community development).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 150</td>
<td>Community Leadership</td>
<td>3</td>
</tr>
<tr>
<td>or ABSC 151</td>
<td>Community Leadership, Honors</td>
<td></td>
</tr>
<tr>
<td>ABSC 310</td>
<td>Building Healthy Communities</td>
<td>3</td>
</tr>
<tr>
<td>or ABSC 311</td>
<td>Building Healthy Communities, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Required Specialty Area Course

Satisfied by the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents</td>
<td></td>
</tr>
<tr>
<td>ABSC 437</td>
<td>Independent Living and People with Disabilities</td>
<td></td>
</tr>
<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
<td></td>
</tr>
<tr>
<td>ABSC 560</td>
<td>The Juvenile Justice System: A Behavioral and Legal Perspective</td>
<td></td>
</tr>
<tr>
<td>ABSC 690</td>
<td>Practicum in Community Health and Development, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Practicum

Satisfied by completing of any ABSC courses, except those already required as introductory, core knowledge, and required specialty area courses, including ABSC 100, ABSC 304, ABSC 308, ABSC 350. Additionally, at least 9 hours of coursework must be at the junior/senior level. Practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for more specific recommendations.

Basic Research

Students pursuing the basic research option learn about behavioral processes and research methods, and acquire skills in the experimental analysis of behavior. Students completing this option complete a 2-semester hands-on practicum in which they assist in the conduct of research on human or nonhuman behavioral processes. Students are involved in all aspects of the research endeavor, from conceptualization of problems to data collection, analysis, and presentation. Students pursuing this option are required to complete an introductory course in statistics.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 675</td>
<td>Practicum in Basic Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Conceptual Foundations

Students pursuing the conceptual foundations option learn about the field’s theoretical, philosophical, conceptual, and historical foundations and acquire skills in critical thinking. Students electing this option are required to complete ABSC 509. Students who complete this option complete a 2-semester practicum in which they read and research a relevant literature and write a paper that advances their understanding of the field.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 304</td>
<td>Practicum in Community Health and Development, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Statistics in Psychological Research

Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (ABSC 304, ABSC 308, and ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see a specialty area advisor for recommendations.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 211</td>
<td>Statistics in Psychological Research, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Practicum

Two semesters of practicum (ABSC 692) are required. Practicum courses are offered for 3-6 credit hours during the fall and spring semesters, and 3 hours during the summer session. However, no more than 6 hours total apply to the major. The prerequisite is the permission of the supervisor, as space permits.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 692</td>
<td>Practicum in Basic Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Area Electives

Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (including ABSC 304, ABSC 308, ABSC 310/311, and ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count as specialty area electives. Please see specialty area advisors for recommendations. (at least 8 hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 798</td>
<td>Practicum in Community Health and Development, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Specialty Area Electives

Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (including ABSC 304, ABSC 308, ABSC 509, ABSC 798). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see a specialty area advisor for more specific recommendations. (at least 8 hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 560</td>
<td>Practicum in Basic Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Area Electives

Satisfied by the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Area Electives

Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (including ABSC 304, ABSC 308, ABSC 509, ABSC 798). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see a specialty area advisor for more specific recommendations. (at least 8 hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 437</td>
<td>Independent Living and People with Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
<td></td>
</tr>
<tr>
<td>ABSC 560</td>
<td>The Juvenile Justice System: A Behavioral and Legal Perspective</td>
<td></td>
</tr>
</tbody>
</table>
Organizational Behavior Management Research & Practice

This specialty area is for students interested in studying the application of behavioral principles to people and groups in business, industry, government, and human service settings. This specialty area includes courses in behavior analysis, research methods, and organizational behavior management with a focus on its three sub-disciplines including performance management, systems analysis, and behavior-based safety. The program culminates in practica that provide students with direct experiences improving employee behavior, work safety, or organizational systems within businesses in the community. Students completing this program will gain knowledge and experience in the areas of behavior analysis, management, staff training, and systems-level interventions.

CAREERS: This area is relevant for students interested in behavioral consulting, management, human services, and business.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 150</td>
<td>Community Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 470</td>
<td>Organizational Behavior Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialty Area Electives

Satisfied by completing any junior-senior level ABSC courses, except those already required as introductory, core knowledge, and required specialty area courses (including ABSC 304, ABSC 308, ABSC 470, and ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations.

Practicum

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 682</td>
<td>Organizational Behavior Management Practicum</td>
<td>6-10</td>
</tr>
</tbody>
</table>

This practicum requires a 2-semester commitment (enrollment in ABSC 682), beginning in the fall semester and continuing in the spring semester. Space may be limited and enrollment may depend on the date of indication of interest. No more than 6 hours of practicum apply to the major.

Applied Behavioral Science Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

**Major Hours**

Satisfied by a minimum of 33 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Double Majors

The department encourages double majors and minors in other departments. Double majors are especially appropriate for students planning to attend graduate school or enter professional programs (e.g., psychology, law, medicine). Any of the College’s other majors may be appropriate, but among the more common are psychology, human biology, sociology, political science, and speech-language-hearing.

Sample 4-year plans for the BA degree in Applied Behavioral Science with the following concentrations can be found here: Adults with Disabilities (p. 1126), Basic Research (p. 1127), Community Health & Development (p. 1128), Conceptual Foundations (p. 1129), Early Childhood Autism Intervention (p. 1130), Early Childhood Education & Intervention (p. 1131), Early Childhood Research (p. 1132), Organizational Behavior Management & Research Practice (p. 1133), or by using the left-side navigation.

Sample 4-year plans for the BGS degree in Applied Behavioral Science can by found here: Adults with Disabilities (p. 1134), Basic Research (p. 1135), Community Health & Development (p. 1136), Conceptual Foundations (p. 1139), Early Childhood Autism Intervention (p. 1136), Early Childhood Education & Intervention (p. 1137), Early Childhood Research (p. 1138), Organizational Behavior Management & Research Practice (p. 1140), or by using the left-side navigation.

### Departmental Honors

The department’s honors program is suited for undergraduates planning to attend graduate school. Students are expected to enroll in two semesters of ABSC 599 for a total of 4 to 8 credit hours. The course combines small-group discussions on advanced topics in applied behavioral science, along with honors thesis supervision of a project of the student’s design. Honors students are invited to attend the ABS graduate proseminar or department colloquium series. Students should meet with the department’s honors advisor by the middle of the junior year to identify a faculty member with whom to complete the project. Prerequisite: Completion of at least 60 hours in the College with a grade-point average of 3.5 in the department.

### Study Abroad

The department offers students opportunities to obtain international experience in a program offered jointly with the Office of Study Abroad (http://www.studyabroad.ku.edu/) (ABSC 279, ABSC 479) and research experience with faculty members who teach research courses or a research practicum:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 499</td>
<td>Directed Research in:</td>
<td>1-3</td>
</tr>
<tr>
<td>ABSC 599</td>
<td>Honors and Thesis in Applied Behavioral Science</td>
<td>1-3</td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
<td>1-6</td>
</tr>
<tr>
<td>ABSC 692</td>
<td>Practicum in Basic Research</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 693</td>
<td>Practicum in Historical and Conceptual Foundations</td>
<td>3-6</td>
</tr>
<tr>
<td>ABSC 698</td>
<td>Special Research Practicum in:</td>
<td>3-6</td>
</tr>
<tr>
<td>ABSC 699</td>
<td>Special Research Practicum in, Honors:</td>
<td>3-6</td>
</tr>
</tbody>
</table>
Research experience is recommended for students planning to attend graduate school. The department also offers some courses that include a service-learning component. Many of these programs, research experiences, and service-learning courses meet university requirements in these areas.

## BA in Applied Behavioral Science with concentration in Adults with Disabilities

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Adults with Disabilities. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website ([http://kucore.ku.edu/courses/](http://kucore.ku.edu/courses/)).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>ABSC 100 (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>ABSC 160 (Goal 3 Social Science)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>ABSC 304 (Major Requirement - Core 1 of 3)</td>
<td>3</td>
<td>ABSC 308 (Major Requirement - Core 2 of 3)</td>
<td>4</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>ABSC Specialty Area Elective (Major Requirement, 300+, 1 of 4)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 350 (Major Requirement)</td>
<td>3</td>
<td>ABSC 509 (Major Requirement - Core 3 of 3, Goal 6)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC Specialty Area Elective (Major Requirement 300+, 2 of 4)</td>
<td>3</td>
<td>ABSC Specialty Area Elective (Major Requirement, 300+, 3 of 4)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 685 (Major Requirement - Practicum 1 of 2)</td>
<td>5</td>
<td>ABSC 685 (Major Requirement - Practicum 2 of 2)</td>
<td>5</td>
</tr>
<tr>
<td>ABSC Specialty Area Elective (Major Requirement - 300+, 4 of 4)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website ([https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/](https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/)) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. 11 hours of ABSC Specialty Area elective courses are required. Visit the degree requirements ([http://catalog.ku.edu/liberal-arts-sciences/applied-behavioral-science/ba-bgs/#requirementstext](http://catalog.ku.edu/liberal-arts-sciences/applied-behavioral-science/ba-bgs/#requirementstext)) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
4. 6-10 hours of ABSC 685 Practicum is required. 5 hours are offered fall and spring, 3 hours are offered in the summer.
5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
## BA in Applied Behavioral Science with concentration in Basic Research

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Basic Research. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman Year

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<tr>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)¹</td>
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<td>3</td>
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<td>Goal 1.2 Quantitative Literacy</td>
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<tr>
<td>PSYC 104 (Major Pre-Requisite)</td>
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<td>ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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<td>Goal 2.2 Communication</td>
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### Sophomore Year

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
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<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)⁶</td>
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<tr>
<td>ABSC 304 (Major Requirement - Core 1 of 3)</td>
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<td>Goal 3 Natural Science</td>
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<td>Goal 3 Arts and Humanities</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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### Junior Year

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<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<tr>
<td>ABSC 509 (Major Requirement - Core 3 of 3, Goal 6)</td>
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### Senior Year

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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (ABSC 304 (http://catalog.ku.edu/search/?P=ABSC%20304), ABSC 308 (http://catalog.ku.edu/search/?P=ABSC%20308), ABSC 509 (http://catalog.ku.edu/search/?P=ABSC%20509)). Additionally, practicum courses (ABSC 675 (http://catalog.ku.edu/search/?P=ABSC%20675)-ABSC 699 (http://catalog.ku.edu/search/?P=ABSC%20699)) do not count toward specialty area elective hours. Please see a specialty area advisor for recommendations.
4. Two semesters of practicum (ABSC 692 (http://catalog.ku.edu/search/?P=ABSC%20692)) are required. Practicum courses are offered for 3-6 credit hours during the fall and spring semesters, and 3 hours during the summer session. However, no more than 6 hours total apply to the major. The prerequisite is the permission of the supervisor, as space permits.
5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.
Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BA in Applied Behavioral Science with concentration in Community Health & Development

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Community Health & Development. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing I)</td>
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<tr>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
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<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
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<tr>
<td>ABSC 100 (Goal 3 Social Science, Major Requirement)</td>
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<td>2nd Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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Sophomore

<table>
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<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
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<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)</td>
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<tr>
<td>Goal 3 Arts and Humanities</td>
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<td>Goal 3 Natural Science</td>
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<tr>
<td>ABSC 304 (Major Requirement)</td>
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<td>BA Laboratory/Field Experience (LFE)</td>
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<tr>
<td>ABSC 150 (Goal 5 Social Responsibility &amp; Ethics, Major Requirement)</td>
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<td>Goal 1.2 Quantitative Literacy</td>
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Junior

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<th>Fall</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>Goal 4.2 Global Awareness</td>
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</tr>
<tr>
<td>ABSC 509 (Major Requirement)</td>
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<table>
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<td>ABSC Specialty Area Elective 300+ (Major Requirement)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tbody>
</table>

Total Hours 120

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3 Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory, core knowledge, and required specialty courses (including ABSC 304, ABSC 308, ABSC 310/ABSC 311, ABSC 509. Additionally, practicum courses (ABSC 675-ABSC 699) do not count as specialty area electives. Please see specialty area advisors for recommendations. (at least 8 hours)

4 Two semesters of practicum (ABSC 690/ABSC 691) are required (3 hours in both fall and spring semesters). Note: ABSC 310/ABSC 311 must be taken prior to, or concurrently with, enrollment in the above practicum courses.

5 Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

6 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Applied Behavioral Science with concentration in Conceptual Foundations

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Conceptual Foundations. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)¹</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)¹</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
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<td>BA Quantitative Reasoning (BAQR)²</td>
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<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
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<tr>
<td>ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
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<td>ABSC 160 (Goal 3 Social Science)</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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**Sophomore**

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<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)³</td>
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<tr>
<td>Goal 3 Arts and Humanities</td>
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<td>Goal 3 Natural Science</td>
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<td>ABSC 304 (Major Requirement - Core 1 of 3)</td>
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**Junior**

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<tr>
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<tr>
<td>ABSC 509 (Major Requirement - Core 3 of 3, Goal 6)</td>
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<td>ABSC 800 (Second Area of Study/Elective/Degree/ Junior-Senior Hours)³</td>
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**Senior**

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<th>Hours</th>
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<tr>
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<td>ABSC 693 (Major Requirement)</td>
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<td>ABSC 693 (Major Requirement)⁴</td>
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**Total Hours 120-126**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Satisfied by completing any junior/senior-level ABSC courses, except those already required as introductory and core knowledge courses (including ABSC 304, ABSC 308, ABSC 509, ABSC 800). Additionally, practicum courses (ABSC 875-ABSC 699) do not count toward specialty area elective hours. Please see a specialty area advisor for more specific recommendations. (at least 8 hours)
4. ABSC 693 Practicum in Historical and Conceptual Foundations (Practicum courses are offered for 3-6 credit hours during the fall and spring semesters, and 3 hours during the summer session.)
5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Applied Behavioral Science with concentration in Early Childhood Autism Intervention

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Early Childhood Autism Intervention. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

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<tr>
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<th>Course Code</th>
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<th>Semester Hours</th>
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<tbody>
<tr>
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<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<tr>
<td></td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3 BA Quantitative Reasoning (BAQR)</td>
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<td>3</td>
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<tr>
<td></td>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
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</tr>
<tr>
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<td>ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>3 ABSC 160 (Goal 3 Social Science, Required Specialty 1 of 3)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Goal 2.2 Communication</td>
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#### Sophomore

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<td>3 Goal 3 Natural Science</td>
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</tr>
<tr>
<td></td>
<td>ABSC 304 (Major Requirement - Core 1 of 3)</td>
<td>3 BA Laboratory/Field Experience (LFE)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Goal 4.1 US Diversity</td>
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<td></td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 ABSC 308 (Major Requirement - Core 2 of 3)</td>
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#### Junior

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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>Fall</td>
<td>Goal 4.2 Global Awareness</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
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#### Senior

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#### Total Hours 120-124

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Satisfied by completing any junior/senior-level courses, except those already required as introductory, core knowledge, and required specialty area courses (which include ABSC 304, ABSC 308, ABSC 350, ABSC 444, and ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations. (at least 5 hours)
4. Two semesters are required: ABSC 680 and ABSC 675-ABSC 680. The courses are offered for 5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 350 must be taken prior to, or concurrently with, enrollment in the above practicum courses.
5. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BA in Applied Behavioral Science with concentration in Early Childhood Education & Intervention**

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Early Childhood Education & Intervention. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3 Goal 1.2 Quantitative Reasoning</td>
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<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
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<td>Goal 3 Natural Science</td>
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<td>Goal 4.1 US Diversity</td>
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<td>BA Laboratory/Field Experience (LFE)</td>
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**Junior**

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<tbody>
<tr>
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<tr>
<td>ABSC 509 (Major Requirement)</td>
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<td>Specialty Area Elective 300+ (Major Requirement)</td>
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<td>ABSC 444 (Major Requirement)</td>
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**Senior**

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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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</table>

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Satisfied by completing 8 hours of specialty area electives. See a major advisor for help choosing these courses.
4. Two semesters of practicum are required, totaling 10 hours. The courses are offered for 5 credit hours during the fall and spring semesters, and 3 hours during the summer session. Students must select at least one of the courses listed below. For their other required semester, students may also select from ABSC 679 or ABSC 680 (in addition to those listed below).
5. Hour requirements (incl. 45 p/hr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.
Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Applied Behavioral Science with concentration in Early Childhood Research

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with concentration in Early Childhood Research. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

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<tr>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/ BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td>Goal 1.2 Quantitative Literacy</td>
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<td>BA Quantitative Reasoning (BAQR)</td>
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</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
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<td>ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
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<th>Hours</th>
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<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)</td>
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<th>Spring</th>
<th>Hours</th>
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### Total Hours 120-126

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. All hours of ABSC specialty area electives are required. Visit the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/applied-behavioral-science/ba-bgs/#requirementstext) tab for a list of suggested courses, or consult with a major advisor.
4. Two semesters are required: ABSC 679 and ABSC 675-ABSC 680. The courses are offered for 3-5 credit hours during the fall and spring semesters, and for 3 hours during the summer session. Note: ABSC 308 must be taken prior to, or concurrently with, enrollment in the above practicum courses.
5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BA in Applied Behavioral Science, concentration in Organizational Behavior Mgmt. Research & Practice

Below is a sample 4-year plan for students pursuing the BA in Applied Behavioral Science with a concentration in Organizational Behavior Management Research. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/).

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<td>Fall</td>
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<td>ABSC 100 (Goal 1.1 First Year Seminar or Critical Thinking)</td>
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<td>ABSC 160 (Goal 3 Social Science)</td>
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<tr>
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<table>
<thead>
<tr>
<th>Class</th>
<th>Hours</th>
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<td>Fall</td>
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Total Hours 120-128

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Satisfied by completing any junior-senior level ABSC courses, except those already required as introductory, core knowledge, and required specialty area courses (including ABSC 304, ABSC 308, ABSC 470, ABSC 509). Additionally, practicum courses (ABSC 675-ABSC 699) do not count toward specialty area elective hours. Please see specialty area advisors for recommendations.

6. KU Core Goals, please visit the Management Research. To view the list of courses approved to fulfill KU Core Goal, please visit the KU Core website (http://kucore.ku.edu/).
This practicum requires a 2-semester commitment (enrollment in ABSC 682), beginning in the fall semester and continuing in the spring semester. Space may be limited and enrollment may depend on the date of indication of interest. 6 - 10 hours.

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

4 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

5 Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in Applied Behavioral Science with concentration in Adults with Disabilities

Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Adults with Disabilities. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
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<tr>
<td>Goal 1.2 Quantitative Reasoning</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
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<tr>
<td>ABSC 350 (Goal 2.2 Communication)</td>
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<td>ABSC 308 (Goal 4.1 US Diversity)</td>
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#### Sophomore

<table>
<thead>
<tr>
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#### Senior

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#### Total Hours 120

1 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

2 11 hours of ABSC Specialty Area elective courses are required.

3 6-10 hours of ABSC 685 Practicum is required, taken across two semesters, for a minimum of 6 credit hours. ABSC 685 is offered for 5 credit hours in Spring and Fall semesters, while it is offered for 3 hours in Summer.
Please note:

All students in the College of Liberal Arts & Sciences are required to complete 120 hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in Applied Behavioral Science with concentration in Basic Research**

Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Basic Research. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

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<tr>
<th>Freshman</th>
<th>Hours</th>
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<th>Hours</th>
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<td>Fall</td>
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<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
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<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
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</tr>
<tr>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
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<table>
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</tbody>
</table>

**Total Hours 120**

¹ The BGS requires completion of a minor (or a second major) outside of the major area of study. Most minors require 18 hours with 12 at the 300+ level.

² 11 hours of ABSC Specialty Area elective courses are required. Visit the degree requirements tab for a list of approved courses.

³ 6 hours of ABSC 692 Practicum are required.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
BGS in Applied Behavioral Science with concentration in Community Health & Development

Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Community Health & Development. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
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<tr>
<th>Freshman</th>
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<th>Spring</th>
<th>Hours</th>
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<tr>
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<td>ABSC 100 (Goal 1.1 First Year Seminar or Critical Thinking, Major Requirement)</td>
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<td>Goal 3 Social Science</td>
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<tr>
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<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
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<td>ABSC 304 (Major Requirement - Core 1 of 3)</td>
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<th>Hours</th>
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<tbody>
<tr>
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</table>

**Total Hours 120**

¹ Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.  
² 11 hours of ABSC Specialty Area elective courses are required. Visit the degree requirements tab for a list of approved courses.  
³ Two semesters of practicum (ABSC 690/ABSC 691) are required (3 hours in both fall and spring semesters). Note: ABSC 310/ABSC 311 must be taken prior to enrollment in ABSC 690/ABSC 691.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.  
The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BGS in Applied Behavioral Science with concentration in Early Childhood Autism Intervention

Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Early Childhood Autism Intervention. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
### Freshman

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<th>Hours</th>
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<tbody>
<tr>
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<td>First Year Seminar or Critical Thinking, Major Requirement</td>
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<td>ABSC 2nd Semester Practicum - Major Requirement)</td>
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<td>Goal 4.2 Global Awareness</td>
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<td>ABSC 444 (Major Requirement - Required Specialty 3 of 3)</td>
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<td>ABSC 509 (Goal 6 Integration and Creativity, Major Requirement)</td>
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<td>ABSC 308 (Major Requirement )</td>
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### Sophomore

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<th>Hours</th>
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<td>3</td>
<td>ABSC 509 (Goal 6 Integration and Creativity, Major Requirement)</td>
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<td></td>
<td>ABSC 308 (Major Requirement )</td>
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### Junior

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<thead>
<tr>
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<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
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<tr>
<td></td>
<td>ABSC 444 (Major Requirement - Required Specialty 3 of 3)</td>
<td>3</td>
<td>ABSC 509 (Goal 6 Integration and Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABSC 308 (Major Requirement )</td>
<td>4</td>
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### Senior

<table>
<thead>
<tr>
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<th>Hours</th>
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<tr>
<td>Fall</td>
<td>ABSC 680 (BGS Career Course (BGSC), Major Requirement)³</td>
<td>3-5</td>
<td>ABSC 680 (ABSC 2nd Semester Practicum - Major Requirement)³</td>
<td>3</td>
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<tr>
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<td>ABSC 160 (Goal 3 Social Science, Major Requirement - Required Specialty 1 of 2)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours 120-122

1. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

2. 5 hours of ABSC Specialty Area elective courses at the 300+ level are required. Visit the degree requirements tab for a list of approved courses.

3. 6-10 hours of Practicum are required.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in Applied Behavioral Science with concentration in Early Childhood & Education Intervention

Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Early Childhood & Education Intervention. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Early Childhood Research. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>ABSC 100 (Goal 1.1 First Year Seminar or Critical Thinking, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABSC 160 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td>Goal 4.2 Global Awareness</td>
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<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABSC 444 (Major Requirement - Required Specialty 2 of 2)</td>
<td>3</td>
<td>ABSC Specialty Area Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ABSC 509 (Goal 6 Integration and Creativity, Major Requirement - Core 3 of 3)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td></td>
<td>ABSC Specialty Area Elective 300+ (Major Elective)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Area of Study Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

### Total Hours 120

1. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

2. 8 hours of ABSC Specialty Area elective courses at the 300+ level are required. Visit the degree requirements tab for a list of approved courses.

3. Two semesters of practicum are required, totaling 6-10 hours, minimum 6 hours required. The courses are offered for 5 credit hours during the fall and spring semesters, and for 3 hours in the summer term.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in Applied Behavioral Science with concentration in Early Childhood Research**

Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Early Childhood Research. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304 (Major Requirement - Core 1 of 3)</td>
<td>4</td>
<td>ABSC 308 (Major Requirement - Core 2 of 3)</td>
<td>4</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tbody>
</table>

**Total Hours 120-124**

1. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a second area of study. Individual degree mapping is done in partnership with your advisor.

2. 11 hours of ABSC Specialty Area elective courses at the 300+ level are required. Visit the degree requirements tab for a list of approved courses.

3. Two semesters of ABSC 679 practicum are required. For the second practicum, students could also take ABSC 675, ABSC 677, or ABSC 680 with special permission. The courses are offered for 3-5 credit hours during the fall and spring semesters, and for 3 hours during the summer term.

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 509 (Goal 6 Integration and Creativity, Major Requirement - Core 3 of 3)</td>
<td>3</td>
<td>ABSC Specialty Area Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC Specialty Area Elective 300+ (Major Requirement)²</td>
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<td>ABSC Specialty Area Elective 300+ (Major Requirement)²</td>
<td>3</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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**Total Hours 15-16**

### Senior

<table>
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<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3-5</td>
<td>ABSC 679 (Major Requirement)³</td>
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<td>ABSC 679 (BGS Career Course (BGSC), Major Requirement)³</td>
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**Total Hours 15-17**

### BGS in Applied Behavioral Science with concentration in Conceptual Foundations

Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Conceptual Foundations. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>3 ABSC 100 or 101 (Goal 1.1 First Year Seminar or Critical Thinking, Major Requirement)</td>
<td>3</td>
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<tr>
<td>PSYC 104 (Goal 3 Social Science)</td>
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**Total Hours 15**

### Sophomore

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<th>Hours</th>
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<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
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<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>ABSC 308 (Major Requirement)</td>
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</tr>
<tr>
<td>ABSC 304 (Major Requirement)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>ABSC 150 (Goal 5 Social Responsibility and Ethics, Major Requirement)</td>
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**Total Hours 15-17**
### BGS in Applied Behavioral Science with concentration in Org Behavior Mgt Research & Practice

Below is a sample 4-year plan for students pursuing the BGS in Applied Behavioral Science with a concentration in Organizational Behavior Management Research & Practice. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
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<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>3 ABSC 100 (Goal 1.1 First Year Seminar or Critical Thinking, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
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<td>Second Area of Study/</td>
<td>3</td>
</tr>
<tr>
<td>Elective/Degree/Junior-</td>
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<td>Elective/Degree/Junior-</td>
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<td>Senior Hours(^1)</td>
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#### Sophomore

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<thead>
<tr>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304 (Major Requirement - Core 1 of 3)</td>
<td>3</td>
<td>ABSC 308 (Major Requirement - Core 2 of 3)</td>
<td>4</td>
</tr>
<tr>
<td>ABSC 150 (Goal 5 Social Responsibility &amp; Ethics, Major Requirement - Required Specialty 1 of 2)</td>
<td>3</td>
<td>3 Second Area of Study/</td>
<td>3</td>
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<tr>
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<td>Elective/Degree/Junior-</td>
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<tr>
<td>Senior Hours(^1)</td>
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<td>Senior Hours(^1)</td>
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#### Junior

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>Goal 4.2 Global Awareness</td>
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</tr>
<tr>
<td>ABSC 509 (Goal 6 Integration and Creativity, Major Requirement - Core 3 of 3)</td>
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<td>3 ABSC 470 (Major Requirement - Required Specialty 2 of 2)</td>
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<tr>
<td>Elective/Degree/Junior-</td>
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<td>Elective/Degree/Junior-</td>
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</tr>
<tr>
<td>Senior Hours(^1)</td>
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<td>Senior Hours(^1)</td>
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</tbody>
</table>

#### Total Hours 120

- Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a second area of study. Individual degree mapping is done in partnership with your advisor.
- 8 hours of ABSC Specialty Area elective courses are required. Visit the degree requirements tab for a list of approved courses.
- 6 hours of ABSC 690 or 691 Practicum are required.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Why study applied behavioral science?

The Department of Applied Behavioral Science offers a curriculum through which students learn how to examine and address problems of social importance across the lifespan. Students receive training in the application of behavioral science to improve the human condition through prevention and intervention.

Requirements for the Minor

Students selecting a minor in Applied Behavioral Science are required to complete ABSC 100 and at least 15 credit hours of coursework in ABS, 12 of which must be at the junior/senior level (courses numbered 300+ above). No more than 3 credit hours in practicum courses and no more than 3 credit hours in research, special topics, and study abroad courses may count toward the general ABS minor.

We recommend that students who are interested in an ABS minor see an ABS advisor and consider completing a course sequence that focuses on one of the following specialty areas: Early Childhood Education and Intervention; Early Childhood Autism Intervention, Early Childhood Research, Youth Development and Juvenile Justice, Adults with Disabilities, Community Health and Development, Basic Research in Behavioral Science, Organizational Behavior Management Research and Practice, and Historical and Conceptual Foundations of Behavioral Science. Specialty area course sequences are described below.

Early Childhood Autism Intervention

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304</td>
<td>Principles and Procedures of Behavioral Interventions</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 680</td>
<td>Practicum in Advanced Laboratory in the Development of Behavioral Treatments for Children with Autism</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Indicates practicum course. Admission to practicum courses for students completing a minor in ABS is subject to limitations on practicum openings.

Early Childhood Research

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304</td>
<td>Principles and Procedures of Behavioral Interventions</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 308</td>
<td>Research Methods and Application</td>
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Select one of the following:

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<th>Hours</th>
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<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
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<td>ABSC 444</td>
<td>Curriculum Development for Young Children</td>
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<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 679</td>
<td>Practicum in Behavior Analysis Research in Early Childhood Education</td>
<td>3</td>
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</tbody>
</table>

1 Indicates practicum course. Admission to practicum courses for students completing a minor in ABS is subject to limitations on practicum openings.
### Early Childhood Education & Intervention

<table>
<thead>
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</tr>
</thead>
<tbody>
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<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
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<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
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</tr>
<tr>
<td>ABSC 304</td>
<td>Principles and Procedures of Behavioral Interventions</td>
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Select one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
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<tr>
<td>ABSC 486</td>
<td>Issues in Parenting</td>
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Select one of the following: 3

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<tr>
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<tbody>
<tr>
<td>ABSC 675 &amp; ABSC 676</td>
<td>Practicum in Infant-Toddler Care and Early Intervention I and Practicum in Infant-Toddler Care and Early Intervention II</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 677 &amp; ABSC 678</td>
<td>Practicum in Preschool Education and Intervention I and Practicum in Preschool Education and Intervention II</td>
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### Community Health and Development

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
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</tr>
<tr>
<td>ABSC 150</td>
<td>Community Leadership</td>
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<td>ABSC 310</td>
<td>Building Healthy Communities</td>
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Select three of the following: 9

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents</td>
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</tr>
<tr>
<td>ABSC 437</td>
<td>Independent Living and People with Disabilities</td>
<td></td>
</tr>
<tr>
<td>ABSC 486</td>
<td>Issues in Parenting</td>
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</tr>
<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
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</tr>
<tr>
<td>ABSC 562</td>
<td>Behavioral Community Approaches to Addressing Social Issues</td>
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<tr>
<td>ABSC 626</td>
<td>Adolescent Behavior and Development</td>
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</table>

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### Basic Research in Behavioral Science

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</thead>
<tbody>
<tr>
<td>ABSC 100</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
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<tr>
<td>ABSC 308</td>
<td>Research Methods and Application</td>
<td>4</td>
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<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
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<tr>
<td>ABSC 425</td>
<td>Teaching Apprenticeship in Applied Behavioral Science</td>
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<tr>
<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 692</td>
<td>Practicum in Basic Research</td>
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### Adults with Disabilities

<table>
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<tbody>
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<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 304</td>
<td>Principles and Procedures of Behavioral Interventions</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 350</td>
<td>The Behavioral Treatment of Children with Autism</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents</td>
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<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
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<tr>
<td>ABSC 437</td>
<td>Independent Living and People with Disabilities</td>
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<tr>
<td>ABSC 685</td>
<td>Practicum in Community-based Residential or Day Treatment Programs for Disabled Adults</td>
<td>3</td>
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</table>

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### Organizational Behavior Management Research & Practice

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>Principles and Procedures of Behavioral Interventions</td>
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<td>ABSC 308</td>
<td>Research Methods and Application</td>
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<td>ABSC 470</td>
<td>Organizational Behavior Management</td>
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<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
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<td>Organizational Behavior Management Practicum</td>
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1 Indicates practicum course. Admission to practicum courses for students completing a minor in ABS is subject to limitations on practicum openings.
Conceptual Foundations of Behavioral Science

<table>
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<td>ABSC 304</td>
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<td>ABSC 509</td>
<td>Contemporary Behavioral Science: Historical, Conceptual, and Comparative Foundations</td>
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<tr>
<td>ABSC 693</td>
<td>Practicum in Historical and Conceptual Foundations ¹</td>
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</table>

¹ Indicates practicum course. Admission to practicum courses for students completing a minor in ABS is subject to limitations on practicum openings.

Applied Behavioral Science Minor Hours & GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+)+ Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 GPA in all departmental courses in the Minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Master of Arts in Applied Behavioral Science

The Department of Applied Behavioral Science offers a curriculum through which students learn how to examine and address problems of social importance across the lifespan. Students receive training in the application of behavioral science to improve the human condition through prevention and intervention. The department’s master’s program in applied behavioral science satisfies coursework requirements for Board Certification in Behavior Analysis and, in most states, licensure as a behavior analyst.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A. Program

For admission in the fall semester, the deadline to submit applications and supporting materials is December 1st. Later applications receive consideration in the order of their receipt. Students may be admitted for the spring semester, but there is no filing deadline.

Eligibility criteria for admission to the M.A. program follow Graduate Studies’ admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission to graduate status in the program, a student must hold a bachelor’s degree.

For admission with full graduate standing, the department recommends that applicants complete 12 credit hours of undergraduate or graduate course work in behavior analysis, behavioral science, psychology, education, or related fields, and 6 hours in experimental methods, research design, or statistics.

Among the department’s application materials is a list of department faculty members. Please review the faculty members (http://absc.ku.edu/faculty/) and descriptions of their research, scholarly, and professional interests on the department’s website. Applicants should select any faculty members within the application whose research interests match their own. These faculty members review the applicant’s materials. An applicant is accepted when one of the faculty members consent to admit the student. This faculty member becomes the advisor of record.

A full list of the required application materials can be found on the Graduate Admission (http://absc.ku.edu/graduate-admission/) page of our departmental website (http://absc.ku.edu/). (http://absc.ku.edu/)

Non-native speakers of English must meet English proficiency requirements. (https://gradapply.ku.edu/english-requirements/)

Admission to the Online M.A. Program

For admission, the deadline to submit applications and supporting materials is December 17th for Spring admission and July 1st for Fall admission. Later applications receive consideration in the order of their receipt.

Eligibility criteria for admission to the M.A. program follow Graduate Studies’ admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission to graduate status in the program, a student must hold a bachelor’s degree.

For admission with full graduate standing, the department recommends that applicants complete 12 credit hours of undergraduate or graduate course work in behavior analysis, behavioral science, psychology, education, or related fields, and 6 hours in experimental methods, research design, or statistics.

Among the department’s application materials is a list of department faculty members. Please review the faculty members (http://absc.ku.edu/faculty/) and descriptions of their research, scholarly, and professional interests on the department’s website. Applicants should select any
The master’s program follows a junior-colleague model. Students work closely with their advisors and join them in many aspects of professional development. This includes designing and conducting research, preparing manuscripts for presentation and publication, presenting and publishing those manuscripts, and engaging in all facets of the responsible conduct of research. Students typically work with one advisor, but may work with other faculty members or have co-advisors. If a student’s or advisor’s interests change, students are free to change advisors.

The M.A. degree requires 30 credit hours: 18 hours in 6 content areas, 3 hours in a practicum, and research and elective courses. Students also must conduct, write up, and orally defend an empirically based thesis. The following 6 courses are required:

1. **Ethical, Legal, and Professional Issues (3)**. Instruction in ethical principles in the conduct of research (e.g., informed consent, data analysis), legal issues in professional conduct (e.g., plagiarism, copyright), and professional skills (e.g., journal reviewing, professional communication). ABSC 841

2. **Principles of Behavior I (3)**. The science of behavior (e.g., observation, experimentation), laboratory methods, basic behavioral principles (e.g., reinforcement, stimulus control), and their applications (e.g., early childhood, disabilities). ABSC 861

3. **Research Methods I (3)**. Strategies and tactics of scientific research (e.g., objectivity, empiricism), the logic of experimentation (e.g., validity, reliability), measurement and direct observation, and experimental designs for single-subject and time-series analyses. ABSC 735

4. **Conceptual Foundations I (3)**. The history and philosophy of behavioral science, contemporary advances in basic research for application, the analysis of everyday behavior (e.g., cognition, emotion), and current issues in the discipline and the profession (e.g., relations between basic and applied research). ABSC 800

5. **Applied Behavior Analysis I (3)**. The characteristics of applied behavioral research (assessment, analysis, intervention, evaluation), intervention research (clinical, community), applied procedures and programs, social validity, and ethical issues. ABSC 746

6. **Experimental Analysis of Behavior (3)** ABSC 799

7. **Research or Intervention Practicum (3)**. A supervised practicum course in either basic or applied research or behavioral interventions.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ABSC 870</td>
<td>Practicum I in Behavioral Psychology</td>
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<tr>
<td>ABSC 871</td>
<td>Practicum I in Behavior Analysis: _____</td>
<td>1-6</td>
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<tr>
<td>ABSC 872</td>
<td>Practicum I in: _____</td>
<td>1-6</td>
</tr>
<tr>
<td>ABSC 873</td>
<td>Practicum in Educational Psychological/ Rehabilitative Services: _____</td>
<td>3-6</td>
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<tr>
<td>ABSC 875</td>
<td>Practicum in Community Health Promotion</td>
<td>1-6</td>
</tr>
<tr>
<td>ABSC 876</td>
<td>Practicum in Community Development</td>
<td>1-6</td>
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</table>

This course work also satisfies 6 of the course requirements and the thesis requirement in the doctoral program.

Master’s students are required to present the results of their research at a department professional seminar meeting. The presentation is comparable to what would be presented at a professional conference. Students answer questions from their peers and the faculty in attendance.

The online master’s program follows a junior-colleague model. Students work closely with their advisors and join them in many aspects of professional development. This includes designing and conducting research, preparing manuscripts for presentation and publication, presenting and publishing those manuscripts, and engaging in all facets of the responsible conduct of research. Students typically work with one advisor, but may work with other faculty members or have co-advisors. If a student’s or advisor’s interests change, students are free to change advisors.

The online M.A. degree requires a minimum of 30 credit hours: 18 hours in 6 content areas (required courses), 3 hours in a practicum, and research and elective courses. Students also must conduct, write up, and orally defend an empirically based thesis. The following courses are required:

1. **ABSC 850** Principles of Behavior Analysis (3). The science of behavior (e.g., observation, experimentation), laboratory methods, basic behavioral principles (e.g., reinforcement, stimulus control), and their applications (e.g., early childhood, disabilities).

2. **ABSC 851** Ethical, Legal, and Professional Issues in Applied Behavioral Science (3). Instruction in ethical principles in the conduct of research (e.g., informed consent, data analysis), legal issues in professional conduct (e.g., plagiarism, copyright), and professional skills (e.g., journal reviewing, professional communication).

3. **ABSC 854** Experimental Analysis of Behavior (3). The basic principles of operant and respondent conditioning in the context of basic non-human and human subjects research.

4. **ABSC 770** Within Subjects Research Methodology and Direct Observation (3). Strategies and tactics of scientific research (e.g., objectivity, empiricism), the logic of experimentation (e.g., validity,
reliability), measurement and direct observation, and experimental designs for single-subject and time-series analyses.

5. ABSC 771 Introduction to Applied Behavioral Science (3). The characteristics of applied behavioral research (assessment, analysis, intervention, evaluation), intervention research (clinical, community), applied procedures and programs, social validity, and ethical issues.

6. ABSC 772 Conceptual Foundations of Behavior Analysis (3). The history and philosophy of behavioral science, contemporary advances in basic research for application, the analysis of everyday behavior (e.g., cognition, emotion), and current issues in the discipline and the profession (e.g., relations between basic and applied research).

7. ABSC 871 or ABSC 872 Research or Intervention Practicum (3).

A supervised practicum course in either basic or applied research or behavioral interventions.

Master’s students are required to present the results of their research at a department professional seminar meeting. The presentation is comparable to what would be presented at a professional conference. Students answer questions from their peers and the faculty in attendance.

Doctor of Philosophy in Behavioral Psychology

The Department of Applied Behavioral Science offers a curriculum through which students learn how to examine and address problems of social importance across the lifespan. Students receive training in the application of behavioral science to improve the human condition through prevention and intervention. The department’s doctoral program in behavioral psychology satisfies coursework requirements for Board Certification in Behavior Analysis and, in most states, licensure as a behavior analyst. It does not satisfy requirements for licensure in psychology.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Ph.D. Program

For admission in the fall semester, the deadline to submit applications and supporting materials is December 1st. Later applications receive consideration in the order of their receipt. Students may be admitted for the spring semester, but there is no filing deadline.

Eligibility criteria for admission to the Ph.D. program follow Graduate Studies’ admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission to graduate status in the program, a student must hold a bachelor’s degree.

For admission with full graduate standing, the department recommends that applicants complete 12 credit hours of undergraduate or graduate course work in behavior analysis, behavioral science, psychology, education, or related fields, and 6 hours in experimental methods, research design, or statistics.

Among the department’s application materials is a list of departmental faculty members. Students should review faculty members (http://absc.ku.edu/faculty/) on the department’s website and descriptions of their research, scholarly, and professional interests. Applicants should select any faculty members whose research interests match their own. These faculty members review the applicants’ materials. An applicant is accepted when one of the faculty members consent to admit the student. This faculty member becomes the advisor of record.

A full list of the required application materials can be found on the Graduate Admission (http://absc.ku.edu/graduate-admission/) page of our departmental website (http://absc.ku.edu/).

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Ph.D. in Behavioral Psychology Degree Requirements

The doctoral program trains highly competent researchers in applied behavioral science (e.g., applied behavior analysis, applied psychology). Students are taught to discover and produce, translate and apply, and communicate knowledge in the behavioral sciences for understanding and solving problems of individual and societal importance, both local and global. The curriculum requires a sequence of instruction that integrates courses in the basic principles of behavior, experimental methods and research design, and conceptual foundations, but emphasizes course work and training in applied and intervention research (e.g., assessment, analysis, intervention, evaluation). Its objective is to discover and advance empirically based solutions to problems of individual and societal importance, both local and global.

The doctoral program follows a junior-colleague model. Students work closely with their advisors and join them in every aspect of professional development. This includes designing and conducting research, preparing manuscripts for presentation and publication, presenting and publishing those manuscripts, preparing editorial reviews of manuscripts, and engaging in all facets of the responsible conduct of research. Students typically work with 1 advisor, but may work with other faculty members or have co-advisors. If a student’s or advisor’s interests change, students are free to change advisors.

Course Requirements

The doctoral degree program requires students to take 1 course in 10 areas, along with 2 practicum courses. The areas and the practicum courses are:

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<thead>
<tr>
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<tbody>
<tr>
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<td>Within Subjects Research Methodology and Direct Observation</td>
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<td>Introduction to Behavioral Science</td>
<td>3</td>
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<tr>
<td>ABSC 799</td>
<td>Experimental Analysis of Behavior</td>
<td>3</td>
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<tr>
<td>ABSC 800</td>
<td>Conceptual Foundations of Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 841</td>
<td>Ethical, Legal, and Professional Issues in Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 861</td>
<td>Principles of Behavior Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>
Conceptual Foundations II (Choose 1)
- ABSC 901 Analysis of Everyday Human Behavior
- ABSC 981 History of Behavior Analysis
- ABSC 931 The Analysis of Verbal Behavior
- ABSC 862 Behavioral Community Approaches to Addressing Social Issues
- ABSC 870 Research Methods II (Choose 1)
- ABSC 710 Community Health and Development
- ABSC 805 Functional Behavioral Assessment

Applied Behavior Analysis II (Choose 1)
- ABSC 788 Designing Early Education Environments
- ABSC 786 Applied Behavior Analysis in Complex Organizations
- ABSC 890 Seminar in: ________
- ABSC 961 Advanced Seminar in Applied Behavior Analysis: ________

Experimental Analysis of Behavior II (Choose 1)
- ABSC 936 Quantitative Analysis of Behavior
- PRVM 800 Principles of Epidemiology
- BIOS 704 Principles of Statistics in Public Health
- BIOS 714 Fundamentals of Biostatistics I

Also required is Research or Intervention Practicum I and II (6). 2 supervised practicum courses in (a) basic or applied research or (b) behavioral interventions.

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</thead>
<tbody>
<tr>
<td>ABSC 972</td>
<td>Practicum II in: ________</td>
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</table>

Electives
Any course that provides students the opportunity to develop competence in specialized areas of behavioral investigation. Students should consult their advisors for elective options.

Master’s Thesis
Students complete an empirically based master’s thesis and pass an oral examination on it. With their advisor’s approval, empirically based theses from other programs may meet this requirement.

Research Skill
The Office of Graduate Studies requires students to have training in responsible scholarship and research skills pertinent to the field of research. This will be met by:

- Satisfactory completion of either ABSC 735 OR ABSC 770
- Satisfactory completion of either ABSC 841 OR ABSC 851

One of the following:

- At least one submission of a first-author manuscript for publication in a peer-reviewed journal, OR
- At least two scholarly presentations at regional, state, or national professional meetings.
  - The work for these must have been entirely completed at KU
  - No more than one may be a poster
  - At least one must have been presented by the time of the comprehensive examination; if the other has not yet been presented by the time of the comprehensive examination, it must be accepted for presentation at an upcoming meeting
  - At least one must list the student as either first or presenting author

Teaching Requirement
Graduate students receive training in the teaching and supervision of undergraduates. The requirement may be met in 1 of 2 ways. In the first, students serve as a paid half-time teaching assistant for 1 semester or as a quarter-time assistant for 2 semesters, assuming proportionate responsibility for class organization, lecturing, grading, and office hours under a faculty member’s supervision. In the second, students take LA&S 792 or ABSC 941, attend 3 brown bag lectures at the Center for Teaching Excellence, and present a guest lecture to the department. In both cases, students must also write a statement of teaching philosophy and obtain numeric evaluations of their teaching in their guest lectures.

Pro-seminar I Requirement
Graduate students are expected to attend pro-seminar sessions when they are scheduled throughout the Fall and Spring semesters. These are usually scheduled for Friday afternoons at 3:30. Pro-seminars are typically presentations given by graduate students (see next paragraph), faculty members, and visiting scholars.

As part of your master’s degree requirements, you are required to present the results of your research (basic, applied, or conceptual) at a weekly pro-seminar meeting. The presentation must be comparable to that which would be given at a professional conference (not a panel discussion). You should be ready to field questions from your peers and the faculty in attendance.

Professional Seminar II Requirement
Doctoral students are required to present the results of their research at a department professional seminar meeting. The presentation is comparable to what would be presented at a professional conference. Students answer questions from their peers and the faculty in attendance.

Editorial Critiques
Students write 3 editorial reviews of published or unpublished journal articles, all of them empirical. The articles cover a range of topics and experimental designs. The first 2 are graded pass-fail by the student’s advisor; the third must be passed by 2 other faculty members.

Comprehensive Examination
Students must complete the comprehensive examination by the end of the third year if entering the PhD program with a completed Master’s obtained at another university, or within a year of defending their Master’s in the
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Applicants to the program must have either a Master's degree (or higher) or be currently enrolled in a masters or doctoral program at KU or another 4 year institution.

To be eligible to take the Behavior Analyst Certification Board exam, students must have supervised experience working with client populations. It is strongly recommended that incoming students who have not already completed supervised experience as part of their master's degree requirements do so while completing the Certificate coursework. However, this supervised experience is not part of the Certificate curriculum.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). A full list of the required application materials can be found on the certificate page (https://edwardscampus.ku.edu/ma-applied-behavioral-science/certificate/) of our website. Applications may be submitted through Graduate Admissions (https://gradapply.ku.edu/apply/).

Certificate students must complete the following courses for a total of 24 graduate credit hours:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ABSC 770</td>
<td>Within Subjects Research Methodology and Direct Observation</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 771</td>
<td>Introduction to Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 772</td>
<td>Conceptual Foundations of Behavior Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 773</td>
<td>Applied Behavior Analysis in Complex Organizations</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 850</td>
<td>Principles of Behavior Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 851</td>
<td>Ethical, Legal, and Professional Issues in Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 852</td>
<td>Behavior Analysis in Developmental Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 853</td>
<td>Behavioral Assessment</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 24

Graduate Certificate in Community Health and Development

The Department of Applied Behavioral Science offers a graduate certificate in community health and development through which students learn how to examine and address problems of social importance in communities. Students receive training in the application of behavioral
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Application materials and admission requirements can be found on the Graduate Certificate in Community Health and Development (https://absc.ku.edu/ma-cert-chd/) page of our departmental website (http://absc.ku.edu/).

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Applications may be submitted through Graduate Admissions. (https://gradapply.ku.edu/apply/)

Certificate Program in Community Health and Development

The Department of Applied Behavioral Science has established a 1-year certificate program in Community Health and Development. The program offers advanced training and university-based certification in building healthy communities. The focus is on training in core aspects of community work: community assessment, strategic planning, intervention, evaluation, and sustainability. Students admitted to the certificate program must be either regular KU graduate students or admitted as certificate-only students.

Students will enroll in 3 3-credit hour courses for a total of 9 credit hours.

ABSC 710 Community Health and Development
ABSC 875 Practicum in Community Health Promotion
ABSC 876 Practicum in Community Development

Dual Degree: Ph.D. in Behavioral Psychology and Master of Public Health

The department offers a dual Ph.D./M.P.H. degree in collaboration with the Master of Public Health (p. 2104) program in the Department of Preventive Medicine and Public Health at KU Medical Center. The degree incorporates efficiencies in the elective and research requirements of both departments. This is the first degree in the nation to combine an M.P.H. with the strengths of advanced study in applied behavioral science.

Faculty and student research teams address issues in community health and development, child and youth health and development, disabilities and independent living, and healthy aging. Separate admission is required to both the Ph.D. program of the Department of Applied Behavioral Science (https://absc.ku.edu/) and M.P.H. program of the Department of Preventive Medicine and Public Health (http://ph.kumc.edu/).

Admission to the Dual Degree: Ph.D. in Behavioral Psychology and Master of Public Health

For admission in the fall semester, the deadline to submit applications and supporting materials to the Ph.D. program is December 1st. Later applications receive consideration in the order of their receipt. Students may be admitted for the spring semester, but there is no filing deadline.

Note: Although students may be applying for the Ph.D. track, students must also submit a separate application for the MPH. Each program (the MPH and Ph.D.) will review the corresponding application separately and will notify students of their admission decision individually. It is possible to be accepted into one program without acceptance in the other.

Eligibility criteria for admission to the Ph.D./M.P.H. program follow Graduate Studies’ admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission to graduate status in the program, a student must hold a bachelor’s degree.

For admission to the Ph.D. program with full graduate standing, the department recommends that applicants complete 12 credit hours of undergraduate or graduate course work in behavior analysis, behavioral science, psychology, education, or related fields, and 6 hours in experimental methods, research design, or statistics.

Among the department’s application materials is a list of department faculty members. Please review faculty members (http://absc.ku.edu/faculty/) on the department's website and the descriptions of their research, scholarly, and professional interests. Applicants should select any faculty members whose research interests in an area of public health match their own. These faculty members review the applicant’s materials. An applicant is accepted when one of the faculty members consents to admit the student. This faculty member becomes the advisor of record.

A full list of the required application materials can be found on the Graduate Admission (http://absc.ku.edu/graduate-admission/) page of our departmental website (http://absc.ku.edu/).

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Dual Ph.D. M.P.H. Degree

Department of Applied Behavioral Science and Department of Preventive Medicine
Offered by the Department of Applied Behavioral Science (Lawrence) and the Department of Preventive Medicine and Public Health (KU Medical Center, Kansas City and Wichita). This dual program is the first in the nation to combine the strengths of advanced study in applied behavioral science with a Master of Public Health (M.P.H.) degree. It results from a unique collaboration between two units: the Department of Applied Behavioral Science, offering a Ph.D. in Behavioral Psychology; and the Department of Preventive Medicine and Public Health, with its M.P.H. program.

Course Requirements Checklist for Dual MPH/Ph.D. Program:

Please note, listed below are the minimum course requirements for the dual degree. Those obtaining a Ph.D. degree in the Applied Behavioral Science program complete M.A. coursework and degree requirements. It is possible to enter the Ph.D. with an M.A. from another university. If that is the case, students will work with the program to waive M.A. equivalent coursework and the M.A. Thesis requirement at the departmental level.

Students in the dual MPH/PhD program are required to complete a total of 42 credit hours before earning their MPH. Some courses have been approved to fulfill requirements in both the MPH and PhD programs.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>PRVM 818</td>
<td>Social and Behavioral Aspects of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 827</td>
<td>Public Health Administration</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 830</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 891</td>
<td>Public Health Internship</td>
<td>1-3</td>
</tr>
<tr>
<td>PRVM 893</td>
<td>Public Health Capstone</td>
<td>1-3</td>
</tr>
<tr>
<td>PRVM 875</td>
<td>Management of Public Health Data</td>
<td>3</td>
</tr>
<tr>
<td>or BIOS 715</td>
<td>Introduction to Data Management using RedCap and SAS</td>
<td>3</td>
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<tr>
<td>PRVM Elective Course</td>
<td></td>
<td>3</td>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PRVM Elective Course</td>
<td></td>
<td>3</td>
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</table>

Coursework Required for the MPH

Coursework satisfying both MPH and Ph.D. Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ABSC 710</td>
<td>Community Health and Development (Research Methods II)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 735</td>
<td>Within Subjects Research Methodology and Direct Observation</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 861</td>
<td>Principles of Behavior Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 704</td>
<td>Principles of Statistics in Public Health (EAB II Course Option)</td>
<td>3</td>
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<tr>
<td>or BIOS 714</td>
<td>Fundamentals of Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology (EAB II Course Option)</td>
<td>3</td>
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Coursework Required for Ph.D.

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ABSC 746</td>
<td>Introduction to Behavioral Science (ABA I)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 799</td>
<td>Experimental Analysis of Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 800</td>
<td>Conceptual Foundations of Applied Behavioral Science (Conceptual Foundations I)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 841</td>
<td>Ethical, Legal, and Professional Issues in Applied Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 875</td>
<td>Practicum in Community Health Promotion (After completion of ABSC 710)</td>
<td>1-6</td>
</tr>
<tr>
<td>ABSC 876</td>
<td>Practicum in Community Development (After ABSC 710)</td>
<td>1-6</td>
</tr>
</tbody>
</table>

Coursework Required for Ph.D.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ABSC 899</td>
<td>Master's Thesis in Applied Behavioral Science</td>
<td>1-9</td>
</tr>
<tr>
<td>ABSC 807</td>
<td>Design and Evaluation of Community Health Promotion Methods</td>
<td>1-6</td>
</tr>
<tr>
<td>ABSC 862</td>
<td>Behavioral Community Approaches to Addressing Social Issues (Conceptual Foundations II)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 961</td>
<td>Advanced Seminar in Applied Behavior Analysis: _____ (ABA II)</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 999</td>
<td>Doctoral Dissertation in Behavioral Psychology</td>
<td>1-9</td>
</tr>
</tbody>
</table>

Research and/or Intervention Practicum

Master’s Thesis

Students complete an empirically based master’s thesis and pass an oral examination on it. With their advisor’s approval, empirically based theses from other programs may meet this requirement.

Research Skill

The Office of Graduate Studies requires students to have training in responsible scholarship and research skills pertinent to the field of research. This will be met by:

- Satisfactory completion of either ABSC 735 OR ABSC 770
- Satisfactory completion of either ABSC 841 OR ABSC 851

One of the following:

- At least one submission of a first-author manuscript for publication in a peer-reviewed journal, OR
- At least two scholarly presentations at regional, state, or national professional meetings.
  - The work for these must have been entirely completed at KU
  - No more than one may be a poster
  - At least one must have been presented by the time of the comprehensive examination; if the other has not yet been presented by the time of the comprehensive examination, it must be accepted for presentation at an upcoming meeting
  - At least one must list the student as either first or presenting author

Teaching Requirement

Graduate students receive training in the teaching and supervision of undergraduates. The requirement may be met in 1 of 2 ways. In the first, students serve as a paid half-time teaching assistant for 1 semester or as a quarter-time assistant for 2 semesters, assuming proportionate responsibility for class organization, lecturing, grading, and office hours under a faculty member’s supervision. In the second, students take LA&S 792 or ABSC 941, attend 3 brown bag lectures at the Center for Teaching Excellence, and present a guest lecture to the department. In both cases, students must also write a statement of teaching philosophy and obtain numeric evaluations of their teaching in their guest lectures.

Pro-seminar I Requirement

Graduate students are expected to attend pro-seminar sessions when they are scheduled throughout the Fall and Spring semesters. These are usually scheduled for Friday afternoons at 3:30. Pro-seminars are typically presentations given by graduate students (see next paragraph), faculty members, and visiting scholars.
As part of your master's degree requirements, you are required to present the results of your research (basic, applied, or conceptual) at a weekly pro-seminar meeting. The presentation must be comparable to that which would be given at a professional conference (not a panel discussion). You should be ready to field questions from your peers and the faculty in attendance.

**Professional Seminar II Requirement**

Doctoral students are required to present the results of their research at a department professional seminar meeting. The presentation is comparable to what would be presented at a professional conference. Students answer questions from their peers and the faculty in attendance.

**Editorial Critiques**

Students write 3 editorial reviews of published or unpublished journal articles, all of them empirical. The articles cover a range of topics and experimental designs. The first 2 are graded pass-fail by the student's advisor; the third must be passed by 2 other faculty members.

**Comprehensive Examination**

Students must complete the comprehensive examination by the end of the third year if entering the PhD program with a completed Master's obtained at another university, or within a year of defending their Master's in the Applied Behavioral Science MA program at KU. The examination has 2 components:

1. **Program of Study Written Document.** Students will generate a program of study document, developed in concert with their mentor, that includes:
   - A list of all graduate lecture/discussion courses completed in behavioral science and how the coursework fulfills ABAI accreditation standards
   - Up to 10 representative readings from each completed graduate lecture/discussion course
   - Research interest statement (2-3 pages)
   - Career plans statement (2-3 pages)
   - Up-to-date CV

In preparation for the oral examination, students provide their program of study document to the comprehensive examination committee. The examination committee will have the right to request additions/modifications to the reading list. The student will have a minimum of 2 weeks to prepare for the oral examination upon finalization of the program of study with the examination committee.

2. **Oral Examination.** The program of study will be used by the comprehensive examination committee to generate relevant and individualized questions to ask during the oral examinations. Questions will span all coursework and student-indicated research domains (those of personal interest to the student and relevant to their career trajectory). These questions will be posed during the oral examination. The oral examination will last two hours and is not open to the public. The defense is successful if a majority of the committee members vote to pass it.

**Dissertation Proposal**

In preparation for the dissertation, students will complete a departmental required written dissertation proposal and an oral discussion of the proposal. The proposal will include a) a thorough literature review and b) a research proposal. Students should follow specific instructions for these components as dictated in the student handbook. The dissertation proposal discussion will entail a one hour meeting with the dissertation committee and will be open to the public.

**Dissertation**

In consultation with their advisors, students conduct an empirically based dissertation, typically based on the comprehensive examination proposal, and pass an oral examination on it. The defense is successful if a majority of the committee members vote to pass it. The dissertation defense will be open to the public.

**Biology Undergraduate Program**

The Department of Ecology & Evolutionary Biology (https://eeb.ku.edu/), the Department of Molecular Biosciences (http://molecularbiosciences.ku.edu/), and the Undergraduate Biology Program (http://kuub.ku.edu/) work together to offer the following undergraduate majors and degrees.

**Biochemistry—B.A. & B.S.**

Biochemistry is the study of life at the level of individual molecules. Biochemistry lies at the intersection of cell biology, physiology, organic chemistry, and physical chemistry. The B.A. Biochemistry major includes one year of biochemistry, as well as upper-division courses in cellular mechanisms and biological physical chemistry. The B.S. Biochemistry major includes two semesters of calculus, one year of biochemistry, analytical chemistry, biological physical chemistry, and upper-division courses in cellular mechanisms and related elective courses.

**Biology—B.A.**

Biology is the study of living systems and is the broadest biological sciences major available at KU. The B.A. Biology degree provides students with much flexibility in their major course choices and can include ecology, microbiology, organismal physiology, and biochemistry.

**Ecology, Evolution, and Organismal Biology—B.A. & B.S.**

This set of majors focuses on the integration of biological systems at the whole organism level, and on how living organisms exist in populations, species, and communities within their environment. Core classes such as genetics, physiology, ecology, and evolutionary biology are combined with courses such as biochemistry, statistics, systematics, and organismal diversity to provide a strong foundation in biology. Students choose electives from a diverse set of classes that allow them to focus on areas of interest.

**Human Biology—B.A.**

This interdisciplinary major permits students to understand humans from a variety of academic viewpoints: anthropology, applied behavioral science, biology, psychology, and speech-language-hearing. Each human biology concentration offers major-level courses in topical categories that allow students to focus on areas that interest them most while retaining the interdisciplinary manner of the major. The broad nature of this major can prepare students for a variety of post-undergraduate opportunities.

**Microbiology—B.A. & B.S.**

Microbiology is the study of bacteria, viruses, the immune system, and their roles in human health, the environment and beyond. Job prospects
for microbiologists with a bachelor's or higher degree continue to be strong. Upper-division courses in immunology, bacterial infectious diseases, virology, and microbial genetics couple laboratory courses with lecture courses to provide students with hands-on practical experience. The B.A. Microbiology major includes a choice of three upper-division lecture and laboratory course pairs, while the B.S. Microbiology major includes all four of the upper-division lecture and laboratory course pairs.

**Molecular, Cellular, and Developmental Biology—B.A. & B.S.**

This set of majors emphasizes study of the fundamental systems of living organisms and leads to an integrated program of study in the biomedical sciences. Core classes in genetics, cell and developmental biology, and neurobiology are combined with critically important classes in subjects such as organic chemistry, evolutionary biology, and statistics. Additionally, students can choose from a diverse set of elective courses. The molecular, cellular, and developmental biology major provides education and training in a range of scientific areas vital to understanding human health and disease.

**Undergraduate Majors and Degrees**

The Department of Ecology & Evolutionary Biology, the Department of Molecular Biosciences, and the Undergraduate Biology Program offer the following undergraduate majors and degrees.

- B.A. and B.S. in biochemistry,
- B.A. in biology,
- B.A. and B.S. in ecology, evolution, and organismal biology,
- B.A. in human biology (concentrations in anthropology, applied behavioral science, biology, psychology, and speech-language-hearing science),
- B.A. and B.S. in microbiology,
- B.A. and B.S. in molecular, cellular, and developmental biology, and
- B.S. in molecular biosciences (KU Edwards Campus).

**Advising and Career Counseling**

Undergraduate majors are encouraged to consult their academic advisor as soon as possible for academic advising and career advising (http://kuub.ku.edu/advising/). Faculty advisors are also available to discuss career planning.

**Courses for Nonmajors**

BIOL 100 Principles of Biology, BIOL 116 Introduction to Evolutionary Biology, and BIOL 120 Insects in Your World offer undergraduate nonmajors an introduction to biology and biological facts or concepts. A laboratory, BIOL 102, supplements BIOL 100. Honors section (BIOL 101) is offered for students with superior academic records. Except when specifically listed in the major requirements, these courses do not count toward a biology major.

**Double Majors**

Students may earn degrees in more than one major within biological sciences, or in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

**Undergraduate Research Opportunities**

The Undergraduate Biology Program encourages independent study and participation in faculty research programs. Consult an advisor or the UBP website (http://www.kuub.ku.edu/) to find a faculty sponsor for research or independent study. After receiving permission, the student may enroll in that faculty member’s section of BIOL 424 Independent Study for the number of hours specified by the faculty member. Depending upon the specific major, three to five independent study hours can be applied to elective requirements in the major. Independent study is required for graduation with departmental honors. By special arrangement with a faculty member, students may earn independent study credit by participating in research programs offered by other units (e.g., faculty members in the School of Medicine).

**Student Organizations**

Biology clubs (http://www.kuub.ku.edu/) allow students to interact with faculty and students while expanding their interest in biology. The biology majors advisory committee—part of the KU biology club—advises the UBP director on all undergraduate issues and provides a forum for concerns and suggestions.

**Biology Courses by Topics**

For a list of biology courses by topics, see Courses (http://kuub.ku.edu/courses/).

**Related Biology Courses**

A biological course from departments outside the Undergraduate Biology Program may count toward a B.A. degree (up to 4 hours of credit). Check with a biology faculty advisor to determine whether nonbiology courses are acceptable to satisfy biology degree requirements.

**Ecology and Evolutionary Biology**

The Department of Ecology and Evolutionary Biology (http://www2.ku.edu/~eeb/) offers M.A. and Ph.D. degrees in ecology and evolution biology, botany, and entomology.

**Molecular Biosciences**

The Department of Molecular Biosciences (http://www.molecularbiosciences.ku.edu/) offers Ph.D. degrees in biochemistry and biophysics; microbiology; and molecular, cellular, and developmental biology.

The B.S. degree in molecular biosciences is offered on the KU Edwards Campus (http://edwardscampus.ku.edu/).

**Courses**

**BIOL 100. Principles of Biology. 3 Credits. NB N**

Intended for non-science majors. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended.

**BIOL 101. Principles of Biology, Honors. 3 Credits. NB N**

Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 is recommended. BIOL 101 and
BIOL 102. Principles of Biology Laboratory. 1 Credits. U LFE
Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). Prerequisite: Concurrent enrollment in BIOL 100 is recommended.

BIOL 105. Biology Orientation Seminar. 1 Credits. N
Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis.

BIOL 116. Introduction to Evolutionary Biology. 3 Credits. N LFE
An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism).

BIOL 120. Insects in Your World. 3 Credits. NB N
Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology, behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week.

BIOL 150. Principles of Molecular and Cellular Biology. 3 Credits. NB N LFE
A course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture per week. An honors section (BIOL 151) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or consent of instructor.

BIOL 151. Principles of Molecular and Cellular Biology, Honors. 3 Credits. NB N LFE
A course for students with superior academic records who are biology majors or who plan to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture per week. Prerequisite: Membership in the University Honors Program and concurrent or prior enrollment in CHEM 130, CHEM 190 and CHEM 191, CHEM 150, or CHEM 170; or consent of instructor.

BIOL 152. Principles of Organismal Biology. 3 Credits. NB N LFE
A course for biology majors and students who plan to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture per week. An honors section (BIOL 153) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170; or consent of instructor.

BIOL 153. Principles of Organismal Biology, Honors. 3 Credits. NB N LFE
A course for students with superior academic records who are biology majors or planning to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture per week. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170 and membership in the University Honors Program; or consent of instructor.

BIOL 154. Introductory Biology Lab for STEM Majors. 2 Credits. N LFE
A hybrid laboratory course for majors in STEM fields. This hybrid laboratory course will use online modules (~ 2 hours per week) to introduce students to key core competencies (e.g., critical thinking, quantitative reasoning, scientific communication, collaboration, etc.) that are applicable to all STEM fields. Two hours of face-to-face laboratory instruction will provide students hands-on opportunities to apply these core competencies and skills to research questions in the biological sciences. Students will apply research skills and engage in an authentic research activity during the second half of the course and will present the results to their peers in oral and written formats.

BIOL 155. Principle Lab in: ______. 1-3 Credits. U LFE
This introductory laboratory exposes the students to basic principles in biology and modern experimental techniques through an open-ended authentic research experience directed by a faculty member. Prerequisite: Consent of instructor.

BIOL 177. First Year Seminar: ______. 3 Credits. NB
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in biology. Does not contribute to major requirements in biology. First-year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

BIOL 200. Basic Microbiology. 3 Credits. NB N
Introduction to bacteria and viruses. Topics include historical development of microbiology, bacterial structure and growth, enzymes and energy production, disinfection, antibacterial drugs, gene transfer, viral replication, infection and immunity, with emphasis on infectious diseases. Can be substituted for BIOL 201 as a prerequisite for other microbiology courses by consent of department. Not open to those with credit in BIOL 400, or BIOL 401. Prerequisite: A course in high school biology and a course in high school chemistry. This course is not recommended for first semester freshmen.

BIOL 203. Introductory Microbiology Laboratory. 2 Credits. U LFE
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200. May be taken concurrently.

BIOL 210. Introduction to Clinical Laboratory Sciences. 1 Credits. U
An introductory overview of the professions of Clinical Laboratory Sciences including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in the Clinical Laboratory Sciences to have a clear definition of the professions. (Same as CLS 210.)

BIOL 225. Evolution and the History of Life. 3 Credits. N
This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms.
that can be extracted from the study of the fossil record. It also uses the
lessons of the fossil record to consider the prospects for our own species.

BIOL 240. Fundamentals of Human Anatomy. 3 Credits. N
Introduction to the gross anatomy of the human body. Covers the spatial
arrangement and appearance of structures throughout the body, including
visual identification of these structures. Musculoskeletal relationships, and
the anatomy of major organ systems, are emphasized. Not intended for
biology majors. Prerequisite: BIOL 100, or equivalent.

BIOL 241. Human Anatomy Observation Laboratory. 2 Credits. U LFE
One of the two laboratories in gross anatomy designed to complement
BIOL 240. Emphasizes the three-dimensional appearance and spatial
relationships of anatomical structures through supervised observations of
pre-dissected human cadavers. Limited to students enrolled in, or seeking
admission to, programs that require a human anatomy observation
laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is
required.

BIOL 246. Principles of Human Physiology. 3 Credits. N
An introduction to the physiological and biochemical processes and
general physiological principles necessary to sustain life. Organ and
organ system processes are emphasized. Intended for students majoring
in allied health or sports related curricula who require a course in human
physiology. Not intended for biology majors. Prerequisite: BIOL 100 or
equivalent.

BIOL 247. Principles of Human Physiology Laboratory. 2 Credits. U LFE
Designed to complement BIOL 246. Uses experiments and simulations to
demonstrate laboratory techniques and representative processes in areas
of human physiology. Concurrent or prior enrollment in BIOL 246 required.

BIOL 350. Principles of Genetics. 4 Credits. N
Why are related individuals more similar than unrelated individuals and
what is the basis for heritable traits? From Mendel's discoveries of the
patterns of genetic inheritance, to the study of transmissible hereditary
factors, genetics is central to understanding the biological sciences.
Topics include molecular genetics and genetic engineering; Mendelian
genetics and mapping; control of gene expression; cytogenetics;
epigenetics and non-Mendelian genetics; and population and quantitative
genetics. Examples are taken from a wide variety of organisms, including
viruses, bacteria, plants, fungi, insects, and humans. Not open to students
with credit in BSCI 350. Prerequisite: CHEM 135 or CHEM 175 or
CHEM 195 and CHEM 196, with a grade of C- or higher and BIOL 150 or
BIOL 151 with a grade of C- or higher and BIOL 152 or BIOL 153 with a
grade of C- or higher; or consent of instructor.

BIOL 350. Principles of Genetics, Honors. 4 Credits. N
The science of genetics aims to explain why individuals differ from
one another and how these differences are inherited. Honors Genetics
covers all core topics in fundamental genetics: Mendelian inheritance,
meiosis and recombination, mutation, molecular genetics, population
genetics, quantitative genetics and genomics. Special attention given to
the practice of genetics and the complex relationship between genotype,
phenotype and environment. A broader goal of Honors Genetics is to
provide students a framework for understanding recent advances in
medical genetics and the modern era of personal genomics. Not open to
students with credit in BSCI 350. Prerequisite: CHEM 135 or CHEM 175 or
CHEM 195 and CHEM 196, with a grade of C- or higher and BIOL 150 or
BIOL 151 with a grade of C- or higher and BIOL 152 or BIOL 153 with a
grade of C- or higher and membership in the University Honors Program;
or consent of the instructor.

BIOL 400. Fundamentals of Microbiology. 3 Credits. NB N
Fundamental principles of microbiology with emphasis on physical and
chemical properties of the bacterial cell; microbial metabolism, cultivation,
growth and death of bacteria; microbial genetics, pathogenesis and
immunity, industrially important microorganisms. Not open to students
with credit in BSCI 400. Prerequisite: BIOL 150 or BIOL 151 with a grade
of C- or higher and two semesters of college chemistry with a grade of C-
or higher, or consent of the instructor.

BIOL 401. Fundamentals of Microbiology, Honors. 4 Credits. N
Honors section of BIOL 400 and BIOL 612, by application and invitation.
Not open to students with credit in BSCI 400. Prerequisite: BIOL 150 or
BIOL 151, two semesters of college chemistry, and membership in the
University Honors Program, or consent of the instructor.

BIOL 402. Fundamentals of Microbiology Laboratory. 2 Credits. U LFE
Laboratory exercises designed to complement BIOL 400 or BIOL 700.
Not open to students with credit in BSCI 401. Prerequisite: BIOL 400 or
BIOL 612, or BIOL 400 or BIOL 612 concurrently.

BIOL 405. Laboratory in Genetics. 3 Credits. U LFE
A laboratory course that provides hands-on experience with classical
genetics and modern molecular genetics. Experiments involve Mendelian
.genetics (dominance/recessivity, complementation, segregation,
independent assortment) in eukaryotic organisms; recombinant DNA;
basic bacterial genetics; polymerase chain reaction; DNA sequencing;
computational genetics; and genome editing. Not open to students
with credit in BSCI 351. Prerequisite: Concurrent or prior enrollment in
BIOL 350.

BIOL 412. Evolutionary Biology. 4 Credits. N
Introduction to the patterns and processes of organic evolution.
Considered are the history of evolutionary thought, molecular evolution,
genetics and microevolution, selection and adaptation, and speciation
and macroevolution. Emphasis will be placed on how scientists study and
document change over time in natural populations, methods for testing
hypotheses about events in evolutionary history, and how discovering
 evolutionary mechanisms at one level of organization can help to
explicate general processes in the natural world. Prerequisite: BIOL 152
and BIOL 350, or consent of the instructor.

BIOL 413. History and Diversity of Organisms. 3 Credits. N LFE
An integrated lecture and laboratory course presenting an overview
of the variety and ancestry of life on earth. Using representatives from
prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic
reconstruction are illustrated and evolutionary trends in the life history
features, functional morphology, and structural complexity of extant and
extinct organisms are presented. Two hours of lecture and three hours of
laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of
the instructor.

BIOL 414. Principles of Ecology. 3 Credits. N
Study of the principles underlying species population density changes,
community structure and dynamics, biogeochemical cycles, and
energy flow and nutrient cycling in ecosystems. (Same as EVRN 414.)
Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

BIOL 415. Field and Laboratory Methods in Ecology. 2 Credits. N
This course complements BIOL 414 with field trips and laboratory
exercises that illustrate the basic concepts of ecology. Topics covered
include methodologies for quantitative sampling of terrestrial and aquatic
systems, design of field studies, computer simulation and digital data
analysis techniques, and scientific writing. Prerequisite: Concurrent or
prior enrollment in BIOL 414. A statistics course is recommended.

BIOL 416. Cell Structure and Function. 3 Credits. N
Lecture survey of molecular cell biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Not open to students with credit in BSCI 416. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; and CHEM 135, or CHEM 175, or CHEM 195 and CHEM 196; or consent of the instructor.

BIOL 417. Biology of Development. 3 Credits. N
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating development, including classic embryology and modern molecular genetics. Not open to students with credit in BSCI 417. Prerequisite: BIOL 350 or BIOL 360 and BIOL 416 or consent of the instructor.

BIOL 418. Laboratory in: ____. 1-3 Credits. U LFE
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption. Each section may have additional prerequisites to be determined by instructor.

BIOL 419. Topics in: ____. 1-3 Credits. N LFE
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs.

BIOL 420. Seminar: ____. 1-3 Credits. N
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor.

BIOL 423. Non-laboratory Independent Study. 1-9 Credits. N
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor.

BIOL 424. Independent Study. 1-9 Credits. N
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor.

BIOL 425. Teaching Apprenticeship in Biology. 1-9 Credits. N
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of instructor and Director of Undergraduate Biology.

BIOL 426. Laboratory in Cell Biology. 3 Credits. U LFE
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; concurrent or prior enrollment in BIOL 416 or BIOL 536; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended.

BIOL 428. Introduction to Systematics. 3 Credits. N
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systematics background.

BIOL 430. Laboratory in Molecular Biology. 3 Credits. U LFE
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or microbiology.

BIOL 435. Introduction to Neurobiology. 3 Credits. N
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Not open to students with credit in BSCI 435. Prerequisite: BIOL 350 or BIOL 360 and BIOL 416 or consent of the instructor.

BIOL 442. Human Anatomy Dissection Laboratory. 3 Credits. U
Laboratory in gross anatomy designed to build on content from BIOL 240 and BIOL 241. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial dissecting experience. Students perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy laboratory. Prerequisite: BIOL 240 and BIOL 241, and consent of the instructor.

BIOL 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N LFE
This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

BIOL 451. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 451 and GEOG 451.)

BIOL 454. Brain Diseases and Neurological Disorders. 3 Credits. N
Major brain diseases and neurological disorders such as stroke, Alzheimer’s Disease, Parkinson’s Disease, Huntington’s Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., are discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Prerequisite: BIOL 416 or BIOL 435 or BIOL 546, or consent of instructor.

BIOL 477. Ecology and Global Change. 3 Credits. N
Humans influence both natural and managed ecosystems. This course studies the effects of climate change, land-use change, and reductions in biodiversity on ecosystems. Emphasis is placed on how biological and physical processes may be perturbed by human influences. Topics include the greenhouse effect, species extinctions, human disease expansion, and the effects of global change on agricultural productivity. A combination of lectures and discussion address issues from a scientific basis and link these ecological issues to our everyday lives and society as a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission of instructor.

BIOL 480. Medical Parasitology. 3 Credits. N
Introductory lecture course focused on parasites (protozoans and metazoans) causing disease in humans, including zoonotic diseases (diseases or infections that are naturally transmissible to humans from non-human vertebrates). Provides basic knowledge about the morphology, epidemiology, evolution, and ecology of parasites infecting humans globally (e.g., malaria, amoebas, hookworms, tapeworms). Emphasis is placed on life-cycles, course of infection, modes of reproduction, diagnosis, and pathology of human parasites; relevant parasites of veterinary importance are also discussed. Prerequisite: BIOL 152 or BIOL 153, or permission of instructor.

BIOL 481. Medical Parasitology Laboratory. 1 Credits. U LFE
Laboratory course in the study of parasites causing disease in humans, including zoonotic diseases (diseases or infections that are naturally transmissible to humans from non-human vertebrates), emphasizing their morphology and identification. One three-hour laboratory each week. Prerequisite: Concurrent or prior enrollment in BIOL 480.

BIOL 490. Internship and Practical Applications. 1-6 Credits. N
This course provides credit for supervised practical experiences in an occupational area of interest. In addition to the work-related activity, students will be expected to complete reading and writing assignments, participate in on-line discussions, and create a final summary of internship accomplishments. Hours of credit earned (1-6) are based on number of hours at internship site and agreement of instructor. Repeatable for up to 6 credit hours, provided the internship experiences are different. Prerequisite: Consent of Instructor.

BIOL 499. Introduction to Honors Research. 2 Credits. N
Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursuing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor.

BIOL 500. Biology of Insects. 3 Credits. N
Lectures and demonstrations providing an introduction to the study of insects, including general classification, structure, phylogeny, identification, development, physiology, behavior, ecology, and relations to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

BIOL 501. Physiological Adaptations of Plants to Extreme Environments. 3 Credits. N
Exploration of physiological adaptations of plants to bright sunlight & deep shade, drought & flooding, excess heat & subfreezing, excess elements and too few elements. Examples of adaptations include: red leaves, blue leaves, succulence, root "knees", moving leaves, frozen leaves, heavy metal plants, carnivorous plants, parasitic plants, epiphytes. Prerequisite: BIOL 150 or BIOL 152 or consent of instructor.

BIOL 502. Laboratory in Insect Biology and Diversity. 2 Credits. U LFE
Laboratory and field studies of insects, emphasizing their diversity, classification, ecological relationships, morphology, and behavior. Course provides practical application of principles covered in BIOL 500. Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent.

BIOL 503. Immunology. 3 Credits. N
Lectures on the nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; ontogeny and cellular basis of immune responsiveness, hypersensitivity; specific immunologic tolerance. Not open to students with credit in BSCI 503. Prerequisite: BIOL 400 or BIOL 401, or consent of instructor.

BIOL 504. Immunology Laboratory. 2 Credits. U LFE
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or BIOL 503 concurrently.

BIOL 506. Bacterial Infectious Diseases. 3 Credits. N
Explores bacterial infectious diseases from the perspective of how disease is established and the mechanisms that underlie disease, as well as how to treat and prevent infectious disease. Not open to freshmen or sophomores. Not open to students with credit in BSCI 506. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.

BIOL 507. Bacterial Infectious Diseases Laboratory. 2 Credits. U LFE
Laboratory to complement BIOL 506. Cultivation of pathogenic microorganisms, diagnostic procedures, and experiments to demonstrate various aspects of microbial pathogenicity and host responses. Prerequisite: BIOL 402 and BIOL 506 (or concurrent enrollment) or consent of instructor.

BIOL 509. Biology of Spiders. 3 Credits. N
An introduction to the evolution, anatomy, physiology, behavior, and ecology of spiders and other arachnids. Special topics include the action of spider venoms; the composition and uses of silk; courtship and mating; predation; social behavior; and the role of spiders in natural and agricultural ecosystems. Concurrent enrollment in BIOL 511 is encouraged. Prerequisite: BIOL 152, BIOL 153 or permission of instructor.

BIOL 511. Biology of Spiders Laboratory. 1 Credits. U LFE
Topics will include comparative biology of arachnid orders (spiders, scorpions, harvestmen, mites, and others), external and internal anatomy of spiders, identification of common spider families and genera, and spider behavior. Students will be required to make a small collection (collect, preserve, and identify specimens). Prerequisite: BIOL 509; concurrent enrollment is preferred.

BIOL 512. General Virology. 3 Credits. N
Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host cell-viral interactions; mode of replication of DNA and RNA viruses, tumor viruses. Not open to students with credit in BSCI 512. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.
BIOL 513. Virology Laboratory. 2 Credits. U LFE
Experiments involving cultivation, quantitation, and identification of animal viruses, continuous cell culture and primary chicken embryo culture techniques. Molecular biology techniques are used to demonstrate the steps in virus replication. The value of viruses as tools to understand normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor.

BIOL 518. Microbial Genetics. 3 Credits. N
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher or consent of instructor.

BIOL 519. Microbial Genetics Laboratory. 2 Credits. U LFE
A laboratory course on the genetic analysis of bacteria. Includes mutagenesis, cloning, agarose and polyacrylamide gel electrophoresis, PCR, regulation of gene expression, and computational analysis of DNA sequences and protein structures. Prerequisite: BIOL 350 or BIOL 360.

BIOL 520. Marine Biology. 3 Credits. N
This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor.

BIOL 524. Mammalian Paleontology. 3 Credits.
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as GEOL 524.) Prerequisite: One of the following: BIOL 225, BIOL 412, BIOL 413, GEOL 304, GEOL 521, or consent of the instructor.

BIOL 527. Primate Evolution and the Fossil Record. 3 Credits. N
This course exposes students to fundamental concepts of paleontology and evolutionary biology using the mammalian order Primates as a high-profile case study. Primates are interesting partly because humans are primates. Hence, scientific understanding of human origins and human evolution must be grounded in knowledge of our nearest relatives. This course places human origins within the broader framework of how primates have evolved over the course of the Cenozoic Era, often in response to radical changes in the Earth's physical environment. Prerequisite: BIOL 412 or BIOL 413, or consent of the instructor.

BIOL 530. Biodiversity Discovery and Assessment. 2 Credits. N
An integrated lecture and laboratory course designed to provide an overview of modern methods in biodiversity exploration and discovery. Lectures cover the theory and practice of planning fieldwork in remote locations, documenting species and their natural history, how museum collections are made, calculating and comparing species richness estimates, and the process of describing and naming new species. The laboratory component provides students experience in documenting species and their natural history, processing and curating samples of natural history specimens, and the statistical analysis of biodiversity data. (Same as EVRN 530.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

BIOL 531. Tropical Fieldwork in Biodiversity Discovery. 1 Credits. U
An introduction to modern field methods of assessing biodiversity. Fieldwork employs insects and various field methods to estimate and compare species diversity between different habitats and field sites. Taught at different sites in tropical South America over Spring Break.

BIOL 533. Biology of Fungi. 4 Credits. N LFE
A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153.

BIOL 536. Cell Structure and Function (Honors). 3 Credits. N
This course is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors program or by permission of instructor. Not open to students with credit in BSCI 416. Prerequisite: BIOL 350 or BIOL 360 or consent of instructor.

BIOL 540. General Invertebrate Zoology. 4 Credits. N LFE
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153.

BIOL 541. Biology of Freshwater Invertebrates. 3 Credits. N
A lecture and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in rivers, lakes, and wetlands. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 152 or BIOL 153; recommended BIOL 414 and/or BIOL 540.

BIOL 544. Comparative Animal Physiology. 3 Credits. N
An intermediate physiology course with lectures and discussions of the structures, functions, mechanisms, and interactions of vertebrate and invertebrate organ systems with a focus on the different ways in which animals adapt to their environments. Topics include digestion and nutrition, metabolism, gas exchange, circulation, excretion, neurophysiology, endocrinology, and muscle physiology. Prerequisite: BIOL 152 or BIOL 153, and CHEM 330, or consent of instructor. A college physics course is recommended but not required.

BIOL 545. Evolution of Development. 4 Credits. N
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent.

BIOL 546. Mammalian Physiology. 3 Credits. N
An intermediate course in the structures, functions, mechanisms, and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Not open to students with credit in BSCI 546. Prerequisite: BIOL 150; BIOL 152 or BIOL 240; and CHEM 330 or consent of instructor.

BIOL 547. Mammalian Physiology Laboratory. 2 Credits. U LFE
Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 546. Not open to students with credit in BIOL 247. Prerequisite: Corequisite: BIOL 546 or BIOL 646.

BIOL 548. Human Osteology. 4 Credits. N LFE
This course examines the structure and function of the human skeleton from an evolutionary and biomedical perspective. Students will learn to identify bones comprising the human skeleton and how osteological information aids in reconstructing sex, age, race, stature, and health status. Major transformations of the human skeleton from hominoid precursors, and some of the biomedical consequences of these transformations, will be addressed. (Same as ANTH 648.) Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor.

BIOL 555. General Plant Physiology. 3 Credits. N
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: Consent of instructor.

BIOL 560. Histology. 3 Credits. N
Study of detailed microscopic anatomy of cells, tissues, and organs of mammals. Examples are drawn from normal and abnormal tissue, histochemistry, and electron microscopy. Lecture and demonstrations. A course in anatomy and physiology is highly recommended. Prerequisite: BIOL 152 or BIOL 153.

BIOL 570. Introduction to Biostatistics. 4 Credits. N LFE
Statistical concepts related to biological problems. Topics include the scientific method, data representation, descriptive statistics, elementary probability distributions, estimation and hypothesis testing, emphasizing the analysis of variation. Prerequisite: College algebra and ten hours of natural science.

BIOL 582. Principles of Biogeography. 3 Credits. N
An introduction to the study of the distribution of life on earth. Covers geographic patterns of species diversity and the processes that give rise to those patterns: speciation, extinction, dispersal, vicariance, continental drift, ecological interactions, and phylogeny. Topics are presented within the framework of evolutionary history and include discussion of the biology of species on islands, terrestrial biomes, altitudinal zonation of species, latitudinal species gradients, historical factors governing species distributions, macroevolutionary trends in the fossil record, and application of modern molecular techniques for testing biogeographical hypotheses. Prerequisite: BIOL 152 or 153 and past or concurrent enrollment in BIOL 412, 413, 414, or 550; or permission of Instructor.

BIOL 583. Herpetology. 3 Credits. N
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origin, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry.

BIOL 592. Ichthyology. 4 Credits. N LFE
A study of fishes. Lecture topics include the structure and adaptations of fishes to the aquatic environment and a survey of major fish groups with emphasis on their evolution and biogeography. Laboratory topics include a survey of fish diversity using specimens and the use of keys to identify fishes, with emphasis on the Kansas fish fauna. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 152 and/or BIOL 413.

BIOL 593. Ornithology. 3 Credits. N LFE
A lecture and laboratory course on the biology, evolution, and diversity of birds. Prerequisite: BIOL 412 (or BIOL 413), or permission of instructor.

BIOL 594. Forest Ecosystems. 3 Credits.
Students learn basic concepts of forest productivity, forest water relations, forest hydrology, nutrient cycling, through soils and vegetation, nutrient uptake, carbon cycling, decomposition, linkages to aquatic ecosystems, and agents of disturbance to these cycles. The class spends a significant part of the semester exploring forest soil profiles and the challenges they present to different forest ecosystems. We discuss the function of forested ecosystems in a global context and identify and understand smaller-scale processes that drive forest function. Prerequisite: CHEM 135, or CHEM 175, or CHEM 195 and CHEM 196; and BIOL 414.

BIOL 595. Human Genetics. 3 Credits. N
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: BIOL 350 or BIOL 360.

BIOL 598. Research Methods. 3 Credits. N LFE
An introduction to the foundational concepts that underpin scientific inquiry and problem solving. Coursework is built around three student-designed inquiries, and topics considered within that context include experimental variables, basic principles of statistics, safety and ethics of investigation, professional communication techniques, and appropriate literature review. Enrollment priority will be given to students currently admitted to the UKanTeach program.

BIOL 599. Senior Seminar: ______. 1 Credits. N
A synthesis and discussion of current trends in a discipline or disciplines related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline’s state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences.

BIOL 600. Introductory Biochemistry, Lectures. 3 Credits. N
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Not open to students with credit in BSCI 600. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry.

BIOL 601. Principles of Biochemistry Laboratory. 2 Credits.
Theory and methods in the development of protein separation and purification, enzyme structure/function, and enzyme kinetics derived from primary literature searches and readings. Prerequisite: Corequisite: BIOL 600; or consent of instructor.

BIOL 602. Plant Ecology. 3 Credits. N
Introduction to basic concepts, focused at community and species level. Architectural ecomorphology of plants and their physiological responses to physical factors: solar radiation, climate, and soils. Plant succession as an interaction among species differing in ecomorphology and life style. Classification and ordination of plant communities: practice and theory. Other topics include: species diversity and lognormal distribution as to abundance classes; species/area relations and theory of island biogeography; allelelochemic defenses; genealogy; paleoecology. Prerequisite: BIOL 414 or consent of instructor.

BIOL 603. Systematic Botany. 3 Credits. N LFE
A lecture/laboratory course providing hands-on experience with plant identification, a history of plant classification, the principles of nomenclature and character analysis, the basics of systematics theory,
and a phylogenically-oriented introduction to vascular plant diversity. Prerequisite: BIOL 413 or equivalent.

**BIOL 612. Fundamentals of Microbiology. 3 Credits.** NB N
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BIOL 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Not open to students with credit in BSCI 612. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor.

**BIOL 616. Medical Entomology. 3 Credits.** N
A study of the major human diseases transmitted by arthropods with emphasis on the biology and ecology of vectors, vector feeding mechanisms as related to disease transmission, epidemiology of arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor.

**BIOL 622. Paleontology. 3 Credits.** N
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as GEOL 521.) Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304.

**BIOL 623. Paleontology Laboratory. 1 Credits. U LFE**
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.)

**BIOL 625. Behavioral Ecology and Sociobiology. 3 Credits.** N
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 152, either BIOL 350, BIOL 412 or BIOL 414 recommended; or consent of instructor.

**BIOL 630. Conservation and Wildlife Biology. 3 Credits.** N
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended.

**BIOL 636. Biochemistry I. 4 Credits.** N
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor.

**BIOL 637. Introductory Biochemistry Laboratory. 2 Credits. U LFE**
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment.

**BIOL 638. Biochemistry II. 4 Credits.** N
Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: CHEM 335 with a grade of C or higher and BIOL 636 with a grade of C or higher, or consent of instructor.

**BIOL 639. Advanced Biochemistry Laboratory. 3 Credits. U LFE**
The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and BIOL 638 (BIOL 638 may be taken concurrently).

**BIOL 640. The Biology and Evolution of Fossil Plants. 3 Credits.** N
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. Prerequisite: BIOL 413, or permission of instructor.

**BIOL 641. Laboratory in Paleobotany. 1 Credits. U LFE**
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. Prerequisite: BIOL 413 or permission of instructor.

**BIOL 642. Biochemistry III: Machines on Genes. 4 Credits.** N
This one-semester lecture course for biochemistry majors is designed to complement the topics covered in BIOL 636 and BIOL 638. Emphasis will be placed on the various molecular machines involved in the transmission and utilization of genetic information, providing a biochemical perspective of replication, transcription, and translation. Prerequisite: BIOL 636 and BIOL 638 with a grade of C or higher.

**BIOL 648. Systematics and Macroevolution. 3 Credits.** N
An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics. Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony. Maximum likelihood and Bayesian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent.

**BIOL 650. Advanced Neurobiology. 3 Credits.** N
The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor.

**BIOL 652. Comparative Animal Behavior. 3 Credits.** N
A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite.

**BIOL 654. Comparative Animal Behavior, Laboratory. 1 Credits. U LFE**
Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652.

BIOL 655. Behavioral Genetics. 3 Credits. N
A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor.

BIOL 660. Summer Field Ecology. 3 Credits. N
An introduction to research methods for environmental science. Similar to EVRN 460, formatted for summer term. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). Assignments and group work emphasize analysis and interpretation of field data. (Same as EVRN 660.) Prerequisite: Junior, Senior, or graduate standing, completion of the natural sciences requirement of the KU Core (GE3N).

BIOL 661. Ecology of Rivers and Lakes. 3 Credits. N
Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended.

BIOL 667. Chemical Communication in Sex, Feeding, and Fighting. 3 Credits. N
The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor.

BIOL 668. Evolutionary Ecology. 3 Credits. N
Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor.

BIOL 672. Gene Expression. 3 Credits. N
The molecular biology of gene expression in eukaryotes: A study of the structure of genes and the molecular mechanisms used by cells to control and regulate gene expression. Emphasis on enzymatic mechanisms related to transcription, translation, post-transcriptional and post-translational modifications, and epigenetics. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in BIOL 772. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor. A course in biochemistry is recommended.

BIOL 680. Genomics. 3 Credits. N
Genomics is the study of the structure, function and evolution of the genome. High-throughput technologies have given us the ability to easily and quickly sequence genomes, and measure genomewide patterns of gene expression. These tools, and the vast amounts of genome-scale data they provide, have transformed biology and medicine. This course will cover the key technological and computational methods by which genomic DNA is sequenced, genomes are assembled, and how RNA and epigenetic patterns are measured. Subsequently, we will emphasize how these genomics tools and techniques have deepened our understanding of biology, covering questions from diverse fields to illustrate the impact of genomics on evolutionary biology, molecular and developmental genetics, human medical genetics and personalized, precision medicine. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor.

BIOL 688. The Molecular Biology of Cancer. 3 Credits. N
The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, tumor viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536; or consent of instructor.

BIOL 699. Biology Honors Research Colloquium. 1 Credits. U
Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor.

BIOL 700. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

BIOL 701. Topics in: ______. 1-3 Credits.
Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests.

BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Credits.
An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences.

BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Credits.
An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 702, algebra and two semesters of either physics or chemistry.

BIOL 706. Natural Sciences Curation and Collections Management. 3 Credits.
This course explores collections in the KU Museum of Natural History through the eyes of their curators and collection managers. It addresses aspects of collecting, cataloging, preserving, storing, managing, and digitally archiving different types of natural science collections. The course format consists of lectures, readings, workshops, and guided tours of the museum's paleontological, biological (flora and fauna) and archaeological division collections, as well as the Spencer Museum of Art's ethnographic collections. Student projects will involve one of the museum's collections with the opportunity for hands-on experience. (Same as MUSE 710.)
BIOL 712. Evolutionary Biology - Graduate. 3 Credits.
A thorough survey of evolutionary biology. Topics include: the history of evolutionary thought, genetics and the nature of variation, adaptation, speciation, coevolution, macroevolution, the comparative method, and the history of life. Prerequisite: BIOL 350 or equivalent or consent of instructor.

BIOL 714. Graduate Ecology. 3 Credits.
A thorough survey of the discipline of ecology. Topics include elements in physiological, population, community and ecosystem ecology. Overarching themes are 1) pattern and process, 2) ecology and evolution, 3) hierarchical nature of ecology, 4) variation in space and time, and 5) human dimensions of ecology. Prerequisite: Graduate standing or consent of instructor.

BIOL 720. Scientific Illustration. 3 Credits.
Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor.

BIOL 735. Scientific Communication. 3 Credits.
Principles of English communication skills for the professional scientist. The course begins by exploring the role of narrative in all forms of scientific communication; it then applies the use of narrative tools to scientific writing, message honing and speaking. The course covers written and verbal communication of primary research. Students must have an independent research project on which to focus their communication assignments. (Same as EVRN 735.)

BIOL 741. Biology of Freshwater Invertebrates. 3 Credits.
A lecture and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in rivers, lakes, and wetlands. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Graduate students will be expected to submit either an original collection of freshwater invertebrates or write a research essay on a topic mutually agreed upon with the professor. Not open to students who have taken BIOL 541. Prerequisite: Graduate standing; recommended: undergraduate invertebrate biology class.

BIOL 743. Population Genetics. 3 Credits.
Description and discussion of genetic variation in natural populations. The effects and interaction of selection, migration, mutation, mating systems, and finite population size on the maintenance of genetic variation. Discussion of the interface with evolution and population ecology. Prerequisite: BIOL 350 and BIOL 412 or equivalent.

BIOL 750. Advanced Biochemistry. 3 Credits.
The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: BIOL 807 and BIOL 808, a general biochemistry course, or permission of instructor.

BIOL 752. Cell Biology. 3 Credits.
A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: BIOL 807 and BIOL 808, or BIOL 416 or BIOL 536, or permission of instructor.

BIOL 754. Brain Diseases and Neurological Disorders. 3 Credits.
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor.

BIOL 755. Mechanisms of Development. 3 Credits.
Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: BIOL 807 and BIOL 808 for graduate students; BIOL 417 or equivalent for undergraduate students; or permission of instructor.

BIOL 757. Carcinogenesis and Cancer Biology. 3 Credits.
This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in cancer and to design experiments which study cancer biology. Toward that end, the student should (at the conclusion of the course) be able to: define cancer, identify and discuss its causes; identify and discuss the genetic basis for cancer development and progression; discuss the theoretical basis for cancer therapy design and efficacy testing; discuss the biochemical, molecular and cellular events involved in the natural history of major human neoplasms. Prerequisite: Permission of instructor.

BIOL 759. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 751 and GEOG 759.)

BIOL 772. Gene Expression. 4 Credits.
The molecular biology of gene expression in eukaryotes: A study of the structure of genes and the molecular mechanisms used by cells to control and regulate gene expression. Emphasis on enzymatic mechanisms related to transcription, translation, post-transcriptional and post-translational modifications, and epigenetics. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in BIOL 672. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor. A course in biochemistry is recommended.

BIOL 782. Principles of Biogeography. 3 Credits.
A synthesis of historical and ecological biogeography of plants and animals, treating vicariance, dispersal, and community patterns; lectures, readings, discussions. A course in systematics and a course in ecology are recommended.

BIOL 784. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

BIOL 785. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 786. Fundamentals of Tropical Biology. 1-8 Credits.**

The tropical environment and biota; ecologic relations, communities and evolution in the tropics. Primarily a field course, taught in Costa Rica; two sessions per year, February-March, July-August.

**BIOL 787. Introduction to Museum Exhibits. 3 Credits.**

This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first-hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 794. Mammalogy. 3 Credits.**

A study of mammals, with emphasis on systematics, biogeography, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 100 or BIOL 413.

**BIOL 798. Introduction to Collections Management and Utilization. 3 Credits.**

This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

**BIOL 801. Topics in: _____ 1-3 Credits.**

Advanced courses on special topics in biology, given as need arises. Lectures, discussing readings, laboratory or field work. Students may select sections according to their special interests.

**BIOL 805. Scientific Integrity in Ecology and Evolutionary Biology. 1 Credits.**

This course covers the responsible conduct of research to help students initiate research projects ethically. Topics covered include expectations of federal granting agencies and the university, best practices for data management and publishing, and professional development as a graduate student. Prerequisite: Admission to the graduate program in Ecology and Evolutionary Biology, or consent of instructor.

**BIOL 807. Graduate Molecular Biosciences. 3 Credits.**

An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, kinetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic genetic mechanisms, cell structure and function, signal transduction, basic and pathogenic bacteriology, immunology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor.

**BIOL 809. Graduate Molecular Biosciences for Medicinal Chemists. 4 Credits.**

An introduction to the advanced study of biochemistry, microbiology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor.

**BIOL 811. Advanced Molecular and Cellular Immunology. 2 Credits.**

Covers recent advances in immunochemistry and immunobiology. Topics include structure and function of antibodies, hybridoma systems, idiotypes, induction and regulation of the immune response through cell interactions and cytokine action, and the role of immune activity in disease states such as hypersensitivity, autoreactivity, and cancer. Prerequisite: BIOL 807 and BIOL 808, or an introductory course in immunology, or consent of instructor.

**BIOL 812. Mechanisms of Host-Parasite Relationships. 2 Credits.**

Emphasis is on virulence factors of microorganisms and the host response to infection. Topics will include pathogenesis of intracellular and extracellular parasites, bacterial adhesins, and toxins, and the role of innate and acquired immunity in host resistance and the response to infection. Prerequisite: BIOL 807 and BIOL 808, or a course in biochemistry, or consent of instructor.

**BIOL 814. Advanced Molecular Virology. 2 Credits.**

The course concentrates on evaluation of current literature concerning all aspects of molecular biology, biochemical characterization, and pathogenic mechanisms involved in host-virus interactions. Students will be expected to present articles and participate in discussions. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics and a course in virology, or consent of instructor.

**BIOL 815. Advanced Molecular Genetics. 2 Credits.**

A literature-based course that covers recent advances in microbial molecular genetics. Topics include transcription, translation, mutagenesis and repair, genetic exchange mechanisms, and regulation of gene expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics, or consent of instructor.

**BIOL 816. Careers in the Biomedical Sciences. 1 Credits.**

Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor.

**BIOL 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.**

This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion. (Same as CHEM 817/MDCM 817/PHCH 817.) Prerequisite: Graduate student.

**BIOL 841. Biometry I. 5 Credits.**

The application of statistical methods to data from various fields of biological research. Special emphasis is placed on practical computational procedures. Prerequisite: College algebra.
BIOL 848. Phylogenetic Methods. 4 Credits.
A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods. Computer lab will familiarize students with software that implements the analyses discussed in lecture. Intended for graduate students specializing in systematics. Prerequisite: BIOL 845 and BIOL 841 or consent of instructor.

BIOL 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as CHEM 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor.

BIOL 895. Human Genetics. 3 Credits.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: A course in genetics.

BIOL 899. Master's Thesis. 1-10 Credits.
Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory progress/limited progress/no progress basis.

BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Credits.
Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission.

BIOL 905. Advanced Molecular Genetics. 1-3 Credits.
A review of current literature in molecular genetics.

BIOL 918. Modern Biochemical and Biophysical Methods. 4 Credits.
This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 817, or permission of instructor.

BIOL 925. Research Grant Proposal Preparation. 3 Credits.
This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor.

BIOL 943. Multivariate Data Analysis. 3 Credits.
Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: Knowledge of elementary matrix algebra.

BIOL 950. Evolutionary Mechanisms. 3 Credits.
Reading and discussions of evolutionary mechanisms from the genetic, ecologic, and systematic viewpoints. Prerequisite: BIOL 412.

BIOL 952. Introduction to Molecular Modeling. 3 Credits.
Introduction to theory and practice of contemporary molecular modeling, including molecular mechanics, molecular dynamics, computer graphics, data analysis, use of structure and sequence databases, docking, and homology modeling. Weekly computer laboratory section aimed at allowing participants to pursue independent research projects that incorporate modeling aspects. Lectures, laboratory manuals, program descriptions, and technical notes are presented on course web page. Prerequisite: Graduate standing or consent of instructor.

BIOL 985. Advanced Study. 1-10 Credits.
Individual investigations; laboratory, field or museum; or reading assignments in specialized topics not ordinarily treated in other courses. Graded on a satisfactory/unsatisfactory basis.

BIOL 999. Doctoral Dissertation. 1-12 Credits.
Original research that is to be incorporated into a Ph.D. dissertation. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts in Biochemistry

Biochemistry

Biochemistry is the study of life at the level of individual molecules. Biochemistry lies at the intersection of cell biology, physiology, organic chemistry, and physical chemistry. The B.A. Biochemistry major includes one year of biochemistry, as well as upper-division courses in cellular mechanisms and biological physical chemistry.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

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Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and
CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

Please note that students completing a B.A. in Biochemistry may not earn a minor in Chemistry.

Requirements for the B.A. Major in Biochemistry

In addition to degree and major requirements for all plans and subplans, all students must complete the KU Core.

Major Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Science Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>Majors must complete the following general science requirements that serve as foundational courses for this major.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Chemistry I. Satisfied by one of the following:</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td></td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors &amp; CHEM 191</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 191</td>
<td>and Foundations of Chemistry I Laboratory, Honors</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry I. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry I Laboratory. Satisfied by:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry II. Satisfied by:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td></td>
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<tr>
<td>Calculus. Satisfied by one of the following:</td>
<td>6-12</td>
<td></td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I &amp; MATH 116 and Calculus II</td>
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</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I &amp; MATH 126 and Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus I &amp; MATH 127 and Calculus II</td>
<td></td>
</tr>
<tr>
<td>Physics. Satisfied by one of the following options:</td>
<td>8-9</td>
<td></td>
</tr>
<tr>
<td>Option 1: General Physics I &amp; II</td>
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<td></td>
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<tr>
<td>PHSX 211</td>
<td>General Physics I &amp; PHSX 211 and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II &amp; PHSX 212 and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td>Option 2: College Physics I &amp; II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I &amp; PHSX 114 and College Physics II</td>
<td></td>
</tr>
<tr>
<td>Biochemistry Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Molecular &amp; Cellular Biology. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td></td>
</tr>
</tbody>
</table>

| BIOL 151 | Principles of Molecular and Cellular Biology, Honors                  |       |
| BIOL 152 | Principles of Organismal Biology                                      |       |
| BIOL 153 | Principles of Organismal Biology, Honors                             |       |
| Introductory Biology Lab for STEM Majors. Satisfied by: | 2     |
| BIOL 154 | Introductory Biology Lab for STEM Majors                             |       |
| Principles of Genetics. Satisfied by one of the following: | 4     |
| BIOL 350 | Principles of Genetics                                              |       |
| BIOL 360 | Principles of Genetics, Honors                                       |       |
| Cell Structure & Function. Satisfied by: |       |
| BIOL 416 | Cell Structure and Function                                          | 3     |
| Biochemistry I. Satisfied by: |       |
| BIOL 636 | Biochemistry I                                                       | 4     |
| Introductory Biochemistry Laboratory. Satisfied by: |       |
| BIOL 637 | Introductory Biochemistry Laboratory                                |       |
| Biochemistry II. Satisfied by: |       |
| BIOL 638 | Biochemistry II                                                      | 4     |
| Advanced Biochemistry Laboratory. Satisfied by: |       |
| BIOL 639 | Advanced Biochemistry Laboratory                                     | 3     |
| Biological Physical Chemistry. Satisfied by: |       |
| CHEM 510 | Biological Physical Chemistry                                       | 3     |

Biochemistry Electives

Satisfied by completing at least 6 hours of biology courses numbered 400 or higher. These courses must be selected in consultation with a biochemistry advisor. No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

<table>
<thead>
<tr>
<th>Major Hours</th>
<th>Major GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by 37 hours of major courses.</td>
<td></td>
</tr>
</tbody>
</table>

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

<table>
<thead>
<tr>
<th>Major Junior/Senior Hours</th>
<th>Major Junior/Senior Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.</td>
<td></td>
</tr>
</tbody>
</table>

Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the B.A. in Biochemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

Please note that students completing a B.A. in Biochemistry may not also earn a minor in Chemistry. Students may earn degrees in more than one major within biological sciences, or in a biological science and an area!
outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

### Bachelor of Arts in Biochemistry

<table>
<thead>
<tr>
<th>Freshman</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td>BIOL 150 or 152 (Goal 3 Science Requirement)³</td>
<td>3</td>
<td>BIOL 152 or 150 (Goal 3 Science Requirement)³</td>
</tr>
<tr>
<td>CHEM 170 or 130 (General Science Requirement, BA Quantitative Reasoning (QR))²</td>
<td>5</td>
<td>CHEM 175 or 135 (General Science Requirement)</td>
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<tr>
<td>BIOL 105 (General Science Requirement)</td>
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<td>MATH 115 (General Science Requirement)</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)¹</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<tr>
<td>BIOL 154</td>
<td>2</td>
<td>Goal 3 Social Science</td>
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<td><strong>Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
</tr>
<tr>
<td>MATH 116 (General Science Requirement)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
</tr>
<tr>
<td>CHEM 330 (General Science Requirement)</td>
<td>3</td>
<td>CHEM 335 (General Science Requirement)⁴</td>
</tr>
<tr>
<td>CHEM 331 (General Science Requirement)</td>
<td>2</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁸</td>
</tr>
<tr>
<td>BIOL 350 or 360 (Major Requirement)</td>
<td>4</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁸</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>Junior</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
</tr>
<tr>
<td>BIOL 636 (Major Requirement)³</td>
<td>4</td>
<td>BIOL 638 (Major Requirement)³</td>
</tr>
<tr>
<td>BIOL 637 (Major Requirement)³</td>
<td>2</td>
<td>BIOL 639 (Major Requirement; Goal 6 Integration &amp; Creativity)⁴</td>
</tr>
<tr>
<td>PHSX 114 (or PHSX 211 and PHSX 216 (Goal 1.1 Critical Thinking; General Science Requirement))</td>
<td>4</td>
<td>PHSX 115 (or PHSX 212 and PHSX 236 (General Science Requirement))</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity (300+ suggested)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td><strong>Total</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>BIOL Elective 400+ (Major Requirement)⁶</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14</td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

**Total Hours 120-122**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. CHEM 170/CHEM 130 and BIOL 150 require a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course.
3. Concurrent or prior enrollment in CHEM 170/CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.
4. CHEM 335 and BIOL 638 and BIOL 639 are offered only in spring; BIOL 636, and CHEM 510 are only in fall.
5. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence.
6. 6 hours of BIOL 400+ electives required. Consult a biochemistry advisor to select major electives.
7. Visit this website ([https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/](https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/)) for a list of courses that fulfill the BA Quantitative Reasoning Requirement.
8. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

**Departmental Honors**

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu/). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

Study Abroad
Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

Bachelor of Arts in Biology

Biology

Biology is the study of living systems and is the broadest biological sciences major available at KU. The B.A. Biology degree provides students with much flexibility in their major course choices and can include ecology, microbiology, organismal physiology, and biochemistry.

Undergraduate Admission

Admission to KU

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Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

Majors and Concentrations

Bachelor’s degree requirements in biology are modified as necessary. Current requirements are available in the UBP office and online (http://www.kuub.ku.edu/). Major programs are offered in biochemistry, biology, human biology, and microbiology. Students may choose to concentrate in a range of specialties in the biological sciences, such as botany, cellular biology, developmental biology, environmental biology, ecology, entomology, genetics, marine biology, molecular biology, neurobiology, paleontology, physiology, systematics, or zoology (invertebrate or vertebrate).

Requirements for the B.A. Major in Biology

Major Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar. Satisfied by:</td>
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</tr>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM 196</td>
<td>Foundations of Chemistry II Laboratory, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM 196</td>
<td>Foundations of Chemistry II Laboratory, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>4-6</td>
</tr>
<tr>
<td>&amp; MATH 116</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 145</td>
<td>Calculus I, Honors</td>
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</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>4-5</td>
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<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>General Physics I Laboratory</td>
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<tr>
<td>PHSX 212</td>
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<tr>
<td>&amp; PHSX 236</td>
<td>General Physics II Laboratory</td>
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Biology Core Requirements

Table

<table>
<thead>
<tr>
<th>Title</th>
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<tbody>
<tr>
<td>Biology Orientation Seminar</td>
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</tr>
<tr>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>Foundations of Chemistry II, Honors</td>
<td>5</td>
</tr>
<tr>
<td>Foundations of Chemistry II Laboratory,</td>
<td></td>
</tr>
<tr>
<td>Honors</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Calculus I</td>
<td>4-6</td>
</tr>
<tr>
<td>Calculus I, Honors</td>
<td></td>
</tr>
<tr>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>General Physics II Laboratory</td>
<td></td>
</tr>
</tbody>
</table>
Principles of Molecular & Cellular Biology. Satisfied by one of the following:
- BIOL 150 Principles of Molecular and Cellular Biology
- BIOL 151 Principles of Molecular and Cellular Biology, Honors

Principles of Organismal Biology. Satisfied by one of the following:
- BIOL 152 Principles of Organismal Biology
- BIOL 153 Principles of Organismal Biology, Honors

Introductory Biology Lab for STEM Majors. Satisfied by:
- BIOL 154 Introductory Biology Lab for STEM Majors

Principles of Genetics. Satisfied by one of the following:
- BIOL 350 Principles of Genetics
- BIOL 360 Principles of Genetics, Honors

Evolutionary Biology. Satisfied by:
- BIOL 412 Evolutionary Biology

Senior Seminar in Biology. Satisfied by:
- BIOL 599 Senior Seminar: ____ (Must be taken in senior year.)

Diversity of Organisms / Principles of Ecology / Introduction to Systematics. Satisfied by one of the following:
- BIOL 413 History and Diversity of Organisms
- BIOL 414 Principles of Ecology
- BIOL 428 Introduction to Systematics

Fundamentals / Development / Function. Satisfied by two of the following:
- BIOL 400 Fundamentals of Microbiology
- BIOL 416 Cell Structure and Function
- BIOL 417 Biology of Development
- BIOL 501 Physiological Adaptations of Plants to Extreme Environments
- BIOL 544 Comparative Animal Physiology
- BIOL 546 Mammalian Physiology
- BIOL 600 Introductory Biochemistry, Lectures

Electives and Laboratory Requirements

Satisfied by completing 10 hours of BIOL courses numbered 400 or higher which include at least 4 hours of laboratory credit. Courses listed above which have not been used to fulfill the above requirements may be used as electives. No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement with no more than 2 hours of BIOL 424 being applied towards the laboratory requirement.

Biology Electives
Satisfied by completing at least 6 hours of biology courses numbered 400 or higher.

Biology Laboratory Electives
Satisfied by completing at least 4 hours of biology lab courses numbered 400 or higher. No more than 2 hours of BIOL 424 may be applied towards the laboratory requirement.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 36 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BA in Biology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

Freshman

Fall | Hours | Spring | Hours
--- | --- | --- | ---
BIOL 150 or 152 (Goal 3 Natural Science, Major Requirement) | 3 | MATH 104 (General Science Requirement) | 3
CHEM 130 (General Science Requirement, BA Quantitative Reasoning (QR)) | 5 | CHEM 135 (General Science Requirement) | 5
BIOL 105 (General Science Requirement) | 3 | MATH 115 (General Science Requirement) | 3
ENGL 101 (Goal 2.1 Written Communication/BA Writing I) | 3 | ENGL 102 (Goal 2.1 Written Communication/BA Writing II) | 3
BIOL 154 (or Elective) | 2 | BIOL 154 (or Elective) | 2

14 | 16

Sophomore

Fall | Hours | Spring | Hours
--- | --- | --- | ---
1st Semester Language (BA Second Language) | 5 | 2nd Semester Language (BA Second Language) | 5
BIOL 350 or 360 (Major Requirement) | 4 | Goal 3 Arts and Humanities | 3
CHEM 330 (General Science Requirement) | 3 | BIOL 412 (Major Requirement) | 4
CHEM 331 (General Science Requirement) | 2 | Second Area of Study/Elective/Degree/Junior-Senior Hours | 3
MATH 116 (General Science Requirement) | 3

17 | 15
**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3-5</td>
<td>3rd Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
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<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
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<tr>
<td>PHSX 114 (or PHSX 211 &amp; 216 (Goal 1.1 Critical Thinking, General Science Requirement))</td>
<td>4-5</td>
<td>PHSX 115 (or PHSX 212 &amp; 236 (General Science Requirement))</td>
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<tr>
<td>BIOL Selective 400+ (Major Requirement)</td>
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<td>BIOL Selective 400+ (Major Requirement)</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tr>
<td>Goal 4.2 Global Awareness (300+ suggested)</td>
<td>3</td>
<td>Goal 4.1 US Diversity (300+ suggested)</td>
<td>3</td>
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<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>BIOL 599 (Major Requirement, Goal 6 Integration &amp; Creativity)</td>
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<tr>
<td>BIOL Selective 400+ (Major Requirement)</td>
<td>3</td>
<td>BIOL Elective 400+ (Major Requirement)</td>
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<td>BIOL Elective 400+ (Major Requirement)</td>
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<td>BIOL Lab Elective 400+ (Major Requirement)</td>
<td>2</td>
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<td>BIOL Lab Elective 400+ (Major Requirement)</td>
<td>2</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 120-123**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Requires a Math ACT Score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the math requirement.

3. Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.

4. BIOL 412 is offered only in the spring.

5. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335 and CHEM 336 sequence.

6. Biology major electives: choose from BIOL 413, BIOL 414, and BIOL 428 AND choose two from BIOL 400, BIOL 416, BIOL 417, BIOL 501, BIOL 544 or BIOL 546, and BIOL 600. BIOL 413, BIOL 414, and BIOL 544 are only offered in the fall. BIOL 428, BIOL 417, and BIOL 546 are only offered in the spring.

7. 10 credit hours of BIOL 400+ level courses, including at least 4 hours of lab credit. See the degree requirements page in the catalog for limits on using BIOL 423 and/or BIOL 424 for this requirement.

8. BIOL 599 is approved to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.

9. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

10. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

- BIOL 105: Biology Orientation Seminar (1 hour online course) is required for the major. It can be taken the summer prior to your freshman year.

Please note:

Students may earn degrees in more than one major within biological sciences, or in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Departmental Honors**

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.

2. Achieve a minimum grade-point average of 3.5 in the major.

3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.

4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.

5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.

6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu/). Candidates
must declare their intent to graduate with honors at least 2 semesters before graduation.

**Study Abroad**

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

**Bachelor of Arts in Ecology, Evolution, and Organismal Biology**

Ecology, Evolution, and Organismal Biology

The B.A. focuses on the integration of biological systems at the whole organism level, and on how living organisms exist in populations, species, and communities within their environment. Core classes such as genetics, physiology, ecology, and evolutionary biology are combined with courses such as statistics, systematics, and organismal diversity to provide a strong foundation in biology. Students choose electives from a diverse set of classes that allow them to focus on areas of interest.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**First- and Second-Year Preparation**

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

---

**General Science Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
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<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
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<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; MATH 116</td>
<td>and Calculus II</td>
<td>6</td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
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**Ecology, Evolution, and Organismal Biology Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors</td>
<td>2</td>
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<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>or BIOL 360</td>
<td>Principles of Genetics, Honors</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 412</td>
<td>Evolutionary Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 413</td>
<td>History and Diversity of Organisms</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 414</td>
<td>Principles of Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 428</td>
<td>Introduction to Systematics</td>
<td>3</td>
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<tr>
<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
<td>4</td>
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<tr>
<td>BIOL 599</td>
<td>Senior Seminar: _____</td>
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**Biology Elective and Laboratory Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL courses numbered 400 or higher, including greater than or equal to 4 hours of lab credit. No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied toward the elective requirement, with no more than 2 hours of BIOL 424 being applied toward the laboratory requirement.</td>
<td></td>
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</table>

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 36 hours of major courses

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 28 hours from junior/senior courses (300+) in the major.
### Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BA in Ecology, Evolution, and Organismal Biology. To view the list of courses approved for majors, see the online catalog (http://kucatalog.ku.edu) or visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to the freshman year, fall semester.

<table>
<thead>
<tr>
<th>Freshman</th>
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<th>Spring</th>
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<td>Fall</td>
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<tr>
<td>BIOL 150 or 152 (Goal 3 Natural Science, Major Requirement)²</td>
<td>3 BIOL 152 or 150 (Goal 3 Natural Science, Major Requirement)²</td>
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<tr>
<td>CHEM 130 (Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)¹</td>
<td>5 CHEM 135 (Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)</td>
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<tr>
<td>BIOL 105 (Major Requirement)⁷</td>
<td>1 MATH 115 (Goal 1.2 Quantitative Reasoning, General Science Requirement)¹</td>
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<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td>BIOL 154 (or Goal 2.2 Communication)</td>
<td>2-3 BIOL 154 (or Goal 2.2 Communication)</td>
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<td><strong>Total</strong></td>
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<td><strong>16-17</strong></td>
<td><strong>16-17</strong></td>
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<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 413 (Major Requirement)⁵</td>
<td>3 BIOL 350 or 360 (Major Requirement)</td>
<td>4</td>
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<tr>
<td>CHEM 330 (General Science Requirement)⁴</td>
<td>3 PHSX 114 or 211 and 216 (Goal 1.1 Critical Thinking, General Science Requirement)</td>
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<tr>
<td>CHEM 331 (General Science Requirement)⁴</td>
<td>2 Goal 3 Social Sciences</td>
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<td>MATH 116 (General Science Requirement)¹</td>
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<tr>
<td>Goal 3 Arts and Humanities</td>
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<tr>
<td><strong>Total</strong></td>
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<table>
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<tr>
<th>Junior</th>
<th>Hours</th>
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<tr>
<td>Fall</td>
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<td></td>
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<tr>
<td>BIOL 414 (Major Requirement)¹</td>
<td>3 BIOL 428 (Major Requirement)³</td>
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<tr>
<td>PHSX 115 or 212 and 236 (General Science Requirement)</td>
<td>4 BIOL 412 (Major Requirement)³</td>
<td>4</td>
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<tr>
<td>BIOL Elective 400+ (Major Requirement)⁶</td>
<td>2 BIOL Elective 400+ Lab (Major Requirement)⁶</td>
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<th>Hours</th>
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<tr>
<td>Fall</td>
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<td>BIOL 570 (Major Requirement)⁵</td>
<td>4 BIOL 599 (Goal 6 Integration &amp; Creativity; Major Requirement)</td>
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<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)</td>
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<tr>
<td>BIOL Elective 400+ Lab (Major Requirement)⁶</td>
<td>2 Second Area of Study/ Elective/Degree/Junior-Senior Hours¹⁰</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3 Goal 5 Social Responsibility and Ethics</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹⁰</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours¹⁰</td>
<td>3</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>13</strong></td>
<td><strong>13</strong></td>
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</tbody>
</table>

Total Hours 120-123

1. Requires MATH ACT scores of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 + MATH 116 to fulfill the math requirement.
2. Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.
3. BIOL 412 and BIOL 428 are offered only in the spring.
4. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence.
5. BIOL 413, BIOL 414, and BIOL 570 are offered only in the fall.
6. 6 credit hours of BIOL courses numbered 400 or higher, including greater than or equal to 4 hours of lab credit. No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied toward the elective requirement, with no more than 2 hours of BIOL 424 being applied toward the laboratory requirement.
7. BIOL 105 Biology Orientation Seminar (1 hour online course) is required for the major. It can be taken the summer prior to your freshman year.
8. BIOL 570 is recommended in sophomore year when possible.
9. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
10. Hour requirements (incl. 45 +/− hr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
Please note: Students may earn degrees in more than one major within biological sciences, or in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

**Departmental Honors**

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu/). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

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Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

**Bachelor of Arts in Human Biology**

**Human Biology**

This interdisciplinary major permits students to understand humans from a variety of academic viewpoints: anthropology, applied behavioral science, biology, psychology, and speech-language-hearing. Each human biology concentration offers major-level courses in topical categories that allow students to focus on areas that interest them most while retaining the interdisciplinary manner of the major. The broad nature of this major can prepare students for a variety of post-undergraduate opportunities.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

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**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**First- and Second-Year Preparation**

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

**Majors and Concentrations**

Bachelor’s degree requirements in biology are modified as necessary. Current requirements are available in the UBP office and online (http://www.kuub.ku.edu/). Major programs are offered in biochemistry, biology, human biology, and microbiology. Students may choose to concentrate in a range of specialties in the biological sciences, such as botany, cellular biology, developmental biology, environmental biology, ecology, entomology, genetics, marine biology, molecular biology, neurobiology, paleontology, physiology, systematics, or zoology (invertebrate or vertebrate).

**Requirements for the B.A. Major in Human Biology**

The curriculum builds from a broad background of general science courses and adds depth in a set of 5 specialized disciplines. Courses in the disciplines emphasize topics related to humans and provide a solid understanding of each field of knowledge.

For general requirements for the B.A. degree, see CLAS General Education Degree Requirements (p. 748) on the College of Liberal Arts and Sciences Degree Requirements page.

Students must choose 1 concentration from the 5 areas:

- Anthropology
- Applied behavioral science
- Biology
- Psychology
- Speech-language-hearing
# General Science Requirements

Majors must complete the following 33-hour minimum of general science requirements that serve as foundational courses for this major.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Introduction to Human Evolutionary Biology.</td>
<td>3-4</td>
</tr>
<tr>
<td>ANTH 304</td>
<td>Fundamentals of Biological Anthropology</td>
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</tr>
<tr>
<td>ANTH 309</td>
<td>Becoming Human</td>
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<tr>
<td>ANTH 340</td>
<td>Human Variation and Evolution</td>
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</tr>
<tr>
<td>BIOL 412</td>
<td>Evolutionary Biology</td>
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<table>
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<tr>
<th>Code</th>
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<th>Hours</th>
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<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
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</tr>
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<td></td>
<td>Principles of Molecular &amp; Cellular Biology.</td>
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<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
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<td>BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
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<td>Principles of Organismal Biology.</td>
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<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
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<td>BIOL 153</td>
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<table>
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<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors</td>
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<tr>
<td>&amp; MATH 116</td>
<td>and Calculus II</td>
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<tr>
<td>MATH 125</td>
<td>Calculus I</td>
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<td>MATH 145</td>
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<td>CHEM 130</td>
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<tr>
<td>CHEM 190&amp; CHEM 191</td>
<td>Foundations of Chemistry I Laboratory, Honors</td>
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<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
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<td>CHEM 195&amp; CHEM 196</td>
<td>Foundations of Chemistry II Laboratory, Honors</td>
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<td>PHSX 211&amp; PHSX 216</td>
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<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
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<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
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<td>MATH 365</td>
<td>Elementary Statistics</td>
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<tbody>
<tr>
<td></td>
<td>Anthrology Concentration</td>
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<tr>
<td></td>
<td>Majors must complete the following 31 hours.</td>
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<tr>
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<td>These additional science courses are included</td>
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</tr>
<tr>
<td></td>
<td>in the Human Biology-Anthropology major hours</td>
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<tr>
<td></td>
<td>and GPA calculations.</td>
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<td>CHEM 330</td>
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<td>Organic Chemistry I Laboratory</td>
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<tr>
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<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
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</tr>
<tr>
<td>BIOL 536</td>
<td>Cell Structure and Function (Honors)</td>
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<tr>
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<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
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</tr>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors</td>
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<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 599</td>
<td>Senior Seminar: _____ (Must be taken in senior year)</td>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Anthrology Concentration Categories</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by completing 2 of the following 4 categories (18-21 hours required):</td>
<td></td>
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</table>

| Category 1: Human Anatomy and Physiology  |       |
| BIOL 417| Biology of Development                          |       |
| CHEM 130| General Chemistry I                             |       |
| CHEM 190& CHEM 191| Foundations of Chemistry I Laboratory, Honors |       |

| Category 2: Human Population Biology     |       |
| BIOL 600| Introductory Biochemistry, Lectures             |       |
| BIOL 637| Introductory Biochemistry Laboratory           |       |
| BIOL 546| Mammalian Physiology                           |       |
| BIOL 547| Mammalian Physiology Laboratory                |       |

| Category 3: Human Adaptation and Evolution |       |
| BIOL 652| Population Dynamics                            |       |

| Category 4: Human Biology and Behavior   |       |
| BIOL 412| Evolutionary Biology                          |       |
| ANTH 359| Anthropology of Sex                           |       |
| BIOL 652| Comparative Animal Behavior                   |       |
Bachelor of Arts in Human Biology

BIOL 655  Behavioral Genetics
PSYC 370  Behavioral Neuroscience

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 31 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Applied Behavioral Science

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ABSC 410</td>
<td>Behavioral Approaches in Working with Adolescents</td>
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<tr>
<td>ABSC 437</td>
<td>Independent Living and People with Disabilities</td>
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<tr>
<td>Category 2: Development: Typical and Atypical</td>
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<tr>
<td>Child Behavior and Development. Satisfied by:</td>
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<tr>
<td>ABSC 632</td>
<td>Advanced Child Behavior and Development</td>
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<tr>
<td>Development: Typical and Atypical. Satisfied by completing 6 hours selected from the following:</td>
<td></td>
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<tr>
<td>ABSC 535</td>
<td>Developmental Psychopathology</td>
<td></td>
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<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td></td>
</tr>
<tr>
<td>BIOL 417</td>
<td>Biology of Development</td>
<td></td>
</tr>
<tr>
<td>Category 3: Biology of Behavior</td>
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<td></td>
</tr>
<tr>
<td>Satisfied by:</td>
<td></td>
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</tr>
<tr>
<td>BIOL 544</td>
<td>Comparative Animal Physiology</td>
<td></td>
</tr>
<tr>
<td>Biology of Behavior. Satisfied by completing 6 hours selected from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td></td>
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<tr>
<td>BIOL 435</td>
<td>Introduction to Neurobiology</td>
<td></td>
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<tr>
<td>BIOL 454</td>
<td>Brain Diseases and Neurological Disorders</td>
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<tr>
<td>BIOL 546</td>
<td>Mammalian Physiology</td>
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<tr>
<td>BIOL 547</td>
<td>Mammalian Physiology Laboratory</td>
<td></td>
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<tr>
<td>BIOL 655</td>
<td>Behavioral Genetics</td>
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<tr>
<td>PSYC 370</td>
<td>Behavioral Neuroscience</td>
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<tr>
<td>PSYC 380</td>
<td>Clinical Neuroscience</td>
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<tr>
<td>Category 4: Evolution, Culture, and Behavior</td>
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<td></td>
</tr>
<tr>
<td>Evolutionary Biology. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 412</td>
<td>Evolutionary Biology</td>
<td></td>
</tr>
<tr>
<td>Evolution, Culture, and Behavior. Satisfied by completing 6 hours selected from the following:</td>
<td></td>
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<tr>
<td>ANTH 341</td>
<td>Human Evolution</td>
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<tr>
<td>BIOL 428</td>
<td>Introduction to Systematics</td>
<td></td>
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<tr>
<td>BIOL 625</td>
<td>Behavioral Ecology and Sociobiology</td>
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<tr>
<td>BIOL 652</td>
<td>Comparative Animal Behavior</td>
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</table>

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 33 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
Biology

Code | Title | Hours
---|---|---

### Biology Concentration

Majors must complete the following 32 hours. These additional science courses are included in the Human Biology-Biology major hours and GPA calculations.

Organic Chemistry I. Satisfied by the following:
- **CHEM 330** Organic Chemistry I

Organic Chemistry I Laboratory. Satisfied by:
- **CHEM 331** Organic Chemistry I Laboratory

Physics II. Satisfied by one of the following:
- **PHSX 115** College Physics II
- **PHSX 212** General Physics II
- & **PHSX 236** and General Physics II Laboratory

Principles of Genetics. Satisfied by one of the following:
- **BIOL 350** Principles of Genetics
- **BIOL 360** Principles of Genetics, Honors

Senior Seminar in Human Biology. Satisfied by:
- **BIOL 599** Senior Seminar: _____ (Must be taken in senior year.)

Biology Laboratory Electives. Course selections from the following categories must include at least 3 hours of laboratory credit, 400 level or above.

### Biology Concentration Categories

Satisfied by completing 2 of the following 4 categories listed below. 18-20 (18-20 hours required) (Course selections must include at least 3 hours of laboratory credit, 400 level or above.)

Category 1: Development and Genetics

- **ABSC/PSYC 535** Developmental Psychopathology
- **BIOL 405** Laboratory in Genetics
- **BIOL 416** Cell Structure and Function
  - or **BIOL 536** Cell Structure and Function (Honors)
- **BIOL 595** Human Genetics
- **BIOL 655** Behavioral Genetics
- **BIOL 688** The Molecular Biology of Cancer
- **PSYC 333** Child Development
- **SPLH 566** Language Development

Anatomy and Physiology

- **Mammalian Physiology. Satisfied by:**
  - **BIOL 546** Mammalian Physiology
- **Anatomy & Physiology. Satisfied by completing 6 hours from the following:**
  - **BIOL 240** Fundamentals of Human Anatomy
  - **BIOL 241** Human Anatomy Observation Laboratory
  - **BIOL 416** Cell Structure and Function
  - **BIOL 435** Introduction to Neurobiology
  - **BIOL 600** Introductory Biochemistry, Lectures
  - **BIOL 637** Introductory Biochemistry Laboratory
  - **BIOL 547** Mammalian Physiology Laboratory
  - **PSYC 370** Behavioral Neuroscience
  - **PSYC 375** Cognitive Neuroscience
  - **PSYC 380** Clinical Neuroscience

Category 3: Evolution, Ecology, and Adaptation

- **Evolutionary Biology. Satisfied by:**
  - **BIOL 412** Evolutionary Biology
  - Evolution, Ecology, and Adaptation. Satisfied by completing 6 hours selected from the following:
    - **ANTH 340** Human Variation and Evolution
    - **ANTH 652** Population Dynamics
    - **BIOL 414** Principles of Ecology
    - **BIOL 668** Evolutionary Ecology

Category 4: Human Disease

- **Fundamentals of Microbiology. Satisfied by one of the following:**
  - **BIOL 400** Fundamentals of Microbiology
  - **BIOL 401** Fundamentals of Microbiology, Honors
- Human Disease. Satisfied by completing 6 hours selected from the following:
  - **BIOL 402** Fundamentals of Microbiology Laboratory
  - **BIOL 503** Immunology
  - **BIOL 504** Immunology Laboratory
  - **BIOL 506** Bacterial Infectious Diseases
  - **BIOL 507** Bacterial Infectious Diseases Laboratory
  - **BIOL 512** General Virology
  - **BIOL 513** Virology Laboratory
  - **BIOL 518** Bacterial Genetics
  - **BIOL 519** Bacterial Genetics Laboratory
  - **BIOL 595** Human Genetics
  - **BIOL 688** The Molecular Biology of Cancer

Total Hours | 32-34

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 32 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
# Psychology

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<td>Majors must complete the following 31 hours. These additional science courses are included in the Human Biology-Psychology major hours and GPA calculations.</td>
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<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors</td>
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<td>Research Methods. Satisfied by:</td>
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<td>PSYC 200</td>
<td>Research Methods in Psychology</td>
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<td>Category 1: Evolution, Adaptation and Health</td>
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<tr>
<td>PSYC 555</td>
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<tr>
<td>PSYC 605</td>
<td>Health Psychology</td>
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<tr>
<td>ANTH 340</td>
<td>Human Variation and Evolution</td>
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<td>ANTH 341</td>
<td>Human Evolution</td>
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<td>ANTH 442</td>
<td>Anthropological Genetics</td>
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<td>BIOL 412</td>
<td>Evolutionary Biology</td>
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<td>BIOL 595</td>
<td>Human Genetics</td>
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<tr>
<td>Category 2: Human Development</td>
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<tr>
<td>PSYC 333</td>
<td>Child Development</td>
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<td>PSYC 334</td>
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<td>Human Development. Satisfied by completing 6 hours selected from the following:</td>
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<td>PSYC 430</td>
<td>Cognitive Development</td>
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<td>PSYC/ABSC 535</td>
<td>Developmental Psychopathology</td>
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<td>PSYC/ABSC 632</td>
<td>Advanced Child Behavior and Development</td>
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<td>BIOL 417</td>
<td>Biology of Development</td>
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<tr>
<td>Category 3: Human Cognition and Language</td>
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<tr>
<td>PSYC 318</td>
<td>Cognitive Psychology</td>
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<td>Category 4: Neuroscience</td>
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<tr>
<td>PSYC 370</td>
<td>Behavioral Neuroscience</td>
<td></td>
</tr>
<tr>
<td>PSYC 375</td>
<td>Cognitive Neuroscience</td>
<td></td>
</tr>
<tr>
<td>PSYC 380</td>
<td>Clinical Neuroscience</td>
<td></td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td></td>
</tr>
<tr>
<td>BIOL 435</td>
<td>Introduction to Neurobiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 454</td>
<td>Brain Diseases and Neurological Disorders</td>
<td></td>
</tr>
<tr>
<td>BIOL 655</td>
<td>Behavioral Genetics</td>
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</table>

## Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

### Major Hours

Satisfied by 31 hours of major courses.

### Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

### Major Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

### Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

# Speech-Language-Hearing

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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<td></td>
<td><strong>Speech-Language-Hearing Concentration</strong></td>
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<tr>
<td></td>
<td>Majors must complete the following 30 hours. These additional science courses are included in the Human Biology-Speech-Language-Hearing major hours and GPA calculations.</td>
<td></td>
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<tr>
<td>SPLH 120</td>
<td>The Physics of Speech</td>
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<tr>
<td>PHSX 115</td>
<td>College Physics II</td>
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<tr>
<td></td>
<td>Research Methods. Satisfied by:</td>
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<tr>
<td>SPLH 660</td>
<td>Research Methods in Speech-Language-Hearing</td>
<td>3</td>
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<tr>
<td></td>
<td>Genetics. Satisfied by one of the following:</td>
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</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior Seminar in Human Biology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>BIOL 599</td>
<td>Senior Seminar: _____ (Must be taken in senior year.)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Speech-Language-Hearing Concentration Categories</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by completing 2 of the following 4 categories (18-19 hours required).</td>
<td></td>
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<tr>
<td>Category 1: Development and Genetics</td>
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<td></td>
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<tr>
<td>BIOL 417</td>
<td>Biology of Development</td>
<td></td>
</tr>
<tr>
<td>Development and Genetics. Satisfied by completing 6 hours selected from the following:</td>
<td></td>
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<tr>
<td>BIOL 405</td>
<td>Laboratory in Genetics</td>
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</tr>
</tbody>
</table>
**Major Junior/Senior Hours**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Hours in Residence**
Satisfied by 30 hours of major courses.

**Major Hours**
Satisfied by completing a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Sample 4-year plans for the BA degree in Human Biology with concentrations in the following can be found here: Anthropology (p. 1175), Applied Behavioral Science (p. 1177), Biology (p. 1178), Psychology (p. 1179), and Speech-Language-Hearing (p. 1180), or by using the left-side navigation.

## Departmental Honors
Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu/). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

## Study Abroad
Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

## BA in Human Biology with concentration in Anthropology
Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Anthropology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or BIOL 536</td>
<td>Cell Structure and Function (Honors)</td>
<td></td>
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<tr>
<td>BIOL 595</td>
<td>Human Genetics</td>
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<tr>
<td>BIOL 655</td>
<td>Behavioral Genetics</td>
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<tr>
<td>PSYC 333</td>
<td>Child Development</td>
<td></td>
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<tr>
<td>PSYC 430</td>
<td>Cognitive Development</td>
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<tr>
<td>SPLH 464</td>
<td>Undergraduate Seminar in:</td>
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</tr>
<tr>
<td></td>
<td>or SPLH 764 Seminar in:</td>
<td></td>
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</tr>
<tr>
<td>SPLH 466</td>
<td>Language Science</td>
<td></td>
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</tr>
<tr>
<td>SPLH 566</td>
<td>Language Development</td>
<td></td>
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<tr>
<td>Category 2: Anatomy and Physiology</td>
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</tr>
<tr>
<td>Mammalian Physiology</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Anatomy and Physiology. Satisfied by:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
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</tr>
<tr>
<td>BIOL 241</td>
<td>Human Anatomy Observation Laboratory</td>
<td></td>
<td></td>
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<tr>
<td>BIOL 547</td>
<td>Mammalian Physiology Laboratory</td>
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<tr>
<td>SPLH 462</td>
<td>Principles of Speech Science</td>
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<tr>
<td>SPLH 463</td>
<td>Principles of Hearing Science</td>
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<tr>
<td>Category 3: Neuroscience</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Physiology of Organisms. Satisfied by:</td>
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<td></td>
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<tr>
<td>BIOL 544</td>
<td>Comparative Animal Physiology</td>
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<tr>
<td>Neuroscience. Satisfied by completing 6 hours selected from the following:</td>
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<td></td>
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</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
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<tr>
<td>BIOL 435</td>
<td>Introduction to Neurobiology</td>
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<td>PSYC 370</td>
<td>Behavioral Neuroscience</td>
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<td>PSYC 375</td>
<td>Cognitive Neuroscience</td>
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<td>PSYC 380</td>
<td>Clinical Neuroscience</td>
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<tr>
<td>SPLH 464</td>
<td>Undergraduate Seminar in:</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(Neural Bases of Speech &amp; Voice)</td>
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<tr>
<td>SPLH 464</td>
<td>Undergraduate Seminar in:</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(Speech Motor Control)</td>
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<td></td>
</tr>
<tr>
<td>Category 4: Research Practicum</td>
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<td></td>
<td></td>
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<tr>
<td>Satisfied by completing 9 hours selected from the following courses:</td>
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</tr>
<tr>
<td>SPLH 464</td>
<td>Undergraduate Seminar in:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Circuit Theory &amp; Bioinstrumentation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPLH 449</td>
<td>Laboratory/Field Work in Human Biology (various topics)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPLH 499</td>
<td>Directed Study in Speech-Language-Hearing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Major Hours & Major GPA**
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3 Natural Science, General Science Requirement)</td>
<td>3</td>
<td>BIOL 152 or 150 (Goal 3 Natural Science, Major Requirement)</td>
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</tr>
<tr>
<td>CHEM 130 (General Science Requirement, BA Laboratory/Field Experience (LFE), BA Quantitative Reasoning (QR))</td>
<td>5</td>
<td>CHEM 135 (General Science Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 105 (General Science Requirement)</td>
<td>1</td>
<td>MATH 115 (Goal 1.2 Quantitative Reasoning, General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154 (or Goal 3 Social Science (PSYC 104 recommended))</td>
<td>2-3</td>
<td>BIOL 154 (or Goal 3 Social Science (PSYC 104 recommended))</td>
<td>2-3</td>
</tr>
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</table>

**Fall Hours: 14-15**

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 116 (General Science Requirement)</td>
<td>3</td>
<td>BIOL 350 (Major Requirement)</td>
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<tr>
<td>CHEM 330 (Major Requirement)</td>
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<td>Major Category Course (Major Requirement)</td>
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<tr>
<td>CHEM 331 (Major Requirement)</td>
<td>2</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Human Evolutionary Biology (General Science Requirement)</td>
<td>3-4</td>
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**Fall Hours: 16-17**

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
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<tr>
<td>PHSX 114 (or PHSX 211 &amp; 216) (Goal 1.1 Critical Thinking, General Science Requirement)</td>
<td>4</td>
<td>PHSX 115 (or PHSX 212 &amp; 236) (General Science Requirement)</td>
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<tr>
<td>BIOL 416 (Major Requirement)</td>
<td>3</td>
<td>Major Category Course (Major Requirement)</td>
<td>3</td>
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<tr>
<td>Goal 2.2 Communication</td>
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<td>Major Category Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>2</td>
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</tbody>
</table>

**Fall Hours: 16**

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 570, MATH 365, or PSYC 210 (General Science Requirement)</td>
<td>3-4</td>
<td>BIOL 599 (Major Requirement, Goal 6 Integration &amp; Creativity)</td>
<td>1</td>
</tr>
<tr>
<td>Major Category Course (Major Requirement)</td>
<td>3</td>
<td>Major Category Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Major Category Course (Major Requirement)</td>
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<td>Major Category Course if needed (Major Requirement)</td>
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<tr>
<td>Goal 3 Arts and Humanities (300+ recommended)</td>
<td>3</td>
<td>Goal 4.1 US Diversity (300+ Recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>Goal 4.2 Global Awareness (300+ Recommended)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 120-126**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.
3. Concurrent or prior enrollment in CHEM 130 is required.
4. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.
5. BIOL 570 is offered only in fall.
6. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence and PHSX 211/PHSX 216 and PHSX 115/PHSX 212 & PHSX 236
7. Refer to the degree requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HBIO-ANTH/), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required.
8. BIOL 599 is approved to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.
9. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
10. ANTH 304, ANTH 309, ANTH 340, or BIOL 412 (offered in spring only) can fulfill this requirement. Only one course is required.
11. Hour requirements (incl. 45 hrs or hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
12. BIOL 105; Biology Orientation Seminar (1 hour online course) is required for the major. It can be taken the summer prior to your freshman year.

Please note:

Students may earn degrees in more than one major within biological sciences, or in a biological science and an area outside biology by
meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BA in Human Biology with concentration in Applied Behavioral Science**

Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Applied Behavioral Science. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152 (General Science Requirement)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>3</td>
<td>BIOL 152 or 150 (General Science Requirement)&lt;sup&gt;3&lt;/sup&gt;</td>
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<tr>
<td>CHEM 130 (Goal 3 Natural Science, BA Laboratory/Field Experience (LFE), General Science Requirement)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>5</td>
<td>CHEM 135 (General Science Requirement)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>5</td>
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<tr>
<td>BIOL 105 (General Science Requirement)</td>
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<td>ABSC 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
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<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<tr>
<td>BIOL 154 or MATH 115 (General Science Requirement)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>2-3</td>
<td>BIOL 154 or MATH 115 (General Science Requirement)&lt;sup&gt;2&lt;/sup&gt;</td>
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14-15

### Sophomore

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td>2nd Semester Language (BA Second Language)</td>
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<tr>
<td>Human Evolutionary Biology (General Science Requirement)&lt;sup&gt;3&lt;/sup&gt;</td>
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<td>Goal 2.2 Communication</td>
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<td>MATH 116 (General Science Requirement)</td>
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<td>PHSX 114 (or PHSX 211 &amp; 216, General Science Requirement)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>4</td>
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<tr>
<td>ABSC 160 or PSYC 333 (Major Requirement)</td>
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<td>BIOL 350 (Major Requirement)</td>
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</table>

14-15

### Junior

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3-5</td>
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<tr>
<td>Major Category Course (Major Requirement)&lt;sup&gt;6&lt;/sup&gt;</td>
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<td>Major Category Course (Major Requirement)&lt;sup&gt;6&lt;/sup&gt;</td>
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<tr>
<td>Goal 3 Arts and Humanities (300+ recommended)</td>
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<td>ABSC 308 (Major Requirement)</td>
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<tr>
<td>Goal 3 Social Science (if needed), or Elective 300+</td>
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<td>Goal 4.1 US Diversity (300+ recommended)</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;10&lt;/sup&gt;</td>
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<td>Goal 4.2 Global Awareness (300+ recommended)</td>
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16-18

### Senior

<table>
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<th>Spring</th>
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<td>Major Category Course (Major Requirement)&lt;sup&gt;6&lt;/sup&gt;</td>
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<td>Major Category Course (Major Requirement)&lt;sup&gt;6&lt;/sup&gt;</td>
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<td>Major Category Course (Major Requirement)&lt;sup&gt;6&lt;/sup&gt;</td>
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<td>Major Category Course (Major Requirement)&lt;sup&gt;6&lt;/sup&gt;</td>
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<tr>
<td>BIOL 570, MATH 365, or PSYC 210 (General Science Requirement)&lt;sup&gt;6&lt;/sup&gt;</td>
<td>3-4</td>
<td>BIOL 599 (Major Requirement, Goal 6 Integration &amp; Creativity)&lt;sup&gt;7&lt;/sup&gt;</td>
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<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;10&lt;/sup&gt;</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;10&lt;/sup&gt;</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;10&lt;/sup&gt;</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;10&lt;/sup&gt;</td>
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</table>

15-16

### Total Hours: 120-126

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. MATH 115 requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.
3. Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.
4. BIOL 570 is offered only in the fall.
5. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence and PHSX 114/PHSX 211 & PHSX 216 and PHSX 115/PHSX 212 & PHSX 236.
6. Refer to the degree requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HBIO-ABSC/), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required.
This degree plan assumes students will have the equivalent of kucore.ku.edu/courses/ approved to fulfill KU Core Goals, please visit the Biology with a concentration in Biology. To view the list of courses below is a sample 4-year plan for students pursuing the BA in Human Biology with concentration in Biology.

BA in Human Biology with concentration in Biology

Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Biology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

### Freshman

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3)</td>
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<td>BIOL 150 or 152 (General Science Requirement)</td>
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</tr>
<tr>
<td>Natural Science, General Science Requirement</td>
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<td>CHEM 130 (General Science Requirement, BA Laboratory/Field Experience (LFE), BA Quantitative Reasoning (QR))</td>
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<tr>
<td>BIOL 105 (General Science Requirement)</td>
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<td>MATH 115 (General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
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</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 154 (or Elective)</td>
<td>2-3</td>
<td>BIOL 154 (or Elective)</td>
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### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3)</td>
<td>3</td>
<td>BIOL 150 or 152 (General Science Requirement)</td>
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<tr>
<td>Natural Science, General Science Requirement</td>
<td>3</td>
<td>CHEM 130 (General Science Requirement, BA Laboratory/Field Experience (LFE), BA Quantitative Reasoning (QR))</td>
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<tr>
<td>BIOL 105 (General Science Requirement)</td>
<td>1</td>
<td>MATH 115 (General Science Requirement)</td>
<td>3</td>
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<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3)</td>
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<td>BIOL 150 or 152 (General Science Requirement)</td>
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<tr>
<td>Natural Science, General Science Requirement</td>
<td>3</td>
<td>CHEM 130 (General Science Requirement, BA Laboratory/Field Experience (LFE), BA Quantitative Reasoning (QR))</td>
<td>5</td>
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<td>BIOL 105 (General Science Requirement)</td>
<td>1</td>
<td>MATH 115 (General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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### Senior

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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3)</td>
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<td>BIOL 150 or 152 (General Science Requirement)</td>
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<tr>
<td>Natural Science, General Science Requirement</td>
<td>3</td>
<td>CHEM 130 (General Science Requirement, BA Laboratory/Field Experience (LFE), BA Quantitative Reasoning (QR))</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 105 (General Science Requirement)</td>
<td>1</td>
<td>MATH 115 (General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3)</td>
<td>3</td>
<td>BIOL 150 or 152 (General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science, General Science Requirement</td>
<td>3</td>
<td>CHEM 130 (General Science Requirement, BA Laboratory/Field Experience (LFE), BA Quantitative Reasoning (QR))</td>
<td>5</td>
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<tr>
<td>BIOL 105 (General Science Requirement)</td>
<td>1</td>
<td>MATH 115 (General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours

120-126
The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.

Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.

BIOL 570 is only offered in fall and is recommended for the Biology concentration.

Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence and PHSX 114/PHSX 211 & PHSX 216 and PHSX 115/PHSX 212 & PHSX 236.

Refer to the degree requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HBIO-BIOL/), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required, and at least 3 hours of lab credit, 400-level of above, must be completed. These lab credit hours may come from within the two major categories being completed or from other categories.

BIOL 599 is approved to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.

Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

ANTH 304, ANTH 309, ANTH 340, or BIOL 412 (offered in spring only) can fulfill this requirement. Only one course is required.

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

* BIOL 105: Biology Orientation Seminar (1 hour online course) is required for the major. It can be taken the summer prior to your freshman year.

Please note:

Students may earn degrees in more than one major within biological sciences, or in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

---

**BA in Human Biology with concentration in Psychology**

Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Psychology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3 Natural Science, General Science Requirement)</td>
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<td>BIOL 152 or 150 (Goal 3 Natural Science, Major Requirement)</td>
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</tr>
<tr>
<td>CHEM 130 (General Science Requirement, BA Laboratory/Field Experience (LFE), BA Quantitative Reasoning (QR))</td>
<td>5</td>
<td>CHEM 135 (General Science Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>MATH 115 (General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 105 (General Science Requirement)</td>
<td>1</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154 or PSYC 104 (Goal 3 Social Science)</td>
<td>2-3</td>
<td>BIOL 154 or PSYC 104 (Goal 3 Social Science)</td>
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<table>
<thead>
<tr>
<th>Hours</th>
<th>14-15</th>
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<table>
<thead>
<tr>
<th>Hours</th>
<th>16-17</th>
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**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 116 (General Science Requirement)</td>
<td>3</td>
<td>PSYC 200 (Major Requirement)</td>
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<tr>
<td>Human Evolutionary Biology (General Science Requirement)</td>
<td>3-4</td>
<td>BIOL 350 (Major Requirement)</td>
<td>4</td>
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<tr>
<td>CHEM 330 (Major Requirement)</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>CHEM 331 (Major Requirement)</td>
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<table>
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<tr>
<th>Hours</th>
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<table>
<thead>
<tr>
<th>Hours</th>
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**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
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<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
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<tr>
<td>COMS 130 (Goal 2.2 Communication)</td>
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<td>Goal 3 Arts and Humanities (300+ Recommended)</td>
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<tr>
<td>PSYC 210, BIOL 570, or MATH 385 (General Science Requirement)</td>
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<td>PHSX 114 (or PHSX 211 &amp; 216, Goal 1.1 Critical Thinking, General Science Requirement)</td>
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</tr>
</tbody>
</table>

| Hours | 3-4 |

| Hours | 4 |

| Hours | 5 |

Full PDF 2022-23
Below is a sample 4-year plan for students pursuing the BA in Human Biology with a concentration in Speech-Language-Hearing. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

### BA in Human Biology with concentration in Speech-Language-Hearing

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td><strong>Fall</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Freshman</td>
<td>3 BIOL 152 or 150 (Goal 3 Natural Science, General Science Requirement)</td>
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<tr>
<td></td>
<td>CHEM 135 (General Science Requirement, BA Laboratory/Field Experience (LFE), BA Quantitative Reasoning (QR))</td>
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<td></td>
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<tr>
<td></td>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 105 (General Science Requirement)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 154 or PSYC 104 (Goal 3 Social Science)</td>
<td>2-3</td>
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<tr>
<td></td>
<td>BIOL 150 or 152 (Goal 3 Natural Science, General Science Requirement)</td>
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<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>3 BIOL 152 or 150 (Goal 3 Natural Science, Major Requirement)</td>
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<td>CHEM 135 (General Science Requirement)</td>
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<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td>BIOL 154 or PSYC 104 (Goal 3 Social Science)</td>
<td>2-3</td>
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</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td>14-15</td>
<td>16-17</td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Semester Language (BA 1st Language)</td>
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<td>2nd Semester Language (BA 2nd Language)</td>
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<tr>
<td>4th Semester Language (BA 4th Language)</td>
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</table>

Please note:

- Students may earn degrees in more than one major within biological sciences, or in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.
- All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.
- The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
MATH 116 (General Science Requirement) 3 SPLH 220 (General Science Requirement) 4
PHSX 114 (or PHSX 211 & 216), Goal 1.1 Critical Thinking, General Science Requirement 4
PHSX 115 (or PHSX 212 & 236)
Human Evolutionary Biology (General Science Requirement) 3-4 BIOL 350 (Major Requirement) 4

15-16 17

Junior

Fall Hours Spring Hours
3rd Semester Language (BA Second Language) 3 4th Semester Language, or 1st semester of Another Language (BA Second Language)
COMS 130 (Goal 2.2 Communication) 3 Goal 3 Arts and Humanities (300+ Recommended)
Major Category Course (Major Requirement) 3 Goal 5 Social Responsibility & Ethics
Second Area of Study/Elective/Degree/Junior-Senior Hours 3 SPLH 660 (Major Requirement)
Second Area of Study/Elective/Degree/Junior-Senior Hours 3 Major Category Course (Major Requirement)

15 15-17

Senior

Fall Hours Spring Hours
Major Category Course (Major Requirement) 3 Goal 4.2 Global Awareness (300+ Recommended)
Major Category Course (Major Requirement) 3 Major Category Course (Major Requirement)
BIOL 570, MATH 365, or PSYC 210 (General Science Requirement) 3-4 Major Category Course (Major Requirement)
Goal 4.1 US Diversity 3 BIOL 599 (Major Requirement, Goal 6 Integration & Creativity)
Second Area of Study/Elective/Degree/Junior-Senior Hours 3 Second Area of Study/Elective/Degree/Junior-Senior Hours

Total Hours 120-126

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2 Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.
3 Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.
4 BIOL 570 is offered only in the fall.
5 Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence and PHSX 114/PHSX 211 & PHSX 216 and PHSX 115/PHSX 212 & PHSX 236.
6 Refer to the degree requirements in the catalog, the departmental website (http://humanbio.ku.edu/overview-HB-SPLH/), the Degree Progress Report (DPR), or your advisor for a list of applicable courses. Completion of 2 of 4 major categories is required.
7 Requires completion of 9 credits of SPLH course work; ENGL 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor.
8 BIOL 599 is approved to fulfill Goal 6. This goal can also be fulfilled by completion of an approved educational experience, or an approved integration of courses and/or experiences. See your advisor for more information.
9 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
10 ANTH 304, ANTH 309, ANTH 340, or BIOL 412 (offered in spring only) can fulfill this requirement. Only one course is required.
11 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
12 BIOL 105: Biology Orientation Seminar (1 hour online course) is required for the major. It can be taken the summer prior to your freshman year.

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The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Bachelor of Arts in Microbiology

Microbiology

Microbiology is the study of bacteria, viruses, the immune system, and their roles in human health, the environment and beyond. Job prospects for microbiologists with a bachelor's or higher degree continue to be strong. Upper-division courses in immunology, bacterial infectious diseases, virology, and microbial genetics couple laboratory courses with lecture courses to provide students with hands-on practical experience. The B.A. Microbiology major includes a choice of three upper-division lecture and laboratory course pairs.
Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

Requirements for the B.A. Major in Microbiology

In addition to degree and major requirements for all plans and subplans, all students must complete the KU Core.

General Science Requirements

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar. Satisfied by:</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular &amp; Cellular Biology. Satisfied by one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 151 Principles of Molecular and Cellular Biology</td>
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</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology. Satisfied by one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 153 Principles of Organismal Biology, Honors</td>
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</tr>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors Satisfied by:</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics. Satisfied by one of the following:</td>
<td>4</td>
</tr>
</tbody>
</table>

Microbiology Core Knowledge & Skills

Fundamentals of Microbiology. Satisfied by one of the following: 3-4

BIOL 400 | Fundamentals of Microbiology

BIOL 401 | Fundamentals of Microbiology, Honors

Fundamentals of Microbiology Laboratory. Satisfied by:

BIOL 402 | Fundamentals of Microbiology Laboratory 2

Microbiology Electives and Laboratory Requirements

Satisfied by completing 15 hours of microbiology courses, including 3 lecture-lab pairings, selected from the following:

BIOL 503 | Immunology

BIOL 504 | Immunology Laboratory

BIOL 506 | Bacterial Infectious Diseases

BIOL 507 | Bacterial Infectious Diseases Laboratory

BIOL 512 | General Virology

BIOL 513 | Virology Laboratory

BIOL 518 | Bacterial Genetics

BIOL 519 | Bacterial Genetics Laboratory

Microbiology Elective

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors 3-8</td>
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<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
</tr>
<tr>
<td>BIOL 636</td>
<td>Biochemistry I &amp; BIOL 638 and Biochemistry II</td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors &amp; CHEM 191 and Foundations of Chemistry I Laboratory, Honors</td>
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<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors &amp; CHEM 196 and Foundations of Chemistry II Laboratory, Honors</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I &amp; MATH 116 and Calculus II</td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 145</td>
<td>Calculus I, Honors</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
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<td>PHSX 211</td>
<td>General Physics I &amp; PHSX 216 and General Physics I Laboratory</td>
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<td>PHSX 213</td>
<td>General Physics I Honors</td>
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<td>PHSX 115</td>
<td>College Physics II</td>
</tr>
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<td>Foundations of Chemistry II, Honors &amp; CHEM 196 and Foundations of Chemistry II Laboratory, Honors</td>
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<td>Organic Chemistry I</td>
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<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I Laboratory</td>
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<td>MATH 115</td>
<td>Calculus I &amp; MATH 116 and Calculus II</td>
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<td>MATH 125</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 145</td>
<td>Calculus I, Honors</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
</tr>
<tr>
<td>PHSX 211</td>
<td>General Physics I &amp; PHSX 216 and General Physics I Laboratory</td>
</tr>
<tr>
<td>PHSX 213</td>
<td>General Physics I Honors</td>
</tr>
<tr>
<td>PHSX 115</td>
<td>College Physics II</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II &amp; PHSX 236 and General Physics II Laboratory</td>
</tr>
<tr>
<td>PHSX 214</td>
<td>General Physics II Honors</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Foundations of Chemistry II, Honors &amp; CHEM 196 and Foundations of Chemistry II Laboratory, Honors</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I Laboratory</td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I &amp; MATH 116 and Calculus II</td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 145</td>
<td>Calculus I, Honors</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
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<tr>
<td>PHSX 211</td>
<td>General Physics I &amp; PHSX 216 and General Physics I Laboratory</td>
</tr>
<tr>
<td>PHSX 213</td>
<td>General Physics I Honors</td>
</tr>
<tr>
<td>PHSX 115</td>
<td>College Physics II</td>
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<tr>
<td>PHSX 212</td>
<td>General Physics II &amp; PHSX 236 and General Physics II Laboratory</td>
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<tr>
<td>PHSX 214</td>
<td>General Physics II Honors</td>
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Microbiology Elective

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 503</td>
<td>Immunology</td>
</tr>
<tr>
<td>BIOL 504</td>
<td>Immunology Laboratory</td>
</tr>
<tr>
<td>BIOL 506</td>
<td>Bacterial Infectious Diseases</td>
</tr>
<tr>
<td>BIOL 507</td>
<td>Bacterial Infectious Diseases Laboratory</td>
</tr>
<tr>
<td>BIOL 512</td>
<td>General Virology</td>
</tr>
<tr>
<td>BIOL 513</td>
<td>Virology Laboratory</td>
</tr>
<tr>
<td>BIOL 518</td>
<td>Bacterial Genetics</td>
</tr>
<tr>
<td>BIOL 519</td>
<td>Bacterial Genetics Laboratory</td>
</tr>
</tbody>
</table>
Satisfied by completing 3 additional hours of BIOL courses numbered 3400 or higher; to be selected in consultation with a microbiology advisor.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 23-24 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Below is a sample 4-year plan for students pursuing the BA in Microbiology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website ([http://kucore.ku.edu/courses/](http://kucore.ku.edu/courses/)).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>BIOL 150 or 152 (General Science Requirement)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
<td>3</td>
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<tr>
<td></td>
<td>CHEM 130 (Goal 3 Natural Science, General Science Requirement)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>BIOL 105 (General Science Requirement)&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 154</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
<td>17</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>BIOL 400 or 401 (Major Requirement)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>3-4</td>
<td>4</td>
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<tr>
<td></td>
<td>BIOL 402 (Major Requirement)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 330 (General Science Requirement)&lt;sup&gt;7&lt;/sup&gt;</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
<td>17</td>
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</table>

**Junior**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>3rd Semester Language (BA Second Language)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Goal 4.1 U.S. Diversity</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Microbiology Elective 400+ (Major Requirement)&lt;sup&gt;5, 6, 8&lt;/sup&gt;</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microbiology Lab Elective 400+ (Major Requirement)&lt;sup&gt;5, 6, 8&lt;/sup&gt;</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 114 (or PHSX 211 &amp; 216 (Goal 1.1 Critical Thinking, General Science Requirement))</td>
<td>4-5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
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<td>17</td>
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**Senior**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microbiology Elective 400+ (Major Requirement)&lt;sup&gt;5, 6, 8&lt;/sup&gt;</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microbiology Lab Elective 400+ (Major Requirement)&lt;sup&gt;5, 6, 8&lt;/sup&gt;</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL Elective 400+ (Major Requirement)&lt;sup&gt;9&lt;/sup&gt;</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;12&lt;/sup&gt;</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;12&lt;/sup&gt;</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;12&lt;/sup&gt;</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Hours 120-124**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the Math requirement.
3. MATH 115 eligibility is required for enrollment.
4. Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.
5. BIOL 506, BIOL 507, BIOL 512, and BIOL 513 are offered only in the spring.
Departmental Honors

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu/). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

Study Abroad

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/). 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

Bachelor of Arts in Molecular, Cellular, and Developmental Biology

Molecular, Cellular, and Developmental Biology

The Molecular, Cellular, and Developmental Biology B.S. and B.A. degrees provide students with a broad understanding of biological systems at the molecular, cellular, and organismal levels. The MCDB degree includes study of genetics, cell biology, developmental biology, cancer biology, and neurobiology. Students have the option of elective courses in these areas for an advanced, in-depth learning experience.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and,
for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

**Major Hours**

Satisfied by 38 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator [here](http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the B.A. in Molecular, Cellular, and Developmental Biology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website [here](http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

### Freshman

**Fall**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>(Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>(Goal 3 Natural Science, General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 105</td>
<td>(Goal 3.1 General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>(Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 152 or 150</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>(Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 115</td>
<td>(Goal 1.2 Quantitative Reasoning, General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>2 Goal 2.2 Communication</td>
<td>3</td>
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### Sophomore

**Fall**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>(Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>(Goal 3 Natural Science, General Science Requirement)</td>
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</tr>
<tr>
<td>BIOL 105</td>
<td>(Goal 3.1 General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>(Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 152 or 150</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>(Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 115</td>
<td>(Goal 1.2 Quantitative Reasoning, General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>2 Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior

**Fall**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>(Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>(Goal 3 Natural Science, General Science Requirement)</td>
<td>3</td>
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</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 152 or 150</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>(Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>MATH 115</td>
<td>(Goal 1.2 Quantitative Reasoning, General Science Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>2 Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 38 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.
Bachelor of Science in Biochemistry

PHSX 114 or 211 and 216 (Goal 1.1 Critical Thinking, General Science Requirement)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-5 PHSX 115 or 212 and 236 (General Science Requirement)</td>
<td>4</td>
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</tr>
<tr>
<td>BIOL 600 (Major Requirement)</td>
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</tr>
<tr>
<td>3 BIOL 405 or 426 (Major Requirement)3,5,6</td>
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<td></td>
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</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
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<tr>
<td>3 BIOL 417 (Major Requirement)3</td>
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<td></td>
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<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours10</td>
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</tbody>
</table>

Senior Hours

Elective/Degree/Junior-Senior Hours10 16-17
Second Area of Study/ Elective/Degree/Junior-Senior Hours10 16

Total Hours 120-121

1. Requires MATH ACT scores of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 + MATH 116 to fulfill the math requirement.

2. Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and is offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and is offered in the spring semesters.

3. BIOL 412, BIOL 417, BIOL 426, and BIOL 672 are offered only in the spring.

4. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence.

5. BIOL 405, BIOL 435, and BIOL 688 are offered only in the fall.

6. Choose BIOL 405 or BIOL 426. BIOL 405 is offered only in the fall, and BIOL 426 is offered only in the spring.

7. 12 credit hours of BIOL courses at 400+ level, with no more than 3 hours of BIOL 423 and/or BIOL 424 (combined) applied toward the elective requirement.

8. Choose BIOL 435, BIOL 672, or BIOL 688. BIOL 435 and BIOL 688 are offered only in the fall, and BIOL 672 is offered only in the spring.

9. BIOL 105 Biology Orientation Seminar (1 hour online course) is required for the major. It can be taken during the summer prior to your freshman year.

10. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note: Students may earn degrees in more than one major within biological sciences, or in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

Departmental Honors

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
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Bachelor of Science in Biochemistry

Biochemistry

Biochemistry is the study of life at the level of individual molecules. Biochemistry lies at the intersection of cell biology, physiology, organic chemistry, and physical chemistry. The B.S. Biochemistry major includes two semesters of calculus, one year of biochemistry, analytical chemistry, biological physical chemistry, and upper-division courses in cellular mechanisms and related elective courses.
Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

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First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

Students completing a B.S. in Biochemistry may not complete a minor in Chemistry.

Requirements for the B.S. Degree in Biochemistry

In addition to degree and major requirements for all plans and subplans, all students must complete the KU Core.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors &amp; Foundations of Chemistry II Laboratory, Honors</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td>3</td>
</tr>
<tr>
<td>Organic Chemistry I Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Organic Chemistry II. Satisfied by one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>Organic Chemistry II Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 336</td>
<td>Organic Chemistry II Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Calculus. Satisfied by:</td>
<td>6-12</td>
<td></td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; MATH 116</td>
<td>and Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; MATH 126</td>
<td>and Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>&amp; MATH 127</td>
<td>and Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>Physics. Satisfied by one of the following options:</td>
<td>8-9</td>
<td></td>
</tr>
<tr>
<td>Option 1: General Physics I &amp; II</td>
<td></td>
<td></td>
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<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>2</td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Option 2: College Physics I &amp; II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PHSX 115</td>
<td>and College Physics II</td>
<td>4</td>
</tr>
<tr>
<td>Biochemistry Course Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied by completing 36 hours from courses below.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Molecular and Cellular Biology. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Organismal Biology. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
<td>3</td>
</tr>
<tr>
<td>Introductory Biology Lab for STEM Majors. Satisfied by:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors</td>
<td>2</td>
</tr>
<tr>
<td>Principles of Genetics. Satisfied by one of the following:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors</td>
<td>4</td>
</tr>
<tr>
<td>Cell Structure and Function. Satisfied by:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>Biochemistry I. Satisfied by:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 636</td>
<td>Biochemistry I</td>
<td>4</td>
</tr>
<tr>
<td>Introductory Biochemistry Laboratory. Satisfied by:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOL 637</td>
<td>Introductory Biochemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Biochemistry II. Satisfied by:</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 638</td>
<td>Biochemistry II</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Biochemistry Laboratory. Satisfied by:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 639</td>
<td>Advanced Biochemistry Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>Analytical Chemistry. Satisfied by:</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science in Biochemistry

### CHEM 400 Analytical Chemistry

Analytical Chemistry Laboratory. Satisfied by:

<table>
<thead>
<tr>
<th>Hour</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

### CHEM 401 Analytical Chemistry Laboratory

Physical Chemistry. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Hour</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### CHEM 510 Biological Physical Chemistry

<table>
<thead>
<tr>
<th>Hour</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### CHEM 530 Physical Chemistry I

### Biochemistry Required Electives

Satisfied by completing 12 hours of BIOL courses numbered 400 or higher, which must be selected in consultation with a Biochemistry advisor. No more than 3 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement.

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

#### Major Hours

Satisfied by 48 hours of major courses.

#### Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

#### Major Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

#### Major Junior/Senior Graduation GPA

Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the B.S. in Biochemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to the freshman year, fall semester.

#### Freshman

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
<td>3</td>
<td>BIOL 152 or 150</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
</tr>
<tr>
<td>CHEM 170 or 130</td>
<td>(Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)</td>
<td>5</td>
<td>CHEM 175 or 135</td>
<td>(General Science Requirement)</td>
</tr>
<tr>
<td>BIOL 105</td>
<td>(General Science Requirement)</td>
<td>1</td>
<td>MATH 115</td>
<td>(General Science Requirement)</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication</td>
<td>(1 of 2)</td>
<td>3</td>
<td>Goal 2.1 Written Communication</td>
<td>(2 of 2)</td>
</tr>
<tr>
<td>BIOL 154</td>
<td></td>
<td>2</td>
<td>Goal 2.2 Communication</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>14</td>
<td>17</td>
<td></td>
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</tbody>
</table>

**Sophomore**

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 350</td>
<td>(General Science Requirement)</td>
<td>4</td>
<td>BIOL 416</td>
<td>(Major Requirement)</td>
</tr>
</tbody>
</table>

### Junior

#### Fall

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 114</td>
<td>(Goal 1.1 Critical Thinking, Goal 1.2 Quantitative Reasoning, or Goal 3 Natural Science, General Science Requirement)</td>
<td>4</td>
<td>PHSX 115 or 212 and 236</td>
<td>(General Science Requirement)</td>
</tr>
<tr>
<td>BIOL 636</td>
<td>(Major Requirement)</td>
<td>4</td>
<td>BIOL 638</td>
<td>(Major Requirement)</td>
</tr>
<tr>
<td>BIOL 637</td>
<td>(Major Requirement)</td>
<td>2</td>
<td>BIOL 639</td>
<td>(Major Requirement; Goal 6 Integration &amp; Creativity)</td>
</tr>
<tr>
<td>CHEM 400</td>
<td>(Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>(Major Requirement)</td>
<td>2</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

#### Senior

**Fall**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td></td>
<td>3</td>
<td>BIOL Elective 400+</td>
<td>(Major Requirement)</td>
</tr>
<tr>
<td>CHEM 510 or 530</td>
<td>(Major Requirement)</td>
<td>3</td>
<td>BIOL Elective 400+</td>
<td>(Major Requirement)</td>
</tr>
<tr>
<td>BIOL Elective 400+</td>
<td>(Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td></td>
</tr>
<tr>
<td>BIOL Elective 400+</td>
<td>(Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td></td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

### Total Hours 120

1. BIOL 105: Biology Orientation Seminar (1 hour online course) can be taken the summer prior to your freshman year.
2. Concurrent or prior enrollment in CHEM 170/CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.
3. Requires a Math ACT score of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course.
Bachelor of Science in Ecology, Evolution, and Organismal Biology

Ecology, Evolution, and Organismal Biology

The B.S. focuses on the integration of biological systems at the whole organism level, and on how living organisms exist in populations, species, and communities within their environment. Core classes such as genetics, ecology, and evolutionary biology are combined with courses such as statistics, biochemistry, systematics, and organismal diversity to provide a strong foundation in biology. Students choose electives from a diverse set of classes that allow them to focus on areas of interest.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
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<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>MATH 115 &amp; MATH 116</td>
<td>Calculus I and Calculus II</td>
<td>4-6</td>
</tr>
</tbody>
</table>

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu/). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

Study Abroad

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.
MATH 125  Calculus I
Choose one of the following:  8-9
PHSX 114  College Physics I
& PHSX 115  and College Physics II
PHSX 211  General Physics I
& PHSX 216  and General Physics I Laboratory
& PHSX 212  and General Physics II
& PHSX 236  and General Physics II Laboratory
BIOL 600  Introductory Biochemistry, Lectures  3

Ecology, Evolution, and Organismal Biology Requirements
BIOL 150  Principles of Molecular and Cellular Biology  3
or BIOL 151  Principles of Molecular and Cellular Biology, Honors
BIOL 152  Principles of Organismal Biology  3
or BIOL 153  Principles of Organismal Biology, Honors
BIOL 154  Introductory Biology Lab for STEM Majors  2
BIOL 350  Principles of Genetics  4
or BIOL 360  Principles of Genetics, Honors
BIOL 400  Fundamentals of Microbiology  3
or BIOL 544  Comparative Animal Physiology
BIOL 412  Evolutionary Biology  4
BIOL 413  History and Diversity of Organisms  3
BIOL 414  Principles of Ecology  3
BIOL 428  Introduction to Systematics  3
BIOL 570  Introduction to Biostatistics  4
BIOL 599  Senior Seminar: ______

Ecology, Evolution, and Organismal Biology Elective Hours
Satisfied by completing 15 hours of BIOL courses numbered 400 or higher, including at least 4 hours of lab credit and 2 hours of seminar/topics courses (BIOL 419, 420, 499, 701). No more than 5 hours of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied to the elective requirement, with no more than 2 hours of BIOL 424 being applied to the laboratory requirement. The Undergraduate Biology Program must approve exceptions to these elective requirements.

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 48 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 40 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa).

Below is a sample 4-year plan for students pursuing the BS in Ecology, Evolution, and Organismal Biology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (https://kucore.ku.edu).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to the freshman year, fall semester.

Freshman
Fall       Hours Spring      Hours
BIOL 150 or 152 (Goal 3 Natural Science, Major Requirement)  2
5 CHEM 130 (Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)  1
BIOL 105 (Goal 1.2 General Science Requirement)  1
3 BIOL 154  2 Goal 2.2 Communication  3

14  17

Sophomore
Fall       Hours Spring      Hours
BIOL 413 (Major Requirement)  1
MATH 116 (General Science Requirement)  1
3 BIOL 350 or 360 (Major Requirement)  1
3 CHEM 330 (General Science Requirement)  4
2 CHEM 331 (General Science Requirement)  4
Goal 3 Arts and Humanities  3

14  14-15

Junior
Fall       Hours Spring      Hours
BIOL 414 (Major Requirement)  5
PHSX 115 or 212 and 236 (General Science Requirement)  6
3 BIOL 412 (Major Requirement)  6
4 BIOL Elective 400+ (Major Requirement)  6
Goal 4.2 Global Awareness  2

16  15

Second Area of Study/Elective/Degree/Junior-Senior Hours  3

16  15
Departmental Honors

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.ku.edu/). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

Study Abroad

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

Bachelor of Science in Microbiology

Microbiology

Microbiology is the study of bacteria, viruses, the immune system, and their roles in human health, the environment and beyond. Job prospects for microbiologists with a bachelor's or higher degree continue to be strong. Upper-division courses in immunology, bacterial infectious diseases, virology, and microbial genetics couple laboratory courses with lecture courses to provide students with hands-on practical experience. The B.S. Microbiology major includes all four of the upper-division lecture and laboratory course pairs.

Undergraduate Admission

Admission to KU

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**First- and Second-Year Preparation**

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

**Requirements for the B.S. Degree in Microbiology**

In addition to degree and major requirements, all students must complete the KU Core.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Science Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete 47-56 hours of the following general science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>requirements that serve as foundational courses for this major.</td>
<td></td>
</tr>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 153</td>
<td>Principles of Organismal Biology, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 360</td>
<td>Principles of Genetics, Honors</td>
<td></td>
</tr>
<tr>
<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td></td>
</tr>
<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
<td></td>
</tr>
<tr>
<td>BIOL 636</td>
<td>Biochemistry I</td>
<td>3-8</td>
</tr>
<tr>
<td>&amp; BIOL 638</td>
<td>and Biochemistry II</td>
<td></td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td></td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Chemistry II. Satisfied by one of the following:</strong></td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors &amp; Foundations of Chemistry I</td>
<td></td>
</tr>
<tr>
<td>Laboratory, Honors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 191</td>
<td>Foundations of Chemistry II, Honors &amp; Foundations of Chemistry II</td>
<td></td>
</tr>
<tr>
<td>Laboratory, Honors</td>
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<td></td>
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<tr>
<td>Organic Chemistry I. Satisfied by one of the following:**</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry I Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry II. Satisfied by one of the following:**</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 385</td>
<td>Organic Chemistry II, Honors</td>
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<tr>
<td>Calculus. Satisfied by one of the following:**</td>
<td>4-6</td>
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<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 116</td>
<td>and Calculus II</td>
<td></td>
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<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td></td>
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<tr>
<td>Physics. Satisfied by one of the following:**</td>
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<tr>
<td>PHSX 114</td>
<td>College Physics</td>
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<td>&amp; PHSX 115</td>
<td>and College Physics</td>
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<tr>
<td>Option 1: College Physics</td>
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<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td><strong>Microbiology Course Requirements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied by completing 34-35 hours from the following courses:**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Microbiology. Satisfied by one of the following:**</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 401</td>
<td>Fundamentals of Microbiology, Honors</td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Microbiology Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 402</td>
<td>Fundamentals of Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>Cell Structure &amp; Function. Satisfied by one of the following:**</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td></td>
</tr>
<tr>
<td>or BIOL 536</td>
<td>Cell Structure and Function (Honors)</td>
<td>3</td>
</tr>
<tr>
<td>Immunology. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 503</td>
<td>Immunology</td>
<td>3</td>
</tr>
<tr>
<td>Immunology Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 504</td>
<td>Immunology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Bacterial Infectious Diseases. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 506</td>
<td>Bacterial Infectious Diseases</td>
<td>3</td>
</tr>
<tr>
<td>Bacterial Infectious Diseases Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 507</td>
<td>Bacterial Infectious Diseases Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>General Virology. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 512</td>
<td>General Virology</td>
<td>3</td>
</tr>
<tr>
<td>Virology Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 513</td>
<td>Virology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Microbial Genetics. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 518</td>
<td>Bacterial Genetics</td>
<td>3</td>
</tr>
<tr>
<td>Microbial Genetics Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Microbiology Required Electives**

Satisfied by completing 6 hours of BIOL courses numbered 400 or higher, which must be selected in consultation with a microbiology advisor.

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 34-35 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major.

Below is a sample 4-year plan for students pursuing the B.S. in Microbiology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website ([http://kucore.ku.edu/courses/](http://kucore.ku.edu/courses/)).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

#### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3</td>
<td>3</td>
<td>Natural Science, General Science Requirement)</td>
<td>3</td>
<td>Natural Science, General Science Requirement)</td>
<td></td>
</tr>
<tr>
<td>CHEM 130 (Goal 1.2 Quantitative Reasoning, General Science Requirement)</td>
<td>5</td>
<td>CHEM 135 (General Science Requirement)</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 105 (General Science Requirement)</td>
<td>1</td>
<td>MATH 115 (General Science Requirement)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 154</td>
<td>2</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
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</table>

**Total Hours: 14**

#### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 330 (General Science Requirement)</td>
<td>3</td>
<td>BIOL 350 (General Science Requirement)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 331 (General Science Requirement)</td>
<td>2</td>
<td>CHEM 335 (General Science Requirement)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 400 or 401 (Major Requirement)</td>
<td>3-4</td>
<td>MATH 116 (General Science Requirement)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 402 (Major Requirement)</td>
<td>2</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td></td>
<td></td>
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</tbody>
</table>

**Total Hours: 17**

#### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 519 Bacterial Genetics Laboratory</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 16-18**

#### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 570, MATH 365, or PSYC 210 (General Science Requirement)</td>
<td>3-4</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours: 15-16**

#### Total Hours 120-123

1. Requires MATH ACT scores of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 + MATH 116 to fulfill the BS Microbiology math requirement.

2. Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and offered in the spring semesters.

3. BIOL 512, BIOL 513, BIOL 506, BIOL 507, and CHEM 335 are offered only in the spring.

4. BIOL 401, BIOL 402, BIOL 503, BIOL 504, BIOL 518, BIOL 519, BIOL 570, and BIOL 636 are offered only in the fall.

5. Microbiology major electives: 6 hrs of Biol courses 400+ level to be selected in consultation with a Microbiology advisor.
BIOL 600 (3 hours) or BIOL 636 and BIOL 638 (8 hours) required. BIOL 636 is offered only in the fall semester, BIOL 638 is offered only in the spring semester, and BIOL 600 is offered in both the fall and spring semesters.

* BIOL 105: Biology Orientation Seminar (1 hour online course) is required for the major. It can be taken the summer prior to your freshman year.

7 BIOL 416 is recommended prior to BIOL 512 and BIOL 503.

8 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

9 See your advisor for Goal 6 Integration & Creativity course options.

Please note:

Students may earn degrees in more than one major within biological sciences, or in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Departmental Honors

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu/). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

Study Abroad

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

Bachelor of Science in Molecular, Cellular, and Developmental Biology

Molecular, Cellular, and Developmental Biology

The Molecular, Cellular, and Developmental Biology B.S. and B.A. degrees provide students with a broad understanding of biological systems at the molecular, cellular, and organismal levels. The MCDB degree includes study of genetics, cell biology, developmental biology, cancer biology, and neurobiology. Students have the option of elective courses in these areas for an advanced, in-depth learning experience.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Because biology study requires preparation in other sciences, students should begin meeting major requirements in the first year. It is particularly important to take CHEM 130 and CHEM 135 in the first year and, for several majors, to take CHEM 330, CHEM 331, CHEM 335, and CHEM 336 in the second year. Ideally, most majors should also take BIOL 150 and BIOL 152 during the first year, as well as BIOL 105.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105</td>
<td>Biology Orientation Seminar</td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
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</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
</tbody>
</table>
MATH 115  Calculus I & MATH 116  and Calculus II or MATH 125  Calculus I
BIOL 570  Introduction to Biostatistics or MATH 365  Elementary Statistics
PHSX 114  College Physics I & PHSX 115  and College Physics II or PHSX 211  General Physics I & PHSX 216  and General Physics I Laboratory & PHSX 212  and General Physics II & PHSX 236  and General Physics II Laboratory

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 412</td>
<td>Evolutionary Biology</td>
<td>4</td>
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<tr>
<td>BIOL 405</td>
<td>Laboratory in Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 435</td>
<td>Introduction to Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 536</td>
<td>Cell Structure and Function (Honors)</td>
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<tr>
<td>BIOL 417</td>
<td>Biology of Development</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 435</td>
<td>Introduction to Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
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</tr>
<tr>
<td>BIOL 650</td>
<td>Advanced Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 672</td>
<td>Gene Expression</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 688</td>
<td>The Molecular Biology of Cancer</td>
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<tr>
<td>BIOL 599</td>
<td>Senior Seminar: _____</td>
<td>1</td>
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</tbody>
</table>

Molecular, Cellular & Developmental Biology Electives 12

Any Biology courses numbered 400 or higher. No more than 3 hours of BIOL 423: Non-Lab Independent Study and/or BIOL 424: Independent Study (combined) may be used to fulfill the elective requirement.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 47 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 39 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the B.S. in Molecular, Cellular, and Developmental Biology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 150 or 152 (Goal 3 Natural Science, Major Requirement)²</td>
<td>BIOL 152 or 150 (Goal 3 Natural Science, Major Requirement)²</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130 (Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)¹</td>
<td>CHEM 135 (Goal 1.2 Quantitative Reasoning or Goal 3 Natural Science, General Science Requirement)¹</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 105 (General Science Requirement)⁹</td>
<td>MATH 115 (Goal 1.2 Quantitative Reasoning, General Science Requirement)¹</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>2 Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

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Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 330 (General Science Requirement)⁴</td>
<td>CHEM 335 (General Science Requirement)³,⁴</td>
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</tr>
<tr>
<td>CHEM 331 (General Science Requirement)</td>
<td>2 BIOL 412 (Major Requirement)³</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 350 or 360 (Major Requirement)</td>
<td>4 BIOL Elective 400+ (Major Requirement)⁷</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116 (General Science Requirement)¹</td>
<td>3 Goal 3 Social Science Requirement</td>
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<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3 Goal 4.1 US Diversity</td>
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</tr>
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</table>

15 16

Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 416 (Major Requirement)⁵</td>
<td>3 PHSX 115 (or PHSX 212 &amp; 236 (General Science Requirement))</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 600 (Major Requirement)⁵</td>
<td>3 BIOL 405 or 426 (Major Requirement)³,⁵,⁶</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 114 (or PHSX 211 &amp; 216, Goal 1.1 Critical Thinking, General Science Requirement)</td>
<td>4-5 BIOL 417 (Major Requirement)³</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3 BIOL Elective 400+ (Major Requirement)⁷</td>
<td>3</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility and Ethics</td>
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13-14 16
**Senior Honors Program**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 435 (Major Requirement)</td>
<td>3</td>
<td>3</td>
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<td>BIOL 688 (or BIOL Elective 400+ Major Requirement)</td>
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<td>BIOL 570 or MATH 365 (General Science Requirement)</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours 10</td>
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**Total Hours 120-121**

1. Requires MATH ACT scores of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 + MATH 116 to fulfill the math requirement.
2. Concurrent or prior enrollment in CHEM 130 is required. BIOL 151 is the honors equivalent of BIOL 150 and is offered in the fall semesters. BIOL 153 is the honors equivalent of BIOL 152 and is offered in the spring semesters.
3. BIOL 412, BIOL 417, BIOL 426, BIOL 650, BIOL 672 and CHEM 335 are offered only in the spring.
4. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence.
5. BIOL 405, BIOL 435, BIOL 570, and BIOL 668 are offered only in the fall.
6. Choose BIOL 405 or BIOL 426. BIOL 405 is offered only in the fall, and BIOL 426 is offered only in the spring.
7. 12 credit hours of BIOL courses at 400+ level, with no more than 3 hours of BIOL 423 and/or BIOL 424 (combined) applied toward the elective requirement.
8. Choose BIOL 650, BIOL 672, or BIOL 688. BIOL 650 and BIOL 672 are offered only in the spring. BIOL 688 is offered only in the fall.
9. BIOL 105: Biology Orientation Seminar (1 hour online course) is required for the major. It can be taken the summer prior to your freshman year.
10. Hour requirements (incl. 45 hr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Note: Students may earn degrees in more than one major within biological sciences, in a biological science and an area outside biology by meeting the requirements of both degree programs and taking at least 15 hours of courses unique to each major.

**Departmental Honors**

Undergraduate majors are eligible to graduate with honors in biology if they fulfill the following requirements:

1. Complete all course work required for the appropriate degree in biology.
2. Achieve a minimum grade-point average of 3.5 in the major.
3. Complete BIOL 499 Introduction to Honors Research with a grade of B or higher.
4. Complete BIOL 699 Biology Honors Research Colloquium with a grade of B or higher.
5. Complete an independent research project under the supervision of a faculty member in an area appropriate to the degree sought.
6. Submit an honors thesis to the honors committee once the research is complete and present the results of the completed research at the honors research symposium.

Students majoring in Human Biology with Anthropology, Applied Behavioral Science, Psychology, or Speech-Language-Hearing concentrations will follow the honors requirements for their respective concentration department.

Specific guidelines and intent forms are available in the Undergraduate Biology Program office and online (http://www.kuub.ku.edu/). Candidates must declare their intent to graduate with honors at least 2 semesters before graduation.

**Study Abroad**

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/). 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

**Department of Chemistry**

At KU Chemistry, we have faculty dedicated to mentoring both undergraduate and graduate students and to helping each student achieve scientific maturity. In addition to required classroom and laboratory courses, options exist for doing research in exciting areas of mainstream chemistry. As a worldwide leader in training and research in chemistry, the Department of Chemistry at KU is highly interdisciplinary in nature, spanning research in: Organometallic, Materials, Environmental, Surface, Bioinorganic, Bioorganic, Biophysical, Bioanalytical,Computational & Theoretical, Synthetic, Combinatorial, and “Green” Chemistry as well as Photochemistry, NMR, Laser Spectroscopy, and Polymers.

Our highly recognized faculty consist of twenty-nine (29) active faculty including five distinguished professors (https://chem.ku.edu/faculty/). The faculty occupy two different buildings: Integrated Science Building (ISB) (http://isb.ku.edu/) and the new Multidisciplinary Research Building (MRB) on the west campus. The number of graduate students continues to increase with current enrollment at 105 and 220 undergraduates; the department usually has about 45 postdoctoral students. Many other students pursue graduate degrees in related areas of medicinal chemistry, pharmaceutical chemistry, chemical engineering, biochemistry, and geochemistry, making a community of more than 350 chemistry-oriented research students.

Always striving to provide the best possible opportunities for our students, new facilities and equipment are being acquired at an amazing pace and our faculty and staff focus on providing a most rewarding and educational environment to help students achieve their goals. Research support facilities include the: Biochemical Research Service Laboratory Instrumentation Design Laboratory Mass Spectrometry Laboratory.
Molecular Graphics and Modeling Laboratory, Nuclear Magnetic Resonance Laboratory, X-ray Crystallography Laboratory, Laboratory Glassblowing, and Instrument Shops. Anschutz Library contains more than 300,000 books and periodicals spanning the fields of chemistry, biochemistry, physics, geology, and pharmacy.

**Undergraduate Program**

The undergraduate program in the Department of Chemistry has two primary missions. One of these is to help its majors attain a mastery of the discipline in preparation for further study in chemistry or a chemical science, or for immediate employment in chemistry. The other is to provide an opportunity for students majoring in other disciplines to acquire a basic knowledge of the fundamental areas of chemistry.

The curriculum leading to the Bachelor of Science (B.S.) degree, a rigorous program certified by the American Chemical Society, consists of a full spectrum of chemistry courses as well as supporting courses in mathematics, physics, and biochemistry, and is designed to prepare students for a professional career in chemistry. The Bachelor of Arts (B.A.) degree program, with fewer required courses, allows students to obtain a broader knowledge of areas outside of chemistry, or to tailor their chemistry program for specific or unique objectives. We also offer a Minor in chemistry for those seeking a secondary area of study.

**Graduate Program**

For a student wishing to earn a Doctor of Philosophy (Ph.D.) degree or a Master of Science (M.S.) degree in chemistry, the selection of a graduate school is one of the most important career decisions you will make. Your choice will not only determine where you will be during the next several years, but will lay the foundation for your future.

The KU Chemistry Graduate Program provides exceptional and diverse opportunities for the student interested in a career in cutting-edge research, higher education or any one of a number of chemically related positions requiring an advanced degree. We have a department of outstanding faculty, each of whom is dedicated to providing mentoring to graduate students and guiding them during their journey from undergraduate to professional.

**Undergraduate Programs**

Chemistry course work educates undergraduates to become professional chemists or to do graduate work in chemistry. It also provides the basic chemistry background for students entering such fields as biochemistry, biological sciences, dentistry, engineering, environmental science, geology, medicine, pharmacy, physics, and secondary-level science education. Courses in chemistry provide general knowledge and appreciation of chemistry and its impact on society.

**Advanced Placement**

Students who have taken the Advanced Placement Examination in chemistry should have the results forwarded to the Office of Admissions (http://admissions.ku.edu/). Students who score 5 need not take CHEM 130 and CHEM 135 and receive 10 hours of credit. With departmental permission, those who score 3 or 4 receive credit for CHEM 130. Credit for CHEM 135 also may be given to those who pass a special examination. Students who score at least 50 on the College Level Examination Program general chemistry examination receive 5 hours of credit in CHEM 130.

**Courses for Non-majors**

Undergraduates taking chemistry as preparatory study for another field should consult the courses listed for that field in this catalog. CHEM 110 is an introductory course for the non-science major who wants to study the general principles, methods, role, and significance of chemistry in the modern world, for pre-nursing students, and for students who plan to take no additional courses in chemistry. Pre-medical students and chemistry or other science majors should not take CHEM 110. CHEM 110 includes a laboratory. Engineering students who need only one semester of chemistry should take CHEM 150. CHEM 130 is an introductory course for students who plan to take more than one year of college chemistry, including chemical engineering, pre-medical, pre-pharmacy, and pre-dental students and students in biological sciences who must take organic chemistry. Students should continue with CHEM 135 in the same academic year that they take CHEM 130.

**Graduate Programs**

The department’s graduate program, its Ph.D. program in particular, produces graduates with the basic knowledge, skills, and experimental training necessary to enter productive careers in academic, industrial, and government positions. Faculty and graduate students work collegially, not only in the search for new knowledge at the frontiers of chemistry, but also toward the solution of problems of fundamental societal concern.

Although the department believes it is essential to provide graduate students with a knowledge base spanning the traditional areas of analytical, inorganic, organic, and physical chemistry, it nurtures its particular strengths in several important research areas at the interface of chemistry and the biological/medical sciences. The Department of Chemistry at KU is a worldwide leader in graduate training and research in bioanalytical chemistry, and its additional interactions with the pharmaceutical and biological sciences have led to strong graduate research programs in diverse areas such as bio-inorganic, bio-organic, and biophysical chemistry.

The department also recognizes its central science role by maintaining strong research and Ph.D. programs in areas that interface closely with molecular biosciences, physics, chemical engineering, mathematics, and computer science, for example, in drug discovery, theoretical chemistry, materials, molecular modeling, and laser spectroscopy. The entering Ph.D. student can be assured of finding vigorous programs spanning a full range of chemical studies, and the graduating Ph.D. student can be equally confident that his or her training and skills are marketable commodities.

The department’s M.S. program is a traditional companion to the Ph.D. program and shares the same goals. It is encouraged for students who prefer a program with less depth and a research (thesis) project that is manageable in 2 to 4 semesters. Although most entering graduate students choose the Ph.D.—the most desirable degree for those who wish to work as independent scientists in academic, industrial, or institutional settings—the M.S. serves a useful and essential role for students with other ambitions.

Research support facilities include the Instrumentation Design Laboratory, Mass Spectrometry Laboratory, Molecular Graphics and Modeling Laboratory, Nuclear Magnetic Resonance Laboratory, and X-ray Crystallography Laboratory. Anschutz Library contains more than 300,000 books and periodicals spanning the fields of chemistry, biochemistry, physics, geology, and pharmacy.
Non-Degree Seeking

Students who are interested in enrolling in graduate level coursework in the Department of Chemistry without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s degrees (https://chem.ku.edu/degrees/) webpage for further details.

Courses

CHEM 110. Introductory Chemistry. 5 Credits. NP N LFE
This integrated lecture and laboratory course provides an introduction to basic concepts related to general, organic, and biological chemistry. Suitable for students seeking an introductory course and for students who are majoring in health and allied health fields. Students whose majors require more than one semester of chemistry should enroll in CHEM 130, CHEM 170, or CHEM 190. CHEM 110 and CHEM 150 cannot both be taken for credit.

CHEM 130. General Chemistry I. 5 Credits. NP N LFE
This course seeks to develop a working knowledge of the conceptual foundation and the quantitative chemical relationships on which subsequent chemistry courses are built. Atomic structure, chemical bonding, reaction stoichiometry, thermochemistry, and periodic trends are emphasized in this integrated lecture and laboratory course. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 170 or CHEM 190. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Must be eligible for MATH 115.

CHEM 135. General Chemistry II. 5 Credits. N LFE
This course, which is a continuation of CHEM 130, focuses on chemical kinetics, chemical equilibrium, acid-base chemistry, and thermodynamics. Additional topics, such as environmental chemistry, electrochemistry, coordination chemistry, nuclear chemistry, organic chemistry, and/or polymers, may also be introduced in this integrated lecture and laboratory course. Students pursuing or considering a major in one of the chemical sciences should strongly consider taking CHEM 175 or CHEM 195. Prerequisite: CHEM 130, CHEM 170, or CHEM 190 with a grade of C- or higher.

CHEM 149. Chemistry for Engineers Supplement. 2 Credits. N
This course is intended for students in the School of Engineering who have credit for CHEM 130 but still need selected elements of second-semester general chemistry. Students will learn to describe phases of matter and quantify changes among them, and to analyze chemical equations and equilibria in the context of acid-base and redox chemistry. Prerequisite: Student in the School of Engineering and CHEM 130 or equivalent (or have Departmental consent). Credit in CHEM 135, CHEM 150, CHEM 175, or CHEM 195 precludes enrollment in and credit for CHEM 149.

CHEM 150. Chemistry for Engineers. 5 Credits. N LFE
This one semester course is designed for students in the School of Engineering who are not required to take additional chemistry courses at the college level. In this integrated lecture and laboratory course, students will learn to predict properties of substances based on their molecular structure, to describe phases of matter and quantify changes among them, and to analyze chemical equations and equilibria in the context of acid-base and redox chemistry. Technical communication and experimental design are also emphasized. Prerequisite: Must have completed a course in high school chemistry and be eligible for MATH 115 (or have Departmental consent). Students not admitted to the School of Engineering must receive permission from instructor. CHEM 110 and CHEM 150 cannot both be taken for credit.

CHEM 170. Chemistry for the Chemical Sciences I. 5 Credits. NP N LFE
The first course in a two-course sequence focused on the principles and applications of modern chemistry. This integrated lecture and laboratory course is designed for students pursuing or considering a major in one of the chemical sciences (such as chemistry, biochemistry, chemical engineering or petroleum engineering). The CHEM 170/CHEM 175 course sequence covers the same general topics as CHEM 130/CHEM 135, but with an increased emphasis on modern applications of chemistry. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: Eligibility for MATH 115.

CHEM 175. Chemistry for the Chemical Sciences II. 5 Credits. N LFE
An integrated lecture and laboratory course which is a continuation of CHEM 170. Prerequisite: CHEM 130, CHEM 170, or CHEM 190 with a grade of C- or higher.

CHEM 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chemistry. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

CHEM 180. Seminar I. 0.5 Credits. U
Special topics for chemistry majors such as using the chemical literature, educational and professional perspectives, scientific ethics, and undergraduate research opportunities. It is recommended that students take this half-semester course in their freshman or sophomore year. Prerequisite: A declared major in chemistry or consent of instructor.

CHEM 190. Foundations of Chemistry I, Honors. 3 Credits. NP N LFE
CHEM 190, together with corequisite laboratory course CHEM 191, provides an integrated treatment of theoretical and experimental aspects of chemistry for qualified and highly motivated students. It is anticipated that students in CHEM 190 and CHEM 191 plan to take more than one year of chemistry at the college level. Students with credit in CHEM 110 will have two hours added on to their total number of hours required for graduation. Prerequisite: High school chemistry and calculus; at least one of the following: (a) acceptance into the KU Honors Program, (b) an AP exam score in chemistry of 3 or higher, (c) a mathematics ACT score of 30 or higher; or permission of instructor. Corequisite: CHEM 191.

CHEM 191. Foundations of Chemistry I Laboratory, Honors. 2 Credits. NP N LFE
Laboratory course for students enrolled in CHEM 190. Prerequisite: Corequisite: CHEM 190.

CHEM 195. Foundations of Chemistry II, Honors. 3 Credits. NP N LFE
CHEM 195 and corequisite laboratory course CHEM 196 continue the integrated theoretical and experimental exploration of chemistry topics for qualified and highly motivated students. Prerequisite: CHEM 130, CHEM 170, or CHEM 190 and CHEM 191 with a grade of C- or better, and permission of the instructor. Corequisite: CHEM 196.

CHEM 196. Foundations of Chemistry II Laboratory, Honors. 2 Credits. NP N LFE
Laboratory course for students enrolled in CHEM 195. Prerequisite: CHEM 130, CHEM 170, or CHEM 190 and CHEM 191 with a grade of C- or better, and permission of the instructor. Corequisite: CHEM 195.

CHEM 201. Laboratory Safety in the Chemical Sciences. 1 Credits. U
A course for undergraduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies. Required for all B.S. majors, and for all B.A. majors participating in undergraduate research. Students with credit in CHEM 201 may not take CHEM 701 for credit. Prerequisite: CHEM 135, CHEM 175, or CHEM 195.

CHEM 250. Mathematical Methods for the Chemical Sciences. 3 Credits. NM
A one-semester course covering advanced mathematical methods necessary for upper-level physical and analytical chemistry courses. Topics include complex numbers and functions, ordinary and partial differential equations, linear algebra and probability and statistics with special emphasis on applications to problems in the chemical sciences. Prerequisite: Corequisite: MATH 127.

CHEM 330. Organic Chemistry I. 3 Credits. N
A study of the structure and reactivity of selected classes of organic compounds. CHEM 330 is the first course of a two-semester sequence. Prerequisite: CHEM 135, CHEM 175, or CHEM 195 with a grade of C- or higher.

CHEM 331. Organic Chemistry I Laboratory. 2 Credits. U LFE
Emphasis on basic techniques for the preparation, separation, and purification of organic compounds. Required for a major in chemistry and by those departments and programs specifying a complete undergraduate organic chemistry course. Prerequisite: CHEM 330 or CHEM 380 with a grade of C- or higher or concurrent enrollment in CHEM 330 or CHEM 380.

CHEM 335. Organic Chemistry II. 3 Credits. N
A continuation of CHEM 330, intended for students who want further training in organic chemistry. Prerequisite: CHEM 330 or CHEM 380 with a grade of C- or higher.

CHEM 336. Organic Chemistry II Laboratory. 2 Credits. U LFE
More advanced organic laboratory techniques with emphasis on modern spectroscopic methods for determining the structure and purity of organic compounds. Prerequisite: CHEM 331 and CHEM 335 or CHEM 385 with a grade of C- or higher or concurrent enrollment in CHEM 335 or CHEM 385.

CHEM 380. Organic Chemistry I, Honors. 3 Credits. N
This is the first half of a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses. Recommended for members of the University Honors Program and students majoring in chemistry or related fields. Prerequisite: CHEM 135, CHEM 175, or CHEM 195 with a grade of C- or higher and permission of the instructor.

CHEM 385. Organic Chemistry II, Honors. 3 Credits. N
This is the second course in a two-semester sequence in organic chemistry for students with strong records in previous chemistry courses. Recommended for members of the University Honors Program and students majoring in chemistry or related fields. Prerequisite: CHEM 330 or CHEM 380 with a grade of C- or higher, and permission of the instructor.

CHEM 390. Topics in Chemistry, Honors: _____. 1-5 Credits. N
A course on special topics in chemistry, given as the need arises. Course content applies and expands upon general chemistry concepts, such as chemical thermodynamics, kinetics, and bonding. In this course, students gain knowledge in a topic of contemporary interest in chemistry, are challenged to examine the experimental and theoretical basis of this knowledge, and consider the broader impacts of this knowledge outside the discipline. Course may be repeated for different topics. Prerequisite: CHEM 135, CHEM 175 or CHEM 195 and membership in the University Honors Program; or permission of instructor. Each section may have additional prerequisites to be determined by the instructor.

CHEM 400. Analytical Chemistry. 3 Credits. N
Principles of analytical chemistry with emphasis on the fundamental methods used for chemical analysis. Topics include experimental error, statistical analysis, method development, sampling, calibration methods, spectrophotometry, chromatography, mass spectrometry, and electrochemistry. Prerequisite: One semester of organic chemistry and one semester of organic chemistry laboratory, or permission of instructor. Corequisite: CHEM 401.

CHEM 401. Analytical Chemistry Laboratory. 2 Credits. U
Experiments illustrate fundamental principles of chemical analysis methods. The course serves as an introduction to advanced instrumental methods of analysis. Prerequisite: One semester of organic chemistry and one semester of organic chemistry lab, or permission of instructor. Corequisite: CHEM 400.

CHEM 450. Directed Readings/Laboratory in Chemistry. 1-3 Credits. N
Individual and supervised study or laboratory work on special topics or problems in chemistry. Prerequisite: Ten hours of chemistry and a minimum overall grade-point average of 2.0 or consent of department.

CHEM 498. Undergraduate Research. 1-2 Credits. N
A research course for Chemistry majors, consisting of experimental or theoretical work in chemistry or a closely related field. A final report must be submitted to the instructor at the end of the semester. Prerequisite: CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training.

CHEM 510. Biological Physical Chemistry. 3 Credits. N
A one-semester course that explores the fundamentals of physical chemistry with specific application to biological systems. The basic principles of thermodynamics, chemical kinetics, quantum mechanics and spectroscopy will be introduced, and their application to aqueous solutions and biochemical systems will be emphasized. This class consists of lecture only. Students requiring laboratory experience should enroll in CHEM 520. Prerequisite: One semester of organic chemistry, two semesters of calculus, and two semesters of physics.

CHEM 520. Biological Physical Chemistry with Laboratory. 5 Credits. N
A one-semester integrated lecture and laboratory course that explores the fundamentals of physical chemistry with specific application to biological systems. The basic principles of thermodynamics, chemical kinetics, quantum mechanics and spectroscopy will be introduced, and their applications to aqueous solutions and biochemical systems will be emphasized. Students who do not wish to take the laboratory component should enroll in CHEM 510. Prerequisite: One semester of organic chemistry, two semesters of calculus and two semesters of physics.

CHEM 525. Physical Chemistry for Engineers. 4 Credits. N
An introduction to the basic principles of quantum mechanics, atomic and molecular structure, molecular rotations and vibrations, statistical mechanics, statistical thermodynamics and reaction dynamics. Prerequisite: Two semesters of general chemistry; PHSX 212; MATH 127, MATH 220 or MATH 320 and MATH 290 or consent of instructor.

CHEM 530. Physical Chemistry I. 4 Credits. N
An introduction to the basic principles of quantum mechanics, atomic and molecular structure, molecular rotations and vibrations, group theory, spectroscopy, and statistical mechanics. Prerequisite: Two semesters of general chemistry; PHSX 212; MATH 127; and CHEM 250 (or MATH 220 [and MATH 221])
CHEM 535. Physical Chemistry II. 3 Credits. N
Emphasizes the thermodynamics of molecular systems with application to the structure and properties of gases, liquids, solids, materials, statistical thermodynamics, chemical kinetics, and reaction dynamics. Prerequisite: CHEM 530 or consent of instructor.

CHEM 537. Physical Chemistry Laboratory. 3 Credits. U LFE
Experiments in physical chemistry, with emphasis on the fundamental principles of quantum mechanics, spectroscopy, thermodynamics and kinetics as applied to chemical systems. Prerequisite: CHEM 401 and CHEM 530 and concurrent enrollment in CHEM 535.

CHEM 598. Research Methods. 3 Credits. N LFE
An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling, laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UKanTeach program. (Same as PHSX 598.) Prerequisite: At least one course at the 100 level or above in CHEM, MATH, or PHSX.

CHEM 635. Instrumental Methods of Analysis. 2 Credits. U
Theory and application of instrumental methods to modern analytical problems. Topics covered include atomic and molecular spectroscopy, electrochemistry, mass spectrometry, and separations. Prerequisite: CHEM 400 and CHEM 401 and one semester of physical chemistry laboratory, or permission of instructor.

CHEM 636. Instrumental Methods of Analysis Laboratory. 3 Credits. U LFE
Theory and application of instrumental methods to modern analysis problems. Experiments covered in this capstone laboratory course include atomic and molecular spectroscopy, electrochemistry, and separation methods. Prerequisite: CHEM 400 and CHEM 401, and one semester of physical chemistry laboratory; or permission of instructor. Prerequisite or Corequisite: CHEM 635.

CHEM 660. Systematic Inorganic Chemistry. 3 Credits. N
A systematic study of the elements and their compounds, emphasizing the relationship between properties of substances and their atomic and molecular structures and the positions of the elements in the periodic systems. Prerequisite: CHEM 510, CHEM 520, or CHEM 530.

CHEM 661. Advanced Inorganic Laboratory. 2 Credits. U LFE
Experiments concerning the synthesis and characterization of inorganic compounds. Prerequisite: CHEM 660 or concurrent enrollment in CHEM 660.

CHEM 680. Topics in Chemistry: ____. 1-5 Credits. N
Courses on special topics in chemistry, given as the need arises. Course may be repeated for different topics. Prerequisite: 20 hours of Chemistry. Each section may have additional prerequisites to be determined by the instructor.

CHEM 695. Seminar II. 0.5 Credits. U
Special topics and presentations by students and faculty in areas of current interest such as recent advancements in chemistry, professional development, societal issues facing chemists, and reports of ongoing research. This half-semester course is recommended for seniors. Prerequisite: CHEM 180.

CHEM 698. Undergraduate Capstone Research. 1-2 Credits. N
An undergraduate capstone research experience in chemistry or a closely related field, consisting of experimental or theoretical work on a topic developed in consultation with the faculty research advisor. A total of 3 credit hours must be accumulated for the course to count toward KU Core Goal 6. Students will submit a final report to the Chemistry Department during the semester in which the third credit hour is completed, and also present their results in a public forum. Prerequisite: CHEM 201, or CHEM 201 concurrently (or documentation of appropriate laboratory safety training), CHEM 335 (or CHEM 385) and CHEM 336 with grades of C or higher, and permission of the Chemistry Department.

CHEM 699. Undergraduate Honors Research. 1-2 Credits. N
An undergraduate research experience in chemistry or a closely related field for students in the Chemistry Department Honors Program, consisting of experimental or theoretical work on a topic developed in consultation with the faculty research advisor. A minimum of 4 credit hours must be accumulated to satisfy Chemistry Department Honors requirements, and 3 of those credit hours will satisfy KU Core Goal 6. At the completion of the research, a written thesis, and an oral defense of the thesis, will be required. Prerequisite: Acceptance to the Chemistry Department Honors Program; CHEM 201, or CHEM 201 concurrently, or documentation of appropriate laboratory safety training.

CHEM 700. Responsible Scholarship in the Chemical Sciences. 1 Credits.
A course for beginning graduate students with particular emphasis on scholarship issues relevant to the chemical sciences. Topics will include scientific ethics, codes of conduct, record keeping, authorship, and the responsibilities of a scientist. Group discussions, particularly centered around case studies, will be a significant component of the course.

CHEM 701. Laboratory Safety in the Chemical Sciences. 1 Credits.
A course for beginning graduate students focusing on chemical safety in modern laboratories. The course will feature practical instruction in lab safety, an introduction to safety resources, and group discussions centered around case studies.

CHEM 718. Mathematical Methods in Physical Sciences. 3 Credits.
Review of all complex variable theory; introduction to the partial differential equations of physics; Fourier analysis; and special functions of mathematical physics. (Same as PHSX 718.) Prerequisite: Two semesters of junior-senior mathematics.

CHEM 720. Fundamentals and Methods of Analytical Chemistry. 3 Credits.
An introductory graduate level course in analytical chemistry, in which the principles of electrochemistry, spectroscopy, and separation science are utilized to solve analytical problems in inorganic, organic and biochemical chemistry. Prerequisite: An undergraduate course in analytical chemistry, a year of organic chemistry, and a year of physical chemistry.

CHEM 730. Coordination and Organometallic Chemistry. 3 Credits.
An examination of the basic foundations of coordination chemistry and organometallic chemistry including symmetry methods, bonding, magnetism, and reaction mechanisms. Prerequisite: Two semesters of organic chemistry and one semester of physical chemistry in which quantum chemistry is introduced. The latter course may be taken concurrently with CHEM 730.

CHEM 740. Principles of Organic Reactions. 3 Credits.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include acid and base properties of functional groups; qualitative aspects of strain, steric, inductive, resonance, and solvent effects on reactivity; stereochemistry and conformations; an introduction to orbital symmetry control; basic
CHEM 742. Spectroscopic Identification of Organic Compounds. 3 Credits.
The use of techniques such as infrared, nuclear magnetic resonance, and ultraviolet spectroscopy, and mass spectrometry for elucidating the structure of organic molecules. A lecture and workshop course. Prerequisite: CHEM 626 and CHEM 627.

CHEM 750. Introduction to Quantum Mechanics. 3 Credits.
An introduction to the basic principles of quantum theory relevant to atomic and molecular systems. Topics include operators and operator algebra, matrix theory, eigenvalue problems, postulates of quantum mechanics, the Schrodinger equation, angular momentum, electronic structure, molecular vibrations, approximation methods, group theory, and the foundations of spectroscopy. Prerequisite: Two semesters of physical chemistry.

CHEM 760. Introduction to Chemistry in Biology. 3 Credits.
A comprehensive introduction to the application of chemistry to address problems in biology at the molecular level. The fundamentals of biomolecules (nucleic acids, proteins, lipids and carbohydrates) and techniques of chemical biology research will be discussed.

CHEM 800. Research. 1-10 Credits.
Original investigation on the graduate level.

CHEM 810. Colloquium: _____, 1 Credits.
Colloquia on various topics of current interest are presented by students, faculty, and visiting scientists.

CHEM 816. Careers in the Biomedical Sciences. 1 Credits.
Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as BIOL 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor.

CHEM 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.
This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion. (Same as BIOL 817/MDCM 817/PHCH 817.) Prerequisite: Graduate student.

CHEM 820. Analytical Separations. 3 Credits.
An advanced treatment of analytical separations techniques. The theory of separation science will be augmented with discussion of practical aspects of instrumentation and experiment design. Prerequisite: CHEM 720.

CHEM 822. Electrochemical Analysis. 3 Credits.
An advanced treatment of selected electroanalytical techniques and methodology. Prerequisite: CHEM 720.

CHEM 824. Spectrochemical Methods of Analysis. 3 Credits.
General concepts of encoding chemical information as electromagnetic radiation; major instrumental systems for decoding, interpretation, and presentation of the radiation signals; atomic emission, absorption, and fluorescence; ultraviolet, visible, infrared, and microwave absorption; molecular luminescence; scattering methods; mass spectrometry; magnetic resonance; automated spectrometric systems. Prerequisite: CHEM 720.

CHEM 826. Mass Spectrometry. 3 Credits.
An introduction to mass spectrometry. The various ionization techniques and mass analyzers will be discussed, and many examples of different mass spectrometric applications will be introduced. Prerequisite: CHEM 720.

CHEM 828. Bioanalysis. 3 Credits.
A course covering important aspects in modern chemical measurement with particular emphasis placed on bioanalysis. This course will survey the modern analytical challenges associated with the ongoing efforts in genomics and proteomics and discuss future trends in methods in instrumentation. Prerequisite: CHEM 720.

CHEM 830. Structure, Bonding and Spectroscopic Methods in Inorganic Chemistry. 3 Credits.
An introduction of quantum and group theories in relation to bonding and physicochemical properties of inorganic substances. Topics include vibrational and electronic spectroscopies, magnetism, and inorganic photochemistry. Prerequisite: CHEM 730.

CHEM 832. Inorganic Reaction Mechanisms and Catalysis. 3 Credits.
Mechanistic aspects of transition metal chemistry including substitution reactions, electron transfer reactions, rearrangement reactions, ligand reactions and inorganic photochemistry. Principles and applications of heterogeneous and homogeneous catalytic processes emphasizing catalysis at transition metal centers. Prerequisite: CHEM 730.

CHEM 840. Physical Organic Chemistry. 3 Credits.
An examination of the methods used to probe the mechanisms of organic reactions and of the chemistry of some important reactive intermediates. Topics will include isotope effects, kinetics, linear free energy relationships, solvent effects, a continuing discussion of orbital symmetry, rearrangements, carbocations, carbanions, carbenes, radicals, excited states, and strained molecules. Prerequisite: CHEM 740.

CHEM 842. Organic Synthesis I. 3 Credits.
A discussion of fundamental reactions for the formation of carbon-carbon bonds, oxidation, reduction, and functional group interchange. Prerequisite: CHEM 740.

CHEM 844. Problem Solving in Organic Chemistry. 1 Credits.
A course designed to develop a student's ability to apply fundamental concepts of mechanistic organic and organometallic chemistry, physical organic chemistry, bioorganic chemistry, synthetic organic reactions and techniques for structure elucidation. Students will propose solutions to practice problems mimicking challenges that arise in contemporary research in organic chemistry. The format includes interactive problem-solving discussions led by faculty and peers and monthly written examinations. May be repeated up to three times until the student has passed at least four of the written exams. Graded on a satisfactory/unsatisfactory basis. Prerequisite: CHEM 740 or permission of instructor.

CHEM 850. Advanced Quantum Mechanics. 3 Credits.
The advanced mathematical and physical principles of quantum mechanics relevant to atomic and molecular systems. Topics may include abstract vector spaces and representations, time-dependent quantum dynamics, electronic structure theory, density matrices, second-quantization, advanced group theory, path integrals, and scattering theory. Prerequisite: CHEM 750 or its equivalent.
CHEM 852. Statistical Thermodynamics. 3 Credits.
Thermodynamics and introduction to equilibrium statistical mechanics with emphasis on problems of chemical interest. The course consists of two roughly equal parts: 1) An advanced overview of the laws and concepts of thermodynamics with application to specific problems in phase and chemical equilibria and 2) An introduction to equilibrium statistical mechanics for both classical and quantum systems. Prerequisite: CHEM 750 or its equivalent.

CHEM 854. Chemical Kinetics and Dynamics. 3 Credits.
A study of the rates, mechanisms, and dynamics of chemical reactions in gases and liquids. Topics include an advanced overview of classical kinetics, reaction rate theories (classical collision theory, transition-state theory and introductory scattering theory), potential energy surfaces, molecular beam reactions, photochemistry, Marcus electron transfer theory and other areas of current interest. Prerequisite: CHEM 750 or its equivalent.

CHEM 856. Molecular Spectroscopy. 3 Credits.
Quantitative molecular spectroscopy and its chemical applications. The basic principles of the molecular energy levels, selection rules and spectral transition intensities will be discussed and applied to rotational, vibrational, electronic, and nuclear magnetic spectroscopy. Linear and nonlinear spectroscopies will be addressed. Prerequisite: CHEM 750 or its equivalent.

CHEM 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor.

CHEM 899. Master's Thesis. 1-10 Credits.
Research work (either experimental or theoretical) in chemistry for students working toward the M.S. degree. Graded on a satisfactory progress/limited progress/no progress basis.

CHEM 900. Advanced Research. 1-10 Credits.
Original investigation in chemistry at the graduate level. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Advancement to doctoral candidacy.

CHEM 914. Computational Methods in Physical Sciences. 3 Credits.
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document computer programs to solve physical problems. (Same as ASTR 815 and PHSX 815.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above.

CHEM 930. Bioinorganic Chemistry. 3 Credits.
A survey of metalloproteins and metalloenzymes, their structures and functions, including recent advances in biomimetic modeling, small molecule activation in biological systems, and related physical methods. Prerequisite: CHEM 832.

CHEM 942. Organic Synthesis II. 3 Credits.
A survey of important techniques in organic chemistry with respect to scope, limitations, mechanism, and stereochemistry. Emphasis will be placed on new synthetic methods and application of such methods to the synthesis of structurally interesting compounds, particularly natural products. Prerequisite: CHEM 842.

CHEM 950. Advanced Statistical Mechanics. 3 Credits.
Advanced equilibrium statistical mechanics and introduction to nonequilibrium statistical mechanics. Topics include: the theory of liquids, critical phenomena linear response theory and time correlation functions, Langevin dynamics, and molecular hydrodynamics. (Same as PHSX 971.) Prerequisite: CHEM 909 or equivalent.

CHEM 980. Advanced Topics in Chemistry: _____ 2-3 Credits.
A course covering special advanced topics in chemistry not included in other graduate courses. One or more topics will be covered in a given semester and an announcement of the course content and prerequisites will be made at the end of the previous semester. This course may be taken more than once when the topic varies.

CHEM 999. Doctoral Dissertation. 1-10 Credits.
Research work (either experimental or theoretical) in chemistry for students working toward the Ph.D. degree. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts in Chemistry

Why study chemistry?
At KU Chemistry, we have faculty dedicated to mentoring both undergraduate and graduate students and to helping each student achieve scientific maturity. In addition to required classroom and laboratory courses, options exist for doing research in exciting areas of mainstream chemistry, including emerging fields of microfluidics, precision medicine and sustainable catalysis.

Undergraduate Program
The undergraduate program in the Department of Chemistry has two primary missions. One of these is to help its majors attain a mastery of the discipline in preparation for further study in chemistry or a chemical science, or for immediate employment in chemistry. The other is to provide an opportunity for students majoring in other disciplines to acquire a basic knowledge of the fundamental areas of chemistry.

The curriculum leading to the Bachelor of Science (B.S.) degree, a rigorous program certified by the American Chemical Society, consists of a full spectrum of chemistry courses as well as supporting courses in mathematics, physics, and biochemistry, and is designed to prepare students for a professional career in chemistry. The Bachelor of Arts (B.A.) degree program, with fewer required courses, allows students to obtain a broader knowledge of areas outside of chemistry, or to tailor their chemistry program for specific or unique objectives. We also offer a minor in chemistry for those seeking a secondary area of study.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.
Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Chemistry Programs

The B.A. degree is for the student who wants to understand the fundamental principles of chemistry and to study a number of other fields. The B.S. degree prepares students for graduate school and professional careers. Both are based on a high school background that includes at least 1½ years of algebra and 1 year of geometry. High school courses in chemistry and physics are desirable but are not required. Many chemistry majors are preparing for medical school or for graduate study in chemistry and related fields. For graduate school, the common body of knowledge in the B.A. program is the minimum prerequisite. For premedical students, much of the knowledge will be important in their careers. Even more important, however, is the training in logical thinking, drawing conclusions from experimental observations, and digesting and understanding scientific information.

First- and Second-Year Preparation

Because study in chemistry requires preparation in mathematics and physics as well as a structured series of courses in chemistry, students should begin meeting major requirements in the first year. Students planning to major in chemistry should consult a chemistry department major advisor during their first semester to develop a 4-year plan for degree completion. It is particularly important to take CHEM 170 (or CHEM 130 or CHEM 190 and CHEM 191) and CHEM 175 (or CHEM 135 or CHEM 195 and CHEM 196) in the first year and CHEM 330 or (CHEM 380) and CHEM 331 in the second year. For those seeking a B.A. degree, it is also important to complete two semesters of calculus and two semesters of physics during the first two years. Minimum requirements in these subject areas for the B.A. degree are MATH 115, MATH 116, PHSX 114 and PHSX 115.

Requirements for the B.A. Major

In addition to the common College requirements for the B.A., a minimum of 29 hours in chemistry (including 5 hours each of analytical, organic, and physical chemistry lecture and laboratory) and one year each of calculus and physics (prerequisites for physical chemistry) are required. These courses fulfill the requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 191</td>
<td>and Foundations of Chemistry I Laboratory, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Chemistry II. Satisfied by one of the following (CHEM 175 recommended) 5

CHEM 175 | Chemistry for the Chemical Sciences II                               |       |
CHEM 135 | General Chemistry II                                                 |       |
CHEM 195 | Foundations of Chemistry II, Honors                                   |       |
& CHEM 196 | and Foundations of Chemistry I Laboratory, Honors                     |       |

Seminar I. Satisfied by 0.5

CHEM 180 | Seminar I                                                            |       |

Laboratory Safety in the Chemical Sciences. Satisfied by: 1

CHEM 201 | Laboratory Safety in the Chemical Sciences                           |       |

Organic Chemistry I (Lecture and Lab). Satisfied by: 5

CHEM 330 | Organic Chemistry I                                                  |       |
CHEM 380 | Organic Chemistry I, Honors                                           |       |
CHEM 331 | Organic Chemistry I Laboratory                                        |       |

Organic Chemistry II (Lecture and Lab). Satisfied by: 5

CHEM 335 | Organic Chemistry II                                                 |       |
CHEM 385 | Organic Chemistry II, Honors                                          |       |
CHEM 336 | Organic Chemistry II Laboratory                                       |       |

Analytical Chemistry (Lecture and Lab). Satisfied by: 5

CHEM 400 | Analytical Chemistry                                                 |       |
CHEM 401 | Analytical Chemistry Laboratory                                       |       |

Physical Chemistry (Lecture and Lab). Satisfied by one of the following (CHEM 520 recommended) 5-10

CHEM 520 | Biological Physical Chemistry with Laboratory                        |       |
CHEM 530 | Physical Chemistry I                                                 |       |
CHEM 535 | and Physical Chemistry II                                            |       |
& CHEM 537 | and Physical Chemistry Laboratory                                    |       |

Seminar II. Satisfied by: 0.5

CHEM 695 | Seminar II                                                           |       |

Capstone experience (Fulfills KU Core Goal 6). Satisfied by one of the following: 3

CHEM 636 | Instrumental Methods of Analysis Laboratory                         |       |
CHEM 698 | Undergraduate Capstone Research                                      |       |
CHEM 699 | Undergraduate Honors Research                                       |       |

Mathematics and Physics 14-20

Mathematics: (choose one of the following (MATH 115 & MATH 116 recommended))

MATH 115 | Calculus I                                                          |       |
& MATH 116 | and Calculus II                                                     |       |
MATH 125 | Calculus II                                                         |       |
& MATH 126 | and Calculus II                                                     |       |
& MATH 127 | and Calculus III                                                    |       |

Physics: (Choose one of the following (PHSX 114 & PHSX 115 recommended))

PHSX 114 | College Physics I                                                   |       |
& PHSX 115 | and College Physics II                                              |       |
PHSX 211 | General Physics I                                                   |       |
& PHSX 216 | and General Physics I Laboratory                                    |       |
& PHSX 212 | and General Physics II                                              |       |
& PHSX 236 | and General Physics II Laboratory                                   |       |

Courses that fulfill KU Core Goal 6 are CHEM 636 Instrumental Methods of Analysis Laboratory or 3 credits of
CHEM 698 or CHEM 699. Students choosing CHEM 636 will be required to take CHEM 635 as the pre or co-requisite.

### Biological Chemistry Option

This option is available to students interested in the biological applications of chemistry. The curriculum is compatible with many pre-health-professions programs and prepares the student for graduate study or career opportunities.

In addition to all of the requirements for the regular B.A. major, the following courses are required:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 636</td>
<td>Biochemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 638</td>
<td>Biochemistry II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Plus 1 elective (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

(1 + consultation with a faculty major advisor, choose 1 course from those listed in the Biology Option Group in requirements for the B.S. degree in Chemistry; Biological Chemistry option.)

#### Biology Option Group

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
</tr>
</tbody>
</table>

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

#### Major Hours

Satisfied by 35-40 hours of major courses.

#### Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

#### Major Junior/Senior Hours

Satisfied by a minimum of 23.5 hours from junior/senior courses (300+) in the major.

#### Major Junior/Senior Graduation GPA

Satisfied by a minimum of 20 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator. (http://clas.ku.edu/undergrad/tools/gpa/)

Sample 4-year plans for the BA degree with the following concentrations, can be found here: Chemistry (p. 1204), Biological Chemistry (p. 1205), or by using the left-side navigation.

Sample 4-year plans for the BS degree in Chemistry can be found by using the left-side navigation.

### Departmental Honors

Undergraduates may apply for admission to the departmental honors program after completion of an analytical, organic, and physical chemistry course but no sooner than the beginning of the junior year. Highly motivated and superior B.A. and B.S. students are admitted to the honors program. Honors in chemistry are awarded to students who have been admitted to the program and who have completed the following requirements with superior performance, including a major GPA of 3.5.

1. At least 2 semesters of CHEM 699 (4-8 hours total) resulting in a written thesis.
2. Evaluation and approval of the thesis by a faculty advisory committee.
3. Oral presentation of the thesis results at a special departmental seminar or other approved forum.

For an application form and further information, consult the department office.

### BA in Chemistry

Below is a sample 4-year plan for students pursuing the standard BA in Chemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, prior to freshman year, fall semester.

#### Freshman

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 180 (Major Requirement)</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 201 (Major Course)</td>
<td>4</td>
<td>1 CHEM 335 or 385 (Major Requirement)</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
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</table>

#### Junior

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 400 (Major Requirement)</td>
<td>4</td>
<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
</tr>
<tr>
<td>1</td>
<td></td>
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</tr>
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<tr>
<td>3</td>
<td></td>
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<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
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</table>

#### Junior

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<thead>
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<th>Spring Hours</th>
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<td>CHEM 400 (Major Requirement)</td>
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<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Chemistry with concentration in Biological Chemistry

Below is a sample 4-year plan for students pursuing the BA in Chemistry with a Biological Chemistry option. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to freshman year, fall semester.

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 520 (Major Requirement)</td>
<td>5</td>
<td>CHEM 635</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 695 (Major Requirement)</td>
<td>0.5</td>
<td>CHEM 636</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 698</td>
<td>2</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
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<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours 120</strong></td>
<td>13.5</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2 CHEM 170 requires eligibility for MATH 115 in order to enroll.
3 Students can elect to enroll in 3 hours of research or CHEM 636, Instrumental Methods of Analysis Lab to fulfill the Capstone, Goal 6 requirement. Goal 6 may also be satisfied by 3 hours of CHEM 698. Those students that elect CHEM 636 must also take CHEM 635 Instrumental Methods of Analysis as the co-requisite.
4 CHEM 180, CHEM 201, CHEM 400, CHEM 401, CHEM 520, CHEM 695 are Fall only courses. CHEM 635, CHEM 636 are Spring only courses.
5 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
6 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.
Bachelor of Science in Chemistry

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Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 CHEM 170 requires eligibility for MATH 115 in order to enroll.

3 BIOL 150 or BIOL 151 is a pre-requisite for the elective courses needed to fulfill the Biological Chemistry concentration elective requirement.

4 Choose from a list of electives approved to count for the Biological Chemistry elective requirement. See the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/chemistry/ba/#requirementstext) tab for a list of courses.

5 CHEM 180, CHEM 201, CHEM 400, CHEM 401, CHEM 530, CHEM 695 are Fall only courses, CHEM 635 and CHEM 636 are Spring only courses. BIOL 636 is a fall only course. BIOL 638 is a spring only course.

6 A Goal 6 course is required to fulfill the KU Core. Students can elect to enroll in 3 hours of research or CHEM 636, Instrumental Methods of Analysis Lab to fulfill the Capstone, Goal 6 requirement. Goal 6 may also be satisfied by 3 hours of CHEM 698. Those students that elect CHEM 636 must also take CHEM 635 Instrumental Methods of Analysis as the co-requisite.

7 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

8 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

9 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Bachelor of Science in Chemistry

Total Hours 120

<table>
<thead>
<tr>
<th>Senior Year</th>
<th>Hours</th>
<th>Spring</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 695 (Major Requirement)</td>
<td>0.5</td>
<td>CHEM 635, 6</td>
<td>2</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>CHEM 636, 6</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 400 (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 401 (Major Requirement)</td>
<td>2</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 636</td>
<td>4</td>
<td>BIOL 635</td>
<td>5</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>BIOL 638</td>
<td>5</td>
</tr>
<tr>
<td>Total Hours</td>
<td>18.5</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>
Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Chemistry Programs

The B.S. degree prepares students for graduate school and professional careers. The B.A. degree is for the student who wants to understand the fundamental principles of chemistry and to study a number of other fields. Both are based on a high school background that includes at least 1½ years of algebra and 1 year of geometry. High school courses in chemistry and physics are desirable but are not required. Many chemistry majors are preparing for medical school or for graduate study in chemistry and related fields. For graduate school, the common body of knowledge in the B.A. program is the minimum prerequisite. For premedical students, much of the knowledge will be important in their careers. Even more important, however, is the training in logical thinking, drawing conclusions from experimental observations, and digesting and understanding scientific information.

First- and Second-Year Preparation

Because study in chemistry requires preparation in mathematics and physics as well as a structured series of courses in chemistry, students should begin meeting major requirements in the first year. Students planning to major in chemistry should consult a chemistry department major advisor during their first semester to develop a 4-year plan for degree completion. It is particularly important to take CHEM 170 (or CHEM 130 or CHEM 190 & CHEM 191) and CHEM 175 (or CHEM 135 or CHEM 195 & CHEM 196) in the first year and CHEM 201, CHEM 330 (or CHEM 380) and CHEM 331 in the second year. For those seeking a B.S. degree it is also important to complete CHEM 335 (or CHEM 385) and CHEM 336 in the second year as well as their mathematics preparation (MATH 125, 126, 127 and CHEM 250) and physics preparation (PHSX 211 & PHSX 216, and PHSX 212 & PHSX 236) in the first 2 years.

Requirements for the B.S. Degree

General Education Requirements

All students must complete the KU Core.

<table>
<thead>
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<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td></td>
<td><strong>Chemistry Prerequisite or Co-requisite Knowledge</strong></td>
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<td>Majors must complete courses as specified in each of the following areas: Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.</td>
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<tr>
<td></td>
<td>MATH 125 Calculus I</td>
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<td>or MATH 141:Calculus I, Honors</td>
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<tr>
<td></td>
<td>MATH 126 Calculus II</td>
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<td></td>
<td>or MATH 141:Calculus II, Honors</td>
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<td>Calculus III. Satisfied by one of the following:</td>
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<td>or MATH 141:Calculus III, Honors</td>
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<td>&amp; PHSX 216 and General Physics I Laboratory</td>
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<td>PHSX 213 General Physics I Honors</td>
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<td>BIOL 636 Biochemistry I</td>
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<td>Majors must complete courses as indicated in the following areas:</td>
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<td></td>
<td>CHEM 170 Chemistry for the Chemical Sciences I</td>
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<td>CHEM 130 General Chemistry I</td>
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</table>
|        | CHEM 190 Foundations of Chemistry I, Honors & CHEM 191 and Foundations of Chemistry I Laboratory, Honors | |}

Full PDF 2022-23 1207
**Advanced Inorganic Laboratory. Satisfied by:**
- CHEM 661 Advanced Inorganic Laboratory

**Seminar II. Satisfied by:**
- CHEM 695 Seminar II

**Capstone Experience (Fulfills KU Core Goal 6). Satisfied by one of the following:**
- CHEM 636 Instrumental Methods of Analysis Laboratory
- CHEM 695 Undergraduate Capstone Research
- CHEM 699 Undergraduate Honors Research

### Major Hours & Major GPA

**KU Core Goal 6 is satisfied by either CHEM 636 Instrumental Methods of Analysis Laboratory, or 3 credit hours of CHEM 698 or CHEM 699.**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
- Satisfied by 47 hours of major courses.

**Major in Residence**
- Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
- Satisfied by a minimum of 35.5 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
- Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator. (http://clas.ku.edu/undergrad/tools/gpa/)

### Biological Chemistry Option

This option is available to students interested in the biological applications of chemistry. The curriculum is compatible with many pre-health-professions programs and prepares the student for graduate study or career opportunities.

### General Education Requirements

All students must complete the KU Core.

<table>
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<tr>
<th>Code</th>
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<th>Hours</th>
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<td>MATH 126 Calculus II</td>
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<tr>
<td>or MATH 141 Calculus II, Honors</td>
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<td>Calculus III. Satisfied by one of the following:</td>
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<tr>
<td>or MATH 141 Calculus III, Honors</td>
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<td>Mathematical Methods for the Chemical Sciences. Satisfied by:</td>
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<td>CHEM 250 Mathematical Methods for the Chemical Sciences</td>
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<td>PHSX 213 General Physics I Honors</td>
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<td>PHSX 212 General Physics II</td>
<td>&amp; PHSX 236 and General Physics II Laboratory</td>
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<td>PHSX 214 General Physics II Honors</td>
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<td><strong>Chemistry Core Knowledge and Skills</strong></td>
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<td>Majors must complete courses as indicated in the following areas:</td>
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<td>Chemistry for the Chemical Sciences I. Satisfied by one of the following:</td>
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<td>CHEM 130 General Chemistry I</td>
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<td>CHEM 190 Foundations of Chemistry I, Honors &amp; CHEM 191 and Foundations of Chemistry I Laboratory, Honors</td>
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<td>Chemistry for the Chemical Sciences II. Satisfied by one of the following:</td>
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<td>CHEM 175 Chemistry for the Chemical Sciences II</td>
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<td>CHEM 135 General Chemistry II</td>
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<td>CHEM 195 Foundations of Chemistry II, Honors &amp; CHEM 196 and Foundations of Chemistry II Laboratory, Honors</td>
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<td><strong>Seminar I. Satisfied by:</strong></td>
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<td><strong>Laboratory Safety in the Chemical Sciences. Satisfied by:</strong></td>
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<td><strong>Organic Chemistry I (Lecture and Lab). Satisfied by:</strong></td>
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<td>CHEM 330 Organic Chemistry I</td>
<td>or CHEM 380 Organic Chemistry I, Honors</td>
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<td><strong>CHEM 331 Organic Chemistry I Laboratory</strong></td>
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<td><strong>Organic Chemistry II (Lecture and Lab). Satisfied by:</strong></td>
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<td>5</td>
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<td>CHEM 335 Organic Chemistry II</td>
<td>or CHEM 383 Organic Chemistry II, Honors</td>
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<td><strong>CHEM 336 Organic Chemistry II Laboratory</strong></td>
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<td><strong>Analytical Chemistry (Lecture and Lab). Satisfied by:</strong></td>
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<td>CHEM 400 Analytical Chemistry &amp; CHEM 401 and Analytical Chemistry Laboratory</td>
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<td><strong>Physical Chemistry I. Satisfied by:</strong></td>
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<td>CHEM 530 Physical Chemistry I</td>
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<td><strong>Physical Chemistry II. Satisfied by:</strong></td>
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<td>CHEM 535 Physical Chemistry II</td>
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<tr>
<td>CHEM 537 Physical Chemistry Laboratory</td>
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<tr>
<td><strong>Instrumental Methods of Analysis. Satisfied by:</strong></td>
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<td>CHEM 635 Instrumental Methods of Analysis</td>
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<tr>
<td><strong>Systematic Inorganic Chemistry. Satisfied by:</strong></td>
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<td>CHEM 660 Systematic Inorganic Chemistry</td>
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<tr>
<td><strong>Advanced Inorganic Laboratory. Satisfied by:</strong></td>
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<td>CHEM 661 Advanced Inorganic Laboratory</td>
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<td><strong>Seminar II. Satisfied by:</strong></td>
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<td>CHEM 695 Seminar II</td>
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<tr>
<td><strong>Capstone Experience (Fulfills KU Core Goal 6). Satisfied by one of the following:</strong></td>
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<td>3</td>
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</tbody>
</table>
CHEM 636 Instrumental Methods of Analysis Laboratory
or CHEM 698 Undergraduate Capstone Research
or CHEM 699 Undergraduate Honors Research

Biological Chemistry Core Knowledge and Skills
Biochemistry. Satisfied by:
- BIOL 636 Biochemistry I
- BIOL 638 Biochemistry II
Biochemistry Laboratory. Satisfied by:
- BIOL 637 Introductory Biochemistry Laboratory

Biological Chemistry Required Electives
Majors choosing this option should select 1 elective (3 hours) from the following:
- BIOL 350 Principles of Genetics
- BIOL 400 Fundamentals of Microbiology
- BIOL 416 Cell Structure and Function

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 47 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 35.5 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Chemical Physics Option
This option allows students to focus on the theoretical basis of chemistry. Students are prepared for graduate programs or employment.

General Education Requirements
All students must complete the KU Core.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>MATH 125</td>
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<tr>
<td>MATH 127</td>
<td>Calculus III</td>
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or MATH 14:Calculus III, Honors
Differential Equations. Satisfied by one of the following:
- MATH 220 Applied Differential Equations
- MATH 320 Elementary Differential Equations

Elementary Linear Algebra. Satisfied by:
- MATH 290 Elementary Linear Algebra

General Physics I. Satisfied by one of the following:
- PHSX 211 General Physics I
- PHSX 216 and General Physics I Laboratory
- PHSX 213 General Physics I Honors

General Physics II. Satisfied by one of the following:
- PHSX 212 General Physics II
- PHSX 236 and General Physics II Laboratory
- PHSX 214 General Physics II Honors

Biochemistry. Satisfied by one of the following:
- BIOL 600 Introductory Biochemistry, Lectures
- BIOL 636 Biochemistry I

Chemistry Core Knowledge and Skills
Majors must complete courses as indicated in the following areas:

Chemistry for the Chemical Sciences I. Satisfied by one of the following:
- CHEM 170 Chemistry for the Chemical Sciences I
- CHEM 130 General Chemistry I
- CHEM 190 Foundations of Chemistry I, Honors
- CHEM 191 and Foundations of Chemistry I Laboratory, Honors

Chemistry for the Chemical Sciences II. Satisfied by one of the following:
- CHEM 175 Chemistry for the Chemical Sciences II
- CHEM 135 General Chemistry II
- CHEM 195 Foundations of Chemistry II, Honors
- CHEM 196 and Foundations of Chemistry II Laboratory, Honors

Seminar I. Satisfied by:
- CHEM 180 Seminar I

Laboratory Safety in the Chemical Sciences. Satisfied by:
- CHEM 201 Laboratory Safety in the Chemical Sciences

Organic Chemistry I (Lecture and Lab). Satisfied by:
- CHEM 330 Organic Chemistry I
- CHEM 38 Organic Chemistry I, Honors

Organic Chemistry II (Lecture and Lab). Satisfied by:
- CHEM 335 Organic Chemistry II
- CHEM 38 Organic Chemistry II, Honors

Analytical Chemistry (Lecture and Lab). Satisfied by:
- CHEM 400 Analytical Chemistry
- CHEM 401 and Analytical Chemistry Laboratory

Physical Chemistry I. Satisfied by:
- CHEM 530 Physical Chemistry I

Physical Chemistry II. Satisfied by:
- CHEM 535 Physical Chemistry II

Physical Chemistry Laboratory. Satisfied by:
- CHEM 537 Physical Chemistry Laboratory
Instrumental Methods of Analysis. Satisfied by:
CHEM 635 Instrumental Methods of Analysis
Systematic Inorganic Chemistry. Satisfied by:
CHEM 660 Systematic Inorganic Chemistry
Advanced Inorganic Laboratory. Satisfied by:
CHEM 661 Advanced Inorganic Laboratory
Seminar II. Satisfied by: 0.5
CHEM 695 Seminar II
Capstone Experience (Fulfills KU Core Goal 6). Satisfied by one of the following:
CHEM 636 Instrumental Methods of Analysis Laboratory
or CHEM 69 Undergraduate Capstone Research
or CHEM 69 Undergraduate Honors Research

Chemical Physics Core Knowledge and Skills 12
Majors must complete 2 courses from each of the following groups:
Group I
PHSX 313 General Physics III
& PHSX 316 and Intermediate Physics Laboratory I (PHSX 313 and PHSX 316 should be taken concurrently)
PHSX 518 Mathematical Physics
PHSX 521 Mechanics I
PHSX 615 Numerical and Computational Methods in Physics
PHSX 655 Optics
PHSX 681 Concepts in Solids
Group II
PHSX 531 Electricity and Magnetism
PHSX 621 Mechanics II
MATH 646 Complex Variable and Applications
MATH 647 Applied Partial Differential Equations
CHEM 698 Undergraduate Capstone Research
CHEM 750 Introduction to Quantum Mechanics

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 47 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 35.5 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Departmental Honors
Undergraduates may apply for admission to the departmental honors program after completion of an analytical, organic, and physical chemistry course but no sooner than the beginning of the junior year. Highly motivated and superior B.A. and B.S. students are admitted to the honors program. Honors in chemistry are awarded to students who have been admitted to the program and who have completed the following requirements with superior performance, including a major GPA of 3.5.

1. At least 2 semesters of CHEM 699 (4-8 hours total) resulting in a written thesis.
2. Evaluation and approval of the thesis by a faculty advisory committee.
3. Oral presentation of the thesis results at a special departmental seminar or other approved forum.

For an application form and further information, consult the department office.

BS in Chemistry
Below is a sample 4-year plan for the American Chemical Society Certified BS degree in Chemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 103 or MATH 104 prior to freshman year, fall semester.

Freshman
Fall Hours Spring Hours
Goal 2.1 Written Communication (1 of 2) 3 Goal 2.1 Written Communication (2 of 2) 3
MATH 125 or 145 (Goal 1.2 Quantitative Literacy) 4 Goal 2.2 Communication 3
First Year Seminar or Goal 1.1 Critical Thinking 3 MATH 126 or 146 (Major Pre-requisite) 4
CHEM 170, 130, or 190 (Goal 3 Natural Science, Major Requirement) 5 CHEM 175, 135, or 195 (Major Requirement) 5
CHEM 180 (Major Requirement) 0.5

15.5

Sophomore
Fall Hours Spring Hours
Goal 3 Arts and Humanities 3 PHSX 212
& PHSX 236 (Major Pre-requisite) 4
PHSX 211 & PHSX 216 (Major Pre-requisite) 5 CHEM 250 (Major Requirement) 3
MATH 127 or 147 (Major Pre-requisite) 4 CHEM 335 or 385 (Major Requirement) 3
CHEM 330 or 380 (Major Requirement) 3 CHEM 336 (Major Requirement) 2
CHEM 331 (Major Requirement) 2 Second Area of Study/Elective/Degree/Junior-Senior Hours 3

17

Junior
Fall Hours Spring Hours
CHEM 201 (Major Requirement) 1 CHEM 535 (Major Requirement) 3
CHEM 400 (Major Requirement) 3 CHEM 537 (Major Requirement) 3

15
Below is a sample 4-year plan for students pursuing the BS in Chemistry with a concentration in Biological Chemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 103 or MATH 104 prior to freshman year, fall semester.

### Freshman

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<td>Goal 2.2 Communication</td>
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<td>First Year Seminar or Goal 1.1 Critical Thinking</td>
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<td>MATH 126 or 146 (Major Pre-requisite)</td>
<td>4</td>
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<tr>
<td>CHEM 170, 130, or 190 (Goal 3 Natural Science, Major Requirement)</td>
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<td>CHEM 175, 135, or 195 (Major Requirement)</td>
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<tr>
<td>CHEM 180 (Major Requirement)</td>
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### Sophomore

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<td>CHEM 250 (Major Requirement)</td>
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<td>MATH 127 or 147 (Major Pre-requisite)</td>
<td>4</td>
<td>CHEM 335 or 385 (Major Requirement)</td>
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<td>CHEM 330 or 380 (Major Requirement)</td>
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<td>CHEM 336 (Major Requirement)</td>
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<td>CHEM 331 (Major Requirement)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>CHEM 535 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>CHEM 537 (Physical Chemistry Laboratory)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 201 (Major Requirement)</td>
<td>1</td>
<td>BIOL 350, 400, or 416 (Major Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 400 (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 401 (Major Requirement)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 530 (Major Requirement)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 695 (Major Requirement)</td>
<td>0.5</td>
<td>CHEM 635 (Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 698</td>
<td>1-2 CHEM 636 (Goal 6 Integration &amp; Creativity)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BS in Chemistry with concentration in Biological Chemistry

Below is a sample 4-year plan for students pursuing the BS in Chemistry with a concentration in Biological Chemistry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
This degree plan assumes students will have the equivalent of MATH 103 or MATH 104 prior to freshman year, fall semester.

### BS in Chemistry with concentration in Chemical Physics

Below is a sample 4-year plan for students pursuing the BS in Chemistry with a concentration in Chemical Physics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 103 or MATH 104 prior to freshman year, fall semester.

### Freshman

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Major Requirement</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 660</td>
<td>Major Requirement</td>
<td>2</td>
<td>3</td>
<td>CHEM 661</td>
<td>Major Requirement</td>
</tr>
<tr>
<td>BIOL 636</td>
<td>Major Requirement</td>
<td>2</td>
<td>4</td>
<td>CHEM 698 or 699 (Goal 6 Integration &amp; Creativity)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 637</td>
<td>Major Requirement</td>
<td>4</td>
<td>2</td>
<td>BIOL 638 (Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 120-121**

1. CHEM 170 requires eligibility for MATH 115 in order to enroll.
2. CHEM 180, CHEM 201, CHEM 400, CHEM 401, CHEM 530, CHEM 660, CHEM 695 are Fall only courses. CHEM 250, CHEM 535, CHEM 537, CHEM 635, CHEM 636, CHEM 661 are Spring only courses.
3. 3 hours of CHEM 698 or CHEM 699 can also be used to satisfy KU Core Goal 6.
4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

**Please note:**

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Sophomore

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Major Requirement</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 211</td>
<td>&amp; PHSX 216 (Major Pre-requisite)</td>
<td>4</td>
<td>5 Goal 3 Social Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 127 or 124 (Major Pre-requisite)</td>
<td>4</td>
<td>PHSX 212 &amp; PHSX 236 (Major Pre-requisite)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 290 or 291 (Major Pre-requisite)</td>
<td>2</td>
<td>MATH 220 or 320 (Major Pre-requisite)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 330 or 380 (Major Requirement)</td>
<td>3</td>
<td>CHEM 335 or 385 (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 331 (Major Requirement)</td>
<td>2</td>
<td>CHEM 336 (Major Requirement)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 16-15**

### Junior

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Major Requirement</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 660 (Major Requirement)</td>
<td>2</td>
<td>CHEM 535 (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 201 (Major Requirement)</td>
<td>1</td>
<td>CHEM 537 (Physical Chemistry Laboratory)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 400 (Major Requirement)</td>
<td>3</td>
<td>CHEM 661 (Major Requirement)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 401 (Major Requirement)</td>
<td>2</td>
<td>Chemical Physics Required Elective Group I (Major Requirement, 2 crs req)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 530 (Major Requirement)</td>
<td>4</td>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Physics Required Elective Group I (Major Requirement, 2 crs req)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 16-14**

### Senior

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Major Requirement</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 600 (Major Pre-requisite)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 695 (Major Requirement)</td>
<td>2</td>
<td>CHEM 635 (Major Requirement)</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 698</td>
<td>3</td>
<td>CHEM 636 (Goal 6 Integration &amp; Creativity)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Physics Required Elective Group II (Major Requirement, 2 crs req)</td>
<td>3</td>
<td>Chemical Physics Required Elective Group II (Major Requirement, 2 crs req)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 14.5-14**

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
1 CHEM 170 requires eligibility for MATH 115 in order to enroll.
2 CHEM 180, CHEM 201, CHEM 400, CHEM 401, CHEM 530, CHEM 660, CHEM 695 are Fall only courses. CHEM 535, CHEM 537, CHEM 635, CHEM 636, CHEM 661 are Spring only courses.
3 A list of courses that fulfill Group I and Group II can be found on the degree requirements tab of the catalog.
4 3 hours of CHEM 698 or CHEM 699 can also be used to satisfy KU Core Goal 6.
5 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

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The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Minor in Chemistry

**Why study chemistry?**

At KU Chemistry, we have faculty dedicated to mentoring both undergraduate and graduate students and to helping each student achieve scientific maturity. In addition to required classroom and laboratory courses, options exist for doing research in exciting areas of mainstream chemistry, including emerging fields of microfluidics, precision medicine and sustainable catalysis.

### Undergraduate Program

The undergraduate program in the Department of Chemistry has two primary missions. One of these is to help its majors attain a mastery of the discipline in preparation for further study in chemistry or a chemical science, or for immediate employment in chemistry. The other is to provide an opportunity for students majoring in other disciplines to acquire a basic knowledge of the fundamental areas of chemistry.

The curriculum leading to the **Bachelor of Science (B.S.)** degree, a rigorous program certified by the American Chemical Society, consists of a full spectrum of chemistry courses as well as supporting courses in mathematics and physics, and is designed to prepare students for a professional career in chemistry. The **Bachelor of Arts (B.A.)** degree program, with fewer required courses, allows students to obtain a broader knowledge of areas outside of chemistry, or to tailor their chemistry program for specific or unique objectives. We also offer a minor in chemistry for those seeking a secondary area of study.

### Requirements for the Minor

The minor allows many non-chemistry majors to obtain a strong, distributed background in the discipline. It is particularly useful for students in STEM fields or pre-professional programs that require at least one year of chemistry coursework but whose career plans would be enhanced by a deeper understanding of the molecular sciences. Due to extensive overlap in required chemistry coursework, the Chemistry minor is not available to students majoring in Biochemistry and Chemical Engineering.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 191</td>
<td>Foundations of Chemistry I Laboratory, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td></td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 196</td>
<td>Foundations of Chemistry II Laboratory, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 520</td>
<td>Biological Physical Chemistry with Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 530</td>
<td>Physical Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 535</td>
<td>Physical Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 537</td>
<td>Physical Chemistry Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

### Mathematics and Physics

Mathematics: (choose one of the following (MATH 115 & MATH 116 6-12 recommended))

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 116</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 126</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>&amp; MATH 127</td>
<td>Calculus III</td>
<td></td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>8-9</td>
</tr>
<tr>
<td>&amp; PHSX 115</td>
<td>College Physics II</td>
<td></td>
</tr>
<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 212</td>
<td>General Physics II</td>
<td></td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>General Physics II Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

### Chemistry Courses

Chemistry I. Satisfied by one of the following (CHEM 170 5 recommended):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 191</td>
<td>Foundations of Chemistry I Laboratory, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Chemistry II. Satisfied by one of the following (CHEM 175 5 recommended):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 196</td>
<td>Foundations of Chemistry II Laboratory, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Organic Chemistry I. Satisfied by one of the following: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
</tbody>
</table>

Organic Chemistry Lab I. Satisfied by: 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
</tbody>
</table>

### Chemistry Required Elective Group I

Students selecting this minor must complete one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 400</td>
<td>Analytical Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 401</td>
<td>Analytical Chemistry Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

Physical Chemistry Lecture and Lab. Satisfied by one of the following (CHEM 520 recommended):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 520</td>
<td>Biological Physical Chemistry with Laboratory</td>
<td></td>
</tr>
<tr>
<td>CHEM 530</td>
<td>Physical Chemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 535</td>
<td>Physical Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 537</td>
<td>Physical Chemistry Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

### Chemistry Required Elective Group II

3-4

Students selecting this minor must complete one of the following:
Physical Chemistry Lecture. Satisfied by one of the following (CHEM 510 Recommended):

| CHEM 510  | Biological Physical Chemistry |
| or CHEM 53-Physical Chemistry |

Systematic Inorganic Chemistry. Satisfied by:

| CHEM 660  | Systematic Inorganic Chemistry |

*Students who select this option for Elective Group I cannot take CHEM 510 or CHEM 530 from Elective Group II.

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 23-24 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**
Satisfied by a minimum of 13 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Master of Science in Chemistry**

Graduate studies in Chemistry at KU are intended to prepare graduate students for any of the multitude of career pathways available to individuals who hold a doctorate in the Chemical Sciences. Graduate studies differ from the undergraduate experience in that each activity and requirement of the graduate program is designed to prepare students to become independent, creative practitioners of Chemistry.

Chemists at KU still make new materials and find new and exciting applications for these compounds, and study how chemical reactions occur. We apply this knowledge to developing compounds that fight disease, to creating cleaner and more efficient chemical processes for industry and to applying chemistry in other manners that benefit society. Striving for a Ph.D. or M.S. degree is about creating and completing an independent, original research project in the chemical sciences. For KU students, this experience becomes the foundation for their future careers in the increasingly diverse scientific enterprise.

Research in Chemistry graduate programs used to take place exclusively in the laboratory. At KU, students apply a broader definition of the term laboratory to include many other types of research environments:

- Medical facilities where researchers study the efficacy of therapeutic agents and analyze the results of clinical trials,
- Computer laboratories where the modeling of molecular structure, chemical reactions and phase changes are contributing enormously to our understanding of the complex systems around us,
- Fields and streams where environmental chemists strive to understand how chemicals derived from natural processes and human activity impact the quality and diversity of life, and
- Classrooms where individuals study strategies for improving student learning of scientific concepts.

**Graduate Program**

For a student wishing to earn a Doctor of Philosophy (Ph.D.) degree or a Master’s of Science (M.S.) degree in chemistry, the selection of a graduate school is one of the most important career decisions you will make. Your choice will not only determine where you will be during the next several years, but will lay the foundation for your future.

At the University of Kansas, we feel that our program provides exceptional and diverse opportunities for the student interested in a career in cutting-edge research, higher education or any one of a number of chemically related positions requiring an advanced degree. We have a department of outstanding faculty, each of whom is dedicated to providing mentoring to graduate students and guiding them during their journey from undergraduate to colleague.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

**Prerequisites**

Before beginning graduate work, students should have completed a bachelor’s degree in chemistry or a related field.

**Application**

Applications for admission are accepted online through the Office of Graduate Studies. Applications must include academic transcripts from all post-secondary schools attended, as well as recommendation letters from 3 individuals familiar with the applicant’s academic background and abilities. Additional materials that are strongly recommended include Graduate Record Examination scores (GRE), a resume/CV and a personal statement describing the applicant’s qualifications and reasons for pursuing a graduate degree in chemistry.

Non-native speakers of English must meet the English proficiency requirements (http://graduate.ku.edu/english-proficiency-requirements/).

Although the preferred submission deadline is December 1, applications must be received by April 15 to be considered for admission in the fall semester.

To apply, complete the online graduate application (https://gradapply.ku.edu/apply/) and upload all requested documents.

**Procedure**

Completed applications are reviewed by a committee of faculty members from the Department of Chemistry. Offers of admission depend on
favorable evaluation of the application materials and an expectation that the student will attain an undergraduate grade-point average of B or higher in chemistry and all other natural science and mathematics courses. Admission to the graduate program is contingent upon completion of a bachelor’s degree in chemistry (or a related field) and all other general admission requirements.

M.S. Degree Requirements

Each M.S. candidate must complete the following course requirements:

1. Distribution Requirement: Each student must complete (with a B or higher) a distribution requirement consisting of two courses selected from the following list of introductory courses in the 5 major areas of study:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 720</td>
<td>Fundamentals and Methods of Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 730</td>
<td>Coordination and Organometallic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 740</td>
<td>Principles of Organic Reactions</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 750</td>
<td>Introduction to Quantum Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 760</td>
<td>Introduction to Chemistry in Biology</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Complete CHEM 700 (Responsible Scholarship in the Chemical Sciences) and CHEM 701 (Laboratory Safety in the Chemical Sciences) with a B or higher.

3. Complete with a B or higher 4 courses at the 700 level or above in chemistry or a related area. The list of courses to be completed must be agreed upon by the student and the student’s research advisor and approved by the Graduate Affairs Committee before the beginning of the student’s second semester in the program. (Changes to the list can only be made with the approval of the student, the research advisor, and the Graduate Affairs Committee.) Note: these 4 courses represent a minimal set and do not preclude the student, with consultation of the research advisor, from taking additional courses in support of the research effort.

The minimum total credit hours required for the master’s degree is 30.

The candidate for the master’s degree must complete a thesis that does not exceed one-third of the credit hours and demands the solution of some research problem in chemistry. The remaining work may consist of additional specialized courses in chemistry or in related fields such as physics, mathematics, microbiology, biochemistry, or chemical engineering. Students completing a master’s thesis in chemical education must take EPSY 715 Understanding Research in Education and EPSY 710 Introduction to Statistical Analysis. Courses from outside the department cannot be from more than 2 departments.

At the time of the completion of the thesis, a candidate for the master’s degree must pass an oral thesis defense (examination) administered by a committee of three members of the department’s Graduate Faculty.

Doctor of Philosophy in Chemistry

Graduate studies in Chemistry at KU are intended to prepare graduate students for any of the multitude of career pathways available to individuals who hold a doctorate in the Chemical Sciences. Graduate studies differ from the undergraduate experience in that each activity and requirement of the graduate program is designed to prepare students to become independent, creative practitioners of Chemistry.

Chemists at KU still make new materials and find new and exciting applications for these compounds, and study how chemical reactions occur. We apply this knowledge to developing compounds that fight disease, to creating cleaner and more efficient chemical processes for industry and to applying chemistry in other manners that benefit society. Striving for a Ph.D. or M.S. degree is about creating and completing an independent, original research project in the chemical sciences. For KU students, this experience becomes the foundation for their future careers in the increasingly diverse scientific enterprise.

Research in Chemistry graduate programs used to take place exclusively in the laboratory. At KU, students apply a broader definition of the term laboratory to include many other types of research environments:

- Medical facilities where researchers study the efficacy of therapeutic agents and analyze the results of clinical trials,
- Computer laboratories where the modeling of molecular structure, chemical reactions and phase changes are contributing enormously to our understanding of the complex systems around us,
- Fields and streams where environmental chemists strive to understand how chemicals derived from natural processes and human activity impact the quality and diversity of life, and
- Classrooms where individuals study strategies for improving student learning of scientific concepts.

Graduate Program

For a student wishing to earn a Doctor of Philosophy (Ph.D.) degree or a Master’s of Science (M.S.) degree in chemistry, the selection of a graduate school is one of the most important career decisions you will make. Your choice will not only determine where you will be during the next several years, but will lay the foundation for your future.

At the University of Kansas, we feel that our program provides exceptional and diverse opportunities for the student interested in a career in cutting-edge research, higher education or any one of a number of chemically related positions requiring an advanced degree. We have a department of outstanding faculty, each of whom is dedicated to providing mentoring to graduate students and guiding them during their journey from undergraduate to colleague.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.
Graduate Admission

Prerequisites

Before beginning graduate work, students should have completed a bachelor’s degree in chemistry or a related field.

Application

Applications for admission are accepted online through the Office of Graduate Studies. Applications must include academic transcripts from all post-secondary schools attended, as well as recommendation letters from three individuals familiar with the applicant’s academic background and abilities. Additional materials that are strongly recommended include Graduate Record Examination (GRE) scores, and a resume/CV and personal statement describing the applicant’s qualifications and reasons for pursuing a graduate degree in chemistry. Although the preferred submission deadline is December 1, applications must be received by April 15 to be considered for admission in the fall semester.

To apply, complete the online graduate application form (https://gradapply.ku.edu/apply/) and upload all requested documents.

Non-native speakers of English must meet the English proficiency requirements (https://policy.ku.edu/english-proficiency-requirements-admission-graduate-study/).

Procedure

Completed applications are reviewed by a committee of faculty members from the Department of Chemistry. Offers of admission depend on favorable evaluation of the application materials and an expectation that the student will attain an undergraduate grade-point average of B or higher in chemistry and all other natural science and mathematics courses. Admission to the graduate program is contingent upon completion of a bachelor’s degree in chemistry (or a related field) and all other general admissions requirements.

Ph.D. Degree Requirements

Each Ph.D. aspirant must complete the following course requirements:

1. Distribution Requirement:
   Each student must complete (with a B or higher) a distribution requirement consisting of two courses selected from the following list of introductory courses in the 5 major areas of study:
   
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 720</td>
<td>Fundamentals and Methods of Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 730</td>
<td>Coordination and Organometallic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 740</td>
<td>Principles of Organic Reactions</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 750</td>
<td>Introduction to Quantum Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 760</td>
<td>Introduction to Chemistry in Biology</td>
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</table>

2. Complete with a B or higher 4 courses at the 700 level or above in chemistry or a related area. The list of courses to be completed must be agreed upon by the student and the student’s research advisor and approved by the Graduate Affairs Committee before the beginning of the student’s second semester in the program. (Changes to the list can only be made with the approval of the student, the research advisor, and the Graduate Affairs Committee.) Note: these 4 courses represent a minimal set and do not preclude the student, with consultation of the research advisor, from taking additional courses in support of the research effort.

3. Complete CHEM 700 (Responsible Scholarship in the Chemical Sciences) and CHEM 701 (Laboratory Safety in the Chemical Sciences) with a B or higher. CHEM 700 satisfies the university's Responsible Scholarship requirement for the chemistry Ph.D.

These courses must be satisfactorily completed before a student takes the comprehensive oral examination.

The aspirant also must fulfill the following requirements:

1. A comprehensive oral examination must be completed. The student must prepare a written, original research proposal before the examination is scheduled. The proposal must be presented and defended orally at the examination; however, the examination is comprehensive in nature. The student must be prepared for questions on a range of topics in the discipline. It should be noted that requirements (1) and (2) must be completed before the comprehensive oral examination can be taken. Failure to pass the oral examination before the beginning of the fourth year of graduate study leads to ineligibility for support by departmental or research funds.

2. A dissertation based on original work of high quality in one of the principal fields of chemistry must be completed.

3. A final oral examination and defense of the dissertation must be completed.

For further details, see Doctoral Degree Requirements, Doctor of Philosophy (p. 2409) in the Graduate Studies section of the online catalog.

Child Language Doctoral Program

Child Language Doctoral Program

The doctoral program in Child Language offers a specialized degree in this interesting area of study. The program crosses traditional academic boundaries to give students the theoretical, empirical, and methodological competence necessary to study basic and applied issues in language acquisition. This multidisciplinary program is a cooperative endeavor of faculty members from the Departments of Applied Behavioral Science, Clinical Child Psychology, Linguistics, Molecular Biosciences, Psychology, and Speech-Language-Hearing: Sciences and Disorders. In addition, the Child Language Doctoral Program has faculty specializing in genetics of language and speech, and in quantitative methods.

Students study 4 areas:

1. Core theoretical and experimental work on language acquisition,
2. Relevant methods and theories in linguistics and psycholinguistics,
3. Theoretical perspectives on developmental psychology, and
4. The nature of disordered language development and methods and techniques for language intervention.

In addition, new areas of study are offered in genetics of language acquisition and impairments, as well as quantitative methods.

Each student is advised by a support committee of 3 faculty members. Enrollment in a proseminar in language acquisition is required of all students in addition to participation in research activities. Opportunities for individual research projects include the projects of participating faculty members and the research teams of the Schiefelbusch Institute for Life
Span Studies, the Speech-Language-Hearing Clinic, and the clinical/research facilities of KU Medical Center.

Graduates are candidates for teaching and research positions, clinical positions providing service to communicatively disabled persons, and research work in business and governmental sectors.

Faculty
We are a cross-disciplinary program and our faculty ([https://cldp.ku.edu/faculty/](https://cldp.ku.edu/faculty/)) is involved in research spanning many diverse fields of study. Our portfolios are dynamic and growing, so you will be directed to our most recent information.

An internationally recognized scholar leads the program activities: Mabel L. Rice ([https://cldp.ku.edu/mabel-l-rice/](https://cldp.ku.edu/mabel-l-rice/)) is the Director and Graduate Advisor.

Courses

**CLDP 709. First Language Acquisition I. 3 Credits.**
Introduction to the study of language acquisition: the significant findings, the basic methodological procedures, and some of the more recent theoretical accounts. Not open to students who have taken Ling 425. (Same as Ling 709.) Prerequisite: Graduate standing or consent of instructor.

**CLDP 739. First Language Acquisition II. 3 Credits.**
A second semester course in child language which explores the acquisition of morphology, syntax and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. (Same as Ling 739.) Prerequisite: Ling 709 or permission of the instructor.

**CLDP 782. Research Methods in Child Language. 3 Credits.**
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as Ling 782 and PsyC 782.)

**CLDP 799. Proseminar in Child Language. 2 Credits.**
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, Ling 799, PsyC 799 and SPLH 799.)

**CLDP 822. Seminar in First Language Acquisition. 3 Credits.**
Critical examination of recent theoretical issues and empirical findings in the study of first language acquisition. (Same as Ling 822.) Prerequisite: Ling 709 or consent of instructor.

**CLDP 852. Concepts in Human Molecular Genetics. 3 Credits.**
This is a lecture course providing concepts in human genetics, fundamentals of gene pathways, Mendelian and non-Mendelian transmission of genetic diseases, gene regulation and expression, genotype/phenotype correlation, characteristics of human genome, Microarray and DNA cloning. The major goal is to introduce a breadth of genetic concepts to students and at the same time provide recent developments in human genetic research. Students are expected to actively participate in discussion of readings from text books, review articles and research papers. There will be at least 3 lab days to demonstrate methodologies like DNA purification from saliva, polymerase chain reaction and DNA electrophoresis. Prerequisite: Consent of instructor.

**CLDP 854. Principles for the Study of Genetic Disorders. 3 Credits.**
This course explores the fundamentals of disease gene identification methods and tools that are effective to explore the genetic components of inherited disorders. Fundamentals of pedigree based genetic analyses will be covered, along with Mendelian and non-Mendelian inheritance patterns, gene mapping methods, population allele frequencies, heterogeneity, microarray expression, DNA sequencing, recent development in disease gene identification, online human genomic databases, genetic variations, pathogenicity and bioinformatic tools. Recent topics like gene editing, personalized medicine, and pharmacogenetics will be discussed. There will be at least 3 lab days to demonstrate DNA quantification, polymorphism, Sanger sequencing and bioinformatic tools like oligo design, prediction of pathogenicity of protein coding SNPs, and browsing human genome databases. Prerequisite: Consent of instructor.

**CLDP 856. Epigenetics of Behavioral and Developmental Disorders. 3 Credits.**
This course will include discussion of the epigenetic mechanisms involved in behavioral and developmental disorders. The topics reviewed will be DNA methylation, histone modification, genomic imprinting, neurogenesis, epigenetic control of gene expression, non-coding RNAs, prions, microbiota and epigenetics, influence of environment, lifestyle, diet and exercise on gene regulation and cellular pathways. The topics of pharmacoeigenetics, personalized epigenetics and future perspectives of epigenetics in human health will be covered. Recent development in epigenetic research will be discussed. Prerequisite: Consent of instructor.

**CLDP 874. Research Practicum. 1-3 Credits.**
Master's level. Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation on topics related to child language acquisition and disorders, including quantitative methods. May be repeated for up to a maximum of 3 credits. Prerequisite: SPLH 660 or equivalent research methods course.

**CLDP 876. Independent Study in Problems of Child Language. 1-6 Credits.**
Investigation of special topics by individual master's level students. Paper required. Prerequisite: Consent of instructor.

**CLDP 880. Seminar in Child Language: Research Methods. 1-3 Credits.**
A seminar devoted to factors affecting children's language acquisition and language impairments, with some attention to theoretical formulations, causal pathways and mechanisms of change. Topics may vary. Prerequisite: Consent of instructor.

**CLDP 889. Investigation and Conference (Masters). 1-8 Credits.**
Directed research and experimentation for M.A. students in some phase of child language acquisition/disorders. Prerequisite: Consent of instructor.

**CLDP 899. Master's Thesis. 1-6 Credits.**
Development of Master's Thesis in the area of child language acquisition and disorders. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Consent of instructor.

**CLDP 944. Multilevel Models for Longitudinal and Repeated Measures Data. 3 Credits.**
Applications of the multilevel model (hierarchical linear model, general linear mixed model) for analyzing longitudinal and repeated measures data, including analysis of growth curves, within-person fluctuation, repeated measures research designs with crossed random effects, and
simultaneous prediction of multiple sources of variation. Prerequisite: Instructor permission

**CLDP 945. Advanced Multilevel Models. 3 Credits.**
Advanced applications of the multilevel model (hierarchical linear model, general linear mixed model) for examining multiple sources of variation, models for crossed sources of nesting, three levels of nesting, heterogeneous variances, multivariate outcomes, and non-linear outcomes. Prerequisite: Instructor permission.

**CLDP 948. Latent Trait Measurement and Structural Equation Models. 3 Credits.**
Contemporary measurement theory and latent variable models for scale construction and evaluation, including confirmatory factor analysis, item response modeling, diagnostic classification models, and structural equation modeling. (Same as EPSY 906.) Prerequisite: EPSY 905 and instructor permission.

**CLDP 964. Seminar in Child Language. 1-3 Credits.**
A seminar that considers advanced research problems in investigations of child language and language impairment, diagnosis, longitudinal development, change over time, and causal factors. Paper is required. Prerequisite: Consent of instructor.

**CLDP 974. Research Practicum. 3 Credits.**
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting a study related to child language acquisition or impairments, and analyzing outcomes. Prerequisite: Consent of instructor.

**CLDP 975. Directed Teaching: Child Language. 1-3 Credits.**
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. Prerequisite: Consent of instructor.

**CLDP 982. Issues in Scientific Conduct. 3 Credits.**
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as PSYC 982 and SPLH 982.)

**CLDP 998. Investigation and Conference. 1-8 Credits.**
Directed research, experimentation, and/or quantitative analysis for Ph.D. students in topics related to child language acquisition, language impairment, diagnosis, causation, or treatment. Prerequisite: Consent of instructor.

**CLDP 999. Doctoral Dissertation. 1-12 Credits.**
Doctoral Dissertation in topics related to child language acquisition, language impairment, diagnosis, causation, or treatment. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Consent of instructor.

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**Doctor of Philosophy in Child Language**

**Child Language Doctoral Program**

The doctoral program in Child Language offers a specialized degree in this interesting area of study. The program crosses traditional academic boundaries to give students the theoretical, empirical, and methodological competence necessary to study basic and applied issues in language acquisition. This multidisciplinary program is a cooperative endeavor of faculty members from the Departments of Applied Behavioral Science, Clinical Child Psychology, Linguistics, Molecular Biosciences, Psychology, and Speech-Language-Hearing: Sciences and Disorders. In addition, the Child Language Doctoral Program has faculty specializing in genetics of language and speech, and in quantitative methods.

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3. Theoretical perspectives on developmental psychology, and
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Each student is advised by a support committee of 3 faculty members. Enrollment in a proseminar in language acquisition is required of all students in addition to participation in research activities. Opportunities for individual research projects include the projects of participating faculty members and the research teams of the Schiefelbusch Institute for Life Span Studies, the Speech-Language-Hearing Clinic, and the clinical/research facilities of KU Medical Center.

Graduates are candidates for teaching and research positions, clinical positions providing service to communicatively disabled persons, and research work in business and governmental sectors.

**Faculty**

We are a cross-disciplinary program and our faculty is involved in research spanning many diverse fields of study. Our portfolios are dynamic and growing, so you will be directed to our most recent information.

An internationally recognized scholar leads program activities: Mabel L. Rice is the Director and the Graduate Advisor.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Students are admitted for the fall semester. Rolling admissions with applications accepted throughout the year. Review of applications for fall admissions begins January 15th, the preferred deadline. Applicants must submit a curriculum vita (C.V.) or resume, a personal statement describing professional goals and interest in program, Graduate Record Examination scores (GRE), 3 letters of recommendation, and a list of all courses taken in relevant areas such as child development, linguistics, psychology, special education, speech and hearing sciences, genetics, and statistics. Non-native speakers of English must meet English
proficiency requirements (https://policy.ku.edu/english-proficiency-requirements-admission-graduate-study/).

Applicants should have earned bachelor’s degrees that include coursework in linguistics, psychology, speech pathology, genetics, and/or statistics with minimum grade-point averages of B. Preference is given to those with master’s degrees in linguistics, psychology, education, special education, and hearing sciences, molecular biosciences, genetics, or to applicants with relevant post-baccalaureate work experience. No one is admitted for a terminal M.A. degree. Admission materials are reviewed by a subcommittee of the CLDP faculty. The admissions committee supervises the admission process and recommends applicants for admission.

Submit your graduate application online (https://gradapply.ku.edu/apply/). Send all other requested application materials to the program:

The University of Kansas
Child Language Doctoral Program
Dole Human Development Center
1000 Sunnyside Ave., Room 3031
Lawrence, KS 66045

Students who are interested in enrolling in graduate level coursework in the Child Language Doctoral Program without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the admission details above.

Ph.D. Degree Requirements

For the Ph.D. degree, the student must complete all general requirements. These include residence, research skills, comprehensive oral examination, preparation of a dissertation, and the final oral examination and defense of the dissertation. 2 options for fulfilling the research skills requirement are available:

1. Proficiency in a language other than English or reading knowledge of 2 languages other than English can be demonstrated.
2. A record of professional research experience or publication may be used to demonstrate research skills.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

For students entering without the master’s degree, the requirements for the M.A. are at least 8 credit hours of core courses in language acquisition; 10 hours of supplemental courses in linguistics, psycholinguistics, developmental psychology, language intervention, or genetics of language and speech; 6 hours of statistics; and 6 hours of thesis. Continuous enrollment in the child language proseminar is required. Within 3 years of entering the program, students normally complete the required 30 graduate credit hours, prepare an M.A. thesis, and pass a final general examination and defense of the thesis.

Ph.D. post-master’s requirements include a minimum of 36 additional graduate credit hours. These should include at least 8 hours of additional core courses, 13 hours of additional supplemental courses, 9 hours of additional statistical and methodological courses, and a minimum of 6 hours of dissertation. Continuous enrollment in the proseminar is required.

After completing the research skills requirement and the major portion of the course work, the doctoral student must pass a written preliminary examination and a comprehensive oral examination. The written examination covers 4 areas:

1. Language acquisition,
2. Psycholinguistics,
3. Developmental psychology,
4. Disorders of language development or language intervention.

The comprehensive oral examination covers the major field, taking one of 5 forms:

1. A defense of the written preliminary examinations,
2. A defense of a completed research project,
3. A prospectus for a future research project,
4. A discussion of a major review paper, or
5. A review of a research grant proposal and a simulated site visit defense of the proposal.

All doctoral students are expected to complete a dissertation and complete a successful defense of the dissertation.

All students are expected to be engaged continuously in research on child language. Research involvement is documented with appropriate enrollment in research, thesis, and dissertation credit hours, and in the proseminar in child language.

Courses

See course listings for the Child Language Doctoral Program and cooperating departments.

Department of Classics

Why study classics?

Because knowledge of Greek and Roman antiquity is fundamental to understanding the ancient and modern world.

What is classics?

Classics is the integrated study of ancient Greek and Roman civilization through its languages, its literature, and its artistic and archaeological remains. This broad field includes the study of the great texts of classical antiquity, such as Vergil’s Aeneid, Homer’s Iliad and Odyssey, Plato’s Symposium, Sophocles’ Antigone, and the love poems of Sappho and Catullus, but also encompasses research into everyday life in the societies that produced those great works.

In addition to training in the classical languages (Greek and Latin), the department introduces students to a range of work in literary criticism and cultural studies. Topics include archaeology and ancient art, ancient theatre, mythology, women’s history, Greek and Roman humor, cultural exchange across the Mediterranean, the translation of Greek and Latin poetry, and the history of slavery, sexuality, and ethnicity in ancient society.

A commitment to teaching and learning

Our curriculum is diverse, innovative, and responsive to students’ needs. We offer a variety of topics as mentioned above, and an array of course structures and formats, including small in-person language courses, hybrid ancient Greek and Latin that combines face-to-face instruction with online exercises, mid-sized discussion courses on archaeological
or literary themes, online offerings during the summer and the academic year, and one large energetic lecture course.

Our faculty members have won nearly all KU’s teaching awards, including the HOPE, Kemper, and Ned Fleming awards, and a wide variety of other university-level teaching and advising awards. The department as a whole received the first ever Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

Beyond KU:

In addition to the rich and interdisciplinary content, the Classics degree teaches strong and widely useful critical skills such as clear writing, effective interpretation and use of evidence, and evaluation of sources. Classics graduates bring all these to bear in a variety of careers. Our students have gone on to careers in law, business, library science, journalism, medicine, museum studies, education, writing and publishing, and technology.

Innovative scholarship:

KU Classics Faculty members conduct research on a variety of ancient topics, from Greek tragedy to Roman architecture. Their research engages some of the world’s most enduring questions, such as: How did the Greek and Roman societies envision happiness? How does knowledge of the past affect one’s choices and identities? How do modern theories about gender and sexuality intersect with ancient concepts? How are cultural values encoded into art, architecture, literature, language, law, religion, and politics? And, who “owns” the classical past?

Classics students can work with faculty as research assistants or can develop their own research projects, and many Classics courses count toward KU’s Research Experience Program. Our undergraduate students have received Undergraduate Research Awards and McNair Scholarships, and many write undergraduate honors theses.

Study Abroad

The Classics Department offers a variety of study opportunities for its students to study in Greece or Italy, the UK, and elsewhere in Europe. We offer scholarships to students who participate in overseas programs that focus on the ancient world.

Undergraduate Programs

Classics is the integrated study of Greek and Roman civilization through its languages, its literature, and its artistic and archaeological remains. The Department of Classics offers 2 majors. Both provide students of diverse career goals a broad humane education and afford a solid foundation for those who wish to pursue graduate work in classics. The Classical Antiquity major provides inclusive, interdisciplinary training in ancient Greek and Roman cultures and prepares you for graduate study in Greek and Roman archaeology, art history, or history. The Classical Languages major trains you to read the great authors of classical antiquity (e.g., Homer, Plato, Vergil, Sappho, Saint Augustine) in the original language and prepares you for graduate study in classics and for teaching in some private schools. You might also combine your classical language interest with a degree in the School of Education. A degree in education with a Latin major allows you to teach Latin in public high schools.

Language Proficiency

The CLAS language requirement may be fulfilled by taking either Latin or Greek. To meet the language requirement in Latin, a student should complete LAT 104, LAT 108, and LAT 112 followed by a course at the LAT 300 level (or their equivalents). To meet the language requirement in Greek, a student should complete GRK 104, GRK 108 or their equivalents, and 2 more courses (6 hours) at the GRK 300 level. The number of hours required may be reduced if a student has high school or transfer hours.

Placement in Latin

Students who wish to enroll in Latin after studying Latin in high school or elsewhere should seek advice from the classics faculty about appropriate placement in Latin courses at KU. Whenever possible, make an advising appointment in advance by calling the Department of Classics at 785-864-3153 or by contacting an advisor.

Retroactive Credit in Latin

In cooperation with the University Registrar, the Department of Classics awards retroactive university credit for work in Latin at the high school level. To qualify for retroactive credit, the student’s initial university-level enrollment in Latin must be in a KU course. The student qualifies for retroactive credit only after completing the KU Latin course with a grade of C or higher.

After completing such a course with a qualifying grade, the student must bring his or her high school transcript to the Department of Classics office for verification. The department then notifies the Office of the University Registrar of the number of credit hours to be awarded. The student’s transcript shows the number of hours awarded but no letter grade. The hours count toward graduation. Guidelines are as follows:

- A student who initially enrolls at KU in LAT 108 or LAT 109 and receives a grade of C or higher will receive 3 hours of retroactive credit.
- A student who initially enrolls in LAT 112 or LAT 113 and receives a grade of C or higher will receive 6 hours of retroactive credit.
- A student who initially enrolls in any LAT 300-level course (e.g., LAT 301, LAT 302, LAT 303, LAT 304, LAT 305, LAT 310) and receives a grade of C or higher will receive 9 hours of retroactive credit.

Courses for Nonmajors

The department offers a range of courses in ancient art, archaeology, literature, and language, including 4 years of Latin and 3½ years of ancient Greek. No knowledge of Latin or Greek is needed for courses labeled CLSX, such as the principal course CLSX 148 Greek and Roman Mythology.

Undergraduate Scholarships and Awards

The department offers several scholarships and awards, such as the Mildred Lord Greef award for best paper or essay, the Albert O. Greef award for literary translation, the Tenney Frank scholarships for undergraduate study, and the Tenney Frank awards for foreign study of the classics. For information, contact the department (http://classics.ku.edu/).

All graduate students who wish to be considered for KU scholarships and financial aid must complete applications with Financial Aid and Scholarships.
KU Financial Aid

All undergraduates who wish to be considered for KU scholarships and financial aid must complete applications with Financial Aid and Scholarships (https://financialaid.ku.edu/).

Graduate Programs

The Department of Classics offers advanced course work in the ancient civilizations of Greece and Rome. Students are expected to study the classical languages (Greek and Latin) and literatures as well as the art and archaeological remains of the Greek and Roman worlds.

Graduate Teaching Assistantships

Financial support is available in the form of teaching assistantships in Latin, Greek, or mythology. Contact the department (http://classics.ku.edu/) for information.

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

Graduate Non-Degree Seeking Status

Students who are interested in enrolling in graduate-level coursework in the Department of Classics without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s webpage (https://classics.ku.edu/) for further details.

Courses

CLSX 105. Introduction to Ancient Near Eastern and Greek History. 3 Credits. NW H/W
A general survey of the political, social, and economic developments of Mesopotamia, Egypt, Asia Minor, and Greece from Paleolithic times to 323 B.C. (Same as HIST 105.)

CLSX 106. Introduction to Roman History. 3 Credits. H/W
A general survey of the political, social, and economic developments of ancient Rome from 753 B.C. to 475 A.D. (Same as HIST 106.)

CLSX 148. Greek and Roman Mythology. 3 Credits. HL H/W
A systematic examination of the traditional cycles of Greek myth and their survival and metamorphosis in Latin literature. Some attention is given to the problems of comparative mythology and the related areas of archaeology and history. Slides and other illustrated materials. No knowledge of Latin or Greek is required.

CLSX 149. Greek and Roman Mythology Honors. 3 Credits. HL H/W
The study of Greek and Roman mythology through extensive readings in primary classical texts and secondary authors. Prerequisite: Admission to the Honors Program or consent of instructor.

CLSX 151. Introduction to Greek and Roman Archaeology. 3 Credits. HT H/W
An introduction to the history, methods, and excavation techniques of archaeology, with special emphasis on ancient Greece and Rome. Topics include stratigraphy, chronology, artifact analysis, the role of archaeology in our understanding of Greek and Roman society, and the treatment of archaeology in popular culture. Illustrated throughout with presentations of important archaeological sites of the ancient Mediterranean such as Athens and Pompeii, from the earliest times through late antiquity.

CLSX 168. Ancient Epic Tales. 3 Credits. HL H
This course provides a survey of ancient epic poetry, focusing on literature from the Greek, Roman, and Mediterranean world. All readings will be in English; no knowledge of any ancient languages is required. The works selected will be ancient epic tales primarily from Greece, Rome and the Mediterranean world (e.g. Epic of Gilgamesh, Homer, Apollonius, Vergil, Ovid, Status) though some ancient epics from other cultures may be used for comparative purposes (e.g. Beowulf, Popol Vuh, Mahabharata). Class discussion and assignments focus on understanding the ancient cultures and their relation to our own, evaluating the arguments of scholars, and creating well-reasoned written and oral arguments about ancient epics.

CLSX 169. Ancient Epic Tales, Honors. 3 Credits. HL H
Honors version of CLSX 168. This course provides a survey of ancient epic poetry, focusing on literature from the Greek, Roman, and Mediterranean world. All readings will be in English; no knowledge of any ancient languages is required. The works selected will be ancient epic tales primarily from Greece, Rome and the Mediterranean world (e.g. Epic of Gilgamesh, Homer, Apollonius, Vergil, Ovid, Status) though some ancient epics from other cultures may be used for comparative purposes (e.g. Beowulf, Popol Vuh, Mahabharata). Class discussion and assignments focus on understanding the ancient cultures and their relation to our own, evaluating the arguments of scholars, and creating well-reasoned written and oral arguments about ancient epics.

CLSX 171. Ancient Ethical Problems. 3 Credits. H/W
This course introduces some of the fundamental ethical questions raised by Greek and Roman philosophers and considers how their answers to these questions can help us solve the social, political, and environmental problems we face today. We will cover questions like "what makes a good friend?", "would I be happier if I had more money?", "do I have a responsibility to protect the natural world?", and "how can I make myself a better person?". We will explore a number of ancient ethical theories that emerged in response to these problems, such as the Hedonism of Epicurus, the Intellectualism of the Socrates and the Stoics, and the Primitivism of the Cynics, and we will consider how these theories can be applied in the contemporary world. All readings will be in English; no knowledge of any ancient languages is required.

CLSX 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Classics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

CLSX 178. Writing About Greek and Roman Culture. 3 Credits. H
This course uses focused content from Greek and Roman mythology as a vehicle for learning, applying, and practicing essential skills of writing. The content varies from term to term but is always circumscribed, such as Helen of Sparta, nature myths, the wandering hero, or children in Greek tragedy. Students complete a variety of writing exercises that build upon each other and include revision. The course will be taught in English.

CLSX 230. Greek Culture and Civilization. 3 Credits. HL H
This course introduces the world of the ancient Greeks, with a focus on Greek cultural beliefs, values, and social structures. Topics covered include: religious beliefs and practices; athletics and competition; oral performance; gender and sexuality; class, status, and slavery. The course surveys a wide variety of sources, including major literary works, inscriptions, legal texts, and personal letters, as well as ancient art and
archaeology. No knowledge of Greek is required; all readings will be in English.

CLSX 232. Word Power: Greek and Latin Elements in English. 3 Credits. H/W
A study of English words drawn from Greek and Latin for all those interested in the sources of the English vocabulary. Enough Greek and Latin for essential purposes is also studied. No knowledge of Greek or Latin is required. A student may not receive credit for both CLSX 232 and CLSX 332.

CLSX 240. Roman Culture and Civilization. 3 Credits. HL H
This course introduces the world of ancient Rome, with a focus on Roman cultural beliefs, values, and social structures. Topics covered include: religious beliefs and practices; politics and empire; games and gladiators; gender and sexuality; class, status, and slavery. The course surveys a wide variety of sources, including literary works, inscriptions, legal texts, and personal letters, as well as ancient art and archaeology. All readings will be in English; no knowledge of any ancient languages is required.

CLSX 305. Greek and Roman Art. 3 Credits. H/W
An introduction to the history, methods of study, and forms of evidence for Greek and Roman art from Archaic Greece to Late Antiquity (600 B.C.E.-400 C.E.), mainly sculpture, painting, and crafted objects. Emphasized topics include: the diversity of approaches towards the study of ancient artifacts, cross-cultural exchange between the cultures of Greece and Rome, ancient vs. modern definitions of art and artists, patrons and audiences, and current debates about ancient art. Illustrated throughout with presentations of significant works and case studies. Use of the study collection in the Wilcox Classical Museum.

CLSX 310. Greek Rhetoric in Theory and Practice. 3 Credits. H
This course explores the theory and practice of ancient Greek rhetoric, with the aim of developing student's own rhetorical skills and habits. All readings are in translation; no knowledge of ancient Greek is required. Students study rhetoric in such authors as Homer, Demosthenes, Plato, and Lysias and discuss such topics as the role of public speaking in maintaining Greek democracy, the difference between rhetorical skill as a means and an end, the relationship between rhetorical style and civic identity, and the adaptability of rhetoric to various circumstances and audiences. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others.

CLSX 316. Ancient Magic and Witches. 3 Credits. H
This course provides a survey of magic and witchcraft in ancient Greece and Rome and interprets these practices through anthropological theories of magic and witchcraft. Emphasized topics may include magicians, witches, ghosts, spirits, demons, divination, and spells. This course considers issues such as how magic works, how people engage with the divine, the marginalization of magical practitioners, and the difference between magic, witchcraft and religion. All readings will be in English; no knowledge of any ancient languages is required. (Same as REL 316.)

CLSX 320. Roman Oratory in Theory and Practice. 3 Credits. H
This course explores the theory and practice of ancient Roman rhetoric, with the aim of developing student's own rhetorical skills and habits. All readings are in translation; no knowledge of Latin is required. Students will study rhetoric in such authors as Cicero, Quintilian, Caesar, and Seneca and discuss such topics as the role of rhetorical theory in Roman education; oratory as a hallmark of public service during the Republic, and its transition to a pastime in the Imperial age; the ways the Romans connected oratorical style with humor, the body, and gender identity; and the leeway given to speakers in constructing an argument. Students practice delivery with ancient speeches; write and deliver speeches tailored to a variety of situations; and listen to and critique the speeches of their peers and others.

CLSX 322. Alexander the Great: Man and Myth. 3 Credits. HT H
This course explores the life, times, and legacy of Alexander the Great (356-323 B.C.E). It covers the historical context of ancient Greece and Macedon from which Alexander emerged; his engagement with ancient Greek, Egyptian, and Persian cultures; his military campaigns; his aims in creating an empire; and the immediate aftermath of his conquests. In addition, the course considers the role of great men in history and historiographical problems in reconstructing the past. It also explores how the image of Alexander has been transmitted, interpreted, challenged, and reshaped from antiquity to the present. Topics may include: the use of the memory of Alexander by later Greeks and Romans; the medieval Alexander tradition; responses to Alexander in Middle Eastern and Indian thought and literature; the legacy of Alexanders conquests in the age of empires; his transformation in Hollywood; and his contested place in the modern political dispute between Greece and North Macedonia. (Same as HIST 387.)

CLSX 323. Julius Caesar: Man and Myth. 3 Credits. HT H
This course explores the life, times, and legacy of Julius Caesar (c. 100-44 B.C.E). It covers Caesars early political career, his military campaigns, and his rise to power through civil war, with special attention paid to his aims, political reforms, and the institutions that enabled his rise to power. In addition, it considers the role of great men in history and historiographical problems in reconstructing the past. It also explores how the image of Caesar has been transmitted, interpreted, challenged, and reshaped from antiquity to the present. Topics may include: the impact of Julius Caesar in Rome with the creation of an empire ruled by Caesars; Medieval responses to Caesar as tyrant, king, and emperor; Caesar as a paradigm of populist tyranny from the Renaissance to the present; the legacy of his literary output and the Romantic image of Caesar as a genius; his impact on the modern age of empires; and re-imaginings of Caesar in film, TV, and video games. (Same as HIST 388.)

CLSX 325. Aegean Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaeans, Minoans, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 525 or HA 525. No knowledge of Greek or Latin is required. (Same as HA 325.)

CLSX 326. Greek Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 526 or HA 526. No knowledge of Greek or Latin is required. (Same as HA 326.)

CLSX 327. Roman Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion;
The course considers the relationship between historical accuracy and from the 20th and 21st centuries for which these sources are relevant. Greece and Rome through primary sources, and analyze several films Rome in film. Students in this course learn about the cultures of ancient This course explores the reception of the cultures of ancient Greece and and research. Special attention is paid to recent methodological, for example constitutional theory, political psychology, and source criticism. All readings will be in English; no knowledge of any ancient languages is required. (Same as POLS 360.)

This course explores the monuments and historical topography of the city of Rome, Italy across the Ancient, Medieval, Renaissance, Baroque, and Modern periods. Focusing on a series of case studies, monuments, and urban spaces such as the Pantheon, the Colosseum, and the imperial forums, this course explores how public spaces change in their usage and meaning over time. The course emphasizes Rome’s illustrious architects and artists, such as Michelangelo and Bernini, who attempted to modernize the eternal city by drawing on its ancient origins with such endeavors as New St. Peters Basilica. Throughout the course, students are challenged to compare the city of Rome to modern urban environments, and even to Lawrence, Kansas. All readings are in English; no prerequisites required.

ARCHAEOLOGY AND ART

This course examines the means of production and preparation, as well as the social role, of food and drink in Greek and Roman antiquity. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor.

This course studies ancient Greek athletics and the Olympic games. Students use historical, literary, and archaeological approaches to study how the Greeks celebrated and memorialized their athletes; how athletic prowess was connected to moral and civic virtue; the technologies by which the Greeks measured athletic performance; and the ways fans and spectators responded to competitions. Special emphasis will be given to the development of the Olympic games and their social, political, and artistic license in the films selected for the course, how each film reflects the concerns of the modern cultural context in which it was made, the common visual and thematic elements that link films set in ancient Greece or Rome, and the reuse of elements from Greek and Roman mythology and history in films set in the modern world. No knowledge of Latin or Greek required.

This course introduces the world of ancient Rome, with a focus on Roman cultural beliefs, values, and social structures. Topics covered include: religious beliefs and practices; athletics and competition; oral performance; gender and sexuality; class, status, and slavery. The course surveys a wide variety of sources, including major literary works, inscriptions, legal texts, and personal letters, as well as ancient art and archaeology. No knowledge of Greek is required; all readings will be in English. Prerequisite: Membership in the University Honors Program or consent of instructor.

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religious function in Greek society and in their modern instantiation. All readings are in English; no knowledge of Greek is required.

**CLSX 381. Ancient Roman Gladiators and Spectacle. 3 Credits. W**

This course studies ancient Roman gladiators and spectacle—the public entertainment that included staged beast hunts, mock naval battles, chariot races, and the punishment of criminals. Students use historical, literary, and archaeological approaches to study the development of gladiatorial combat and its reception in later periods. Emphasized topics may include: slavery in ancient Rome, the relationship between politics and spectacle, the architecture and engineering of the Colosseum, the representation of gladiators in modern film and video games, and the intersection of violence and entertainment in ancient Roman and modern American culture. All readings are in English; no knowledge of Latin is required.

**CLSX 382. Jerusalem Through the Ages. 3 Credits. H**

As a prominent site in the religious and cultural histories of Judaism, Christianity, and Islam, Jerusalem is uniquely situated as one of the world's most sacred cities. For more than 3,000 years, this city has been a focal point of religious and political activity. Through the critical reading of historical and religious texts, and archaeological data, this course will explore the historical development of Jerusalem as a sacred place in Judaism, Christianity, and Islam. (Same as HIST 382, JWSH 382 and REL 382.)

**CLSX 384. Ethics in Greek Tragedy. 3 Credits. HL H**

This course provides an introductory survey of theories of morality and uses Greek tragedy as case studies for understanding ethical problems. Students will read passages from ethical theorists alongside plays by Aeschylus, Sophocles, and Euripides, giving particular attention to identifying the ethical dilemmas the characters face, the criteria by which these characters make their decisions, ethical assessment of their decisions by their own standards and by those of ethical theories, and the role of cultural context in understanding the ethical dimensions of the plays. No knowledge of Greek is required.

**CLSX 402. War and Society in Greece and Rome. 3 Credits. H/W**

This course explores the military history of the ancient world, with a focus on the connections between warfare and political, social, and cultural developments. Through extensive reading, analysis, and discussion of a wide variety of ancient sources (literary, epigraphic, archaeological) and contemporary scholarship, this class will survey both the major developments in warfare in Greece and Rome, while at the same time investigating the relationship of military institutions, technologies, tactics, and strategies to the key political and economic changes, social structures, and value systems of antiquity. Beyond exploring famous and influential campaigns and battles (Persian Wars; Peloponnesian War; rise of Macedonia; Punic Wars; Roman civil wars; barbarian invasions), topics will include: hoplite warfare and the emergence of Sparta and Athens; sea-power, democracy, and imperialism; citizen militia and professionalization in Rome; trauma, triumph, and memorialization; gender roles and ethnic identity. (Same as HIST 402.)

**CLSX 480. Classical Museum in Context. 3 Credits. H**

This seminar is about the Wilcox Classical Museum, KU's first and oldest museum collection, founded in 1888. It introduces collecting and curation practices of universities during the nineteenth and early twentieth centuries, explores the culture of the reception of classical antiquity in KU's early history from the period of 1880-1910, and provides hands-on experience with objects in the Wilcox Collection. Emphasized topics include: the diversity of approaches in the study and interpretation of ancient artifacts, the controversial history of the usage of plaster casts of Greek and Roman sculptures in museum displays, and the future of the Wilcox Classical Museum. Students learn visual literacy skills, conduct original research on objects in the museum's collection, and become familiar with digital methods in the documentation, cataloguing, and display of museum objects. Prepares students for upper-level classes and graduate work in Greek and Roman Archaeology, Art History, and Museum Studies.

**CLSX 496. Honors Essay in Classical Antiquity. 3 Credits. H/W**

Individual directed research and preparation of an essay on a topic in Classical literature, culture, or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor.

**CLSX 502. The Age of Heroes: Early Greece. 3 Credits. H/W**

This course explores the Greek Bronze and Dark Ages and in particular the relationship of the Iliad and the Odyssey to early Greek history. The course is organized around current methods, problems, and debates in the fields of Greek history, archaeology, and Classics. Topics include the rise and fall of the Minoan and Mycenaean worlds, the historicity of the Trojan War, and social, religious, and political institutions of the Dark Ages. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 502.) Prerequisite: Any CLSX or HIST course.

**CLSX 504. Rise of Athens and Sparta. 3 Credits. H/W**

This course explores the history of Archaic and Classical Greece, focusing on the rise and fall of the rival states of Sparta and Athens. The course is organized around current methods, problems, and debates in the fields of Greek history and Classics. Topics include the emergence of the Greek polis; Greek colonization; developments in political, religious, and social institutions, including the Spartan constitution and the rise of Athenian democracy; the changing definitions of personal, cultural, and national identities; cultural, political, and economic tensions between rival Greek city-states and neighbouring cultures, especially Persia and Macedonia. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 504.) Prerequisite: Any CLSX or HIST course.

**CLSX 505. Roman Republic. 3 Credits. H**

This course investigates the origins, development, and eventual crisis of the Roman Republic, from its foundation in the eighth century BC to Civil War in the first century BC. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include the contexts and causes for the rise of Rome, the growth, development, and eventual collapse of the Roman republican constitution, and the impact of empire on Roman society, culture, religion, economy, and identity. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 506.) Prerequisite: Any CLSX or HIST course.

**CLSX 507. Early Roman Empire. 3 Credits. H**

This course investigates the establishment and development of the Roman Empire, from the rise of Augustus to the peak of Roman power and prosperity in the second century AD. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include the creation of the imperial system; developments in the role of the emperor and the Roman government; continuity and transformation in society, culture, religion, economy, and identity with the shift from republic to empire; daily life across the empire...
and in the army. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 507.) Prerequisite: Any CLSX or HIST course.

CLSX 508. Late Roman Empire (284-527). 3 Credits. H
This course investigates the history of the later Roman Empire, from the height of its power in the second century AD to the fall of the Western Roman Empire in the fifth century AD. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include continuity and change in Roman culture, identity, and institutions; the Christianization of the empire; contact and conflict between Romans and the “barbarians”; political decline and daily life across the empire. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as HIST 508.) Prerequisite: Any CLSX or HIST course.

CLSX 510. Love, Lust, and Laughter in Ancient Literature. 3 Credits. H
This course moves beyond ancient epic and tragedy to introduce students to less familiar genres from Greek and Roman literature. Texts studied may include the romantic novels of Heliodorus and Apuleius; the erotic poetry of Sappho and Catullus; the comedies of Aristophanes and Plautus; the proto-science fiction of Lucian; or the satires of Horace and Persius. Attention will be given to theories, approaches, and questions in contemporary criticism of ancient literature, and assessment will include a final paper or creative project that integrates these perspectives. All readings will be in English; no knowledge of any ancient languages is required. Prerequisite: Any CLSX course.

CLSX 515. Gender and Sexuality in Greek Culture. 3 Credits. H
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as WGSS 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

CLSX 516. Gender and Sexuality in Roman Culture. 3 Credits. HL H
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as WGSS 516.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

CLSX 525. Aegean Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaeans, Minoans, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 325 or HA 325. No knowledge of Greek or Latin is required. (Same as HA 525.)

CLSX 526. Greek Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 326 or HA 326. No knowledge of Greek or Latin is required. (Same as HA 526.)

CLSX 527. Roman Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 327 or HA 327. No knowledge of Greek or Latin is required. (Same as HA 537.)

CLSX 529. Archaeology and Art of the Ancient Near East. 3 Credits. H
A cross-cultural survey of the material remains of the major civilizations of the ancient Near East, including Anatolia, Mesopotamia, the Levant, and Egypt from Neolithic period to the rise of the Roman empire (ca. 6000 B.C.E. - 30 B.C.E.). Includes lectures with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as HA 529.)

CLSX 538. Pompeii and Herculaneum. 3 Credits. H
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as HA 538, HUM 538.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor.

CLSX 550. Capstone in Classics. 1-3 Credits. H
This capstone seminar synthesizes various aspects in the discipline of Classics by focusing on recent award-winning scholarship or creative work in the field. Specific assignments and additional readings vary from one semester to another and will be stated on the instructor's syllabus. Introductory knowledge of Greek or Latin is required. Prerequisite: 15 hours in CLSX/LAT/GRK at the 200 level or above, or status as a senior major in the department, or permission of the instructor.

CLSX 570. Study Abroad Topics in Greek and Roman Culture: _____ 1-3 Credits. H
This course is designed for the study of special topics in Classics at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

CLSX 575. Readings in: _____ 1-3 Credits.
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit if topic
varies. Only six hours may count toward the major. Prerequisite: Consent of instructor.

**CLSX 577. Topics in the Archaeology and Art of the Ancient Mediterranean:_____ 3 Credits. H**
Lecture and discussion course focusing on a theme, medium, region, or period in the archaeology and art of the ancient Near Eastern and classical world. May be repeated for credit if topic varies. Only 6 hours may count toward the major.

**CLSX 675. Studies in:_____ 1-3 Credits. H/W**
Selected readings in Greek and Roman antiquity and the classical tradition for students who desire special work on a flexible basis. No knowledge of Greek or Latin is required. May be repeated for credit, the maximum being twelve hours. Prerequisite: Consent of instructor.

**CLSX 790. Practicum in the Teaching of Classics. 0.5 Credits.**
Required of all assistant instructors and teaching assistants in the teaching of Classics courses. May be repeated up to three semester hours credit in total.

**CLSX 899. Thesis. 1-6 Credits.**
Thesis hours. Graded on a satisfactory progress/limited progress/no progress basis.

## Courses

**GRK 104. Elementary Ancient Greek. 5 Credits. U F1**
The essentials of ancient Greek grammar, with readings.

**GRK 105. Elementary Ancient Greek, Honors. 5 Credits. U F1**
The essentials of ancient Greek grammar, with readings. Prerequisite: Membership in the University Honors Program or permission of instructor.

**GRK 108. Ancient Greek Readings and Grammar. 5 Credits. U F2**
A continuation of Greek 104, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or GRK 105.

**GRK 109. Ancient Greek Readings and Grammar, Honors. 5 Credits. U F2**
A continuation of GRK 105, with extensive readings from one or more classical authors. Prerequisite: GRK 104 or GRK 105; and membership in the University Honors Program or permission of instructor.

**GRK 177. First Year Seminar:_____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Greek. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**GRK 301. Philosophy and Oratory. 3 Credits. H/W F3**
Systematic grammar review in conjunction with readings selected from Plato, Aristotle and the Attic orators, with attention to issues of interpretation and social and cultural history. Prerequisite: GRK 108 or GRK 109.

**GRK 302. Drama and Lyric Poetry. 3 Credits. H/W F3**
Systematic grammar review in conjunction with readings selected from Aeschylus, Sophocles, Euripides, and the lyric poets, with attention to issues of literary interpretation and cultural history. Prerequisite: GRK 108 or GRK 109.

**GRK 303. Greek Narrative Prose. 3 Credits. H/W F3**
Systematic grammar review in conjunction with readings selected from the historians Herodotus, Thucydides, and Xenophon, as well as from the Greek novels and the New Testament. Attention will be given to issues of interpretation and cultural history. Prerequisite: GRK 108 or GRK 109.

**GRK 310. Homer's Odyssey. 3 Credits. H/W F4**
Selections from Homer's Odyssey, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303.

**GRK 312. Homer's Iliad. 3 Credits. H/W F4**
Selections from Homer's Iliad, with attention to issues of literary translation and interpretation, performance, and social and cultural history. Prerequisite: GRK 301, or GRK 302, or GRK 303.

**GRK 315. Biblical and Imperial Greek. 3 Credits. W**
This course surveys the post-classical development of Greek in the Hellenistic and Roman periods, with special attention given to the languages of the Bible. The course will focus on extending linguistic knowledge and developing an understanding of the historical development of Greek through close readings of selections from the Septuagint, New Testament, and Greek authors of the Roman Empire, such as Lucian. We will examine how and why koine ("common") Greek differs from Classical Greek, and we will interpret these texts in light of the contact and conflict between different political, linguistic, ethnic, and religious communities that characterized the Hellenistic and Roman worlds. This course will be indispensable both for those interested in the history and culture of Greece and Rome beyond the fifth century B.C., and for those interested in reading the Bible and early Christian writers. Prerequisite: GRK 108 or GRK 109.

**GRK 375. Readings in:_____ 1-3 Credits. H/W F3**
Readings in classical Greek texts. May be repeated for up to twelve hours. Prerequisite: GRK 108 or the equivalent.

**GRK 496. Honors Essay in Greek. 3 Credits. H/W FP**
Individual directed research and preparation of an essay on a topic in Greek literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor.

**GRK 508. Early Greek Philosophy. 3 Credits. H/W FP**
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers with some attention paid to the Sophists and the Hippocratic Corpus. (Same as PHIL 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor.

**GRK 701. Archaic Poetry. 3 Credits.**
Close reading of texts from Homer, Hesiod, Pindar, the lyric poets.

**GRK 702. Drama. 3 Credits.**
Close reading of texts from Aeschylus, Sophocles, Euripides, Aristophanes.

**GRK 703. History and Oratory. 3 Credits.**
Close reading of texts from Herodotus, Thucydides, Xenophon, Attic orators.

**GRK 704. Philosophy. 3 Credits.**
Close reading of texts from Plato, Aristotle, the Pre-Socratics.

**GRK 705. Readings in Classical Greek. 0.5 Credits.**
Extensive reading in a variety of Greek authors.

**GRK 790. Practicum in the Teaching of Greek. 3 Credits.**
Extensive reading in a variety of Greek authors. Prerequisite: Consent of instructor.

**GRK 798. Studies in:_____ 1-3 Credits.**
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Greek or equivalent.

**GRK 899. Thesis. 1-6 Credits.**
Thesis credit. Graded on a satisfactory progress/limited progress/no progress basis.

Courses

LAT 104. Elementary Latin I. 5 Credits. U F1
An introduction to the Latin language.

LAT 105. Elementary Latin I, Honors. 5 Credits. U F1
Integrates study of elementary Latin with study of Roman culture. Prerequisite: Enrollment to Honors Program or permission of department.

LAT 108. Elementary Latin II. 5 Credits. U F2
Latin grammar concluded with selected readings. Prerequisite: LAT 104 or LAT 105, or permission of department.

LAT 109. Elementary Latin II, Honors. 5 Credits. U F2
Latin grammar concluded with selected readings, integrated with study of Roman culture. Prerequisite: LAT 105 or permission of department.

LAT 112. Readings in Latin Literature. 3 Credits. U F3
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Attention to literary history and historical context. Prerequisite: LAT 108 or LAT 109, or permission of department.

LAT 113. Readings in Latin Literature, Honors. 3 Credits. U F3
Systematic grammar review in conjunction with selected prose authors, such as Cicero or Caesar, with additional readings in Roman poetry. Exercises in literary analysis and/or prose composition. Prerequisite: LAT 109 or permission of department.

LAT 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

LAT 300. Intermediate Latin Composition. 3 Credits. H/W FP
Composition in Latin prose, stressing the basic principles of Latin syntax and style. Recommended for majors and minors. Prerequisite: LAT 112 or LAT 113 or permission of the department.

LAT 301. Prose Fiction and Epistolography. 3 Credits. H/W FP
Selected readings from such authors as Cicero, Seneca, Petronius, Pliny, and Apuleius, with attention to literary interpretation and historical context. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 302. Hexameter Poetry. 3 Credits. H/W FP
Selected readings from such authors as Lucretius, Vergil, Ovid, and the satirists, with attention to literary interpretation and historical context. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 303. Roman Historians. 3 Credits. H/W FP
Selected readings from such authors as Caesar, Livy, and Tacitus, with attention to issues in Roman history and historiography. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 304. Lyric and Elegiac Poetry. 3 Credits. H/W FP
Selected readings from such authors as Catullus, Horace, Tibullus, Propertius, Sulpicia, Ovid, and Martial, with attention to literary interpretation and historical context. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 305. Roman Drama. 3 Credits. H/W FP
Selected readings from such authors as Plautus, Terence, and Seneca, with attention to literary interpretation, theater history, and performance. Prerequisite: LAT 112 or LAT 113, or permission of department.

LAT 310. Vergil's Aeneid. 3 Credits. H/W

In this course students read selections from Vergil's Aeneid through various interpretive lenses such as literary history (including its relationship to epic and tragedy), socio-cultural and political context, and reception. Attention will be paid throughout to Vergil's poetic style, syntax, and lexicon. Prerequisite: LAT 112 or LAT 113 or permission of department.

LAT 375. Readings in: ______. 1-3 Credits. H/W FP
Readings in Latin literature, selected in consultation with the instructor. May be repeated for up to twelve hours. Prerequisite: LAT 112 or LAT 113, or consent of instructor.

LAT 496. Honors Essay in Latin. 3 Credits. H/W FP
Individual directed research and preparation of an essay on a topic in Latin literature or language. Prerequisite: Eligibility for departmental honors and consent of essay advisor.

LAT 700. Advanced Latin Prose Composition. 3 Credits.
An examination of the grammar, syntax, and style of the Latin language through exercises in composition. Prerequisite: Consent of instructor.

LAT 701. Hexameter Poetry. 3 Credits.
Close reading of texts from authors such as Lucretius, Vergil, Ovid, Statius. Prerequisite: Consent of instructor.

LAT 702. Lyric and Elegy Poetry. 3 Credits.
Close reading of texts from authors such as Catullus, Horace, Propertius, Tibullus, Sulpicia, Ovid, Martial. Prerequisite: Consent of instructor.

LAT 703. History, Oratory, Philosophy. 3 Credits.
Close reading of texts from authors such as Cicero, Livy, Seneca, Tacitus, Augustine. Prerequisite: Consent of instructor.

LAT 704. Drama, Satire, and Novel. 3 Credits.
Close reading of texts from authors such as Plautus, Terence, Horace, Petronius, Seneca, Juvenal, Apuleius.

LAT 705. Readings in Classical Latin. 3 Credits.
Extensive reading in a variety of Latin authors.

LAT 790. Practicum in the Teaching of Latin. 0.5 Credits.
Required of all assistant instructors and teaching assistants in the teaching of Latin. May be repeated up to three semester hours credit in total.

LAT 798. Studies in: ______. 1-3 Credits.
Selected readings for qualified students who desire special work on a flexible basis. May be repeated for credit, the maximum being twelve hours. Prerequisite: Undergraduate proficiency in Latin or equivalent.

LAT 899. Thesis. 1-6 Credits.
Thesis credit. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts and Bachelor of General Studies in Classics

Why classics?

Because knowledge of Greek and Roman antiquity is fundamental to understanding the ancient and modern world.

What is classics?

Classics is the integrated study of ancient Greek and Roman civilization through its languages, its literature, and its artistic and archaeological remains. This broad field includes the study of the great texts of classical antiquity, such as Vergil's Aeneid, Homer's Iliad and Odyssey, Plato's Symposium, Sophocles' Antigone, and the love poems of Sappho.
and Catullus, but also encompasses research into everyday life in the societies that produced those great works.

In addition to training in the classical languages (Greek and Latin), the department introduces students to a range of work in literary criticism and cultural studies. Topics include archaeology and ancient art, ancient theatre, mythology, women’s history, Greek and Roman humor, cultural exchange across the Mediterranean, the translation of Greek and Latin poetry, and the history of slavery, sexuality, and ethnicity in ancient society.

A commitment to teaching and learning:

Our curriculum is diverse, innovative, and responsive to students’ needs. We offer a variety of topics as mentioned above, and an array of course structures and formats, including small in-person language courses, hybrid ancient Greek and Latin that combines face-to-face instruction with online exercises, mid-sized discussion courses on archaeological or literary themes, online offerings during the summer and the academic year, and one large energetic lecture course.

Our faculty members have won nearly all KU’s teaching awards, including the HOPE, Kemper, and Ned Fleming awards, and a wide variety of other university-level teaching and advising awards. The department as a whole received the first ever Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

Beyond KU:

In addition to the rich and interdisciplinary content, the Classics degree teaches strong and widely useful critical skills such as clear writing, effective interpretation and use of evidence, and evaluation of sources. Classics graduates bring all these to bear in a variety of careers. Our students have gone on to careers in law, business, library science, journalism, medicine, museum studies, education, writing and publishing, and technology.

Innovative scholarship:

KU Classics Faculty members conduct research on a variety of ancient topics, from Greek tragedy to Roman architecture. Their research engages some of the world’s most enduring questions, such as: How did the Greek and Roman societies envision happiness? How does knowledge of the past affect one’s choices and identities? How do modern theories about gender and sexuality intersect with ancient concepts? How are cultural values encoded into art, architecture, literature, language, law, religion, and politics? And, who “owns” the classical past?

Classics students can work with faculty as research assistants or can develop their own research projects, and many Classics courses count toward KU’s Research Experience Program. Our undergraduate students have received Undergraduate Research Awards and McNair Scholarships, and many write undergraduate honors theses.

Study Abroad

The Classics Department offers a variety of study opportunities for its students to study in Greece or Italy, the UK, and elsewhere in Europe. We offer scholarships to students who participate in overseas programs that focus on the ancient world.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

All CLSX/LAT/GRK courses at the 100 or 200 level provide important cultural and historical background for the advanced work in the major. As soon as you decide that you are interested in the Classics major, we suggest that you talk to an undergraduate advisor in Classics, who can help you plan your program of study. Each concentration has different requirements. For concentrations that focus on ancient Greek or Latin, we recommend that students take GRK 104 or LAT 104 as soon as possible, so that they can achieve the language proficiency needed for upper-level courses in the major. For concentrations that focus on archaeology and art or humanities, we recommend that students take introductory courses on archaeology (CLSX 151), literature and culture (CLSX 148, CLSX 168, CLSX 171, CLSX 230, CLSX 240) or history (CLSX 105, CLSX 106).

Classical Languages Concentration

The Classical Languages concentration is designed for students who wish to concentrate on the languages and literatures of ancient Greece and Rome, while allowing the flexibility to take a wide range of courses about all aspects of the ancient world. This concentration provides students with proficiency in the Greek and Latin languages; allows students to read, analyze, and respond to a variety of important texts from the ancient Greek and Roman worlds in their original language; and offers the opportunity to take complementary courses in the history, archaeology, and culture of the ancient world. The Classical Languages concentration provides the linguistic training necessary for further study in Classics and related disciplines (e.g., Biblical Studies, Comparative Literature) and fosters analytical and writing skills that are essential for careers such as law, government, and business.

Students interested in teaching might consider combining our Classical Languages concentration with a degree in the School of Education and Human Sciences. A teacher preparation program followed by educator
licensure (also called teacher “certification”), along with a Classics major in the Classical Languages concentration, will allow you to teach Latin in public high schools.

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<th>Code</th>
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<tr>
<td>GRK 104</td>
<td>Elementary Ancient Greek</td>
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<td>GRK 108</td>
<td>Ancient Greek Readings and Grammar</td>
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<td>LAT 104</td>
<td>Elementary Latin I</td>
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<tr>
<td>LAT 108</td>
<td>Elementary Latin II</td>
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Students planning to continue to 300-level Latin should also take LAT 112 or equivalent.

If you have previous training in Greek or Latin, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class and explore options for receiving retroactive credit for your previous study of the language.

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<td>LAT 108</td>
<td>Elementary Latin II</td>
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<td>Ancient Greek Readings and Grammar</td>
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Additional courses in Classics or related subjects. This can include any course in the Classics department (course codes LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.

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If you have previous training in Greek, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class.

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<th>Code</th>
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<tr>
<td>LAT 112</td>
<td>Readings in Latin Literature</td>
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If you have previous training in Latin, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class and explore options for receiving retroactive credit for your previous study of the language.

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<th>Code</th>
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<tr>
<td>LAT 102</td>
<td>Readings in Latin Literature</td>
<td>3</td>
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The Latin concentration is designed for students who wish to concentrate on the language and literature of ancient Rome, while allowing the flexibility to take a wide range of courses about all aspects of the ancient world. This concentration provides students with proficiency in the Latin language; allows students to read, analyze, and respond to a variety of important texts from the ancient Roman world in their original language; and offers the opportunity to take complementary courses in the history, archaeology, and culture, as well as the other major languages, of the ancient world. The Latin concentration provides the linguistic training necessary for further study in Latin and related disciplines (e.g., Medieval Studies, Theology, Early Modern Science, Renaissance History, Comparative Literature); prepares students for teaching Latin at the secondary school level; and fosters analytical and writing skills that are essential for careers such as law, government, and business.

Students interested in teaching might want to consider combining our Latin concentration with a degree in the School of Education and Human Sciences. A teacher preparation program followed by educator licensure (also called teacher “certification”), along with a Classics major in the Latin concentration, will allow you to teach Latin in public high schools.

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<td>Readings in Latin Literature</td>
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If you have previous training in Latin, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class and explore options for receiving retroactive credit for your previous study of the language.

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<tr>
<td>LAT 112</td>
<td>Readings in Latin Literature</td>
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The Greek concentration is designed for students who wish to concentrate on the language and literature of ancient Greece, while allowing the flexibility to take a wide range of courses about all aspects of the ancient world. This concentration provides students with proficiency in the ancient Greek language; allows students to read, analyze, and respond to a variety of important texts from the ancient Greek world in their original language; and offers the opportunity to take complementary courses in the history, archaeology, and culture, as well as the other major languages, of the ancient world. This concentration provides the linguistic training necessary for further study in Greek and related disciplines (e.g., Biblical Studies, Classical Studies, Comparative Literature) and fosters analytical and writing skills that are essential for careers such as law, government, and business.

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<tr>
<td>GRK 108</td>
<td>Ancient Greek Readings and Grammar</td>
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<tr>
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Additional courses in Classics or related subjects. This can include any course in the Classics department (course codes LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.

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<tr>
<td>LAT 102</td>
<td>Readings in Latin Literature</td>
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The Archaeology and Art concentration prepares students for further study in Classical Archaeology, Art History, Museum Studies, and related fields.

To ensure flexibility for students, there is no language requirement as part of the Archaeology and Art concentration. It is, however, often helpful to take either Greek or Latin, as they count towards the B.A. language.
requirement and allow you a deeper insight into the ancient world. Any
courses taken in Greek and Latin can be counted towards the major as
electives.

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<th>Code</th>
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<tbody>
<tr>
<td>Greek and Roman archaeology</td>
<td>Introduction to Greek and Roman Archaeology</td>
<td>3</td>
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<tr>
<td>CLSX 151</td>
<td>or CLSX 351Introduction to Greek and Roman Archaeology, Honors</td>
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<tr>
<td>Greek or Roman art</td>
<td>Greek and Roman Art</td>
<td>3</td>
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<tr>
<td>CLSX 305</td>
<td>or CLSX 526Greek Art</td>
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<tr>
<td>Archaeology and Art electives</td>
<td>Greek and Roman Art</td>
<td>12</td>
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<tr>
<td>CLSX 305</td>
<td>or CLSX 527Roman Art</td>
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<tr>
<td>Additional courses in Classics or related subjects. This can include any course in the Classics department (course codes LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.</td>
<td>12</td>
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Classical Humanities Concentration

The Classical Humanities concentration is designed for students who wish to concentrate on the literature, history, and culture of ancient Greece and Rome, while allowing the flexibility to take a wide range of courses about all aspects of the ancient world. This concentration is ideal for students who are fascinated by the ancient world and who want the experience of a liberal arts degree before pursuing careers beyond Classics, such as medicine, law, teaching, business, and the creative industries. Students who are interested in further study in Classics or Classical Archaeology are strongly advised to talk to an advisor about taking one of the other concentrations (i.e., Classical Languages or Archaeology and Art) to ensure that they have adequate preparation for entry into graduate programs.

To ensure flexibility for students, there is no language requirement as part of the Classical Humanities concentration. It is, however, often helpful to take either Greek or Latin, as they count towards the B.A. language requirement and allow you a deeper insight into the ancient world. Any courses taken in Greek and Latin can be counted towards the major as electives.

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<th>Code</th>
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<tbody>
<tr>
<td>Classical Humanities Courses</td>
<td>Greek Culture and Civilization</td>
<td>15</td>
</tr>
<tr>
<td>CLSX 230</td>
<td>or CLSX 330Greek Culture and Civilization, Honors</td>
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<tr>
<td>CLSX 240</td>
<td>or CLSX 340Roman Culture and Civilization, Honors</td>
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<tr>
<td>CLSX 310</td>
<td>Ancient Magic and Witches</td>
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<tr>
<td>CLSX 320</td>
<td>Alexander the Great: Man and Myth</td>
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<tr>
<td>CLSX 322/ HIST 387</td>
<td>Julius Caesar: Man and Myth</td>
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<tr>
<td>CLSX 332</td>
<td>Medical Terminology: Greek and Latin Roots</td>
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<tr>
<td>CLSX 350</td>
<td>Modern Themes, Ancient Models:</td>
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<tr>
<td>CLSX 355</td>
<td>Ancient Greece and Rome in Film</td>
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<tr>
<td>CLSX 360</td>
<td>Ancient Roots of Modern Politics</td>
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<tr>
<td>CLSX 375</td>
<td>Studies in:</td>
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<tr>
<td>CLSX 378</td>
<td>Ancient Roman Gladiators and Spectacle</td>
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<tr>
<td>CLSX 384</td>
<td>Ethics in Greek Tragedy</td>
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<tr>
<td>CLSX/HIST 402</td>
<td>War and Society in Greece and Rome</td>
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<tr>
<td>CLSX 496</td>
<td>Honors Essay in Classical Antiquity</td>
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<tr>
<td>CLSX/HIST 502</td>
<td>The Age of Heroes: Early Greece</td>
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<tr>
<td>CLSX/HIST 504</td>
<td>Rise of Athens and Sparta</td>
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<tr>
<td>CLSX 505/ HIST 506</td>
<td>Roman Republic</td>
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<tr>
<td>CLSX/HIST 507</td>
<td>Early Roman Empire</td>
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<tr>
<td>CLSX/HIST 508</td>
<td>Late Roman Empire (284-527)</td>
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<tr>
<td>CLSX 510</td>
<td>Love, Lust, and Laughter in Ancient Literature</td>
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<td>CLSX 515</td>
<td>Gender and Sexuality in Greek Culture</td>
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<td>CLSX/HIST 516</td>
<td>Gender and Sexuality in Roman Culture</td>
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<tr>
<td>CLSX 570</td>
<td>Study Abroad Topics in Greek and Roman Culture:</td>
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<tr>
<td>HA 510</td>
<td>Medieval Manuscripts and Early Printed Books</td>
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<tr>
<td>HIST 320</td>
<td>From Goddesses to Witches: Women in Premodern Europe</td>
<td></td>
</tr>
<tr>
<td>HIST 335</td>
<td>History of Jewish Women</td>
<td></td>
</tr>
<tr>
<td>PHIL 384</td>
<td>Ancient Philosophy</td>
<td></td>
</tr>
</tbody>
</table>
**Departmental Honors**

Departmental honors are awarded to undergraduates who demonstrate exceptional academic achievement in the major. To receive departmental honors, students must have a major GPA of at least 3.50 and must complete either CLSX 496, GRK 496, or LAT 496 with a grade of B or higher. Students interested in departmental honors should discuss this option with the Classics department honors coordinator as early as they can, preferably in their junior year.

**Classics Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

**Major Hours**
Satisfied by a minimum of 24-30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA in Classics with the following concentrations can be found here: Archaeology and Art (p. 1231), Classical Humanities (p. 1232), Classical Languages (p. 1233), Greek (p. 1234), Latin (p. 1236), or by using the left-side navigation.

A sample 4-year plan for the BGS in Classics with the following concentrations can be found here: Archaeology and Art (p. 1237), Classical Humanities (p. 1238), Classical Languages (p. 1239), Greek (p. 1240), Latin (p. 1241), or by using the left-side navigation.

**Departmental Honors**

A candidate for honors must meet all the general requirements for graduation with honors established by the College. The independent research requirement is met by successful completion of Honors Essay: CLSX 496, GRK 496, or LAT 496. This is normally in the spring semester of the senior year. This enrollment substitutes for one of the optional major courses, whether central or peripheral.

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**Study Abroad**

The department offers study abroad opportunities in Greece and Italy. All students may apply to attend these summer programs, and classics majors are especially encouraged to enroll. Courses offered vary from year to year; consult the Office of Study Abroad (http://www.studyabroad.ku.edu/) or advisors in the Department of Classics.

For scholarships, students should apply to Study Abroad as well as to the department. The department also offers advice to students interested in non-KU programs or in summer internships at archaeological sites.

**BA in Classics with concentration in Archaeology and Art**

Below is a sample 4-year plan for students pursuing the BA in Classics with a concentration in Archaeology and Art. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>ENGL 101</td>
<td>Communication/BA Writing I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CLSX 151 or 351</td>
<td>Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GRK 104 or LAT 104</td>
<td>(Recommended. 1st Semester Language (BA Second Language))</td>
<td>5</td>
</tr>
<tr>
<td>Sophomore</td>
<td>GRK 301, 302, 303, or LAT 112</td>
<td>(Recommended. 3rd Semester Language (BA Second Language))</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Archaeology and Art Elective (1 of 4)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Classics Elective (1 of 4)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA Quantitative Reasoning (QR)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Archaeology and Art Elective (3 of 4)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

---

**Additional courses in Classics or related subjects. This can include any course in the Classics department (course codes LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.**

**Total Hours**

30
### BA in Classics with concentration in Classical Humanities

Below is a sample 4-year plan for students pursuing the BA in Classics with a concentration in Classical Humanities. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking (consider CLSX course)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities (consider CLSX course)</td>
<td>3</td>
<td>Goal 3 Social Science (consider CLSX course)</td>
<td>3</td>
</tr>
<tr>
<td>GRK 104 or LAT 104 (Recommended. 1st Semester Language (BA Second Language))</td>
<td>5</td>
<td>GRK 108 or LAT 108 (Recommended. 2nd Semester Language (BA Second Language))</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRK 301, 302, 303, or LAT 112 (Recommended. 3rd Semester Language (BA Second Language))</td>
<td>3</td>
<td>GRK 310, 312, LAT 300, LAT 301, LAT 302, LAT 303, LAT 304, LAT 305, or LAT 375 (Recommended. 4th Semester Language (BA Second Language))</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication (consider CLSX course)</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Classical Humanities (1 of 5)</td>
<td>3</td>
<td>Classical Humanities (2 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/</td>
<td>3</td>
<td>3 Classics Elective (1 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Elective/Degree/Junior-Senior Hours</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. CLSX 305 fulfills KU Core Goal 3H.
3. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
4. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.
5. Additional courses in Classics or related subjects. This can include any course in the Classics department (course codes LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.
6. It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

KU Core Options within the department

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 159
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168
- Goal 3 Social Science: CLSX 316, CLSX 378
- Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378
- Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
- Goal 6 Integration & Creativity: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 508, CLSX 510

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Total Hours 120

<table>
<thead>
<tr>
<th>Senior Hours</th>
<th>Elective/Degree/Junior-Senior Hours</th>
<th>Elective/Degree/Junior-Senior Hours</th>
<th>Elective/Degree/Junior-Senior Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

Total hours 120 requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. CLSX 305 fulfills KU Core Goal 3H.
3. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
4. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.
5. Additional courses in Classics or related subjects. This can include any course in the Classics department (course codes LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.
6. It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

KU Core Options within the department

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 159
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168
- Goal 3 Social Science: CLSX 316, CLSX 378
- Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378
- Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
- Goal 6 Integration & Creativity: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 508, CLSX 510

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Classics with concentration in Classical Humanities

Below is a sample 4-year plan for students pursuing the BA in Classics with a concentration in Classical Humanities. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking (consider CLSX course)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities (consider CLSX course)</td>
<td>3</td>
<td>Goal 3 Social Science (consider CLSX course)</td>
<td>3</td>
</tr>
<tr>
<td>GRK 104 or LAT 104 (Recommended. 1st Semester Language (BA Second Language))</td>
<td>5</td>
<td>GRK 108 or LAT 108 (Recommended. 2nd Semester Language (BA Second Language))</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRK 301, 302, 303, or LAT 112 (Recommended. 3rd Semester Language (BA Second Language))</td>
<td>3</td>
<td>GRK 310, 312, LAT 300, LAT 301, LAT 302, LAT 303, LAT 304, LAT 305, or LAT 375 (Recommended. 4th Semester Language (BA Second Language))</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication (consider CLSX course)</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Classical Humanities (1 of 5)</td>
<td>3</td>
<td>Classical Humanities (2 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/</td>
<td>3</td>
<td>3 Classics Elective (1 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Elective/Degree/Junior-Senior Hours</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

See the degree requirements tab for a list of Classical Humanities courses.

Additional courses in Classics or related subjects. This can include any course in the Classics department (course prefix codes - LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies. At a minimum students must have 15 Junior/Senior courses (300+) in the major.

<table>
<thead>
<tr>
<th>Second Area of Study/ Elective/Degree/Junior-Senior Hours</th>
<th>Second Area of Study/ Elective/Degree/Junior-Senior Hours</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td>Fall</td>
<td>Hours Sprin</td>
</tr>
<tr>
<td>Classical Humanities (3 of 5)</td>
<td>3 Goal 4.2 Global Awareness (consider CLSX course)</td>
<td>3</td>
</tr>
<tr>
<td>Classics Elective (2 of 5)</td>
<td>3 Classical Humanities (4 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3 Classics Elective (3 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours Sprin</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility and Ethics (consider CLSX course)</td>
<td>3 CLSX 502, 504, 505, 507, 508, 510, 550, or 577 (Goal 6 Integration and Creativity, Classics Elective (5 of 5)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Classical Humanities (5 of 5)</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Classics Elective (4 of 5)</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 120

5 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

6 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

KU Core Options within the department

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLSX 169
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLSX 169
- Goal 3 Social Science: CLSX 316, CLSX 378
- Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378
- Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
- Goal 6 Integration & Creativity: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 508, CLSX 509

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BA in Classics with concentration in Classical Languages**

Below is a sample 4-year plan for students pursuing the BA in Classics with a concentration in Classical Languages. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours Sprin</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>1</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking (consider CLSX course)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>1</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities (consider CLSX course)</td>
<td>3</td>
<td>Goal 3 Social Science (consider CLSX course)</td>
<td>1</td>
</tr>
<tr>
<td>GRK 104 or LAT 104 (1st Semester Language (BA Second Language))</td>
<td>5</td>
<td>GRK 108 or LAT 108 (2nd Semester Language (BA Second Language))</td>
<td>1</td>
</tr>
</tbody>
</table>
## BA in Classics with concentration in Greek

Below is a sample 4-year plan for students pursuing the BA in Classics with a concentration in Greek. To view the list of courses approved to fulfill the requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRK 301, 302, 303, or LAT 112 (3rd Semester Language (BA Second Language), Language/Literature Requirement (1 of 5))</td>
<td>3 GRK 301, 312, LAT 300, LAT 301, LAT 302, LAT 303, LAT 304, LAT 305, or LAT 375 (4th Semester Language (BA Second Language), Language/Literature Requirement (2 of 5))</td>
<td>3</td>
</tr>
<tr>
<td>LAT 104 or GRK 104</td>
<td>5 LAT 108 or GRK 108</td>
<td>5</td>
</tr>
<tr>
<td>Goal 2.2 Communication (consider CLSX course)</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3 BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>15</strong></td>
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</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek/Latin Language/ Literature Requirement (3 of 5)</td>
<td>3 Greek/Latin Language/ Literature Requirement (4 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Classics Elective (1 of 3)</td>
<td>3 Classics Elective (2 of 3)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3 Goal 4.2 Global Awareness (consider CLSX course)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek/Latin Language/ Literature Requirement (5 of 5)</td>
<td>3 CLSX 502, 504, 505, 507, 508, 510, 550, or 577 (Goal 6 Integration and Creativity, Classics Elective (3 of 3))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility and Ethics (consider CLSX course)</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. If you have previous training in Greek or Latin, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class and explore options for receiving retroactive credit for your previous study of the language.
3. It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.
4. 15 hours or Greek or Latin Language and/or literature courses (course code GRK or LAT) at the 300-level or above required.
5. Additional courses in Classics or related subjects. This can include any course in the Classics department (course prefix codes - LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.
6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
7. Students planning to take 300-level Latin courses will need to complete LAT 112 or equivalent. LAT 112 will not count as a 300+ Language/Literature course so students may need to adjust graduation plan to meet overall requirements, please consult with academic advisor.

### KU Core Options within the department

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLSX 171, CLSX 305
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168
- Goal 3 Social Science: CLSX 316, CLSX 378
- Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378
- Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
- Goal 6 Integration & Creativity: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 508, CLSX 577, CLSX 578

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Classics with concentration in Greek

Below is a sample 4-year plan for students pursuing the BA in Classics with a concentration in Greek. To view the list of courses approved to fulfill
KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I) ¹</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II) ¹</td>
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<tr>
<td>GRK 104 (1st Semester Language (BA Second Language))</td>
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<td>GRK 108 (2nd Semester Language (BA Second Language))</td>
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<td>Goal 1.1 Critical Thinking (consider CLSX course) ³</td>
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<td>Goal 1.2 Quantitative Reasoning</td>
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<tr>
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### Sophomore

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<tr>
<td>GRK 301, 302, or 303 (3rd Semester Language (BA Second Language), Greek Language/Literature Requirement (1 of 5)) ⁴</td>
<td>3</td>
<td>GRK 310 or 312 (4th Semester Language (BA Second Language), Greek Language/Literature Requirement (2 of 5)) ⁴</td>
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<tr>
<td>Classics Electives (1 of 4) ⁵</td>
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<td>Classics Electives (2 of 4) ⁵</td>
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<tr>
<td>Goal 2.2 Communication (consider CLSX course) ³</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
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<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3 BA Laboratory/Field Experience (LFE)</td>
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<tr>
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### Junior

<table>
<thead>
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<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Greek Language/Literature Requirement (3 of 5) ⁴</td>
<td>3</td>
<td>Greek Language/Literature Requirement (4 of 5) ⁴</td>
<td>3</td>
</tr>
<tr>
<td>Classics Electives (3 of 4) ⁵</td>
<td>3</td>
<td>Goal 4.2 Global Awareness (consider CLSX course) ³</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours ⁶</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours ⁶</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours ⁶</td>
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<table>
<thead>
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### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Greek Language/Literature Requirement (5 of 5) ⁴</td>
<td>3</td>
<td>CLSX 502, 504, 505, 507, 508, 510, 550, or 577 (Goal 6 Integration and Creativity, Classics Elective (4 of 4)) ⁵</td>
<td>3</td>
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</table>

### Goal 5 Social Responsibility and Ethics (consider CLSX course) ³

<table>
<thead>
<tr>
<th>Hours</th>
<th>3</th>
</tr>
</thead>
</table>

### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. If you have previous training in Greek, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class.

3. It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

4. 15 hours of Greek Language and/or literature (prefix course code - GRK) courses at the 300-level or above required

5. 12 hours of additional courses in Classics or related subjects required. This can include any course in the Classics department (course prefix codes - LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.

6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

### KU Core Options within the department

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, etc.
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, etc.
- Goal 3 Social Science: CLSX 316, CLSX 378
- Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378
- Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
- Goal 6 Integration & Creativity: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 508, etc.

### Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific
requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Classics with concentration in Latin

Below is a sample 4-year plan for students pursuing the BA in Classics with a concentration in Latin. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Term</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking (consider CLSX course)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities (consider CLSX course)</td>
<td>3</td>
<td>Goal 3 Social Science (consider CLSX course)</td>
<td>3</td>
</tr>
<tr>
<td>LAT 104 (1st Semester Language (BA Second Language))</td>
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<td>LAT 108 (2nd Semester Language (BA Second Language))</td>
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#### Sophomore

<table>
<thead>
<tr>
<th>Term</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAT 112 (3rd Semester Language (BA Second Language))</td>
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<td>LAT 300, 301, 302, 303, 304, 305, or 375 (4th Semester Language (BA Second Language), Latin Language/Literature Requirement (1 of 5))</td>
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</tr>
<tr>
<td>Goal 2.2 Communication (consider CLSX course)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (OR)</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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#### Junior

<table>
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<tr>
<th>Term</th>
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<tbody>
<tr>
<td>Latin Language/Literature Requirement (2 of 5)</td>
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<td>Latin Language/Literature Requirement (3 of 5)</td>
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<td>Classics Electives (1 of 4)</td>
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<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness (consider CLSX course)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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#### Senior

<table>
<thead>
<tr>
<th>Term</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin Language/Literature Requirement (4 of 5)</td>
<td>3</td>
<td>Latin Language/Literature Requirement (5 of 5)</td>
<td>4</td>
</tr>
<tr>
<td>Classics Electives (3 of 4)</td>
<td>3</td>
<td>CLSX 502, 504, 505, 507, 508, 510, 550, or 577 (Goal 6 Integration and Creativity, Classics Elective (4 of 4))</td>
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</tr>
<tr>
<td>Goal 5 Social Responsibility and Ethics (consider CLSX course)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
</tbody>
</table>

#### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. If you have previous training in Latin, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class.
3. It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.
4. 15 hours of Latin Language and/or literature (prefix course code - LAT) courses at the 300-level or above required
5. 12 hours of additional courses in Classics or related subjects required. This can include any course in the Classics department (course prefix codes - LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.
6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

#### KU Core Options within the department

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLSX 171, CLSX 177, CLSX 316, CLSX 317, CLSX 384
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLSX 177, CLSX 316, CLSX 317, CLSX 384
- Goal 3 Social Science: CLSX 316, CLSX 378
- Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378
- Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in Classics with concentration in Archaeology and Art**

Below is a sample 4-year plan for students pursuing the BGS in Classics with a concentration in Archaeology and Art. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
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<tr>
<th>Fall</th>
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<tr>
<td>Goal 2.1 Written</td>
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<tr>
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<td>CLSX 151 or 351 (Goal 1.1)</td>
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<td>Critical Thinking</td>
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</tr>
<tr>
<td>Goal 3 Arts and Humanities (consider CLSX course)</td>
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### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
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<tbody>
<tr>
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<tr>
<td>Classics Elective (1 of 4)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Goal 2.2 Communication (consider CLSX course)</td>
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<td></td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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### Junior

<table>
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<th>Hours</th>
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<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>4.2 Global Awareness (consider CLSX course)</td>
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<tr>
<td>Archaeology and Art Elective (3 of 4)</td>
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<td>4.2 Global Awareness (consider CLSX course)</td>
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<table>
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### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility and Ethics (consider CLSX course)</td>
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<td>510, 550, or 577 (Goal 6 Integration &amp; Creativity, Classics Elective (4 of 4))</td>
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<td>BGS Career Course (BGSC)</td>
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<table>
<thead>
<tr>
<th>Total</th>
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</table>

1. CLSX 305 fulfills KU Core Goal 3H.
2. Refer to the Degree Requirements tab for a list of courses that fulfill this major requirement.
3. Additional courses in Classics or related subjects. This can include any course in the Classics department (course prefix codes - LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.
4. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
5. It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

**KU Core Options within the department**

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLSX 305, CLSX 326, CLSX 307, CLSX 357
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLSX 305, CLSX 326
- Goal 3 Social Science: CLSX 316, CLSX 378
- Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378
• Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
• Goal 6 Integration & Creativity: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 608, CLSX 510, CLSX 550, CLSX 577

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in Classics with concentration in Classical Humanities**

Below is a sample 4-year plan for students pursuing the BGS in Classics with a concentration in Classical Humanities. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking (consider CLSX course)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
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<tr>
<td>Goal 3 Arts and Humanities (consider CLSX course)</td>
<td>3</td>
<td>Goal 3 Social Science (consider CLSX course)</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>Goal 2.2 Communication (consider CLSX course)</td>
<td>3</td>
<td>Classical Humanities (2 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Classical Humanities (1 of 5)</td>
<td>3</td>
<td>Classics Elective (1 of 5)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Senior</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility and Ethics (consider CLSX course)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>BGS Career Course (BGSC)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<table>
<thead>
<tr>
<th>Total Hours 120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>Classical Humanities (5 of 5)</td>
</tr>
<tr>
<td>Classics Electives (2 of 5)</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
</tr>
</tbody>
</table>

1. See the Degree Requirements tab for a list of Classical Humanities courses.
2. Additional courses in Classics or related subjects. This can include any course in the Classics department (course prefix codes - LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.
3. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
4. It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

**KU Core Options within the department**

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLSX 199, CLSX 501
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168
• Goal 3 Social Science: CLSX 316, CLSX 378
• Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378, CLSX 515, CLSX 516, CLSX 518
• Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
• Goal 6 Integration & Creativity: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 510, CLSX 514, CLSX 515

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in Classics with concentration in Classical Languages**

Below is a sample 4-year plan for students pursuing the BGS in Classics with a concentration in Classical Languages. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

| Goal 2.1 Written Communication (1 of 2) | Hours | Spring | 3 Goal 2.1 Written Communication (2 of 2) | Hours | 3 |
| Goal 1.1 Critical Thinking (consider CLSX course) | 3 | Goal 3 Social Science (consider CLSX course) | 3 |
| Goal 3 Arts and Humanities (consider CLSX course) | 3 | Goal 1.2 Quantitative Reasoning | 3 |
| GRK 104 or LAT 104 | 5 | GRK 108 or LAT 108 | 5 |
| | | Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 |

| Total | 14 | 17 |

### Sophomore

| LAT 104 or GRK 104 | 5 | LAT 108 or GRK 108 | 5 |
| Language/Literature Requirement (1 of 5) | 3 | Language/Literature Requirement (2 of 5) | 3 |
| Goal 2.2 Communication (consider CLSX course) | 3 | Goal 3 Natural Science | 3 |
| Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 |

| Total | 14 | 15 |

### Junior

| Greek/Latin Language/Literature Requirement (3 of 5) | Hours | Spring | 3 Greek/Latin Language/Literature Requirement (4 of 5) | Hours | 3 |
| Classics Elective (1 of 3) | 3 | Classics Elective (2 of 3) | 3 |
| Goal 4.1 US Diversity | 3 | Goal 4.2 Global Awareness (consider CLSX course) | 3 |
| Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 | Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 |

| Total | 15 | 15 |

### Senior

| Greek/Latin Language/Literature Requirement (5 of 5) | Hours | Spring | 3 CLSX 502 (Goal 6 Integration and Creativity, Classics Elective (3 of 3)) | Hours | 3 |
| Goal 5 Social Responsibility and Ethics (consider CLSX course) | 3 | Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 |
| BGS Career Course (BGSC) | 3 | Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 |

| Total | 15 | 15 |

**Total Hours 120**

1. If you have previous training in Greek or Latin, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class and explore options for receiving retroactive credit for your previous study of the language.
2. 15 hours or Greek or Latin Language and/or literature courses (course code GRK or LAT) at the 300-level or above required.
3. 9 hours of additional courses in Classics or related subjects required. This can include any course in the Classics department (course prefix codes - LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.
4. Students planning to take 300-level Latin courses will need to complete LAT 112 or equivalent. LAT 112 will not count as a 300+ Language/Literature course so students may need to adjust graduation plan to meet overall requirements, please consult with academic advisor.
5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
It is possible to overlap your KU Core Courses with Classics major requirements, see below for all options. Your advisor can help you create a degree plan that maximizes your choices.

KU Core Options within the department

- Goal 1.1 Critical Thinking: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 152, CLSX 153, CLSX 154
- Goal 2.2 Oral Communication: CLSX 310, CLSX 320
- Goal 3 Arts & Humanities: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLX 151, CLSX 316, CLSX 317, CLSX 318
- Goal 3 Social Science: CLSX 316, CLSX 378
- Goal 4.2 Global Awareness: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378, CLSX 515, CLSX 516
- Goal 5 Social Responsibility and Ethics: CLSX 171, CLSX 384
- Goal 6 Integration & Creativity: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 508, 510, 550, or 577 (Goal 5 Social Responsibility and Ethics (consider CLSX course) 

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in Classics with concentration in Greek**

Below is a sample 4-year plan for students pursuing the BGS in Classics with a concentration in Greek. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.1 Written</td>
<td>3</td>
<td>3 Goal 2.1 Written</td>
<td>3</td>
</tr>
<tr>
<td>Communication (1 of 2)</td>
<td></td>
<td>Communication (2 of 2)</td>
<td></td>
</tr>
<tr>
<td>GRK 104(^1)</td>
<td>5</td>
<td>GRK 108(^1)</td>
<td>5</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking (consider CLSX course)(^5)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities (consider CLSX course)(^5)</td>
<td>3</td>
<td>Goal 3 Social Science (consider CLSX course)(^5)</td>
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</tr>
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</table>

**Total Hours 14**

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Greek Language/Literature (1 of 5)(^2)</td>
<td>3</td>
<td>3 Greek Language/Literature (2 of 5)(^2)</td>
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</tr>
<tr>
<td>Classics Electives (1 of 4)(^3)</td>
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<td>Classics Electives (2 of 4)(^3)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication (consider CLSX course)(^5)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^5)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^5)</td>
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**Total Hours 17**

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Greek Language/Literature (3 of 5)(^2)</td>
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<td>Greek Language/Literature (4 of 5)(^2)</td>
<td>3</td>
</tr>
<tr>
<td>Classics Electives (3 of 4)(^3)</td>
<td>3</td>
<td>Goal 4.2 Global Awareness (consider CLSX course)(^5)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
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**Total Hours 15**

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek Language/Literature (5 of 5)(^2)</td>
<td>3</td>
<td>3 CLSX 502, 504, 505, 507, 508, 510, 550, or 577 (Goal 6 Integration and Creativity, Classics Elective (4 of 4))(^3)</td>
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</tr>
<tr>
<td>Goal 5 Social Responsibility and Ethics (consider CLSX course)(^5)</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
<td>3</td>
</tr>
<tr>
<td>BGS Career Course (BGSC)</td>
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<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
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<td>2</td>
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</table>

**Total Hours 15**

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1. If you have previous training in Greek, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class.
2. 15 hours of Greek Language and/or literature (prefix course code - GRK) courses at the 300-level or above required.
3. 15 hours of additional courses in Classics or related subjects required. This can include any course in the Classics department (course prefix codes - LAT, GRK, or CLSX). Related courses from other departments may be substituted but require written permission from the Chair or the Director of Undergraduate Studies.
KU Core Options within the department

- **Goal 1.1 Critical Thinking**: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 155, CLSX 156, CLSX 157, CLSX 158, CLSX 186, CLSX 187, CLSX 205, CLSX 207, CLSX 222, CLSX 322, CLSX 323, CLSX 351, CLSX 352, CLSX 353
- **Goal 2.2 Oral Communication**: CLSX 310, CLSX 320
- **Goal 3 Arts & Humanities**: CLSX 105, CLSX 106, CLSX 148, CLSX 149, CLSX 151, CLSX 168, CLS
- **Goal 3 Social Science**: CLSX 316, CLSX 378
- **Goal 4.2 Global Awareness**: CLSX 148, CLSX 149, CLSX 168, CLSX 169, CLSX 316, CLSX 378, CLSX 515, CLSX 516
- **Goal 5 Social Responsibility and Ethics**: CLSX 171, CLSX 384
- **Goal 6 Integration & Creativity**: CLSX 496, CLSX 502, CLSX 504, CLSX 505, CLSX 507, CLSX 510, CLSX 515, CLSX 550, CLSX 551, CLSX 552, CLSX 555, CLSX 556

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in Classics with concentration in Latin**

Below is a sample 4-year plan for students pursuing the BGS in Classics with a concentration in Latin. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>LAT 104</td>
<td>5</td>
<td>LAT 108</td>
<td>5</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking (consider CLSX course)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities (consider CLSX course)</td>
<td>3</td>
<td>Goal 3 Social Science (consider CLSX course)</td>
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**Total Hours**: 14  

### Sophomore

<table>
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<tr>
<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>LAT 112</td>
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<td>Latin Language/Literature (1 of 5)</td>
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<td>Classics Elective (1 of 4)</td>
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<td>Classics Elective (2 of 4)</td>
<td>3</td>
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</tbody>
</table>

**Total Hours**: 17  

---

1. If you have previous training in Latin, please speak to an undergraduate advisor in Classics as soon as possible, so that you can be placed in the correct language class.

2. 15 hours of Latin Language and/or literature (prefix course code - LAT) courses at the 300-level or above required.
Minor in Classical Antiquity

Why classics?

Because knowledge of Greek and Roman antiquity is fundamental to understanding the ancient and modern world.

What is classics?

Classics is the integrated study of ancient Greek and Roman civilization through its languages, its literature, and its artistic and archaeological remains. This broad field includes the study of the great texts of classical antiquity, such as Vergil’s Aeneid, Homer’s Iliad and Odyssey, Plato’s Symposium, Sophocles’ Antigone, and the love poems of Sappho and Catullus, but also encompasses research into everyday life in the societies that produced those great works.

In addition to training in the classical languages (Greek and Latin), the department introduces students to a range of work in literary criticism and cultural studies. Topics include archaeology and ancient art, ancient theatre, mythology, women’s history, Greek and Roman humor, cultural exchange across the Mediterranean, the translation of Greek and Latin poetry, and the history of slavery, sexuality, and ethnicity in ancient society.

A commitment to teaching and learning:

Our curriculum is diverse, innovative, and responsive to students’ needs. We offer a variety of topics as mentioned above, and an array of course structures and formats, including small in-person language courses, hybrid ancient Greek and Latin that combines face-to-face instruction with online exercises, mid-sized discussion courses on archaeological or literary themes, online offerings during the summer and the academic year, and one large energetic lecture course.

Our faculty members have won nearly all KU’s teaching awards, including the HOPE, Kemper, and Ned Fleming awards, and a wide variety of other university-level teaching and advising awards. The department as a whole received the first ever Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

Beyond KU:

In addition to the rich and interdisciplinary content, the Classics degree teaches strong and widely useful critical skills such as clear writing, effective interpretation and use of evidence, and evaluation of sources. Classics graduates bring all these to bear in a variety of careers. Our students have received Undergraduate Research Awards and McNair Scholarships, and many write undergraduate honors theses. Students have received Center of Teaching Excellence (CTE) awards. Our undergraduate research groups and research projects have received funding from KU and other sources.

Innovative scholarship:

KU Classics Faculty members conduct research on a variety of ancient topics, from Greek tragedy to Roman architecture. Their research engages some of the world’s most enduring questions, such as: How did the Greek and Roman societies envision happiness? How does knowledge of the past affect one’s choices and identities? How do modern theories about gender and sexuality intersect with ancient concepts? How are cultural values encoded into art, architecture, literature, language, law, religion, and politics? And, who “owns” the classical past?

Classics students can work with faculty as research assistants or can develop their own research projects, and many Classics courses count toward KU’s Research Experience Program. Our undergraduate students have received Undergraduate Research Awards and McNair Scholarships, and many write undergraduate honors theses.

Study Abroad

The Classics Department offers a variety of study opportunities for its students to study in Greece or Italy, the UK, and elsewhere in Europe. We offer scholarships to students who participate in overseas programs that focus on the ancient world.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLSX Courses (300-level or above)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>CLSX, LAT, or GRK courses (3 hours must be at the 300-level or above)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
</tbody>
</table>

Related courses from other departments may be substituted with written permission from the Chair or Director of Undergraduate Studies.

This minor cannot be combined with the Classics major: Archaeology or Humanities concentrations.
Beyond KU:

Our faculty members have won nearly all KU's teaching awards, including the HOPE, Kemper, and Ned Fleming awards, and a wide variety of other university-level teaching and advising awards. The department as a whole received the first ever Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

A commitment to teaching and learning:

Our curriculum is diverse, innovative, and responsive to students' needs. We offer a variety of topics as mentioned above, and an array of course structures and formats, including small in-person language courses, hybrid ancient Greek and Latin that combines face-to-face instruction with online exercises, mid-sized discussion courses on archaeological or literary themes, online offerings during the summer and the academic year, and one large energetic lecture course.

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Beyond KU:

In addition to the rich and interdisciplinary content, the Classics degree teaches strong and widely useful critical skills such as clear writing, effective interpretation and use of evidence, and evaluation of sources.

Classics graduates bring all these to bear in a variety of careers. Our students have gone on to careers in law, business, library science, journalism, medicine, museum studies, education, writing and publishing, and technology.

Innovative scholarship:

KU Classics Faculty members conduct research on a variety of ancient topics, from Greek tragedy to Roman architecture. Their research engages some of the world's most enduring questions, such as: How did the Greek and Roman societies envision happiness? How does knowledge of the past affect one’s choices and identities? How do modern theories about gender and sexuality intersect with ancient concepts? How are cultural values encoded into art, architecture, literature, language, law, religion, and politics? And, who “owns” the classical past?

Classics students can work with faculty as research assistants or can develop their own research projects, and many Classics courses count toward KU’s Research Experience Program. Our undergraduate students have received Undergraduate Research Awards and McNair Scholarships, and many write undergraduate honors theses.

Study Abroad

The Classics Department offers a variety of study opportunities for its students to study in Greece or Italy, the UK, and elsewhere in Europe. We offer scholarships to students who participate in overseas programs that focus on the ancient world.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek and/or Latin (300-level or above)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>LAT, GRK, or CLSX courses (3 hours must be at the 300-level or above)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>18</strong></td>
<td></td>
</tr>
</tbody>
</table>

Related courses from other departments may be substituted with written permission from the Chair or Director of Undergraduate Studies.

This minor cannot be combined with the Classics major: Classical Languages, Latin, or Greek concentrations.

Classical Antiquity Minor Hours & GPA

While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 GPA in all departmental courses in the Minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Classical Languages Minor Hours & GPA

While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 GPA in all departmental courses in the Minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Master of Arts in Classics

Why study classics?

Knowledge of ancient Greek and Roman culture is fundamental to understanding both history and the modern world. The Department of Classics offers advanced course work and research in the ancient civilizations of Greece and Rome. Students study the classical languages (ancient Greek and Latin) and literatures, as well as the art and archaeology of the Greek and Roman worlds. A Master's degree serves as preparation for a doctorate in classics and related fields, such as ancient history and archaeology. The degree also offers valuable training for students pursuing teaching careers at the secondary level.

Graduate Teaching Assistantships

Financial support is available in the form of teaching assistantships in Latin, Greek, or courses on ancient Greek and Roman culture taught in translation. Contact the department (http://classics.ku.edu) for information.

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The B.A. in classics or another field in the humanities is required. For admission to the graduate program, the entering student should have 15 junior/senior hours in Latin and/or Greek. Well-qualified candidates with fewer hours in ancient languages are considered for admission and may be offered positions as teaching assistantships in non-language courses. Financial support is available in the form of teaching assistantships in Latin, Greek, or courses on ancient Greek and Roman culture taught in translation. The Graduate Record Examination is not required but is necessary if the applicant wishes to be considered for university-level scholarships.

Submit your graduate application online (https://gradapply.ku.edu/apply/).

Scholarships and Awards

The department offers several scholarships and awards. For information, please see our website (https://classics.ku.edu/scholarships-awards-prizes/) or contact the department.

All graduate students who wish to be considered for KU scholarships and financial aid must complete applications with Financial Aid and Scholarships.

M.A. Degree Requirements

Course Requirements

1. The degree program consists of 30 hours, whether one chooses the thesis or non-thesis option.
   a. At least 50% of coursework must be taken at the 700 level or above.

2. The student may stress either Latin or Greek or a combination of both. Students who take only one of the ancient languages at the graduate level must present at least 10 hours of elementary course work in the other; this requirement may also be satisfied by passing a departmental examination.

3. Students may select their 30 hours from graduate courses in Greek, Latin, classics, and certain courses in philosophy, history, history of art, and linguistics. A maximum of 12 hours may be taken in non-language courses.

4. Students who elect to write an M.A. thesis must complete at least 24 hours on the graduate level, in addition to 6 hours of Thesis (LAT 899 or GRK 899 or CLSX 899). In consultation with the graduate advisor, each student selects a thesis committee of 3 members.

5. The student selecting the non-thesis option must complete 30 hours of courses on the graduate level. In 2 of these courses, students must prepare research papers that meet the approval of the appropriate instructors and the graduate advisor. These papers are placed on file in the department office.

Language Requirements

Incoming graduate students take a diagnostic reading examination in Greek or Latin or both if they plan to take graduate-level courses in both languages. Students who take only one of the ancient languages at the graduate level must demonstrate a basic knowledge of the other. By the end of graduate study, the student must also demonstrate a reading knowledge of German, Italian, or French as specified in the Research Skills section of the Department of Classics Graduate Handbook (https://classics.ku.edu/graduate-handbook/).

Examinations

A written general examination is required of all M.A. students. For further information, see the Department of Classics Graduate Handbook (https://classics.ku.edu/graduate-handbook/).

Accelerated Master of Arts in Classics

The combined B.A. / M.A. degree allows high-achieving undergraduate majors in Classical Languages at the University of Kansas to move directly into the Master's degree program in Classics, completing it within one year of completing the B.A.
Students take the same courses (and the same number of courses) as those required for the two degrees under the normal sequence, but in a more flexible configuration. All requirements for the M.A. are the same as for other tracks: the principal focus remains ancient Greek and/or Latin (concluding with a comprehensive exam in both languages), and there remains a thesis and non-thesis option and required reading knowledge of a modern research language.

Students normally apply for the program in the junior year, and not later than their seventh semester at KU. Admission standards depend not only on academic record but also on the demonstrated ability to continue with accelerated work, as determined by the department's admissions committee (to include the Chair, Director of Graduate Studies, and Undergraduate Director).

Application to the program requires:

- A brief statement of purpose
- A writing sample
- Three letters of recommendation (two of which must be from KU Classics faculty)
- One official transcript
- A 3.5 GPA in the major (slightly lower would be acceptable with especially strong letters of recommendation).

Candidacy will be reviewed in the seventh semester. If the committee decides at that time that the candidate is not suited to continue with the accelerated program, or if the student no longer wishes to pursue the MA, the student will be eligible to earn the BA as soon as those requirements have been met. Should the student not be able to complete the MA in the fifth year, provided he/she is in good standing the student may continue into a sixth year.

**Combined B.A./M.A. in Classics**

This track allows high-achieving undergraduate majors in Classical Languages at the University of Kansas to move directly into the Master's degree in Classics, completing it within one year of completing the B.A.

Students take the same courses (and the same number of courses) as those required for the two degrees under the normal sequence, but in a more flexible configuration. For especially well prepared students with superior grade-point averages, the M.A. requires 24 graduate hours rather than 30. Students enroll as an undergraduate in six hours of 500-700 level courses that count toward the B.A. but are beyond those required for the Classical Languages major. All other requirements for the M.A. are the same as for other tracks: the principal focus remains ancient Greek and/or Latin (concluding with a comprehensive exam in both languages), and there remains a thesis and non-thesis option and required reading knowledge of a modern research language. At least 50% of coursework must be taken at the 700 level or above. See department website (http://classics.ku.edu/overview-0/) for details.

Students enroll as an undergraduate in six hours of 500-700 level courses that count toward the B.A. but are beyond those required for the Classical Languages major. All other requirements for the M.A. are the same as for other tracks: the principal focus remains ancient Greek and/or Latin (concluding with a comprehensive translation exam), and there remains a thesis and non-thesis option and required reading knowledge of a modern research language.

The shift of 6 credit hours from the M.A. to pre-requisites for the B.A. allows students greater flexibility and will ease the burden on their final year of study. More precisely, the flexibility allows faculty to advise students on a course of study that distributes courses across the 5 years of study in the most optimal way for language development.

In summary, students will successfully complete the M.A. in Classics from the University of Kansas if the following credit hour and Enroll & Pay career conditions are met:

1. A minimum of 24 hours at the 500+ level on the graduate program line.
2. A minimum of 6 hours at the 500+ level on the undergraduate program line beyond what is required of the Classics undergraduate major.

Students may be eligible to co-enroll in their final semester of undergraduate study. This should be discussed and planned during the junior year of undergraduate study.

The requirement that students in the program write an undergraduate honors thesis also provides preparation toward the M.A. thesis. Students who choose the non-thesis option are not required to write an undergraduate thesis.

**Examinations**

All students must write a final translation examination prepared by a committee of three members of the graduate faculty, at least two of whom, including the committee chair, must be members of the Classics Department. The members of the examination committee will be selected by the student, with the approval of the graduate faculty of the Department, and the examination will be prepared by the committee in consultation with the student.

One section of this examination will be drawn from material read in graduate classes. The student will present a reading list of no less than 400 pages, according to pagination in the Oxford Classical Text or its equivalent. This will consist of 50-150 pages from at least four of the eight major areas of Greek and Latin literature that form the four-semester cycle of courses (see below). A second section will be a sight passage from one of the major genres of Greek or Latin literature selected by the student.

**Four-Semester Cycle of Courses**

Headings indicate areas from which instructors may draw material for author or genre courses. Author listings are representative, not exclusive.

**Greek**

- Epic and Lyric Poetry: From Homer to the Hellenistic poets
- Drama: Aeschylus, Sophocles, Euripides, Aristophanes
- History and Oratory: Herodotus, Thucydides, Xenophon, Attic Orators
- Philosophy: Pre-Socratics, Plato, Xenophon, Aristotle

**Latin**

- Epic Poetry: Lucretius, Ovid, Vergil, post-Augustan epic poets
- Lyric and Elegy: Catullus, Horace, Tibullus, Propertius, Ovid
- History, Oratory, Philosophy: Caesar, Sallust, Cicero, Livy, Seneca, Tacitus, Augustine, Boethius
- Drama, Satire, and Novel: Plautus, Terence, Horace, Petronius, Seneca, Juvenal, Apuleius
### Freshman

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<tr>
<th>Fall</th>
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<th>Spring</th>
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<tr>
<td>ENGL 101 (Goal 2.1 Written Communication)(^1)</td>
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<td>Goal 1.2 Quantitative Reasoning(^2)</td>
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<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
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<td>ENGL 102 or CLSX 178 (Goal 2.1 Written Communication)(^3)</td>
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<tr>
<td>CLSX 151, 168, or 177 (Goal 1.1 Critical Thinking)</td>
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<td>Goal 2.2 Oral Communication</td>
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<tr>
<td>GRK 104 (Major Pre-requisite)</td>
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<td>GRK 108 (Major Pre-requisite)</td>
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### Sophomore

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<tbody>
<tr>
<td>LAT 104 (Major Pre-requisite)</td>
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<td>LAT 108 (Major Pre-requisite)</td>
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<tr>
<td>Goal 3 Humanities</td>
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<td>Goal 3 Natural Science</td>
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<tr>
<td>Goal 3 Social Science</td>
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<td>Elective or possible minor course</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course</td>
<td>3</td>
<td>Elective or possible minor course 300+</td>
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<tr>
<td>Elective or possible minor course</td>
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<td>Lab Science</td>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>LAT 112 or GRK 301 (Major Requirement)(^3)</td>
<td>3</td>
<td>CLSX 151, 351, 525, 526, 527, 529, 538, or 577 (Classical Ancient Art &amp; Archaeology course Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>Advanced language course (Major Requirement)(^3)</td>
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<tr>
<td>CLSX 230, 330, 240, 340, HIST 402, CLSX 502, HIST 506, HIST 507, or HIST 508 (Classical History course Major Requirement)</td>
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<td>Goal 4.2 Global Awareness</td>
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<tr>
<td>Elective or possible minor course 300+</td>
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<td>Goal 5 Social Responsibility &amp; Ethics</td>
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### Senior

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<tbody>
<tr>
<td>Advanced Language Course (Major Requirement)(^3)</td>
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<td>Goal 6 Integration and Creativity(^5)</td>
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<tr>
<td>Classics Elective (Major Requirement)(^4)</td>
<td>3</td>
<td>Advanced Language Course (Major Requirement)(^3)</td>
<td>3</td>
</tr>
<tr>
<td>Classics Elective (Major Requirement)(^4)</td>
<td>3</td>
<td>Advanced Language Course (Major Requirement)(^3)</td>
<td>3</td>
</tr>
<tr>
<td>LA&amp;S 490 (Recommended, or elective)</td>
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<td>Elective or possible minor course 300+</td>
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### Year 5

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</thead>
<tbody>
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<td>CLSX course 500+</td>
<td>3</td>
<td>LAT 899 or GRK 899</td>
<td>3</td>
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<tr>
<td>LAT course 700+</td>
<td>3</td>
<td>CLSX course 500+</td>
<td>3</td>
</tr>
<tr>
<td>GRK course 700+</td>
<td>3</td>
<td>LAT course 700+</td>
<td>3</td>
</tr>
<tr>
<td>LAT 899 or GRK 899</td>
<td>3</td>
<td>GRK course 700+</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
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<td>12</td>
<td></td>
</tr>
</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. The Classical Languages major requires 15 hours of advanced language study beyond GRK 108 and LAT 108, beginning with LAT 112 or GRK 301. The student must complete at least 3 semesters in LAT or GRK, and one semester in the other in order to fulfill the B.A. Language Requirement.

4. Majors must complete 2 courses (6 hours) of electives. Elective courses may include any Classics, Greek, or Latin courses (but not used to satisfy other major requirements), and PHIL 384, PHIL 508, PHIL 605, PHIL 607, PHIL 608, HUM 380, ENGL 308 or other courses in allied fields as approved by the department chair.

5. Typically KU Core Goal 6 is fulfilled by a major course. If an approved Classical Languages course is not available to fulfill Goal 6, another course will need to be chosen. A free elective may need to be used to meet Goal 6 course pre-requisites.

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

In Spring of the Senior Year, the student needs to take 6 hours at the 500-700 level beyond what is required for the major (this could be in CLSX, GRK, or LAT). These credit hours are applied to the M.A. once the student begins Year 5.

In the Spring of the Senior Year, it is strongly encouraged for the student to write an Honors Essay (CLSX 496/LAT 496/GRK 496).

During Year 5 (the M.A. year), the student will also take the M.A. comprehensive exam. Additionally, unless the student has taken 2 years of a modern language or GERM 100/GERM 101 as a B.A. student, the modern language requirement will need to be satisfied during the M.A. year.
Clinical Child Psychology Program

Clinical Child Psychology Graduate Program

The Clinical Child Psychology Program (CCPP) at the University of Kansas is a graduate program leading to the doctoral degree (Ph.D.) in Clinical Child Psychology. The CCPP is accredited by the American Psychological Association’s Commission on Accreditation as a clinical psychology doctoral training program with a special emphasis on children, adolescents, and families. The Program is affiliated with the Departments of Psychology and Applied Behavioral Science, and has strong ties with the Department of Pediatrics at the University of Kansas School of Medicine (KUMC) and with Children’s Mercy Hospital. The program does not offer a terminal Masters degree. However, students admitted to the Doctoral program without a Masters degree will obtain a MA in Clinical Child Psychology en route to the Ph.D.

The mission of the CCPP is to develop leaders in the research, dissemination, and practice of clinical science for children, youths, and their families. As such, doctoral training in the CCPP develops clinical scientists capable of conducting innovative research and developing and delivering interventions for a range of human problems, particularly those involving children and families. In service of its mission, the CCPP is designed to promote profession-wide competencies in nine specific domain areas (e.g., Research, Assessment, Intervention, Individual and Cultural Diversity, Ethics and Legal issues), as well as program-specific competencies in two domains (Administration/Management, and Professional Leadership and Communications). This is accomplished through broad and general training across the substantive areas of the science of psychology (i.e., behavioral, social, cognitive, affective, and biological bases of psychology), specialized training in research methodology and statistical analytic methods, and specialized clinical training through basic and advanced practice. Subdomains of the professional competency and substantive knowledge areas are detailed in the CCPP Training Manual. A particular strength of the program is the developmental perspective that pervades all core courses.

The field of psychological science is changing rapidly, with advances in our understanding, assessment, diagnosis, prevention, and treatment of a range of conditions. Our goal is to train the professionals who are at the forefront of these advances in research, dissemination, education, and service. The program’s didactic and practical experiences prepare graduates for the many roles open to clinical child psychologists. Graduates hold research/teaching positions in universities, medical schools, colleges, and internship programs, and direct service delivery positions in mental health centers, hospitals, and schools.

In its fulfillment of the training model of clinical psychology known as the “scientist-practitioner model,” the CCPP utilizes report of the National Conference on Scientist-Practitioner Education and Training for the Professional Practice of Psychology. This conference defined the model as “an integrative approach to science and practice wherein each must continually inform the other” in which the scientific research base is related to clinical practice, and practice elements are inherently interrelated to research. The CCPP places an extremely high priority on the development of research skills and competencies.

Students can complete course work, practicum requirements, and research requirements for the doctoral degree in 4 years of full-time study followed by a 1-year doctoral clinical internship at an approved site, although some students take longer. Students are expected to, and indeed want to, participate maximally in research and clinical experiences to ensure the breadth of their training. An empirically-based master’s thesis (if not obtained prior to admission), qualifying examination, and doctoral dissertation are formal milestones of research progress in addition to regular evaluation in courses, clinical practica, and annual faculty reviews.

The Director of the Program serves as the official Academic Advisor for all students in the program. As such, the Director bears responsibility for assisting the student in course selection, articulating career goals, assisting with program requirements (e.g., internship applications), and designing experiences consonant with career goals. Each student in the Clinical Child Psychology Program also selects a Research Advisor who provides individualized guidance with regard to course selection, developing and articulating career goals, and designing experiences consonant with career goals.

Doctor of Philosophy in Clinical Child Psychology

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Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Admission to the CCPP is highly competitive. All completed applications are reviewed and incoming students are selected by an admissions committee chaired by the Program Director and comprising core CCPP faculty members and a student representative. Essential requirements for admission include (a) a Bachelor’s degree (BA, BS) from an accredited institution, (b) a record of scholarly achievement that shows strong promise of success in course work, research, and clinical work, and (c) at least 15 credit hours in psychology coursework, including statistics and research methodology. Preferred qualifications for admission include a strong record of research experience and evidence of research productivity (e.g., presentations, posters, honors theses). Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

The Admissions committee will use the following when determining suitability for admission: The applicant’s transcripts and grade point averages (GPAs) from previous educational institutions; a written statement of interests/goals provided by the candidate; the candidate’s résumé or CV; 3 letters of recommendation from professionals who can address the candidate’s potential in a doctoral training program; and a statement (max. 500 words) describing (a) your views on diversity, equity, and inclusion (DEI) in clinical child psychology, (b) evidence of your contribution to DEI to date, and/or (c) your commitment to DEI in your future career. Applicants may also submit a writing sample that demonstrates their technical/professional writing skills. Highly rated applicants will be invited to interview with CCPP faculty and students prior to admissions decisions. Financial aid is available. Please visit the program’s website (http://www.ccpp.ku.edu/student-admissions-data) for information regarding student admissions, outcomes, and other data.

Submit your graduate application online (https://gradapply.ku.edu/apply/) (College of Liberal Arts and Sciences, Psychology — Clinical Child Psychology Program) as well as all supplemental materials.

Clinical Child Psychology Curriculum

The following curriculum meets criteria for APA accreditation and KU general requirements.

Psychology Core

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<thead>
<tr>
<th>Code</th>
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<tr>
<td>ABSC 857</td>
<td>Biological Bases of Behavior</td>
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<td>2. Cognitive/Affective Aspects:</td>
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</tr>
<tr>
<td>4. History of Psychology. Select one of the following:</td>
<td></td>
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</tr>
<tr>
<td>PSYC 805</td>
<td>History of Psychology</td>
<td></td>
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<tr>
<td>EPSY 882</td>
<td>History and Systems of Psychology</td>
<td></td>
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<tr>
<td>5. Cultural and Ethnic Diversity:</td>
<td></td>
<td></td>
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<tr>
<td>ABSC/PSYC 888</td>
<td>Diversity Issues in Clinical Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or EPSY 875</td>
<td>Understanding Cultural &amp; Individual Differences in</td>
<td></td>
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<td></td>
<td>Professional Psychology</td>
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Clinical Child Psychology Specialty Skills

Psychopathology, Psychodiagnosis, and Psychological Assessment

Required:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC/PSYC 803</td>
<td>Fundamentals of Psychological Assessment and Intervention with Children</td>
<td>3</td>
</tr>
<tr>
<td>ABSC/PSYC 811</td>
<td>Achievement and Intellectual Assessment in Clinical Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ABSC/PSYC 812</td>
<td>Behavioral and Personality Assessment of Children</td>
<td>3</td>
</tr>
<tr>
<td>ABSC/PSYC 905</td>
<td>Psychopathology in Children</td>
<td>3</td>
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</tbody>
</table>
## Intervention and Therapy Procedures

### Required:

<table>
<thead>
<tr>
<th>Code/Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ABSC/PSYC 976 Therapeutic Interventions with Children</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 967 Psychotherapy with Families</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 956 Theory of Couples and Family Counseling</td>
<td></td>
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<tr>
<td>PSYC 946 Theories and Methods of Psychotherapy</td>
<td></td>
</tr>
<tr>
<td>PSYC 949 Evidence Based Practice in Psychology</td>
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<tr>
<td>PSYC 936 Group Therapeutic Techniques</td>
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## Clinical Practica

### Required (17 credit hours, 275 contact hours):

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<thead>
<tr>
<th>Code/Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ABSC/PSYC 846 Practicum in Clinical Child Psychology I</td>
<td>1-3</td>
</tr>
<tr>
<td>ABSC/PSYC 847 Practicum in Clinical Child Psychology II</td>
<td>1-3</td>
</tr>
<tr>
<td>ABSC/PSYC 943 Advanced Practicum in Clinical Child Psychology III</td>
<td>1-3</td>
</tr>
<tr>
<td>ABSC/PSYC 944 Advanced Practicum in Clinical Child Psychology IV</td>
<td>1-3</td>
</tr>
<tr>
<td>ABSC/PSYC 947 Advanced Practicum in Clinical Child Psychology V</td>
<td>1-5</td>
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</tbody>
</table>

## Ethics/Professional Standards

### Required:

<table>
<thead>
<tr>
<th>Code/Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PSYC 975 Professional and Ethical Problems in Clinical Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or EPSY 880 Ethical and Legal Issues in Psychology and Counseling</td>
<td></td>
</tr>
<tr>
<td>ABSC/PSYC 809 Professional Issues: Clinical Child Psychology (one semester)</td>
<td>1</td>
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</tbody>
</table>

Clinical adult psychology workshop (offered every other year)

Students are expected to function within the code of professional ethics of the American Psychological Association (http://www.apa.org/ethics/code/) in their behavior and personal demeanor. Adherence to these ethical principles is part of the regular evaluation of students for completion of the degree in clinical child psychology.

## Consultation and Supervision

### Code

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<thead>
<tr>
<th>Code/Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PSYC/ABSC 706 Special Topics in Clinical Child Psychology: ____</td>
<td>3</td>
</tr>
<tr>
<td>or EPSY 945 Clinical Supervision and Consultation</td>
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## Research and Statistics Core Courses

### Required:

<table>
<thead>
<tr>
<th>Code/Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PSYC 815 Design and Analysis for Developmental Research</td>
<td>3</td>
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<tr>
<td>or PSYC 961 Research Methods in Clinical Psychology</td>
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<tr>
<td>PSYC 790 Statistical Methods in Psychology I</td>
<td>4</td>
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<tr>
<td>or EPSY 811 Regression and ANOVA: General Linear Models</td>
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One ANOVA or Multivariate Statistics Course

<table>
<thead>
<tr>
<th>Code/Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PSYC 791 Statistical Methods in Psychology II</td>
<td>4</td>
</tr>
<tr>
<td>Alternate to PSYC 791 includes the following:</td>
<td></td>
</tr>
<tr>
<td>PSYC 893 Multivariate Analysis</td>
<td></td>
</tr>
<tr>
<td>EPSY 811 Analysis of Variance</td>
<td></td>
</tr>
<tr>
<td>EPSY 905 Fundamentals of Multivariate Modeling</td>
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</table>

At least 1 additional quantitative course

In consultation with the student’s primary research advisor to be consistent with the student’s professional and research goals.

## Research Skills and Responsible Scholarship

### Responsible Scholarship Requirement

Responsible Scholarship in the CCPP involves pertinent areas of protection of human subjects, collaborative research, conflicts of interest, authorship, publication, plagiarism, copyright, data management, professional practices, mentor/student responsibilities, maintenance of confidentiality, approach research conduct and research misconduct, HIPAA, and ethics of publishing clinical case material, among other related topics. This requirement must be met before taking the Comprehensive Oral Examination.

Students in the CCPP fulfill the Responsible Scholarship Requirement through

- Courses in the curriculum:
  - PSYC/ABSC 809 Professional Issues: Clinical Child Psychology: 1
  - PSYC 975 Professional and Ethical Problems in Clinical Psychology: 3
  - or EPSY 880 Ethical and Legal Issues in Psychology and Counseling: 3

- The Collaborative Institutional Training Initiative (CITI) Human Subjects Protection and HIPAA online tutorial

### Research Skills Training Requirement in CCPP

The additional Research Skill requirement is fulfilled by 1 additional course above the 2 required courses in statistical or data analysis (quantitative, applied behavior analysis, qualitative). No course is specified, but must be approved by the student’s research advisor and the program director.

### Professional Competencies

Students in the program must demonstrate profession-wide competencies and program-specific competencies before being approved to apply for the required Doctoral Internship. The competency assessment process includes evaluation of the student’s professional artifacts (i.e., work products) as well as the student’s self-evaluation of how the artifacts collectively demonstrate the professional competencies.

## Master’s Degree and Thesis

The master’s degree requires a thesis consisting of empirical research and a minimum of 30 hours of course work (24 of which must be nonthesis credit hours). A minimum of 6 credit hours in
ABSC 897/PSYC 897 Master’s Thesis in Clinical Child Psychology is required.

**Ph.D. Preliminary Examination: The Task**

The program uses the Task system for its preliminary examination in research methodology, teaching, or applied/clinical area. Details are available in the Clinical Child Psychology Program Training Manual, available on the program's website (https://ccpp.ku.edu/student-resources/).

**Ph.D. Oral Comprehensive Examination**

Upon completion of all course requirements for the Ph.D. and of the Task, except for dissertation and internship, the student must pass the oral comprehensive examination. Details are available in the Clinical Child Psychology Program Training Manual, available on the program's website (https://ccpp.ku.edu/student-resources/).

**Doctoral Dissertation**

The Ph.D. dissertation must be based on an original, empirical investigation. A minimum of 12 hours in dissertation in clinical child psychology is required.

**Doctoral Internship**

An 11-month clinical internship at a setting accredited by the American Psychological Association is required. Students apply to accredited internships through the Association of Psychology Postdoctoral and Internship Centers (https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fappic.org%2F&data=04%7C01%7C1000&sdata=MY3w4xVmK1F&reserved=0) and are matched to an internship by National Matching Services, Inc. (https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpsychint-landing.html&data=04%7C01%7C1000&sdata=MY3w4xVmK1F&reserved=0) Upon matching, students enroll in ABSC 963/PSYC 963 for a total of 3 credit hours. The PhD in Clinical Child Psychology may not be awarded until the internship is successfully completed.

**Courses**

See the course listings for the Departments of Applied Behavioral Science and Psychology.

**Department of Communication Studies**

**Why study communication studies?**

The Communication Studies undergraduate major equips students with a diversity of skill sets by investigating communication in various cultural contexts, including relational, organizational, intercultural, political, and more.

In an increasingly globalized world, competent communication is crucial for career advancement, interpersonal relationships, and public democratic participation. Here’s what we know: humans rely on communication, and the creation and translation of symbols, language, and messages are integral to daily interactions. In other words, communication connects us.

The major expands on fundamental public speaking principles from the introductory course through emphasizing theories, methods, performances that apply to everyday communication practices.

**Undergraduate Programs**

In our complex, mediated, global, and pluralistic world, we are awash in messages. Others seek to influence our ideas and our actions, and we seek to influence theirs. Studying human communication in its many forms and contexts enables students to be engaged civic participants, reflective analysts, effective communicators at work and in relationships, and reflective consumers of messages. Examining communication through historical and contemporary lenses demonstrates its power to move individuals, to enable the development of groups ranging from families to nations, and to inspire events. The communication studies curriculum prepares students to engage with the world they enter as thoughtful, critical communicators and as agents of community building in a global world.

**Graduate Programs**

The Department of Communication Studies offers a Graduate Certificate, Master of Arts, and Doctorate of Philosophy. Non-degree seeking students who have completed an undergraduate degree may apply to the Graduate Certificate Program in COMS.

**Graduate Certificate Program**

The 4-course, 12-hour Professional Workplace Communication certificate is intended to increase communication competencies for effective decision-making, team-building, problem-solving, and crisis-resolution practices with various professional stakeholders.

**Lawrence campus M.A. Program**

The M.A. program is designed as a 30-hour, 2-year degree program in either Relationships & Social Interaction or Rhetoric & Political Communication. Students will complete a thesis or non-thesis plan of study. The primary mission of the Master of Arts in COMS is to introduce graduate students to the process of conducting original research in human communication. The majority of our MA students go on to pursue a PhD in communication or a related field. Others use the MA as preparation for careers in business, legal consulting, politics, social work, or other related areas of employment.

**Ph.D. Program**

The doctoral program in COMS is designed to as an intensive, 4-year program with content in experimental, qualitative, quantitative, and rhetorical methods. Students may specialize in either Relationships & Social Interaction or Rhetoric & Political Communication. The primary mission of the Doctor of Philosophy in COMS is to train students in the process of conducting original research in human communication. With
few exceptions, KU PhD graduates pursue careers doing research and teaching in higher educations.

Courses

COMS 104. Introduction to Communication Studies. 3 Credits. H
Survey of the major areas of the Communication Studies field. Provides an overview of communication theory and research methods, and introduces key topics, approaches, and applications in core areas such as rhetoric, organizational communication, interpersonal communication, intercultural communication, and communication technology.

COMS 130. Speaker-Audience Communication. 3 Credits. U
Study of rhetorical theory and its application to the preparation, presentation, and criticism of oral discourse in audience situations. Special consideration of listening behavior and of the ethical conduct of speech in a free society. This course fulfills the College argument and reason requirement.

COMS 131. Speaker-Audience Communication, Honors. 3 Credits. U
The study of rhetorical theory and its application to the preparation, presentation, and criticism of oral discourse in audience situations. Special consideration of listening behavior and of the ethical conduct of speech in a free society. This course fulfills the College argument and reason requirement. This is an honors section of COMS 130 open only to students in the Honors Program.

COMS 132. Speaker-Audience Communication for the Professional Schools. 3 Credits. H
This course focuses on the study of oral communication: the application, preparation, presentation and criticism of messages appropriate in the business or organizational setting. Special consideration is given to speaker confidence, working in teams, listening behaviors and application of communication theories to the audience and rhetorical situation. Prerequisite: Open only to students in the professional schools.

COMS 133. Speaker-Audience Communication for the Professional Schools, Honors. 3 Credits. H
This course focuses on the study of oral communication: the application, preparation, presentation and criticism of messages appropriate in the business or organizational setting. Special consideration is given to speaker confidence, working in teams, listening behaviors and application of communication theories to the audience and rhetorical situation. Prerequisite: Open only to students in the professional schools who are members of the University Honors Program.

COMS 177. First Year Seminar: ___. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Communication Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

COMS 207. Introduction to Political Communication. 3 Credits. S
This class addresses the different ways in which the three main players in political communication processes (leaders, the media and citizens) affect the political behavior, attitudes or cognitions of individuals; or have outcomes that influence public policy at different levels. The contents of the course are organized into three areas: Foundations of political communication, central questions and theories in political communication, and political campaigning and advertising. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 210. Introduction to Organizational and Professional Communication. 3 Credits. S
Introduces foundational concepts in organizational communication, focusing on topics such as superior-subordinate relationships, information- and feedback-seeking, relationships with stakeholders, and dealing with organizational change. The course emphasizes individual communication practices and responsibilities that contribute to organizational outcomes and personal success in organizations. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 230. Fundamentals of Debate. 3 Credits. U
Introduction to the principles of debating. Emphasis on debating techniques, analysis of the question, methods of using evidence, refutation, and brief making. This course fulfills the College argument and reason requirement.

COMS 231. Practicum in Forensics. 1 Credits. U
For students selected by faculty supervisor for work on university debate squad. Students to enroll at time of their selection. Recurring enrollments permitted.

COMS 232. Introduction to Rhetoric. 3 Credits. HR H
Historical survey of theories of communication and persuasion, the people who produced them, and the philosophical assumptions upon which they rest. Beginning with the Greeks, especially Plato and Aristotle, and ending with selections from Kenneth Burke and other contemporary figures, the course focuses on changing concepts of rhetoric throughout a time span of some 2000 years. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 235. Introduction to Rhetoric and Social Influence. 3 Credits. HL H
This course examines in detail the texts of speeches and essays on controversial issues in order to illustrate the varied forms of rhetorical action and the diverse modes of analysis and evaluation that can be applied to them. Examples are drawn from the rhetorical literature of contemporary U.S. speakers and prose writers. Prerequisite: COMS 130, or COMS 230.

COMS 236. Introduction to Rhetoric and Social Influence, Honors. 3 Credits. H
This course examines in detail the texts of speeches and essays on controversial issues in order to illustrate the varied forms of rhetorical action and the diverse modes of analysis and evaluation that can be applied to them. Examples are drawn from the rhetorical literature of contemporary U.S. speakers and prose writers. Prerequisite: COMS 130 or COMS 230. Open only to students admitted to the University Honors Program, or by consent of the instructor.

COMS 238. Cases in Persuasion. 3 Credits. H
An exploration of basic principles that explain the effect and effectiveness of the arts of persuasion currently practiced in American society. Class discussions of incidents leading to the discovery of principles and theories that explain them. Continuing emphasis on issues concerning the ethical character of persuasion in contemporary life. Prerequisite: COMS 130 or COMS 230.

COMS 244. Introduction to Interpersonal Communication Theory. 3 Credits. SI S
Examines basic theoretical perspectives and research on verbal and nonverbal communication elements affecting communication between individuals in a variety of contexts. Topics include communication competence, developmental aspects of interpersonal communication, and interpersonal influence. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 246. Introduction to Intercultural Communication. 3 Credits. S
This course attempts to provide an understanding of communication as it affects culture and as it is affected by culture. Special emphasis will be placed on the principle of similarity and differences as it relates to the roles of verbal and non-verbal symbols, codes, and cues, stereotypes, prejudices and value and thought patterning systems between and among cultures. Prerequisite: Concurrent or prior enrollment in COMS 130.

COMS 310. Advanced Organizational and Professional Communication. 3 Credits. SC
This course provides a foundation for the study of communication in organizational contexts. It introduces students to various organization theories including classical, human relations, systems, and cultural approaches and examines the role of communication in each. Information flow, communication climate, communication networks, work relationships and managerial communication are discussed as well as organizational symbolism, conflict resolution, rituals and ethics. The course is designed to heighten students' awareness of the role of communication in the organizing process and to develop their abilities to diagnose and prevent communication-related problems. Prerequisite: COMS 130.

COMS 320. Communication on the Internet. 3 Credits. S
This course introduces social and communication issues in the context of online interaction. Surveys a range of social internet technologies (e.g., newsgroups, chat, MUDs, etc.). Focus is on the interpersonal topics, including the establishment and maintenance of individual and cultural identities, personal relationships, the emergence of online communities, power and conflict in online groups, language use in online contexts, and how online groups are used to enhance or alter civic and global cultures.

COMS 322. Audience Centered Public Speaking in the Workplace. 3 Credits. S
In this course, students develop and present their ideas by applying communication theories to organizational audiences in various presentation situations. Specifically, this course focuses on presentation development, preparation, presentation and critique of messages appropriate in the business or organization setting. Special attention is given to speaking with confidence, presenting and working effectively in teams, reflecting and improving on presentations skills, and listening and speaking ethically in an increasingly diverse work world. Prerequisite: Not intended for Communication Studies Majors. Does not count toward Communication Studies Major or Minor requirements. Must have completed at least 15 credit hours at KU to enroll.

COMS 330. Effective Business Communication. 3 Credits. S
The purpose of this course is to develop the student's written, spoken and electronically mediated business communication skills to prepare to enter a career field. Focus is placed on job search preparation including the development of cover letters, resumes, online applications, and interviewing skills. Students are also engaged with business communication by expanding their current writing skills to meet the needs of a business, exposure to common business writing situations, and developing professional presentations. Prerequisite: COMS 130 or COMS 230.

COMS 331. Persuasive Speaking. 3 Credits. H
Guided experiences in the preparation and presentation of discourse intended to influence outcomes of human interactions in various speaker-audience situations, including television. Special emphasis on speech styles in influencing thought, attitudes, and behavior. Prerequisite: COMS 130 or COMS 230.

COMS 335. Mass Media and Politics. 3 Credits. H
The primary goal of this course is to critically examine the role of mass media in U.S. politics. Students learn how information makes it into news coverage, as well as how media content affects individuals, political campaigns, and governing decisions. The course covers media effects theories, news bias and polarization, political entertainment, and other topics. Although the primary focus of the course is politics, students interested in public relations and strategic communication also benefit from learning about U.S. journalism. By the end of the semester, students will be able to critically evaluate political and media systems in the U.S. (Same as POLS 521.) Prerequisite: COMS 130.

COMS 342. Problem-Solving in Teams and Groups. 3 Credits. S
This course introduces basic concepts important to leading and/or participating in problem-solving work teams. Problem identification and analysis and leadership are emphasized and practiced. Teamwork variables are discussed and promoted. Lecture, demonstrations, exercises in class are structure for students to analyze groups outside of class. Prerequisite: COMS 130 or COMS 230.

COMS 350. Communication in a Diverse World. 3 Credits. S
In a diverse world, communication plays a central role in both creating and sustaining cultural norms, values, and beliefs. However, diversity is not universally valued, and difference leads to unequal institutions, systems, and policies, including discrimination, oppression, and ethnocentrism. In this course, students will reflect on current cultural diversity topics and critically interrogate communication's role in structuring identities and difference across socio-cultural contexts.

COMS 356. Introduction to Behavioral Research Methods in Communication. 3 Credits. S
An introduction to the nature of theory and theory building in the study of human communication. Research methods include experimentation, survey, content analysis, and field description. An introduction to statistics and statistical tests is included as well. Prerequisite: MATH 101 and admission to the Communication Studies Major or consent of instructor.

COMS 405. Speech Writing. 3 Credits. H
Emphasis is on actual practice in preparing speech manuscripts for oneself and others. Model speeches are examined to better understand language, evidence, and stylistic choices available to speech writers. The ethical dimensions of writing for others in corporate and political positions are stressed. Students are required to prepare a variety of speeches and analyses of others' speeches. Prerequisite: COMS 130, COMS 150, or COMS 230.

COMS 410. Micro-Level Organizational Communication. 3 Credits. S
An examination of dyadic level communication in organizations, with emphasis on contexts of superior-subordinate and peer communication. The course also addresses contexts of organizational entry and exit, perception and judgment, information seeking, feedback, and organizational attachment. This course also explores social identities (gender, race, social class, sexuality, ability, and age) and the way they are relevant to communication in contemporary workplaces. Prerequisite: COMS 310.

COMS 415. Communication, Leadership, and Conflict Management. 3 Credits. S
This course introduces students to theories of conflict management from a variety of academic perspectives and the role leadership plays in managing conflict across multiple contexts. Students will learn how to successfully assess and command situations and effectively resolve interpersonal, organizational, and systemic conflict while doing the work of leadership. (Same as LDST 420.)

COMS 420. Communication, Technology and Globalization. 3 Credits. H
Examines the social, cultural, and economic challenges and opportunities advanced communication technologies and globalization pose to
processes such as democratic deliberation, urban governance, and environmental sustainability. Prerequisite: COMS 130.

COMS 425. Communication and the American Presidency. 3 Credits. H
Examination of the ways in which American presidents communicate with the American people and how such communication influences the public. Emphasis is on a number of approaches to better understanding presidential communication, including rhetorical, historical, and content analysis. Prerequisite: COMS 130 or COMS 230.

COMS 440. Communication and Gender. 3 Credits. S
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as WGSS 440.) Prerequisite: COMS 130, or COMS 230.

COMS 447. Intercultural Communication: The Afro-American. 3 Credits. H/W
An examination of the barriers to effective communication between black Americans and non-black Americans. (Same as AAAS 420.) Prerequisite: COMS 130 or COMS 230.

COMS 450. Ethical Issues in Political Communication. 3 Credits. H
Application of ethical standards to the evaluation of political communication. Examination of value questions related to advocacy in modern society (propaganda, demagoguery, credibility). Analysis of First Amendment rights and other issues pertaining to censorship and freedom of speech (defamation, dissent, incitement, public morals, privacy). Prerequisite: COMS 130 or COMS 230.

COMS 454. Rhetoric of Popular Culture. 3 Credits. H
A study of the social and cultural importance of popular culture. Emphasis is on using rhetorical analysis and a number of important theoretical perspectives to help examine popular culture's often unnoticed influence. Prerequisite: COMS 130 or COMS 230.

COMS 460. Undergraduate Seminar in: ___. 1-3 Credits. S
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects. (Distribution credit given for two or three hour enrollments only.)

COMS 496. Capstone in: ___. 3 Credits. S
In the capstone course students synthesize and apply knowledge and skills gained through the major. Capstone coursework requires students to integrate practices and theories learned in their areas of concentration. Topics within each concentration change as needs and resources develop. Prerequisite: Senior standing, COMS 130 or COMS 131, and completion of COMS 235 and COMS 356.

COMS 498. Honors Thesis. 2-6 Credits. H
(Six hours maximum credit, which may be distributed through two semesters.) Study should include readings directed toward original research, i.e., an intensive investigation of a specific problem in this field. Prerequisite: Consent of the Department Honors Committee.

COMS 499. Directed Study in Communication Studies. 1-3 Credits. H
(A maximum of six hours of credit may be counted, with no more than four in a single area of study.) Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading, or special

research, individual reports and conferences. (Distribution credit given for two-three hours only.) Prerequisite: At least seven hours of credit in the department and consent of instructor.

COMS 503. Post-Soviet Communication. 3 Credits. H
This course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as SLAV 503.)

COMS 530. Internship in Communication Studies. 1-3 Credits. S
Students do communication-centered fieldwork in an organization related to their career goals. Criteria for the organizations and work assignments suitable for internship credit are in an information brochure available at the COMS Department office and website. The internship plan is developed with field supervisor and internship faculty adviser. Reports and meetings are required. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission of instructor, admission to COMS major.

COMS 535. American Public Address, Puritans to 1900. 3 Credits. H
A history of American public address from the Puritans to about 1900. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235.

COMS 536. American Public Address, 1900-Present. 3 Credits. H
A history of American public address from 1900 to the present. Using the tools of rhetorical criticism, students describe, analyze, and evaluate select rhetoric from the period. Graduate students are assigned extra reading and a research paper. Prerequisite: COMS 235.

COMS 537. Communication in Conflict Resolution. 3 Credits. S
An examination of conflict situations and the manner in which communication can serve as a vehicle for their intensification or resolution. The focus is on the theory of games as it applies to conflict within interpersonal situations; implications will be drawn for larger social systems. Prerequisite: COMS 130 or COMS 230.

COMS 538. Persuasion Theory and Research. 3 Credits. S
This course focuses on the social scientific study of persuasion. Traditional theories of attitude change and persuasion research are studied along with techniques of measuring attitudes. Attention is also given to the attitude-behavior relationship and the production of compliance-gaining messages. Prerequisite: COMS 130 or COMS 230.

COMS 539. Argumentation. 3 Credits. S
Analysis of the theory and techniques of argumentation in historical and contemporary writings, with special emphasis on the works of Aristotle, John Stuart Mill, Richard Whateley, and Stephen Toulmin. Application of argumentation theory to political and legal discourse. Opportunity for student performances in the preparation and criticism of argument. Prerequisite: Four hours in the department.

COMS 544. Advanced Interpersonal Communication: Theories and Research. 3 Credits. S
Intensive exploration of contemporary theories and research in the field of interpersonal communication; emphasis on an array of theoretical models and research exemplars; comparative analysis of major theoretical and research paradigms. Prerequisite: COMS 244 or instructor consent.

COMS 547. Communication and Culture. 3 Credits. S
A study of the systematic relationship between communication and culture. Emphasis is on culture as a variable in communicative situations:
cultural aspects of attitude and cognition, language interchange, cultural
differences in extra-verbal behavior, interaction between oral traditions
and mass media. Prerequisite: COMS 130, COMS 230, or an introduction
course in anthropology.

COMS 548. Advanced Interviewing Skills and Strategies. 3 Credits. S
Comprehensive study of communication processes in dyadic, face-to-
face situations commonly encountered in organizations and professional
environments. Intensive analysis of simulated and real-life interviews.
Prerequisite: COMS 130 and COMS 330.

COMS 552. The Rhetoric of Women’s Rights. 3 Credits. H
An analysis of the themes and rhetorical strategies of the women’s rights
movement in America. The course will view the struggle for women’s
rights from a historical perspective and will conclude with contemporary
issues concerning the role of women in society. (Same as WGSS 552.)
Prerequisite: COMS 130 or COMS 230.

COMS 555. Family Communication. 3 Credits. S
An examination of trends and theory related to the scientific study
of the family, with a focus on issues related to family interaction,
functioning, relationships, and communication. Research and theories
from communication, sociological, and psychological perspectives are
employed to examine topics such as family violence, mental health
problems, marital satisfaction, divorce, courtship, and the impact
of the family on its children (and vice versa). Prerequisite: COMS 130 or
COMS 230.

COMS 557. East Asian Communication. 3 Credits. S
Explores the major communication theories and research in the East
Asian cultural contexts by focusing on the Chinese, Japanese, and
Korean cultures. Examines, from a broader perspective, certain cultural
values (e.g., harmony, hierarchy, conservatism, and modernism) upheld
in East Asian cultures and their influences on people’s communicative
behaviors in an age of globalization. Students explore issues of history,
identity, verbal and non-verbal symbols, stereotypes, prejudice, values
and thought patterning systems in the East Asian cultural context from a
communicative perspective. This course is designed as a bridge course
and meets with a graduate level section of the same title. Prerequisite:
COMS 130.

COMS 560. Seminar in: Political Communication. 3 Credits. S
Course organized any given semester to study particular subject matter or
to take advantage of special competence by an individual faculty member.
Topics change as needs and resources develop. Class discussion,
readings, and individual projects. (May be repeated for credit if content
varies).

COMS 590. Nonverbal Communication. 3 Credits. S
Examination of non-linguistic behavior in human communication,
including proxemics (spacing), kinesics (movement and expression),
and paralinguistics (voice quality). Includes phylogenetic and developmental
perspectives, methods of analysis, applications to interpersonal problems.
(Same as PSYC 590.) Prerequisite: COMS 356 or PSYC 210 or
PSYC 211.

COMS 607. Political Campaigns. 3 Credits. H
This course will examine the communication involved in political
campaigns. Students will be exposed to theories and ideas related to
campaigns and will apply this knowledge to current political activity.
Although the primary focus of the course is politics, students interested
in public relations and strategic communication also benefit from learning
and practicing media relations strategies. The mediated nature of modern
political communication, as well as the communication strategies of
campaigns and journalists, will be examined in a semester-long simulated
campaign. By the end of the semester, students will become more
informed users and consumers of political campaign messages. (Same as
POLS 520.) Prerequisite: COMS 130.

COMS 620. Communication and New Technology. 3 Credits. S
This course explores the impact of new communication technology
on individuals and groups in various contexts. Topics include: The
development of computer-mediated communication, social and
psychological impacts of new communication technology, the evolution of
telework and advances in interactive telecommunications.

COMS 639. Legal Communication. 3 Credits. S
An analysis of how communication principles and theories operate
within the context of the legal system. Topics covered will include the
lawyer/client interview, depositions and pre-trial discovery, settlement
negotiation, jury selection, opening and closing statements, and witness
testimony. Prerequisite: COMS 130.

COMS 647. Issues in Intercultural Communication. 3 Credits. S
Examination of the processes and factors affecting communication
in an intercultural context, and of methods of training for intercultural
communication roles. Prerequisite: COMS 547 and an introductory course
in anthropology, or consent of instructor.

COMS 656. Mass Media: Social Science Applications. 3 Credits. S
This course introduces students to the major theories of and prominent
research in mass communication. The aim is to stimulate critical thinking
about the content and effects of mass communication, develop critical
consumption skills, and enhance awareness of public policy issues
relating to the media. Students are required to read a variety of chapters
and articles on mass communication, promoting independent investigation
into specific areas of interest. This course is a bridge course and meets
with a graduate level section of the same title. Prerequisite: COMS 356.

COMS 667. Interpersonal Communication in Multinational
Organizations. 3 Credits.
A study of interpersonal communication in management and professional
development in intercultural situations. Focus on preparation of the global
manager or professional in the organizational environment. Special
attention to the problems and challenges of intercultural interactions in the
context of multinational organizations.

COMS 741. Special Topics in Communication Studies: _____ 2-3
Credits.
Examination of special topics in Communication Studies. Prerequisite:
Instructor consent.

COMS 787. Multidisciplinary Perspectives on Gerontology and
Aging. 3 Credits.
A seminar coordinated by the Gerontology Program. The seminar
explores essential areas of gerontology for researchers and practitioners,
providing a multidisciplinary (biology, health services, behavioral and
social sciences, human services) perspective on aging. The seminar
surveys contemporary basic and applied research, service programs,
and policy and management issues in gerontology. (Same as ABSC 787,
AMS 767, PSYC 787, and SOC 767.)

COMS 810. Organizational Communication: Theory and Research. 3
Credits.
This course examines the theoretical and philosophical underpinnings of
organizational communication research. Course topics cover variable
analytic traditions and systems theory, as well as cultural, critical, and
various interpretive approaches to understanding communication in
organizational contexts.
COMS 835. Impression Formation and Interpersonal Behavior. 3 Credits.
Intensive investigation of the processes involved in impression formation and of the effects of established impressions upon interpersonal communication. (Same as PSYC 845.) Prerequisite: COMS 535 or PSYC 670.

COMS 844. Seminar in Interpersonal Communication. 3 Credits.
This class will address current theory and research in interpersonal communication. Issues addressed may include verbal or nonverbal communication in families, close relationships, initial interactions, and the like.

COMS 846. Communication and Aging. 3 Credits.
Examination of the interrelationship between communication and the aging process. The course will include current research and theory on such topics as intergenerational communication, language and age identity, age-stereotyping and communication, mass media and aging, age and health communication, and others of current interest in the field.

COMS 851. Communication Research: Historical and Descriptive. 3 Credits.
An introduction to types of historical and descriptive research in human communication. Library resources and methods of research will be covered. Emphasis will be placed upon preparing a research prospectus and upon writing the research report.

COMS 852. Communication Research: Behavioral and Social Science. 3 Credits.
An introduction to the process of research in communication studies, including consideration of basic principles in research design, methods of observation and measurement, and the application of appropriate statistical techniques.

COMS 855. Qualitative Research Methods in Communication Studies. 3 Credits.
Study of strategies for describing communication behavior in particular contexts, emphasizing ethnography and specific observational and interview data gathering and analysis methods. Prerequisite: COMS 755 or equivalent.

COMS 856. Communication Research: Quantitative Analysis. 3 Credits.
An intermediate overview of statistical techniques commonly used in communication research. Content will include a review of univariate statistical tests such as t-test, correlation, chi-square, and other nonparametric techniques of data analysis. Additionally, factorial analysis of variance, multiple regression, and factor analysis will be covered, along with the application of appropriate statistical techniques. Prerequisite: An introductory course in statistics.

COMS 859. Proseminar in Communication Studies. 3 Credits.
An overview and integration of communication studies based upon an examination of selected basic writings in the discipline.

COMS 898. Investigation and Conference (For Master's Candidates). 1-8 Credits.
(Limited to eight hours credit toward the M.A. degree.) Directed research and experimentation for M.A. students in some phase of speech science or the teaching of speech and drama.

COMS 899. Master's Thesis. 1-6 Credits.
Thesis Hours. Graded on a satisfactory progress/limited progress/no progress basis.

COMS 907. Seminar in Political Communication. 3 Credits.
This course will focus on contemporary political communication theory and illustrate how such theories are exemplified in modern political contexts: political arguments and developing consensus, communication strategies in Congressional and bureaucratic decision-making, the rhetorical presidency, the dissemination of political information, political narrative, and political campaigns.

COMS 910. Organizing Identity, Identification, and Stigma. 3 Credits.
Students who take this course will: 1) deepen their knowledge about communicating with diverse populations, 2) enhance their understanding of gender, race, social class, sexuality, ability, and age, and 3) apply and advance their critical thinking, research, analysis, and writing skills. This course explores ideas and implications about identity, identification, and stigma within organized contexts like school, work, and nonprofit organizations. This seminar will focus on theoretical and practical issues relevant to identity and communication in contemporary organizations. Whether we realize it or not, we spend the majority of our lives in organizations like educational institutions and the workforce where we are continually interacting with diverse groups of people. Yet, many identities are stigmatized in organizational settings and those individuals often experience ostracism, stereotyping, and marginalization. The purpose of this course is to explore the power of communication to construct, reproduce, and transform social identities for ourselves and for others, within organizational contexts and acts of organizing.

COMS 920. Introduction to Teaching Oral Communication. 3 Credits.
This seminar prepares new graduate teaching assistants for their first teaching experience. Students will develop course materials including lectures, discussion prompts, assignments, exams based on pedagogical best practices. Students will apply theoretical concepts related to teaching, learning and assessment, and apply those theories to their own classrooms.

COMS 930. Seminar in Speech: _______. 1-4 Credits.
Special problems in speech.

COMS 932. Theories of Rhetoric: Classical. 3 Credits.
An intensive study of the rhetorical theories of classical writers from 466 B.C. to the decline of Roman oratory. Principal emphasis will be on Isocrates, Plato, Aristotle, Quintilian, Cicero, and Longinus.

COMS 933. Theories of Rhetoric: Neo-Classical. 2-3 Credits.
A study of the development of rhetorical theory from 325 A.D. to the twentieth century. Notable departures from the classical tradition will be examined. Special concentration on the writings of Augustine and the tradition of medieval preaching, Alcuin, Ramus, Bacon, Campbell, Whately, Blair, John Quincy Adams, and the eloquency movement.

COMS 936. Seminar in Language and Discourse. 3 Credits.
This seminar uses interdisciplinary readings to examine central theoretical questions regarding language and communication. The course moves from considering major theoretical positions to current research in communication on discourse. Methodological issues in the study of language and discourse are also addressed.

COMS 939. Seminar in Argumentation. 2-3 Credits.
Examination of special problems in argumentation, with emphasis on the relationship of systems of argumentation to their philosophic presuppositions. Discussion of the writings of Toulmin, Natason, Johnstone, Perelman, Dewey. Prerequisite: COMS 539 or equivalent.

COMS 945. Seminar in Social Support. 3 Credits.
This course is a survey of the many disciplines of the fundamental form of communication known as social or emotional support or comforting. Emphases include message-, receiver-, and interactionally-oriented
approaches, as well as support contexts, dilemmas, structures, features, and positive effects on physical and mental health.

COMS 946. Seminar in Communication and Intergroup Relations. 3 Credits.
Conceptual and theoretical frameworks for exploring and understanding relations between individuals from different societal groups (e.g., cultural/ethnic, gender, age). Focus on issues of identity, power relations as manifested in interpersonal, mass media, and organizational contexts. The course will include methodological and applied implications for studying different groups, both within the USA and around the world.

COMS 948. Seminar in Organizational Communication. 2-3 Credits.
Analysis of speech communication functions in the organizational structures of business, industry, labor, military, education, government, and professional agencies. Development of conceptual schemes for conducting research and training programs on speech systems which characterize the operation of organized groups.

COMS 951. Seminar in Movement Theory and Genre Criticism. 3 Credits.
This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on social movements and rhetorical genres. It will review existing theory on these topics, develop a methodological approach to both forms of critical analysis, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor.

COMS 952. Seminar in Mythic and Narrative Approaches to Rhetorical Criticism. 3 Credits.
This course examines the theoretical and methodological underpinnings of approaches to rhetorical analysis focusing on narrative rhetoric, with a special emphasis on myth as a type of narrative. It will review existing theory on these topics, consider a number of alternative methodological approaches, and test each methodological approach via case studies. Prerequisite: COMS 755 or consent of instructor.

COMS 953. Seminar in Organizational Rhetoric. 3 Credits.
This course focuses on theoretical and methodological materials related to the use of rhetoric in an organizational setting. It will review existing theory and methodological development on this topic, paying special attention to the distinction between rhetoric used within an organization and rhetoric focused on audiences external to the organization. Multiple case-studies will be considered to illuminate the functioning of both internal and external organizational rhetoric. Prerequisite: COMS 755 or consent of instructor.

COMS 955. Seminar in Rhetorical Criticism. 3 Credits.
A study of contemporary and historical writings on rhetorical criticism. Emphasis is placed upon the development of critical methodology for future research and writing. Prerequisite: COMS 755.

COMS 958. Comparative Theories of Speech Communication. 3 Credits.
A descriptive and comparative analysis of theories of communication applicable to speech behavior. Prerequisite: COMS 859 or equivalent.

COMS 959. Theories of Rhetoric: Contemporary. 3 Credits.
A study of the writings on rhetorical theory in the twentieth century. Principal emphasis will be on the psychological treatment of rhetoric. I.A. Richards and Kenneth Burke, and the relationship in the twentieth century between rhetoric and dialectic, rhetoric and poetic. Prerequisite: COMS 859 or equivalent.

COMS 997. Research in: _____ 1-6 Credits. Supervised research under the direction of a faculty member on a topic of mutual interest to the faculty and graduate student.

COMS 998. Investigation and Conference (For Doctoral Candidates). 1-8 Credits.
(Limited to eight hours credit towards the Ph.D. degree.) Directed research and experimentation for Ph.D. students in some phase of speech science or the teaching of speech and drama.

COMS 999. Doctoral Dissertation. 1-12 Credits.
Dissertation Hours. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts and Bachelor of General Studies in Communication Studies

The Communication Studies undergraduate major equips students with a diversity of skill sets by investigating communication in various cultural contexts, including relational, organizational, intercultural, political, and more.

In an increasingly globalized world, competent communication is crucial for career advancement, interpersonal relationships, and public democratic participation. Here’s what we know: humans rely on communication, and the creation and translation of symbols, language, and messages are integral to daily interactions. In other words, communication connects us.

The major expands on fundamental public speaking principles from the introductory course through emphasizing theories, methods, performances that apply to everyday communication practices.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Students should meet with departmental academic advisor or faculty member to declare a Communication Studies major.
## Requirements for the B.A. or B.G.S. Major

### Prerequisite Knowledge

Majors must complete a public speaking requirement as specified below. Note: COMS 130 and COMS 131 do not contribute to the minimum number of hours required for the major.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker-Audience Communication. Satisfied by one of the following: 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMS 131</td>
<td>Speaker-Audience Communication, Honors</td>
<td></td>
</tr>
<tr>
<td>Exemption</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Communication Core Knowledge in Theory and Methods 15

Complete Three Courses in Basic Communication Theory 9

Majors must complete 9 hours

Majors must complete one course of the following two

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 207</td>
<td>Introduction to Political Communication</td>
<td></td>
</tr>
<tr>
<td>COMS 232</td>
<td>Introduction to Rhetoric</td>
<td></td>
</tr>
</tbody>
</table>

Majors must complete one course of the following three

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 210</td>
<td>Introduction to Organizational and Professional Communication</td>
<td></td>
</tr>
<tr>
<td>COMS 244</td>
<td>Introduction to Interpersonal Communication Theory</td>
<td></td>
</tr>
<tr>
<td>COMS 246</td>
<td>Introduction to Intercultural Communication</td>
<td></td>
</tr>
</tbody>
</table>

Majors must complete a third course in Basic Communication Theory from the courses above

### Complete Two Courses in Research Methodology 6

Majors must complete the following two courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 235</td>
<td>Introduction to Rhetoric and Social Influence</td>
<td></td>
</tr>
<tr>
<td>or COMS 23</td>
<td>Introduction to Rhetoric and Social Influence, Honors</td>
<td></td>
</tr>
<tr>
<td>COMS 356</td>
<td>Introduction to Behavioral Research Methods in Communication</td>
<td></td>
</tr>
</tbody>
</table>

### Diversity, Equity, Inclusion, and Ethical Communication Behaviors 3

Majors must complete 3 hours. Choose one of the following

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 350</td>
<td>Communication in a Diverse World</td>
<td></td>
</tr>
<tr>
<td>COMS 410</td>
<td>Micro-Level Organizational Communication</td>
<td></td>
</tr>
<tr>
<td>COMS 440</td>
<td>Communication and Gender</td>
<td></td>
</tr>
<tr>
<td>COMS 450</td>
<td>Ethical Issues in Political Communication</td>
<td></td>
</tr>
<tr>
<td>COMS 454</td>
<td>Rhetoric of Popular Culture</td>
<td></td>
</tr>
<tr>
<td>COMS 447</td>
<td>Intercultural Communication: The Afro-American</td>
<td></td>
</tr>
<tr>
<td>COMS 547</td>
<td>Communication and Culture</td>
<td></td>
</tr>
<tr>
<td>COMS 552</td>
<td>The Rhetoric of Women's Rights</td>
<td></td>
</tr>
<tr>
<td>COMS 557</td>
<td>East Asian Communication</td>
<td></td>
</tr>
</tbody>
</table>

### Capstone Experience in Communication Studies 3

Majors must complete 3 hours. Choose one of the following

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 496</td>
<td>Capstone in: ____</td>
<td>3</td>
</tr>
</tbody>
</table>

### Communication Studies Required Electives 12

All majors must take 12 elective hours in Communication Studies

Note: For students pursuing the B.G.S. degree, it is recommended that you choose one of the following courses as part of your 12 hours of required major electives, as either of these also fulfill the Career Preparation Requirement for the B.G.S. COMS 330, COMS 342.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

## Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

### Major Hours

Satisfied by 33 hours of major courses.

### Major Hours in Residence

Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

### Major Junior/Senior Hours

Satisfied by a minimum of 15 hours of KU resident credit in the major.

### Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator ([http://clas.ku.edu/undergrad/tools/gpa/](http://clas.ku.edu/undergrad/tools/gpa/)).

A sample 4-year plan for the BA degree in Communication Studies can be found here (p. 1257), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Communication Studies can be found here (p. 1258), or by using the left-side navigation.

### Departmental Honors

Outstanding undergraduates may earn departmental honors if they meet the following criteria:

1. A grade-point average at the time of graduation of at least 3.5 in Communication Studies courses.
2. Completion of an honors thesis involving independent research — either a single comprehensive project or an integration of several related projects. Completion requires satisfactory defense of the thesis in an oral examination and submission of a satisfactory thesis manuscript to the department office by one month before graduation. Independent research for the thesis must be conducted under the direction of a faculty member. The student must be enrolled with that instructor in 2 to 6 hours of COMS 498, usually over two semesters.

### BA in Communication Studies

Below is a sample 4-year plan for students pursuing the BA in Communication Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website ([http://kucore.ku.edu/](http://kucore.ku.edu/)).

### Freshman

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 COMS 207 or 232</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMS 130 or 131 (Goal 2.2 Communication, Major Requirement)</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### GPA Calculator

A grade-point average at the time of graduation of at least 3.5 in Communication Studies courses.

Completion of an honors thesis involving independent research — either a single comprehensive project or an integration of several related projects. Completion requires satisfactory defense of the thesis in an oral examination and submission of a satisfactory thesis manuscript to the department office by one month before graduation. Independent research for the thesis must be conducted under the direction of a faculty member. The student must be enrolled with that instructor in 2 to 6 hours of COMS 498, usually over two semesters.

### Departmental Honors

Outstanding undergraduates may earn departmental honors if they meet the following criteria:

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### BA in Communication Studies

Below is a sample 4-year plan for students pursuing the BA in Communication Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website ([http://kucore.ku.edu/](http://kucore.ku.edu/)).
Below is a sample 4-year plan for students pursuing the BGS in Communication Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

## BGS in Communication Studies

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3 COMS 207 or 232 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130 (Goal 2.2 Oral Communication, Major Requirement)</td>
<td>3</td>
<td>3 Goal 3 Arts and Humanities</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>Total Hours</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>COMS 210, 244, or 246 (Major Requirement)</td>
<td>3</td>
<td>3 COMS 235 (Major Requirement)</td>
</tr>
<tr>
<td>COMS 207, 210, 232, 244, or 246 (Major Requirement)</td>
<td>3</td>
<td>3 COMS 300+ Elective (Major Requirement)</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>Total Hours</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

### Notes:

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. The COMS 130/COMS 131 requirement can also be fulfilled by exemption (http://kucore.ku.edu/exemptions/).

3. COMS 356 is required for the major and requires admission to the major in order to be able to enroll.

4. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

5. See degree requirements (p. 1257) for list of eligible courses.

6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 4 3 3

Junior

Fall

Hours Spring Hours

Goal 4.1 US Diversity 3 COMS 300+ Elective (Major Requirement) 3

COMS 300+ Elective (Major Requirement) 3 Goal 4.2 Global Awareness 3

BGS Career Course (BGSC) (COMS 330 or COMS 342 recommended)† 3 Diversity, Equity, Inclusion & Ethical Communication Behavior Course§ 3

COMS 356 3 Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3

Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3 Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3

15 15

Senior

Fall

Hours Spring Hours

Goal 5 Social Responsibility and Ethics 3 Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3

COMS 300+ Elective (Major Requirement) 3 Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3

Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3 COMS 496 (Major Requirement) 3

Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3 Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3

Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3 Second Area of Study/Elective/Degree/Junior-Senior Hours∗ 3

15 15

Total Hours 120

1 The COMS 130/COMS 131 requirement can also be fulfilled by exemption.

2 Please note that the Bachelor of General Studies degree requires completion of the requirements of a single BGS major AND a secondary field of academic study (a second major, co-major, or minor). This sample plan is based on the completion of a minor. If a second major is selected instead, elective hours on plan will be needed for these additional major requirements.

3 See degree requirements (p. 1257) for list of eligible courses

4 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Minor in Communication Studies

Why study communication studies?

The Communication Studies undergraduate major equips students with a diversity of skill sets by investigating communication in various cultural contexts, including relational, organizational, intercultural, political, and more.

In an increasingly globalized world, competent communication is crucial for career advancement, interpersonal relationships, and public democratic participation. Here’s what we know: humans rely on communication, and the creation and translation of symbols, language, and messages are integral to daily interactions. In other words, communication connects us.

The major expands on fundamental public speaking principles from the introductory course through emphasizing theories, methods, performances that apply to everyday communication practices.

Requirements for the Minor

Students selecting the communication studies minor must complete 6 COMS courses (18 hours).

Prerequisite Knowledge. Minors must complete a public speaking requirement. These hours do not contribute to the minimum number of hours required for the minor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td></td>
</tr>
<tr>
<td>COMS 131</td>
<td>Speaker-Audience Communication, Honors</td>
<td></td>
</tr>
<tr>
<td>COMS 230</td>
<td>Fundamentals of Debate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exemption</td>
<td></td>
</tr>
</tbody>
</table>

Communication Studies Course Requirements. Satisfied by 6 COMS courses (18 hours), 12 hours at the 300+ level.

Minor Hours & GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Undergraduate Certificate in Professional Communication

Good communication skills are consistently ranked in the top 5 desired skills for employers (National Association of Colleges and Employers Job Outlook Survey, 2016). And, interpersonal and team skills were identified as the second most required workplace competency employers expect in new hires. The undergraduate certificate in professional communication meets these workforce needs. This interdisciplinary certificate prepares students by fostering a better understanding of human communication in organizational settings and by coaching students in their writing skills. Gain an advantage in your job search and career by honing your professional communication skills.

### Requirements for the Undergraduate Certificate in Professional Communication

12 credit hours, 6 of which must be completed at the Jr/Sr level.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 210</td>
<td>Introduction to Organizational and Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMS 310</td>
<td>Advanced Organizational and Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: ____ (Professional Writing)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

(All courses available online)

### Master of Arts in Communication Studies

The Communication Studies program offers a Masters of Arts at the Lawrence and Edwards campus. The degree requirements at both locations are the same. The program in Communication Studies at the University of Kansas is research intensive and primarily designed to train students for careers doing research and teaching in the field of human communication at institutions of higher education. More specifically, our graduate program expects students to focus on one of the department’s two primary areas of research, with a narrower focus on one or two of the research subareas:

- Relationships & Social Interaction, with an emphasis on digital media, interpersonal, intercultural, and organizational communication.
- Rhetoric & Political Communication, with an emphasis on argumentation, democratic inclusion, digital media, political institutions, and public memory.

Across both areas of research, our department collectively focuses on communication as it relates to gender, race, social class, national identity, and other cultural indices. Moreover, the department offers training in qualitative, quantitative, and rhetorical methods.

Almost all Communication Studies graduate students are funded through the department as either Graduate Teaching Assistants (GTA) or Graduate Research Assistants (GRA), which both include competitive stipends, tuition coverage, and health care benefits. In addition, all GTAs and GRAs are provided annual travel assistant to attend academic conferences, and the department awards approximately $25,000 a year in graduate awards for research, teaching, and service.

### Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

### Graduate Admission

Eligibility criteria for admission to the M.A. program follow Graduate Studies’ admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Non-native speakers of English must meet Graduate Admissions’ English proficiency requirements (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

Potential students must submit a complete online graduate application (https://gradapply.ku.edu/apply/). For all domestic or international M.A. applicants on the Lawrence or Edwards campuses, please check the application requirements through the MA Admission webpage (https://coms.ku.edu/admissions-ma/).

For additional questions regarding program requirements and application processes, please contact the chair of the department, Dr. Jay Childers (https://coms.ku.edu/people/jay-p-childers/).

### M.A. Degree Requirements

#### Concentration in Communication Studies

For course work areas, see Ph.D. requirements.

#### Communication Studies

Satisfactory completion of these required courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 851</td>
<td>Communication Research: Historical and Descriptive</td>
<td>3</td>
</tr>
<tr>
<td>or COMS 852</td>
<td>Communication Research: Behavioral and Social Science</td>
<td></td>
</tr>
</tbody>
</table>

A second methodology course chosen in consultation with your advisor 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 859</td>
<td>Proseminar in Communication Studies</td>
<td>3</td>
</tr>
</tbody>
</table>
two primary areas of research, with a narrower focus on one or two of the
subareas:

• Relationships & Social Interaction, with an emphasis on digital media,
interpersonal, intercultural, and organizational communication.

Across both areas of research, our department collectively focuses on
communication as it relates to gender, race, social class, national identity,
and other cultural indices. Moreover, the department offers training in
qualitative, quantitative, and rhetorical methods.

Almost all Communication Studies graduate students are funded through
the department as either Graduate Teaching Assistants (GTA) or
Graduate Research Assistants (GRA), which both include competitive
stipends, tuition coverage, and health care benefits. In addition, all GTAs
and GRAs are provided annual travel assistance to attend academic
conferences, and the department awards approximately $25,000 a year in
graduate awards for research, teaching, and service.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be
admitted as either a degree-seeking or non-degree seeking student.

Eligibility criteria for admission to the Ph.D.
program follow Graduate Studies’ admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Non-native speakers of English must meet Graduate Admissions’ English proficiency requirements (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

For additional questions regarding program requirements and application
processes, please contact the chair of the department, Dr. Jay Childers
(https://coms.ku.edu/people/jay-p-childers/).

Ph.D. Degree Requirements
Concentration in Communication Studies
Requirements include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 958</td>
<td>Comparative Theories of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMS 995</td>
<td>Theories of Rhetoric: Contemporary</td>
<td>3</td>
</tr>
</tbody>
</table>

A minimum of 27 hours of additional subject matter courses:
These courses must represent 2 emphases. These areas are developed by the student in consultation with the advisor and the director of graduate study.

If a student holds a master’s degree in communication studies (or equivalent), appropriate course work from this degree may be used to fulfill the subject matter course requirements. However, the total number of hours from the M.A. program used to satisfy items 2c, 3, and 4 must not exceed 24 hours.

Electives 18

Electives may be chosen from another department or any phase of the program. The 18 hours need not be all in the same department. They may be used to broaden or intensify the program, as long as they constitute a meaningful course of study. Only 6 hours may be in independent study. Students with master’s degrees from other universities satisfy this requirement with 18 hours from their master’s programs.

Research Methodology 1

Courses required of all students:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 851</td>
<td>Communication Research: Historical and Descriptive</td>
<td>3</td>
</tr>
<tr>
<td>or COMS 852</td>
<td>Communication Research: Behavioral and Social Science</td>
<td></td>
</tr>
</tbody>
</table>

Choose 12 additional hours appropriate to the student’s research/dissertation interest. A list of approved courses is provided below.

In lieu of 3 hours of methodological course work, a student may elect to enroll in 3 hours of applied research in which he or she produces original research using one of the above methods. The final paper must meet the approval of the student’s advisor and must be submitted to a professional society for presentation on a convention program or to a professional journal for possible publication.

In lieu of 3 hours of methodological course work, a student may elect to demonstrate a high level of writing competence in one foreign language if she or he can show that knowledge of this language directly relates to his or her research and academic interests. Competence levels are determined through consultation with the appropriate language department or program.

Research Skills & Responsible Scholarship requirement:

• The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the Comprehensive Oral Exam.

• This requirement may be fulfilled by taking either COMS 851 Communication Research: Historical & Descriptive or COMS 852: Communication Research: Behavioral & Social Science, in addition to four graduate research methods courses as approved by the Director of Graduate Studies.

Satisfactory completion of the oral and written comprehensive examination.

All students must enroll in dissertation hours (COMS 999) in accordance with the University policy on Doctoral Candidacy (http://policy.ku.edu/graduate-studies/doctoral-candidacy/).

Final oral examination.

Approved Methodology Courses

The following lists identify methods courses taught in and outside of the department for the two main research areas: Relationships & Social Interaction and Rhetoric & Political Communication. The faculty of the Communication Studies Department agrees that these courses qualify as methods courses toward the course requirements for doctoral candidates.

Three caveats:

1. These lists are not comprehensive. Other courses may count as methods courses provided the student receives approval from the advisor.
2. The courses on these lists are not required. These are recommended courses for training in each methods type.
3. All methods courses should be chosen with the advisor’s input.

Rhetorical methods courses include but are not limited to:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 851</td>
<td>Communication Research: Historical and Descriptive</td>
<td>3</td>
</tr>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: _____ (Postmodern Rhetorical Theories)</td>
<td>1-4</td>
</tr>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: _____ (Contemporary Theories in Public Address)</td>
<td>1-4</td>
</tr>
<tr>
<td>COMS 951</td>
<td>Seminar in Movement Theory and Genre Criticism</td>
<td>3</td>
</tr>
<tr>
<td>COMS 952</td>
<td>Seminar in Mythic and Narrative Approaches to Rhetorical Criticism</td>
<td>3</td>
</tr>
<tr>
<td>COMS 955</td>
<td>Seminar in Rhetorical Criticism</td>
<td>3</td>
</tr>
</tbody>
</table>

Please consult with your advisor and other relevant faculty members about courses that may meet the research methods requirement. Courses that may be used to meet a Methods requirement instead of Theory, because they involve systematic and explicit reflection on research methods including appropriate research questions, objects of study, and units of analysis include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: _____ (Seminar on Burke)</td>
<td>1-4</td>
</tr>
<tr>
<td>COMS 933</td>
<td>Theories of Rhetoric: Neo-Classical</td>
<td>2-3</td>
</tr>
<tr>
<td>COMS 953</td>
<td>Seminar in Organizational Rhetoric</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses outside of COMS may qualify as a rhetorical methods course subject to advisor approval.

In Department Qualitative Methods Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 855</td>
<td>Qualitative Research Methods in Communication Studies</td>
<td>3</td>
</tr>
<tr>
<td>COMS 930</td>
<td>Seminar in Speech: _____ (Analyzing Qualitative Data)</td>
<td>1-4</td>
</tr>
<tr>
<td>COMS 936</td>
<td>Seminar in Language and Discourse</td>
<td>3</td>
</tr>
</tbody>
</table>

It is recommended that graduate students complete COMS 855 prior to taking qualitative methods courses outside of Communication Studies.

Qualitative Methods Graduate Courses at KU that are Not in Communication Studies:
Courses with an asterisk have been recommended by our graduate students or affiliate faculty. Please review all course selections with your advisor prior to enrolling.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>American Studies:</td>
<td></td>
</tr>
<tr>
<td>AMS 803</td>
<td>Research Methods in American Studies *</td>
<td>3</td>
</tr>
<tr>
<td>AMS 998</td>
<td>Seminar in: _____ (special topics) *</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Anthropology:</td>
<td></td>
</tr>
<tr>
<td>ANTH 783</td>
<td>Doing Ethnography *</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Journalism:</td>
<td></td>
</tr>
<tr>
<td>JOUR 829</td>
<td>Marketing Communications Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Political Science:</td>
<td></td>
</tr>
<tr>
<td>POLS 708</td>
<td>Advanced Qualitative Research Methods</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Public Administration:</td>
<td></td>
</tr>
<tr>
<td>PUAD 937</td>
<td>Qualitative Methods in Public Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

* Courses with an asterisk have been recommended by our graduate students or affiliate faculty.

In Department Quantitative Methods Course

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 856</td>
<td>Communication Research: Quantitative Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

It is recommended that graduate students complete COMS 856 prior to taking quantitative methods courses outside of Communication Studies.

Introductory Outside COMS Quantitative Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td>4</td>
</tr>
<tr>
<td>or EPSY 810</td>
<td>Regression and ANOVA: General Linear Models</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 818</td>
<td>Experimental Research Methods in Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 811</td>
<td>Analysis of Variance</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Outside COMS Quantitative Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 791</td>
<td>Statistical Methods in Psychology II</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 887</td>
<td>Factor Analysis</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 893</td>
<td>Multivariate Analysis</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 894</td>
<td>Multilevel Modeling</td>
<td>4</td>
</tr>
<tr>
<td>EPSY 940</td>
<td>Advanced Studies in Educational Psychology and Research</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 896</td>
<td>Structural Equation Modeling I</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 996</td>
<td>Structural Equation Modeling II</td>
<td>3</td>
</tr>
</tbody>
</table>

Computational Biology Program

Computational Biology Graduate Program

Computational Biology is an interdisciplinary science at the interface of biology, chemistry, medicine, mathematics, and computer science. Its goal is development and application of computational approaches to studies of life processes and improvement of human health. The Computational Biology Graduate Program recruits students with bachelor's or master's degrees who made a choice to pursue a career in computational biology. The Ph.D. degree in Computational Biology requires successful completion of formal courses and demonstration of accomplishments in basic research, qualifying examinations, scientific writing, and formal presentations of research data.

Courses

**BINF 701. Computational Biology I. 5 Credits.**

First semester of a two-semester course in bioinformatics and computational biology. Topics include basic concepts of bioinformatics and molecular modeling, bioinformatics databases, computational tools and modeling methods, protein sequence and structure alignment, conformational analysis, secondary structure determination, tertiary structure modeling (homology, threading, ab initio, protein folding and dynamics), networks, data mining and machine learning, as well as student presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Students will also learn responsible scholarship, including allocation of credit, treatment of data, scientific misconduct, collaborative research, and mentor/ trainee responsibilities. Prerequisite: College introductory biochemistry (no requirement for specific courses), math, and computer courses or concurrent enrollment in such courses and consent of instructor.

**BINF 702. Computational Biology II. 5 Credits.**

Second semester of a two-semester course in bioinformatics and computational biology. Topics include protein quaternary structure modeling (protein-protein/DNA/small ligand docking, binding, computer-aided drug design), protein structure-function relationships, modeling of genome-wide protein interaction networks based on structure, systems biology, mathematical and computational modeling of complex systems, synthetic biology and dynamics of chemical reaction networks as well as student presentations of material from current papers in the field of study and their own on-going research for discussion and critique. Students will also learn responsible scholarship, including allocation of credit, treatment of data, scientific misconduct, collaborative research, and mentor/trainee responsibilities. Prerequisite: BINF 701.

**BINF 703. Advanced Computational Biology I. 5 Credits.**

This is the first semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 701 and BINF 702, or consent of instructor.

**BINF 704. Advanced Computational Biology II. 5 Credits.**

This is the second semester of an intensive two-semester course in Computational Biology, aimed at second-year graduate students. Topics include graph theory, systems biology, mathematical and computational modeling of complex systems, synthetic biology and protein design. Students will gain a mastery of cutting-edge topics in Computational Biology through lectures, careful reading of current literature, and advanced individual research projects. Prerequisite: BINF 703.

**BINF 709. Topics in: _____ 1-3 Credits.**

Advanced courses on special topics in Bioinformatics, given as need arises, including lectures, discussions, readings, or laboratory. Students may select sections according to their special interests.

**BINF 999. Doctoral Dissertation. 1-12 Credits.**

Original research that is to be incorporated into a PhD dissertation.
Doctor of Philosophy in Computational Biology

Computational Biology Graduate Program

Computational biology is an interdisciplinary science at the interface of biology, chemistry, medicine, mathematics, and computer science. Its goal is development and application of computational approaches to studies of life processes and improvement of human health. The Computational Biology Graduate Program recruits students with bachelor’s or master’s degrees who made a choice to pursue a career in computational biology. The Ph.D. degree in Computational Biology requires successful completion of formal courses and demonstration of accomplishments in basic research, qualifying examinations, scientific writing, and formal presentations of research data.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Ph.D. Admission

Admission Requirements

Applicants must have a bachelor’s or master’s degree in natural sciences, mathematics, engineering, or another relevant field. Applications are accepted online (https://gradapply.ku.edu/apply/).

Non-Degree Seeking Admission

Students who are interested in enrolling in graduate level coursework in the Department of Computational Biology without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s admission webpage (http://compbio.ku.edu/apply-0/) for further details.

Ph.D. Degree Requirements

Students must earn credit in each of the following courses or their equivalents:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BINF 701</td>
<td>Computational Biology I</td>
<td>5</td>
</tr>
<tr>
<td>BINF 702</td>
<td>Computational Biology II</td>
<td>5</td>
</tr>
<tr>
<td>BINF 703</td>
<td>Advanced Computational Biology I</td>
<td>5</td>
</tr>
<tr>
<td>BINF 704</td>
<td>Advanced Computational Biology II</td>
<td>5</td>
</tr>
<tr>
<td>BINF 709</td>
<td>Topics in:</td>
<td>1-3</td>
</tr>
<tr>
<td>BIOL 636</td>
<td>Biochemistry I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 638</td>
<td>Biochemistry II</td>
<td>4</td>
</tr>
<tr>
<td>Elective courses in biology/chemistry</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Elective courses in analysis/mathematics/statistics</td>
<td>6</td>
<td></td>
</tr>
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By the end of the second year, the student should have completed the formal course work to fulfill requirements for the degree. The student completes and submits a research proposal for the comprehensive oral examination. The proposal must develop a research topic related to the general areas of computational biology. The topic of the research proposal is decided upon by the student in consultation with the thesis advisor. Upon completion of the comprehensive oral examination, the student aggressively carries out research in the laboratory of the thesis advisor. In addition, the student continues attending the weekly Computational Biology seminar series and participating in the Computational Biology student seminar series. A Ph.D. degree is awarded once the student has written a final dissertation and carried out a successful defense of it before a committee.

The research skills training and responsible scholarship requirements are met through BINF 701/BINF 702 coursework, as well as through collaborations in the Center for Computational Biology, student research presentations and individual mentorship.

Department of East Asian Languages and Cultures

Why study East Asian languages and cultures?

We cover China, Japan, and Korea, three of the oldest continuous civilizations in the world. Study of these languages and cultures opens the door to immensely rich traditions in literature, philosophy, and art, as well as contemporary global phenomena such as Anime, K-pop, popular cuisines, and martial arts. And, with its long tradition of invention and creativity, East Asia is at the forefront of technological innovation today. Mainland China and Japan have the world's largest economies after the United States, and, along with South Korea and Taiwan, are key U.S. trading partners. Thousands of US companies do business with East Asia. Economic and political relations with East Asia are of critical importance to the US and are becoming more significant every year.

Studying with us will prepare you for today's interconnected world, open up opportunities for travel and adventure, and give you a competitive edge when you enter the job market. Learning an East Asian language and culture at KU is a fun, rewarding experience, and many students also study-abroad in East Asia while at KU. Students often pair an EALC major or minor with a second major to widen their skill-set and increase their competitiveness as they enter the global marketplace. Our graduates have gone on to successful positions in business, government, finance, non-profit organizations, teaching, research, and many other fields.

Undergraduate Programs

The department offers a full program of instruction in the languages, literatures, and cultures of China, Japan, and Korea.

With an EALC B.A., students can pursue a range of careers in business, government, education, nonprofit organizations, and many other fields, or continue on to graduate study in East Asian languages and literatures or related fields. Many students pair an EALC major or minor with a second major to widen their skill-set and increase their competitiveness as they enter the global marketplace. Some students choose an EALC B.A. to fulfill personal interests or connect with their heritage.
Placement
If students have already learned Chinese, Japanese, or Korean to some degree, whether at home, in a classroom, or elsewhere, they must take a placement test before enrolling in a language class. For more information on placement and proficiency exams see the department website (https://ealc.ku.edu/proficiency-placement/) or contact the department administrator at 785-864-9250, email: ealc@ku.edu. (ealc@ku.edu) There is no fee for a placement test. To be eligible for enrollment in intermediate Chinese, Japanese, or Korean, a student must have earned college credit for the first year, or have earned 2 years of high school credit in that language, or have permission from the department based on the results of the placement test.

Retroactive Credit
Students with no prior college or university Chinese, Japanese, or Korean course credit are eligible for retroactive credit according to this formula:

- Students who place into second-semester Chinese, Japanese, or Korean (CHIN 108, JPN 108, KOR 108) and earn grades of C or higher may receive 2 hours of retroactive credit.
- Students who place into third-semester Chinese, Japanese, or Korean (CHIN 204, JPN 204, KOR 204) and earn grades of C or higher may receive 5 hours of retroactive credit.
- Students who place into fourth-semester Chinese, Japanese, or Korean (CHIN 208, JPN 208, KOR 208) and earn grades of C or higher may receive 7 hours of retroactive credit.
- Students who place into fifth-semester Chinese, Japanese, or Korean (CHIN 504 CHIN 504, JPN 504 JPN 504, KOR 504) and earn grades of C or higher may receive 10 hours of retroactive credit.

Students who want to be considered for retroactive credit must:

- Meet with their language faculty advisor to discuss previous study and familiarity of the language.
- Take a placement test to confirm language placement.
- Then, upon completion of the course, reach out to the EALC undergraduate advisor to receive credit:
  - Nicole Evans (nicoleevas@ku.edu)

Regardless of the number of credits received, students will be charged $50.00 by the Bursar’s office after the credits have been applied to their transcript.

Courses for Non-majors
Courses in English, suitable for non-degree seeking students, are listed under “EALC” (East Asian Languages and Cultures).

EALC also offers elementary and intermediate language courses in Tibetan (TIB 101, TIB 102, TIB 201, TIB 202) and Uyghur (UYGR 101, UYGR 102, UYGR 201, UYGR 202). Tibetan and Uyghur language studies can be used to fulfill the CLAS second language requirement necessary to complete the B.A. degree.

Graduate Program
M.A. in East Asian Languages & Cultures
The Department of East Asian Languages and Cultures (EALC) is the only department in Kansas offering a regular program of instruction in the languages, literatures, and cultures of East Asia.

The EALC M.A. program trains students who will devote themselves to becoming effective links between the Far East and the United States.

Students concentrate in Chinese, Japanese, Korean, or East Asian Cultures, usually entering the program with at least two years of college-level language. The program typically takes two years to complete, including the defense of a Master’s thesis or oral defense for non-thesis students.

Graduate Non-Degree Seeking Status
Students who are interested in enrolling in graduate-level coursework in the Department of East Asian Languages and Cultures without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s webpage (https://ealc.ku.edu/nds-overview/) for further details.

Center for East Asian Studies
The Center for East Asian Studies (http://www.ceas.ku.edu/) is a National Resource Center funded by the U.S. Department of Education. CEAS promotes East Asian language and area studies; coordinates interdisciplinary activities; works with the East Asian Library; advises students in East Asian studies; awards Foreign Language and Area Studies Fellowships in Chinese, Japanese, Korean, Uyghur, and Tibetan; and arranges special events related to East Asia on campus. CEAS also offers outreach to schools, businesses, and the community and serves as a regional resource for information about East Asia.

Courses
CHIN 100. Elementary Conversational Chinese I. 3 Credits. U
Three hours of class per week plus outside use of recorded text materials. Basic spoken language instruction intended primarily for beginners planning travel or work in China and Taiwan. Introduction to basic written characters. Does not fulfill College of Liberal Arts and Sciences foreign language distribution requirements or department major and minor requirements.

CHIN 101. Elementary Conversational Chinese II. 3 Credits. U
Continuation of CHIN 100. Prerequisite: CHIN 100 or equivalent.

CHIN 102. Beginning Chinese I. 4 Credits. U
Taught mainly in the summer, this course covers about 75% of the material in CHIN 104, upon which this course is modeled.

CHIN 104. Elementary Chinese I. 5 Credits. U
Three hours of lecture and three hours of spoken drill each week. An introduction to spoken and written modern standard Chinese (Mandarin). Not open to students with native ability in Mandarin or Chinese dialect. Students who have any previous knowledge of Chinese must take a placement exam before enrolling in Chinese classes at K.U. Consult Department of East Asian Languages and Cultures for details.

CHIN 106. Elementary Chinese for Advanced Beginners. 3 Credits. U
This course is designed for students who have already acquired some elementary Chinese language abilities (in high school or from family), but cannot be placed in CHIN 108, Elementary Chinese II. The course focuses on perfecting listening, speaking, reading and writing skills, and prepares students for CHIN 108. For admission to the class, students must take the EALC Chinese placement exam, be interviewed by designated instructors, and approved.

CHIN 108. Elementary Chinese II. 5 Credits. U F2
Continuation of CHIN 104. Prerequisite: CHIN 101, CHIN 104, or equivalent.

**CHIN 177. First Year Seminar:** __________. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Chinese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**CHIN 204. Intermediate Chinese I.** 5 Credits. U F3
Continuation of CHIN 108. Three hours of lecture and three hours of spoken drill. Prerequisite: CHIN 108 or equivalent.

**CHIN 206. Intermediate Chinese Conversation.** 2 Credits. U
Practice in speaking, presentation of prepared talks, and guided discussions. This course is primarily used to award transfer credit and does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: CHIN 204 or equivalent.

**CHIN 208. Intermediate Chinese II.** 5 Credits. U F4
Continuation of CHIN 204. Prerequisite: CHIN 204.

**CHIN 251. Reading and Writing Chinese I.** 3 Credits. H
Designed for students, Chinese heritage speakers as well as second-language Chinese learners, who wish to learn or improve their abilities in reading and writing Chinese characters. Focuses on the 500 most commonly used Chinese characters and the major concepts essential for reading and writing Chinese characters. Chinese culture, customs and history that are reflected in Chinese characters will also be introduced.

**CHIN 252. Reading and Writing Chinese II.** 3 Credits. H
Continuation of CHIN 251. Focuses on another 500 most commonly used Chinese characters and the major concepts essential for learning to read and write Chinese characters, preparing students for possible entry into advanced courses in Chinese, e.g. CHIN 504 (Advanced Modern Chinese I), or, after appropriate testing, for possible exemption from the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: CHIN 251 or permission of the instructor.

**CHIN 290. Accelerated Chinese.** 3 Credits. U
Instruction in reading and writing Chinese for students who already possess a degree of oral/aural proficiency. This course will prepare students for enrollment in CHIN 504, Advanced Modern Chinese I. No prerequisites. Consent of instructor required.

**CHIN 342. Introduction to Classical Chinese.** 3 Credits. H/W FP
An introduction to Classical Chinese through detailed analysis of short original passages from a variety of early Chinese texts. Students gain a foundation in the grammar and vocabulary of Classical Chinese, preparing them for CHIN 544. The course is offered at the 300 and 500 levels, with additional requirements for students taking CHIN 542. Prerequisite: A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108) and consent of instructor, or CHIN 208 or JPN 208. Not open to students who have completed CHIN 342.

**CHIN 344. Readings in Classical Chinese: __________.** 3 Credits. H/W FP
Classical Chinese is the language of the most famous works of Chinese philosophy, and most Chinese literature before the twentieth century. This topics course introduces readings on a specific theme or genre, for example: Early Chinese Philosophy, Poetry, Religion, Confucian Philosophical Texts, Daoist Philosophical Texts, etc. Primary-text readings are in original Classical Chinese while secondary readings are in English. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in CHIN 744. Prerequisite: CHIN 342 or CHIN 542 or consent of the instructor. May be repeated for credit if content varies.

**CHIN 508. Advanced Modern Chinese II.** 5 Credits. H/W FP
Continuation of CHIN 504. Prerequisite: CHIN 504 or equivalent.

**CHIN 511. Advanced Chinese I.** 2 Credits. H/W FP
Readings in modern Chinese texts on a variety of subjects and discussion in Chinese. Prerequisite: CHIN 218 or equivalent.

**CHIN 512. Advanced Chinese II.** 2 Credits. H/W FP
Continuation of CHIN 512. Prerequisite: CHIN 512 or equivalent.

**CHIN 542. Introduction to Classical Chinese.** 3 Credits. H/W FP
An introduction to Classical Chinese through detailed analysis of short original passages from a variety of early Chinese texts. Students gain a foundation in the grammar and vocabulary of Classical Chinese, preparing them for CHIN 544. The course is offered at the 300 and 500 levels, with additional requirements for students taking CHIN 542. Prerequisite: A basic knowledge of Chinese characters (e.g. from CHIN 108 or JPN 108) and consent of instructor, or CHIN 208 or JPN 208. Not open to students who have completed CHIN 342.

**CHIN 544. Readings in Classical Chinese: __________.** 3 Credits. H/W FP
Students will read selections from materials on a given topic or topics. May be repeated for credit if content varies.

**CHIN 562. Modern Chinese Texts I.** 3 Credits. NW H/W FP
Readings and interpretation of varied modern Chinese texts. Continued study of the language in the form of oral discussion and written reports. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in CHIN 762. Prerequisite: CHIN 504 or equivalent.

**CHIN 564. Modern Chinese Texts II.** 3 Credits. H/W FP
A continuation of CHIN 562 with materials of increasing difficulty. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in CHIN 764. Prerequisite: CHIN 562.

**CHIN 598. Readings in: __________.** 1-3 Credits. H/W FP
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: CHIN 564 or permission of instructor.

**CHIN 744. Readings in Classical Chinese:** __________. 3 Credits.
Classical Chinese is the language of the most famous works of Chinese philosophy, and most Chinese literature before the twentieth century. This topics course introduces readings on a specific theme or genre, for example: Early Chinese Philosophy, Poetry, Religion, Confucian Philosophical Texts, Daoist Philosophical Texts, etc. Primary-text readings are in original Classical Chinese while secondary readings are in English. This course is offered at the 500 and 700 level with additional assignments at the 500 level. Not open to students with credit in CHIN 544. May be repeated for credit if topic varies. Prerequisite: CHIN 342 or CHIN 542 or consent of the instructor.

**CHIN 762. Modern Chinese Texts I.** 3 Credits.
Readings and interpretation of varied modern Chinese texts. Continued study of the language in the form of oral discussion and written reports. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in CHIN 562. Prerequisite: CHIN 504 or equivalent.

CHIN 764. Modern Chinese Texts II. 3 Credits.
A continuation of CHIN 762 with materials of increasing difficulty. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in CHIN 564. Prerequisite: CHIN 762.

CHI 801. Directed Readings and Research in Chinese. 1-4 Credits. FP
Advanced language training for the study of Chinese sources in the humanities or social science field of the student. Prerequisite: Consent of instructor.

Courses

EALC 105. Asian Religions. 3 Credits. HR/NW H/W
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. (Same as REL 106.)

EALC 121. Introduction to Contemporary China. 3 Credits. NW H/W
An overview of contemporary Chinese culture and society since the economic reforms and opening up launched in 1978, through the study of changes in politics, the economy, society, culture and everyday life in China. The course is taught in English. No prior knowledge of Chinese language is required.

EALC 130. Myth, Legend, and Folk Beliefs in East Asia. 3 Credits. NW H/W
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the traditional world view of the peoples of East Asia. (Same as ANTH 293, REL 130.)

EALC 142. Ethics in Chinese Philosophy. 3 Credits. H/W
How can ethical codes help us lead a better life? What principles of government will ensure an ordered and harmonious society? What responsibilities do we have to others and to the natural world? Thinkers in early China asked these questions and came to a variety of different conclusions, ranging from a goal of spontaneous harmony, to a rigid law-and-order ethic. Their ideas are still relevant today and in this course we will both survey these different ethical perspectives and also apply them to contemporary social, political, and environmental issues.

EALC 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in East Asian Languages and Cultures. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

EALC 198. Studies in: _____ 1-5 Credits. H/W
Special purpose subject in East Asia and contiguous regions.

EALC 231. Introduction to: _____ 1-3 Credits. NW H/W
Topics are various aspects of Chinese and Japanese cultures.

EALC 298. Studies in: _____ 1-5 Credits. H/W
Special purpose subject in East Asia and contiguous regions.

EALC 308. Music in East Asia. 3 Credits.
Study of musical cultures in China, Korea, and Mongolia, with a special focus on court music, musical theater, popular music, and the influence of East Asian music on the Western art music and vice-versa. (Same as MUSC 308.)

EALC 312. Japan's Literary Legacy. 3 Credits. H/W
A survey of the major works of Japan's long literary heritage. Readings from such classics as the Tale of Genji, the world's first novel, No drama, and poetry will acquaint the student with one of the world's great literary traditions.

EALC 315. Survey of Japanese Film. 3 Credits. NW H/W
This course surveys the major developments in and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, the course introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this institution shapes gender, race, class, ethnic and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions students critically examine how Japanese cinema as an institution both responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 315.)

EALC 316. Modern Japanese Fiction and Film. 3 Credits. H/W
A survey of major works of fiction and film in modern Japan. Topics include the social and spiritual challenges of modernization, urbanization, and the issues of race and national identity. Works by Akutagawa, Kawabata, Kurosawa, Ogai, Ozu, Soseki and Tanizaki and others are covered. Lectures, discussion, readings, and films in English. Knowledge of Japanese language is not required. This course is offered at the 300 and the 700 levels, with additional assignments at the 700 level. Not open to students who have completed EALC 716.

EALC 317. Contemporary Japanese Fiction and Film. 3 Credits. HL H/W
A survey of major literary and cinematic works of Japan's post-war and contemporary eras. Topics include life during and after the war, the experience of the atomic bomb, and the postmodern landscape. Novels by Dazai Osamu, Mishima Yukio, Oe Kenzaburo, Murakami Haruki and Yoshimoto Banana and films by Imamura Shohei, Ozu Yasujiro, Teshigahara Hiroshi and others will be covered. Course format is a combination of lecture and discussion. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Not open to students who have completed EALC 717.

EALC 318. Modern Chinese Fiction and Film. 2-3 Credits. H/W
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 518. This course is taught at the 300 and 500 levels with additional assignments at the 500-level.

EALC 319. Contemporary Chinese Fiction and Film. 3 Credits. H
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 519.)

EALC 320. Modern East Asia: Multiple Perspectives. 3 Credits. NW H
A survey of the major political changes in China, Japan, Korea and Tibet in the 20th century. Students will learn about the changes that swept through East Asia as it rapidly modernized via documentary films and
lectures and will study the impact of these changes on individuals by reading autobiographies.

**EALC 325. Minorities in Japan. 3 Credits. S**
This course offers a sociological and historical exploration of Japan's minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan's minorities, their historical experiences, current struggles, and future challenges. This course is taught at the 300 and 600-levels with additional assignments required at the 600-level.

**EALC 330. China's Cultural Legacy. 3 Credits. HL/NW H/W**
An examination of Chinese literature and culture from earliest times to the modern period. Not open to students who have taken EALC 530. This course is taught at the 300 and 500 levels with additional assignments at the 500-level.

**EALC 331. Studies In: _____ 1-3 Credits. H/W**
Topics in the Chinese and Japanese cultures.

**EALC 332. Asian Literature in Translation: _____ 3 Credits. NW H/W**
Introduction to Asian culture and society through close reading and analysis of important works of Asian literature. Themes and issues to be focused upon will vary (e.g., traditional or modern literature of China, Japan, or Korea, and special topics of interest). Lecture and discussion format. Knowledge of Asian languages is not required.

**EALC 333. Asian Literature in Translation, Honors: _____ 3 Credits. NW H/W**
An honors course that may be cross-listed with an existing EALC literature course. Students are required to do additional work. Open only to students in the University Honors Program or by permission of instructor.

**EALC 344. Manga: Histories and Theories. 3 Credits. H**
Manga (Japanese comics) have long been an extremely popular and influential medium in Japan and internationally. Manga offers engaging narratives and visual imagery revealing central concerns not only of Japanese culture, history, society and politics, but also of the global cultural industry. The medium has been studied through various disciplinary lenses ranging from art history to visual culture and media studies, literature, sociology, and anthropology. Through the examination of several manga artists and works from the late 19th century to the present as well as reading a broad range of scholarship, this course explores the major issues addressed and theoretical approaches used in the interdisciplinary study of manga. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 544. (Same as HA 344.)

**EALC 353. Language and Society in East Asia. 3 Credits. NW/SC S**
This course examines the cultures of East Asian countries through the lens of language. We will discuss the interactions of language and ideology, government policies, gender and education in East Asia. The course will be relevant for students interested in East Asian anthropology, politics, religion, philosophy, linguistics and language learning. The class has no prerequisites and requires no prior knowledge of East Asian languages or cultures. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students who have earned credit in EALC 553.

**EALC 354. Japanese Prints. 3 Credits. NW H/W**
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. (Same as HA 354.)

**EALC 360. Buddhist Art of Korea. 3 Credits. H**
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 561 or REL 511. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as HA 361.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

**EALC 361. Colonial Korea. 3 Credits. H**
This course examines the history, society, and culture of Korea from the end of Choson dynasty through the Colonial period (1910-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. Not open to students with credit in EALC 561.

**EALC 362. Post-Colonial Korea. 3 Credits. H**
This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. This course is offered at the 300 and 500-level with additional assignments at the 500 level. Not open to students with credit in EALC 562.

**EALC 367. Art and Culture of Japan. 3 Credits. NW H/W**
The history of Japanese art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions with different countries, and the roots of modernism in Japanese art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art. (Same as HA 367.)

**EALC 368. The Peoples of China. 3 Credits. NW S/W**
An analysis of the cultural origin, diversity, and unity of the peoples of China. Emphasis on historical development, social structure, cultural continuity and change, and ethics. (Same as ANTH 368.)

**EALC 369. Art and Culture of Korea. 3 Credits. NW H/W**
The history of Korean art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions with different countries, and the roots of modernism in Korean art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art.

**EALC 372. Ceramics of Korea. 3 Credits. H**
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 562. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as HA 362.)
EALC 373. Modern Korean Art and Culture. 3 Credits. H
This course is a thematic introduction to Korean art and culture with an emphasis on modern and contemporary Korea. Pre-modern works are contextualized with respect to contemporary issues. Students learn how to conduct a comprehensive analysis of an artwork by considering the political, historical and social conditions of its time within a broader East Asian cultural framework. (Same as HA 363.) Prerequisite: An introductory course in art history at the college level, or consent of instructor.

EALC 375. Love, Sexuality and Gender in Japanese Literature. 3 Credits. HL H
An examination of Japanese attitudes toward love, sexuality and gender differences as revealed in literature from the tenth century to the present. Discussion format. Not open to students who have taken EALC 575/ WGSS 576. (Same as WGSS 376.)

EALC 378. Art and Culture of China. 3 Credits. NW H/W
The history of Chinese art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions between different ethnic groups, and the roots of modernism in Chinese art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art. (Same as HA 368.)

EALC 380. Popular Cultures of East Asia. 3 Credits. NW H
This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. Not open to students who have taken EALC 580.

EALC 385. The Art of Buddhism. 3 Credits. H/W
A survey of Buddhist visual arts (architecture, sculpture, and painting) of India, China, Japan, and Korea. Through an examination of the history of Buddhist art interpreted from visual, historical, social, and political perspectives, the course enables students to analyze a wide range of Buddhist art forms within their regional contexts. Students will also consider how Buddhist-related material functions within museums and engage with local collections. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 585. (Same as HA 385.)

EALC 388. Modern and Contemporary Visual Arts of Japan. 3 Credits. H
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 588. (Same as HA 388.)

EALC 418. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Credits. NW H
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. Recommended: A course in East Asian studies. Not open to students who have taken EALC 618. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. (Same as WGSS 418.) Prerequisite: One course in EALC or WGSS.

EALC 420. Daily Life in China From the Opium War to 1911. 3 Credits. NW H/W
This course examines everyday life in China from the mid-19th century to the end of the last dynasty in 1911. The focus is on living conditions, social customs, and gender relations of people of all social levels, from emperors and empresses to servants, prostitutes, and concubines. Other topics include: the culture of drugs in the form of opium smoking, including how opium served as a key point of contact between China and the Euro-west; sexual culture, especially in the form of the history of prostitution and gender roles and values in China on the verge of modernity; interactions in daily life between Chinese and Westerners in China; and the experience of China's last imperial rulers. These topics are weighed against the backdrop of the decline of China's last dynasty and the concurrent impact of modernity in the form of social, political and technological change, especially as effected by the intrusion of the Euro-west. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EALC 720.

EALC 431. Studies in: _____. 1-3 Credits. H/W
Topics in the Chinese and Japanese traditions.

EALC 498. Directed Readings in East Asian Languages and Cultures. 1-4 Credits. H/W
Readings in English on an East Asian subject, selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: ECIV 104 or ECIV 304 and consent of instructor.

EALC 499. Honors Thesis. 3 Credits. H/W
Required of all students working for a degree with honors. May be repeated for a total of nine semester hours.

EALC 509. Religion in Japan. 3 Credits. NW H/W
Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as REL 509.)

EALC 518. Modern Chinese Fiction & Film. 3 Credits. H
A general survey of important Chinese fiction and film of the 20th century. Lectures, readings, and discussions in English. Knowledge of Chinese is not required. Not open to students with credit in EALC 318. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor.

EALC 519. Contemporary Chinese Fiction and Film. 3 Credits. H
A general survey of important Chinese fiction and film from the late 20th century to the present. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course such as ECIV 104 or ECIV 304 or EALC 105; or consent of instructor. (Not open to students with credit in EALC 319.)

EALC 530. China's Cultural Legacy. 3 Credits. NW H/W
An examination of Chinese literature and culture from earliest times to the modern period. This course is taught at the 300 and 500 levels with additional assignments at the 500-level. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304 or EALC 105; or consent of the instructor. Not open to students with credit in EALC 330.

EALC 543. Contemporary Japanese Film. 3 Credits. NW H

Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 543.) Prerequisite: Junior status.

EALC 544. Manga: Histories and Theories. 3 Credits. H

Manga (Japanese comics) have long been an extremely popular and influential medium in Japan and internationally. Manga offer engaging narratives and visual imagery revealing central concerns not only of Japanese culture, history, society and politics, but also of the global cultural industry. The medium has been studied through various disciplinary lenses ranging from art history to visual culture and media studies, literature, sociology, and anthropology. Through the examination of several manga artists and works from the late 19th century to the present as well as reading a broad range of scholarship, this course explores the major issues addressed and theoretical approaches used in the interdisciplinary study of manga. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 344. (Same as HA 544.) Prerequisite: A college level introduction to Asian art history or Asian studies, or consent of instructor.

EALC 553. Language and Society in East Asia. 3 Credits. NW/SC S

This course examines the cultures of East Asian countries through the lens of language. We will discuss the interactions of language and ideology, government policies, gender and education in East Asia. The course will be relevant for students interested in East Asian anthropology, politics, religion, philosophy, linguistics and language learning. The class has no prerequisites and requires no prior knowledge of East Asian languages or cultures. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students who have earned credit in EALC 353. Prerequisite: Any EALC course, or any CHIN, JPN, KOR language course, or any Linguistics course.

EALC 561. Colonial Korea. 3 Credits. H

This course examines the history, society, and culture of Korea from the end of the Choson dynasty through the colonial period (1920-1945) in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature and film. Prerequisite: An introductory East Asian studies course, such as ECIV 104 or ECIV 304, or EALC 105; or consent of instructor. There are additional readings and more extensive writing assignments than in EALC 361. Not open to students with credit in EALC 361.

EALC 562. Post-Colonial Korea. 3 Credits. H

This course examines the history, society, and culture of South Korea from the time of its liberation from Japan in 1945 to the present in its East Asian and global context. The course uses a multi-disciplinary approach, including history, anthropology, literature, and film. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in EALC 362. Prerequisite: One course on Korea or East Asia.

EALC 563. Cultural History of Korea. 3 Credits. H

This course examines the cultural history of Korea in periods prior to the 19th Century. Special attention is given to varying constructions of cultural value, heritage, and identity, together with the historically specific factors that engendered them.

EALC 570. The Structure of Japanese. 3 Credits. H

A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 570.)

EALC 572. The Structure of Chinese. 3 Credits. H

A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as LING 572.)

EALC 575. Love, Sexuality and Gender in Japanese Literature. 3 Credits. HL H

An examination of Japanese attitudes toward love, sexuality, and gender differences as revealed in literature from the tenth century to the present. Discussion format. Not open to students with credit in EALC 375/ WGSS 376. (Same as WGSS 576.) Prerequisite: One course in EALC or WGSS.

EALC 580. Popular Cultures of East Asia. 3 Credits. NW H

This course examines the contemporary popular cultures of Korea, Japan, China, and Taiwan, with particular emphasis on relations between East Asia and North America. Students study the issue of globalization and how the transnational flow of commodities and culture affects local societies and individual identities. They learn to identify, describe, and analyze the cross-cultural content of popular cultural artifacts and modes of expression relating to East Asia. To this end, they explore in detail such subjects as: fashion, foodways, cinema, manga, soap operas, and punk rock. More extensive writing requirements than 380. Not open to students who have taken EALC 380.

EALC 583. Imperial China. 3 Credits. NW H/W

An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as HIST 583.)

EALC 584. Modern China. 3 Credits. NW H/W

An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as HIST 584.)

EALC 585. Reform in Contemporary China. 3 Credits. NW H/W

Examines the epochal changes that have occurred in China from Deng Xiaoping's rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that swept the 1989 "prodemocracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and economic decentralization, and leadership succession. A previous course on China is helpful, but not mandatory. (Same as POLS 668.)

EALC 587. Age of Shoguns: Early Modern Japan. 3 Credits. NW H/W

Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the
formation of traditional cultural forms such as Kabuki theater. (Same as HIST 587.) Prerequisite: An earlier course in history or east Asian languages and cultures, or permission of the instructor.

EALC 588. Japan, 1853-1945. 3 Credits. NW H/W
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as HIST 588.)

EALC 589. Japan Since 1945. 3 Credits. NW H/W
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic "miracle," popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as HIST 589.)

EALC 590. Topics in East Asian Languages and Cultures: _____ 1-9 Credits. H/W
Specific topical courses will be offered every year covering a number of disciplines. Credit, description, and prerequisites will vary. Note: May be repeated for credit up to the stated limit.

EALC 591. Topics in East Asian Languages and Cultures: _____ 1-9 Credits. S/W
Specific topical courses will be offered every year covering a number of disciplines. Credit, descriptions, and prerequisites will vary. Note: May be repeated for credit up to the stated limit.

EALC 610. Minorities in Japan. 3 Credits. S
This course offers a sociological and historical exploration of Japan's minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan's minorities, their historical experiences, current struggles, and future challenges. This course is taught at the 300 and 600-levels, with additional assignments required at the 600-level. (Same as CEAS 610.) Prerequisite: An introductory East Asian Studies course or consent of the instructor.

EALC 618. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Credits. NW H
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. (Same as WGSS 618.) Prerequisite: A course in East Asian studies. Not open to students who have taken EALC 418. This course is taught at the 400 and 600 levels with additional assignments at the 600-level.

EALC 642. Chinese Thought. 3 Credits. NW H/W
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as HUM 524 and PHIL 506.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy.

EALC 656. Government and Politics of East Asia. 3 Credits. NW S/W
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as POLS 656.) Prerequisite: Junior level or consent of the instructor.

EALC 666. Political Economy of East Asia. 3 Credits. S
This course provides basic understanding of fiscal, monetarist, and trade policies; how governments in East Asia use them to pursue growth; the extent to which these governments follow or controvert economics to pursue growth; and how the performances of economies in East Asia relate to the US and global economies. (Same as POLS 666.) Prerequisite: POLS 150.

EALC 676. International Relations of Asia. 3 Credits. S/W
An intensive study of the problems of ideological conflict, diplomatic relations, strategic arrangements, economic cooperation, and cultural exchange in East and Southeast Asia with special emphasis upon the roles of major world powers. (Same as POLS 676.) Prerequisite: Sophomore level or consent of the instructor.

EALC 678. Chinese Foreign Policy. 3 Credits. S/W
In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as GIST 678 and POLS 678.) Prerequisite: Sophomore level or consent of the instructor.

EALC 701. Practicum in Teaching Chinese. 1 Credits.
This course is required every semester for graduate teaching assistants in the Chinese language program in EALC. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Chinese classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department.

EALC 702. Practicum in Teaching Japanese. 1 Credits.
This course is required every semester for graduate teaching assistants in the Japanese language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Japanese language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department.

EALC 703. Practicum in Teaching Korean. 1 Credits.
This course is required every semester for graduate teaching assistants in the Korean language program in East Asian Languages and Cultures. The course will cover applicable second language acquisition theories and principles of foreign language pedagogy and focus on teaching methodologies, instructional techniques, and development of pedagogical materials specific to the Korean language classroom. This class will be conducted in a seminar format. Prerequisite: Teaching appointment in the East Asian Languages and Cultures department.

EALC 704. Contemporary East Asia. 3 Credits.
This graduate seminar explores rapidly changing societies in contemporary East Asia, particularly China, Japan, and Korea. The course provides a critical overview of East Asia and its diversity and complexity using cross-cultural perspectives and interdisciplinary social science approaches, and situates East Asian societies in the context of globalization. (Same as CEAS 704.)

EALC 715. Survey of Japanese Film. 3 Credits.
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth
century Japanese film. Through secondary readings, lectures, and discussions, students will examine how Japanese cinema as an institution responds to and intervenes in the social, cultural, and political history of twentieth-century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as FMS 743.)

EALC 716. Fiction and Film in Japan. 3 Credits.
A survey of major works of fiction and film in modern Japan. Topics include the social and spiritual challenges of modernization, urbanization, and the issues of race and national identity. Works by Akutagawa, Kawabata, Kurosawa, Ogai, Ozu, Soseki, and Tanizaki, and others will be covered. Lectures, discussions, readings, and films in English. A knowledge of Japanese language is not required. This course is offered at the 300 and the 700 levels, with additional assignments at the 700 level. Not open to students who have completed EALC 316.

EALC 717. Contemporary Japanese Literature in Translation: 1945-Present. 3 Credits.
A survey of major literary works of Japan's post-war and contemporary eras. Topics include life during and after the war, the experience of the atomic bomb, and the postmodern landscape. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. An individual research project in an area of the student's special interest will be required. Not open to students who have completed EALC 317.

EALC 718. Readings in Modern Chinese Literature. 2-3 Credits.
A general survey of the important writers of the 20th century and their works. Lectures, readings, and discussions in English. A knowledge of Chinese is not required. (Not open to students with credit in EALC 318.)

EALC 720. Daily Life in China from the Opium War to 1911. 3 Credits.
This course examines everyday life in China from the mid-19th century to the end of the last dynasty in 1911. The focus is on living conditions, social customs, and gender relations of people of all social levels, from emperors and empresses to servants, prostitutes, and concubines. Other topics include: the culture of drugs in the form of opium smoking, including how opium served as a key point of contact between China and the Euro-west; sexual culture, especially in the form of the history of prostitution and gender roles and values in China on the verge of modernity; interactions in daily life between Chinese and Westerners in China; and the experience of China's last imperial rulers. These topics are weighed against the backdrop of the decline of China's last dynasty and the concurrent impact of Modernity in the form of social, political, and technological change, especially as effected by the intrusion of the Euro-west. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EALC 420. Prerequisite: An upper-level course on China or East Asia or consent of instructor.

EALC 725. Ancient China. 3 Credits.
A survey of ancient Chinese culture to the Qin period. Major archaeological discoveries and the literary tradition will be taken as the primary evidence through which a number of topics are introduced (for example: environment, food, writing, art, thought, ritual). A knowledge of Chinese is not required.

EALC 743. Contemporary Japanese Film. 3 Credits.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as FMS 743.)

EALC 790. Topics in East Asian Languages and Cultures: _____ 1-3 Credits.
Special topical courses covering a number of disciplines. Credit descriptions and prerequisites will vary. NOTE: May be repeated for up to 12 total credits.

EALC 801. Directed Readings. 1-5 Credits.
Designed to meet the needs of advanced students whose study in East Asian studies cannot be met with regular courses. Prerequisite: Consent of instructor.

EALC 841. Asian Film. 3 Credits.
Seminar on various national film cultures of East and Southeast Asia. Representative films are studied from formal, stylistic, and socio-historic perspectives. Addresses the impact of key cultural, economic and political issues on each film industry. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level.

EALC 899. Thesis. 1-6 Credits.
An inquiry into the source material upon a specific subject.

Courses

ECIV 104. Eastern Civilizations. 3 Credits. HL/NW H/W
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Does not complete major requirement. Not open to students with credit in ECIV 304.

ECIV 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Eastern Civilization. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ECIV 304. Eastern Civilizations. 3 Credits. HL/NW H/W
This course acquaints the student with the broad outlines of the traditional cultures and literatures of East Asia, and explores the interaction between these regions and cultures as well as their continuities and disparities. Course materials include translations and discussions of original sources. The course is most appropriate for students with no background in Asian culture. Not open to students with credit in ECIV 104. If majoring in EALC and have completed ECIV 104, see major advisor about completing the ECIV 304 major requirement.

ECIV 305. Eastern Civilizations Honors. 3 Credits. HL/NW H/W
An introductory course designed to acquaint the student with the broad outlines of the traditional cultures and literatures of East Asia. By reading translations of original source materials, the student is able to see the interaction among the various cultures as well as their essential continuity. The course is most appropriate for students without any background in Asian culture. Similar to ECIV 304, but reading and writing assignments reflect the fact that this is an honors course. Open only to students in the University Honors Program or by permission of instructor.

Courses

HNDI 110. Beginning Hindi I. 5 Credits. U F1
An introduction to modern standard Hindi that emphasizes acquisition of basic language skills (speaking, comprehension, reading and writing) through a combination of lecture, drill, and work with the Devanagari script.

**HNDI 120. Beginning Hindi II. 5 Credits. U F2**
A continuation of Beginning Hindi I that builds on basic skills of speaking and comprehension, and the writing and reading of the Devanagari script developed in Beginning Hindi I. Prerequisite: HNDI 110 or placement exam that establishes a level of proficiency in Hindi suited to Beginning Hindi II.

**HNDI 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hungarian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**HNDI 210. Intermediate Hindi I. 3 Credits. U F3**
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 120 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi I.

**HNDI 220. Intermediate Hindi II. 3 Credits. U F4**
Enhancement of speaking, comprehension, reading and writing abilities in modern standard Hindi, with emphasis on grammar. Readings will be introduced from representative genres of Hindi literature. Prerequisite: HNDI 210 or placement exam that establishes a level of proficiency in Hindi suited to Intermediate Hindi II.

**HNDI 301. Topics in Hindi Culture, Language and Literature: _____ 3 Credits. U**
Investigation of special topics on Hindi culture, language and literature at the undergraduate level. May be repeated for credit when topic varies.

**HNDI 310. Advanced Hindi I. 3 Credits. U FP**
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 220 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi I.

**HNDI 320. Advanced Hindi II. 3 Credits. U FP**
Enhancement of speaking, comprehension, reading and writing abilities in Hindi. Readings are introduced from representative genres of Hindi literature. Prerequisite: HNDI 310 or placement exam that establishes a level of proficiency in Hindi suited to Advanced Hindi II.

**HNDI 593. Directed Study in Hindi Culture and Literature: _____ 1-3 Credits. H**
This course is designed for students seeking proficiency in Hindi beyond HNDI 320. Instructor will direct the student through readings and materials in Hindi that will add to the students substantive knowledge of India and culture in the Hindi language. May be taken multiple semesters for credit with varying content. Prerequisite: HNDI 320, and consent of instructor.

## Courses

**JPN 100. Beginning Japanese I. 3 Credits. U**
An introduction to Japanese. Familiarity with the basic structural patterns of the language through conversation is stressed. The hiragana and katakana syllabaries are introduced and a few characters are learned. Usually offered as part of a Summer Study Abroad Program.

**JPN 101. Beginning Japanese II. 3 Credits. U**
Continuation of JPN 100. Available to students who took JPN 100 as part of the Summer Study Abroad Program. Not available for credit for students who have previously completed JPN 104. Prerequisite: JPN 100 or equivalent.

**JPN 104. Elementary Japanese I. 5 Credits. U F1**
Three hours of lecture, three hours of drill per week. Acquisition of basic language skills (listening, speaking, reading, writing). Not available for credit for students who have previously completed JPN 101.

**JPN 106. Elementary Japanese II. 5 Credits. U F2**
Continuation of JPN 104. Prerequisite: JPN 101, JPN 104, or equivalent.

**JPN 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Japanese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**JPN 204. Intermediate Japanese I. 5 Credits. U F3**
Three hours of lecture, three hours of drill. Prerequisite: JPN 108 or equivalent.

**JPN 206. Intermediate Japanese Conversation. 2-4 Credits. U**
Enhancement of conversational ability at the intermediate level. Used primarily to accommodate transfer credits. Prerequisite: JPN 204 or equivalent.

**JPN 208. Intermediate Japanese II. 5 Credits. U F4**
Continuation of JPN 204. Prerequisite: JPN 204.

**JPN 226. Japanese in Context - Intermediate. 3 Credits. U**
Supervised and individualized study and practice of language skills through direct experience in interviews and guided practical applications in various public settings in Japan. Some conventional classroom instruction in grammar included. Offered only during the Summer Institute in Hiratsuka, Japan. Prerequisite: Two semesters or the equivalent of Japanese language study.

**JPN 233. Special Skills in Japanese: _____ 1-4 Credits. U**
Instruction in special skills in Japanese, such as pronunciation, recognition of Chinese characters, comprehension of broadcast media, etc. at the freshman/sophomore level. Course work must be arranged through the office of KU Study Abroad and approved by the Department of East Asian Languages and Cultures. May be repeated for credit if content varies.

**JPN 333. Special Skills in Japanese: _____ 1-4 Credits. U**
Instruction in special skills in Japanese, such as recognition and writing of Chinese characters, comprehension of broadcast media, etc. at the junior/senior level. If part of a Study Abroad program, approval by the Department of East Asian Languages and Cultures is required. May be repeated for credit if content varies.

**JPN 386. Advanced Japanese Conversation III. 1-3 Credits. U FP**
Instruction in discussion in formal contexts and speech making. Prerequisite: JPN 504 or equivalent.

**JPN 498. Directed Readings in Japanese. 1-4 Credits. H/W FP**
Readings in Japanese on a subject selected by a student with the advice and direction of the instructor. Individual meetings and reports. Prerequisite: Consent of instructor.

**JPN 504. Advanced Modern Japanese I. 5 Credits. H/W FP**
Readings in selected modern Japanese texts on various topics: history, education, society, and business. Includes oral discussion and written short essays. Meets five hours per week. Prerequisite: JPN 208 or equivalent.
JPN 508. Advanced Modern Japanese II. 5 Credits. H/W FP
Continuation of JPN 504. Prerequisite: JPN 504 or equivalent.

JPN 562. Modern Japanese Texts I. 3 Credits. H/W FP
Readings and interpretation of modern Japanese texts from various fields. Continued study of the language in the form of oral discussion and written reports. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in JPN 762. Prerequisite: JPN 508.

JPN 564. Modern Japanese Texts II. 3 Credits. H/W FP
A continuation of JPN 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in JPN 764. Prerequisite: JPN 562 or equivalent.

JPN 598. Readings in: ______. 1-3 Credits. H/W FP
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: JPN 564 or permission of instructor.

JPN 690. Seminar in: ______. 1-3 Credits. H/W FP
Varying topics with varying prerequisites.

JPN 762. Modern Japanese Texts I. 3 Credits.
Readings and interpretation of modern Japanese texts from various fields. Continued study of the language in the form of oral discussion and written reports. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in JPN 762. Prerequisite: JPN 508.

JPN 764. Modern Japanese Texts II. 3 Credits.
A continuation of JPN 762. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in JPN 764. Prerequisite: JPN 562 or equivalent.

JPN 801. Directed Readings and Research in Japanese. 1-4 Credits. FP
Advanced language training for the study of Japanese sources in the humanities or social science field of the student. Prerequisite: JPN 564 or consent of instructor.

Courses

KOR 100. Beginning Korean I. 3 Credits. U
Introduction to basic communication skills in Korean and Korean culture; Korean alphabet, survival Korean expressions, cultural etiquette and norms; speaking, listening, reading, and writing in basic Korean. Does not fulfill College of Liberal Arts and Sciences foreign language requirements or department major and minor requirements.

KOR 101. Beginning Korean II. 3 Credits. U
Continuation of KOR 100. Basic communicative skills in Korean. Speaking, listening, reading, writing, and culture are equally emphasized throughout the course. Does not fulfill College of Liberal Arts and Sciences foreign language requirements or department major and minor requirements. Prerequisite: KOR 100 or equivalent.

KOR 104. Elementary Korean I. 5 Credits. U F1
Five hours of class and two hours of drill in the spoken language each week. Grammar and readings in selected texts.

KOR 108. Elementary Korean II. 5 Credits. U F2
Continuation of KOR 104. Prerequisite: KOR 104.

KOR 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Korean. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

KOR 204. Intermediate Korean I. 5 Credits. U F3
Five hours of class and two hours of spoken drill. Readings in selected texts in modern Korean. Prerequisite: KOR 108 or equivalent.

KOR 208. Intermediate Korean II. 5 Credits. U F4
Continuation of KOR 204. Prerequisite: KOR 204.

KOR 498. Directed Readings in Korean. 1-4 Credits. H/W FP
Readings in and discussion of selected modern Korean texts on various topics: history, literature, society, and language. Prerequisite: KOR 208 or equivalent.

KOR 504. Advanced Modern Korean I. 5 Credits. H/W FP
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 762. Prerequisite: KOR 508 or equivalent.

KOR 562. Modern Korean Texts I. 3 Credits. H FP
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 508 or equivalent.

KOR 564. Modern Korean Texts II. 3 Credits. H/FP
Continuation of KOR 562. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 564. Prerequisite: KOR 562 or equivalent.

KOR 598. Readings in: ______. 1-3 Credits. U
Students will read selections from materials on a given topic or topics. May be repeated for credit. Prerequisite: KOR 508 or permission of instructor.

KOR 762. Modern Korean Texts I. 3 Credits. H/FP
Readings and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 762. Prerequisite: KOR 508 or equivalent.

KOR 764. Modern Korean Texts II. 3 Credits. H/FP
Continuation of KOR 762. Reading and analysis of modern or contemporary texts from various fields. Includes oral discussion and written essays. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in KOR 764. Prerequisite: KOR 562 or equivalent.

Courses

MONG 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Mongolian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

Courses

TIB 101. Elementary Tibetan I. 3 Credits. U F1
An introduction to the Tibetan language in both its literary and colloquial forms according to the Central Tibetan dialects. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement.

TIB 102. Elementary Tibetan II. 3 Credits. U F2
A continuation of TIB 101. Prerequisite: TIB 101 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement.

TIB 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Tibetan. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

TIB 201. Intermediate Tibetan I. 3 Credits. U F3
Continuation of TIB 102. Prerequisite: TIB 102 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement.

TIB 202. Intermediate Tibetan II. 3 Credits. U F4
Continuation of TIB 201. Prerequisite: TIB 201 or equivalent. Four semesters of 3-credit Tibetan language courses fulfill the College of Liberal Arts and Sciences foreign language requirement.

TIB 301. Advanced Tibetan I. 1-3 Credits. H
This course focuses on developing reading fluency in classical and modern Tibetan with continued practice in the spoken language as well. Prerequisite: TIB 202 or permission of the instructor.

TIB 302. Advanced Tibetan II. 1-3 Credits. H
This course focuses on more advanced reading fluency in classical and modern Tibetan with continued practice in the spoken language as well. Prerequisite: TIB 301 or permission of the instructor.

Courses

UYGR 101. Elementary Uyghur I. 3 Credits. U F1
Uyghur is an important Central Asian Turkic language spoken by nine million people in China. The first semester is designed to give the student basic communicative competency, including pronunciation and intonation, structure, and syntax. Effective oral and written communication is stressed.

UYGR 102. Elementary Uyghur II. 3 Credits. U F2
Continuation of UYGR 101. Prerequisite: UYGR 101 or the equivalent.

UYGR 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Uyghur. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

UYGR 201. Intermediate Uyghur I. 3 Credits. U F3
Continuation of UYGR 102. Prerequisite: UYGR 102 or equivalent.

UYGR 202. Intermediate Uyghur II. 3 Credits. U F4
Continuation of UYGR 201. Prerequisite: UYGR 201 or equivalent.

Bachelor of Arts in East Asian Languages and Cultures

Why study East Asian languages and cultures?

China, Japan, and Korea are three of the oldest continuous civilizations in the world, offering rich literary and philosophical traditions, vibrant contemporary cultures, and cutting-edge technological innovation. Mainland China and Japan have the world’s largest economies after the United States and, along with South Korea and Taiwan, are key U.S. trading partners. Thousands of U.S. companies do business with East Asia. The economic and political relationships between the U.S. and East Asia are among the most important for the U.S. in the 21st century.

With an EALC B.A., students can pursue a range of careers in business, government, education, nonprofit organizations, to name a few, or continue on to graduate study in East Asian languages and cultures. Many students pair an EALC major or minor with a second major to widen their skill-set and increase their competitiveness as they enter the global marketplace. Some students choose EALC-related courses to connect with their heritage or to fulfill personal interests.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Major and Concentrations

For undergraduates in the department, the B.A. degree in East Asian languages and cultures is available in the following concentrations:

1. Chinese language and literature.
2. Japanese language and literature.
3. East Asian studies with Chinese language.
4. East Asian studies with Japanese language.
5. East Asian studies with Korean language.
6. Double language Concentration: Chinese and/or Japanese and/or Korean.

**First- and Second-Year Preparation**

Students considering a major in EALC should begin language training as soon as possible, starting with CHIN 104/JPN 104/KOR 104-CHIN 108/JPN 108/KOR 108 in the first year and advancing to the intermediate 204-208 level. Students are encouraged to take ECIV 104/ECIV 304/ECIV 305 as soon as possible.

Students are encouraged to complete EALC 142 to fulfill the KU Core goal 5.1. Talk to the undergraduate advisor in the target language to plan a 4-year course of study. Email ealc@ku.edu or call 785-864-9250 for information about advisors to contact.

**Requirements for the B.A. Major**

**Chinese Language and Literature Concentration**

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<th>Title</th>
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<td>CHIN 104</td>
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<td>CHIN 108</td>
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<td>CHIN 204</td>
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<tr>
<td>&amp; CHIN 208</td>
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<tr>
<td>ECIV 104</td>
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<td>or ECIV 304</td>
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<td>or ECIV 305</td>
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<td>Advanced Language. Satisfied by:</td>
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<tr>
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<td>and Advanced Modern Chinese II</td>
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<td>CHIN 342</td>
<td>Introduction to Classical Chinese</td>
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<tr>
<td>or CHIN 542</td>
<td>Introduction to Classical Chinese</td>
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<td>CHIN 562</td>
<td>Modern Chinese Texts I</td>
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<tr>
<td>or CHIN 744</td>
<td>Readings in Classical Chinese:_____</td>
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<tr>
<td>CHIN 564</td>
<td>Modern Chinese Texts II</td>
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<td>Majors choosing this concentration must complete a course in each of the following areas (A course cannot be used in more than 1 area). Please consult an EALC advisor for additional courses that may fulfill the requirements:</td>
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<tr>
<td>or CHIN 744</td>
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<tr>
<td>EALC 330</td>
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<tr>
<td>or EALC 530</td>
<td>China's Cultural Legacy</td>
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<tr>
<td>EALC 418</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
<td></td>
</tr>
<tr>
<td>or WGSS 41</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
<td></td>
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<tr>
<td>or EALC 618</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
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<td>EALC 420</td>
<td>Daily Life in China From the Opium War to 1911</td>
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<td>EALC 583</td>
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<td>or HIST 583</td>
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<td>EALC 642</td>
<td>Chinese Thought</td>
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<td>or HUM 524</td>
<td>Chinese Thought</td>
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</tr>
<tr>
<td>or PHIL 506</td>
<td>Chinese Thought</td>
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<tr>
<td>HA 368</td>
<td>Art and Culture of China</td>
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<tr>
<td>or HA 468</td>
<td>Art and Culture of China, Honors</td>
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<tr>
<td>HA 488</td>
<td>Chinese Painting, Honors</td>
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<tr>
<td>HA 545</td>
<td>Early Chinese Art</td>
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<td>HA 546</td>
<td>Chinese Sculpture</td>
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<tr>
<td>HA 549</td>
<td>Chinese Painting</td>
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<tr>
<td>Satisfied by one course in Modern Chinese literature or culture:</td>
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<tr>
<td>EALC 318</td>
<td>Modern Chinese Fiction and Film</td>
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<tr>
<td>or EALC 518</td>
<td>Modern Chinese Fiction &amp; Film</td>
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<tr>
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<td>or EALC 519</td>
<td>Contemporary Chinese Fiction and Film</td>
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<td>or HIST 584</td>
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<td>EALC 585</td>
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<td>or POLS 668</td>
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<tr>
<td>or POLS 67</td>
<td>Chinese Foreign Policy</td>
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<tr>
<td>HIST 394</td>
<td>Made in China: Chinese Business History</td>
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<tr>
<td>HIST 397</td>
<td>From Mao to Now: China's Red Revolution</td>
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<tr>
<td>HIST 604</td>
<td>Contemporary Greater China</td>
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<td>Satisfied by one course on China:</td>
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<tr>
<td>CHIN 544</td>
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<td>or CHIN 744</td>
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<td>or EALC 518</td>
<td>Modern Chinese Fiction &amp; Film</td>
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<td>Contemporary Chinese Fiction and Film</td>
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<tr>
<td>or EALC 519</td>
<td>Contemporary Chinese Fiction and Film</td>
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<tr>
<td>EALC 330</td>
<td>China's Cultural Legacy</td>
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<tr>
<td>or EALC 530</td>
<td>China's Cultural Legacy</td>
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<tr>
<td>EALC 418</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
<td></td>
</tr>
<tr>
<td>or WGSS 41</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
<td></td>
</tr>
<tr>
<td>or EALC 618</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
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<tr>
<td>EALC 420</td>
<td>Daily Life in China From the Opium War to 1911</td>
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<td>EALC 572</td>
<td>The Structure of Chinese</td>
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<td>EALC 583</td>
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<td>or HIST 583</td>
<td>Imperial China</td>
<td></td>
</tr>
<tr>
<td>EALC 584</td>
<td>Modern China</td>
<td></td>
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</table>
or HIST 584 Modern China
EALC 585 Politics and Society in China
or POLS 666 Politics and Society in China
EALC 642 Chinese Thought
or HUM 524 Chinese Thought
or PHIL 506 Chinese Thought
HA 368 Art and Culture of China
or HA 468 Art and Culture of China, Honors
HA 488 Chinese Painting, Honors
HA 545 Early Chinese Art
HA 546 Chinese Sculpture
HA 549 Chinese Painting
HIST 394 Made in China: Chinese History
HIST 397 From Mao to Now: China's Red Revolution
HIST 604 Contemporary Greater China

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 31 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 12 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 28 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Japanese Language and Literature Concentration**

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<td><strong>East Asian Languages and Cultures Prerequisite Knowledge</strong></td>
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<tr>
<td>JPN 104</td>
<td>Elementary Japanese I</td>
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<tr>
<td>JPN 108</td>
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<td>JPN 204</td>
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<td>&amp; JPN 208</td>
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<td><strong>East Asian Languages and Cultures Core Knowledge and Skills</strong></td>
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<tr>
<td>ECIV 104</td>
<td>Eastern Civilizations</td>
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<td>or ECIV 304</td>
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<td>or ECIV 305</td>
<td>Eastern Civilizations Honors</td>
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<td>EALC 315</td>
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<td>&amp; EALC 316</td>
<td>Modern Japanese Fiction and Film</td>
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<td>EALC 317</td>
<td>Contemporary Japanese Literature in Translation: 1945-Present</td>
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<td>EALC 543</td>
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<td>EALC 312</td>
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<td>EALC 367</td>
<td>Art and Culture of Japan</td>
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<td>EALC 375</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
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<td>EALC 385</td>
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<td>or HA 585</td>
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<td>Age of Shoguns: Early Modern Japan</td>
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<td>HA 586</td>
<td>Japanese Painting</td>
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<td>Japanese Sculpture</td>
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<td>HIST 395</td>
<td>History of Sushi</td>
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<td>HIST 398</td>
<td>Introduction to History of Japan: Anime to Zen</td>
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<td>HIST 399</td>
<td>The Samurai</td>
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<td>Beer, Sake, Tea-Beverages in Japan History</td>
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<td>REL 360</td>
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<td>EALC 308</td>
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<tr>
<td>EALC 315</td>
<td>Survey of Japanese Film</td>
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</table>
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 31 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 12 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 28 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semster/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

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### East Asian Studies with Chinese Language Concentration

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<td>CHIN 104</td>
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<tr>
<td></td>
<td>Elementary Chinese II. Satisfied by:</td>
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<td>CHIN 108</td>
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<td></td>
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<tr>
<td>CHIN 204</td>
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<td>10</td>
</tr>
<tr>
<td>&amp; CHIN 208</td>
<td>Intermediate Chinese II</td>
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<tr>
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<tr>
<td></td>
<td>in each of the following areas:</td>
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<td>ECIV 104</td>
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<td>the following areas (a course cannot be used in more than one area).</td>
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<tr>
<td>or CHIN 542</td>
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</tr>
<tr>
<td>CHIN 544</td>
<td>Readings in Classical Chinese: _____</td>
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</tr>
<tr>
<td>or CHIN 744</td>
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<td>China's Cultural Legacy</td>
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<tr>
<td>or EALC 530</td>
<td>China's Cultural Legacy</td>
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<tr>
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<td>Sexual Politics in Chinese Literature and Culture:</td>
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<tr>
<td>or WGSS 41 or EALC 618</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
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<td>or EALC 618</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
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<tr>
<td>or EALC 420</td>
<td>Daily Life in China From the Opium War to 1911</td>
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<tr>
<td>EALC 642</td>
<td>Chinese Thought</td>
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<tr>
<td>or HUM 524</td>
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</tr>
<tr>
<td>or PHIL 506</td>
<td>Chinese Thought</td>
<td></td>
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<tr>
<td>HA 368</td>
<td>Art and Culture of China</td>
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<tr>
<td>or HA 468</td>
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<td>HA 488</td>
<td>Chinese Painting, Honors</td>
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<td>HA 546</td>
<td>Chinese Sculpture</td>
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<td>HA 549</td>
<td>Chinese Painting</td>
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Modern or Contemporary Chinese Literature, Culture, or Language.
Satisfied by one of the following:

- CHIN 562  Modern Chinese Texts I
- CHIN 564  Modern Chinese Texts II
- EALC 318  Modern Chinese Fiction and Film
- EALC 516  Modern Chinese Fiction & Film
- EALC 319  Contemporary Chinese Fiction and Film
- EALC 519  Contemporary Chinese Fiction and Film
- EALC 584  Modern China
  or HIST 584  Modern China
- EALC 585  Politics and Society in China
  or POLS 668  Politics and Society in China
- EALC 678  Chinese Foreign Policy
  or GIST 678  Chinese Foreign Policy
  or POLS 676  Chinese Foreign Policy
- HIST 394  Made in China: Chinese Business History
- HIST 397  From Mao to Now: China's Red Revolution
- HIST 604  Contemporary Greater China

East Asia. Satisfied by one of the following:

- COMS 557  East Asian Communication
- EALC 308  Music in East Asia
  or MUSC 308  Music in East Asia
- EALC 320  Modern East Asia: Multiple Perspectives
- EALC 353  Language and Society in East Asia
  or EALC 553  Language and Society in East Asia
- EALC 380  Popular Cultures of East Asia
  or EALC 580  Popular Cultures of East Asia
- EALC 385  The Art of Buddhism
  or HA 385  The Art of Buddhism
  or HA 585  The Art of Buddhism
- EALC 656  Government and Politics of East Asia
  or POLS 656  Government and Politics of East Asia
- EALC 666  Political Economy of East Asia
  or POLS 666  Political Economy of East Asia
- EALC 676  International Relations of Asia
  or POLS 676  International Relations of Asia
- GEOG 396  East Asia
- HA 347  Ceramics of East Asia
  or HA 547  Ceramics of East Asia
- REL 360  The Buddhist Tradition in Asia

China or East Asia. Satisfied by two courses chosen from the following:

- CHIN 342  Introduction to Classical Chinese
  or CHIN 542  Introduction to Classical Chinese
- CHIN 544  Readings in Classical Chinese: 1
  or CHIN 744  Readings in Classical Chinese: 1
- COMS 557  East Asian Communication
- EALC 308  Music in East Asia
  or MUSC 308  Music in East Asia
- EALC 318  Modern Chinese Fiction and Film
  or EALC 516  Modern Chinese Fiction & Film
- EALC 319  Contemporary Chinese Fiction and Film
- EALC 320  Modern East Asia: Multiple Perspectives
- EALC 330  China's Cultural Legacy
  or EALC 530  China's Cultural Legacy
- EALC 353  Language and Society in East Asia
  or EALC 553  Language and Society in East Asia
- EALC 380  Popular Cultures of East Asia
  or EALC 580  Popular Cultures of East Asia
- EALC 385  The Art of Buddhism
  or HA 385  The Art of Buddhism
  or HA 585  The Art of Buddhism
- EALC 418  Sexual Politics in Chinese Literature and Culture: Premodern Times
  or WGSS 418  Sexual Politics in Chinese Literature and Culture: Premodern Times
- EALC 618  Sexual Politics in Chinese Literature and Culture: Premodern Times
- EALC 420  Daily Life in China From the Opium War to 1911
- EALC 572  The Structure of Chinese
- EALC 583  Imperial China
  or HIST 583  Imperial China
- EALC 584  Modern China
  or HIST 584  Modern China
- EALC 585  Politics and Society in China
  or POLS 666  Politics and Society in China
- EALC 642  Chinese Thought
  or HUM 524  Chinese Thought
  or PHIL 506  Chinese Thought
- EALC 656  Government and Politics of East Asia
  or POLS 656  Government and Politics of East Asia
- EALC 666  Political Economy of East Asia
  or POLS 666  Political Economy of East Asia
- EALC 676  International Relations of Asia
  or POLS 676  International Relations of Asia
- EALC 678  Chinese Foreign Policy
  or GIST 678  Chinese Foreign Policy
  or POLS 678  Chinese Foreign Policy
- GEOG 396  East Asia
- HA 347  Ceramics of East Asia
  or HA 547  Ceramics of East Asia
- HA 368  Art and Culture of China
  or HA 468  Art and Culture of China, Honors
- HA 488  Chinese Painting, Honors
- HA 545  Early Chinese Art
- HA 546  Chinese Sculpture
- HA 549  Chinese Painting
- HIST 394  Made in China: Chinese Business History
- HIST 397  From Mao to Now: China's Red Revolution
- HIST 604  Contemporary Greater China
- REL 360  The Buddhist Tradition in Asia

Japan or Korea. Satisfied by one of the following:

- EALC 312  Japan's Literary Legacy
- EALC 315  Survey of Japanese Film
EALC 316 Modern Japanese Fiction and Film
or EALC 716 Fiction and Film in Japan
EALC 317 Contemporary Japanese Fiction and Film
or EALC 717 Contemporary Japanese Literature in Translation: 1945-Present
EALC 325 Minorities in Japan
or EALC 610 Minorities in Japan
EALC 344 Manga: Histories and Theories
or HA 344 Manga: Histories and Theories
EALC 354 Japanese Prints
or HA 354 Japanese Prints
EALC 360 Buddhist Art of Korea
or HA 361 Buddhist Art of Korea
EALC 361 Colonial Korea
or EALC 561 Colonial Korea
EALC 362 Post-Colonial Korea
or EALC 562 Post-Colonial Korea
EALC 367 Art and Culture of Japan
or HA 367 Art and Culture of Japan
EALC 369 Art and Culture of Korea
EALC 372 Ceramics of Korea
or HA 362 Ceramics of Korea
EALC 373 Modern Korean Art and Culture
or HA 363 Modern Korean Art and Culture
EALC 375 Love, Sexuality and Gender in Japanese Literature
EALC 388 Modern and Contemporary Visual Arts of Japan
or HA 388 Modern and Contemporary Visual Arts of Japan
or HA 588 Modern and Contemporary Visual Arts of Japan
EALC 509 Religion in Japan
or REL 509 Religion in Japan
EALC 543 Contemporary Japanese Film
or FMS 543 Contemporary Japanese Film
EALC 563 Cultural History of Korea
EALC 570 The Structure of Japanese
EALC 587 Age of Shoguns: Early Modern Japan
or HIST 587 Age of Shoguns: Early Modern Japan
EALC 588 Japan, 1853-1945
or HIST 588 Japan, 1853-1945
EALC 589 Japan Since 1945
or HIST 589 Japan Since 1945
HA 354 Japanese Prints
or HA 554 Japanese Prints
HA 361 Buddhist Art of Korea
or HA 561 Buddhist Art of Korea
HA 362 Ceramics of Korea
or HA 562 Ceramics of Korea
HA 363 Modern Korean Art and Culture
HA 586 Japanese Painting
HA 587 Japanese Sculpture
HIST 350 The Korean War, 1950-1953
HIST 395 History of Sushi
HIST 398 Introduction to History of Japan: Anime to Zen
HIST 399 The Samurai
HIST 581 The Japanese Empire
HIST 585 Beer, Sake, Tea-Beverages in Japan History
KOR 562 Modern Korean Texts I
KOR 564 Modern Korean Texts II
REL 510 Religion in Korea

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 31 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 12 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 28 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**East Asian Studies with Japanese Language Concentration**

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<th>Title</th>
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<td>Intermediate Japanese I</td>
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<td>Advanced Modern Japanese I &amp; JPN 208</td>
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<td>Majors choosing this concentration must complete a course or courses in each of the following areas:</td>
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<td>Eastern Civilizations. Satisfied by one of the following:</td>
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<td>Japanese Literature, Culture, or Language. Satisfied by one of the following:</td>
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<td>EALC 312 Japan's Literary Legacy</td>
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**Major Hours & Major GPA**

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**Major Hours**
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<td>Manga: Histories and Theories</td>
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**Japan. Satisfied by two courses from the following:**

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<td>East Asian Communication</td>
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<td>Language and Society in East Asia</td>
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<td>EALC 580</td>
<td>Popular Cultures of East Asia</td>
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</tr>
<tr>
<td>EALC 656</td>
<td>Government and Politics of East Asia</td>
</tr>
<tr>
<td>EALC 666</td>
<td>Political Economy of East Asia</td>
</tr>
<tr>
<td>EALC 676</td>
<td>International Relations of Asia</td>
</tr>
<tr>
<td>GEOG 396</td>
<td>East Asia</td>
</tr>
<tr>
<td>HA 347</td>
<td>Ceramics of East Asia</td>
</tr>
<tr>
<td>REL 360</td>
<td>The Buddhist Tradition in Asia</td>
</tr>
</tbody>
</table>
China or Korea. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 342</td>
<td>Introduction to Classical Chinese</td>
<td></td>
</tr>
<tr>
<td>or CHIN 542</td>
<td>Introduction to Classical Chinese</td>
<td></td>
</tr>
<tr>
<td>CHIN 544</td>
<td>Readings in Classical Chinese: _____</td>
<td></td>
</tr>
<tr>
<td>or CHIN 744</td>
<td>Readings in Classical Chinese: _____</td>
<td></td>
</tr>
<tr>
<td>EALC 318</td>
<td>Modern Chinese Fiction and Film</td>
<td></td>
</tr>
<tr>
<td>or EALC 518</td>
<td>Modern Chinese Fiction &amp; Film</td>
<td></td>
</tr>
<tr>
<td>EALC 319</td>
<td>Contemporary Chinese Fiction and Film</td>
<td></td>
</tr>
<tr>
<td>or EALC 519</td>
<td>Contemporary Chinese Fiction and Film</td>
<td></td>
</tr>
<tr>
<td>EALC 330</td>
<td>China's Cultural Legacy</td>
<td></td>
</tr>
<tr>
<td>or EALC 533</td>
<td>China's Cultural Legacy</td>
<td></td>
</tr>
<tr>
<td>EALC 360</td>
<td>Buddhist Art of Korea</td>
<td></td>
</tr>
<tr>
<td>or HA 361</td>
<td>Buddhist Art of Korea</td>
<td></td>
</tr>
<tr>
<td>or HA 561</td>
<td>Buddhist Art of Korea</td>
<td></td>
</tr>
<tr>
<td>EALC 361</td>
<td>Colonial Korea</td>
<td></td>
</tr>
<tr>
<td>or EALC 561</td>
<td>Colonial Korea</td>
<td></td>
</tr>
<tr>
<td>EALC 362</td>
<td>Post-Colonial Korea</td>
<td></td>
</tr>
<tr>
<td>or EALC 562</td>
<td>Post-Colonial Korea</td>
<td></td>
</tr>
<tr>
<td>EALC 369</td>
<td>Art and Culture of Korea</td>
<td></td>
</tr>
<tr>
<td>EALC 372</td>
<td>Ceramics of Korea</td>
<td></td>
</tr>
<tr>
<td>or HA 362</td>
<td>Ceramics of Korea</td>
<td></td>
</tr>
<tr>
<td>or HA 562</td>
<td>Ceramics of Korea</td>
<td></td>
</tr>
<tr>
<td>EALC 373</td>
<td>Modern Korean Art and Culture</td>
<td></td>
</tr>
<tr>
<td>or HA 363</td>
<td>Modern Korean Art and Culture</td>
<td></td>
</tr>
<tr>
<td>EALC 418</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
<td></td>
</tr>
<tr>
<td>or WGSS 418</td>
<td>Sexual Politics in Chinese Literature: Premodern Times</td>
<td></td>
</tr>
<tr>
<td>or EALC 618</td>
<td>Sexual Politics in Chinese Literature: Premodern Times</td>
<td></td>
</tr>
<tr>
<td>EALC 420</td>
<td>Daily Life in China From the Opium War to 1911</td>
<td></td>
</tr>
<tr>
<td>EALC 563</td>
<td>Cultural History of Korea</td>
<td></td>
</tr>
<tr>
<td>EALC 583</td>
<td>Imperial China</td>
<td></td>
</tr>
<tr>
<td>or HIST 583</td>
<td>Imperial China</td>
<td></td>
</tr>
<tr>
<td>EALC 584</td>
<td>Modern China</td>
<td></td>
</tr>
<tr>
<td>or HIST 584</td>
<td>Modern China</td>
<td></td>
</tr>
<tr>
<td>EALC 585</td>
<td>Politics and Society in China</td>
<td></td>
</tr>
<tr>
<td>or POLS 664Politics and Society in China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EALC 642</td>
<td>Chinese Thought</td>
<td></td>
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<tr>
<td>or HUM 524</td>
<td>Chinese Thought</td>
<td></td>
</tr>
<tr>
<td>or PHIL 506</td>
<td>Chinese Thought</td>
<td></td>
</tr>
<tr>
<td>EALC 678</td>
<td>Chinese Foreign Policy</td>
<td></td>
</tr>
<tr>
<td>or GIST 678</td>
<td>Chinese Foreign Policy</td>
<td></td>
</tr>
<tr>
<td>or POLS 678</td>
<td>Chinese Foreign Policy</td>
<td></td>
</tr>
<tr>
<td>HA 363</td>
<td>Modern Korean Art and Culture</td>
<td></td>
</tr>
<tr>
<td>HA 368</td>
<td>Art and Culture of China</td>
<td></td>
</tr>
<tr>
<td>or HA 468</td>
<td>Art and Culture of China, Honors</td>
<td></td>
</tr>
<tr>
<td>HA 488</td>
<td>Chinese Painting, Honors</td>
<td></td>
</tr>
<tr>
<td>HA 545</td>
<td>Early Chinese Art</td>
<td></td>
</tr>
<tr>
<td>HA 546</td>
<td>Chinese Sculpture</td>
<td></td>
</tr>
<tr>
<td>HA 549</td>
<td>Chinese Painting</td>
<td></td>
</tr>
<tr>
<td>HIST 350</td>
<td>The Korean War, 1950-1953</td>
<td></td>
</tr>
<tr>
<td>HIST 394</td>
<td>Made in China: Chinese Business History</td>
<td></td>
</tr>
</tbody>
</table>

East Asian Studies with Korean Language Concentration

**Code** | **Title** | **Hours**
--- | --- | ---
HIST 397 | From Mao to Now: China's Red Revolution | 12
HIST 604 | Contemporary Greater China | 3
KOR 562 | Modern Korean Texts I | 3
KOR 564 | Modern Korean Texts II | 3
REL 510 | Religion in Korea | 3

**East Asian Languages and Cultures Prerequisite Knowledge**

Elementary Korean I. Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOR 104</td>
<td>Elementary Korean I</td>
<td>5</td>
</tr>
</tbody>
</table>

Elementary Korean II. Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOR 108</td>
<td>Elementary Korean II</td>
<td>5</td>
</tr>
</tbody>
</table>

**Language Proficiency. Satisfied by:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOR 204</td>
<td>Intermediate Korean I</td>
<td>10</td>
</tr>
<tr>
<td>&amp; KOR 208</td>
<td>and Intermediate Korean II</td>
<td>10</td>
</tr>
</tbody>
</table>

**East Asian Languages and Cultures Core Knowledge and Skills**

Majors choosing this concentration must complete a course or courses in each of the following areas:

- **Eastern Civilizations.** Satisfied by one of the following:
  - ECIV 104 | Eastern Civilizations | 3 |
  - or ECIV 304 | Eastern Civilizations | 3 |
  - or ECIV 305 | Eastern Civilizations Honors | 3 |

**Advanced Language.** Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOR 504</td>
<td>Advanced Modern Korean I</td>
<td>10</td>
</tr>
<tr>
<td>&amp; KOR 508</td>
<td>and Advanced Modern Korean II</td>
<td>10</td>
</tr>
</tbody>
</table>

**East Asian Languages and Cultures Required Electives** 18

Majors choosing this concentration must complete a course in each of the following areas (a course cannot be used in more than one area). Please consult an EALC advisor for additional courses that may fulfill the requirements:

Korea. Satisfied by two of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 360</td>
<td>Buddhist Art of Korea</td>
<td>3</td>
</tr>
<tr>
<td>or HA 361</td>
<td>Buddhist Art of Korea</td>
<td>3</td>
</tr>
<tr>
<td>or HA 561</td>
<td>Buddhist Art of Korea</td>
<td>3</td>
</tr>
<tr>
<td>EALC 361</td>
<td>Colonial Korea</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 31 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 12 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 28 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 308</td>
<td>Music in East Asia</td>
</tr>
<tr>
<td>or MUSC 30</td>
<td>Music in East Asia</td>
</tr>
<tr>
<td>EALC 312</td>
<td>Japan's Literary Legacy</td>
</tr>
<tr>
<td>EALC 315</td>
<td>Survey of Japanese Film</td>
</tr>
<tr>
<td>EALC 316</td>
<td>Modern Japanese Fiction and Film</td>
</tr>
<tr>
<td>or EALC 716</td>
<td>Fiction and Film in Japan</td>
</tr>
<tr>
<td>EALC 317</td>
<td>Contemporary Japanese Fiction and Film</td>
</tr>
<tr>
<td>or EALC 717</td>
<td>Contemporary Japanese Literature in Translation: 1945-Present</td>
</tr>
<tr>
<td>EALC 318</td>
<td>Modern Chinese Fiction and Film</td>
</tr>
<tr>
<td>or EALC 518</td>
<td>Modern Chinese Fiction &amp; Film</td>
</tr>
<tr>
<td>EALC 319</td>
<td>Contemporary Chinese Fiction and Film</td>
</tr>
<tr>
<td>or EALC 519</td>
<td>Contemporary Chinese Fiction and Film</td>
</tr>
<tr>
<td>EALC 325</td>
<td>Minorities in Japan</td>
</tr>
<tr>
<td>or EALC 610</td>
<td>Minorities in Japan</td>
</tr>
<tr>
<td>EALC 330</td>
<td>China's Cultural Legacy</td>
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<tr>
<td>or EALC 530</td>
<td>China's Cultural Legacy</td>
</tr>
<tr>
<td>EALC 344</td>
<td>Manga: Histories and Theories</td>
</tr>
<tr>
<td>or HA 344</td>
<td>Manga: Histories and Theories</td>
</tr>
<tr>
<td>or HA 544</td>
<td>Manga: Histories and Theories</td>
</tr>
<tr>
<td>EALC 354</td>
<td>Japanese Prints</td>
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<tr>
<td>or HA 354</td>
<td>Japanese Prints</td>
</tr>
<tr>
<td>or HA 554</td>
<td>Japanese Prints</td>
</tr>
<tr>
<td>EALC 367</td>
<td>Art and Culture of Japan</td>
</tr>
<tr>
<td>or HA 367</td>
<td>Art and Culture of Japan</td>
</tr>
<tr>
<td>EALC 375</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
</tr>
<tr>
<td>or HA 375</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
</tr>
<tr>
<td>or EALC 575</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
</tr>
<tr>
<td>EALC 387</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
</tr>
<tr>
<td>or HA 387</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
</tr>
<tr>
<td>or HA 587</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
</tr>
<tr>
<td>EALC 418</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
</tr>
<tr>
<td>or WGSS 41</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
</tr>
<tr>
<td>or EALC 618</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
</tr>
<tr>
<td>EALC 420</td>
<td>Daily Life in China From the Opium War to 1911</td>
</tr>
<tr>
<td>EALC 509</td>
<td>Religion in Japan</td>
</tr>
<tr>
<td>or REL 509</td>
<td>Religion in Japan</td>
</tr>
<tr>
<td>EALC 543</td>
<td>Contemporary Japanese Film</td>
</tr>
<tr>
<td>or FMS 543</td>
<td>Contemporary Japanese Film</td>
</tr>
<tr>
<td>EALC 570</td>
<td>The Structure of Japanese</td>
</tr>
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<td>EALC 572</td>
<td>The Structure of Chinese</td>
</tr>
<tr>
<td>EALC 583</td>
<td>Imperial China</td>
</tr>
<tr>
<td>or HIST 583</td>
<td>Imperial China</td>
</tr>
<tr>
<td>EALC 584</td>
<td>Modern China</td>
</tr>
<tr>
<td>or HIST 584</td>
<td>Modern China</td>
</tr>
<tr>
<td>EALC 585</td>
<td>Politics and Society in China</td>
</tr>
<tr>
<td>or HUM 524</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>or PHIL 506</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>EALC 587</td>
<td>Age of Shoguns: Early Modern Japan</td>
</tr>
<tr>
<td>or HIST 587</td>
<td>Age of Shoguns: Early Modern Japan</td>
</tr>
<tr>
<td>EALC 588</td>
<td>Japan, 1853-1945</td>
</tr>
<tr>
<td>or HIST 588</td>
<td>Japan, 1853-1945</td>
</tr>
<tr>
<td>EALC 589</td>
<td>Japan Since 1945</td>
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<tr>
<td>or HIST 589</td>
<td>Japan Since 1945</td>
</tr>
<tr>
<td>EALC 642</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>or HUM 524</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>or PHIL 506</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>EALC 678</td>
<td>Chinese Foreign Policy</td>
</tr>
<tr>
<td>or GIST 678</td>
<td>Chinese Foreign Policy</td>
</tr>
<tr>
<td>or POLS 678</td>
<td>Chinese Foreign Policy</td>
</tr>
<tr>
<td>HA 368</td>
<td>Art and Culture of China</td>
</tr>
<tr>
<td>or HA 468</td>
<td>Art and Culture of China, Honors</td>
</tr>
<tr>
<td>HA 488</td>
<td>Chinese Painting, Honors</td>
</tr>
<tr>
<td>HA 545</td>
<td>Early Chinese Art</td>
</tr>
<tr>
<td>HA 546</td>
<td>Chinese Sculpture</td>
</tr>
<tr>
<td>HA 549</td>
<td>Chinese Painting</td>
</tr>
</tbody>
</table>
languages chosen and will range from 30-32 jr/sr hours. or Korean. Total hours required for this concentration will depend on the requirements for 2 languages from the following: Japanese, Chinese, and/ Majors choosing this concentration must complete the following Double Language Concentration study including F’s and repeated courses. See the GPA Calculator the major. GPA calculations include all junior/senior courses in the field of study.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**  
Satisfied by 31 hours of major courses.

**Major Hours in Residence**  
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**  
Satisfied by a minimum of 28 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**  
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Double Language Concentration**

Majors choosing this concentration must complete the following requirements for 2 languages from the following: Japanese, Chinese, and/ or Korean. Total hours required for this concentration will depend on the languages chosen and will range from 30-32 jr/sr hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asian Languages and Cultures Prerequisite Knowledge</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>JPN 104</td>
<td>Elementary Japanese I</td>
<td></td>
</tr>
<tr>
<td>CHIN 104</td>
<td>Elementary Chinese I</td>
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<tr>
<td>KOR 104</td>
<td>Elementary Korean I</td>
<td></td>
</tr>
<tr>
<td>JPN 108</td>
<td>Elementary Japanese II</td>
<td></td>
</tr>
<tr>
<td>CHIN 108</td>
<td>Elementary Chinese II</td>
<td></td>
</tr>
<tr>
<td>KOR 108</td>
<td>Elementary Korean II</td>
<td></td>
</tr>
<tr>
<td>Language Proficiency. Satisfied by one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JPN 204 &amp; JPN 208</td>
<td>Intermediate Japanese I &amp; Intermediate Japanese II</td>
<td></td>
</tr>
<tr>
<td>CHIN 204 &amp; CHIN 208</td>
<td>Intermediate Chinese I &amp; Intermediate Chinese II</td>
<td></td>
</tr>
<tr>
<td>KOR 204 &amp; KOR 208</td>
<td>Intermediate Korean I &amp; Intermediate Korean II</td>
<td></td>
</tr>
<tr>
<td>East Asian Languages and Cultures Core Knowledge and Skills</td>
<td>8-10</td>
<td></td>
</tr>
</tbody>
</table>

**Advanced Language. Satisfied by one of the following sequences:**

<table>
<thead>
<tr>
<th>East Asian Studies-Chinese</th>
<th>East Asian Studies-Korean</th>
<th>East Asian Studies-Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 504</td>
<td>Advanced Modern Chinese I</td>
<td>JPN 504</td>
</tr>
<tr>
<td>&amp; CHIN 508</td>
<td>and Advanced Modern Chinese II</td>
<td>&amp; JPN 508</td>
</tr>
<tr>
<td>KOR 504</td>
<td>Advanced Modern Korean I</td>
<td>&amp; KOR 508</td>
</tr>
</tbody>
</table>

**Pre-Modern Culture**  
Choose 2 of the following 3, matching language choices (6 credits combined - must be in the same two languages as chosen to fulfill the language sequences):

China: Please choose from the list above.  
Japan: Please choose from the list above.  
Korea: Please choose from the following:

<table>
<thead>
<tr>
<th>East Asian Studies-Chinese</th>
<th>East Asian Studies-Korean</th>
<th>East Asian Studies-Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 563</td>
<td>Cultural History of Korea</td>
<td>HA 361</td>
</tr>
<tr>
<td>or HA 561</td>
<td>Buddhist Art of Korea</td>
<td>or HA 562</td>
</tr>
<tr>
<td>HA 362</td>
<td>Ceramics of Korea</td>
<td>REL 510</td>
</tr>
</tbody>
</table>

**Modern Culture**  
Choose 2 of the following 3, matching language choices (6 credits combined - must be in the same two languages as chosen to fulfill the language sequences):

China: Please choose from the list above.  
Japan: Please choose from the list above.  
Korea: Please choose from the following:

<table>
<thead>
<tr>
<th>East Asian Studies-Chinese</th>
<th>East Asian Studies-Korean</th>
<th>East Asian Studies-Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 361</td>
<td>Colonial Korea</td>
<td>HA 363</td>
</tr>
<tr>
<td>EALC 362</td>
<td>Post-Colonial Korea</td>
<td>HIST 350</td>
</tr>
</tbody>
</table>

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**  
Satisfied by 30-32 hours of major courses.

**Major Hours in Residence**  
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**  
Satisfied by a minimum of 30-32 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**  
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Sample 4-year plans for the BA degree in East Asian Languages and Cultures with the following concentrations can be found here: Chinese Language & Literature (p. 1285), Japanese Language & Literature (p. 1286), East Asian Studies-Chinese Language (p. 1287), East Asian Studies-Japanese Language (p. 1288), East Asian Studies-Korean...
Language (p. 1289), Double Language (p. 1290), or by using the left-side navigation.

**Departmental Honors**

The department awards honors to undergraduates who demonstrate exceptional academic achievement. Students should make their intentions known in writing before the final undergraduate semester, preferably during the junior year. The candidate must achieve a minimum of 3.5 in the major and complete EALC 499 with a grade of B or higher. In EALC 499, the student writes an honors thesis under the supervision of a faculty member. Two faculty members evaluate the thesis.

**Study Abroad**

Students are strongly encouraged to undertake a study-abroad experience as part of the major. Studying abroad allows students to dramatically increase their foreign-language proficiency and affords them cultural understanding far beyond what can be conveyed in a classroom. Employers greatly value study-abroad experience in job candidates, making KU graduates with such experience more competitive as they enter global society.

Students are encouraged to talk to an EALC study-abroad advisor (https://ealc.ku.edu/study-abroad/) about the many options available for study abroad in the language they are studying. Study-abroad programs vary in length from several weeks to a full year. They include language-intensive programs (some allowing one to complete a year’s worth of US-college course credit in Chinese, Japanese or Korean in just eight weeks), programs that include non-language courses taught in English, and programs that offer an internship experience. We work with students to find a program that fits their requirements and degree plan. Credit from study-abroad programs can be transferred and can almost always be used to fulfill requirements for the major.

Scholarships are available for study-abroad programs to China, Japan, and South Korea, and EALC often offers a three-week study abroad program in Japan during the summer. The Office of Study Abroad (https://studyabroad.ku.edu/) provides help with the practical aspects of study abroad, as well as advice about programs and scholarships.

**BA in East Asian Languages & Cultures with concentration in Chinese Language & Literature**

Below is a sample 4-year plan for students pursuing the BA in East Asian Languages & Culture with a concentration in Chinese Language & Literature. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th><strong>Freshman</strong></th>
<th><strong>Fall</strong></th>
<th>Hours</th>
<th><strong>Spring</strong></th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)¹</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAGR)²</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Sophomore</strong></th>
<th><strong>Fall</strong></th>
<th>Hours</th>
<th><strong>Spring</strong></th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 104 (1st Semester Language (BA Second Language), Major Requirement - FALL ONLY)</td>
<td>3</td>
<td>CHIN 108 (2nd Semester Language (BA Second Language), Major Requirement - SPRING ONLY)</td>
<td>5</td>
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</tr>
<tr>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
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<td>CHIN 206 (4th Semester Language (BA Second Language), Major Requirement - SPRING ONLY)</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours³</td>
<td>3</td>
<td>ECIV 104, 304, or 305 (Goal 4.2 Global Awareness, Eastern Civilization)</td>
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<table>
<thead>
<tr>
<th><strong>Junior</strong></th>
<th><strong>Fall</strong></th>
<th>Hours</th>
<th><strong>Spring</strong></th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 142 (Recommended for Goal 5 Social Responsibility &amp; Ethics - FALL ONLY)</td>
<td>3</td>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHIN 504 (Major Requirement - FALL ONLY)</td>
<td>5</td>
<td>CHIN 508 (Major Requirement - SPRING ONLY)</td>
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<tr>
<td>CHIN 342 or 542 (Major Requirement - FALL ONLY)</td>
<td>3</td>
<td>Pre-Modern Chinese Literature or Culture Course 300+ (Major Requirement - SPRING ONLY) (Can use CHIN 544)</td>
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<tr>
<td>Modern Chinese Literature or Culture 300+ (Major Requirement)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours³</td>
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<table>
<thead>
<tr>
<th><strong>Senior</strong></th>
<th><strong>Fall</strong></th>
<th>Hours</th>
<th><strong>Spring</strong></th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 562 (Goal 6 Integration &amp; Creativity, Major Requirement - FALL ONLY)</td>
<td>3</td>
<td>CHIN 544 or 564 (Major Requirement - SPRING ONLY)</td>
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</tr>
</tbody>
</table>
BA in East Asian Languages & Cultures with concentration in Japanese Language & Literature

Below is a sample 4-year plan for students pursuing the BA in East Asian Languages & Culture with a concentration in Japanese Language & Literature. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/ BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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**Sophomore**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
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</tr>
</thead>
<tbody>
<tr>
<td>17</td>
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<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>15</td>
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**Junior**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
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<tbody>
<tr>
<td>14</td>
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**Senior**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Goal 1.2 Quantitative Literacy**

- 3 BA Quantitative Reasoning (BAQR)³

**Goal 1.1 First Year Seminar**

- 3 Goal 2.2 Communication

**JPN 104 (1st Semester Language) Major Requirement - FALL ONLY**

- 5 JPN 108 (2nd Semester Language) Major Requirement - SPRING ONLY

**Second Area of Study/ Elective/Degree/Junior-Senior Hours³**

- 3 EALC 104, 304, or 305 (Goal 4.2 Global Awareness, Eastern Civilization)

**Second Area of Study/ Elective/Degree/Junior-Senior Hours³**

- 3 China Course 300+ (Major Requirement)

**Second Area of Study/ Elective/Degree/Junior-Senior Hours³**

- 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours³

**Second Area of Study/ Elective/Degree/Junior-Senior Hours³**

- 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours³

**Second Area of Study/ Elective/Degree/Junior-Senior Hours³**

- 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours³

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Electives for EALC must be taken at the 300+ level.

For clarification: when asked for a class on East Asia, classes on East Asia must be on East Asia broadly (so, a course on Japan, China, and Korea broadly).
The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

Students completing the BGS with a major must choose a secondary core, degree, major, second area of study and/or elective hours. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

All EALC electives need to be 300+ or higher.

## BA in East Asian Languages & Cultures with concentration in East Asian Studies/Chinese Language

Below is a sample 4-year plan for students pursuing the BA in East Asian Languages & Culture with a concentration in East Asian Studies-Chinese Language. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
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</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 104 (1st Semester Language (BA Second Language), Major Requirement - FALL ONLY)</td>
<td>5</td>
<td>5      CHIN 108 (2nd Semester Language (BA Second Language), Major Requirement - SPRING ONLY)</td>
<td>5</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>3 ECV 104, 304, or 305 (Goal 4.2 Global Awareness, Eastern Civilization)</td>
<td>3</td>
<td>3     BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 CHIN 208 (4th Semester Language (BA Second Language), Major Requirement - SPRING ONLY)</td>
<td>5</td>
</tr>
<tr>
<td>East Asia course EALC 300+ elective</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>3 Goal 3 Arts and Humanities</td>
<td>3</td>
<td>5 Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication/BA Writing</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Pre-Modern Chinese Literature, Culture, or Language course EALC elective 300+</td>
<td>3</td>
<td>3 Modern or Contemporary Chinese Literature, Culture, or Language course EALC elective 300+</td>
<td>3</td>
</tr>
<tr>
<td>EALC 142 (Recommended for Goal 5 Social Responsibility &amp; Ethics - FALL ONLY)</td>
<td>3</td>
<td>3 China or East Asia course EALC elective 300+</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics - FALL ONLY)</td>
<td>3</td>
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### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 504 (Major Requirement - FALL ONLY)</td>
<td>5</td>
<td>5 CHIN 508 (Major Requirement - SPRING ONLY)</td>
<td>5</td>
</tr>
<tr>
<td>Pre-Modern Chinese Literature, Culture, or Language course EALC elective 300+</td>
<td>3</td>
<td>3 Modern or Contemporary Chinese Literature, Culture, or Language course EALC elective 300+</td>
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</tr>
<tr>
<td>EALC 142 (Recommended for Goal 5 Social Responsibility &amp; Ethics - FALL ONLY)</td>
<td>3</td>
<td>3 China or East Asia course EALC elective 300+</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics - FALL ONLY)</td>
<td>3</td>
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### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>China or East Asia Course EALC elective 300+</td>
<td>3</td>
<td>3 Goal 6 Integration &amp; Creativity</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>3 Japan or Korea course EALC elective 300+</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Goal 6 Integration &amp; Creativity</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics - FALL ONLY)</td>
<td>3</td>
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</table>
Second Area of Study/ Elective/Degree/Junior- Senior Hours 3 3 2 2

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<thead>
<tr>
<th></th>
<th>Total Hours 120</th>
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<tbody>
<tr>
<td>1</td>
<td>The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.</td>
</tr>
<tr>
<td>2</td>
<td>Visit this website (<a href="https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/">https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/</a>) for a list of courses that fulfill the BA Quantitative Reasoning requirement.</td>
</tr>
<tr>
<td>3</td>
<td>Typically Goal 6 is fulfilled using a course required by the major. Review the list of Goal 6 courses (<a href="http://kucore.ku.edu/courses/goal6/">http://kucore.ku.edu/courses/goal6/</a>) that may apply to the major, or choose another course. A free elective may need to be used to fulfill pre-requisites if a course within the major is not chosen.</td>
</tr>
<tr>
<td>4</td>
<td>Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.</td>
</tr>
</tbody>
</table>

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

All EALC electives must be 300+.

**BA in East Asian Languages & Cultures with concentration in East Asian Studies/Japanese Language**

Below is a sample 4-year plan for students pursuing the BA in East Asian Languages & Culture with a concentration in Japanese Language. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

| JPN 104 (1st Semester Language (BA Second Language), Major Requirement - FALL ONLY) | 5 |
| JPN 108 (2nd Semester Language (BA Second Language), Major Requirement - SPRING ONLY) | 5 |
| Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 |
| ECIV 104, 304, or 305 (Goal 4.2 Global Awareness, Eastern Civilizations) | 3 |

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 3 Arts and Humanities</td>
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</tr>
<tr>
<td>JPN 204 (3rd Semester Language (BA Second Language), Major Requirement - FALL ONLY)</td>
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<td>Goal 3 Natural Science</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>BA Laboratory/Field Experience (LFE)</td>
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<tr>
<td>Japanese Literature, Culture, or Language course EALC elective 300+</td>
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<td>JPN 208 (4th Semester Language (BA Second Language), Major Requirement - SPRING ONLY)</td>
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<tr>
<td>East Asia course EALC elective 300+</td>
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<table>
<thead>
<tr>
<th>Junior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPN 504 (Major Requirement - FALL ONLY)</td>
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<td>JPN 508 (Major Requirement - SPRING ONLY)</td>
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<tr>
<td>Japan course EALC elective 300+</td>
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<td>Japan course EALC elective 300+</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td>EALC 142 (Recommended for Goal 5 Social Responsibility &amp; Ethics - FALL ONLY)</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
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<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>China or Korea course EALC elective 300+</td>
<td>3</td>
<td>Goal 6 Integration &amp; Creativity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>East Asia course EALC elective 300+</td>
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<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
</tbody>
</table>
Second Area of Study/Elective/Degree/Junior-Senior Hours 3
Second Area of Study/Elective/Degree/Junior-Senior Hours 4

Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

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The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

All EALC electives must be 300+.

**BA in East Asian Languages & Cultures with concentration in East Asian Studies/Korean Language**

Below is a sample 4-year plan for students pursuing the BA in East Asian Languages & Culture with a concentration in Korean Language. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
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<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
</tr>
<tr>
<td>KOR 104 or (1st Semester Language (BA Second Language), Major Requirement - FALL ONLY)</td>
<td>5</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Area of Study/Elective/Degree/Junior-Senior Hours** 4

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>KOR 204 (3rd Semester Language (BA Second Language), Major Requirement - FALL ONLY)</td>
<td>5</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
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<tr>
<td>Korea course EALC elective 300+</td>
<td>3</td>
<td>KOR 208 (4th Semester Language (BA Second Language), Major Requirement - SPRING ONLY)</td>
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</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOR 504 (Major Requirement - FALL ONLY)</td>
<td>5</td>
<td>KOR 508 (Major Requirement - SPRING ONLY)</td>
<td>5</td>
</tr>
<tr>
<td>EALC 142 (Recommended for Goal 5 Social Responsibility &amp; Ethics - FALL ONLY)</td>
<td>3</td>
<td>East Asia course EALC elective 300+</td>
<td>3</td>
</tr>
<tr>
<td>Korea or East Asia course EALC elective 300+</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective (KOR 562 Recommended)</td>
<td>3</td>
<td>China or Japan course EALC elective 300+</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 6 Integration &amp; Creativity</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Korea or East Asia course EALC elective 300+</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>
Second Area of Study/ Elective/Degree/Junior- Senior Hours 3 LA&S 492 (Job Search Strategies, or elective) 1

Second Area of Study/ Elective/Degree/Junior- Senior Hours

Total Hours 120

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3 Typically Goal 6 is fulfilled using a course required by the major. Review the list of Goal 6 courses (https://kucore.ku.edu/courses/) that may apply to the major, or choose another course. A free elective may need to be used to fulfill pre-requisites if a course within the major is not chosen. Note - KOR 562 is not approved for KU Core Goal 6.

4 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

All EALC electives must be 300+.

**BA in East Asian Languages & Cultures with concentration in Double Language**

Below is a sample 4-year plan for students pursuing the BA in East Asian Languages & Culture with a concentration in Double Language. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Hours**

| Total | 16 |

**Senior**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Modern Culture course - 1st EALC language</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| Total | 16 |

Please note:

**All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.**

**The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.**

**All EALC electives must be 300+.**
Minor in East Asian Languages and Cultures

Why study East Asian languages and cultures?

China, Japan, and Korea are three of the oldest continuous civilizations in the world, offering rich literary and philosophical traditions, vibrant contemporary cultures, and cutting-edge technological innovation. Mainland China and Japan have the world’s largest economies after the United States and, along with South Korea and Taiwan, are key U.S. trading partners. Thousands of US companies do business with East Asia. The economic and political relationships between the U.S. and East Asia are likely to remain among the most important for the U.S. in the 21st century.

With an EALC B.A., students can pursue a range of careers in business, government, education, nonprofit organizations, to name a few, or continue on to graduate study in East Asian languages and cultures. Many students pair an EALC major or minor with a second major to widen their skill-set and increase their competitiveness as they enter the global marketplace. Some students choose EALC related courses to connect with their heritage or to fulfill personal interests.

Requirements for the Minor

Students selecting this minor must complete one of the following options:

East Asian Languages and Cultures Minor with Advanced Language

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor I - East Asian Culture with Advanced Language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHIN 504 &amp; CHIN 508 Advanced Modern Chinese I</td>
<td>10</td>
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</tr>
<tr>
<td>JPN 504 &amp; JPN 508 Advanced Modern Japanese I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KOR 504 &amp; KOR 508 Advanced Modern Korean I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least two courses wholly on the culture of one's language choice.</td>
<td>6</td>
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</table>

Chinese Culture

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 544</td>
<td>Readings in Classical Chinese: _____</td>
</tr>
<tr>
<td>EALC 318</td>
<td>Modern Chinese Fiction and Film</td>
</tr>
<tr>
<td>or EALC 518 Modern Chinese Fiction &amp; Film</td>
<td></td>
</tr>
<tr>
<td>EALC 319</td>
<td>Contemporary Chinese Fiction and Film</td>
</tr>
<tr>
<td>or EALC 519 Contemporary Chinese Fiction and Film</td>
<td></td>
</tr>
<tr>
<td>EALC 330</td>
<td>China's Cultural Legacy</td>
</tr>
<tr>
<td>or EALC 530 China's Cultural Legacy</td>
<td></td>
</tr>
<tr>
<td>EALC 418</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
</tr>
<tr>
<td>or WGSS 41 Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
<td></td>
</tr>
<tr>
<td>or EALC 618 Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
<td></td>
</tr>
<tr>
<td>EALC 420</td>
<td>Daily Life in China From the Opium War to 1911</td>
</tr>
<tr>
<td>EALC 583</td>
<td>Imperial China</td>
</tr>
<tr>
<td>or HIST 583 Imperial China</td>
<td></td>
</tr>
<tr>
<td>EALC 584</td>
<td>Modern China</td>
</tr>
</tbody>
</table>

Please note:

- All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.
- The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
or HIST 584 Modern China
EALC 585 Politics and Society in China
or POLS 666 Politics and Society in China

EALC 642 Chinese Thought
or HUM 524 Chinese Thought
or PHIL 506 Chinese Thought

EALC 678 Chinese Foreign Policy
or POLS 676 Chinese Foreign Policy
or GIST 678 Chinese Foreign Policy

HA 368 Art and Culture of China
or HA 468 Art and Culture of China, Honors

HA 488 Chinese Painting, Honors

HA 545 Early Chinese Art

HA 546 Chinese Sculpture

HA 549 Chinese Painting
or HA 488 Chinese Painting, Honors

HIST 394 Made in China: Chinese Business History
HIST 397 From Mao to Now: China's Red Revolution
HIST 604 Contemporary Greater China

Japanese Culture
EALC 312 Japan's Literary Legacy
EALC 315 Survey of Japanese Film
EALC 316 Modern Japanese Fiction and Film
or EALC 716 Fiction and Film in Japan
EALC 317 Contemporary Japanese Fiction and Film
or EALC 717 Contemporary Japanese Literature in Translation: 1945-Present
EALC 325 Minorities in Japan
or EALC 610 Minorities in Japan
EALC 344 Manga: Histories and Theories
or HA 344 Manga: Histories and Theories
or HA 544 Manga: Histories and Theories
EALC 375 Love, Sexuality and Gender in Japanese Literature
EALC 388 Modern and Contemporary Visual Arts of Japan
or HA 388 Modern and Contemporary Visual Arts of Japan
or HA 588 Modern and Contemporary Visual Arts of Japan
EALC 509 Religion in Japan
or REL 509 Religion in Japan
EALC 543 Contemporary Japanese Film
or FMS 543 Contemporary Japanese Film
EALC 570 The Structure of Japanese
EALC 587 Age of Shoguns: Early Modern Japan
or HIST 587 Age of Shoguns: Early Modern Japan
EALC 588 Japan, 1853-1895
or HIST 588 Japan, 1853-1895
EALC 589 Japan Since 1845
or HIST 589 Japan Since 1845
HA 586 Japanese Painting
HA 587 Japanese Sculpture
HIST 395 History of Sushi
HIST 398 Introduction to History of Japan: Anime to Zen
HIST 399 The Samurai

HIST 581 The Japanese Empire
HIST 585 Beer, Sake, Tea-Beverages in Japan History

Korean Culture
EALC 360 Buddhist Art of Korea
or HA 361 Buddhist Art of Korea
or HA 561 Buddhist Art of Korea
EALC 361 Colonial Korea
or EALC 561 Colonial Korea
EALC 362 Post-Colonial Korea
or EALC 562 Post-Colonial Korea
EALC 369 Art and Culture of Korea
EALC 372 Ceramics of Korea
or HA 362 Ceramics of Korea
or HA 562 Ceramics of Korea
EALC 563 Cultural History of Korea
HA 363 Modern Korean Art and Culture
REL 510 Religion in Korea
HIST 350 The Korean War, 1950-1953
KOR 562 Modern Korean Texts I
KOR 564 Modern Korean Texts II

One course on the culture of one's language or East Asia broadly. (One course may be at the 100 level)
3

EALC 105 Asian Religions
or REL 106 Asian Religions
EALC 121 Introduction to Contemporary China
EALC 130 Myth, Legend, and Folk Beliefs in East Asia
EALC 142 Ethics in Chinese Philosophy
ECIV 104 Eastern Civilizations
or ECIV 304 Eastern Civilizations
or ECIV 305 Eastern Civilizations Honors
HA 166 The Visual Arts of East Asia
HIST 118 Premodern East Asia
or HIST 119 Modern East Asia
HIST 190 Warlords and Rebels in Asia
EALC 308 Music in East Asia
or MUSC 308 Music in East Asia
EALC 320 Modern East Asia: Multiple Perspectives
EALC 353 Language and Society in East Asia
or EALC 553 Language and Society in East Asia
EALC 380 Popular Cultures of East Asia
or EALC 580 Popular Cultures of East Asia
EALC 385 The Art of Buddhism
or HA 385 The Art of Buddhism
or HA 585 The Art of Buddhism
EALC 656 Government and Politics of East Asia
or POLS 656 Government and Politics of East Asia
EALC 666 Political Economy of East Asia
or POLS 666 Political Economy of East Asia
EALC 676 International Relations of Asia
or POLS 676 International Relations of Asia
GEOG 396 East Asia

HA 347 Ceramics of East Asia
<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>REL 360</td>
<td>The Buddhist Tradition in Asia</td>
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</table>

### East Asian Languages and Cultures Minor with Intermediate Language

<table>
<thead>
<tr>
<th>Minor II - East Asian Culture with Intermediate Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite knowledge: Second-year Chinese, Japanese or Korean language courses. These hours do not contribute to the minimum number of hours required for the minor.</td>
</tr>
<tr>
<td>CHIN 204 &amp; CHIN 208</td>
</tr>
<tr>
<td>JPN 204 &amp; JPN 208</td>
</tr>
<tr>
<td>KOR 204 &amp; KOR 208</td>
</tr>
</tbody>
</table>

One course at the 300 level on the pre-modern culture of the country of the language choice.  

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN 544</td>
<td>Readings in Classical Chinese: _______</td>
</tr>
<tr>
<td>EALC 330</td>
<td>China's Cultural Legacy</td>
</tr>
<tr>
<td>or EALC 530</td>
<td>China's Cultural Legacy</td>
</tr>
<tr>
<td>EALC 418</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
</tr>
<tr>
<td>or WGSS 41</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
</tr>
<tr>
<td>or EALC 616</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
</tr>
<tr>
<td>EALC 420</td>
<td>Daily Life in China From the Opium War to 1911</td>
</tr>
<tr>
<td>EALC 583</td>
<td>Imperial China</td>
</tr>
<tr>
<td>or HIST 583</td>
<td>Imperial China</td>
</tr>
<tr>
<td>EALC 642</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>or HUM 524</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>or PHIL 506</td>
<td>Chinese Thought</td>
</tr>
<tr>
<td>HA 368</td>
<td>Art and Culture of China</td>
</tr>
<tr>
<td>or HA 468</td>
<td>Art and Culture of China, Honors</td>
</tr>
<tr>
<td>HA 488</td>
<td>Chinese Painting, Honors</td>
</tr>
<tr>
<td>HA 545</td>
<td>Early Chinese Art</td>
</tr>
<tr>
<td>HA 546</td>
<td>Chinese Sculpture</td>
</tr>
<tr>
<td>HA 549</td>
<td>Chinese Painting</td>
</tr>
<tr>
<td>or HA 488</td>
<td>Chinese Painting, Honors</td>
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<table>
<thead>
<tr>
<th>Pre-Modern Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 312</td>
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<tr>
<td>EALC 354</td>
</tr>
<tr>
<td>or HA 354</td>
</tr>
<tr>
<td>or HA 554</td>
</tr>
<tr>
<td>EALC 367</td>
</tr>
<tr>
<td>or HA 367</td>
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<tr>
<td>EALC 375</td>
</tr>
<tr>
<td>or EALC 575</td>
</tr>
<tr>
<td>EALC 509</td>
</tr>
<tr>
<td>or REL 509</td>
</tr>
<tr>
<td>EALC 587</td>
</tr>
</tbody>
</table>

EALC 563 | Cultural History of Korea                                            |

EALC 610 | Minorities in Japan                                                  |

Pre-Modern Korea

<table>
<thead>
<tr>
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<th>Title</th>
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</thead>
<tbody>
<tr>
<td>EALC 584</td>
<td>Politics and Society in China</td>
</tr>
<tr>
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</tr>
<tr>
<td>EALC 678</td>
<td>Chinese Foreign Policy</td>
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<tr>
<td>or GIST 678</td>
<td>Chinese Foreign Policy</td>
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<tr>
<td>or POLS 678</td>
<td>Chinese Foreign Policy</td>
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</table>

<table>
<thead>
<tr>
<th>Modern China</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 318</td>
</tr>
<tr>
<td>or EALC 518</td>
</tr>
<tr>
<td>EALC 319</td>
</tr>
<tr>
<td>or EALC 519</td>
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<tr>
<td>or HIST 584</td>
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<td>or POLS 666</td>
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<tr>
<td>or GIST 678</td>
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<tr>
<td>or POLS 678</td>
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<table>
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<tbody>
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<td>EALC 315</td>
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<td>EALC 316</td>
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<td>or EALC 716</td>
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<td>EALC 317</td>
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<td>or EALC 717</td>
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</tr>
<tr>
<td>or EALC 610</td>
</tr>
<tr>
<td>EALC 344</td>
</tr>
<tr>
<td>or HA 344</td>
</tr>
<tr>
<td>or HA 544</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modern and Contemporary Visual Arts of Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 388</td>
</tr>
<tr>
<td>or HA 388</td>
</tr>
<tr>
<td>or HA 588</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contemporary Japanese Film</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 543</td>
</tr>
<tr>
<td>or FMS 543</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>The Structure of Japanese</th>
</tr>
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<tbody>
<tr>
<td>EALC 587</td>
</tr>
<tr>
<td>or HIST 588</td>
</tr>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>HA 586</td>
<td>Japanese Painting</td>
</tr>
<tr>
<td>HA 587</td>
<td>Japanese Sculpture</td>
</tr>
<tr>
<td>HIST 395</td>
<td>History of Sushi</td>
</tr>
<tr>
<td>HIST 398</td>
<td>Introduction to History of Japan: Anime to Zen</td>
</tr>
<tr>
<td>HIST 399</td>
<td>The Samurai</td>
</tr>
<tr>
<td>HIST 585</td>
<td>Beer, Sake, Tea-Beverages in Japan History</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pre-Modern Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 587</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modern China</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 318</td>
</tr>
<tr>
<td>or EALC 518</td>
</tr>
<tr>
<td>EALC 395</td>
</tr>
<tr>
<td>HIST 398</td>
</tr>
<tr>
<td>HIST 399</td>
</tr>
<tr>
<td>HIST 585</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modern Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 388</td>
</tr>
<tr>
<td>or HA 388</td>
</tr>
<tr>
<td>or HA 588</td>
</tr>
<tr>
<td>Course Code</td>
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<tr>
<td>------------</td>
</tr>
<tr>
<td>EALC 589</td>
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<tr>
<td>HIST 395</td>
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<td>HIST 581</td>
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<tr>
<td>HIST 585</td>
</tr>
<tr>
<td>EALC 361</td>
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<tr>
<td>EALC 362</td>
</tr>
<tr>
<td>or EALC 562</td>
</tr>
<tr>
<td>HA 363</td>
</tr>
<tr>
<td>HIST 350</td>
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<td>EALC 361</td>
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<tr>
<td>EALC 362</td>
</tr>
<tr>
<td>or EALC 562</td>
</tr>
<tr>
<td>HA 363</td>
</tr>
<tr>
<td>HIST 350</td>
</tr>
</tbody>
</table>

Four courses on Japan, China, Korea or East Asia. (Two courses may be at the 100 level.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 105</td>
<td>Asian Religions</td>
</tr>
<tr>
<td>EALC 121</td>
<td>Introduction to Contemporary China</td>
</tr>
<tr>
<td>EALC 130</td>
<td>Myth, Legend, and Folk Beliefs in East Asia</td>
</tr>
<tr>
<td>EALC 142</td>
<td>Ethics in Chinese Philosophy</td>
</tr>
<tr>
<td>ECIV 104</td>
<td>Eastern Civilizations</td>
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<tr>
<td>or ECIV 304</td>
<td>Eastern Civilizations Honors</td>
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<tr>
<td>HA 166</td>
<td>The Visual Arts of East Asia</td>
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<td>HIST 118</td>
<td>Premodern East Asia</td>
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<tr>
<td>or HIST 119</td>
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<td>HIST 190</td>
<td>Warlords and Rebels in Asia</td>
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<td>Music in East Asia</td>
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<td>or MUSC 30</td>
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<tr>
<td>EALC 312</td>
<td>Japan's Literary Legacy</td>
</tr>
<tr>
<td>EALC 315</td>
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<tr>
<td>EALC 316</td>
<td>Modern Japanese Fiction and Film</td>
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<tr>
<td>or EALC 716</td>
<td>Fiction and Film in Japan</td>
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<tr>
<td>EALC 317</td>
<td>Contemporary Japanese Fiction and Film</td>
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<td>or EALC 717</td>
<td>Contemporary Japanese Literature in Translation: 1945-Present</td>
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<tr>
<td>EALC 318</td>
<td>Modern Chinese Fiction and Film</td>
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<td>or EALC 518</td>
<td>Modern Chinese Fiction &amp; Film</td>
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<tr>
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<tr>
<td>EALC 320</td>
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<td>EALC 325</td>
<td>Minorities in Japan</td>
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<td>or EALC 610</td>
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<td>China's Cultural Legacy</td>
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<td>or HA 554</td>
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<td>EALC 362</td>
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<tr>
<td>or EALC 562</td>
<td>Post-Colonial Korea</td>
</tr>
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<tr>
<td>EALC 369</td>
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<tr>
<td>EALC 372</td>
<td>Ceramics of Korea</td>
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<td>or HA 362</td>
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<td>or HA 562</td>
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<td>Popular Cultures of East Asia</td>
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<tr>
<td>or EALC 580</td>
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<tr>
<td>EALC 385</td>
<td>The Art of Buddhism</td>
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<tr>
<td>or HA 385</td>
<td>The Art of Buddhism</td>
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<td>or HA 585</td>
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<td>EALC 388</td>
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<td>or HA 388</td>
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<td>or HA 588</td>
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<td>EALC 418</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
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<td>or EALC 618</td>
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<td>or WGSS 418</td>
<td>Sexual Politics in Chinese Literature and Culture: Premodern Times</td>
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<td>Daily Life in China From the Opium War to 1911</td>
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<td>Cultural History of Korea</td>
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<td>EALC 570</td>
<td>The Structure of Japanese</td>
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<td>EALC 575</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
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<td>Popular Cultures of East Asia</td>
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<td>or HIST 584</td>
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<td>EALC 585</td>
<td>Politics and Society in China</td>
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<td>or POLS 668</td>
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<td>Age of Shoguns: Early Modern Japan</td>
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<td>EALC 588</td>
<td>Japan, 1853-1945</td>
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<td>EALC 590</td>
<td>Japan Since 1945</td>
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<td>or HIST 589</td>
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<td>EALC 642</td>
<td>Chinese Thought</td>
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<td>or HUM 524</td>
<td>Chinese Thought</td>
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<td>or PHIL 506</td>
<td>Chinese Thought</td>
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<tr>
<td>EALC 656</td>
<td>Government and Politics of East Asia</td>
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<tr>
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<td>Government and Politics of East Asia</td>
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</tbody>
</table>
Master of Arts in East Asian Languages and Cultures

Why study East Asian languages and cultures?

The areas of East Asia covered represent 3 of the oldest continuous civilizations of the world. The great historical contributions of China, Japan, and Korea in literature, philosophy, and art are widely recognized and studied throughout the world. Today, the highly advanced industries of Japan, the enormous human resources of China, and the rapidly growing economies of Korea and Taiwan have contributed to the development of extremely valuable socio-political and economic ties between these areas and the United States.

M.A. Program Overview

The Department of East Asian Languages and Cultures (EALC) is the only department in Kansas offering a regular program of instruction in the languages, literatures, and cultures of East Asia.

The EALC Thesis M.A. program trains students who will devote themselves to becoming effective links between the Far East and the United States. Students concentrate in Chinese, Japanese, Korean, or East Asian Cultures, usually entering the program with at least two years of college-level language. The program typically takes two years to complete, including the defense of a required Master's thesis.

FLAS Fellowships

Students in the M.A. program may also be eligible for a Foreign Language and Area Studies (FLAS) fellowship through the Center for East Asian Studies. FLAS fellowships include:

- Summer award - up to $5,000 for tuition and a stipend of $2,500 for living expenses for summer language study equivalent to one full year of language study
- Academic Year award - up to $18,000 for tuition and a stipend of $15,000 for living expenses for academic year study that includes two semesters of language and six credits or more of East Asian culture courses.

Students in the joint J.D./M.A. or who are also admitted to other programs are strongly encouraged to apply (https://flas.ku.edu/apply/) for this funding.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.
Admission to the M.A. program

Apply to the EALC M.A. program via the Office of Graduate Studies online application system (https://gradapply.ku.edu). For additional information regarding departmental admissions requirements, deadlines, and the application process, please visit the graduate admissions page (https://ealc.drupal.ku.edu/_prerequisites/) of the EALC Department website, or contact the EALC Department Graduate Program directly at ealc@ku.edu.

Master’s Program

The department offers a master’s degree in East Asian languages and cultures. The student declares his or her concentration in 1 of 4 options.

• Chinese language and literature
• Japanese language and literature
• Korean language and literature
• East Asian cultures

Students of Chinese, Japanese, or Korean language and literature gain in-depth knowledge of these ancient civilizations, which have produced some of the world’s greatest literature.

Students of East Asian cultures develop a broad interdisciplinary knowledge of East Asia. This concentration is for students pursuing professional or noncollege teaching careers, for students in the early stages of language training, or for students who have already acquired competence in an East Asian language.

At least 50% of coursework for the master’s degree must be taken at the 700 level or above.

Prerequisites

Entrance requirements for a concentration in either Chinese, Japanese, or Korean language and literature include

• 3 years of the modern language and, for Chinese language students, one year of classical Chinese or the demonstrated equivalent. Students not meeting this prerequisite may be admitted with deficiencies provided they achieve this level of proficiency outside the minimum of 30 graduate credit hours required for the degree.**
• 2 lecture courses dealing with East Asia.

Entrance requirements for a concentration in East Asian cultures are

• At least 2 years of an East Asian language. Students not meeting this prerequisite may be admitted with deficiencies provided they achieve this level of proficiency outside the minimum of 30 graduate credit hours required for the degree.**
• 2 lecture courses dealing with East Asia.

Requirements for Chinese, Japanese, or Korean Language and Literature Concentration

1. A minimum of 30 graduate credit hours:
   a. Fourth-year level of language.**
   b. While students may apply credit hours from study abroad toward their degree, at least 18 credit hours must be taken in residence at KU.
   c. No more than 6 hours of directed readings courses may be included in the required 30 hours.
   d. A course involving research methods, to be determined in consultation with the Thesis/Faculty Advisor and the Director of Graduate Studies.
   e. Students are expected to take at least one course at the 500 level or above in the literature of their concentration.

2. Thesis Option
   a. A thesis that will demonstrate in-depth research on a topic in the area of concentration, typically completed over 1 or 2 semesters (EALC 899, 3 to 6 credit hours). Students are expected to make significant use of primary and secondary sources in the language of concentration.

3. Non-Thesis Option
   a. Must write three substantial research papers on East Asian topics (15-20 pages).
      i. At least one of the papers must be completed by the end of the second semester in the program.
      ii. The papers will be evaluated and graded by the instructor of the class in which the paper is submitted. The grade must be A or B.
      iii. The student will submit each paper to the Director of Graduate Studies (DGS), plus an abstract (no more than 500 words) summarizing each. The student will submit the original copy with the instructor’s remarks and grade. The DGS may require revisions be made before final acceptance.
   b. With the permission of the DGS, students may include relevant courses in non-East Asian areas (such as linguistics, language pedagogy, anthropology, political science, and literary theory). A paper for such a course would generally not be used to fulfill the above requirements unless it was on an East Asian topic approved beforehand by the DGS.
   c. Students will meet regularly with the DGS (at least once a semester) to determine course selection, progress to degree, and designation of courses in which papers are to be submitted for the degree.
   d. With approval of the DGS, students with a specific focus of study will work with a faculty member with knowledge of that field as their faculty advisor. The DGS will liaise with the advisor on all matters listed above.
   e. In the final semester of study, the DGS, faculty advisor, and student will work together to assemble an oral defense committee of three graduate faculty. The student will select one of the three papers to present and defend for their exam. The committee may also ask general questions about the two other research papers that were submitted to meet the non-thesis requirements.

Requirements for East Asian Cultures Concentration

1. A minimum of 30 graduate credit hours:
   a. Third-year level of language.**
   b. While students may apply credit hours from study abroad toward their degree, at least 18 credit hours must be taken in residence at KU.
   c. A course involving research methods, to be determined in consultation with the Thesis/Faculty Advisor and the Director of Graduate Studies.
   d. Students are expected to select 1 of the East Asian cultures for their concentration and to include in their programs at least 2 courses dealing wholly with an East Asian culture outside the concentration or broadly on East Asia.
e. Students may not take more than 6 hours of directed readings.

f. Students may, in consultation with the department graduate director, take other credit hours in a discipline or disciplines closely related to their studies. The balance between courses in EALC and related departments must be determined with the student’s thesis advisor and the director of graduate studies. East Asian area courses are offered in anthropology, business, film and media studies, geography, history, history of art, linguistics, political science, religious studies, and sociology.

g. Students must take 1 literature or culture course with an EALC department graduate faculty member at the 500 level or above in the country of their concentration.

2. Thesis Option
   a. A thesis that will demonstrate in-depth research on a topic in the area of concentration (China, Japan, or Korea), typically completed over 1 or 2 semesters (EALC 899, 3 to 6 credit hours).

3. Non-Thesis Option
   a. Must write three substantial research papers on East Asian topics (15-20 pages).
      i. At least one of the papers must be completed by the end of the second semester in the program.
      ii. The papers will be evaluated and graded by the instructor of the class in which the paper is submitted. The grade must be A or B.
      iii. The student will submit each paper to the Director of Graduate Studies (DGS), plus an abstract (no more than 500 words) summarizing each. The student will submit the original copy with the instructor’s remarks and grade. The DGS may require revisions be made before final acceptance.

   b. With the permission of the DGS, students may include relevant courses in non-East Asian areas (such as linguistics, language pedagogy, anthropology, political science, and literary theory). A paper for such a course would generally not be used to fulfill the above requirements unless it was on an East Asian topic approved beforehand by the DGS.

   c. Students will meet regularly with the DGS (at least once a semester) to determine course selection, progress to degree, and designation of courses in which papers are to be submitted for the degree.

   d. With approval of the DGS, students with a specific focus of study will work with a faculty member with knowledge of that field as their faculty advisor. The DGS will liaise with the advisor on all matters listed above.

   e. In the final semester of study, the DGS, faculty advisor, and student will work together to assemble an oral defense committee of three graduate faculty. The student will select one of the three papers to present and defend for their exam. The committee may also ask general questions about the two other research papers that were submitted to meet the non-thesis requirements.

**A language course result lower than ‘B’ may result in a departmental recommendation for probation status. If language coursework performance does not improve after one semester, the student may be recommended for dismissal.

### East Asian Courses in Other Departments

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<thead>
<tr>
<th>Code</th>
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<tr>
<td>COMS 557</td>
<td>East Asian Communication</td>
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### Film and Media Studies

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### History

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<td>HIST 583</td>
<td>Imperial China</td>
<td>3</td>
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<td>HIST 584</td>
<td>Modern China</td>
<td>3</td>
</tr>
<tr>
<td>HIST 587</td>
<td>Age of Shoguns: Early Modern Japan</td>
<td>3</td>
</tr>
<tr>
<td>HIST 588</td>
<td>Japan, 1853-1945</td>
<td>3</td>
</tr>
<tr>
<td>HIST 589</td>
<td>Japan Since 1945</td>
<td>3</td>
</tr>
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<td>HIST 605</td>
<td>Medieval Japan</td>
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<td>HIST 696</td>
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### History of Art

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<td>Early Chinese Art</td>
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<tr>
<td>HA 788</td>
<td>Proseminar in Japanese Art</td>
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<td>HA 980</td>
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### Political Science

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<td>POLS 668</td>
<td>Politics and Society in China</td>
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<td>POLS 676</td>
<td>International Relations of Asia</td>
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<td>POLS 678</td>
<td>Chinese Foreign Policy</td>
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### Religious Studies

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<tr>
<td>REL 510</td>
<td>Religion in Korea</td>
<td>3</td>
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</tbody>
</table>

For additional courses in the above disciplines, see appropriate sections of the online catalog.

### Dual Degree Program in Law and East Asian Languages and Culture

#### Dual Degree Program in Law and East Asian Languages and Cultures

The J.D./M.A. EALC program combines the Juris Doctor program offered by the School of Law and the Master of East Asian Languages and Cultures program offered by the Department of East Asian Languages and Cultures in the College of Liberal Arts and Sciences into 4 years and one summer of full time study.

Growing interdependence with East Asia, particularly with China, provides a need for lawyers versed in culture and language. A dual degree in Law and East Asian Languages and Cultures opens many doors for its recipients. One can find opportunities in international trade and finance, immigration law, and other related fields, as well as a greater ability to work with clients from various backgrounds.

#### Funding

Dual J.D./M.A. students are eligible and strongly encouraged to apply for a Foreign Language and Area Studies (FLAS) (http://flas.ku.edu/) fellowship through the Center for East Asian Studies.
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Dual Program

To be admitted to the dual J.D./M.A. EALC Program, an applicant must hold an earned baccalaureate degree from an accredited college or university, complete the admission processes, meet the admission requirements for both the School of Law and the Department of East Asian Languages and Cultures, and be admitted to both programs no later than the end of the first year of study in Law or the completion of more than 16 credit hours in EALC. Full-time study is required for the dual J.D./M.A. EALC program. The Law School Admission Test (LSAT) is the only standardized test required for an applicant to the dual degree program.

For information about applying to the Law School, see the school website (http://www.law.ku.edu/admissions/). For information about applying to the EALC Department, please visit the graduate admissions page (https://ealc.drupal.ku.edu/_prerequisites/) of the EALC Department website, or contact the EALC Department Graduate program directly at ealc@ku.edu.

Degree Requirements

To receive the J.D./M.A. EALC, a student must successfully complete a minimum of 106 credit hours, 81 in the School of Law and 25 in the Department of East Asian Languages and Cultures. The School of Law requires a 2.0 grade point average, while the office of Graduate Studies requires a 3.0 GPA for all courses counting toward the M.A. in EALC portion of the degree.

J.D. Requirements

Students must complete all required first year School of Law courses (29 credit hours) prior to enrolling in courses for the joint degree. In addition to these course requirements, the School of Law has an upper-class writing requirement, a residence requirement, and a time limit for completion of the degree.

In addition to the 44 TOTAL credit hours of coursework required of all law students, students in the joint J.D./M.A. EALC program must complete an additional 12 credit hours of coursework consisting of courses in any two of the following four areas of concentration:

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<td>LAW 864</td>
<td>Advanced International Trade Law</td>
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<tr>
<td>LAW 945</td>
<td>International Commerce and Investment</td>
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<td>LAW 974</td>
<td>Public International Law</td>
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Comparative Law

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<tr>
<td>LAW 879</td>
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<td>3</td>
</tr>
<tr>
<td>LAW 918</td>
<td>Islamic Law</td>
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</table>

Students may choose courses to complete the remaining hours necessary to reach the total of 81 hours of law school credit needed for the joint degree from any part of the Law School curriculum.

Please refer to the current School of Law Catalog for further details about the requirements for the J.D. portion of the degree.

EALC Requirements

Students shall consider the degree in East Asian Cultures to be interdisciplinary in nature:

1. A minimum of 22 graduate credit hours plus 1 of the 2 options listed in part 6.
2. Each student is expected to select 1 of the East Asian Cultures (Japan, China, or Korea) for concentration and to include in his or her program at least two courses dealing wholly with an East Asian culture outside of his or her concentration. Up to 2 courses can be pan-East Asian courses including the student’s country of concentration.
3. Students must complete a third year of language of the country of concentration.**
4. No more than 6 hours of directed reading in a language may count toward the M.A. degree.
5. Students must take 1 literature or culture course with an EALC department graduate faculty member at the 500 level or above in the country of their concentration.
6. Students are required to fulfill 1 of the following requirements:
   a. Write a thesis (3 credit hours) which must deal with a subject within the concentration chosen by the student, or
   b. Practical thesis: Hold an internship or job in the country of concentration for a period of at least 8 weeks, at the advisor’s approval, and write a 40 page analysis of the cultural aspects of the experience (3 credits)

Students MUST consult with the EALC Director of Graduate Studies (DGS) immediately upon admission to the joint program to determine an enrollment plan and obtain a list of current approved joint courses. Joint students must also consult with the DGS during advising periods each semester.

First and second year language courses do not count toward the 25 credits required for M.A. degree completion in the J.D./M.A. program. Third year language is 6-10 credits and counts toward the degree. Third and fourth year Chinese, Japanese, and Korean language courses fulfill the requirements, as well.**

** A language course result lower than B may result in a departmental recommendation for probation status. If language coursework performance does not improve after one semester, the student may be recommended for dismissal.

Graduate Certificate in East Asian Cultures

Students pursuing the Graduate Certificate in East Asian Cultures will specialize in one of three areas of East Asia, and have the flexibility to study the country through the scope of other disciplines (Art History,
Business, Film, History, Linguistics, Political Science, Religious Studies, Women, Gender & Sexuality Studies). Understanding the culture of China, Japan, or Korea is increasingly important in more and more fields - from environmental studies to supply chain management, from international finance to military affairs. This certificate enables students to document valuable expertise gained from the many faculty members at KU who conduct research and teach about East Asia by choosing one of the following tracks:

- China Studies
- Japan Studies
- Korea Studies

Please contact Graduate Program Coordinator, Aley Pennington, at aleypennington@ku.edu for more information.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (p. 1295).

Applicants must submit the following materials for the East Asian Cultures Certificate:

1. A C.V. or Resume
2. A personal statement declaring your interest in East Asian Cultures and its relationship to your graduate course of study and/or career objectives.
3. 2 letters of recommendation from your graduate degree program.
4. A KU Advising report or an official transcript.

The East Asian Languages & Cultures Department offers an East Asian Cultures certificate for specialized study through three different tracks:

- China Studies
- Japan Studies
- Korea Studies

Students are required to complete 12 credits of graduate-level coursework to successfully earn an East Asian Cultures certificate in the area of concentration.

**Required Course:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EALC 704</td>
<td>Contemporary East Asia</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective Courses:** In consultation with the department’s Director of Graduate Studies, students must choose three additional 3-credit courses from either:

- East Asian Languages and Cultures (EALC) graduate-level courses
- Approved additional Elective courses (see the EALC Graduate Student Handbook for current listing)

*One language course at 4th year level or above (500+) may fulfill one of the three elective course requirements

The following restrictions apply to the choice of electives:

- Two courses must concentrate on the country the student is studying.
- The third elective course may either concentrate on the country of study, OR on East Asia in general.

**Department of Ecology and Evolutionary Biology**

**Ecology and Evolutionary Biology Graduate Programs**

The department comprises a large number of biologists with a variety of research interests. 3 broad overlapping themes capture the interests and activities in EEB — biodiversity and macroevolution, ecology and global change biology, and evolutionary mechanisms. The department offers graduate study leading to Master of Arts and Doctor of Philosophy degrees in ecology and evolutionary biology. General information about the department and its faculty, current graduate students, admission, and financial support may be found on the EEB website (https://eeb.ku.edu/). Students who are interested in enrolling in EEB graduate-level coursework without admission to a graduate program are encouraged to apply for graduate non-degree seeking student status. See the EEB admission page (https://eeb.ku.edu/how-apply/) for further details.

Neotropical biodiversity is a special area of concentration among EEB faculty. Many faculty members have courtesy appointments in the Latin American Area Studies Program, which fosters multidisciplinary research in Latin America across the campus. KU is a member of the Organization for Tropical Studies, and many faculty members and students participate in advanced, field-oriented OTS courses. Graduate students can receive fellowships for courses, e.g. BIOL 786 Fundamentals of Tropical Biology, or research projects in Costa Rica. Other EEB faculty have research concentrations in Asia, Africa, Antarctica, and elsewhere, creating a genuinely global reach for EEB research activities.

(B.A. and B.S. degree programs in biology are listed under Biology Undergraduate Programs (p. 1150).)

**Facilities**

Departmental physical facilities include laboratories, natural history collections, and field-study sites near the university. Most laboratory facilities are in Dyche Hall, Higuchi Hall, McGregor Herbarium, Haworth Hall, and the Public Safety Building. Special facilities in Haworth include controlled-environment rooms, greenhouses, and various instrument rooms, including an excellent microscopy and analytical imaging facility (https://mai.ku.edu/).

The natural history collections are housed by the Biodiversity Institute (https://biodiversity.ku.edu/) and include approximately 8 million...
specimens, including mammals, birds, reptiles, amphibians, fishes, arthropods and other invertebrates, parasites, and plants, as well as fossils of vertebrates, arthropods, other invertebrates, and plants. Collections support diverse research in evolutionary biology, paleobiology, and ecology including systematics, phylogenetics, biogeography, morphology, behavior, biodiversity informatics, and biotic surveys and inventories. The BI also has leading facilities for diverse analyses of biodiversity information, including well-equipped spatial analysis laboratories, and extensive facilities for molecular systematics.

The Kansas Biological Survey (https://biosurvey.ku.edu/) is a KU research and service unit and a non-regulatory state agency, whose mission is to gather information on the kinds, distribution, and abundance of plants and animals in Kansas and to compile, analyze, interpret, and distribute this information broadly. KBS is a nationally recognized leader in many fields of environmental research and maintains a strong tradition of natural history studies. Scientists at KBS study terrestrial ecosystem ecology, aquatic ecology, water quality, evolution, biodiversity, ecology, and population biology of animals and plants, and conservation and restoration of natural communities. KBS researchers routinely use technologies such as satellite and airborne remote sensing, aerial photography, and Geographic Information Systems.

KBS administers the University of Kansas Field Station (https://biosurvey.ku.edu/field-station/), 3,700 acres of field-sites dedicated to environmental research and education, and is part of the prestigious National Ecological Observatory Network. KUFS sites are in the transition zone between the Eastern Deciduous Forest and Tallgrass Prairie biomes and include woodland, prairie, old fields, and wetlands. The Fitch Natural History Reservation and Baldwin Woods are used primarily to study unmanipulated ecological processes in undisturbed habitats. The John H. Nelson Environmental Study Area is used for experimental ecological studies and has experimental ponds, a dedicated lake and watershed, a common garden, small-mammal enclosures, and a succession facility.

Courses

**BIOL 100. Principles of Biology. 3 Credits.** **NB N**
Intended for non-science majors. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended.

**BIOL 101. Principles of Biology, Honors. 3 Credits.** **NB N**
Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 is recommended. BIOL 101 and BIOL 102 satisfy the College natural science with laboratory requirement. Prerequisite: Membership in the College Honors Program or consent of instructor.

**BIOL 102. Principles of Biology Laboratory. 1 Credits.** **U LFE**
Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). Prerequisite: Concurrent enrollment in BIOL 100 is recommended.

**BIOL 105. Biology Orientation Seminar. 1 Credits.** **N**
Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis.

**BIOL 116. Introduction to Evolutionary Biology. 3 Credits.** **N LFE**
An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism).

**BIOL 120. Insects in Your World. 3 Credits.** **NB N**
Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology, behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week.

**BIOL 150. Principles of Molecular and Cellular Biology. 3 Credits.** **NB N LFE**
A course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture per week. An honors section (BIOL 151) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170; or consent of instructor.

**BIOL 151. Principles of Molecular and Cellular Biology, Honors. 3 Credits.** **NB N LFE**
A course for students with superior academic records who are biology majors or who plan to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture per week. Prerequisite: Membership in the University Honors Program and concurrent or prior enrollment in CHEM 130, CHEM 190 and CHEM 191, CHEM 150, or CHEM 170; or consent of instructor.

**BIOL 152. Principles of Organismal Biology. 3 Credits.** **NB N LFE**
A course for biology majors and students who plan to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture per week. An honors section (BIOL 153) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170; or consent of instructor.

**BIOL 153. Principles of Organismal Biology, Honors. 3 Credits.** **NB N LFE**
A course for students with superior academic records who are biology majors or planning to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture per week. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170; or consent of instructor.

**BIOL 154. Introductory Biology Lab for STEM Majors. 2 Credits.** **N LFE**
A hybrid laboratory course for majors in STEM fields. This hybrid laboratory course will use online modules (~ 2 hours per week) to
introduce students to key core competencies (e.g., critical thinking, quantitative reasoning, scientific communication, collaboration, etc.) that are applicable to all STEM fields. Two hours of face-to-face laboratory instruction will provide students hands-on opportunities to apply these core competencies and skills to research questions in the biological sciences. Students will apply research skills and engage in an authentic research activity during the second half of the course and will present the results to their peers in oral and written formats.

**BIOL 155. Principle Lab in: _____ 1-3 Credits. U LFE**
This introductory laboratory exposes the students to basic principles in biology and modern experimental techniques through an open-ended authentic research experience directed by a faculty member. Prerequisite: Consent of instructor.

**BIOL 177. First Year Seminar: _____ 3 Credits. NB**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in biology. Does not contribute to major requirements in biology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**BIOL 200. Basic Microbiology. 3 Credits. NB N**
Introduction to bacteria and viruses. Topics include historical development of microbiology, bacterial structure and growth, enzymes and energy production, disinfection, antibacterial drugs, gene transfer, viral replication, infection and immunity, with emphasis on infectious diseases. Can be substituted for BIOL 201 as a prerequisite for other microbiology courses by consent of department. Not open to those with credit in BIOL 400, or BIOL 401. Prerequisite: A course in high school biology and a course in high school chemistry. This course is not recommended for first semester freshmen.

**BIOL 203. Introductory Microbiology Laboratory. 2 Credits. U LFE**
Laboratory exercises to complement BIOL 200. Prerequisite: BIOL 200. May be taken concurrently.

**BIOL 210. Introduction to Clinical Laboratory Sciences. 1 Credits. U**
An introductory overview of the professions of Clinical Laboratory Sciences including types of analyses performed, specialties, interrelationships in the health care system and a visit to a clinical laboratory. This course will enable those considering a major in the Clinical Laboratory Sciences to have a clear definition of the professions. (Same as CLS 210.)

**BIOL 225. Evolution and the History of Life. 3 Credits. N**
This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species.

**BIOL 240. Fundamentals of Human Anatomy. 3 Credits. N**
Introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent.

**BIOL 241. Human Anatomy Observation Laboratory. 2 Credits. U LFE**
One of the two laboratories in gross anatomy designed to complement BIOL 240. Emphasizes the three-dimensional appearance and spatial relationships of anatomical structures through supervised observations of pre-dissected human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy observation laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is required.

**BIOL 246. Principles of Human Physiology. 3 Credits. N**
An introduction to the physiological and biochemical processes and general physiological principles necessary to sustain life. Organ and organ system processes are emphasized. Intended for students majoring in allied health or sports related curricula who require a course in human physiology. Not intended for biology majors. Prerequisite: BIOL 100 or equivalent.

**BIOL 247. Principles of Human Physiology Laboratory. 2 Credits. U LFE**
Designed to complement BIOL 246. Uses experiments and simulations to demonstrate laboratory techniques and representative processes in areas of human physiology. Concurrent or prior enrollment in BIOL 246 required.

**BIOL 350. Principles of Genetics. 4 Credits. N**
Why are related individuals more similar than unrelated individuals and what is the basis for heritable traits? From Mendel's discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cyton genetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Not open to students with credit in BSCI 350. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195 and CHEM 196, with a grade of C- or higher and BIOL 150 or BIOL 151 with a grade of C- or higher and BIOL 152 or BIOL 153 with a grade of C- or higher; or consent of instructor.

**BIOL 360. Principles of Genetics, Honors. 4 Credits. N**
The science of genetics aims to explain why individuals differ from one another and how these differences are inherited. Honors Genetics covers all core topics in fundamental genetics: Mendelian inheritance, meiosis and recombination, mutation, molecular genetics, population genetics, quantitative genetics and genomics. Special attention given to the practice of genetics and the complex relationship between genotype, phenotype and environment. A broader goal of Honors Genetics is to provide students a framework for understanding recent advances in medical genetics and the modern era of personal genomics. Not open to students with credit in BSCI 350. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195 and CHEM 196, with a grade of C- or higher and BIOL 150 or BIOL 151 with a grade of C- or higher and BIOL 152 or BIOL 153 with a grade of C- or higher and membership in the University Honors Program; or consent of the instructor.

**BIOL 400. Fundamentals of Microbiology. 3 Credits. NB N**
Fundamental principles of microbiology with emphasis on physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics, pathogenesis and immunity, industrially important microorganisms. Not open to students with credit in BSCI 400. Prerequisite: BIOL 150 or BIOL 151 with a grade of C- or higher and two semesters of college chemistry with a grade of C- or higher, or consent of the instructor.

**BIOL 401. Fundamentals of Microbiology, Honors. 4 Credits. N**
Honors section of BIOL 400 and BIOL 612, by application and invitation. Not open to students with credit in BSCI 400. Prerequisite: BIOL 150 or BIOL 151, two semesters of college chemistry, and membership in the University Honors Program, or consent of the instructor.
BIOL 402. Fundamentals of Microbiology Laboratory. 2 Credits. U LFE
Laboratory exercises designed to complement BIOL 400 or BIOL 700. Not open to students with credit in BSCI 401. Prerequisite: BIOL 400 or BIOL 612, or BIOL 400 or BIOL 612 concurrently.

BIOL 405. Laboratory in Genetics. 3 Credits. U LFE
A laboratory course that provides hands-on experience with classical genetics and modern molecular genetics. Experiments involve Mendelian genetics (dominance/recessivity, complementation, segregation, independent assortment) in eukaryotic organisms; recombinant DNA; basic bacterial genetics; polymerase chain reaction; DNA sequencing; computational genetics; and genome editing. Not open to students with credit in BSCI 351. Prerequisite: Concurrent or prior enrollment in BIOL 350.

BIOL 412. Evolutionary Biology. 4 Credits. N
Introduction to the patterns and processes of organic evolution. Considered are the history of evolutionary thought, molecular evolution, genetics and microevolution, selection and adaptation, and speciation and macroevolution. Emphasis will be placed on how scientists study and document change over time in natural populations, methods for testing hypotheses about events in evolutionary history, and how discovering evolutionary mechanisms at one level of organization can help to explicate general processes in the natural world. Prerequisite: BIOL 152 and BIOL 350, or consent of the instructor.

BIOL 413. History and Diversity of Organisms. 3 Credits. N LFE
An integrated lecture and laboratory course presenting an overview of the variety and ancestry of life on earth. Using representatives from prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic reconstruction are illustrated and evolutionary trends in the life history features, functional morphology, and structural complexity of extant and extinct organisms are presented. Two hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

BIOL 414. Principles of Ecology. 3 Credits. N
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. (Same as EVRN 414.) Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

BIOL 415. Field and Laboratory Methods in Ecology. 2 Credits. N
This course complements BIOL 414 with field trips and laboratory exercises that illustrate the basic concepts of ecology. Topics covered include methodologies for quantitative sampling of terrestrial and aquatic systems, design of field studies, computer simulation and digital data analysis techniques, and scientific writing. Prerequisite: Concurrent or prior enrollment in BIOL 414. A statistics course is recommended.

BIOL 416. Cell Structure and Function. 3 Credits. N
Lecture survey of molecular cell biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Not open to students with credit in BSCI 416. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; and CHEM 135, or CHEM 175, or CHEM 195 and CHEM 196; or consent of the instructor.

BIOL 417. Biology of Development. 3 Credits. N
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating development, including classic embryology and modern molecular genetics. Not open to students with credit in BSCI 417. Prerequisite: BIOL 350 or BIOL 360 and BIOL 416 or consent of the instructor.

BIOL 418. Laboratory in: ____. 1-3 Credits. U LFE
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption. Each section may have additional prerequisites to be determined by instructor.

BIOL 419. Topics in: ____. 1-3 Credits. N LFE
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs.

BIOL 420. Seminar: ____. 1-3 Credits. N
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor.

BIOL 423. Non-laboratory Independent Study. 1-9 Credits. N
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor.

BIOL 424. Independent Study. 1-9 Credits. N
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor.

BIOL 425. Teaching Apprenticeship in Biology. 1-9 Credits. N
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of instructor and Director of Undergraduate Biology.

BIOL 426. Laboratory in Cell Biology. 3 Credits. U LFE
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; concurrent or prior enrollment in BIOL 416 or BIOL 536; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended.

BIOL 428. Introduction to Systematics. 3 Credits. N
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systematic background.

BIOL 430. Laboratory in Molecular Biology. 3 Credits. U LFE
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or microbiology.

BIOL 435. Introduction to Neurobiology. 3 Credits. N
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Not open to students with credit in BSCI 435. Prerequisite: BIOL 350 or BIOL 360 and BIOL 416 or consent of the instructor.

BIOL 442. Human Anatomy Dissection Laboratory. 3 Credits. U Laboratory in gross anatomy designed to build on content from BIOL 240 and BIOL 241. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial dissecting experience. Students perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy laboratory. Prerequisite: BIOL 240 and BIOL 241, and consent of the instructor.

BIOL 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N LFE This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

BIOL 451. Ecosystems Stewardship. 3 Credits. This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 451 and GEOG 451.)

BIOL 454. Brain Diseases and Neurological Disorders. 3 Credits. N Major brain diseases and neurological disorders such as stroke, Alzheimer’s Disease, Parkinson’s Disease, Huntington’s Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., are discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Prerequisite: BIOL 416 or BIOL 435 or BIOL 546, or consent of instructor.

BIOL 477. Ecology and Global Change. 3 Credits. N Humans influence both natural and managed ecosystems. This course studies the effects of climate change, land-use change, and reductions in biodiversity on ecosystems. Emphasis is placed on how biological and physical processes may be perturbed by human influences. Topics include the greenhouse effect, species extinctions, human disease expansion, and the effects of global change on agricultural productivity. A combination of lectures and discussion address issues from a scientific basis and link these ecological issues to our everyday lives and society as a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission of instructor.

BIOL 480. Medical Parasitology. 3 Credits. N Introductory lecture course focused on parasites (protozoans and metazoans) causing disease in humans, including zoonotic diseases (diseases or infections that are naturally transmissible to humans from non-human vertebrates). Provides basic knowledge about the morphology, epidemiology, evolution, and ecology of parasites infecting humans globally (e.g., malaria, amoebas, hookworms, tapeworms). Emphasis is placed on life-cycles, course of infection, modes of reproduction, diagnosis, and pathology of human parasites; relevant parasites of veterinary importance are also discussed. Prerequisite: BIOL 152 or BIOL 153, or permission of instructor.

BIOL 481. Medical Parasitology Laboratory. 1 Credits. U LFE Laboratory course in the study of parasites causing disease in humans, including zoonotic diseases (diseases or infections that are naturally transmissible to humans from non-human vertebrates), emphasizing their morphology and identification. One three-hour laboratory each week. Prerequisite: Concurrent or prior enrollment in BIOL 480.

BIOL 490. Internship and Practical Applications. 1-6 Credits. N This course provides credit for supervised practical experiences in an occupational area of interest. In addition to the work-related activity, students will be expected to complete reading and writing assignments, participate in on-line discussions, and create a final summary of internship accomplishments. Hours of credit earned (1-6) are based on number of hours at internship site and agreement of instructor. Repeatable for up to 6 credit hours, provided the internship experiences are different. Prerequisite: Consent of Instructor.

BIOL 499. Introduction to Honors Research. 2 Credits. N Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor.

BIOL 500. Biology of Insects. 3 Credits. N Lectures and demonstrations providing an introduction to the study of insects, including general classification, structure, phylogeny, identification, development, physiology, behavior, ecology, and relations to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

BIOL 501. Physiological Adaptations of Plants to Extreme Environments. 3 Credits. N Exploration of physiological adaptations of plants to bright sunlight & deep shade, drought & flooding, excess heat & subfreezing, excess elements and too few elements. Examples of adaptations include: red leaves, blue leaves, succulence, root "knees", moving leaves, frozen leaves, heavy metal plants, carnivorous plants, parasitic plants, epiphytes. Prerequisite: BIOL 150 or BIOL 152 or consent of instructor.

BIOL 502. Laboratory in Insect Biology and Diversity. 2 Credits. U LFE Laboratory and field studies of insects, emphasizing their diversity, classification, ecological relationships, morphology, and behavior. Course provides practical application of principles covered in BIOL 500. Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent.

BIOL 503. Immunology. 3 Credits. N Lectures on the nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of
antigens and antibodies and of their interaction; ontogeny and cellular basis of immune responsiveness, hypersensitivity; specific immunologic tolerance. Not open to students with credit in BSCI 503. Prerequisite: BIOL 400 or BIOL 401, or consent of instructor.

BIOL 504. Immunology Laboratory. 2 Credits. U LFE
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or BIOL 503 concurrently.

BIOL 506. Bacterial Infectious Diseases. 3 Credits. N
Explores bacterial infectious diseases from the perspective of how disease is established and the mechanisms that underlie disease, as well as how to treat and prevent infectious disease. Not open to freshmen or sophomores. Not open to students with credit in BSCI 506. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.

BIOL 507. Bacterial Infectious Diseases Laboratory. 2 Credits. U LFE
Laboratory to complement BIOL 506. Cultivation of pathogenic microorganisms, diagnostic procedures, and experiments to demonstrate various aspects of microbial pathogenicity and host responses. Prerequisite: BIOL 402 and BIOL 506 (or concurrent enrollment) or consent of instructor.

BIOL 509. Biology of Spiders. 3 Credits. N
An introduction to the evolution, anatomy, physiology, behavior, and ecology of spiders and other arachnids. Special topics include the action of spider venoms; the composition and uses of silk; courtship and mating; predation; social behavior; and the role of spiders in natural and agricultural ecosystems. Concurrent enrollment in BIOL 511 is encouraged. Prerequisite: BIOL 152, BIOL 153 or permission of instructor.

BIOL 511. Biology of Spiders Laboratory. 1 Credits. U LFE
Topics will include comparative biology of arachnid orders (spiders, scorpions, harvestmen, mites, and others), external and internal anatomy of spiders, identification of common spider families and genera, and spider behavior. Students will be required to make a small collection (collect, preserve, and identify specimens). Prerequisite: BIOL 509; concurrent enrollment is preferred.

BIOL 512. General Virology. 3 Credits. N
Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host cell-viral interactions; mode of replication of DNA and RNA viruses, tumor viruses. Not open to students with credit in BSCI 512. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.

BIOL 513. Virology Laboratory. 2 Credits. U LFE
Experiments involving cultivation, quantitation, and identification of animal viruses, continuous cell culture and primary chicken embryo culture techniques. Molecular biology techniques are used to demonstrate the steps in virus replication. The value of viruses as tools to understand normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor.

BIOL 518. Microbial Genetics. 3 Credits. N
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher or consent of instructor.

BIOL 519. Microbial Genetics Laboratory. 2 Credits. U LFE
A laboratory course on the genetic analysis of bacteria. Includes mutagenesis, cloning, agarose and polyacrylamide gel electrophoresis, PCR, regulation of gene expression, and computational analysis of DNA sequences and protein structures. Prerequisite: BIOL 350 or BIOL 360.

BIOL 520. Marine Biology. 3 Credits. N
This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor.

BIOL 524. Mammalian Paleontology. 3 Credits. N
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as GEOL 524.) Prerequisite: One of the following: BIOL 225, BIOL 412, BIOL 413, GEOL 304, GEOL 521, or consent of the instructor.

BIOL 527. Primate Evolution and the Fossil Record. 3 Credits. N
This course exposes students to fundamental concepts of paleontology and evolutionary biology using the mammalian order Primates as a high-profile case study. Primates are interesting partly because humans are primates. Hence, scientific understanding of human origins and human evolution must be grounded in knowledge of our nearest relatives. This course places human origins within the broader framework of how primates have evolved over the course of the Cenozoic Era, often in response to radical changes in the Earth's physical environment. Prerequisite: BIOL 412 or BIOL 413, or consent of the instructor.

BIOL 530. Biodiversity Discovery and Assessment. 2 Credits. N
An integrated lecture and laboratory course designed to provide an overview of modern methods in biodiversity exploration and discovery. Lectures cover the theory and practice of planning fieldwork in remote locations, documenting species and their natural history, how museum collections are made, calculating and comparing species richness estimates, and the process of describing and naming new species. The laboratory component provides students experience in documenting species and their natural history, processing and curating samples of natural history specimens, and the statistical analysis of biodiversity data. (Same as EVRN 530.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

BIOL 531. Tropical Fieldwork in Biodiversity Discovery. 1 Credits. U
An introduction to modern field methods of assessing biodiversity. Fieldwork exposes insects and various field methods to estimate and compare species diversity between different habitats and field sites. Taught at different sites in tropical South America over Spring Break. Contact Undergraduate Biology, or the Office of Study Abroad. (Same as EVRN 531.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. Concurrent or prior enrollment of BIOL 530 is strongly encouraged.

BIOL 533. Biology of Fungi. 4 Credits. N LFE
A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153.

BIOL 536. Cell Structure and Function (Honors). 3 Credits. N
BIOL 536 is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors
BIOL 540. General Invertebrate Zoology. 4 Credits. N LFE
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153.

BIOL 541. Biology of Freshwater Invertebrates. 3 Credits. N
A lecture and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in rivers, lakes, and wetlands. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 152 or BIOL 153; recommended BIOL 414 and/or BIOL 540.

BIOL 544. Comparative Animal Physiology. 3 Credits. N
An intermediate physiology course with lectures and discussions of the structures, functions, mechanisms, and interactions of vertebrate and invertebrate organ systems with a focus on the different ways in which animals adapt to their environments. Topics include digestion and nutrition, metabolism, gas exchange, circulation, excretion, neurophysiology, endocrinology, and muscle physiology. Prerequisite: BIOL 152 or BIOL 153, and CHEM 330, or consent of instructor. A college physics course is recommended but not required.

BIOL 545. Evolution of Development. 4 Credits. N
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent.

BIOL 546. Mammalian Physiology. 3 Credits. N
An intermediate course in the structures, functions, mechanisms, and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Not open to students with credit in BSCI 546. Prerequisite: BIOL 150; BIOL 152 or BIOL 240; and CHEM 330 or consent of instructor.

BIOL 547. Mammalian Physiology Laboratory. 2 Credits. U LFE
Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 546. Not open to students with credit in BIOL 247. Prerequisite: Corequisite: BIOL 546 or BIOL 646.

BIOL 548. Human Osteology. 4 Credits. N LFE
This course examines the structure and function of the human skeleton from an evolutionary and biomedical perspective. Students will learn to identify bones comprising the human skeleton and how osteological information aids in reconstructing sex, age, race, stature, and health status. Major transformations of the human skeleton from hominoid precursors, and some of the biomedicai consequences of these transformations, will be addressed. (Same as ANTH 648.) Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor.

BIOL 555. General Plant Physiology. 3 Credits. N
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: Consent of instructor.

BIOL 560. Histology. 3 Credits. N
Study of detailed microscopic anatomy of cells, tissues, and organs of mammals. Examples are drawn from normal and abnormal tissue, histochemistry, and electron microscopy. Lecture and demonstrations. A course in anatomy and physiology is highly recommended. Prerequisite: BIOL 152 or BIOL 153.

BIOL 570. Introduction to Biostatistics. 4 Credits. N LFE
Statistical concepts related to biological problems. Topics include the scientific method, data representation, descriptive statistics, elementary probability distributions, estimation and hypothesis testing, emphasizing the analysis of variation. Prerequisite: College algebra and ten hours of natural science.

BIOL 582. Principles of Biogeography. 3 Credits. N
An introduction to the study of the distribution of life on earth. Covers geographical patterns of species diversity and the processes that give rise to those patterns: speciation, extinction, dispersal, vicariance, continental drift, ecological interactions, and phylogeny. Topics are presented within the framework of evolutionary history and include discussion of the biology of species on islands, terrestrial biomes, altitudinal zonation of species, latitudinal species gradients, historical factors governing species distributions, macroevolutionary trends in the fossil record, and application of modern molecular techniques for testing biogeographical hypotheses. Prerequisite: BIOL 152 or 153 and past or concurrent enrollment in BIOL 412, 413, 414, or 550; or permission of Instructor.

BIOL 583. Herpetology. 3 Credits. N
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry.

BIOL 592. Ichthyology. 4 Credits. N LFE
A study of fishes. Lecture topics include the structure and adaptations of fishes to the aquatic environment and a survey of major fish groups with emphasis on their evolution and biogeography. Laboratory topics include a survey of fish diversity using specimens and the use of keys to identify fishes, with emphasis on the Kansas fish fauna. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 152 and/or BIOL 413.

BIOL 593. Ornithology. 3 Credits. N LFE
A lecture and laboratory course on the biology, evolution, and diversity of birds. Prerequisite: BIOL 412 (or BIOL 413), or permission of instructor.

BIOL 594. Forest Ecosystems. 3 Credits.
Students learn basic concepts of forest productivity, forest water relations, forest hydrology, nutrient cycling, through soils and vegetation, nutrient uptake, carbon cycling, decomposition, linkages to aquatic ecosystems, and agents of disturbance to these cycles. The class spends a significant part of the semester exploring forest soil profiles and the challenges they present to different forest ecosystems. We discuss the function of forested ecosystems in a global context and identify and understand smaller-scale processes that drive forest function. Prerequisite: CHEM 135, or CHEM 175, or CHEM 195 and CHEM 196; and BIOL 414.

BIOL 595. Human Genetics. 3 Credits. N
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current
issues in human and medical genetics. Prerequisite: BIOL 350 or BIOL 360.

**BIOL 598. Research Methods.** 3 Credits. N LFE
An introduction to the foundational concepts that underpin scientific inquiry and problem solving. Coursework is built around three student-designed inquiries, and topics considered within that context include experimental variables, basic principles of statistics, safety and ethics of investigation, professional communication techniques, and appropriate literature review. Enrollment priority will be given to students currently admitted to the UKanTeach program.

**BIOL 599. Senior Seminar: _____ . 1 Credits. N**
A synthesis and discussion of current trends in a discipline or disciplines related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline's state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences.

**BIOL 600. Introductory Biochemistry, Lectures.** 3 Credits. N
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Not open to students with credit in BSCI 600. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry.

**BIOL 601. Principles of Biochemistry Laboratory.** 2 Credits.
Theory and methods in the development of protein separation and purification, enzyme structure/function, and enzyme kinetics derived from primary literature searches and readings. Prerequisite: BIOL 600; or consent of instructor.

**BIOL 602. Plant Ecology.** 3 Credits. N
Introduction to basic concepts, focused at community and species level. Architectural ecomorphology of plants and their physiological responses to physical factors: solar radiation, climate, and soils. Plant succession as an interaction among species differing in ecomorphology and life style. Classification and ordination of plant communities: practice and theory. Other topics include: species diversity and lognormal distribution as to abundance classes; species/area relations and theory of island biogeography; allelochemic defenses; genecology; paleoecology. Prerequisite: BIOL 414 or consent of instructor.

**BIOL 603. Systematic Botany.** 3 Credits. N LFE
A lecture/laboratory course providing hands-on experience with plant identification, a history of plant classification, the principles of nomenclature and character analysis, the basics of systematics theory, and a phylogenically-oriented introduction to vascular plant diversity. Prerequisite: BIOL 413 or equivalent.

**BIOL 612. Fundamentals of Microbiology.** 3 Credits. NB N
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BIOL 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Not open to students with credit in BSCI 612. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor.

**BIOL 616. Medical Entomology.** 3 Credits. N
A study of the major human diseases transmitted by arthropods with emphasis on the biology and ecology of vectors, vector feeding mechanisms as related to disease transmission, epidemiology of arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor.

**BIOL 622. Paleontology.** 3 Credits. N
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as GEOL 521.) Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304.

**BIOL 623. Paleontology Laboratory.** 1 Credits. U LFE
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.)

**BIOL 625. Behavioral Ecology and Sociobiology.** 3 Credits. N
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 152; either BIOL 350, BIOL 412 or BIOL 414 recommended; or consent of instructor.

**BIOL 630. Conservation and Wildlife Biology.** 3 Credits. N
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended.

**BIOL 636. Biochemistry I.** 4 Credits. N
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor.

**BIOL 637. Introductory Biochemistry Laboratory.** 2 Credits. U LFE
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment.

**BIOL 638. Biochemistry II.** 4 Credits. N
Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: CHEM 335 with a grade of C or higher and BIOL 636 with a grade of C or higher, or consent of instructor.

**BIOL 639. Advanced Biochemistry Laboratory.** 3 Credits. U LFE
The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and BIOL 638 (BIOL 638 may be taken concurrently).

**BIOL 640. The Biology and Evolution of Fossil Plants.** 3 Credits. N
A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology,
biogeography and the stratigraphic distribution and composition of ancient floras. Prerequisite: BIOL 413, or permission of instructor.

BIOL 641. Laboratory in Paleobotany. 1 Credits. U LFE
An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. Prerequisite: BIOL 413 or permission of instructor.

BIOL 642. Biochemistry III: Machines on Genes. 4 Credits. N
This one-semester lecture course for biochemistry majors is designed to complement the topics covered in BIOL 636 and BIOL 638. Emphasis will be placed on the various molecular machines involved in the transmission and utilization of genetic information, providing a biochemical perspective of replication, transcription, and translation. Prerequisite: BIOL 636 and BIOL 638 with a grade of C or higher.

BIOL 648. Systematics and Macroevolution. 3 Credits. N
An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics. Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony, Maximum likelihood and Baysian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent.

BIOL 650. Advanced Neurobiology. 3 Credits. N
The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor.

BIOL 652. Comparative Animal Behavior. 3 Credits. N
A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite.

BIOL 654. Comparative Animal Behavior, Laboratory. 1 Credits. U LFE
Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652.

BIOL 655. Behavioral Genetics. 3 Credits. N
A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor.

BIOL 660. Summer Field Ecology. 3 Credits. N
An introduction to research methods for environmental science. Similar to EVRN 460, formatted for summer term. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). Assignments and group work emphasize analysis and interpretation of field data. (Same as EVRN 660.) Prerequisite: Junior, Senior, or graduate standing, completion of the natural sciences requirement of the KU Core (GE3N).

BIOL 661. Ecology of Rivers and Lakes. 3 Credits. N
Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended.

BIOL 667. Chemical Communication in Sex, Feeding, and Fighting. 3 Credits. N
The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor.

BIOL 668. Evolutionary Ecology. 3 Credits. N
Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor.

BIOL 672. Gene Expression. 3 Credits. N
The molecular biology of gene expression in eukaryotes: A study of the structure of genes and the molecular mechanisms used by cells to control and regulate gene expression. Emphasis on enzymatic mechanisms related to transcription, translation, post-transcriptional and post-translational modifications, and epigenetics. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in BIOL 772. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor. A course in biochemistry is recommended.

BIOL 680. Genomics. 3 Credits. N
Genomics is the study of the structure, function and evolution of the genome. High-throughput technologies have given us the ability to easily and quickly sequence genomes, and measure genomewide patterns of gene expression. These tools, and the vast amounts of genome-scale data they provide, have transformed biology and medicine. This course will cover the key technological and computational methods by which genomic DNA is sequenced, genomes are assembled, and how RNA and epigenetic patterns are measured. Subsequently, we will emphasize how these genomics tools and techniques have deepened our understanding of biology, covering questions from diverse fields to illustrate the impact of genomics on evolutionary biology, molecular and developmental genetics, human medical genetics and personalized, precision medicine. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor.

BIOL 688. The Molecular Biology of Cancer. 3 Credits. N
The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, tumor viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536; or consent of instructor.

BIOL 699. Biology Honors Research Colloquium. 1 Credits. U
Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor.
BIOL 700. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

BIOL 701. Topics in: _____ . 1-3 Credits.
Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests.

BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Credits.
An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences.

BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Credits.
An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 701, algebra and two semesters of either physics or chemistry.

BIOL 706. Natural Sciences Curation and Collections Management. 3 Credits.
This course explores collections in the KU Museum of Natural History through the eyes of their curators and collection managers. It addresses aspects of collecting, cataloguing, preserving, storing, managing, and digitally archiving different types of natural science collections. The course format consists of lectures, readings, workshops, and guided tours of the museum’s paleontological, biological (flora and fauna) and archaeological division collections, as well as the Spencer Museum of Art’s ethnographic collections. Student projects will involve one of the museum’s collections with the opportunity for hands-on experience. (Same as MUSE 710.)

BIOL 712. Evolutionary Biology - Graduate. 3 Credits.
A thorough survey of evolutionary biology. Topics include: the history of evolutionary thought, genetics and the nature of variation, adaptation, speciation, coevolution, macroevolution, the comparative method, and the history of life. Prerequisite: BIOL 350 or equivalent or consent of instructor.

BIOL 714. Graduate Ecology. 3 Credits.
A thorough survey of the discipline of ecology. Topics include elements in physiological, population, community and ecosystem ecology. Overarching themes are 1) pattern and process, 2) ecology and evolution, 3) hierarchical nature of ecology, 4) variation in space and time, and 5) human dimensions of ecology. Prerequisite: Graduate standing or consent of instructor.

BIOL 720. Scientific Illustration. 3 Credits.
Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor.

BIOL 735. Scientific Communication. 3 Credits.
Principles of English communication skills for the professional scientist. The course begins by exploring the role of narrative in all forms of scientific communication; it then applies the use of narrative tools to scientific writing, message honing and speaking. The course covers written and verbal communication of primary research. Students must have an independent research project on which to focus their communication assignments. (Same as EVRN 735.)

BIOL 741. Biology of Freshwater Invertebrates. 3 Credits.
A lecture and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in rivers, lakes, and wetlands. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Graduate students will be expected to submit either an original collection of freshwater invertebrates or write a research essay on a topic mutually agreed upon with the professor. Not open to students who have taken BIOL 541. Prerequisite: Graduate standing; recommended: undergraduate invertebrate biology class.

BIOL 743. Population Genetics. 3 Credits.
Description and discussion of genetic variation in natural populations. The effects and interaction of selection, migration, mutation, mating systems, and finite population size on the maintenance of genetic variation. Discussion of the interface with evolution and population ecology. Prerequisite: BIOL 350 and BIOL 412 or equivalent.

BIOL 750. Advanced Biochemistry. 3 Credits.
The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: BIOL 807 and BIOL 808, a general biochemistry course, or permission of instructor.

BIOL 752. Cell Biology. 3 Credits.
A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: BIOL 807 and BIOL 808, or BIOL 416 or BIOL 536, or permission of instructor.

BIOL 754. Brain Diseases and Neurological Disorders. 3 Credits.
Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor.

BIOL 755. Mechanisms of Development. 3 Credits.
Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: BIOL 807 and BIOL 808 for graduate students; BIOL 417 or equivalent for undergraduate students; or permission of instructor.

BIOL 757. Carcinogenesis and Cancer Biology. 3 Credits.
This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in
Management of an exhibit program in both large and small museums in conjunction with basic preparation techniques. Emphasis will be placed on the development of high-quality museum exhibits. Laboratory exercises will provide first-hand experience in planning and producing exhibits, and discussion will focus on issues involved in planning and producing exhibits.

BIOL 759. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 751 and GEOG 759.)

BIOL 772. Gene Expression. 4 Credits.
The molecular biology of gene expression in eukaryotes: A study of the structure of genes and the molecular mechanisms used by cells to control and regulate gene expression. Emphasis on enzymatic mechanisms related to transcription, translation, post-transcriptional and post-translational modifications, and epigenetics. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in BIOL 672. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor. A course in biochemistry is recommended.

BIOL 782. Principles of Biogeography. 3 Credits.
A synthesis of historical and ecological biogeography of plants and animals, treating vicariance, dispersal, and community patterns; lectures, readings, discussions. A course in systematics and a course in ecology are recommended.

BIOL 784. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

BIOL 785. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

BIOL 786. Fundamentals of Tropical Biology. 1-8 Credits.
The tropical environment and biota; ecologic relations, communities and evolution in the tropics. Primarily a field course, taught in Costa Rica; two sessions per year, February-March, July-August.

BIOL 787. Introduction to Museum Exhibits. 3 Credits.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

BIOL 794. Mammalogy. 3 Credits.
A study of mammals, with emphasis on systematics, biogeography, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 100 or BIOL 413.

BIOL 798. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

BIOL 801. Topics in: ___ 1-3 Credits.
Advanced courses on special topics in biology, given as need arises. Lectures, discussing readings, laboratory or field work. Students may select sections according to their special interests.

BIOL 805. Scientific Integrity in Ecology and Evolutionary Biology. 1 Credits.
This course covers the responsible conduct of research to help students initiate research projects ethically. Topics covered include expectations of federal granting agencies and the university, best practices for data management and publishing, and professional development as a graduate student. Prerequisite: Admission to the graduate program in Ecology and Evolutionary Biology, or consent of instructor.

BIOL 807. Graduate Molecular Biosciences. 3 Credits.
An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, kinetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic genetic mechanisms, cell structure and function, signal transduction, basic and pathogenic bacteriology, immunology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor.

BIOL 809. Graduate Molecular Biosciences for Medicinal Chemists. 4 Credits.
An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor.

BIOL 811. Advanced Molecular and Cellular Immunology. 2 Credits.
Covers recent advances in immunochemistry and immunobiology. Topics include structure and function of antibodies, hybridoma systems, idiotypes, induction and regulation of the immune response through cell interactions and cytokine action, and the role of immune activity in disease states such as hypersensitivity, autoreactivity, and cancer. Prerequisite: BIOL 807 and BIOL 808, or an introductory course in immunology, or consent of instructor.

BIOL 812. Mechanisms of Host-Parasite Relationships. 2 Credits.
Emphasis is on virulence factors of microorganisms and the host response to infection. Topics will include pathogenesis of intracellular
and extracellular parasites, bacterial adhesins, and toxins, and the role of innate and acquired immunity in host resistance and the response to infection. Prerequisite: BIOL 807 and BIOL 808, or a course in biochemistry, or consent of instructor.

BIOL 814. Advanced Molecular Virology. 2 Credits.
The course concentrates on evaluation of current literature concerning all aspects of molecular biology, biochemical characterization, and pathogenic mechanisms involved in host-virus interactions. Students will be expected to present articles and participate in discussions. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics and a course in virology, or consent of instructor.

BIOL 815. Advanced Molecular Genetics. 2 Credits.
A literature-based course that covers recent advances in microbial molecular genetics. Topics include transcription, translation, mutagenesis and repair, genetic exchange mechanisms, and regulation of gene expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics, or consent of instructor.

BIOL 816. Careers in the Biomedical Sciences. 1 Credits.
Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor.

BIOL 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.
This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion. (Same as CHEM 817/MDCM 817/PHCH 817.) Prerequisite: Graduate student.

BIOL 841. Biometry I. 5 Credits.
The application of statistical methods to data from various fields of biological research. Special emphasis is placed on practical computational procedures. Prerequisite: College algebra.

BIOL 848. Phylogenetic Methods. 4 Credits.
A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods. Computer lab will familiarize students with software that implements the analyses discussed in lecture. Intended for graduate students specializing in systematics. Prerequisite: BIOL 845 and BIOL 841 or consent of instructor.

BIOL 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as CHEM 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor.

BIOL 895. Human Genetics. 3 Credits.
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: A course in genetics.

BIOL 899. Master's Thesis. 1-10 Credits.
Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory progress/limited progress/no progress basis.

BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Credits.
Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission.

BIOL 905. Advanced Molecular Genetics. 1-3 Credits.
A review of current literature in molecular genetics.

BIOL 918. Modern Biochemical and Biophysical Methods. 4 Credits.
This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 817, or permission of instructor.

BIOL 925. Research Grant Proposal Preparation. 3 Credits.
This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor.

BIOL 943. Multivariate Data Analysis. 3 Credits.
Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: Knowledge of elementary matrix algebra.

BIOL 950. Evolutionary Mechanisms. 3 Credits.
Reading and discussions of evolutionary mechanisms from the genetic, ecologic, and systematic viewpoints. Prerequisite: BIOL 412.

BIOL 952. Introduction to Molecular Modeling. 3 Credits.
Introduction to theory and practice of contemporary molecular modeling, including molecular mechanics, molecular dynamics, computer graphics, data analysis, use of structure and sequence databases, docking, and homology modeling. Weekly computer laboratory section aimed at allowing participants to pursue independent research projects that incorporate modeling aspects. Lectures, laboratory manuals, program descriptions, and technical notes are presented on course web page. Prerequisite: Graduate standing or consent of instructor.

BIOL 985. Advanced Study. 1-10 Credits.
Individual investigations; laboratory, field or museum; or reading assignments in specialized topics not ordinarily treated in other courses. Graded on a satisfactory/unsatisfactory basis.

BIOL 999. Doctoral Dissertation. 1-12 Credits.
Original research that is to be incorporated into a Ph.D. dissertation. Graded on a satisfactory progress/limited progress/no progress basis.
Master of Arts in Ecology and Evolutionary Biology

Ecology and Evolutionary Biology Graduate Programs

The department comprises a large number of biologists with a variety of research interests. Three broad overlapping themes capture the interests and activities in EEB — biodiversity and macroevolution, ecology and global change biology, and evolutionary mechanisms. The department offers graduate study leading to Master of Arts and Doctor of Philosophy degrees in ecology and evolutionary biology. General information about the department and its faculty, current graduate students, admission, and financial support may be found on the EEB website (https://eeb.ku.edu/).

Neotropical biodiversity is a special area of concentration among EEB faculty. Many faculty members have courtesy appointments in the Latin American Area Studies Program, which fosters multidisciplinary research in Latin America across the campus. KU is a member of the Organization for Tropical Studies, and many faculty members and students participate in advanced, field-oriented OTS courses. Graduate students can receive fellowships for courses, e.g. BIOL 786 Fundamentals of Tropical Biology, or research projects in Costa Rica. Other EEB faculty have research concentrations in Asia, Africa, Antarctica, and elsewhere, creating a genuinely global reach for EEB research activities.

(B.A. and B.S. degree programs in biology are listed under Biology Undergraduate Programs (p. 1150).)

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The departmental graduate admissions committee reviews the record of each applicant. Admission is based on background, preparation, test scores, and academic performance. The committee considers each candidate’s overall undergraduate record in the context of the institution(s) from which the record was received. A graduate student should have a broad undergraduate background in natural science and math, including calculus, physics, chemistry, organismal biology, genetics, ecology, and evolutionary biology. Faculty recommendations, honors, awards, undergraduate research experience, publications, and professional experience also are considered. Enthusiasm, scientific expertise, and clarity of writing as evidenced by the applicant’s essay are particularly important.

The master’s degree is not a prerequisite for entering a Ph.D. program. Non-native speakers of English must meet English proficiency requirements as described on the English Proficiency Requirements policy (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). For more details on admission requirements, visit the EEB website (https://eeb.ku.edu/).

Applicants are encouraged to seek a faculty sponsor through correspondence with one or more faculty members prior or during the application process. Prospective doctoral students who would prefer to do rotations with two or three faculty members in their first year should indicate a general field of interest and a short list of prospective faculty mentors on their application. Interested students are encouraged to visit campus to meet faculty members and graduate students. Graduate school is critically important in beginning a career, and the choice of a program in which to enroll should be made carefully.

The number of students admitted is limited. Qualified candidates may be denied admission because of lack of a faculty sponsor, financial support, or research facilities.

Applications and supplemental materials may be submitted online. Applications from underrepresented groups are encouraged. For a detailed description of the application process, visit the EEB website (https://eeb.ku.edu/). All application requirements, including the deadline for application receipt, can be found on the EEB Admissions (https://eeb.ku.edu/how-apply/) page. Only complete applications are considered. Send inquiries to the graduate academic advisor listed on the EEB Staff (https://eeb.ku.edu/staff/) page.

M.A. Degree Requirements:

Ecology and Evolutionary Biology

Options I (Thesis) and II (Nonthesis)

Two options leading to the M.A. degree are offered. Option I (Thesis) is research-oriented and requires a thesis. Option II (Nonthesis) emphasizes broader graduate training without a concentration on research. For each option, the advisory committee must have at least 3 Graduate Faculty members, 2 of whom must be in EEB. No faculty member outside the department is required. A faculty member from a different department with a courtesy appointment in the student’s home department may serve in fulfillment of the committee majority.

Required Course Work

Most course work requirements are identified during the student’s preliminary advisory meeting. Students are expected to take graduate-level courses (or have equivalent knowledge) in ecology, evolution, and systematics. A student’s advisory committee may add course requirements during annual meetings. Listed below are specific course requirements for all master’s students in the EEB department:

1. Students must complete BIOL 805 Scientific Integrity in Ecology and Evolutionary Biology during the first year of graduate education in the fall semester. Students are expected to attend departmental seminars in subsequent semesters.
2. Students must complete BIOL 801 Core Topics in Current EEB Research Seminar during the first year of graduate study in the spring semester.
3. Students must complete a graduate-level course in statistics, typically fulfilled by completing BIOL 841 Biometry I. Alternatively, students may demonstrate equivalent background knowledge.
4. Students pursuing Option I (Thesis) must complete a minimum of 1 credit hour of BIOL 899 Master’s Thesis.
5. 50% of the coursework required for the master's degree must be taken at the 700 level or above.

Master's students must meet a credit-hour-completion requirement. Those in the thesis program must complete a minimum of 30 graduate-level credit hours with no more than 14 of the 30 from enrollment in thesis, research, or advanced study hours. Those in the nonthesis program must complete a minimum of 36 graduate level credit hours with no more than 16 of the 36 from enrollment in thesis, research, or advanced study hours.

Master's Defense for Option I (Thesis) Students

During the final semester of enrollment, students pursuing the Option I (Thesis) master's degree must present the results of thesis research in a public forum and complete a thesis defense. The thesis presentation should follow the standard departmental seminar format. The master's thesis defense consists of a substantive test of the student's knowledge of the field and the thesis topic, with approximately 50 percent of the time devoted to questions in the general examination realm, covering the full breadth of the candidate's field of study (i.e., general knowledge of ecology and evolutionary biology). At the discretion of the student and advisor, the exam may be held on the same day as the thesis presentation, or the events may be held on separate days. The defense examining committee must be composed of 3 members of the Graduate Faculty, the majority of which must be tenured, or tenure-track EEB faculty with regular or dissertation status on the Graduate Faculty. In some cases it may be possible for committee members to attend the examination via mediated means such as tele/video-conferencing (for details view the exam attendance policy [http://www.policy.ku.edu/graduate-studies/oral-exam-attendance/]). To pass the thesis defense, a student must receive a majority of passing votes from the examining committee. Students must contact the EEB graduate program coordinator 2 weeks prior to the anticipated examination to request departmental and College permission to schedule the event.

Master's Final Examination for Option II (Nonthesis) Students

During the final semester of enrollment in course work when nonthesis program activities are nearing completion, students pursuing the Option II (Nonthesis) master's degree must successfully complete a general oral examination. The examination's structure is similar to that of the doctoral oral comprehensive examination; however, the examination is shorter, and depth and breadth of knowledge required of the student are less comprehensive than expected of a successful doctoral aspirant. The examining committee must be comprised of at least 3 members of the Graduate Faculty, the majority of which must be tenured or tenure-track EEB faculty with regular or dissertation status on the Graduate Faculty. In some cases it may be possible for committee members to attend the examination via mediated means such as tele/video conferencing (for details view the exam attendance policy [http://www.policy.ku.edu/graduate-studies/oral-exam-attendance/]). To pass the master's final examination, a student must receive a majority of passing votes from the examining committee. Students must contact the EEB graduate program coordinator 2 weeks prior to the anticipated examination to request departmental and College permission to schedule the event.

Research

Upon completion of their work, students in M.A. Option I (Thesis) must submit a thesis reporting original research. The committee-approved thesis must be submitted electronically to Graduate Studies. Students must follow the instructions for thesis formatting [http://graduate.ku.edu/etd-formatting-and-working-multimedia-files/] and the instructions for submitting the thesis [http://graduate.ku.edu/submitting/]. The thesis also must be submitted to the department as a PDF document. Copies of the title and acceptance pages containing the signatures of the examining committee members must be submitted to both the College and the department.

Students in M.A. Option II (Nonthesis) must conduct research with 1 or more faculty members involving work on a research problem that requires use of literature, and laboratory or field techniques. Nonthesis students must submit a comprehensive written report to the advisory committee. Examples of research problems that could be the basis of the written report include a literature review of a critical issue in a scientific discipline, original research, or other creative activity approved by the advisory committee. The committee-approved report must be submitted to the department as a PDF document. A copy of the title page containing signatures of the advisory committee members also must be submitted.

Time Constraints

A student beginning graduate study with only a bachelor's degree is expected to complete all work for the master's degree within 2 or 3 years of initial enrollment at KU. A student beginning graduate study with a master's degree in the biological sciences should complete all work for the doctoral degree within 4 to 5 years of initial enrollment at KU. A student beginning graduate study with only a bachelor's degree in the biological sciences should complete all work for the doctoral degree within 5 or 6 years.

The maximum tenure for EEB graduate students varies according to degree program. The policy for master's program length [http://policy.ku.edu/graduate-studies/ma-program-time-constraints/] allows a maximum of 7 years to complete the degree program, and the policy for doctoral program length [https://policy.ku.edu/graduate-studies/engagement-enrollment-doctoral-programs/] allows 8 years for completion. Students earning both an M.A. and a Ph.D. from the same academic department have a total of 10 years to complete both degrees. Petitions to extend the time limits must be approved by the student's advisory committee and forwarded to the EEB Graduate Program Committee for consideration before being forwarded to the College for final approval.

EEB requires that doctoral students complete the equivalent of at least 3 academic years of full-time graduate study. This may include the time spent earning a master's degree.

Doctor of Philosophy in Ecology and Evolutionary Biology

Ecology and Evolutionary Biology Graduate Programs

The department comprises a large number of biologists with a variety of research interests. 3 broad overlapping themes capture the interests
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog. Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The departmental graduate admissions committee reviews the record of each applicant. Admission is based on background, preparation, test scores, and academic performance. The committee considers each candidate's overall undergraduate record in the context of the institution(s) from which the record was received. A graduate student should have a broad undergraduate background in natural science and math, including calculus, physics, chemistry, organismal biology, genetics, ecology, and evolutionary biology. Faculty recommendations, honors, awards, undergraduate research experience, publications, and professional experience also are considered. Enthusiasm, scientific expertise, and clarity of writing as evidenced by the applicant's essay are particularly important.

The master's degree is not a prerequisite for entering a Ph.D. program. Non-native speakers of English must meet English proficiency requirements as described on the English Proficiency Requirements policy (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). For more details on admission requirements, visit the EEB website (https://eeb.ku.edu/).

Applications are encouraged to seek a faculty sponsor through correspondence with one or more faculty members prior or during the application process. Prospective doctoral students who wish to do rotations with two or three faculty members in their first year should indicate a general field of interest and a short list of prospective faculty mentors on their application. Interested students are encouraged to visit campus to meet faculty members and graduate students. Graduate school is critically important in beginning a career, and the choice of a program in which to enroll should be made carefully.

The number of students admitted is limited. Qualified candidates may be denied admission because of lack of a faculty sponsor, financial support, or research facilities.

Applications and supplemental materials may be submitted online. Applications from underrepresented groups are encouraged. For a detailed description of the application process, visit the EEB website (https://eeb.ku.edu/). All application requirements, including the deadline for application receipt, can be found on the EEB Admissions (https://eeb.ku.edu/how-apply/) page. Only complete applications are considered. Send inquiries to the graduate academic advisor listed on the EEB Staff (https://eeb.ku.edu/staff/) page.

Ph.D. Degree Requirements:
Ecology and Evolutionary Biology

Required Course Work

Most course work requirements for EEB graduate students are identified during the student’s preliminary advisory meeting. Students are expected to take graduate-level courses (or have equivalent knowledge) in ecology, evolution, and systematics. A student's advisory committee may add course requirements to a student’s degree program during annual meetings. Listed below are specific course requirements for all doctoral students in the EEB department:

1. Students must complete BIOL 805 Scientific Integrity in Ecology and Evolutionary Biology during the first year of graduate education in the fall semester. They are expected to attend departmental seminars in subsequent semesters.
2. Students must complete the BIOL 801 Core Topics in Current EEB Research seminar course during the first year of graduate study in the spring semester.
3. Students must complete a graduate-level course in statistics, typically fulfilled by completing BIOL 841 Biometry I. Alternatively, students may demonstrate equivalent background knowledge.
4. Students pursuing the doctorate must complete at least 1 credit hour of BIOL 999 Doctoral Dissertation.

Assistantships

Doctoral students must complete at least 2 semesters of half-time supervised teaching, curatorial, or research assistantships. Alternative experiences may be approved by the student’s advisory committee.

Research Skills and Responsible Scholarship

All students aspiring to the Ph.D. are required by the Office of Graduate Studies to respond to the need for training in Research Skills and Responsible Scholarship (see the Research Skills and Responsible Scholarship requirement policy (https://policy.ku.edu/graduate-studies/research-skills-responsible-scholarship/) for additional details). As such, requirements in EEB include training in responsible scholarship (BIOL 805 Scientific Integrity in Ecology and Evolutionary Biology). In addition, students must develop, in consultation with their preliminary advisory committees, a list of additional research skills that will be necessary for successful completion of the doctoral program; these skills may include fluency in English (if not the native language); fluency (reading or speaking) in other foreign languages; and skills such as scientific illustration, phylogenetic methods, genomic analysis, geographic
Comprehensive Oral Examination

The comprehensive oral examination tests the depth and breadth of the student’s knowledge and explores the student’s ability to synthesize information and think critically. The examination should include, but is not limited to, questions relating to ecology and evolutionary biology, as well as information directly relevant to the proposed field of dissertation research. Examination committee members determine the questions, but the following is suggested outline for oral comprehensive exams, in roughly equal proportions:

1. General ecology and evolutionary biology
2. Research area (e.g., ecology, systematics, or evolutionary genetics)
3. Specific research foci (e.g., sub-fields of research areas, taxonomic specialization, specific analytical methods)

Examinations are conducted in English. Students are encouraged to take the examination within four semesters of entering the program and are expected to complete the examination within five semesters. To be eligible to take the examination, both the Research Skills and Responsible Scholarship requirement and the Engagement and Enrollment requirement must be fulfilled and documented. Students must acquire approval to take the comprehensive oral examination from (1) dissertation adviser(s), (2) remaining Research Advisory Committee (RAC) members, and (3) Graduate Program Committee. Students must contact the EEB graduate program coordinator no later than 2 weeks prior to the anticipated examination date to request departmental and College permission to schedule the event.

Doctoral committees must comply with the Graduate Studies policy on doctoral committee composition (https://policy.ku.edu/graduate-studies/dissertation-composition/).

Exam outcomes are pass or fail; honors is not an option. A majority vote of the committee is required to pass the examination. If the adviser or committee members wish, secret ballots may be used. If the student fails the comprehensive oral examination, another examination may be scheduled a minimum of 90 days after the first examination, but under no circumstances may a student take the examination more than twice.

A successful pass of the comprehensive oral examination is considered valid by the university for 5 years. Doctoral candidates who do not complete the dissertation within 5 years may be required to take the examination again to demonstrate current knowledge in the field.

All doctoral students must prepare a dissertation proposal of 5–8 pages, with detail and clarity on par with NSF, NIH, or comparable proposals. Chapters should be described in sufficient detail that RAC members can assess scientific merit, feasibility, and whether the doctoral dissertation will fulfill the scope and requirements for a Ph.D. Dissertation proposals must be approved by the student’s RAC by the time the student submits their second annual report to the department (end of 5 semesters). Failure to obtain approval of a dissertation proposal may result in an “unsatisfactory” annual evaluation. A suggested time frame would entail: Proposals distributed to the RAC committee at least two weeks prior to the second RAC meeting (end of 5 semesters). At this RAC meeting, students defend their proposal in the form of a presentation and must address any questions or concerns, before being approved by the RAC (majority) committee. Approval of dissertation proposal must be reported in the annual RAC report. Students are encouraged to develop the proposal ideas with their mentor and advisory committee well in advance of the meeting.

Research Progress, Final Oral Examination, and Dissertation Defense

After passing the comprehensive oral examination and advancing to degree candidacy, doctoral students are expected to focus on completing original research and writing of the dissertation. Although opportunities for taking valuable courses may arise, the majority of a doctoral candidate’s enrollment should be in dissertation credits (BIOL 999 Doctoral Dissertation).

It is generally expected that the dissertation should be completed two to three years after advancing to candidacy. During these years, the student should continue to meet with his or her advisory committee on an annual basis to receive guidance on research progress. Committee membership should follow university requirements.

When the student and the faculty advisor are able to reasonably predict when the dissertation research and writing will be done, the dissertation defense and final oral examination may be scheduled. At least 5 months must have elapsed between successful completion of the oral examination and the date of the defense. Students must contact the EEB graduate program coordinator at least 2 weeks prior to the anticipated defense date to request departmental and university approval of the defense.

A complete dissertation must be provided to the EEB Graduate Program Committee and to the student’s entire dissertation committee no less than 2 weeks (or longer if requested by the student’s committee) in advance of the planned defense. All members of the dissertation committee are required to read and comment on the work. 3 members are designated readers and provide a more detailed review. Students must follow the instructions for dissertation formatting (http://graduate.ku.edu/etd-formatting-and-working-multimedia-files/) and the instructions for submitting the dissertation (http://graduate.ku.edu/submitting/).

The dissertation defense and final oral examination include a presentation of the candidate’s dissertation as a formal, public lecture. Whenever possible, the presentation should be part of the regular departmental
Economics offers the tools you need to understand our increasingly interconnected world. With these tools, you can exploit "Big Data" to make decisions, and make them with confidence. How should we produce? How should they be produced? How should they be distributed around the world? Economics is outstanding preparation for a career in finance, business, policy analysis, international relations, or any other field that requires rigorous analytic thinking. It also makes an excellent foundation for graduate study in economics, business, law, political science, or public administration.

**Courses for Nonmajors**

ECON 104 is recommended for students who want only an introductory course. Students planning to teach social sciences should consult the School of Education. Students who plan to enter the School of Business in the junior year should consult the School of Business. Students who plan to enter the School of Journalism should consult the School of Journalism and Mass Communications.

**Graduate Programs**

The economics department offers a Master of Arts degree and a Doctor of Philosophy degree and, in conjunction with the School of Law, a program in which one can earn the Master of Arts and Juris Doctor degrees. These programs help students prepare for careers in education, government, and business.

Students who are interested in enrolling in graduate level coursework in the Department of Economics without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s admission (https://economics.ku.edu/graduate-admission/) webpage for further details.

**Courses**

**ECON 104. Introductory Economics. 4 Credits. SF S**

An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economic policies to meet the current problems of the domestic and international economy. Course may be offered in lecture or online format. Prerequisite: MATH 101 or MATH 104, or LA&S 108, or eligibility for MATH 115 or MATH 116 or MATH 125.

**ECON 105. Introductory Economics, Honors. 4 Credits. SF S**

An introduction to modern economics designed primarily for students who do not plan to major in economics. Topics include economic history, the operation of economic institutions, and the formation and execution of economic policies to meet the current problems of the domestic and international economy. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 104, or eligibility for MATH 115 or MATH 116 or MATH 125. Open only to students who have been admitted to the University Honors Program, or by consent of instructor.

**ECON 110. The Economics of Globalization. 3 Credits. SF S**

The course emphasizes the application of economic methods of analysis to the public policy issues that globalization creates. Topics covered may include the following: winners and losers from trade; links between trade and labor markets; links between trade and foreign investment; the international financial system and exchange rates; outsourcing and multinational corporations; international institutions and regional trade agreements.

**ECON 142. Principles of Microeconomics. 3 Credits. SF S**

An analytical introduction to microeconomics. Topics include theory of markets, public policy, international trade, economic efficiency, and equity. Prerequisite: MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126.

**ECON 143. Principles of Microeconomics, Honors. 3 Credits. SF S**

An honors section of ECON 142. An analytical introduction to microeconomics. Topics include theory of markets, public policy,
international trade, economic efficiency, and equity. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126. Open only to students who have been admitted to the University Honors Program, or by consent of instructor.

ECON 144. Principles of Macroeconomics. 3 Credits. SF S
An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126.

ECON 145. Principles of Macroeconomics, Honors. 3 Credits. SF S
An honors section of ECON 144. An analytical introduction to macroeconomics. Topics include determination of aggregate income, employment, Inflation, exchange rates, and the role of fiscal and monetary policy in dealing with unemployment, inflation, and economic growth. Prerequisite: Consent of the Economics Department and MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126. Open only to students who have been admitted to the University Honors Program, or by consent of instructor.

ECON 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Economics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ECON 199. Data I: Dealing with Data. 3 Credits. S
Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to derive knowledge and insights from data. This course teaches students the core concepts of inference and computing, working with real behavioral, economic, geographic, physical, social, and text data. Students obtain basic statistics training from a computational perspective using simulation to answer questions, explore problems, and delve into social issues surrounding data analysis such as privacy and design. (Same as POLS 199, PSYC 199 and SOC 199.)

ECON 250. Study Abroad Topics in: ______. 1-5 Credits. S
This course is designed for the study of special topics in economics at the freshman/sophomore level. Coursework must be arranged by the office of KU Study Abroad and approved by the Economics Department. This course may be repeated for credit if content varies.

ECON 310. Topics in Applied Economics: ______. 3 Credits. S
(Topic, instructor, and specific prerequisites to be announced in the Schedule of Classes.) This course will focus on an area of applied economics of current interest. This course cannot be used to fulfill the elective course requirements for the Economics major or the Economics minor.

ECON 399. Data 2: Foundations of Data Science. 3 Credits. S
Data science empowers its users to provide data-driven solutions to problems and questions in the world. This course provides foundational skill and knowledge behind this power. This knowledge and skill includes learning to formulate effective questions to answer with data, computer programming, data management and wrangling, exploratory data analysis and visualization, statistical inference and prediction, data-driven decision making, and communication. (Same as POLS 399 and PSYC 399.) Prerequisite: PSYC 199/POLS 199/ECON 199 or EECS 138; and PSYC 210 or MATH 365 or ECON 426 or POLS 306 or SOC 380 or MATH 101 or MATH 104 or MATH 115 or MATH 121.

ECON 426. Statistics and Data Analysis for Economics. 3 Credits. S
An introduction to probability and statistical methods for empirical work in economics. Probability, random variables, sampling, descriptive statistics, probability distributions, estimation hypothesis testing, introduction to the regression model. Prerequisite: MATH 115 or MATH 125.

ECON 450. Study Abroad Topics in: ______. 1-5 Credits. S
This course is designed for the study of special topics in economics at the junior/senior level. Coursework must be arranged by the office of KU Study Abroad, approved by the Economics Department, and may count as an economics elective for economics majors. This course may be repeated for credit if content varies.

ECON 505. History of Economic Analysis. 3 Credits. S
The history of intellectual efforts to understand economic phenomena and the impact of these efforts on the social and economic development of the modern world. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

ECON 510. Energy Economics. 3 Credits. S
The application of basic economic concepts and methods to the analysis of energy markets, regulation, and policies. Topics covered include energy trends and projections, economic growth and resource exhaustion, the organization and regulation of fossil fuel industries, nuclear power and non-conventional energy technologies, the world oil market, energy conservation, environmental pollution, and national energy policies in the U.S. and other developed as well as developing countries. Prerequisite: ECON 142 or ECON 143.

ECON 513. Behavioral Economics. 3 Credits. S
Decisions link our thoughts to our actions and as a result define who we are and who people think we are. This makes decision making a fundamental life skill. But, can we make better decisions? This course will introduce you to the science of decision making that has developed as scholars including biologists, economists, mathematicians, philosophers, psychologists, and others have sought to answer this very question. Over the course of the semester we will examine what we have learned so far such as how people predict and mispredict events, how people make decisions and how their decisions can be quite irrational from one perspective but simultaneously appear quite reasonable, how people bargain and why they sometimes choose to cooperate and other times not, and why negotiating can be so difficult. (Same as PSYC 513.) Prerequisite: PSYC 104 or ECON 142; MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126.

ECON 515. Income Distribution and Inequality. 3 Credits. S
An analysis of the distribution of income and wealth in the United States and a few other developed countries. The concepts of economic inequality, economic justice, statistical measures of inequality and their applications will be discussed. Various theories of income distribution (e.g., Ricardian, Marxist, neoclassical, and neo-Keynesian) will be covered. Prerequisite: ECON 104 or ECON 143 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

ECON 520. Microeconomics. 3 Credits. S
The theory of consumption, production, pricing, and resource allocation. Not open for credit to students with credit in ECON 524. Prerequisite: ECON 142 or ECON 143; and MATH 115 or MATH 125.

ECON 522. Macroeconomics. 3 Credits. S
The theory of national income and employment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 144 or ECON 145; and MATH 115 or MATH 125.

ECON 523. Macroeconomics Honors. 3 Credits. S
The theory of national income and unemployment, the analysis of aggregate demand, the general degree of utilization of productive resources, the general level of prices, and related questions of policy. Prerequisite: ECON 144 or ECON 145; and MATH 115 or MATH 125. Open only to students who have been admitted to the University Honors Program, or by consent of instructor.

**ECON 526. Introduction to Econometrics. 3 Credits. S**
An introduction to the statistical analysis of economic data and its application to economic inquiry. Includes extensive use of statistical software. Prerequisite: MATH 115 or MATH 125; ECON 426 or MATH 526.

**ECON 535. Economic History of Europe. 3 Credits. S/W**
An introductory study of European economic history from the Middle Ages to the 1980s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as HIST 528.) Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 536. Economic Issues of the European Union. 3 Credits. S**
A survey of the economies of the European Union, with a focus on the economic development of the member states since World War II, and an examination of the various economic issues confronting them today. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 550. Environmental Economics. 3 Credits. U**
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as EVRN 550.) Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 551. Philosophy of Economics. 3 Credits. HR**
This course surveys the central concepts, issues and debates surrounding the philosophy of economics. The course is divided into three parts. The first is focused on the nature of economic science, whether it can be separated from value judgments, along with the foundational and methodological issues that arise in economics. The second part of the course provides a survey of several central topics in the philosophy of economics including rational choice theory, game theory, social choice theory, behavioral and neuroeconomics. The third part concerns welfare economics (broadly understood), including the aims of welfare economics, the nature of well-being, the possibility of interpersonal utility comparisons, and the aims of economic institutional design. At the end of this course, students should have knowledge and understanding of central methodological and substantive debates regarding the nature of economic theories. This course should also enhance students’ ability to think critically and analytically about the nature of economic theories and the key concepts in the philosophy of economics, write clearly and cogently about philosophical issues that arise in economic, incorporate the ideas, theories and techniques that arise in both philosophy and economics to understand social and economic issues. (Same as PHIL 551.) Prerequisite: An introductory course in philosophy or economics, or permission of instructor.

**ECON 560. Economic Systems. 3 Credits. S**
Critical analysis of economic theories underlying such economic systems as capitalism, different types of socialism, communism, and fascism. Comparative study of economic planning, production, distribution, price formation, economic institutions, and forms of government in countries under different economic systems. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 562. The Russian Economy. 3 Credits. S/W**
An analytical survey of Russian economic development, with emphasis on the structure and operation of the Russian economy and transition issues. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 563. Current Economic Issues of East Europe. 3 Credits. S**
An institutional and theoretical analysis of the issues arising from the transition from a command economy to a free market-oriented economy. With emphasis on the former Soviet Union, topics will include: assessment of the central planning experience; changes in property rights and their effect on resource allocation; market mechanisms and how they work when market institutions are at the formative stage; and public interest under privatization. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 564. Topics in Applied Economics: _____. 3 Credits. S**
This course will focus on an area of applied economics of current interest. This course can be used to fulfill the elective course requirement for the Economics major. Prerequisite: ECON 104 or ECON 105 or ECON 142 or ECON 143 or ECON 144 or ECON 145 or ECON 428.

**ECON 582. Economic Development. 3 Credits. S**
An introduction to economic growth and development in high and low income countries, problems of development, and development policy. Prerequisite: ECON 104 or ECON 105 or ECON 142 or ECON 143.

**ECON 584. Economic Development of Latin America. 3 Credits. S**
This course explores development strategies followed in the countries of Latin America and the Caribbean, and analyzes current debates over development strategy. Topics covered include: debt, structural adjustment, and multilateral lending agencies; trade policy, and regional or hemispheric integration; state intervention in the economy; the role of elites; environmental degradation and sustainable development; land reform and agricultural policy; transnational enterprises and foreign investment; women in work and the household; migration (rural-urban, and international); and grassroots development projects. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 586. Economic Issues in China. 3 Credits. S**
This course studies the Chinese economy, especially during the post-1979 reform period, and its relationship to the development of the Greater China Circle (China, Hong Kong, and Taiwan). Topics to be covered include economic development during the pre-1979 reform period, economic reform, and its impacts on China, Hong Kong, Taiwan, and lessons from the Chinese economic reforms. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 587. Economic Development of Africa. 3 Credits. S**
This course studies current economic issues facing African countries. It studies the general characteristics of several African economies and examines the impact of economic development policies, including those of international organizations, on the economies of Africa. Topics include poverty, income inequality, debt, foreign investment policies, trade policies, and government regimes. Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

**ECON 590. Game Theory. 3 Credits. S**
Analysis of strategic choice problems. Firms, voters, bargainers, animals, sports competitors, and persons in everyday life choose alternative options with the outcomes depending on the choices of one or more other similar decision makers. Strategies of rational choices will be derived and analyzed in economic and other environments. Prerequisite: ECON 142 or ECON 143.

**ECON 597. Research in Economics. 1-3 Credits. S**
A directed reading and research course for economics majors. The course involves the preparation of a research paper under the supervision of a faculty member whose area of interest and specialization corresponds with the area of study selected by the student. Note that a maximum of 3 credits total of ECON 597 and ECON 697 can count for the elective requirements of any economics degree. Prerequisite: Completion of ECON 520 or ECON 522 or ECON 526, along with approval of the Director of Undergraduate Studies and selected faculty member.

**ECON 600. Money and Banking. 3 Credits. S**
The basic principles of money, credit, and banking and their relation to prices and business fluctuations; a study of commercial and central banking and the problems of credit control. Prerequisite: ECON 522 or ECON 523, and MATH 115 or MATH 125.

**ECON 604. International Trade. 3 Credits. S**
An introduction to the nonmonetary theory of international trade, the cause and pattern of trade, the gains from trade, and the contemporary issues in international economic policy. Prerequisite: ECON 520, and MATH 115 or MATH 125.

**ECON 605. International Finance. 3 Credits. S**
This course surveys theories of exchange rate and balance of payments determination. Included are the elasticity approach, Keynesian models, and the monetary approach. The mechanics of foreign exchange trading, balance of payments accounting, and the working of the international monetary system are also discussed. Prerequisite: ECON 522 or ECON 523, and MATH 115 or MATH 125.

**ECON 609. Sports Economics. 3 Credits. S**
The course covers the microeconomics of the sports industry. Topics include analysis of teams, leagues, players, incomes, strategies, history, and government policy. Prerequisite: ECON 520, and MATH 115 or MATH 125 or permission of instructor.

**ECON 610. Resource Economics and Environmental Policy. 3 Credits.**
Survey of the economics of natural resources, designed to introduce the student to the economic models and analytical methods commonly used in natural resource problems and policy issues. Topics covered include environmental pollution and regulation, environmental case studies and applications of cost-benefit analysis, theoretical models, policy issues in the utilization of renewable and nonrenewable resources, sustainable development, and global environmental problems. Prerequisite: ECON 520, and MATH 115 or MATH 125 or permission of instructor.

**ECON 620. Elements of Mathematical Economics. 3 Credits. S**
Selected aspects of economic theory with emphasis on those parts where the spirit of mathematical analysis, rather than dexterity, is utilized. The simplification of the subject matter is accomplished by stressing complete treatment of special cases such as a two commodity-two individual world. Prerequisite: ECON 520; MATH 116 or MATH 126.

**ECON 622. Public Finance. 3 Credits. S**
A general introduction to the science of public finance. Topics covered include public expenditures, public revenues and public credit, and the shifting and incidence of taxation. Prerequisite: ECON 520, and MATH 115 or MATH 125.

**ECON 630. Industrial Organization and Antitrust Policy. 3 Credits. S**
An examination of the structure, conduct and performance of American industry applying the concepts and techniques of economic analysis. Topics covered include the theories of monopoly, competition and oligopoly, concentration, barriers to entry, price-fixing and other restrictive practices, mergers, technological change, and public regulation. The course will also focus on the historical development of American antitrust law. Prerequisite: ECON 520, and MATH 115 or MATH 125.

**ECON 640. Labor Economics. 3 Credits. S**
Analysis of labor markets and differences in wage rates and incomes. Topics include returns to education and training, labor unions, unemployment, anti-poverty programs, and other government policies influencing the labor market. Not open to students with credit in ECON 641. Prerequisite: ECON 520; MATH 115 or MATH 125.

**ECON 641. Labor Economics - Capstone. 3 Credits. SI S**
This course covers the analysis of labor markets and differences in wage rates and incomes. The course covers various topics, such as returns to education and training, labor unions, unemployment, anti-poverty programs, and other government policies influencing the labor market. This course represents the capstone version of Labor Economics (ECON 640) by exploring a package of economic studies in the primary literature. Not open to students with credit in ECON 640. Prerequisite: ECON 520; ECON 526; MATH 115 or MATH 125; ECON 426 or MATH 526.

**ECON 664. Topics in Economics: ______. 3 Credits.**
This course focuses on a particular area of applied economics reflecting the current interests of students. Students can use this course to fulfill the elective course requirement for the Economics major. Repeatable for credit if topic varies. Prerequisite: ECON 520 or ECON 522 or ECON 523 or ECON 526.

**ECON 669. The Economics of Financial Markets. 3 Credits. S**
This course introduces the fundamentals of derivatives pricing, leading to the celebrated Black-Scholes formula—a discovery that led to the Nobel Prize for Robert Merton and Myron Scholes in 1997. Students will derive explicitly the formula for themselves. To achieve this objective, the course introduces and applies a wide array of important concepts drawn from economics, finance, mathematics, and statistics, including no-arbitrage, stochastic calculus, self-financing portfolios, risk-neutral measures, hedging, and the fundamental equations for pricing. Prerequisite: MATH 126; MATH 526.

**ECON 680. Economic Growth. 3 Credits. S**
This course studies growth with an emphasis on national evidence and macroeconomic policy issues. Classic and modern growth theories are developed and evaluated on the basis of how well they fit empirical evidence. Theories are developed in which productivity growth results from endogenous changes in technology or in the efficiency with which factors are utilized. The fundamental factors that affect productivity are examined, and they may include government policies, income inequality, geography, climate, resources and other factors. Prerequisite: ECON 522 or ECON 523, and MATH 115 or MATH 125.

**ECON 696. Research Methods in Economics. 3 Credits. S**
The course effectively considers research methods employed in microeconomic studies, macroeconomic studies, and econometric studies. As important, the course focuses strongly on research methods common to any type of economic study, such as effective literature reviews and technical writing tools. This course distinguishes across theoretical methods, empirical methods, and experimental methods. To the extent relevant, the course explores the links between theoretical methods and the other two methods. The course considers common
theoretical methods (e.g., utility maximization), established empirical methods (e.g., difference-in-difference estimation), and standard experimental methods (e.g., blocked random assignment). Prerequisite: ECON 520; ECON 522 or ECON 523; and ECON 526.

ECON 697. Senior Research Honors. 1-3 Credits. S
A directed reading and research course for qualifying seniors. Involves preparation of a research paper under the supervision of a faculty member whose area of interest and specialization corresponds with the area of study selected by the student. Note that a maximum of 3 credits total of ECON 597 and ECON 697 can count for the elective requirements of any economics degree. Prerequisite: ECON 696 and approval of the selected faculty member and the Director of Undergraduate Studies.

ECON 700. Survey of Microeconomics. 3 Credits.
A comprehensive survey of microeconomics, including the theories of consumption, production, distribution, pricing, and resource allocation. Prerequisite: ECON 520; MATH 116 or MATH 126. Students approved to begin coursework in the Accelerated Master’s program are exempt from the ECON 520 prerequisite.

ECON 701. Survey of Macroeconomics. 3 Credits.
A comprehensive survey of the modern theory of national income determination with particular emphasis on the foundation of macroeconomic models and their empirical implementation. Prerequisite: ECON 522; MATH 116 or MATH 126. Students approved to begin coursework in the Accelerated Master’s program are exempt from the ECON 522 prerequisite.

ECON 705. Development of Economic Thought. 3 Credits.
The development of economic thought from the time of the physiocrats through the modern period. Consideration is given to the works of the English Classical school, the school of Vienna, the historical school, the Lausanne school, and Cambridge school. In addition, the development of economic thought in the United States during the period is treated. Prerequisite: ECON 520 and ECON 522.

ECON 715. Elementary Econometrics. 3 Credits.
An elementary analysis of the problems of estimation, prediction, and hypothesis testing in the context of general linear, stochastic difference equation and simultaneous equations models. Applications of econometric theory to practical economic problems will be emphasized. Prerequisite: ECON 526 or MATH 526; MATH 116 or MATH 126.

ECON 716. Econometric Forecasting. 3 Credits.
An analysis of econometric forecasting techniques, including time-series models, single-equation regression models, and multiple-equation regression models. The course will examine forecasts of (a) macroeconomic variables, such as interest rates, investment, GNP, and the rate of inflation; and (b) market variables, such as price and quantity. Prerequisite: ECON 526 or ECON 715 or permission of instructor.

ECON 730. Topics in Industrial Organization. 3 Credits.
Advanced study of recent research in applied microeconomics and business behavior. Topics include vertical integration, collusion, multi-plant and multi-product operations, regulated industries, tying arrangements, and the empirical links between monopoly power and profitability. Prerequisite: ECON 630.

ECON 740. Theory of Economic Growth and Development. 3 Credits.
Advanced study of the theory of economic growth and development. Recent growth models, theory of underdevelopment, programming, policies and plans for development. Prerequisite: ECON 520 and ECON 522.

ECON 769. Financial Economics. 3 Credits.
An introduction to the economic analysis of choice under uncertainty and asset pricing theory. Topics include the general equilibrium Arrow-Debreu model of complete markets; capital asset pricing model; stochastic dominance; portfolio frontiers; mutual fund separation theorems; arbitrage pricing theory; valuation of derivative securities. Both single-period models and multi-period models will be discussed. Students should have some background in elementary linear algebra, calculus, and probability theory. Prerequisite: MATH 127; ECON 526 or MATH 526; MATH 290 recommended.

ECON 770. Economics of the Labor Market. 3 Credits.
A theoretical and empirical analysis of labor supply and demand, human capital, information and labor mobility, unemployment, discrimination, and union behavior and influence. Prerequisite: ECON 520; MATH 116 or MATH 126.

ECON 780. Topics in Economics: _______. 1-3 Credits.
Selected topics in economics. Prerequisite: Consent of instructor.

ECON 790. Game Theory and Applications. 3 Credits.
This course covers basic game theory and applications. Topics covered include strategic games with complete information, Bayesian games (with incomplete information), extensive games with perfect information, and extensive games with imperfect information. Equilibrium concepts covered include Nash equilibrium, mixed-strategy Nash equilibrium, rationalizability, Bayesian Nash equilibrium, sub-game perfect Nash equilibrium, and sequential equilibrium. Depending on availability of time, additional topics may include strictly competitive games and repeated games. The course may include diverse applications such as in business strategy, auctions, voting, international trade, military conflicts, contracts, regulation, and industrial organization. Prerequisite: MATH 127; ECON 526 or MATH 526; MATH 290 recommended.

ECON 791. Game Theory and Applications II. 3 Credits.
This course is a continuation of game theory and applications (ECON 790). Topics may include rationality and common knowledge, multi-stage games and repeated games, coalitional games and the core, and sequential rationality, including possible applications such as signaling, reputation, and information transmission. Additional topics may include, among others, strictly competitive games, auctions, and evolutionary game theory. The course may include diverse applications within and outside economics. Prerequisite: ECON 790.

ECON 800. Optimization Techniques I. 3 Credits.
Economic models involving the maximization of a scalar (vector) function subject to equality and inequality constraint where the variables are in a finite dimensional Euclidean space. Characterization of optimal points by way of first and second order derivatives and by way of saddle points. Duality theorems of mathematical programming. Prerequisite: Consent of instructor.

ECON 801. Microeconomics I. 3 Credits.
An advanced course in price and distribution theory. Prerequisite: ECON 800 or consent of instructor.

ECON 802. Microeconomics II. 3 Credits.
The study of the operation of the economic system taking into account the diversity of goods and services. Primary attention is centered upon the competitive economy. A study is made of the existence, uniqueness, stability, and comparative statics of equilibrium positions. In addition, a study is made of ways of evaluating alternative states of the economy in terms of systems of value judgments. This includes a discussion of the Arrow Impossibility Theorem; the notion of a Pareto-satisfactory process is introduced and the relationship between Pareto-optimal states and competitive equilibrium positions is studied. Prerequisite: ECON 800 and ECON 801.
ECON 805. Teaching Methods in Economics. 3 Credits.
The goal of the course is to enhance undergraduate student learning by refining and expanding the teaching techniques in the teaching assistant's arsenal. The course starts by discussing and illustrating the importance of setting the tone on the first day of class. Then the course turns to ways of creating intellectually exciting lectures and discussion sections. Active learning comes next as the course presents techniques to involve actively the students in their learning experience. Then the course examines ways for recognizing and broadening our teaching styles to include different learning styles. The course also discusses the evaluation of students by emphasizing the importance of matching the assessment of students with course objectives. This course will not assume any prior teaching experience. Prerequisite: Consent of instructor.

ECON 809. Optimization Techniques II. 3 Credits.
Economic models involving the maximization of an integral (a vector of integrals) subject to differential equality (inequality), integral equality (inequality), and finite equality (inequality) constraints. Characterization of optimal paths by way of first and second derivatives. Existence of optimal paths. Prerequisite: ECON 809 or consent of instructor.

ECON 810. Macroeconomics I. 3 Credits.
A survey of basic macroeconomic models, including Classical and Keynesian as well as more recent ones. Topics also cover monetary and fiscal stabilization policies, the role of rational expectations, and basic behavioral equations. Tradeoffs of inflation and unemployment are examined both theoretically and empirically. Prerequisite: ECON 809 or consent of instructor.

ECON 811. Macroeconomics II. 3 Credits.
Structure of dynamic models and intertemporal optimization. Monetary and real business cycle theories and long-run economic growth. Microeconomic foundations of macroeconomics, theories of explicit and implicit contracts, and implications of overlapping generations models. Prerequisite: ECON 810.

ECON 816. Probability and Statistics. 3 Credits.
Basic tools in probability theory, mathematical statistics, and stochastic optimization designed to provide Ph.D. students training in stochastic models useful for all fields in economics. Prerequisite: Ph.D. standing in economics or consent of instructor.

ECON 817. Econometrics I. 3 Credits.
An intensive study of the general linear model and distribution theory associated with the multivariate normal; stochastic difference equation; autocorrelation, errors in variables. Prerequisite: MATH 628.

ECON 818. Econometrics II. 3 Credits.
The study of estimation and hypothesis testing within the context of the stochastic simultaneous equations model. Prerequisite: ECON 817.

ECON 825. Tutorial. 0 Credits.
This course is designed to provide extra assistance for graduate students in economics.

ECON 830. Game Theory and Industrial Organization. 3 Credits.
A comprehensive introduction to game theory and the theory of industrial organization. Basic game theoretic equilibrium concepts will be discussed in the context of static games, games of incomplete information, and dynamic games. These concepts will be applied to the theory of industrial organization. Topics may include mechanism design, market failure, monopoly, imperfect competition and oligopoly, limit pricing, predatory pricing, innovation and technical change, advertising and signaling theory, collusion and coordination, regulation under incomplete information, agency and auditing problems, incentives in hierarchies, job market signaling, insurance markets, nonlinear pricing and monopoly, and bargaining and long term relations. Prerequisite: ECON 801 and 802.

ECON 840. Microeconomic Issues in Development Economics. 3 Credits.
This course will examine the process and policies of economic development from a microeconomic perspective. Selected topics may include: the use of input-output matrices in development planning; price controls and corrections for their allocative distortions; international trade policies; transformations from planned to market economies; labor markets and labor mobility; and capital markets and capital mobility.

ECON 844. Macroeconomic Issues in Development Economics. 3 Credits.
This course will examine the process and policies of economic development from a macroeconomic perspective. Topics will include the theory of growth in the dual economy, the role of foreign trade in economic development, inflation and stabilization in developing economies, the problem of foreign debt, the relationship between financial and real development, and various development policies. Prerequisite: ECON 810 or consent of instructor.

ECON 851. The Theory of International Trade. 3 Credits.
The study of the pure theory of international trade; factor-price equalization, trade and welfare, general equilibrium in the international economy, comparative statics, and stability conditions. Prerequisite: ECON 700 and ECON 701.

ECON 855. Natural Resources. 3 Credits.
Advanced analysis of the economic relationships between natural resources, population, and environment. Emphasis is on the analytical techniques useful for solving the economic problems of natural resource allocation over time. Prerequisite: ECON 700.

ECON 869. Advanced Financial Economics. 3 Credits.
This course presents an analysis of financial markets and instruments, together with the quantitative tools essential for research in the field. The material will be presented in a discrete time setting and will stress the link between financial economics and equilibrium theory. Topics will include securities pricing in the absence of arbitrage, the theory of risk and utility in the basic portfolio problem, mean variance analysis and the CAPM, the Martingale properties of security prices, restricted participation, asymmetric information, and recent research results. Prerequisite: ECON 802 or consent of instructor.

ECON 870. Applied Microeconomics. 3 Credits.
This course introduces students to the data and empirical methods used in the fields of applied economics such as labor economics, public finance, and industrial organization. The course will focus on how to adjust for self-selection and identify causal relationships in applied microeconomic fields. Topics covered include economic data and statistical programming, instrumental variables, difference-in-differences, regression discontinuity, count data, sample selection, treatment effects, and duration models. Attention will be given to the suitability of the methods to the research question under consideration. Each topic will emphasize the proper application of the methods using the standard textbook treatment as well as assigned papers that examine the basic economic issues, the econometric techniques, and the applications to data. Prerequisite: ECON 817 and ECON 818, or consent of instructor. ECON 915 is recommended.

ECON 880. Advanced Topics in Economic Theory: ______. 1-3 Credits.
Selected topics in economics covered at an advanced level. Prerequisite: Consent of instructor.
ECON 899. Master’s Thesis. 1-10 Credits.

ECON 901. Advanced Economic Theory I. 3 Credits.
Advanced study of current general equilibrium analysis, the mathematical tools involved in such analysis, and some applications to other branches of economic theory. Prerequisite: ECON 802 and ECON 810.

ECON 910. Economic Theory Seminar-Workshop. 1-3 Credits.
This seminar-workshop is designed to study advanced research topics in the areas of microeconomic and macroeconomic theory, and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates in these areas of specialization.

ECON 911. Applied Macroeconomics. 3 Credits.
This course studies tools for applied macroeconomic research. It uses modern analytical methods to investigate economic theories. Econometric techniques to identify structure from time series data are emphasized. The goal is for each student to be able to use this toolkit to answer important macroeconomic questions. Prerequisite: ECON 810.

ECON 912. Advanced Macroeconomics. 3 Credits.
An analysis of economic policy in dynamic economic models. The effects of various policies on the equilibrium, stability, and adjustment paths of the models will be considered. Both open and closed economies will be analyzed. Prerequisite: ECON 810. MATH 320 is recommended.

ECON 913. Monetary Economics. 3 Credits.
This course examines how money, monetary policy, and monetary institutions influence the macroeconomy. Modern theories of money demand are presented and critiqued. The function of commercial banks, non-bank financial intermediaries, and central banks in the money supply process is addressed. Interrelationships between the tools, the instruments, the operating procedures, the intermediate targets, and the goals of policy are examined. Additional topics may include the monetary transmission mechanism, the effect of uncertainty on optimal policy decisions, the rules versus discretion debate, the monetary implications of fiscal policy, the term structure of interest rates, the causes and consequences of bank runs and financial panics, and the optimal method of constructing weighted monetary aggregates. Prerequisite: ECON 811 or consent of instructor.

ECON 915. Advanced Econometrics I. 3 Credits.
The study of selected topics in applied cross-section econometrics for uses mainly in applied microeconomics, public finance, and labor economics. Topics include traditional econometrics of production and demand, latent variable models, panel data studies, probabilistic choice models, censored and truncated models, sample selection, disequilibrium models, duration studies, and semi- and non-parametric models. Prerequisite: ECON 818, or consent of instructor.

ECON 916. Advanced Econometrics II. 3 Credits.
A study of selected topics in applied time-series econometrics for use mainly in applied microeconomics, international finance, and development economics. Topics include empirical applications of ARCH models, VAR models (study of impulse response function and variance decomposition), unit-root cointegration and long memory models. Bayesian unit root analysis, estimation and inference of dynamic general equilibrium models, model calibration and simulation are also possible topics of this course. Prerequisite: ECON 818, or consent of instructor.

ECON 917. Advanced Econometrics III. 3 Credits.
A study of structural and nonlinear time series approaches to econometric modeling and inference. The course emphasizes techniques needed to use economic theory in system-wide econometrics. Emphasis is placed on selection of functional form for approximation to theoretical functions and the use of duality theorems for derivation of the resulting econometric systems of equation. Inference with those models will be by nonlinear parametric, semi-parametric, and nonparametric methods. Prerequisite: ECON 818.

ECON 918. Financial Econometrics. 3 Credits.
This course is designed to provide a variety of new econometric tools useful to investigate financial data. It discusses how to measure and forecast financial volatility using models such as Stochastic Volatility, multivariate GARCH, and Dynamic Conditional Correlation models. It also covers Dynamic Factor models and State Space models, which can be used in many financial data analyses. The course will be particularly helpful for the students preparing dissertations in the field of finance, macro-finance, monetary economics, international finance, and development economics. It will also benefit the students interested in more practical use of tools in the field such as financial risk management, insurance, and commercial banking. Prerequisite: ECON 818. ECON 916 is recommended.

ECON 919. Health Economics. 3 Credits.
An advanced course in the mathematical and graphical representations and classic and current literature in health economics. Students will be asked to read multiple academic papers per lecture. Topics may include measurement of health (height, infant mortality, life expectancy), health insurance, selection, Medicare, Medicaid, geographic variation, household finances, the Affordable Care Act, productivity of spending, international comparisons, health over the business cycle, hospitals, competition, physicians, nurses, health behaviors (alcohol, smoking, obesity, wellness), HIV/AIDS, pollution, malpractice, reproductive health, children, pharma, opioids, and machine learning. Prerequisite: ECON 802 and ECON 818. ECON 870 recommended.

ECON 940. Economic Seminar-Workshop in: ______. 1-3 Credits.
This seminar-workshop is designed to study advanced research topics in the specified area of applied economics (public finance, monetary analysis, environment-energy, economic growth and development, urban economics, health care economics, natural resources, labor-manpower, international trade and finance, comparative economic systems, Soviet economics), and also provide assistance in the preparation and development of the dissertations of Ph.D. candidates with dissertations in a specific area of applied economics.

ECON 950. Special Problems in Economics. 1-10 Credits.

ECON 999. Doctoral Dissertation. 1-10 Credits.

Bachelor of Arts and Bachelor of General Studies in Economics

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Economics Majors

The economics department offers 3 degrees.

- The B.A. or B.G.S. major in economics is designed for the majority of students who will attend professional graduate schools or enter the work force.
- The Bachelor of Science degree in economics is designed for the student interested in attending graduate school in economics or a closely related field. It requires the minimum amount of preparation in economics and mathematics required to be successful in graduate study. Students interested in pursuing a Ph.D. in economics are encouraged to double major in economics and mathematics.

First- and Second-Year Preparation

Students considering an economics major should enroll in ECON 142 (or ECON 143) Principles of Microeconomics or ECON 144 (or ECON 145) Principles of Macroeconomics no later then the end of the sophomore year. Students should also have completed at least 1 course in the calculus sequence (MATH 115 or MATH 125) by the end of the sophomore year.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____</td>
<td>3</td>
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<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
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<td>MATH 115</td>
<td>Calculus I</td>
<td>3</td>
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<tr>
<td>or MATH 125</td>
<td>Calculus I</td>
<td></td>
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<tr>
<td>ECON 426</td>
<td>Statistics and Data Analysis for Economics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td></td>
</tr>
</tbody>
</table>

Requirements for the B.A. or B.G.S. Major

1. Majors must complete a course in each of the following areas:
   - Principles of Microeconomics. Satisfied by:
     - ECON 142 Principles of Microeconomics 3
     - or ECON 143 Principles of Microeconomics, Honors
   - Principles of Macroeconomics. Satisfied by:
     - MATH 115 Calculus I 3
     - or MATH 125 Calculus I 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics, Honors</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>Macroeconomics. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 520</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Macroeconomics. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 522</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 523</td>
<td>Macroeconomics Honors</td>
<td></td>
</tr>
<tr>
<td>Introduction to Econometrics. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 526</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 715</td>
<td>Elementary Econometrics</td>
<td></td>
</tr>
</tbody>
</table>

Economics Required Electives

- Majors must complete 2 courses (6 hours) in economics outside of the core courses at the 500-level or above.

Economics Required Capstone Elective Courses

- Majors must complete 3 courses (9 hours) in economics at the 600-level or above.

Note: A maximum of 3 credits total from ECON 597 and ECON 697 may count as electives for the major.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

Satisfied by 30 hours of major courses.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major. (At least 3 of the required elective courses must be taken from the KU Department of Economics.)

Major Junior/Senior Hours

Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major. At least 9 hours of the required elective courses must be taken from the KU Department of Economics.

Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Major Junior/Senior Major Attempts

Summary includes Economics junior/senior (300+) hours attempted, including F’s and incompletes.

A sample 4-year plan for the BA degree in Economics can be found here: Economics (p. 1323), or by using the left-side navigation.

Sample 4-year plan for the BGS degree in Economics can be found here: Economics (p. 1323), or by using the left-side navigation.

Departmental Honors

Graduation with honors in economics is limited to undergraduate majors who have fulfilled these requirements:

1. Completed all economics major requirements and achieved a grade-point average of 3.5 or above in all economics courses at the time of graduation.
2. Completed ECON 697 Senior Research Honors
3. Submitted and defended a research paper before at least 3 faculty members of the Department of Economics.

Honors candidates should consult the department honors coordinator before enrolling in the first semester of the senior year and file a declaration of intent form with the coordinator at that time.

**BA in Economics**

Below is a sample 4-year plan for students pursuing the BA in Economics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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</tr>
<tr>
<td>MATH 101 or 104 (Goal 1.2 Quantitative Reasoning)</td>
<td>3-5 MATH 115 (BA Quantitative Reasoning (QR))</td>
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<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 ECON 142 (Goal 3 Social Science, Major Requirement)</td>
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</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3 2nd Semester Language (BA Second Language)</td>
<td>5</td>
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</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
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17-19 14

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)²</td>
<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3 Goal 4.1 US Diversity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 144 (Major Requirement)</td>
<td>3 ECON 520 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 426 (Major Requirement)</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
<td>3</td>
<td></td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
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<table>
<thead>
<tr>
<th>Junior</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
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<tr>
<td>ECON 522 (Major Requirement)</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 526 (Major Requirement)</td>
<td>3 Lab Science (BA Lab Requirement)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
<td>3 ECON Elective 500+ (Major Requirement)</td>
<td>3</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
<td>3 ECON Elective 500+ (Major Requirement)</td>
<td>3</td>
<td></td>
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</tbody>
</table>

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<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 696 (Major Requirement)</td>
<td>3 Goal 6 Integration &amp; Creativity (ECON 597 or ECON 697 are possibilities)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
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<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
<td>1 Second Area of Study/Elective/Degree/Junior-Senior Hours³</td>
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<td></td>
</tr>
</tbody>
</table>

13 15

**Total Hours 120-122**

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

3 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in Economics**

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<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.1 Written Communication (First Course, 2 Crs Required)</td>
<td>3 Goal 2.1 Written Communication (Second Course, 2 Crs Required)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3 MATH 115 (Goal 1.2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3 ECON 142 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td></td>
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</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 144 (Goal 3 Social Science, Major Requirement)</td>
<td>3 Goal 4.1 US Diversity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 426</td>
<td>3 ECON 520 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
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**Junior**

<table>
<thead>
<tr>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3 Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 522 (Major Requirement)</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 526 (Major Requirement)</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
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**Senior**

<table>
<thead>
<tr>
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<th>Hours</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ECON 696</td>
<td>3 Goal 6 Integration &amp; Creativity (ECON 597 or ECON 697 are possibilities)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Elective 600+ (Major Requirement)</td>
<td>3 ECON Elective 600+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
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<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
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<tr>
<td>BGS Career Prep Course (BGS Requirement)</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
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</tr>
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</table>

Second Area of Study/Elective/Degree/Junior-Senior Hours¹ 3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹ 3

**Total Hours 120**

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First- and Second-Year Preparation

Economics Prerequisite or Co-Requisite Knowledge

Majors must complete courses as specified in each of the following areas. These hours do not contribute to the minimum number of hours required for the major.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td></td>
<td><strong>College Algebra or Pre-Calculus</strong></td>
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<tr>
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<td>Satisfied by:</td>
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<td>MATH 101</td>
<td>College Algebra: _____</td>
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<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
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<tr>
<td>MATH 125</td>
<td>Calculus I (4)</td>
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<td>(Students may Complete MATH 115 and MATH 116 prior to completing MATH 126)</td>
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<tr>
<td>MATH 126</td>
<td>Calculus II (4)</td>
<td>4</td>
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<tr>
<td></td>
<td>(Open for only 2 hours credit to students with credit in MATH 116.)</td>
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<tr>
<td>MATH 127</td>
<td>Calculus III (4)</td>
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<td>MATH 290</td>
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<td>or MATH 291</td>
<td>Elementary Linear Algebra, Honors</td>
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<td><strong>Statistics</strong></td>
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<tr>
<td></td>
<td><strong>Economics General Education Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>In addition to degree and major requirements, all students must complete the KU Core.</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Requirements for the B.S. Degree</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Economics Core Knowledge and Skills</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete a course in each of the five following areas:</td>
<td></td>
</tr>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics. Satisfied by:</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 143</td>
<td>Principles of Microeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Principles of Macroeconomics. Satisfied by:</strong></td>
<td></td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 520</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Macroeconomics. Satisfied by:</strong></td>
<td></td>
</tr>
<tr>
<td>ECON 522</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 523</td>
<td>Macroeconomics Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 526</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Economics Required Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete 2 courses (6 hours) in economics outside of the core courses at the 500-level or above.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Economics Required Capstone Elective Courses</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete 3 courses (9 hours) in economics at the 600-level or above.</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Economics Required Masters-Level Elective Courses</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete 2 courses (6 hours) in economics at the 700-level or above.</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: A maximum of 3 credits total from ECON 597 and ECON 697 may count as electives for the major.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 36 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major. (At least 3 of the required elective courses must be taken from the KU Department of Economics.)

**Major Junior/Senior Hours**
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major. (At least 9 hours of the required elective courses must be taken from the KU Department of Economics.)

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BS in Economics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MATH 104 (Goal 1.2 Quantitative Literacy, Major Pre-Requisite)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENGL 101 (Goal 2.1 Written Communication)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication)</td>
<td>3</td>
</tr>
</tbody>
</table>
### Minor in Economics

#### Why study economics?

Economics offers the tools you need to understand our increasingly interconnected world. With these tools, you can exploit "Big Data" to explore human behavior in numerous economic settings such as labor supply, consumption patterns, health care choices and energy use. You can also examine the overall economy by assessing the links among aggregate output, interest rates, unemployment levels and international exchange rates.

---

### Goal 3 Arts and Humanities (Economics General Education Requirement)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125 (Major Pre-requisite)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Goal 3 Natural Science (Economics General Education Requirement)

<table>
<thead>
<tr>
<th>Course</th>
<th>Goals</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 142 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Second Area of Study/ Elective/Degree/Junior-Senior Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
</tbody>
</table>

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### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>MATH 126 (Major Pre-requisite)</td>
<td>4</td>
<td>MATH 127 (Major Pre-requisite)</td>
<td>4</td>
</tr>
<tr>
<td>ECON 144 (Goal 3 Social Science)</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 526 (Major Pre-requisite)</td>
<td>3</td>
<td>ECON 526 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 522 (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>ECON Elective 600+</td>
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</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 6 Integration &amp; Creativity (ECON 597 and ECON 697 are possibilities)</td>
<td>3</td>
</tr>
<tr>
<td>ECON Elective 500+ (Major Requirement)</td>
<td>3</td>
<td>ECON Elective 700+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 696</td>
<td>3</td>
<td>ECON Elective 500+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ECON Elective 600+ (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

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### Total Hours 120

1. Majors must complete 2 courses (6 hours) in economics outside of the core courses at the 500-level or above, 3 courses (9 hours) in economics at the 600-level or above, and 2 courses (6 hours) in economics at the 700-level or above.

2. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

**Please note:**

- All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.
- The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Departmental Honors

Graduation with honors in economics is limited to undergraduate majors who have fulfilled these requirements:

1. Completed all economics major requirements and achieved a grade-point average of 3.5 or above in all economics courses at the time of graduation.
3. Completed ECON 697 Senior Research Honors in spring term of senior year.
4. Submitted and defended a research paper before at least 3 faculty members of the Department of Economics.

Honors candidates should consult the department honors coordinator before enrolling in the first semester of the senior year and file a declaration of intent form with the coordinator at that time.

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### Minor in Economics

**Why study economics?**

Economics offers the tools you need to understand our increasingly interconnected world. With these tools, you can exploit "Big Data" to explore human behavior in numerous economic settings such as labor supply, consumption patterns, health care choices and energy use. You can also examine the overall economy by assessing the links among aggregate output, interest rates, unemployment levels and international exchange rates.
Requirements for the Minor

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>College Algebra or Pre-Calculus Prerequisite. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____</td>
<td></td>
</tr>
<tr>
<td>MATH 104</td>
<td>Pre-calculus Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

Economics Minor Course Requirements

Students selecting this minor must complete courses as specified in each of the following areas:

Principles of Microeconomics. Satisfied by:

- ECON 142 Principles of Microeconomics 3
- or ECON 143 Principles of Microeconomics, Honors

Principles of Macroeconomics. Satisfied by one of the following:

- ECON 144 Principles of Macroeconomics 3
- or ECON 145 Principles of Macroeconomics, Honors

Economics Required Electives. Minors must complete 4 ECON courses (12 hours) electives at the 500 level or above. A maximum of 3 credits total from ECON 597 and ECON 697 may count toward this requirement.

Undergraduate Certificate in Microeconomics

The economics department has two certificates: one in microeconomics and one in macroeconomics. They are best for students who have strong math backgrounds (e.g., MATH 115) but limited space in their schedules to complete a major or minor in economics. The course requirements and acceptable electives for each certificate are listed below. The certificates are mutually exclusive—a student can complete either or both.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 143</td>
<td>Principles of Microeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 520</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

ECON 600+ Micro based elective. Choose two of the following: 6

- ECON 604 International Trade
- ECON 609 Sports Economics
- ECON 610 Resource Economics and Environmental Policy
- ECON 620 Elements of Mathematical Economics
- ECON 622 Public Finance
- ECON 630 Industrial Organization and Antitrust Policy
- ECON 640 Labor Economics
- or ECON 64 Labor Economics - Capstone
- ECON 669 The Economics of Financial Markets
- ECON 700 Survey of Microeconomics
- ECON 730 Topics in Industrial Organization
- ECON 769 Financial Economics
- ECON 770 Economics of the Labor Market
- ECON 790 Game Theory and Applications
- ECON 791 Game Theory and Applications II

Master of Arts in Economics

Economists gather and analyze data, evaluate and report on statistical trends, and make recommendations based on collected insights. In our program, you will develop these analytical skills and gain experience using statistical analysis software. An Economics M.A. degree is an ideal foundation for jobs in data science, analytics, government, and policy.

Financial Aid

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

Facilities and Services

In addition to KU computing and library facilities, students in the M.A. and Ph.D. programs may use the department’s computer laboratory, which

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 522</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 523</td>
<td>Macroeconomics Honors</td>
<td></td>
</tr>
</tbody>
</table>

ECON 600+ Macro based elective. Choose two of the following: 6
provides access to a variety of databases and econometric software packages useful for economics research.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants to the M.A. and M.A./J.D. programs should have taken a minimum of 2 courses in calculus (6 to 10 semester hours) and a statistics course. Students with little background in economics may be advised to take ECON 520 Microeconomics and/or ECON 522 Macroeconomics and/or ECON 526 Introduction to Econometrics as preparation for M.A. courses. ECON 520, ECON 522, and ECON 526 do not count toward completion of M.A. degree requirements.

Applications submitted before May 1 receive first consideration for fall or summer admission. Applications submitted before November 1 receive first consideration for spring admission.

Submit your graduate application online (https://gradapply.ku.edu/apply/).

English Proficiency
Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/),

M.A. Degree Requirements

The Master of Arts degree program serves students with little previous background in economics as well as students who majored in economics as undergraduates. The program provides maximum flexibility for students to pursue their own special interests.

Candidates for the M.A. degree must complete a minimum of 30 semester hours of graduate work— at least 18 hours of this coursework must be 700+ level. Economics has three required core classes—ECON 700, ECON 701, and ECON 715—that count toward the 18 hours of 700+ level coursework required. Students must take at least 21 hours in economics, with the option of taking up to 9 hours in related areas, such as business administration, computer science, political science, or mathematics, subject to the approval of the M.A. advisor. At initial enrollment, each candidate must discuss a preliminary plan of study with his or her graduate advisor. This plan may be revised over time.

Thesis and Nonthesis Options
Candidates may pursue either a thesis or a nonthesis track. Students electing the thesis track must complete 24 hours of formal course work and 6 hours of thesis under the direction of a thesis supervisor. This work is to be devoted to the completion of a satisfactory thesis. An oral examination is held on completion of the thesis. Students electing the nonthesis track must complete 30 hours of formal course work.

Written Comprehensive Examination

All candidates for the M.A. degree, including students enrolled in the M.A./J.D. program, must demonstrate proficiency in the application of economic theory through a written examination taken during the last semester of enrollment.

Plan of Study

Most M.A. students complete the program in 1.5 academic years. Unless they must complete prerequisites, new M.A. students enroll in ECON 700 Survey of Microeconomics and 2 electives during the first fall semester. In the first spring semester, M.A. students enroll in ECON 701 Survey of Macroeconomics, ECON 715 Elementary Econometrics, and 1-2 electives. Note: Doctoral level theory courses (ECON 801, ECON 810, ECON 817) can be substituted for—or taken in addition to—the corresponding master’s level courses (700, 701, 715 respectively). Enrollments in subsequent semesters are electives until 30 credit hours are complete.

Accelerated Masters of Arts in Economics (BA or BS/MA)

Accelerated undergraduate-graduate degree tracks are increasingly becoming more common. A Master’s in Economics provides not only professional skills but also deeper foundational knowledge. This combination attracts employers and strengthens the profiles of students preparing for further study in doctoral programs. As a result, many students see a master’s degree as essential to their future success.

KU’s Accelerated MA program is available to KU undergraduates only. Please see Admissions to learn more.

Careful course selection and steady progression through the undergraduate career is necessary to ensure all requirements for both degrees may be completed within the 5-year time frame. All prospective students should discuss their interest in admission to the Accelerated Master’s program with their undergraduate advisor and the department’s graduate advisor no later than the student’s Junior year, the first semester of Year 3.

Admission’s checklist

• KU student earning Economics BA;
• on-track to complete all undergraduate degree requirements by the second semester of Senior year (Year 4);
• Major and cumulative GPA of at least 3.25; and
• has submitted an online application for the Accelerated MA program in the second semester of Junior year (Year 3).

After review of the application for admission, the Economics Department will notify the student on their eligibility to begin coursework in the program.

Final acceptance to the graduate program will occur following the completion of Year 4 and be contingent upon the following:

• Successful completion of all requirements for the bachelor’s degree;
• an undergraduate cumulative GPA of at least 3.25;
• a GPA of at least 3.25 in graduate-level coursework taken in Year 4; and
• grades of B or above in all graduate-level coursework taken in Year 4.

This accelerated program uses a carefully planned combination of prerequisite coursework, graduate-level courses taken for both undergraduate and graduate credit in Academic Year 4 (defined as when a student has completed 90 credit hours and therefore has senior standing), and graduate credit courses taken in Academic Year 5 (defined as after a student has been awarded an undergraduate degree). At initial enrollment in graduate coursework, each candidate must discuss a preliminary plan of study with their graduate advisor. This plan may be revised over time. The student must be approved to begin coursework toward the master’s prior to enrolling in any classes that are to count for both undergraduate and graduate credit.

Students may choose between a BA/MA combination or a BS/MA combination.

**BA Degree Option**

**First- and Second-Year Preparation for the BA Degree**

Students considering an economics major should enroll in ECON 142 (or ECON 143) Principles of Microeconomics or ECON 144 (or ECON 145) Principles of Macroeconomics no later than the end of the sophomore year. Students should also have completed at least 1 course in the calculus sequence (MATH 115 or MATH 125) by the end of the sophomore year.

**Additional math requirements**

Calculus 2 (MATH 116 or MATH 126) is needed by the end of Junior year, MATH 526 is needed in the first semester of Senior year or prior to ECON 715.

**BA Degree Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 700</td>
<td>Survey of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 701</td>
<td>Survey of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 715</td>
<td>Elementary Econometrics</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 143</td>
<td>Principles of Microeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 700</td>
<td>Survey of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 701</td>
<td>Survey of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 715</td>
<td>Elementary Econometrics</td>
<td>3</td>
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<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>ECON 520</td>
<td>Microeconomics. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>or ECON 521</td>
<td>Microeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I (Students may complete MATH 115 and MATH 116 prior to completing MATH 126.)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II (Open for only 2 hours credit to students with credit in MATH 116.)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 291</td>
<td>Elementary Linear Algebra, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td>3</td>
</tr>
</tbody>
</table>

**BS Degree Requirement**

**Economics Prerequisite or Co-Requisite Knowledge**

Majors must complete courses as specified in each of the following areas. These hours do not contribute to the minimum number of hours required for the major.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 105</td>
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<tr>
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</tr>
<tr>
<td>MATH 106</td>
<td>Applied Calculus</td>
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</tr>
<tr>
<td>or MATH 107</td>
<td>Calculus I</td>
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</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II (Open for only 2 hours credit to students with credit in MATH 116.)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 526</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 527</td>
<td>Elementary Linear Algebra, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td>3</td>
</tr>
</tbody>
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<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 142</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 143</td>
<td>Principles of Microeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 700</td>
<td>Survey of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 701</td>
<td>Survey of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 715</td>
<td>Elementary Econometrics</td>
<td>3</td>
</tr>
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</table>

<table>
<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
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<tr>
<td>MATH 105</td>
<td>College Algebra: _______</td>
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<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
<td></td>
</tr>
<tr>
<td>MATH 106</td>
<td>Applied Calculus</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 107</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II (Open for only 2 hours credit to students with credit in MATH 116.)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 526</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 527</td>
<td>Elementary Linear Algebra, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Economics Core Knowledge and Skills**

Majors pursuing the Accelerated MA program must complete the following courses in each of the following areas:

**Principles of Microeconomics. Satisfied by:**

- ECON 142 Principles of Microeconomics
- or ECON 143 Principles of Microeconomics, Honors

**Principles of Macroeconomics. Satisfied by:**

- ECON 144 Principles of Macroeconomics
- or ECON 145 Principles of Macroeconomics, Honors

**Microeconomics. Satisfied by:**

- ECON 700 Survey of Microeconomics
- ECON 701 Survey of Microeconomics
- ECON 715 Elementary Econometrics

**Microeconomics. Satisfied by:**

- ECON 700 Survey of Microeconomics
- ECON 701 Survey of Microeconomics
- ECON 715 Elementary Econometrics

**Microeconomics. Satisfied by:**

- ECON 700 Survey of Microeconomics
- ECON 701 Survey of Microeconomics
- ECON 715 Elementary Econometrics

**Microeconomics. Satisfied by:**

- ECON 700 Survey of Microeconomics
- ECON 701 Survey of Microeconomics
- ECON 715 Elementary Econometrics

**Economics Required Electives**

Majors must complete 5 courses (15 hours) in economics at the 500-level or above.

**Economics Required Capstone Elective Courses**

Majors must complete 2 courses (6 hours) at the 600-level or above.

Of the requirements listed above, ECON 700, ECON 701, ECON 715 and one elective course at the 500-level or above must be completed after the student has been approved to begin coursework toward the MA. ECON 700 is typically offered in the fall. ECON 701 and ECON 715 are typically offered in the spring. These courses will count toward both undergraduate and graduate degrees. The elective course may be in Economics or a related area (e.g., Business, Computer Science, Political Science, Psychology, Public Policy, Mathematics).
or Mathematics). ECON 520 and ECON 522, which are listed as prerequisites for ECON 700 and ECON 701, are not required for those in the Accelerated Master’s program.

**MA Degree Requirements**

**Coursework**

Upon completion of the bachelor’s degree, students must complete an additional 18 credit hours (6 courses) of graduate electives for a total of 30 graduate credit hours. At least 21 of the 30 hours must be in economics; but students may take up to 9 hours in related areas, such as business administration, computer science, political science, or mathematics, subject to the approval of the M.A. advisor. In total, 18 hours of coursework (out of 30 hours) must be 700 level or higher.

**Thesis and Nonthesis Options**

Candidates may pursue either a thesis or a nonthesis track. Students electing the thesis track must complete 24 hours of formal coursework and 6 hours of thesis under the direction of a thesis supervisor. This work is to be devoted to the completion of a satisfactory thesis. An oral examination is held on completion of the thesis. Accelerated Master’s students electing the thesis option may take longer than 5 years to complete the full program. Students electing the nonthesis track must complete 30 hours of formal course work and demonstrate proficiency in the application of economic theory through a written examination taken during the last semester of enrollment.

**Progression Requirements**

Given the accelerated nature of this program, each student’s progress will be closely monitored at various points during the program:

1. Once authorized to begin coursework in the Accelerated Master’s, the student must meet with the DGS to plan the final year of undergraduate study.
2. In the final semester of undergraduate study (Year 4), the student must meet with the DGS to review the student’s performance in ECON courses. The student must earn a grade of “B” or better in each of these courses to be eligible for regular admission to the master’s degree.
3. Following completion and award of the undergraduate degree (end of final semester of undergraduate study), the admitted student will again meet with the DGS to review the course plan for the fifth year of study and update as needed. The student’s performance in the graduate-level courses taken as an undergraduate will be evaluated. To continue in the track, students must earn a combined minimum GPA of 3.25 for these courses, as well as a cumulative undergraduate GPA of 3.25.
4. For those students who do not meet the minimum GPA requirement of 3.25, an alternative plan of study to address the student’s deficiencies may be developed, at the department’s sole discretion.
5. If the baccalaureate degree is not completed at the end of Year 4, the student will not be permitted to enroll in additional courses for graduate credit toward the master’s degree until the baccalaureate degree has been conferred.

Students should complete all requirements for the Accelerated Master’s within one year of receiving the bachelor’s degree. If unforeseen circumstances prevent the timely completion of the master’s degree, the student must consult with their graduate advisor to develop an alternative plan for completion.

**Accelerated Masters & Co-Enrollment**

Students, with the explicit approval of the Director of Undergraduate Studies and the Masters’ Advisor in the Department of Economics, may combine this program with the existing program on co-enrollment (https://policy.ku.edu/graduate-studies/seniors-and-grad-study/), which permits undergraduate students to enroll in graduate courses toward a future graduate degree while simultaneously enrolling in undergraduate courses toward an undergraduate degree.

This would not increase the number of undergraduate credit hours taken in Academic Year 4 that count toward both the undergraduate and graduate degrees (i.e., 12 credit hours: ECON 700, ECON 701, ECON 715, and one elective course at the 500-level or above). It would, though, enable a student to take additional graduate credit hours in the second semester of Academic Year 4, enabling the student to potentially finish the M.A. degree with only one additional semester of graduate enrollment.

Beyond the co-enrolled semester the student will not be permitted to enroll in additional courses in a subsequent semester for graduate credit toward the Master’s degree until the baccalaureate degree has been conferred. Any graduate credits successfully completed during co-enrollment would remain on the student’s record and could be potentially applied toward a future graduate degree after the student has completed a baccalaureate degree.

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>MATH 115 (Goal 1.2 Quantitative Reasoning, BA Quantitative Reasoning (QR))</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>ECON 142 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Frist Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>14</strong></td>
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</tr>
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</table>

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3-5</td>
<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)</td>
<td>3-5</td>
</tr>
<tr>
<td>ECON 426</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>MATH 103 (Prereq or Coreq for MATH 116)</td>
<td>2</td>
<td>ECON 520 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>MATH 116 (Prereq for ECON 700 and ECON 715)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>2nd Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14-16</strong></td>
<td><strong>15-17</strong></td>
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### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3 Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Elective 500+ (Major Requirement)</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 BA Laboratory/Field Experience (LFE)</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>ECON Elective 500+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours 145-150</strong></td>
<td>15</td>
<td>16-17</td>
<td></td>
</tr>
</tbody>
</table>

4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

5. Upon completion of the bachelor’s degree, students must complete an additional 18 credit hours (6 courses) of graduate electives for a total of 30 graduate credit hours. At least 21 of the 30 hours must be in economics; but students may take up to 9 hours in related areas, such as business administration, computer science, political science, or mathematics, subject to the approval of the M.A. advisor. In total, 18 hours of coursework (out of 30 hours) must be 700 level or higher.

6. Students electing the thesis track must complete 24 hours of formal coursework and 6 hours of thesis under the direction of a thesis supervisor. This work is to be devoted to the completion of a satisfactory thesis. An oral examination is held on completion of the thesis. Accelerated Master’s students electing the thesis option may take longer than 5 years to complete the full program.

7. Students electing the nonthesis track must complete 30 hours of formal course work and demonstrate proficiency in the application of economic theory through a written examination taken during the last semester of enrollment.

### Year 4

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 700 (Major Requirement)</td>
<td>3 Goal 6 Integration &amp; Creativity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Elective 600+ (Major Requirement)</td>
<td>3 ECON 715 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Elective 600+ (Major Requirement)</td>
<td>3 ECON 701 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>ECON Elective 500+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Year 5</strong></td>
<td>15</td>
<td>15</td>
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</table>

### Year 5

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON Graduate Elective</td>
<td>3 ECON Graduate Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Graduate Elective</td>
<td>3 ECON Graduate Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Graduate Elective</td>
<td>3 ECON Graduate Elective</td>
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</tr>
<tr>
<td>ECON Graduate Elective</td>
<td>3 ECON Graduate Elective</td>
<td>3</td>
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</tr>
<tr>
<td><strong>Total Hours 145-150</strong></td>
<td>12</td>
<td>12</td>
<td></td>
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</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.
### Total Hours 145

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 700 (Major Requirement)</td>
<td>3</td>
<td>Goal 6 Integration &amp; Creativity</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Elective 600+ (Major Requirement)</td>
<td>3</td>
<td>ECON 715 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Elective 600+ (Major Requirement)</td>
<td>3</td>
<td>ECON 701 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
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<table>
<thead>
<tr>
<th>Year 5</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON Graduate Elective</td>
<td>3</td>
<td>ECON Graduate Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON Graduate Elective</td>
<td>3</td>
<td>ECON Graduate Elective</td>
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<tr>
<td>ECON Graduate Elective</td>
<td>3</td>
<td>ECON Graduate Elective</td>
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</tr>
<tr>
<td>ECON Graduate Elective</td>
<td>3</td>
<td>ECON Graduate Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Accelerated Masters of Arts in Economics (Minor/MA)

Only current KU undergraduate students are eligible to apply to the Accelerated MA program. If you are not a current undergraduate student at KU, please review the admission requirements for the regular MA program.

Our Minor/Accelerated MA program is available to KU undergraduate students minoring in Economics. The ideal candidate will have a strong math foundation and have a complementary major (e.g., Engineering or similar math-intensive major).

Accelerated undergraduate-graduate degree tracks are increasingly becoming more common. A Master’s degree in Economics provides not only professional skills but also deeper foundational knowledge. This combination attracts employers and strengthens the profiles of students preparing for further study in doctoral programs. As a result, many students see a master’s degree as essential to their future success.

Careful course selection and steady progression through the undergraduate career is necessary to ensure all requirements for both degrees may be completed within the 5-year time frame. All prospective students should discuss their interest in admission to the Accelerated MA program with their undergraduate advisor and the department’s graduate advisor no later than the student’s Junior year, the first semester of Year 3.

#### Admission’s checklist

- KU student earning bachelor’s degree and Economics minor;
- on-track to complete all undergraduate degree requirements by the second semester of Senior year (Year 4);
- Major and cumulative GPA of at least 3.25; and
- has submitted an online application for the Accelerated MA program in the second semester of Junior year (Year 3)

After review of the application for admission, the Economics Department will notify the student on their eligibility to begin coursework in the program.

#### Final acceptance to the graduate program will occur following the completion of Year 4 and be contingent upon the following:

- Successful completion of all requirements for the bachelor’s degree and Economics minor;
- an undergraduate cumulative GPA of at least 3.25;
- a GPA of at least 3.25 in graduate-level coursework taken in Year 4; and
- grades of B or above in all graduate-level coursework taken in Year 4.

This accelerated program uses a carefully planned combination of prerequisite coursework, graduate-level courses taken for both undergraduate and graduate credit in Year 4, and graduate credit courses taken in Year 5. At initial enrollment in graduate coursework, each candidate must discuss a preliminary plan of study with his or her graduate advisor. This plan may be revised over time. The student must
be approved to begin coursework toward the master's prior to enrolling in any classes that are to count for both undergraduate and graduate credit.

**Undergraduate Degree Requirements**

**Requirements for the Economics Minor**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 116</td>
<td>Calculus II</td>
<td>3</td>
</tr>
</tbody>
</table>

Students selecting this minor must complete courses as specified in each of the following areas:

- **Calculus Prerequisite.** Satisfied by the following:
  - MATH 115 | Calculus I | 3
  - MATH 116 | Calculus II | 3

- **Principles of Microeconomics.** Satisfied by:
  - ECON 142 | Principles of Microeconomics | 3
  - or ECON 143 | Principles of Microeconomics, Honors | 3

- **Principles of Macroeconomics.** Satisfied by one of the following:
  - ECON 144 | Principles of Macroeconomics | 3
  - or ECON 145 | Principles of Macroeconomics, Honors | 3

The following courses must be completed after the student has been approved to begin coursework toward the MA and will count toward both minor and the master's degree requirements:

- ECON 700 | Survey of Microeconomics | 3
- ECON 701 | Survey of Macroeconomics | 3
- ECON 715 | Elementary Econometrics | 3

One graduate elective course numbered 500 level or above. The elective course may be in Economics or a related area (e.g., Business, Computer Science, Political Science, Psychology, Public Policy, or Mathematics).

ECON 520 and ECON 522, which are listed as prerequisites for ECON 700 and ECON 701, are not required for those in the Accelerated Master's program.

**Additional math requirements**

Calculus 2 (MATH 116 or MATH 126) is needed by the end of Junior year, MATH 526 is needed in the first semester of Senior year or prior to ECON 715.

**Graduate Degree Requirements**

**Coursework**

Upon completion of the bachelor's degree, students must complete an additional 18 credit hours (6 courses) of graduate electives for a total of 30 graduate credit hours. At least 21 of the 30 hours must be in economics; but students may take up to 9 hours in related areas, such as business administration, computer science, political science, or mathematics, subject to the approval of the M.A. advisor. In total, 18 hours of coursework (out of 30 hours) must be 700 level or higher.

**Thesis and Nonthesis Options**

Candidates may pursue either a thesis or a nonthesis track.

Students electing the thesis track must complete 24 hours of formal coursework and 6 hours of thesis under the direction of a thesis supervisor. This work is to be devoted to the completion of a satisfactory thesis. An oral examination is held on completion of the thesis.

Accelerated Master's students electing the thesis option may take longer than 5 years to complete the full program.

Students electing the nonthesis track must complete 30 hours of formal coursework and demonstrate proficiency in the application of economic theory through a written examination taken during the last semester of enrollment.

**Progression Requirements**

Given the accelerated nature of this program, each student's progress will be closely monitored at various points during the program:

1. Once authorized to begin coursework in the Accelerated Master's, the student must meet with the DGS to plan the final year of undergraduate study.
2. In the final semester of undergraduate study (Year 4), the student must meet with the DGS to review the student’s performance in ECON courses. The student must earn a grade of “B” or better in these courses to be eligible for regular admission to the master’s degree.
3. Following completion and award of the undergraduate degree (end of second semester Year 4), the admitted student will again meet with the DGS to review the course plan for the fifth year of study and update as needed. The student’s performance in the graduate-level courses taken as an undergraduate will be evaluated. To continue in the track, students must earn a combined minimum GPA of 3.25 for these courses, as well as a cumulative undergraduate GPA of 3.25.
4. For those students who do not meet the minimum GPA requirement of 3.25, an alternative plan of study to address the student’s deficiencies may be developed, at the department’s sole discretion.
5. If the baccalaureate degree is not completed at the end of Year 4, the student will not be permitted to enroll in additional courses for graduate credit toward the master’s degree until the baccalaureate degree has been conferred.
6. Students should complete all requirements for the Accelerated Master’s within one year of receiving the bachelor’s degree. If unforeseen circumstances prevent the timely completion of the master’s degree, the student must consult with their graduate advisor to develop an alternative plan for completion.

Visit the department’s website to view sample degree plans (https://economics.ku.edu/accelerated-masters-program).

**M.A.-J.D. Degree Program**

A dual degree in economics and law can be applied to virtually any area of legal practice and is especially valuable in corporate law, tort law, contract law, civil procedure, and international law. Additional career options include mergers & acquisitions consultant, policy advisor, legislator, regulatory investigator, and several options in the financial services sector.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.
Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Application Timeline**

Students must first be accepted to the University of Kansas Law School before applying to the Economics M.A. program. In the spring semester (Year 1) of law school, students can apply for the Economics M.A./J.D. degree. The application deadline for a summer or fall start is May 1. The Graduate Program Coordinator in Economics can assist with questions.

**M.A.-J.D. Degree Program**

In this program a student can earn both the Juris Doctor (p. 720) and the Master of Arts in economics in 3 years and 1 summer session. The requirements for the combined degree are as follows:

1. Admission to the M.A./J.D. degree program must be approved by the School of Law (http://www.law.ku.edu/), the Department of Economics (http://www.economics.ku.edu/), and the College of Liberal Arts and Sciences (http://clas.ku.edu/).
2. The program requires 100 credit hours of course work, of which 82 hours must be completed in the law school and 18 hours in the Department of Economics. The department gives credit toward the M.A. degree for 12 hours of pertinent work in the law school, and the law school counts 8 credit hours in economics toward the J.D. degree. The 8 hours of economics courses that count toward the J.D. degree can be chosen from certain courses numbered 500-799 and from all 800-900 level courses. Prerequisites continue to apply, as does the requirement that all students seeking the M.A. degree must have taken several foundation courses that do not count toward a graduate degree in economics: microeconomics, macroeconomics, and calculus. In addition, ECON 700, ECON 701, and ECON 715 must be included in the M.A. program. The student takes only law classes the first year and spreads out the 18 hours of credit in economics in the following semesters (e.g., one course per semester).
3. The M.A./J.D. degree is a nonthesis degree in economics.
4. A written comprehensive examination in economics is required of all candidates for the M.A./J.D. degree.

**Doctor of Philosophy in Economics**

The Ph.D. program in economics provides a solid foundation in modern economic analysis, develops expertise in two fields in economics, provides milestones and incentives for dissertation research, and supports graduate student professional development and placement. The department has a long-standing tradition of producing Ph.D. economists with strong foundational skills and expertise. Please visit the department website (http://economics.ku.edu) for additional information.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

**Graduate Admission**

The economics department seeks well-trained economists with strong quantitative skills for its Ph.D. program. In particular, applicants should have taken the equivalent of a minimum of three courses in calculus and a course in linear algebra (twelve to fifteen semester hours). A course in real analysis is not required, but exposure to logical mathematical derivation is very useful.

The department strives to provide a comprehensive financial aid package to strong applicants. This typically includes a paid graduate teaching assistant (GTA) position for up to five years. A GTA position also includes a full tuition waiver and other benefits such as subsidized health insurance. Outstanding applicants may receive a fellowship that reduces or eliminates teaching commitment for one or two semesters and may include funding for summer research. The department also strives to provide some financial support for students to present research at academic conferences every year.

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/). Please note that the requirements for admission are different from those for a teaching/research assistant.

The deadline for an applicant to be considered for admission and financial aid is January 5. Applicants should submit a graduate application online (https://gradapply.ku.edu/apply/).

**Ph.D. Degree Requirements**

**Course Requirements**

In addition to meeting general requirements, the Ph.D. candidate in economics must complete a minimum of 48 credit hours of course work in economics and at least 1 credit hour of ECON 999 Doctoral Dissertation.

1. All Ph.D. candidates must complete these core courses in economic theory and quantitative methods

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<tr>
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**Qualifying Examinations**

Each Ph.D. student is required to pass written qualifying examinations in microeconomics and macroeconomics after completion of the core courses in these areas. A student who does not pass a qualifying examination may be permitted one retake, ordinarily within a few weeks of the first attempt.
In order to demonstrate competency in econometrics, each Ph.D. student must complete ECON 817 and ECON 818, with a combined grade point average of 3.0. A student who does not achieve the 3.0 combined grade point average is required to pass, without retake, a written comprehensive examination in econometrics.

**Fields of Specialization and Electives**
Each student must demonstrate competence in at least 2 fields of specialization in economics by completing 2 courses in each of their chosen fields. In addition, each student takes 3 elective courses in economics. Fields of specialization and elective courses are selected in consultation with the advisor.

**Seminar Workshops**
Beginning in Year 3, each student is required to enroll in ECON 910 and attend the weekly department seminars for 5 continuous semesters or until graduation (whichever is earlier).

**Second-Year Paper**
Each student is required to complete a second-year paper by the end of the fourth semester (second year) of study.

**Third-Year Paper**
Each student is required to complete a third-year paper by the end of the sixth semester (third year) of study.

**Research Skills and Responsible Scholarship**
Every doctoral student is required to have training in research skills and responsible scholarship pertinent to economics research. Enrollment in one semester of ECON 910 and successfully completing the third year paper requirement satisfies these requirements.

**Comprehensive Oral Examination**
Each student is required to pass the comprehensive oral examination by the end of the eighth semester (fourth year) of study. It is strongly recommended that a student pass this exam by the end of the seventh semester.

**Dissertation**
Following the comprehensive oral examinations, the candidate must organize and write a dissertation on his or her chosen topic under the supervision of a dissertation committee.

**Final Oral Examination**
The candidate must defend the dissertation successfully in a final oral examination.

**Department of English**

**Why study English language and literature?**
KU's English Department is at the core of the humanities, highlighting the "human" through our individual, one-on-one interactions with our students, our emphasis on community and global engagement, and our abiding interest in our shared humanity through the stories of others. We seek to challenge the mind and to engage the imagination of our students, to teach them to ask questions and to seek for answers. We encourage them to grapple with the complexity of a culturally and commercially interconnected world and the global networks and processes of cultural exchange. We believe that words and ideas will shape the world. We teach our students life-long skills, so that they learn to write clearly, creatively, and effectively—discovering themselves even as they lay a solid foundation for professional success.

**A commitment to teaching and learning.**
Our department is renowned for its tradition of excellence in teaching. The vast majority of our undergraduate classes have 15-25 students, and much of the class time is dedicated to active learning and engagement with texts and ideas. In the last ten years, faculty members in the department of English have won ten Kemper Fellowships for Excellence in Teaching, two Chancellors Club Teaching Professorships, a Career Achievement Teaching Award, and a wide variety of other university-level teaching and advising awards, and the department as a whole received the Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

**A variety of career and life paths.**
English students at all levels graduate and embark upon a variety of careers, including law, teaching, scholarship, publishing, library science, and journalism—as well as medicine, politics, design, and any number of other fields that value clear communication, interpretive skill, and critical and creative thinking.

**Engaged and innovative scholarship.**
KU's English Department has several core strengths that cross tracks and periods, including Global and Cross-Cultural Approaches; Literature, Rhetoric, and Social Action; Diversity Studies; Language, Literature and Science; and Popular Expressive Forms.

In the KU English Department, students work closely with nationally-renowned writers and researchers. Our faculty have won national awards that recognize excellence in research, including grants from the National Endowment for the Humanities, the American Philosophical Society, and the Newberry Library, among others. English Department faculty members have also received major research funding from the University of Kansas, including the Hall Center for the Humanities Research fellowships and Keeler Intra-University Fellowships for interdisciplinary work. Undergraduate students can work one-on-one with faculty mentors in the Honors Program, McNair Scholars Program, and Dean's Scholars Program, as well as through independent Directed Studies. Advanced graduate students have the opportunity to work collaboratively with faculty members as research assistants.

**Undergraduate Programs**
The English major prepares undergraduates for engagement with the world through language by helping them

- to cultivate the craft of writing in a variety of rhetorical contexts,
- to read and interpret a broad range of texts,
- to develop and sustain critical arguments, and
- to produce independent research.

The major is crafted to ensure students' familiarity with

- written forms and genres;
- a range of literary histories and writers;
• multiple regional and historical contexts of literature and language;
• the theories, methodologies, and terminology of English Studies; and
• the relationship between literature, language, and the larger culture.

Courses for Non-majors

Many English courses fulfill KU Core requirements; see catalog course listings for details. All students are encouraged to take a 200-level English course before enrolling in 300- or 400-level English courses. For students following University requirements prior to Fall 2013, please consult the principal and non-Western course lists. English principal courses under the Literature and the Arts heading are designated HL. Prospective English teachers in the public schools should consult the requirements of the School of Education.

Transfer Credit

English undergraduate majors may take up to 6 hours out of residence with the prior approval of the Director of Undergraduate Studies.

Double Majors

Double majors within the College or dual-degree programs are encouraged.

Placement in English courses

In general, entering KU students should enroll in ENGL 101, with the following exceptions:

ACT English Scores:

• 31-36 — Enroll in ENGL 105. 1/2 of KU Core Goal 2.1 (Written Communication, 6 hours) complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• 27-30 — Enroll in ENGL 102 and petition for honors placement for possible admittance to ENGL 105. 1/2 of KU Core Goal 2.1 complete; ENGL 102 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• 00-26 — Enroll in ENGL 101. ENGL 101 + ENGL 102 fulfill KU Core Goal 2.1 and CLAS BA-specific writing requirement.

SAT Verbal Scores:

• 650 or higher — Enroll in ENGL 105. 1/2 of KU Core Goal 2.1 complete; ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• 600-649 — Enroll in ENGL 102 and petition for honors placement for possible admittance to ENGL 105. 1/2 of KU Core Goal 2.1 complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• 00-599 — Enroll in ENGL 101. ENGL 101 + ENGL 102 fulfill KU Core Goal 2.1 and CLAS BA-specific writing requirement.

Advanced Placement Scores — Literature and Composition Exam:

• AP 5 — Enroll in ENGL 205; 3 hours of credit given. KU Core Goal 2.1 complete. ENGL 205 satisfies both KU Core Goal 2.1 and CLAS BA-specific writing requirement.

• AP 4 — Enroll in ENGL 205 ENGL 205; 3 hours of credit given. 1/2 of KU Core Goal 2.1 complete. ENGL 205 ENGL 205 satisfies both KU Core Goal 2.1 and CLAS BA-specific writing requirement.

• AP 3 — Enroll in ENGL 105 or ENGL 102*. No credit is given for ENGL 101 or ENGL 102. KU Core Goal 2.1 complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• AP 2 — Enroll in ENGL 101 and petition for honors placement. If the petition is successful, it admits the student to ENGL 105. ENGL 101 + ENGL 102 or ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course fulfill KU Core 2.1 and CLAS BA-specific writing requirement.

Advanced Placement Scores — Language and Composition Exam:

• AP 4 or 5 — Enroll in ENGL 205; 3 hours of credit given; KU Core Goal 2.1 complete. ENGL 205 satisfies both KU Core Goal 2.1 and CLAS BA-specific writing requirement.

• AP 3 — Enroll in ENGL 105 or ENGL 102*. No credit is given for ENGL 101 or ENGL 102. 1/2 of KU Core Goal 2.1 complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

• AP 2 — Enroll in ENGL 101 and petition for honors placement. If the petition is successful, it admits the student to ENGL 105. ENGL 101 + ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course fulfill KU Core 2.1 and CLAS BA-specific writing requirement.

International Baccalaureate Scores:

• IB 5 and up — Enroll in ENGL 102. 1/2 of KU Core Goal 2.1 complete; ENGL 102 or ENGL 105 + an additional KU Core Goal 2.1 course will fulfill CLAS BA-specific writing requirement.

*If you choose to take ENGL 102, you will need to petition if you want to enroll in ENGL 205 next. You could also choose to take ENGL 203, or ENGL 209, ENGL 210, or ENGL 211 for a second English course, or another KU Core Goal 2.1 course to fulfill the KU Core and the CLAS BA-specific requirements.

Graduate Programs

The department offers a full graduate program, leading to the Master of Arts (Literature, Literature & Literary Theory, Rhetoric & Composition, and English Language Studies), Master of Fine Arts in Creative Writing, and Doctor of Philosophy degrees with specializations in Literature, Rhetoric and Composition, English Language Studies, and Creative Writing.

The M.A./M.F.A. may be pursued as a terminal degree or as preparation to apply for specialized doctoral studies at KU or elsewhere. The Ph.D. may be pursued by students already holding an M.A. in English or a related field.

We also offer an accelerated doctoral program in Rhetoric, Composition intended for students who want to pursue a Ph.D. in this field at KU but who do not yet hold the M.A. degree in English.

All applicants are considered for competitive funding packages and GTA, GRA, and GA positions.

Students who are interested in enrolling in graduate level coursework in the Department of English without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking
student status. See the department webpage for non-degree student admission for further details.

Courses

ENGL 100. Introduction to Literature. 3 Credits. H
An introduction to critical thinking skills through the study of works of literature drawn from a variety of genres and methods of critical inquiry. This course does not fulfill any KU writing requirement.

ENGL 101. Composition. 3 Credits. U
Instruction and practice in writing in a variety of rhetorical contexts, including academic ones.

ENGL 102. Critical Reading and Writing. 3 Credits. U
Builds upon the instruction in writing of ENGL 101, emphasizing critical thinking through careful, thoughtful reading and writing. Also instructs in the evaluation and use of secondary sources. Prerequisite: Completion of ENGL 101 or its equivalent, or an ACT score of 27-31, or an SAT score of 600-649, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or an IB score of 5.

ENGL 105. Honors Introduction to English. 3 Credits. U
Study of significant works of world literature. The primary aims are to develop reading and writing skills and to introduce the students to works of literature drawn from a variety of genres and historical periods. Prerequisite: An ACT score of 31-36, or an SAT score of 650 or higher, or an AP exam score of 3 on either the Literature and Composition exam or the Language and Composition exam, or membership in the University Honors Program.

ENGL 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in English. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ENGL 199. Orientation to English Studies. 1 Credits. H
Provides an overview of English Studies at the University of Kansas. Students learn about degree requirements and specializations; research, extracurricular, and study abroad opportunities; and career and internship options. Graded on a satisfactory/unsatisfactory basis.

ENGL 200. Study Abroad Topics in: 1-6 Credits. H
This course is designed for the study of special topics in English. Coursework is completed through a KU study abroad program. Available only to KU study abroad participants. May be repeated for credit if content varies. Does NOT fulfill any part of the Freshman-Sophomore requirement.

ENGL 203. Topics in Reading and Writing: _____ 3 Credits. H
In-depth reading and writing on a significant topic, theme, or genre. Includes a variety of textual types or a range of historical periods. Continued practice in critical reading and writing. May include but will not be limited to writing in literary genres. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent.

ENGL 205. Freshman-Sophomore Honors Proseminar: _____ 3 Credits. H
Study of a major movement, topic, or theme in literature and culture. The primary aims are to further develop reading and writing skills and to consider significant cultural and artistic issues. Prerequisite: ENGL 105 or an AP exam score of 4 on either the Literature and Composition exam or the Language and Composition exam.

ENGL 209. Introduction to Fiction. 3 Credits. H
In-depth reading of and writing about prose fiction with emphasis on critical analysis of a variety of narrative types from different historical periods. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent.

ENGL 210. Introduction to Poetry. 3 Credits. H
In-depth reading of and writing about poetry with emphasis on critical analysis of a variety of forms and techniques used in poems from different historical periods. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent.

ENGL 211. Introduction to the Drama. 3 Credits. H
Study of plays selected to familiarize the student with dramatic masterpieces and with the drama as a literary type. Prerequisite: Completion of ENGL 101 and ENGL 102, or their equivalent.

ENGL 220. Introduction to Creative Writing. 3 Credits. H
In-depth reading and writing in multiple genres (e.g. poetry, fiction, creative nonfiction, playwriting). Creative assignments combine with critical analysis to help students identify, analyze, and employ forms and techniques across various genres, audiences, and contexts. Written assignments include creative works in multiple genres and critical responses to reading. Prerequisite: ENGL 101 and ENGL 102, or their equivalents.

ENGL 300. Introduction to English Studies. 3 Credits. H
An introduction to English Studies and its methods and areas, including literary studies, cultural studies, creative writing, rhetoric and composition, and language studies. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 301. Topics in British Literature to 1800: _____ 3 Credits. H
Study of British literary works before 1800. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 302. Topics in British Literature Since 1800: _____ 3 Credits. H
Study of British literary works since 1800. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 305. World Indigenous Literatures. 3 Credits. NW H
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as GIST 305/ISP 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 306. Global Environmental Literature. 3 Credits. H
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. (Same as EVRN 306 and GIST 306.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.
ENGL 308. Introduction to Literary Criticism and Theory. 3 Credits.
H
Study of significant problems in literary interpretation and methodology, in which basic critical principles and approaches are systematically examined and applied. These approaches might include, but are not limited to, feminism, Marxism, deconstruction, psychoanalysis, and cultural studies. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 309. The British Novel. 3 Credits. HL H
Study of five or more significant novels representative of developments in the British novel of the eighteenth, nineteenth, and twentieth centuries. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 310. Literary History I. 3 Credits. H
A study of literature in English, including major forms and movements, from the medieval period to Romanticism. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 312. Major British Writers to 1800. 3 Credits. H
Outstanding works of British literature, from the earliest times to the close of the eighteenth century, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 314. Major British Writers after 1800. 3 Credits. H
Outstanding works of British literature, from 1800 to the present, studied in chronological sequence and with some attention to the characteristics of the various periods of English literary history embraced. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 315. Studies in British Literature. 3 Credits. HL H
For students enrolled in the annual summer Study Abroad program, an interdisciplinary program conducted with other humanities departments. British literature is studied in the context of visits to relevant sites such as London, the Lake District, and Edinburgh. Prerequisite: Prior completion of the KU Core Written Communication requirement. Approval for enrollment in the Summer Institute through the Study Abroad office is required. Recommended: Prior completion of one 200-level English course.

ENGL 317. Topics in American Literature to 1865: ___. 3 Credits. H
Study of American literary works before 1865. Topics may focus on a particular genre, theme, topic, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 318. Topics in American Literature Since 1865: ___. 3 Credits. H
Study of American literary works since 1865. Topics may focus on a particular genre, theme, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 320. American Literature I. 3 Credits. H
From the beginnings to 1865, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 322. American Literature II. 3 Credits. H
From 1865 to the present, with emphasis on the major writers and movements. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 323. Twentieth Century Literature and Culture. 3 Credits. H
The study of British and American literature, emphasizing important figures and movements since World War I. On occasion, the study of literature will be enriched with an investigation of other arts, such as music, film, and painting. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 324. Contemporary Authors: ___. 3 Credits. H
Study of one or more recent British and/or American authors. (Different authors in different semesters.) May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 325. Recent Popular Literature. 3 Credits. HL H
Study of recent best sellers or other works of popular interest. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 326. Introduction to African Literature. 3 Credits. NW H/W
Reading, analysis, and discussion of contemporary fiction, poetry, and drama from sub-Saharan Africa. Brief attention is paid to historical development and to traditional literature. (Same as AAAS 332.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 327. Studies in Twentieth-Century Drama: ___. 3 Credits. H
A survey of major twentieth-century playwrights and theatre groups, to be selected by the instructor. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 328. Literature and Film: ___. 3 Credits. H
The comparative study of the literary and film treatments of a particular topic or theme, with special attention to the generic qualities of literature and film. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 329. Topics in Forms and Genres: ___. 3 Credits. H
An introductory study of a selected topic focused on a literary or rhetorical form or genre (e.g., Lyric Poetry, Captivity Narratives, Genre Theory). May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 330. Literary History II. 3 Credits. H
A study of literature in English, including major forms and movements, from the Romantics to the present. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 331. Chaucer. 3 Credits. H
Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 332. Shakespeare. 3 Credits. H**
A study of ten to fourteen of Shakespeare’s plays. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 334. Major Authors: _____ 3 Credits. H**
Study of one or two major British and/or American authors. Different authors in different semesters. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 336. Jewish American Literature and Culture. 3 Credits. H**
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as JWSH 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 337. Introduction to U.S. Latino/a Literature. 3 Credits. H**
An historical survey of literature by U.S. Latina/o writers of Mexican, Puerto Rican, Cuban, Dominican, and Central/South American descent. Various genres, including oral forms such as corridos as well as novels, poetry, essays, and autobiographical writing, will be considered. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 338. Introduction to African-American Literature. 3 Credits. H**
An introduction to prominent works of African-American literature from the 18th century to the present as well as to the basic approaches to study and principles of this body of work, including its connection with African sources. Literature will include a wide variety of genres, and course materials may be supplemented by folklore, music, film, and visual arts. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 339. Introduction to Caribbean Literature. 3 Credits. H**
Reading, analysis, and discussion of fiction, poetry, and drama from the Caribbean, including a small selection of Spanish, French, and Dutch Antillean works in translation. (Same as AAAS 333.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 340. Topics in U.S. Ethnic Literature: _____ 3 Credits. H**
A study of literature by authors from one or more ethnic groups within the U.S., including but not limited to Asian American, African American, American Indian, Jewish American, Italian American, U.S. Latina/o. Different topics in different semesters. May be repeated for credit as topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 341. American Literature of Social Justice. 3 Credits. H**
An examination of U.S. literature that addresses situations of political and economic oppression or repression with the potential function of enlisting readers’ sympathies in a project of social justice. The course focuses on U.S. literary texts dealing with social injustice and the curtailment of human and civil rights and addresses debates surrounding cultural authority and authenticity, identity politics, attempts to represent the voice of the “oppressed,” revision of strategies used in slave narrative or in testimonio, and ethical and rhetorical appeals to an assumed readership. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 342. Topics in Transcultural Literature, Language, or Rhetoric: _____ 3 Credits. H**
An introduction to a topic in the literatures, languages, or rhetorics of diverse cultural groups in the US or the world. A supermajority of the works considered were originally written in English. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 344. Black Feminist Theory. 3 Credits. HL H**
This course will study the critical discourse produced by black female intellectuals, writers, and activists about their race, gender, sexual, and class identities. Students will explore black women’s distinct positionality through an examination of their theory as well as their praxis from the nineteenth century to the contemporary moment. By tracing the evolution of black feminist thought, the class will explore black women’s initiation of and engagement with political, social, and artistic conversations in various fields of scholarly inquiry including but not limited to, literature, history, sociology, political science, and the law. (Same as AAAS 344 and WGSS 344.) Prerequisite: WGSS 101, AAAS 104, or prior completion of one 200-level English course.

**ENGL 351. Fiction Writing I. 3 Credits. H**
A study of narrative techniques and practice in the writing of fiction. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 352. Poetry Writing I. 3 Credits. H**
A study of prosody and practice in the writing of verse. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 353. Screenwriting I. 3 Credits. H**
An introduction to the practice of writing and evaluating scripts for film. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 354. Playwriting I. 3 Credits. H**
An introduction to the practice of writing and evaluating scripts for stage. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 355. Nonfiction Writing I. 3 Credits. H**
An introduction to the literary techniques of nonfiction and practice in the writing of one or more of the genre’s subtypes, such as the personal essay, the familiar essay, the lyric essay, the memoir, nature writing, or travel writing. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 359. English Grammar. 3 Credits. U**
A course in traditional English grammar for students who wish to understand and be able to analyze English sentence structure. Students might apply the course to studies of style (their own or other authors’), rhetorical analysis, literary interpretation, or teaching. This course may be offered in either lecture or online format. Prerequisite: Prior completion of the KU Core Written Communication requirement.
ENGL 360. Topics in Writing: _____. 3 Credits. H
A writing course that helps students continue their writing practices at an advanced level, with a focus on particular varieties, purposes, audiences, media, or other issues in rhetorical writing. Topics vary (e.g., Writing for Social Action, Writing with Confidence, Writing Online, Writing for Style). May be repeated for credit as topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 362. Foundations of Technical Writing. 3 Credits. H
Introduces students to the principles of technical communication. Students learn to organize, develop, write, and revise various technical documents (e.g., letters, manuals, presentations, proposals, reports, resumes, websites) often needed in business, engineering and scientific settings. Includes an introduction to technical-writing software. This course fulfills the prerequisite for English 562 and English 564. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 380. Introduction to Rhetoric and Composition. 3 Credits. H
Introduces students to rhetoric and composition, a field that investigates questions about the nature, processes, teaching and historical, social and cultural contexts of writing. Students survey the themes, debates, and trends that inform the work of scholars in this field. Students also become acquainted with the historical traditions of discourse instruction, and the relevance of those traditions to our current understandings of writing. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 381. Topics in Rhetoric and Composition: _____. 3 Credits. H
An introductory study of a selected topic in rhetoric or writing studies (e.g., Multimedia Rhetoric, Rhetoric of Social Action, Teaching Writing). May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 382. Composing Cultures. 3 Credits. H
In this course, we will explore how texts are culturally situated and will carry out our own investigations of a subculture. Through analysis of the rhetorical and social situations that motivate writing and ethnographic investigation of a culture’s discursive interactions, we will explore how a group’s purposes and actions are shaped by cultural contexts for writing. We will complete a range of related writing projects (an observation of a place/setting for a culture’s interactions; an analysis of a culture’s language or cultural artifacts; interviews with participants in a culture or oral histories), culminating in a longer field study or ethnography—a descriptive and analytical account of a culture or subculture. We will also critically read and respond to multiple interdisciplinary texts and genres, including ethnographies and overviews of ethnographic research methods. As we explore the cultural embeddedness of writing, we will focus, in particular, on the positioning of the researcher and the ethics of conducting cultural research. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 383. Cultural Rhetorics. 3 Credits. H
In this course, we will engage in the interdisciplinary study of cultural rhetorics, which is an approach to rhetorical study that considers the role of cultural forces in shaping the rhetorical practices of individuals, communities, and politics. Emphasizing feminist, queer, critical race, and/or disability studies work in rhetorical studies, this course will focus on the following questions: How does rhetoric enable the functioning of power, oppression, and resistance? How are cultural, political, economic, and ideological notions of identity, of the body, and even of the human rhetorically constructed? What counts as rhetoric, and who gets to decide what is worthy of rhetorical study? How do rhetorics of space, place, home, diversity/identity, and the nation influence culture, politics, and institutions? Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 385. The Development of Modern English. 3 Credits. H
An introduction to the history of the English language, with special attention to general structural changes throughout its history, especially changes in vocabulary and meaning, and past influences of other languages upon present usage. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 386. Language and Social Justice in the US. 3 Credits. H
In this course, we consider the social implications of using different varieties and dialects of the English language in the US. Questions covered may include (but are not limited to): different social characteristics attributed to different varieties (dialects, ethnolects, genderlects) and their users; features of language that carry stigma and how such stigma is socially and historically constructed; and the role of media (news outlets, movies, “the internet”) in conveying what is seen as acceptable or unacceptable in language. We also explore how these language attitudes and evaluations impact different groups of people in their daily lives, and what possible recourses we have to address language injustice. As we discuss these issues, you will not only gain an understanding of the social nature of the English language, but you will also acquire the skills and tools to discuss, analyze, and write about language. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 387. Introduction to the English Language. 3 Credits. HL H
A survey of the English language, its historical development, and its grammatical structure. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 388. Topics in English Language Studies. 3 Credits. H
An introductory study of a selected topic in English language studies (e.g., World Englishes, Language and Literary Style, The Secret Life of English Words.) Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 389. Postcolonial and World Englishes. 3 Credits. H
In this course, we explore the complex landscape of varieties of English or Englishes around the world. We chart the history of English and its spread through colonization and through the cultural and economic influence of especially the US and the UK. We get a sense of the diversity of Englishes by focusing on a selection of countries from various continents (including Africa and Asia), looking at the linguistic characteristics of these Englishes as well as the attitudes towards the Englishes within and outside the countries. This survey of Englishes leads us to consider broader questions such as how people evaluate different Englishes, who “owns” English, and similar issues. As we discuss these topics, you will not only gain an understanding of the variable and changeable nature of the English language, but you will also acquire the skills and tools to discuss, analyze, and write about language. Prerequisite: Prior completion of the KU Core Written Communication requirement.

ENGL 390. Studies in: _____. 3 Credits. H
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ENGL 400. Teaching and Tutoring Writing. 3 Credits. U
Students explore theories and strategies of teaching and tutoring writing across academic disciplines. They learn more about themselves as writers as they build a repertoire of writing techniques useful in their studies, in the workplace, and in their personal lives. By observing and
consulting in the writing center, they understand how reflection leads to responsive, ethical, and engaged practice. (Same as LA&S 400.) Prerequisite: ENGL 102 or equivalent.

**ENGL 466. Literature for Children. 3 Credits. H**
Wide reading in the great literature of the past and present suitable for children: folktales and epics, mythology, modern fantasy, fiction, poetry. Emphasis on extending the student's background and developing critical judgment. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 479. The Literature of: _____ 3 Credits. H**
A study of the literary treatment of a particular aspect of British and/or American society. May be repeated for credit as the topic changes. Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**ENGL 492. The London Review. 3 Credits. H**
This class meets one day a week throughout the semester and includes a nine-day visit to London over the spring break period. Students spend the early part of the semester selecting special interests, researching places to visit and study, and exchanging information. After the trip, students compile and publish a journal entitled "The London Review", which is comprised of essays, photos, art work, and other reflections about their experience in London. Prerequisite: Admission to University Honors Program or permission of instructor.

**ENGL 494. Research Internship. 1-3 Credits. H**
Practical research experience in English studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. May be used as a component of the Research Experience Program (REP). Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor.

**ENGL 495. Directed Study: _____ 1-3 Credits. H**
Work for advanced majors in fields or on topics not covered in course work. May be repeated for a total of up to six hours. Does not satisfy specific course requirements for the English major. May be counted as part of the total junior-senior credit hours required. Prerequisite: Completion of three junior-senior courses in English and consent of instructor.

**ENGL 496. Internship. 1-3 Credits. H**
Practical experience in the use of English skills in supervised academic or professional settings. Credit hours are graded according to the written evaluation provided by the supervisor to the director. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level English course, declaration of English major, and permission of Undergraduate Director.

**ENGL 497. Service Learning Internship. 1-3 Credits. H**
Practical experience in the use of English skills in a non-profit or advocacy context. Credit hours are graded according to the written evaluation provided by the on-site supervisor and on the student's written reflective component assigned and evaluated by the supervising faculty member. May be used as a component of the Service Learning certification program. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level English course, declaration of English major, and permission of instructor.

**ENGL 506. Science Fiction. 3 Credits. H**
The development of science fiction as a literary genre, and as a literature of ideas for a future-oriented society. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 507. Science, Technology, and Society: Examining the Future through a Science-Fiction Lens. 3 Credits. H**
Science and technology offer many benefits to individuals and to societies, yet they also present many challenges. This course explores the past, present, and possible future effects of science and technology on society through readings and discussions of nonfiction articles in conjunction with science-fiction stories and novels. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 508. Contemporary Literary Theory. 3 Credits. H**
Study of selected works of literary theory and of current issues in literary studies. The course is designed for advanced undergraduates who intend to continue their study of literature in graduate school and for new graduate students who require a grounding in literary theory. According to each instructor's interest, the course may survey contemporary literary theory or may focus on a particular topic (e.g., authorship, canon formation, creativity, metaphor, narrative, rhetoric) or on a theoretical position (e.g., cultural studies, deconstruction, feminism, historicism, Marxism, psychoanalysis). A student may repeat the course with the permission of the appropriate director. Prerequisite: Completion of three junior-senior courses in English (or their equivalent) or graduate standing.

**ENGL 520. History of the Book. 3 Credits. H**
Brief history of writing materials and handwritten books; history of printed books from the fifteenth century as part of cultural history; technical progress and aesthetic change. (Same as HIST 500.)

**ENGL 521. Advanced Topics in British Literature 1800: _____ 3 Credits. H**
A study of texts written before 1800. May be organized around a particular genre, historical period, a group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 522. Advanced Topics in British Literature After 1800: _____ 3 Credits. H**
A study of texts written after 1800. May be organized around a particular genre, historical period, group of writers, or a theme. May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 525. Shakespeare: _____ 3 Credits. H**
Intensive study of selected works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 530. Irish Literature and Culture: _____ 3 Credits. H**
Study of topics in Irish literature and culture. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 534. Major Authors (Capstone): _____ 3 Credits. H**
Study of one or two major authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

**ENGL 545. Methodologies in Digital Humanities, Honors. 3 Credits. H**
This course addresses research possibilities and ongoing debates in the field of Digital Humanities. Students will examine how digital technologies and methodologies can enhance or suggest new modes of Humanities
research. The course focuses on core topics in the field, including text analysis, data visualization, digital mapping, archiving and (digital) cultural studies. We will take a hands-on and critical approach to investigating the benefits and limitation of different digital methods. Course assignments will consist of blog posts and mini projects conducted throughout the semester. At the end of the semester, students will develop a proposal for a project that brings digital methodologies to bear on a research inquiry related to the student's discipline. No prior experience in digital work or technical skills required. Prerequisite: Instructor permission.

ENGL 551. Fiction Writing II. 3 Credits. H
Continuation of ENGL 351. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 351 or equivalent.

ENGL 552. Poetry Writing II. 3 Credits. H
Continuation of ENGL 352. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 352 or its equivalent.

ENGL 553. Screenwriting II. 3 Credits. H
A continuation of ENGL 353. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 353 or its equivalent.

ENGL 554. Playwriting II. 3 Credits. H
A continuation of ENGL 354. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 354 or its equivalent.

ENGL 555. Nonfiction Writing II. 3 Credits. H
Continuation of ENGL 355. May be repeated for undergraduate credit up to a total of six hours. Prerequisite: ENGL 355 or its equivalent.

ENGL 560. British Literature of the 20th Century: _____ 3 Credits. H
Study of twentieth-century literary works. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 565. The Gothic Tradition. 3 Credits. H
This course explores and defines the Gothic tradition in British and American literature from its beginnings in the late eighteenth century to more recent twentieth-century texts in literature and film. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 566. Modern Drama: _____ 3 Credits. H
A study of American, British, or comparative drama from the late nineteenth century to the present. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 569. The Modern Tradition. 3 Credits. H
An intensive study of the formative backgrounds of the "modern" spirit as it is expressed in imaginative literature. Readings from such influential spokesmen as W. James, Zola, Marx, Darwin, Henry Adams, Kierkegaard, Dostoevsky, Nietzsche, I.A. Richards, T.S. Eliot, Joyce, Auden, Rilke, Croce, Yeats, Malraux, Freud, Jung, D.H. Lawrence, Sartre, Camus, and Gide. Prerequisite: Prior completion of the freshman-sophomore English requirement or its equivalent.

ENGL 570. Topics in American Literature: _____ 3 Credits. H
Different topics in different semesters. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 572. Women and Literature: _____ 3 Credits. H
Different topics in different semesters. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 574. African American Literature: _____ 3 Credits. H
A study of the literature written by African Americans from the pre-Civil War period to the present. Emphasis upon specific historical periods in the development of African American literature as well as on a critical analysis of major autobiographical, poetic, and fictional works. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 576. Advanced Topics in American Literature to 1865: _____ 3 Credits. H
Study of American literary works before 1865. Topics may focus on a particular genre, theme, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 577. Advanced Topics in American Literature Since 1865: _____ 3 Credits. H
Study of American literary works after 1865. Topics may focus on a particular genre, theme, historical period, author, or group of authors. May be repeated for credit as the topic changes. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 578. Poetry, 1900-1945. 3 Credits. H
A Study of English-language poetry of the early twentieth century. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 579. Poetry since 1945. 3 Credits. H
A study of English-language poetry from the mid-twentieth century to the present. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 580. Rhetoric and Writing: _____ 3 Credits. H
A study of selected broad topics in rhetoric and writing, including such topics as the rhetoric of law, the rhetoric of education, persuasion in literature, literacy, and rhetorical genres. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 581. English Language Studies: _____ 3 Credits. H
A study of selected topics in English language studies (e.g. World Englishes, Language and Literary Style, and The Secret Life of English Words). May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 582. Multimedia/Multimodal Rhetorics. 3 Credits. H
Digital culture and new media have transformed reading, writing, and research practices, revealing the multidimensionality of texts, blurring the roles of writer and audience, and creating new spaces for dialogue, collaboration, and participation in rhetorical acts. In this course, we will apply rhetorical principles across a variety of media genres-from blogs, to YouTube videos, to podcasts, to Tweets, to Instagram and Facebook posts-and will address the complex realities and challenges of composing ethical, persuasive, and effective arguments in the 21st century. The course will explore how traditional processes of writing and reading texts are challenged by communication across a range of diverse new media genres that employ multiple modes of communication (linguistic, visual, spatial, gestural, and aural ways of making meaning). We will examine the impact of multimedia/multimodal discourse on ourselves and our culture, and through our analysis and production of multimodal texts, we will explore how medium and mode shape the message, work to persuade multiple audiences, and alter the way that we understand, structure, and process knowledge. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 586. Language and Style. 3 Credits. H
When we talk about a writer's style, or the style of a text or genre, what exactly do we mean? How do we identify, define, and analyze the elements that make up a style? What is it that makes us think that one style is "better" than another style? This is what we will explore in this course. We draw on a number of frameworks and theories from English language studies that can be used to discuss and analyze linguistic choices and strategies in texts; in other words, we will take apart the language of a text or writer (including your own!) in order to understand how it has been put together. As we approach language, text, and style from this perspective, you will not only gain an understanding of the flexible, yet structured nature of the English language, but you will also acquire the skills and tools to discuss, analyze, and write about language. Prerequisite: Prior completion of a 300- or 400-level English course.

ENGL 587. American English. 3 Credits. H
A study of the structure, history, and varieties of the English language in the United States from the period of colonization to the present. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 590. Studies in: _____. 1-3 Credits. H
A study of a specialized theme or topic in English studies. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of the first-and-second year English requirement or its equivalent, and at least one 300- or 400-level ENGL course; or permission of instructor.

ENGL 598. Honors Proseminar: _____. 3 Credits. H
Directed reading and participation in small discussion groups, each formed to consider a specific and limited subject during the semester. Written work will be required, and will be judged on both content and form. The course is part of a departmental program leading to Honors in English. Prerequisite: Admission must be approved by the departmental director of undergraduate studies.

ENGL 599. Honors Essay. 3 Credits. H
Independent study, culminating in a substantial essay prepared under the direction of a member of the Department of English who is a specialist in the area of the student's interest. Prerequisite: Admission must be approved by the departmental director of undergraduate studies.

ENGL 610. The Literature of England to 1500. 3 Credits. H
A survey of the literature of medieval England (in translation). Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 620. Renaissance English Literature: _____. 3 Credits. H
A broad view of literary works written between 1485 and 1660. Surveys may be offered with focus on a particular genre (poetry, drama, or prose), historical period (16th- or 17th-century literature), or group of authors (women writers). May be repeated for credit as topic varies. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 633. Milton. 3 Credits. H
A close reading of Paradise Lost, Paradise Regained, Samson Agonistes, and the minor poems, with illustrative selections of prose. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 640. British Literature, 1600-1800: _____. 3 Credits. H
Study of literary works from the Restoration and eighteenth century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 650. Romantic Literature: _____. 3 Credits. H
Study of literary works from the British Romantic period. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 655. Victorian Literature: _____. 3 Credits. H
Study of literary works from the Victorian period. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 674. African Literature: _____. 3 Credits. NW H
An advanced study of a topic, genre, or area of written and/or oral African literature. Emphasis is placed on the critical analysis of major works, as well as their cultural and historical contexts. The course also addresses central critical and theoretical debates in the field. May be repeated for credit as the topic changes. Prerequisite: At least one 300- or 400-level English course, or permission of instructor.

ENGL 690. Studies in: _____. 3 Credits. H
A study of a major topic of concern to English literature. May be repeated for credit as the topic changes. Capstone course. Prerequisite: Prior completion of at least one 300- or 400-level English course.

ENGL 709. Critical Theory: Problems and Principles: _____. 3 Credits.
Study of a topic (such as mimesis, influence, deconstruction) that is important in critical theory. May be repeated for credit as topic varies.

ENGL 714. Middle English Literature. 3 Credits.
Reading of selected works in Middle English (exclusive of the works of Chaucer).

ENGL 725. Shakespeare: _____. 3 Credits.
Intensive study of selected plays. May be repeated for credit as the topic changes.

ENGL 730. Topics in Early Modern Literature: _____. 3 Credits.
Intensive study of texts written between 1485 and 1800. The course may be organized around a particular genre (poetry, prose, drama), historical period (e.g., Elizabethan literature), a major author (e.g., Milton), group of authors (e.g., women writers), or theme (e.g., literature and politics 1660-1800). Students will be expected to read and apply relevant criticism and theory as well as study primary texts. May be repeated for credit as topic varies.

ENGL 750. British Literature of the 19th Century: _____. 3 Credits.
Intensive study of British literary works of the 1800s. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes.

ENGL 751. Fiction Writing III. 3 Credits.
Practice in the writing of fiction under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance enrollment, manuscripts showing unusual ability. May be repeated for credit.

ENGL 752. Poetry Writing III. 3 Credits.
Practice in the writing of poetry under the direction of a member of the department working in conjunction with one or more writers in residence. Membership is limited to students who submit, well in advance enrollment, manuscripts showing unusual ability. May be repeated for credit.

ENGL 753. Writers Workshop. 3 Credits.
An intensive course in writing prose fiction and/or verse. Criticism (NEW) of manuscripts through group meetings and individual conferences with
the instructor. Membership limited to students who submit manuscripts showing special ability in at least one of the creative writing forms. May be repeated for credit.

**ENGL 756. Forms:** ______. 3 Credits.
A study of literary works belonging to a particular genre or to multiple genres (fiction, nonfiction, poetry, drama etc.), either in a particular form (short story, essay, sonnet, etc.), concerned with a particular topic, or illustrative of a particular element of craft (voice, point of view, character development, etc.). Intended primarily for creative-writing students with an interest in developing their skills at reading as writers. May be repeated for credit as the topic varies.

**ENGL 757. Speculative Fiction Writing Workshop.** 3 Credits.
An intensive, 2-week course in writing speculative fiction, including genres such as slipstream, magical realism, fantasy, horror, and science fiction. The course is part of the Center for the Study of Science Fiction Summer Institute. Application period: January 1 - April 15. Application includes note to instructor expressing interest and one story. May be repeated for credit with instructor’s permission.

**ENGL 760. British Literature of the 20th Century:** ______. 3 Credits.
Intensive study of British literary works written during the 20th century. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes.

**ENGL 767. Studies in Modern Drama:** ______. 3 Credits.
Reading of selected works in modern and contemporary drama. May be repeated for credit as the topic changes.

**ENGL 770. Studies in Life Writing:** ______. 3 Credits.
This course focuses on or surveys individual writers in the tradition of life writing; or intensively examines topics such as “Autobiography,” “Memoir and Diary,” “Biography,” “Slave Narrative,” “Letters,” “Personal Essays,” or “Autobiographical Fictions.” Special emphasis within a topic, such as period, gender, or ethnicity, are possible. May be repeated for credit up to a maximum of six hours.

**ENGL 774. Topics in Literatures of Africa and the African Diaspora:** ______. 3 Credits.
An intensive study of the literatures of Africa and/or African diaspora (people of African descent dispersed around the world). This study will focus on the major characteristics of a particular genre, theme, mode, and/or theme in literatures such as African, Caribbean, Afro-Brazilian, African American, African Canadian, Black British. Critical theories pertinent to writers and their work will be covered. Topics may include studies in drama, poetry, or the novel; migration narratives; literature of a particular era, such as the Harlem Renaissance, Ngritude, or the Black Arts Movement; representations of gender, etc. As topics vary by semester, the course may be repeated for credit. (Same as AAAS 774.)

**ENGL 776. American Literature to 1900:** ______. 3 Credits.
Intensive study of North American literary works before 1900. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes.

**ENGL 777. American Literature after 1900:** ______. 3 Credits.
Intensive study of North American literary works after 1900. Topics may focus on a particular genre, theme, historical period or group of authors. May be repeated for credit as the topic changes.

**ENGL 779. U.S. Poetries Since 1900.** 3 Credits.
A colloquium for graduate students, sampling the range of poetries and poetics produced in the United States in the twentieth and twenty-first centuries.

**ENGL 780. Composition Studies.** 3 Credits.
This course surveys the field of composition studies, examining major issues and theories in the study of writing. The course may include theories from classical to contemporary rhetoric, composition theory from the twentieth century, and the most current debates in the study of writing.

**ENGL 785. History of the English Language.** 3 Credits.
Historical study of the phonology, morphology, syntax, vocabulary, and semantics of English; the relation between linguistic and cultural change.

**ENGL 787. Modern English Grammar.** 3 Credits.
A study of contemporary English: phonology, morphology, syntax, and usage. The emphasis is structural, but "traditional" grammar is referred to for contrast, example, and clarification.

**ENGL 790. Studies in:** ______. 3 Credits.
Examination of a significant topic in literature or the English language. May be repeated for credit as the topic varies.

**ENGL 800. Methods, Theory, and Professionalism.** 3 Credits.
Acquaintance with resources and practice in techniques that are essential to other graduate courses. Major concerns include the writing and documentation of scholarly papers; basic reference and bibliographical aids; critical approaches to literature and literary historiography; and the place of language and rhetoric in English studies today.

**ENGL 801. Study and Teaching of Writing.** 3 Credits.
A survey of major concepts and issues in the study of writing, especially as applied to teaching composition. Practices in writing pedagogy are also discussed, and students’ teaching of composition is observed and explored. Required of and enrollment limited to new teachers of English 101. May not be repeated for credit toward graduate degree.

**ENGL 802. Practicum in the Teaching of College English.** 1 Credits.
A course concerned primarily with the pedagogy and practice of teaching English 102. Includes weekly group meetings, individual conferences, and class visitations. Required of and enrollment limited to new teachers of English 102. May not be repeated for credit toward graduate degree. Course graded on a satisfactory/unsatisfactory basis.

**ENGL 880. Topics in Composition Studies and Rhetoric:** ______. 3 Credits.
Examination of selected topics in composition and rhetoric, such as literary studies, genre theory, dialogism, or writing across the curriculum. May be repeated for credit as the topic changes. Prerequisite: ENGL 780 or equivalent.

**ENGL 896. Internship.** 1-3 Credits.
Practical experience under professional supervision with the Writing Center, in editing, in theatrical production, or other activities relevant to the completion of an advanced degree in English. Prerequisite: Permission of Director of Graduate Studies.

**ENGL 897. Preparation for the M.A. Examination.** 1-6 Credits.
An independent reading course for students preparing to take the M.A. examination. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of the Director of Graduate Studies.

**ENGL 898. M.A. Portfolio.** 1-6 Credits.
An independent reading and writing course for students preparing the M.A. portfolio. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Consent of the Director of Graduate Studies.

**ENGL 899. M.A./M.F.A. Thesis.** 1-15 Credits.
An independent reading and writing course for students researching and writing the M.A./M.F.A. thesis. Graded on a satisfactory progress/limited progress/no progress basis.

**ENGL 904. Seminar in Composition Theory:** ______. 3 Credits.
Bachelor of Arts and Bachelor of General Studies in English

Why study English language and literature?

Because reading and writing shape the world.

KU's English Department is at the core of the humanities, highlighting the "human" through our individual, one-on-one interactions with our students, our emphasis on community and global engagement, and our abiding interest in our shared humanity through the stories of others. We seek to challenge the mind and to engage the imagination of our students, to teach them to ask questions and to seek for answers. We encourage them to grapple with the complexity of a culturally and commercially interconnected world and the global networks and processes of cultural exchange. We believe that words and ideas will shape the world. We teach our students life-long skills, so that they learn to write clearly, creatively, and effectively—discovering themselves even as they lay a solid foundation for professional success.

A commitment to teaching and learning.

Our department is renowned for its tradition of excellence in teaching. The vast majority of our undergraduate classes have 20-35 students, and much of the class time is dedicated to active learning and engagement with texts and ideas. In the last ten years, faculty members in the department of English have won ten Kemper Fellowships for Excellence in Teaching, two Chancellors Club Teaching Professorships, a Career Achievement Teaching Award, and a wide variety of other university-level teaching and advising awards, and the department as a whole received the Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

A variety of career and life paths.

English majors graduate to a variety of careers, including law, teaching, scholarship, publishing, library science, and journalism—as well as medicine, politics, design, and any number of other fields that value clear communication, interpretive skill, and critical and creative thinking.

Engaged and innovative scholarship.

KU's English Department has several core strengths that cross tracks and periods, including Global and Cross-Cultural Approaches; Literature, Rhetoric, and Social Action; Diversity Studies; Language, Literature and Science; and Popular Expressive Forms.

At the KU English Department, students work closely with nationally-renowned writers and researchers. Our faculty have won national awards that recognize excellence in research, including grants from the National Endowment for the Humanities, the American Philosophical Society, and the Newberry Library, among others. English Department faculty members have also received major research funding from the University of Kansas, including the Hall Center for the Humanities Research fellowships and Keeler Intra-University Fellowships for interdisciplinary work. Undergraduate students can work one-on-one with faculty mentors in the Honors Program, McNair Scholars Program, and Dean's Scholars Program, as well as through independent Directed Studies.
Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Undergraduate First- and Second-Year Preparation
Prospective English majors and minors are encouraged to complete their KU Core Goal 2.1 requirements and their BA degree-specific written communication requirements with English Department coursework (i.e., ENGL 101, ENGL 102 or ENGL 105, and 200-level ENGL courses). Students are strongly encouraged to take a 200-level English course before taking 300- and 400-level coursework in English. Prospective English majors are encouraged to consult with the Director or Associate Director of Undergraduate Studies in order to declare the major, review major and degree requirements, and become familiar with departmental opportunities.

Requirements for the B.A. or B.G.S. Major
The major in English requires 30 hours (33 for Honors English).

ENGL 300 Introduction to English Studies (3 hours – must be taken within first year of declaring the English major):

English Studies Coursework (21 hours, 300 or above)
This includes at least one course chosen from:

- Rhetoric, Language and Writing studies
- Literature, Language, or Rhetoric prior to 1850
- Diverse identities, communities, and texts

The remaining courses may be chosen from any 300-level or above English course offerings. For students who are interested in focusing on a specific area of study, they may follow the optional emphases path outlined below.

- One 200-level course may be counted toward English Studies coursework.

Capstone Requirements (6 hours, 500 or above)

- Students must complete ENGL 300 and 2 other 300-level courses before they proceed to the capstone requirements. All 500-level or above English courses count as capstone courses.
- Students pursuing departmental honors may use ENGL 598 to fill one capstone requirement, and must also enroll in ENGL 599: Thesis hours.

Breadth Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 351</td>
<td>Fiction Writing I</td>
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<tr>
<td>ENGL 352</td>
<td>Poetry Writing I</td>
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</tr>
<tr>
<td>ENGL 353</td>
<td>Screenwriting I</td>
<td></td>
</tr>
<tr>
<td>ENGL 354</td>
<td>Playwriting I</td>
<td></td>
</tr>
<tr>
<td>ENGL 355</td>
<td>Nonfiction Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL 551</td>
<td>Fiction Writing II</td>
<td></td>
</tr>
<tr>
<td>ENGL 552</td>
<td>Poetry Writing II</td>
<td></td>
</tr>
<tr>
<td>ENGL 553</td>
<td>Screenwriting II</td>
<td></td>
</tr>
<tr>
<td>ENGL 554</td>
<td>Playwriting II</td>
<td></td>
</tr>
<tr>
<td>ENGL 555</td>
<td>Nonfiction Writing II</td>
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</tr>
<tr>
<td>ENGL 359</td>
<td>English Grammar</td>
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<td>ENGL 360</td>
<td>Topics in Writing: ____</td>
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<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
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<td>ENGL 380</td>
<td>Introduction to Rhetoric and Composition</td>
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<tr>
<td>ENGL 381</td>
<td>Topics in Rhetoric and Composition: ____</td>
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<tr>
<td>ENGL 382</td>
<td>Composing Cultures</td>
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</tr>
<tr>
<td>ENGL 383</td>
<td>Cultural Rhetorics</td>
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</tr>
<tr>
<td>ENGL 385</td>
<td>The Development of Modern English</td>
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</tr>
<tr>
<td>ENGL 386</td>
<td>Language and Social Justice in the US</td>
<td></td>
</tr>
<tr>
<td>ENGL 387</td>
<td>Introduction to the English Language</td>
<td></td>
</tr>
<tr>
<td>ENGL 388</td>
<td>Topics in English Language Studies</td>
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</tr>
<tr>
<td>ENGL 389</td>
<td>Postcolonial and World Englishes</td>
<td></td>
</tr>
<tr>
<td>ENGL 580</td>
<td>Rhetoric and Writing: ____</td>
<td></td>
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<tr>
<td>ENGL 581</td>
<td>English Language Studies: ____</td>
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</tr>
<tr>
<td>ENGL 582</td>
<td>Multimedia/Multimodal Rhetorics</td>
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<tr>
<td>ENGL 586</td>
<td>Language and Style</td>
<td></td>
</tr>
<tr>
<td>ENGL 587</td>
<td>American English</td>
<td></td>
</tr>
</tbody>
</table>

At least one course in Literature, Language, or Rhetoric prior to 1850 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 301</td>
<td>Topics in British Literature to 1800: ____</td>
<td></td>
</tr>
<tr>
<td>ENGL 310</td>
<td>Literary History I</td>
<td></td>
</tr>
<tr>
<td>ENGL 312</td>
<td>Major British Writers to 1800</td>
<td></td>
</tr>
<tr>
<td>ENGL 317</td>
<td>Topics in American Literature to 1865:</td>
<td></td>
</tr>
<tr>
<td>ENGL 320</td>
<td>American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENGL 331</td>
<td>Chaucer</td>
<td></td>
</tr>
<tr>
<td>ENGL 332</td>
<td>Shakespeare</td>
<td></td>
</tr>
</tbody>
</table>
Optional Emphases within the Major

- Students may pursue an emphasis in a particular field by taking at least 3 courses in it.
- These emphases include:
  - Literary Studies: one literary history course, one theory course, and one literary studies capstone
  - Creative Writing: 300-level workshops in two genres, and one creative writing capstone
  - Language, Culture, and Rhetoric: 380 or 387, another RCL course, and one RCL capstone
  - Students may also designate their own ‘custom’ emphasis, in consultation with a departmental advisor.

- 27 hours must be at the junior/senior level.
- No 100-level ENGL courses count toward major requirements.

Notes:
- Up to 6 credits combined of ENGL 494 Research Internship or ENGL 495 Directed Study: _____ may be applied as major electives.
- Up to 3 credit hours of ENGL 496 Internship or ENGL 497 Service Learning Internship may be applied as a major elective.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses (33 for Honors English).

**Major Hours in Residence**
Satisfied by a minimum of 25 hours of KU resident credit in the major; exceptions by permission of Director of Undergraduate Studies only.

**Major Junior/Senior Hours**
Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Sample 4-year plans for the BA degree in English with the following concentrations can be found here: English General Track (p. 1347), Creative Writing (p. 1348), and Rhetoric, Language, and Writing (p. 1350).

Sample 4-years plans for the BGS degree in English with the following concentrations can be found here: English General Track (p. 1351), Creative Writing (p. 1352), and Rhetoric, Language, and Writing (p. 1353), or by using the left-side navigation.

**Departmental Honors**
To be admitted to the English Honors major program, an undergraduate must have a 3.5 grade-point average in English courses.

Honors English majors must complete at least 1 section of ENGL 598 Honors Proseminar: _____ and ENGL 599 Honors Essay. This requirement, in effect, adds 3 hours of capstone-level coursework to the student’s emphasis.

**BA in English**

Below is a sample 4-year plan for students pursuing the BA in English. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning²</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
</tbody>
</table>

Notes:
- Full PDF 2022-23 1347
### BA in English with concentration in Creative Writing

Below is a sample 4-year plan for students pursuing the BA in English - Creative Writing track. To view the list of courses approved to fulfill.

<table>
<thead>
<tr>
<th>First Year Seminar (Goal 1.1 Critical Thinking)</th>
<th>3 Goal 2.2 Communication &amp; Ethics</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>1 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Senior Hours</strong></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td><strong>Second Area of Study/ Elective/Degree/Junior-Senior Hours</strong></td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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</tr>
<tr>
<td><strong>Total Hours 120-121</strong></td>
<td>15</td>
<td>14</td>
</tr>
</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Before beginning 300+ level English courses it is recommended that students take a 200-level English course. One 200-level course may be counted toward English Studies coursework. ENGL 203, ENGL 205, ENGL 209 and ENGL 210 fulfill KU Core Goal 3 Arts & Humanities.
4. Students may pursue an emphasis in a particular field by taking at least 3 courses in it (including a capstone). These emphases include:
   - Literary Studies: one literary history course, one theory course, and one humanities course.
   - Creative Writing: 300-level workshops in two genres, and one creative writing capstone.
   - Language, Culture, and Rhetoric: ENGL 380 or ENGL 387, another RCL course, and one RCL capstone.
   - Students may also designate their own 'custom' emphasis, in consultation with a departmental advisor.
5. Capstone Requirements (6 hours, 500 or above): Students must complete ENGL 300 and 2 other 300-level courses before they proceed to the capstone requirements. All 500-level or above English courses count as capstone courses. Students pursuing departmental honors may use ENGL 598 to fill one capstone requirement, and must also enroll in ENGL 599: Thesis hours.
6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>1</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total | 15 | 15 |

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3</td>
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<tr>
<td>ENGL 200+ (Major Requirement, Goal 3 Arts &amp; Humanities)</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
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<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>ENGL 300 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total | 15 | 15 |

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 300+ from Rhetoric, Language, or Writing Area (Creative Writing, Major Requirement)</td>
<td>3</td>
<td>ENGL 300+ from Literature, Language, or Rhetoric before 1850 Area (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 300+ Elective (Major Requirement)</td>
<td>3</td>
<td>ENGL 300+ Creative Writing Elective, Genre 2 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
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</tr>
</tbody>
</table>

| Total | 15 | 16 |

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 300+ from Diverse Identities, Communities, &amp; Texts Area (Major Requirement)</td>
<td>3</td>
<td>ENGL 300+ Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 500+ Creative Writing Elective (Major Requirement)</td>
<td>3</td>
<td>ENGL 500+ Elective (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
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<tr>
<td>L&amp;S 490 (Recommended, or elective)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>7</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>L&amp;S 492 (Job Search Strategies, or elective)</td>
<td>1</td>
<td>LA&amp;S 492 (Job Search Strategies, or elective)</td>
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</tbody>
</table>

### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. ENGL 203, ENGL 205, ENGL 209, and ENGL 210 fulfill KU Core Goal 3 Arts & Humanities. It is strongly recommended that students complete an ENGL 200-level course before attempting a 300-level.
4. Creative writing students complete workshops in at least two genres. For the purposes of the Creative Writing Tracks, the four major genres are: Fiction; Poetry; Playwriting, Screenwriting, and/or Scriptwriting; and Creative Non-Fiction.
5. Two ENGL courses must be taken at the 500+ level per major requirements.
6. Choose at least one of the required ENGL 500+ level courses, as required by the major, from the list of approved ENGL courses for Goal 6 of the KU Core.
7. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
# BA in English with concentration in Rhetoric, Language & Writing

Below is a sample 4-year plan for students pursuing the BA in English - Rhetoric, Language, and Writing Track. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Senior Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>2 Goal 2.2 Communication</td>
</tr>
<tr>
<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
<td>1</td>
<td>15</td>
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<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
<td>Hours</td>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 200-level course (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>ENGL 300 (Major Requirement)</td>
</tr>
<tr>
<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>Junior</td>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
<td>Hours</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 380 or 387 (Rhetoric, Composition, &amp; Language Course (Major Requirement))</td>
<td>3</td>
<td>ENGL 300+ from Literature, Language, or Rhetoric before 1850 (Major Requirement)</td>
<td>3</td>
<td>ENGL 300+ Elective (Major Requirement)</td>
<td>3</td>
<td>ENGL 300+ Rhetoric, Composition, &amp; Language Course (Major Requirement)</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 300+ from Diverse Identities, Communities, &amp; Texts Area (Major Requirement)</td>
<td>3</td>
<td>ENGL Elective 500+ (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 500+ Rhetoric, Composition, and Language Area (Major Requirement)</td>
<td>3</td>
<td>ENGL 300+ Elective (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LA&amp;S 492 (Recommended, or elective)</td>
<td>1</td>
<td>3 LA&amp;S 492 (Job Search Strategies, or elective)</td>
<td></td>
<td></td>
</tr>
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<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
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<tr>
<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/E elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

## Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. English majors are encouraged to take a 200-level English course before beginning 300+ level English courses.
4. Two ENGL 500+ level courses are required by the major. Attempt to choose at least one of the ENGL 500+ courses from the list of approved Goal 6 courses for the KU Core.
5. Second Language courses for the BA are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For Rhetoric, Composition, and Language Area course, see the Degree Requirements (p. 1346) in the Catalog.

### Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific
requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in English**

Below is a sample 4-year plan for students pursuing the BGS in English. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 Human Diversity</td>
<td>3</td>
<td>3 Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 200+ Level Course</td>
<td>3</td>
<td>3 ENGL 300 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
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</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
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</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 300+ from Rhetoric, Language, or Writing studies (Major Requirement)</td>
<td>3</td>
<td>3 Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 300+ elective (Major Requirement)⁴</td>
<td>3</td>
<td>3 ENGL 300+ from Diverse Identities, Communities, &amp; Texts (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours², ⁶</td>
<td>3</td>
<td>3 ENGL Elective 300+⁴</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours², ⁶</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁶</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours², ⁶</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>3 ENGL 500+ required capstone (Major Requirement, Goal 6 Integration &amp; Creativity)⁴</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 300+ from Literature, Language, or Rhetoric bef. 1850 (Major Requirement)</td>
<td>3</td>
<td>3 ENGL 300+ elective (Major Requirement)⁴</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 500+ required capstone (Major Requirement)⁴, ⁵</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours², ⁶</td>
<td>3</td>
</tr>
<tr>
<td>BGS Career Prep Course (BGS Requirement)³</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours², ⁶</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours², ⁶</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours², ⁶</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

1. Students must complete ENGL 101 and ENGL 102, or their equivalents to be eligible for 200-level and higher ENGL courses.
2. Please note that the Bachelor of General Studies degree requires completion of a single BGS major AND a secondary field of academic study (a second major, co-major, or minor). This sample plan is based on the completion of a minor. If a second major is selected instead, elective hours on plan will be needed for these additional major requirements.
3. Before beginning 300+ level English courses it is recommended that students take a 200-level English course. One 200-level course may be counted toward English Studies coursework.
4. Students may pursue an emphasis in a particular field by taking at least 3 courses in it (including a capstone). These emphases include:
   - Literary Studies: one literary history course, one theory course, and one creative writing capstone
   - Creative Writing: 300-level workshops in two genres, and one creative writing capstone
   - Language, Culture, and Rhetoric: ENGL 380 or ENGL 387, another RCL course, and one RCL capstone
   - Students may also designate their own ‘custom’ emphasis, in consultation with a departmental advisor.
5. Capstone Requirements (6 hours, 500 or above): Students must complete ENGL 300 and 2 other 300-level courses before they proceed to the capstone requirements. All 500-level or above English courses count as capstone courses. Students pursuing departmental honors may use ENGL 598 to fill one capstone requirement, and must also enroll in ENGL 599: Thesis hours.
6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
7. ENGL 203, ENGL 205, ENGL 209 and ENGL 210 fulfill Goal 3 Arts & Humanities
8. ENGL 362, ENGL 496 and ENGL 497 may fulfill BGS career Course requirement when taken for 3 credit hours.
Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in English with concentration in Creative Writing

Below is a sample 4-year plan for students pursuing the BGS in English - Creative Writing track. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses)/.

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 15**

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 200+ Course (Major Requirement, Goal 3 Arts and Humanities)²</td>
<td>3</td>
<td>ENGL 300 (Major Requirement)²</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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</tbody>
</table>

**Total Hours 15**

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 300+ Elective (Major Requirement)²³</td>
<td>3</td>
<td>3 ENGL 300+ Elective (Creative Writing Genre 2, Major Requirement)²³</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 15**

#### Total Hours 120

1. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

2. Before beginning 300+ level English courses it is recommended that students take a 200-level English course. One 200-level course may be counted toward English studies coursework.

3. Please note that the Bachelor of General Studies degree requires completion of a single BGS major AND a secondary field of academic study (a second major, co-major, or minor). This sample plan is based on the completion of a minor. If a second major is selected instead, elective hours on plan will be needed for these additional major requirements.

4. Creative writing students must complete workshops in at least two genres. For the purposes of the Creative Writing Tracks, the four major genres are: Fiction; Poetry; Playwriting, Screenwriting, and/or Scriptwriting; and Creative Non-Fiction.

5. Two ENGL courses must be taken at the 500+ level per major requirements and at least one of the 500+ courses must be a creative writing course.
Choose at least one of the required ENGL 500+ level courses, as required by the major, from the list of approved ENGL courses for Goal 6 of the KU Core.

ENGL 203, ENGL 205, ENGL 209, and ENGL 210 fulfill Goal 3 Arts & Humanities

ENGL 362, ENGL 496, and ENGL 497 fulfill BGS Career Course requirement.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BGS in English with concentration in Rhetoric, Language & Writing**

Below is a sample 4-year plan for students pursuing the BGS in English - Rhetoric, Language, and Writing Track. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3 Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 200-level Course (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3 ENGL 300 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 300+ from Diverse Identities, Communities, &amp; Texts Area (Major Requirement)</td>
<td>3 ENGL 300+ from Literature, Language, or Rhetoric before 1850 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>120</td>
<td>120</td>
</tr>
</tbody>
</table>

1. English majors are encouraged to take a 200-level English course before beginning 300+ level English courses.
2. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
3. ENGL 203, ENGL 205, ENGL 209, and ENGL 210 fulfill Goal 3 Arts & Humanities.
4. For Rhetoric, Composition, and Language area courses see catalog under Degree Requirements. (p. 1346)
5 ENGL 362, ENGL 496, and ENGL 497 fulfill the BGS Career Course requirement.
6 Please note that the Bachelor of General Studies degree requires completion of a single BGS major AND a secondary field of academic study (a second major, co-major, or minor). This sample plan is based on the completion of a minor. If a second major is selected instead, elective hours on plan will be needed for these additional major requirements.
7 Two ENGL 500+ level courses are required by the major. Attempt to choose at least one of the ENGL 500+ level courses from the list of approved Goal 6 courses for the KU Core.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Bachelor of Arts and Bachelor of General Studies in Literature, Language, and Writing

Why study English language and literature?

Because reading and writing shape the world.

KU’s English Department is at the core of the humanities, highlighting the "human" through our individual, one-on-one interactions with our students, our emphasis on community and global engagement, and our abiding interest in our shared humanity through the stories of others. We seek to challenge the mind and to engage the imagination of our students, to teach them to ask questions and to seek for answers. We encourage them to grapple with the complexity of a culturally and commercially interconnected world and the global networks and processes of cultural exchange. We believe that words and ideas will shape the world. We teach our students life-long skills, so that they learn to write clearly, creatively, and effectively—discovering themselves even as they lay a solid foundation for professional success.

A commitment to teaching and learning.

Our department is renowned for its tradition of excellence in teaching. The vast majority of our undergraduate classes have 20-35 students, and much of the class time is dedicated to active learning and engagement with texts and ideas. In the last ten years, faculty members in the department of English have won ten Kemper Fellowships for Excellence in Teaching, two Chancellors Club Teaching Professorships, a Career Achievement Teaching Award, and a wide variety of other university-level teaching and advising awards, and the department as a whole received the Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

A variety of career and life paths.

The Literature, Language, and Writing program at the Edwards campus helps to prepare undergraduate students for a variety of professions, including law, scholarship, publishing, library science, and marketing—as well as any number of other fields that value clear communication, interpretive skill, and critical and creative thinking.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. or B.G.S.

Literature, Language, and Writing Major

KU Edwards Campus

The undergraduate program in literature, language, and writing is offered in its entirety only at the KU Edwards Campus (http://edwardscampus.ku.edu/), 12600 Quivira Rd., Overland Park, KS 66213. This program is designed for students who have earned an associate’s degree or equivalent hours and wish to complete the upper-level courses necessary for a bachelor’s degree.

Literature, Language, and Writing Program

The major in Literature, Language and Writing requires 30 hours, of which 3 hours may be an appropriate 200-level English course. The program includes professional writing courses. Internship opportunities may be pursued as credit toward the major, offering students the opportunity to develop communication skills in specific professional contexts.

In today’s rapidly changing work environment, employers are seeking people who can deal with concepts and abstractions, who are imaginative and creative, and who have good communication and people skills. A degree in English can help develop these skills, and it is good preparation for a variety of advanced professional degrees in areas such as business and law. English majors pursue a range of careers including editing, technical writing, advertising and public relations, teaching, market research, retail management, teaching English as a second language, nonprofit fund-raising and/or advocacy, Web design, speech writing, sales, video production, script reading, radio and television, and many others. Some career paths require an advanced degree or specialized
post-graduate training, but an undergraduate degree in English is an excellent base from which to explore career options.

Contact the CLAS undergraduate advisor on the Edwards Campus, Ben Herron, bherron2@ku.edu, 913-897-8544 for more information.

**Requirements for the B.A. or B.G.S. Major**

**Course Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Literature, Language and Writing Core Knowledge and Skills</td>
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<tr>
<td></td>
<td>Literature Before 1900. Satisfied by two courses (6 hours) from the following:</td>
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<tr>
<td>ENGL 301</td>
<td>Topics in British Literature to 1800: _____</td>
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<tr>
<td>ENGL 309</td>
<td>The British Novel</td>
<td></td>
</tr>
<tr>
<td>ENGL 312</td>
<td>Major British Writers to 1800</td>
<td></td>
</tr>
<tr>
<td>ENGL 314</td>
<td>Major British Writers after 1800</td>
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<td>ENGL 315</td>
<td>Studies in British Literature</td>
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<td>ENGL 317</td>
<td>Topics in American Literature to 1865: _____</td>
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<tr>
<td>ENGL 320</td>
<td>American Literature I</td>
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<tr>
<td>ENGL 322</td>
<td>American Literature II</td>
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<tr>
<td>ENGL 331</td>
<td>Chaucer</td>
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<td>ENGL 332</td>
<td>Shakespeare</td>
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<td>ENGL 521</td>
<td>Advanced Topics in British Literature 1800: _____</td>
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<td>ENGL 525</td>
<td>Shakespeare: _____</td>
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<tr>
<td>ENGL 565</td>
<td>The Gothic Tradition</td>
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<td>ENGL 576</td>
<td>Advanced Topics in American Literature to 1865: _____</td>
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<tr>
<td>ENGL 610</td>
<td>The Literature of England to 1500</td>
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</tr>
<tr>
<td>ENGL 620</td>
<td>Renaissance English Literature: _____</td>
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<tr>
<td>ENGL 633</td>
<td>Milton</td>
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<tr>
<td>ENGL 640</td>
<td>British Literature, 1600-1800: _____</td>
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<td>ENGL 650</td>
<td>Romantic Literature: _____</td>
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<tr>
<td>ENGL 655</td>
<td>Victorian Literature: _____</td>
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<tr>
<td>ENGL 690</td>
<td>Studies in: _____</td>
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</tr>
<tr>
<td>ENGL 340</td>
<td>Topics in U.S. Ethnic Literature: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 341</td>
<td>American Literature of Social Justice</td>
<td></td>
</tr>
<tr>
<td>ENGL 574</td>
<td>African American Literature: _____</td>
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</tr>
<tr>
<td>ENGL 576</td>
<td>Advanced Topics in American Literature to 1865: _____</td>
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</tr>
<tr>
<td>ENGL 577</td>
<td>Advanced Topics in American Literature Since 1865: _____</td>
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<tr>
<td>ENGL 578</td>
<td>Poetry, 1900-1945</td>
<td></td>
</tr>
<tr>
<td>ENGL 579</td>
<td>Poetry since 1945</td>
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<tr>
<td></td>
<td>American Literature. Satisfied by one course (3 hours) from the following:</td>
<td></td>
</tr>
<tr>
<td>ENGL 320</td>
<td>American Literature I</td>
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<tr>
<td>ENGL 322</td>
<td>American Literature II</td>
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<tr>
<td>ENGL 325</td>
<td>Recent Popular Literature</td>
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<td>ENGL 336</td>
<td>Jewish American Literature and Culture</td>
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<td>ENGL 337</td>
<td>Introduction to U.S. Latino/a Literature</td>
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<tr>
<td>ENGL 338</td>
<td>Introduction to African-American Literature</td>
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<td>ENGL 340</td>
<td>Topics in U.S. Ethnic Literature: _____</td>
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<tr>
<td>ENGL 341</td>
<td>American Literature of Social Justice</td>
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<tr>
<td>ENGL 570</td>
<td>Topics in American Literature: _____</td>
<td></td>
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<tr>
<td>ENGL 574</td>
<td>African American Literature: _____</td>
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<tr>
<td>ENGL 610</td>
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<td>ENGL 570</td>
<td>Topics in American Literature: _____</td>
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<td>ENGL 574</td>
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<td>ENGL 576</td>
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<td>ENGL 577</td>
<td>Advanced Topics in American Literature Since 1865: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 578</td>
<td>Poetry, 1900-1945</td>
<td></td>
</tr>
<tr>
<td>ENGL 579</td>
<td>Poetry since 1945</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing or English Language Required Electives</td>
<td>9</td>
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<tr>
<td></td>
<td>Majors must complete a total of 3 courses (9 hours) of writing and/or English language courses, of which 3 hours may be an appropriate 200-level English course.</td>
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<tr>
<td>ENGL Required Elective</td>
<td>ENGL courses. Up to 6 credits combined of ENGL 494 (Research Internship) or ENGL 495 (Directed Study) may be applied as major electives; they may not count as English core equivalents. Up to 3 credit hours of ENGL 496 (Internship) or ENGL 497 (Service Learning Internship) can be applied as major elective credit. In addition, the following courses offered in other CLAS departments may be selected: HUM 304, HUM 308, HUM 312, FMS 373, FMS 773.</td>
<td>9</td>
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<tr>
<td></td>
<td>Total Hours</td>
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</table>

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 30 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
A sample 4-year plan for the BA degree in Literature, Language, and Writing can be found here: Literature, Language and Writing (p. 1356), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Literature, Language, and Writing can be found here: Literature, Language and Writing (p. 1357), or by using the left-side navigation.

**Departmental Honors**

To be admitted to the English Honors major program, an undergraduate student must have earned a 3.5 grade-point average in English courses. The student should declare an English major, if enrolled in the College of Liberal Arts and Sciences, or an English concentration, if enrolled in the School of Business or the School of Education.

Honors English majors must complete at least 1 section of ENGL 598 Honors Proseminar: _____ and ENGL 599 Honors Essay. This requirement, in effect, adds 3 hours of capstone-level coursework to the student’s emphasis.

### BA in Literature, Language & Writing

Below is a sample 4-year plan for students pursuing the BA in Literature, Language, and Writing. A 4-year plan for the BGS in Literature, Language, and Writing is coming soon. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

The Literature, Language & Writing major is only available to Edwards campus students.

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
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<td>Goal 3 Arts and Humanities</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
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<td>BA Quantitative Reasoning (QR)</td>
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<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td>2nd Semester Language (BA Second Language)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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| Total | 17 | 14 |

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
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<tr>
<td>Goal 3 Natural Science</td>
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<td>Writing/English Language Elective 200+ (1 of 3), Major Requirement</td>
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<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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| Total | 15 | 13 |

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature Before 1900 (1 of 2), Major Requirement</td>
<td>3</td>
<td>Literature Before 1900 (2 of 2), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>British Literature 300+, Major Requirement</td>
<td>3</td>
<td>American Literature 300+, Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Writing/English Language 300+ (2 of 3), Major Requirement</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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| Total | 15 | 15 |

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ENGL Elective 300+, Major Requirement</td>
<td>3</td>
<td>Writing/English Language Elective 300+ (3 of 3), Major Requirement</td>
<td>3</td>
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<tr>
<td>ENGL Elective 300+, Major Requirement</td>
<td>3</td>
<td>ENGL Elective 500+, Goal 6 Integration &amp; Creativity, (Major Requirement)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Junior-Senior Hours</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total | 15 | 13 |

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Major must complete 3 courses (9 hours) in writing and/or English language courses.
3. Majors must complete 3 courses (9 hours) of junior/senior level ENGL courses. Up to 6 credits combined of ENGL 494 (Research Internship) or ENGL 495 (Directed Study) may be applied as major electives; they may not count as English core equivalents. Up to 3 credit hours of ENGL 496 (Internship) or ENGL 497 (Service Learning Internship) can be applied as major elective credit.
4. At least one major course must be taken at the 500+ level.
The Literature, Language & Writing major is only available to Edwards campus students.

Please Note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BGS in Literature, Language & Writing

Below is a sample 4-year plan for students pursuing the BGS in Literature, Language, & Writing. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

The Literature, Language & Writing major is only available to Edwards campus students.

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
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<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
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<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
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</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Arts and Humanities (Recommended ENGL 203, 209, or 210)</td>
<td>3</td>
<td>Writing/English Language (1 of 3) Elective 200+, Major Requirement</td>
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</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
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</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature Before 1900 (1 of 2), Major Requirement</td>
<td>3</td>
<td>Literature Before 1900 (2 of 2), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>American Literature 300+, Major Requirement</td>
<td>3</td>
<td>British Literature 300+, Major Requirement</td>
<td>3</td>
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<tr>
<td>Writing/English Language 300+ (2 of 3), Major Requirement</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
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</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL Elective 300+, Major Requirement</td>
<td>3</td>
<td>Writing/English Language Elective 300+ (3 of 3), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>ENGL Elective 300+, Major Requirement</td>
<td>3</td>
<td>ENGL elective 500+, Goal 6 Integration &amp; Creativity, Major Requirement</td>
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<tr>
<td>BGS Career Course (BGSC)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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</table>

### Total Hours 120

1. Majors must complete 3 courses (9 hours) of junior/senior level English courses. Up to 6 credits combined of ENGL 494 Research Internship or ENGL 495 Directed Study: _____ may be applied as major electives; they may not count as English core equivalents. Up to 3 credit hours of ENGL 496 Internship or ENGL 497 Service Learning Internship can be applied as major elective credit.

2. At least one major course must be taken at the 500+ level.

3. At least one major course should be chosen from the list of English courses approved to fulfill KU Core Goal 6.

4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Minor in English

Why study English language and literature?

Because reading and writing shape the world.

KU’s English Department is at the core of the humanities, highlighting the “human” through our individual, one-on-one interactions with our students, our emphasis on community and global engagement, and our abiding interest in our shared humanity through the stories of others. We seek to challenge the mind and to engage the imagination of our students, to teach them to ask questions and to seek for answers. We encourage them to grapple with the complexity of a culturally and commercially interconnected world and the global networks and processes of cultural exchange. We believe that words and ideas will shape the world. We teach our students life-long skills, so that they learn to write clearly, creatively, and effectively—discovering themselves even as they lay a solid foundation for professional success.

A commitment to teaching and learning.

Our department is renowned for its tradition of excellence in teaching. The vast majority of our undergraduate classes have 15-25 students, and much of the class time is dedicated to active learning and engagement with texts and ideas. In the last ten years, faculty members in the department of English have won ten Kemper Fellowships for Excellence in Teaching, two Chancellors Club Teaching Professorships, a Career Achievement Teaching Award, and a wide variety of other university-level teaching and advising awards, and the department as a whole received the Center of Teaching Excellence (CTE) award for Department Excellence in Teaching at the University of Kansas.

A variety of career and life paths.

The English minor is an excellent complement to any major or professional degree. English students graduate to a variety of careers, including law, teaching, scholarship, publishing, library science, and journalism—as well as medicine, business, politics, design, and any number of other fields that value clear communication, interpretive skill, and critical and creative thinking.

Engaged and innovative scholarship.

KU’s English Department has several core strengths that cross tracks and periods, including Global and Cross-Cultural Approaches; Literature, Rhetoric, and Social Action; Diversity Studies; Language, Literature and Science; and Popular Expressive Forms.

At the KU English Department, students work closely with nationally-renowned writers and researchers. Our faculty have won national awards that recognize excellence in research, including grants from the National Endowment for the Humanities, the American Philosophical Society, and the Newberry Library, among others. English Department faculty members have also received major research funding from the University of Kansas, including the Hall Center for the Humanities Research fellowships and Keeler Intra-University Fellowships for interdisciplinary work. Undergraduate students can work one-on-one with faculty mentors in the Honors Program, McNair Scholars Program, and Dean's Scholars Program.

Requirements for the Minor

The minor in English requires students to complete 18 hours of English coursework in one of three tracks: Regular, Creative Writing, or Rhetoric, Language, and Writing.

Requirements for the English Minor, Regular Track

18 hours, of which 12 hours must be selected from 4 of the following categories that comprise the common requirements of the English major, and of which at least 15 must be jr/sr hours. No more than 1 creative writing course may count for the regular track. ENGL 494, ENGL 495, ENGL 496, and ENGL 497 may not be applied to English minor requirements.

Categories:

1. Individual Authors or Movements
2. Literary Theory
3. English Language or Rhetoric
4. Transcultural Approaches to Language, Literature, or Writing
5. Writing
6. Forms and Genres
7. Literary History

For full course lists for each category, see the General Track of the English Major (http://catalog.ku.edu/liberal-arts-sciences/english/ba-bgs-english/#Gen).

Requirements for the Creative Writing Track of the English Minor

18 hours, of which 12 hours must be creative writing workshops (see below) in at least two genres, and of which at least 15 must be jr/sr hours. For the purposes of the creative writing tracks of the major and minor, genres are 1) fiction; 2) poetry; 3) playwriting, screenwriting, and/or scriptwriting; and 4) non-fiction. At least one workshop must be at the 500 level or above. ENGL 494, ENGL 495, ENGL 496, and ENGL 497 may not be applied to English minor requirements.

Creative Writing workshops:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 351</td>
<td>Fiction Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 352</td>
<td>Poetry Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 353</td>
<td>Screenwriting I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 354</td>
<td>Playwriting I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 355</td>
<td>Nonfiction Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 360</td>
<td>Topics in Writing: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 492</td>
<td>The London Review</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 551</td>
<td>Fiction Writing II</td>
<td>3</td>
</tr>
</tbody>
</table>
ENGL 552 Poetry Writing II 3
ENGL 553 Screenwriting II 3
ENGL 554 Playwriting II 3
ENGL 555 Nonfiction Writing II 3
FMS 373 Intermediate Screenwriting 3

Requirements for the Rhetoric, Language, and Writing track of the English Minor

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 380 or ENGL 387</td>
<td>Introduction to Rhetoric and Composition or Introduction to the English Language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 581</td>
<td>English Language Studies: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 582</td>
<td>Multimedia/Multimodal Rhetorics</td>
<td></td>
</tr>
<tr>
<td>ENGL 586</td>
<td>Language and Style</td>
<td></td>
</tr>
<tr>
<td>ENGL 587</td>
<td>American English</td>
<td></td>
</tr>
</tbody>
</table>

12 hours chosen from the following courses on English Language Studies and Rhetoric and Composition:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 359</td>
<td>English Grammar</td>
<td></td>
</tr>
<tr>
<td>ENGL 360</td>
<td>Topics in Writing: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 380</td>
<td>Introduction to Rhetoric and Composition</td>
<td></td>
</tr>
<tr>
<td>ENGL 381</td>
<td>Topics in Rhetoric and Composition: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 382</td>
<td>Composing Cultures</td>
<td></td>
</tr>
<tr>
<td>ENGL 383</td>
<td>Cultural Rhetorics</td>
<td></td>
</tr>
<tr>
<td>ENGL 385</td>
<td>The Development of Modern English</td>
<td></td>
</tr>
<tr>
<td>ENGL 386</td>
<td>Language and Social Justice in the US</td>
<td></td>
</tr>
<tr>
<td>ENGL 387</td>
<td>Introduction to the English Language</td>
<td></td>
</tr>
<tr>
<td>ENGL 388</td>
<td>Topics in English Language Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 389</td>
<td>Postcolonial and World Englishes</td>
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</tr>
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<td>ENGL 400</td>
<td>Teaching and Tutoring Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 580</td>
<td>Rhetoric and Writing: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 581</td>
<td>English Language Studies: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 582</td>
<td>Multimedia/Multimodal Rhetorics</td>
<td></td>
</tr>
<tr>
<td>ENGL 586</td>
<td>Language and Style</td>
<td></td>
</tr>
<tr>
<td>ENGL 587</td>
<td>American English</td>
<td></td>
</tr>
</tbody>
</table>

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 12 hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator.

Undergraduate Certificate in Creative and Analytical Writing

The Opportunity

Creativity and innovation are how businesses move forward and gain a competitive edge. They also present ways to explore your abilities and develop practical skills that help you see the big picture, while approaching problems in a constructive, unique way that helps you stand out from the crowd.

The KU Edwards Campus offers two undergraduate certificate programs that develop your writing and critical thinking skills for the professional world, and add a valuable KU qualification to your resume. Develop your creative side and critical thinking skills with the Creative and Analytical Writing certificate. If you’re more technically minded, develop your professional writing skills and critical analysis abilities with the Critical Thinking and Writing certificate.

Each certificate can be completed in three semesters, and offers a light course load and flexible curriculum that you can take at your own pace. Apply the skills and thought processes you learn to the work you’re already doing and become the innovative, constructive leader you’ve always wanted to be.

This certificate is designed to enhance written communication with an emphasis on strengthening creativity. The curriculum’s fiction and poetry writing classes allow you to stretch your creative muscles, while also developing critical thinking and feedback skills through the process of workshopping. Literature courses strengthen critical thinking and analysis skills through studying works in historical and cultural context.

The Creative and Analytical Writing certificate is 12 credits, to include two courses in each of the following categories. All 12 hours must be at the JR/SR level.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 351</td>
<td>Fiction Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL 551</td>
<td>Fiction Writing II</td>
<td></td>
</tr>
<tr>
<td>ENGL 352</td>
<td>Poetry Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL 552</td>
<td>Poetry Writing II</td>
<td></td>
</tr>
<tr>
<td>ENGL 355</td>
<td>Nonfiction Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL 555</td>
<td>Nonfiction Writing II</td>
<td></td>
</tr>
</tbody>
</table>

Writing about ideas

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 306</td>
<td>Global Environmental Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 327</td>
<td>Studies in Twentieth-Century Drama: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 332</td>
<td>Shakespeare</td>
<td></td>
</tr>
<tr>
<td>ENGL 338</td>
<td>Introduction to African-American Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 479</td>
<td>The Literature of: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 590</td>
<td>Studies in: _____</td>
<td>1-3</td>
</tr>
<tr>
<td>HIST 353</td>
<td>Indigenous Peoples of North America</td>
<td></td>
</tr>
<tr>
<td>HIST 319</td>
<td>History, Women, and Diversity in the U.S.</td>
<td></td>
</tr>
</tbody>
</table>

Full PDF 2022-23 1359
### Undergraduate Certificate in Critical Thinking and Writing

Creativity and innovation are how businesses move forward and gain a competitive edge. They also present ways to explore your abilities and develop practical skills that help you see the big picture, while approaching problems in a constructive, unique way that helps you stand out from the crowd.

The KU Edwards Campus offers two undergraduate certificate programs that develop your writing and critical thinking skills for the professional world, and add a valuable KU qualification to your resume. Develop your creative side and critical thinking skills with the Creative and Analytical Writing certificate. If you’re more technically minded, develop your professional writing skills and critical analysis abilities with the Critical Thinking and Writing certificate.

Each certificate can be completed in three semesters, and offers a light course load and flexible curriculum that you can take at your own pace. Apply the skills and thought processes you learn to the work you’re already doing and become the innovative, constructive leader you’ve always wanted to be.

This certificate pairs technical writing and research courses with literature courses that study works in context. The program works directly on strengthening your capacity to accurately critique ideas and understand diverse points of view.

The certificate will require 12 credits and will require students to include two courses in each of the following two categories. All 12 hours must be at the JR/SR level.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 360</td>
<td>Topics in Writing: _____</td>
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<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 494</td>
<td>Research Internship</td>
<td>1-3</td>
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<tr>
<td>ENGL 496</td>
<td>Internship</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL 497</td>
<td>Service Learning Internship</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL 306</td>
<td>Global Environmental Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 327</td>
<td>Studies in Twentieth-Century Drama: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 332</td>
<td>Shakespeare</td>
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<tr>
<td>ENGL 338</td>
<td>Introduction to African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 479</td>
<td>The Literature of: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 590</td>
<td>Studies in:</td>
<td>1-3</td>
</tr>
<tr>
<td>HIST 353</td>
<td>Indigenous Peoples of North America</td>
<td>3</td>
</tr>
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<td>HIST 319</td>
<td>History, Women, and Diversity in the U.S.</td>
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</tr>
<tr>
<td>HIST 530</td>
<td>History of American Women--Colonial Times to 1870</td>
<td>3</td>
</tr>
<tr>
<td>HIST 531</td>
<td>History of American Women--1870 to Present</td>
<td>3</td>
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</tbody>
</table>

### Undergraduate Certificate in Writing

This certificate program gives students the opportunity to develop a variety of writing skills and a credential testifying to their abilities in written communication. It serves students who are interested in exploring writing and developing their writing skills in a wide range of genres and for varied purposes and contexts—from creative writing, to writing for the professions, to writing in the disciplines.

Complete the following (12 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</table>

#### Core Writing Course (Choose one 3 hour course): 3

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____</td>
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<tr>
<td>ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL 220</td>
<td>Introduction to Creative Writing</td>
<td>1-3</td>
</tr>
<tr>
<td>ENGL 360</td>
<td>Topics in Writing: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 380</td>
<td>Introduction to Rhetoric and Composition</td>
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</tr>
<tr>
<td>ENGL 381</td>
<td>Topics in Rhetoric and Composition: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 385</td>
<td>The Development of Modern English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 387</td>
<td>Introduction to the English Language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 388</td>
<td>Topics in English Language Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 400</td>
<td>Teaching and Tutoring Writing</td>
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</tr>
<tr>
<td>ENGL 580</td>
<td>Rhetoric and Writing: _____</td>
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</tr>
<tr>
<td>ENGL 587</td>
<td>American English</td>
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#### Rhetoric, Language, and Writing (Choose one 3 hour course): 3

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 359</td>
<td>English Grammar</td>
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</tr>
<tr>
<td>ENGL 360</td>
<td>Topics in Writing: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 380</td>
<td>Introduction to Rhetoric and Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 381</td>
<td>Topics in Rhetoric and Composition: _____</td>
<td>3</td>
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<td>ENGL 385</td>
<td>The Development of Modern English</td>
<td>3</td>
</tr>
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<td>ENGL 387</td>
<td>Introduction to the English Language</td>
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<td>ENGL 388</td>
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<tr>
<td>ENGL 400</td>
<td>Teaching and Tutoring Writing</td>
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<td>ENGL 580</td>
<td>Rhetoric and Writing: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 587</td>
<td>American English</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Choose two courses (a total of 6 hours) from at least two of the following areas: 6

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 359</td>
<td>English Grammar</td>
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</tr>
<tr>
<td>ENGL 360</td>
<td>Topics in Writing: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 380</td>
<td>Introduction to Rhetoric and Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 381</td>
<td>Topics in Rhetoric and Composition: _____</td>
<td>3</td>
</tr>
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<td>ENGL 385</td>
<td>The Development of Modern English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 387</td>
<td>Introduction to the English Language</td>
<td>3</td>
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<tr>
<td>ENGL 388</td>
<td>Topics in English Language Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 400</td>
<td>Teaching and Tutoring Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 580</td>
<td>Rhetoric and Writing: _____</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 587</td>
<td>American English</td>
<td>3</td>
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</tbody>
</table>

#### Creative Writing

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 351</td>
<td>Fiction Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 352</td>
<td>Poetry Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 354</td>
<td>Playwriting I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 355</td>
<td>Nonfiction Writing I</td>
<td>3</td>
</tr>
</tbody>
</table>

Writing in the Professions
All applicants must submit their complete admission information, see the Graduate Admission Studies section of the online catalog.

Interdisciplinary Studies degrees, which may be found in the Graduate Policies and procedures of Graduate Studies govern the process of admission. These may be found in the Graduate Division of Graduate Studies. Only one course outside the College (BUS, JOUR) may be used to fulfill certificate requirements.

**Master of Arts in English**

The M.A. in Literature and the M.A. in Literature & Literary Theory provide students with a broad knowledge of literatures in English across a range of time periods, as well as an introduction to the basic concepts and methods of the discipline. This program has special strengths in ecocriticism and posthuman studies, African American & African diaspora literatures, nineteenth-century U.S. literature, science fiction & fantasy, and Victorian literature.

The M.A. in Rhetoric & Composition provides students with a broad knowledge of writing and the teaching of writing, including the study of composing across multiple genres, media and situations. This program has special strengths in genre and language theory, multimodality and digital rhetorics, public rhetoric, and writing pedagogy.

The M.A. in English Language Studies provides students with a broad introduction to empirical approaches to the study of the English language. This program has special strengths in historical linguistics, sociolinguistics, pragmatics, and discourse analysis.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

To be admitted to any of the department’s graduate degree tracks, a student must have a strong undergraduate record, particularly in the humanities. Applicants are expected to have some familiarity with British and American literary history and the work of the major writers in English. Applicants for graduate work in literary studies and rhetoric-composition studies should be able to demonstrate, with writing samples, their ability to produce advanced analytical and interpretive scholarly writing. For complete admission information, see the English department website (https://english.ku.edu/).

All applicants must submit their graduate application online (https://gradapply.ku.edu/apply/). All supplemental materials (transcripts, writing samples, letters of recommendation, etc.) may be attached electronically and submitted with the online application. Those who cannot submit supplemental materials electronically may mail them to the department:

The University of Kansas
Department of English
Graduate Applications
1445 Jayhawk Blvd., Room 3001
Lawrence, KS 66045

**M.A. Degree Requirements**

While continuously enrolled, a student has a total of 7 years to complete the master's degree; however, the expected time to degree is 2.5 to 3 years. The candidate’s program should be arranged in consultation with the department’s director of graduate studies or a member of the departmental committee on graduate studies.

Students who elect to write a master’s thesis must enroll in ENGL 899. M.A. candidates in Options 1a, 1b, 2a and 2b must take at least 18 hours of their course work, in addition to ENGL 800, at the 700, 800, and 900 levels.

**Option 1a—Literature**

1. A total of 30 hours in English courses carrying graduate credit. No more than 6 hours may be taken at the 600 level. At least 6 hours must be taken at the 900 or seminar level. ENGL 998 does not count as a seminar or 900-level class. **Exam option** students will take 9 conventional courses (27 hours), plus 3 hours of ENGL 897 (exam preparation hours) or another elective course. **Thesis option** students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 899 (MA or MFA thesis hours). **Portfolio option** students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 898.

2. 3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Literary Studies: ordinarily 708, 709, 800, or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours on Pedagogy: the 801-802 sequence (required for TAs), 780, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 1 course must be pre-1700; at least 1 must be 1700-1800; and at least 1 must be after 1900. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

5. Exam option (3 hours): the student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on a 30-item exam list of literary and / or theoretical texts, including at least 6 items from before 1700; at least 6 items from 1700-1900; and at least 6 items from 1900-present. The student may opt to enroll in 1 additional 3-hour elective course instead of ENGL 897.

6. Thesis Option (6 hours): The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____ (”Writing for Engineering”)</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
</tr>
<tr>
<td>BUS 305</td>
<td>Business Writing</td>
</tr>
<tr>
<td>COMS 330</td>
<td>Effective Business Communication</td>
</tr>
<tr>
<td>COMS 320</td>
<td>Communication on the Internet</td>
</tr>
<tr>
<td>ENGL 580</td>
<td>Rhetoric and Writing: _____ (”Digital Rhetoric” or “Multimedia Rhetoric”)</td>
</tr>
</tbody>
</table>

***NOTE*** Courses cannot be used to fulfill more than one category, unless special topic differs. Only one course outside the College (BUS, JOUR) may be used to fulfill certificate requirements.
7. Portfolio Option (6 hours): The student must enroll in 6 hours of ENGL 898 (MA portfolio) over 2 semesters of work: (1) a first semester with the portfolio director, deciding on the shorter scholarly pieces to be included in the portfolio and drafting the cover essay (3-5 pages); and (2) a writing semester for crafting and revising the scholarly pieces, leading to the oral defense (90 minutes) of the polished portfolio (40-50 pages or the digital equivalent).

**Option Ib—Literature and Literary Theory**

1. A total of 30 hours in English courses carrying graduate credit. No more than 6 hours may be taken at the 600 level. At least 6 hours must be taken at the 900 or seminar level. ENGL 998 does not count as a seminar or 900-level class. **Exam option** students will take 9 conventional courses (27 hours), plus 3 hours of ENGL 897 (exam preparation hours) or another elective course. **Thesis option** students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 899 (MA or MFA thesis hours). **Portfolio option** students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 898.

2. 3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Rhetoric and Composition, ordinarily 780 (Composition Studies), or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours on Pedagogy: the 801-802 sequence (required for TAs), 780, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 3 hours (1 course) must be pre-1800; at least 1 (3 hours) must be post-1800. At least 2 courses (6 hours), besides the course used to fulfill requirement 1 (Methods or Theory) must focus primarily on Literary Theory. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

5. Exam option (3 hours): The student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on a 30-item exam list of works in a second area: literature, literary theory, or rhetoric and composition. The student may opt to enroll in 1 additional 3-hour elective course instead of ENGL 897.

6. **Thesis Option (6 hours):** The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.

7. **Portfolio Option (6 hours):** The student must enroll in 6 hours of ENGL 898 (MA portfolio) over 2 semesters of work: (1) a first semester with the portfolio director, deciding on the shorter scholarly pieces to be included in the portfolio and drafting the cover essay (3-5 pages); and (2) a writing semester for crafting and revising the scholarly pieces, leading to the oral defense (90 minutes) of the polished portfolio (40-50 pages or the digital equivalent).

**Option 2a—Rhetoric and Composition**

1. A total of 30 hours in English courses carrying graduate credit. No more than 6 hours may be taken at the 600 level. At least 6 hours must be taken at the 900 or seminar level. ENGL 998 does not count as a seminar or 900-level class. **Exam option** students will take 9 conventional courses (27 hours), plus 3 hours of ENGL 897 (exam preparation hours) or another elective course. **Thesis option** students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 899 (MA or MFA thesis hours). **Portfolio option** students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 898.

2. 3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Rhetoric and Composition, ordinarily 780 (Composition Studies), or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours on Pedagogy: the 801-802 sequence (required for TAs), 780, 781, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 6 hours in English Language Studies courses (including at least 1 seminar) beyond the courses used to fulfill requirements 2 (Methods and Theory) and 3 (Pedagogy).

5. 6 hours of elective courses

6. For students selecting the exam option, 6 hours in second exam area (rhetoric and composition, literature, literary theory), including at least 1 seminar.

7. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

8. Exam option (3 hours): The student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on 2 lists developed in consultation with advisors: a) a 15-item exam list of works in English Language Studies, and b) a 15-item exam list of works in a second area: literature, literary theory, or rhetoric and composition. The student may opt to enroll in 1 additional 3-hour elective course instead of ENGL 897.

9. **Thesis Option (6 hours):** The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.

10. **Portfolio Option (6 hours):** The student must enroll in 6 hours of ENGL 898 (MA portfolio) over 2 semesters of work: (1) a first semester with the portfolio director, deciding on the shorter scholarly pieces to be included in the portfolio and drafting the cover essay (3-5 pages); and (2) a writing semester for crafting and revising the scholarly pieces, leading to the oral defense (90 minutes) of the polished portfolio (40-50 pages or the digital equivalent).

**Option 2b—English Language Studies**

1. A total of 30 hours in English courses carrying graduate credit. No more than 6 hours may be taken at the 600 level. At least 6 hours must be taken at the 900 or seminar level. ENGL 998 does not count as a seminar or 900-level class. **Exam option** students will take 9 conventional courses (27 hours), plus 3 hours of ENGL 897 (exam preparation hours) or another elective course. **Thesis option** students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 899 (MA or MFA thesis hours). **Portfolio option** students will take 8 conventional courses (24 hours), plus 6 hours of ENGL 898.

2. 3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Rhetoric and Composition, ordinarily 780 (Composition Studies), or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours on Pedagogy: the 801-802 sequence (required for TAs), 780, 781, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 6 hours in English Language Studies courses (including at least 1 seminar) beyond the courses used to fulfill requirements 2 (Methods and Theory) and 3 (Pedagogy).

5. 6 hours of elective courses

6. For students selecting the exam option, 6 hours in second exam area (rhetoric and composition, literature, literary theory), including at least 1 seminar.

7. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

8. Exam option (3 hours): The student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on 2 lists developed in consultation with advisors: a) a 15-item exam list of works in English Language Studies, and b) a 15-item exam list of works in a second area: literature, literary theory, or rhetoric and composition. The student may opt to enroll in 1 additional 3-hour elective course instead of ENGL 897.

9. **Thesis Option (6 hours):** The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.

10. **Portfolio Option (6 hours):** The student must enroll in 6 hours of ENGL 898 (MA portfolio) over 2 semesters of work: (1) a first semester with the portfolio director, deciding on the shorter scholarly pieces to be included in the portfolio and drafting the cover essay (3-5 pages); and (2) a writing semester for crafting and revising the scholarly pieces, leading to the oral defense (90 minutes) of the polished portfolio (40-50 pages or the digital equivalent).
(Composition Studies), or another course appropriately designated by the Graduate Director. A 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3. 3 hours on Pedagogy: the 801-802 sequence (required for TAs), 780, or other appropriate course as approved by the Graduate Director.

4. 18 (6 courses with thesis option) or 21 (7 courses with exam option) distribution hours (6 courses) to be selected in consultation with advisors (Graduate Director during first year and thereafter advisors with whom students plan to move toward exam or thesis options). At least 6 hours in Rhetoric and Composition courses (including at least 1 seminar) beyond the courses used to fulfill requirements 2 (Methods and Theory) and 3 (Pedagogy).

5. 6 hours of elective courses

6. For students selecting the exam option, 6 hours in second exam area (rhetoric and composition specialty, English language studies, literature, literary theory), including at least 1 seminar

7. 2 courses (6 hours) outside the department may be included in the 18 distribution hours with approval of the Graduate Director.

8. Exam option (3 hours): The student will generally enroll in 3 hours of ENGL 897 (exam preparation hours) and must pass a 90-minute oral exam based on 2 lists developed in consultation with advisors: a) a 15-item exam list of works in rhetoric and composition, and b) a 15-item exam list of works in a second area: literature, literary theory, English Language Studies, or specialty within rhetoric and composition. The student may opt to enroll in 1 additional 3-hour elective course instead of ENGL 897.

9. Thesis Option (6 hours): The student must enroll in 6 hours of ENGL 899 (MA or MFA thesis hours) over 2 semesters of thesis work: (1) a first semester of work with the thesis director leading to polished proposal with a bibliography; and (2) a thesis semester of writing leading to defense of finished thesis.

10. Portfolio Option (6 hours): The student must enroll in 6 hours of ENGL 898 (MA portfolio) over 2 semesters of work: (1) a first semester with the portfolio director, deciding on the shorter scholarly pieces to be included in the portfolio and drafting the cover essay (3-5 pages); and (2) a writing semester for crafting and revising the scholarly pieces, leading to the oral defense (90 minutes) of the polished portfolio (40-50 pages or the digital equivalent).

Accelerated Master of Arts in English

The 4+1 B.A.-M.A. program will offer our best undergraduate majors the opportunity to earn both the bachelor's and master's degrees in a focused and accelerated manner. The program enables KU students to count 12 hours of graduate-level coursework toward the major requirements and the master's degree, which will be completed in the 5th year.

The course requirements for the accelerated M.A. program are fulfilled by a combination of graduate-level courses taken for both undergraduate and graduate credit in Year 4, fulfilling both B.A. major requirements and M.A. degree requirements, and graduate credit courses taken in Year 5.

- Students must be approved to begin coursework toward the 4+1 program prior to enrolling in any classes that are to count for both undergraduate and graduate credit.

Only current KU undergraduate students are eligible to apply to the Accelerated MA program. If you are not a current undergraduate student at KU, please review the admission requirements for the regular MA program.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

ADMISSION REQUIREMENTS:

Careful course selection and steady progression through the undergraduate career is necessary to ensure all requirements for both degrees may be completed within the 5-year timeframe. All prospective students should discuss their interest in admission to the accelerated master's track with both the Undergraduate Director (UGD) and the Director of Graduate Studies (DGS) no later than the Fall of the student's Junior year (Year 3).

Prospective students are eligible to apply to the graduate program in the Fall semester of their Senior Year. The following program requirements must be met by this time:

- Major GPA of at least 3.5
- Overall GPA of at least 3.25
- On track to complete all requirements for a BA degree in English from KU by the spring semester of Senior year (Year 4).

GRE scores are not required.

Applicants must complete an Application for Graduate Study online (https://gradapply.ku.edu/apply/). The following information should be gathered in advance and uploaded with the application:

- 3 letters of recommendation (at least one from an English faculty member);
- resume or curriculum vitae (CV);
- one-page Statement of Purpose (maximum 750 words);
- writing samples (15 to 20 pages total; more than one paper preferred).

Upon review of the application for admission, the English Department will notify the student of her or his eligibility to begin coursework in the program. Final acceptance to the graduate program will be contingent upon the following:

- grades of B or above in all English graduate-level coursework taken in Year 4;
- successful completion of all requirements for the BA/BGS degree.

Application and admission procedures for the Accelerated Master's program are different from the regular master's program. For more information, please contact the Director of Undergraduate Studies.

DEGREE REQUIREMENTS:
The course requirements for the accelerated MA program are fulfilled by a combination of graduate-level courses taken for both undergraduate and graduate credit in Year 4, fulfilling both BA major requirements and MA degree requirements, and graduate credit courses taken in Year 5.

The student must be approved to begin coursework toward the accelerated program prior to enrolling in any classes that are to count for both undergraduate and graduate credit.

REQUIREMENTS for the BA MAJOR:

The major in English requires 30 hours (33 for Honors English). Students in the accelerated program must take 6 credit hours at the 590 level or above, and 6 credit hours at the 700 level or above. These courses may be selected from those that count toward major distribution requirements or major electives. (See the 590+ level options in the course lists below).

ENGL 300 Introduction to English Studies (3 hours – must be taken within first year of declaring the English major):

English Studies Coursework (21 hours, 300 or above)

This includes at least one course chosen from:

Rhetoric, Language and Writing studies

Literature, Language, or Rhetoric prior to 1850

Diverse identities, communities, and texts

The remaining courses may be chosen from any 300-level or above English course offerings. For students who are interested in focusing on a specific area of study, they may follow the optional emphases path outlined below.

• One 200-level course may be counted toward English Studies coursework.

Capstone Requirements (6 hours, 500 or above)

• Students must complete ENGL 300 and 2 other 300-level courses before they proceed to the capstone requirements. All 500-level or above English courses count as capstone courses.

• Students pursuing departmental honors may use ENGL 598 to fill one capstone requirement, and must also enroll in ENGL 599: Thesis hours.

Breadth requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 355</td>
<td>Nonfiction Writing II</td>
<td></td>
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<tr>
<td>ENGL 359</td>
<td>English Grammar</td>
<td></td>
</tr>
<tr>
<td>ENGL 360</td>
<td>Topics in Writing: ______</td>
<td></td>
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<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
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<tr>
<td>ENGL 380</td>
<td>Introduction to Rhetoric and Composition</td>
<td></td>
</tr>
<tr>
<td>ENGL 381</td>
<td>Topics in Rhetoric and Composition: ______</td>
<td></td>
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<tr>
<td>ENGL 382</td>
<td>Composing Cultures</td>
<td></td>
</tr>
<tr>
<td>ENGL 383</td>
<td>Cultural Rhetorics</td>
<td></td>
</tr>
<tr>
<td>ENGL 385</td>
<td>The Development of Modern English</td>
<td></td>
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<tr>
<td>ENGL 386</td>
<td>Language and Social Justice in the US</td>
<td></td>
</tr>
<tr>
<td>ENGL 387</td>
<td>Introduction to the English Language</td>
<td></td>
</tr>
<tr>
<td>ENGL 388</td>
<td>Topics in English Language Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 389</td>
<td>Postcolonial and World Englishes</td>
<td></td>
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<tr>
<td>ENGL 580</td>
<td>Rhetoric and Writing: ______</td>
<td></td>
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<tr>
<td>ENGL 581</td>
<td>English Language Studies: ______</td>
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<tr>
<td>ENGL 582</td>
<td>Multimedia/Multimodal Rhetorics</td>
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<tr>
<td>ENGL 586</td>
<td>Language and Style</td>
<td></td>
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<tr>
<td>ENGL 587</td>
<td>American English</td>
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</tr>
</tbody>
</table>

At least one course in Literature, Language, or Rhetoric prior to 1650: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 301</td>
<td>Topics in British Literature to 1800: ______</td>
<td></td>
</tr>
<tr>
<td>ENGL 310</td>
<td>Literary History I</td>
<td></td>
</tr>
<tr>
<td>ENGL 312</td>
<td>Major British Writers to 1800</td>
<td></td>
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<tr>
<td>ENGL 317</td>
<td>Topics in American Literature to 1865: ______</td>
<td></td>
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<tr>
<td>ENGL 320</td>
<td>American Literature I</td>
<td></td>
</tr>
<tr>
<td>ENGL 331</td>
<td>Chaucer</td>
<td></td>
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<tr>
<td>ENGL 332</td>
<td>Shakespeare</td>
<td></td>
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<tr>
<td>ENGL 385</td>
<td>The Development of Modern English</td>
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<tr>
<td>ENGL 521</td>
<td>Advanced Topics in British Literature 1800: ______</td>
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<tr>
<td>ENGL 525</td>
<td>Shakespeare: ______</td>
<td></td>
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<tr>
<td>ENGL 565</td>
<td>The Gothic Tradition</td>
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<tr>
<td>ENGL 576</td>
<td>Advanced Topics in American Literature to 1865: ______</td>
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<tr>
<td>ENGL 610</td>
<td>The Literature of England to 1500</td>
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<tr>
<td>ENGL 620</td>
<td>Renaissance English Literature: ______</td>
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<tr>
<td>ENGL 633</td>
<td>Milton</td>
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<tr>
<td>ENGL 640</td>
<td>British Literature, 1600-1800: ______</td>
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</tr>
<tr>
<td>ENGL 650</td>
<td>Romantic Literature: ______</td>
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</tbody>
</table>

At least one course emphasizing diverse identities, communities, and texts: 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ENGL 305</td>
<td>World Indigenous Literatures</td>
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<tr>
<td>ENGL 306</td>
<td>Global Environmental Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 326</td>
<td>Introduction to African Literature</td>
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</tr>
<tr>
<td>ENGL 336</td>
<td>Jewish American Literature and Culture</td>
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</tr>
<tr>
<td>ENGL 337</td>
<td>Introduction to U.S. Latino/a Literature</td>
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</tr>
<tr>
<td>ENGL 338</td>
<td>Introduction to African-American Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Introduction to Caribbean Literature</td>
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</tr>
<tr>
<td>ENGL 340</td>
<td>Topics in U.S. Ethnic Literature: ______</td>
<td></td>
</tr>
<tr>
<td>ENGL 341</td>
<td>American Literature of Social Justice</td>
<td></td>
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<tr>
<td>ENGL 342</td>
<td>Topics in Transcultural Literature, Language, or Rhetoric: ______</td>
<td></td>
</tr>
<tr>
<td>ENGL 344</td>
<td>Black Feminist Theory</td>
<td></td>
</tr>
</tbody>
</table>
Optional Emphases within the Major

- Students may pursue an emphasis in a particular field by taking at least 3 courses in it.
- These emphases include:
  - Literary Studies: one literary history course, one theory course, and one literary studies capstone
  - Creative Writing: 300-level workshops in two genres, and one creative writing capstone
  - Language, Culture, and Rhetoric: ENGL 380 or ENGL 387, another RCL course, and one RCL capstone
  - Students may also designate their own ‘custom’ emphasis, in consultation with a departmental advisor

- 27 hours must be at the junior/senior level.
- No 100-level ENGL courses count toward major requirements.

Notes:

- Up to 6 credits combined of ENGL 494 Research Internship or ENGL 495 Directed Study: ______ may be applied as major electives.
- Up to 3 credit hours of ENGL 496 Internship or ENGL 497 Service Learning Internship may be applied as a major elective.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses (33 for Honors English).

Major Hours in Residence
Satisfied by a minimum of 25 hours of KU resident credit in the major; exceptions by permission of Director of Undergraduate Studies only.

Major Junior/Senior Hours
Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

MA DEGREE REQUIREMENTS:

In addition to the 12 graduate credit hours completed during the senior year, MA students must complete an additional 18 hours of graduate-level coursework. The candidate’s program should be arranged in consultation with the Director of Graduate Studies (DGS) or a member of the departmental committee on graduate studies. At least 12 hours of the 18 hours of graduate-level coursework for the MA must be taken at the 700 level or above, and the remaining hours may be taken at the 590-600 level or above. The following requirements also apply:

3 hours (1 course) on Methods or Theory appropriate to different areas of focus in Literary Studies: ordinarily ENGL 709 or ENGL 800, or another course appropriately designated by the Graduate Director. A ENGL 998 (Directed Reading) directly focused on questions of methods and theory can fulfill this requirement if approved by the Graduate Director.

3 hours on Pedagogy: ENGL 780, or other appropriate course as approved by the Graduate Director.

21 distribution hours to be selected in consultation with advisors. Two options are available:

- Option 1a, Literature: At least 1 course (3 hours) must be pre-1700; at least 1 must be 1700-1900; and at least 1 must be after 1900. 2 courses (6 hours) outside the department may be included in the distribution hours with approval of the Graduate Director.
- Option 1b, Literature and Literary Theory: At least 1 course (3 hours) must be pre-1800; at least 1 (3 hours) must be post-1800. At least 2 courses (6 hours), besides the course used to fulfill requirement 2 (Methods or Theory) must focus primarily on Literary Theory. 2 courses (6 hours) outside the department may be included in the distribution hours with approval of the Graduate Director.

ENGL 899: Portfolio Preparation: This course is completed during the last semester of the MA year (Year 5). Students prepare a portfolio of work from their graduate courses over which they will be examined at an oral defense, not to exceed 90 minutes.

PROGRESSION REQUIREMENTS:

Given the accelerated nature of this program, each student’s progress will be closely monitored at various points during the program:

- Once approved to begin graduate coursework, the student must meet with the DGS to plan the final year of undergraduate study;
- At the end of the final semester of undergraduate study (Year 4), the department will review the student’s performance in graduate-level English courses taken in Year 4. The student must earn a grade of B or better in each course to be eligible to continue in the accelerated program;
- Following the completion and award of the BA or BGS degree, the accelerated masters student will meet again with the DGS to review the course plan for the 5th year of study and update it as needed. The student’s performance in the graduate-level courses taken as an undergraduate will be evaluated;
- For students who do not meet the minimum GPA requirement of 3.0 in the first semester of Year 5, the department may, at its discretion, devise a plan of study to address the student’s deficiencies, or may dismiss the student from the program;

The program is designed so that students can complete all requirements for the accelerated masters degree within one year of receiving the BA/ BGS degree.

If unforeseen circumstances prevent the timely completion of the MA degree, the student must consult with the DGS and her or his graduate advisor to develop an alternative plan for finishing the program. Similarly, a student may decide to discontinue in the graduate program after finishing the bachelor’s degree, or while still completing undergraduate
requirements; the student should notify the DGS of this decision. Those still completing requirements for the BA should also contact their undergraduate advisor as soon as possible to ensure timely completion of the bachelor’s degree.

If a student performs poorly in graduate coursework in Year 4 (receiving lower than a B in any graduate classes), the student will be advised to withdraw from the accelerated program as long as the BA requirements have been met, the student will be able to graduate with a bachelor’s degree.

If the student performs poorly in Year 5 (dropping below a 3.0 GPA/"B" average in English classes), the student will fall out of Good Standing. The student’s name will be forwarded to the College and the student will be put on academic probation for one semester. The DGS and Graduate Committee senior staff will review the student’s progress regularly. If satisfactory progress is not being made, the student may be dismissed from the accelerated program. The student can also withdraw voluntarily.

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Year 5</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td>ENGL 780 (Pedagogy or other appropriate course as approved by the Graduate Director)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA 2nd Language)</td>
<td>5</td>
<td>2nd Semester Language (BA 2nd Language)</td>
<td>5</td>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>ENGL 700+ from Individual Authors/Movements (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>1</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>1</td>
<td>ENGL 590+ Elective (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
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<td>15</td>
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### Sophomore

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<th>Fall</th>
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<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)</td>
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<td>Graduate Distribution Hours</td>
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<td>Goal 4.1 US Diversity</td>
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<td>Goal 4.2 Global Awareness</td>
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<td>Graduate Distribution Hours</td>
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<td>ENGL 200+ Level Course (Major Requirement, Goal 3 Arts and Humanities)</td>
<td>3</td>
<td>ENGL 300 (Major Requirement)</td>
<td>3</td>
<td>ENGL 780 (Pedagogy or 800 (Methods or Theory (or other agreed upon course))</td>
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<td>Goal 1.2 Quantitative Reasoning</td>
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<td>ENGL 300+ Elective (Major Requirement)</td>
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<td>ENGL 899</td>
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### Junior

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<tr>
<td>ENGL 300+ Elective (ENGL 308 or ENGL 508 recommended, Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>ENGL 300+ from Diverse Identities, Communities, &amp; Texts Area (Major Requirement)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<td>3 Goal 3 Natural Science</td>
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### Senior

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<tr>
<th>Fall</th>
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<tr>
<td>BA Quantitative Reasoning (QR)³</td>
<td>3</td>
<td>ENGL Elective 700+ (Major Requirement)</td>
<td>3</td>
<td>ENGL 709 or 800 (Methods or Theory (or other agreed upon course))</td>
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<tr>
<td>ENGL 700+ from Individual Authors/Movements (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3</td>
<td>ENGL 899</td>
<td>2-3</td>
</tr>
<tr>
<td>ENGL 590+ Elective (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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### Total Hours 136-139

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Hour requirements (incl. 45 Jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
Visit this website ([https://collegeadvising.ku.edu/ba-quantitative-reasoning/](http://collegeadvising.ku.edu/ba-quantitative-reasoning/)) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:
The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Master of Fine Arts in Creative Writing**

The M.F.A. in Creative Writing provides students with a balance between the study of literature and intensive workshop experience. In the final year, students receive support and substantial feedback on a creative thesis.

Our award-winning faculty and alumni have received international recognition for their creative work; distinctions include the Pushcart Prize, the Nebula Award, the Hugo Award, the Kennedy Center Gold Medallion, the Gertrude Stein Award, the Kenyon Review Prize. Recent visiting writers include Sherman Alexie, Julia Alvarez, Margaret Atwood, Michael Chabon, Rita Dove, Nuruddin Farah, Kent Haruf, Cherrie Moraga, Paul Muldoon, Salman Rushdie, George Saunders, and Natasha Trethewey. Graduate students also run a professional literary journal called *Landlocked*.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

To be admitted to any of the department's graduate degree tracks, a student must have a strong undergraduate record, particularly in the humanities. Creative writing applicants need to submit writing samples that demonstrate an advanced level of writing skills in their respective genres. For complete admission information, see the English department website ([https://english.ku.edu/](http://english.ku.edu/)).

All applicants must submit their graduate application online ([https://gradapply.ku.edu/apply/](https://gradapply.ku.edu/apply/)). All supplemental materials (transcripts, writing samples, letters of recommendation, etc.) may be attached electronically and submitted with the online application. Those who cannot submit supplemental materials electronically may mail them to the department.

**Graduate Applications**

1445 Jayhawk Blvd., Room 3001
Lawrence, KS 66045

**Master of Fine Arts in Creative Writing**

Degree Requirements

Requirements for the M.F.A. in Creative Writing ([http://www2.ku.edu/~englishmfa/](http://www2.ku.edu/~englishmfa/)) include:

1. 4 graduate courses (12 hours) in literature, English or American.
2. 4 graduate courses (12 hours) in creative writing.
3. No more than 2 classes (6 hours) may be taken at the 600-level and no classes at the 500-level or below.
4. 7 to 9 hours in electives or practica, chosen from graduate courses in the Department of English, or approved courses in another department.
5. ENGL 899, Thesis (15 hours required). Original writing in prose fiction, poetry, drama, or nonfiction prose.

**Doctor of Philosophy in English**

The Ph.D. degree offers the opportunity for advanced and concentrated research to students who hold an M.A. degree in English or a related field, from KU or elsewhere.

Our Literature and Literary Theory program has special strengths in ecocriticism and posthuman studies, African American & African diaspora literatures, nineteenth-century U.S. literature, science and technology studies, and Victorian literature.

Our Rhetoric & Composition program has special strengths in genre and language theory, public and professional discourses, multimodality and digital rhetorics, translingualism, writing pedagogy, and global writing research.

Our English Language Studies program has special strengths in historical linguistics, sociolinguistics, pragmatics, and discourse analysis.

Our Creative Writing program has special strengths in the novel, environmental writing, drama, mixed-genre work, and short story collections.

All of our programs boast distinguished and award-winning faculty with notable research publications and a deep foundation in their areas of specialization.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

The University of Kansas
Department of English
Graduate Admission

To be admitted to any of the department’s graduate degree tracks, a student must have a strong undergraduate record, particularly in the humanities. Applicants are expected to have some familiarity with British and American literary history and the work of the major writers in English. Most importantly, applicants for graduate work in literary studies and rhetoric-composition studies should be able to demonstrate, with writing samples, their ability to produce advanced analytical and interpretive scholarly writing. Similarly, creative writing applicants need to submit writing samples that demonstrate an advanced level of writing skills in their respective genres. For complete admission information, see the English department website (https://english.ku.edu/).

All applicants must submit their graduate application online (https://gradapply.ku.edu/). All supplemental materials (transcripts, writing samples, letters of recommendation, etc.) may be attached electronically and submitted with the online application. Those who cannot submit supplemental materials electronically may mail them to the department:

The University of Kansas
Department of English
Graduate Applications
1445 Jayhawk Blvd., Room 3001
Lawrence, KS 66045

Ph.D. in English Degree Requirements

Students entering the program with the B.A. have, while being continuously enrolled, 10 years to complete the M.A. and Ph.D. combined. Students entering with the M.A. have 7 years to complete the Ph.D.; however, the expected time to degree is 6-7 years for the M.A. plus Ph.D., and 4-5 years for the Ph.D.

Ph.D. Requirements: Literature and Creative Writing

1. At least 24 hours of credit in appropriate formal graduate courses beyond the M.A. or M.F.A. At least 15 hours (in addition to introduction to ENGL 800 if not taken for the M.A.) of this course work must be taken from among courses offered by the Department of English at the 700 level and above. ENGL 997 and ENGL 999 credits cannot be included among the 24 hours. Students may petition to take up to 6 hours outside the department.

2. Required courses: ENGL 800 and 2 seminars (courses numbered 900 or above) offered by the Department of English at KU beyond the M.A. ENGL 998 does not fulfill this requirement. Students with master’s degrees earned elsewhere may be required by the director of graduate studies, acting on behalf of the graduate committee, to take additional course work.

3. A reading knowledge of 1 of the following languages: French, German, Greek, Hebrew, Italian, Japanese, Latin, Russian, Old English, or Spanish, and completion of the Responsible Scholarship and Research Skills requirement (usually fulfilled with ENGL 800).

4. ENGL 999, Dissertation (at least 12 hours).

5. A comprehensive examination, to be completed after satisfaction of formal course requirements. This examination, which has both written and oral components, consists of three areas of study.

6. In the semester following the comprehensive examination, a 90-minute review of the dissertation proposal, which is to provide formal direction for the dissertation.

7. At least 1 year of supervised quarter-time teaching for qualified candidates except for those who do not plan to undertake teaching careers or who have already had extensive teaching experience.


Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Ph.D. Requirements: Composition and Rhetoric, M.A. to Ph.D., standard track

1. At least 24 hours of credit in appropriate formal graduate courses beyond the M.A. or M.F.A. At least 15 hours (in addition to introduction to ENGL 800 if not taken for the M.A.) of this course work must be taken from among courses offered by the Department of English at the 700 level and above. ENGL 997 and ENGL 999 credits cannot be included among the 24 hours. Students may petition to take up to 6 hours outside the department.

2. An introduction to the field: either ENGL 800 or ENGL 780.

3. 2 seminars (courses numbered 900 or above) offered by the Department of English at KU beyond the M.A., at least one of which should be in Rhetoric and Composition. ENGL 998 does not fulfill this requirement.

4. A reading knowledge of 1 of the following languages: French, German, Greek, Hebrew, Italian, Japanese, Latin, Russian, Old English, or Spanish, and completion of the Responsible Scholarship and Research Skills requirement (usually fulfilled with ENGL 800).

5. ENGL 999, Dissertation (at least 12 hours).

6. A comprehensive examination, to be completed after satisfaction of formal course requirements. This examination, which has both written and oral components, consists of three areas of study.

7. In the semester following the comprehensive examination, a 90-minute review of the dissertation proposal, which is to provide formal direction for the dissertation.

8. At least 1 year of supervised quarter-time teaching for qualified candidates except for those who do not plan to undertake teaching careers or who have already had extensive teaching experience.


Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Ph.D. Requirements: Composition and Rhetoric, B.A. to Ph.D. accelerated track

Each student admitted to the Ph.D. program in composition and rhetoric is assigned a graduate advisor from among the faculty in composition and rhetoric, who will help the student plan an initial course of study. After the first semester, students may ask other faculty members in the field to serve as their graduate advisors, depending on availability. The students and their graduate advisors together design and monitor a coherent program of study, individualized to serve each student’s goals within current expectations for a Ph.D. in composition and rhetoric. As an interdisciplinary field, study in composition and rhetoric might involve work
Environmental Studies Program

Why study environmental studies?

The Environmental Studies Program at the University of Kansas, established in 1971, is one of the oldest environmental studies programs in the country. The KU Environmental Studies Program provides a rigorous interdisciplinary education and stimulates exchange concerning the environment from natural science, social science, and humanities perspectives. Learning Pathways (https://esp.ku.edu/learning-pathways/), thematic areas of study that match student interest to the environmental expertise of our faculty, are a key aspect of our unique program.

The program provides students with the tools they need to investigate environmental phenomena, including soil sampling and freshwater ecology to policy-making and social science. Environmental Studies students learn how to put together what other disciplines take apart.

Our pedagogy is focused on engaged learning. Learning Pathways (https://esp.ku.edu/learning-pathways/) concentrations provide options for a deeper dive within our major, with recommended courses, faculty, and experiences. In addition to a vibrant classroom curriculum (https://esp.ku.edu/degrees/), Environmental Studies students are encouraged to participate in the many exciting experiential learning opportunities that KU offers, including undergraduate research (https://esp.ku.edu/undergraduate-research/), co-curricular projects (http://esp.ku.edu/projects/), and internships (http://esp.ku.edu/internships/).

Environmental Studies equips students to get involved in the intellectual life of the university and to connect to environmental projects in the surrounding community. These experiences enhance the success of students along their path to graduation and rewarding careers.

Undergraduate Programs

This interdisciplinary major gives students a fundamental knowledge of the human environment, the dimensions of human impact on the environment, and holistic approaches to solving problems resulting from this impact. The human environment includes all facets of human activity affecting the environment, such as philosophical and ethical issues, environmental resource use and misuse, population biology, and the chemistry of the atmosphere.

Electives

The goals of the program are

1. To provide a holistic view of the environment, one in which the synergistic nature of perturbations, natural and anthropogenic, can be understood and
2. To provide the technical and evaluative skills for active participation in an environmental career.

The environment is the central theme around which a liberal arts education is focused.

Students may declare an interest in environmental studies or a major in environmental studies by filling out the appropriate forms. CLAS Interest Code and Major Declaration forms are available from College Advising & Student Services (https://collegeadvising.ku.edu), 109 Strong Hall, or in the environmental studies office. Students are strongly encouraged to declare an environmental studies major as soon as possible.

Electives provide the opportunity to specialize, and these can be chosen by consulting the various pathways in the major (https://esp.ku.edu/learning-pathways/), which contain a list of faculty members associated with the pathway who are available to help decide on electives and environmental careers. An elective approval form must be submitted to 109 Strong Hall before a student is allowed to graduate. Forms may be obtained from the environmental studies office. Except for study abroad, a maximum of 8 hours of non-classroom course work may be counted toward electives (e.g., internship or research).

Exceptions and Substitutions

All substitutions must be approved by a student’s environmental studies faculty advisor. A student must submit a requirement substitution form to
the environmental studies faculty advisor. Forms can be obtained from the environmental studies office.

Internships
Internships allow majors to develop new skills and test their abilities and educational backgrounds. Students can assess their career objectives in professional settings. Internships are done in city, county, state, and federal agencies and in environmental organizations and private companies or agencies. Students are encouraged to participate at the end of the sophomore or junior year. Completion of an internship by the end of the junior year provides an opportunity to make career changes and final elective selections before the senior year. It is not possible to participate in an internship after graduation. The applicant must have a grade-point average of 2.5 or above, must have completed 12 hours of required environmental studies courses, and must have a suitable internship opportunity. A maximum of 3 hours may be applied to the 12 hours of required electives.

Professional Science Masters
The Professional Science Masters professional graduate degree is designed for graduates of bachelor’s programs in physical/natural sciences, environmental studies, civil/environmental engineering or related fields who are currently employed or wanting to be employed in private firms, public agencies, and not-for-profit organizations that address a range of environmental issues. Key foci in the science curriculum of this program are environmental impact assessment; soils, water, and ecosystems science; geospatial analysis; environmental health and policy; and an understanding of environmental law and policy and the regulatory environment.

The P.S.M. degree is a unique professional degree grounded in natural science, technology, engineering, mathematics and/or computational sciences and designed to prepare students for direct entry into a variety of career options in industry, business, government, or non-profit organizations. P.S.M. programs prepare graduates for high-level careers in science that have a strong emphasis on such skill areas as management, policy, entrepreneurship, communication and project management. P.S.M. programs consist of 2 years of academic training in an emerging or interdisciplinary area, along with a professional component that may include internships and “cross-training” in workplace skills.

Graduate Certificate in Environmental Studies
The Graduate Certificate in Environmental Studies is designed to give students already admitted to a graduate program at KU the opportunity for interdisciplinary coursework in Environmental Studies, spanning the humanities, natural/physical sciences, and social sciences.

Students wishing to be accepted into the Environmental Studies Certificate program must already be admitted to a graduate program at KU. Applicants must write a cover letter to the Environmental Studies Graduate Director explaining their interest in the certificate and how interdisciplinary training in Environmental Studies helps meet individual goals in research and training. This statement is to be attached on page 9 of the application. On page 6, please upload a copy of your advising report. A graduate GPA of 3.0 or higher is required, but provisional admittance can be granted for one semester to new graduate students.

Students must also have their thesis or dissertation advisor write a letter of recommendation to be admitted to the certificate program. The letter must address the importance of the certificate in the student’s overall research and training plan. In addition to purposes of admission, this letter will also be used to consider the applicant for scholarship funding.

Graduate Certificate in Environmental Assessment
The Certificate in Environmental Assessment is designed for graduates of bachelor’s programs in physical/natural sciences, environmental studies, civil/environmental engineering or related fields who are currently employed in private firms, public agencies, and not-for-profit organizations that address a range of environmental issues. Key foci in the science curriculum of this program are environmental impact assessment; soils, water, and ecosystems science; geospatial analysis; environmental health and policy; and an understanding of environmental law and policy and the regulatory environment.

Graduate Certificate in Environmental Justice
The Certificate in Environmental Justice is designed for graduates of bachelor’s programs in environmental studies or related fields who want to address issues such as social, economic, and political marginalization of minorities and low income populations. Key foci in the curriculum of this program are environmental law, governance, policy and planning, sustainability, development, and political ecology.

For admissions and application information for the P.S.M. and the Graduate Certificates in Environmental Assessment and Environmental Justice, go to the KU Edwards Campus website (https://edwardscampus.ku.edu/professional-science-masters-concentration-environmental-assessment-graduate-certificate/).

Students who are interested in enrolling in graduate level coursework in the Environmental Studies Program without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s admission (https://esp.ku.edu/admissions/) webpage for further details.

Courses
EVRN 103. Environment and History. 3 Credits. H
Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as HIST 103.)

EVRN 140. Global Environment I: The Discovery of Environmental Change. 5 Credits. U LFE
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 140 and HIST 140.)

EVRN 142. Global Environment II: The Ecology of Human Civilization. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity’s engagement with the global environment using historical and present-day examples. (Same as GEOG 142 and HIST 142.)

EVRN 144. Global Environment I: Discovery of Environmental Change, Honors. 5 Credits. U LFE
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 144 and HIST 144.) Open only to students admitted to the University Honors Program or by permission of instructor.

EVRN 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics will include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity’s engagement with the global environment using historical and present-day examples. (Same as GEOG 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor.

EVRN 148. Scientific Principles of Environmental Studies. 3 Credits. NB N
This course provides the scientific knowledge necessary to understand the changing relationships between humans and the natural environment, with an emphasis on the assessment of current environmental problems and critical evaluation of potential solutions. Major topics include fundamental scientific concepts and principles, interactions among the biological and physical components of the environment, implications of a growing human population, water resources, the atmosphere, climate, and energy sources. (Same as GEOG 148.)

EVRN 150. Environment, Culture and Society. 3 Credits. SC S
An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere, and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as GEOG 150.)

EVRN 170. Introduction to Kansas Landscapes. 1 Credits. N
A course focused on the land and environment of Kansas. Field trips provide students with direct experience of the diverse landscapes in our area. Coursework also emphasizes the dynamic nature of the current landscape and the natural and cultural processes that have shaped it.

EVRN 171. Understanding Kansas Landscapes. 1 Credits. N
An introduction to the research methods used by scholars in diverse fields, applied to environmental issues introduced in EVRN 170. Prerequisite: EVRN 170.

EVRN 172. Kansas Landscape Projects. 1 Credits. N
Students participate in the design and execution of a simple research project focused on a local environmental topic. Prerequisite: EVRN 170, and EVRN 171.

EVRN 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Environmental Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

EVRN 200. Study Abroad Topics In: _____ 1-5 Credits. U
This course is designed for the study of special topics in Environmental Studies. Coursework must be arranged through the Office of Study Abroad. May be repeated for credit if content varies.

EVRN 304. Environmental Conservation. 3 Credits. NE N
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water, are described with attention to the earth’s total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as GEOG 304.)

EVRN 306. Global Environmental Literature. 3 Credits. H
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. (Same as ENGL 306 and GIST 306.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

EVRN 320. Environmental Policy Analysis. 3 Credits. N
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention will be directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: EVRN 140/GEOG 140/HIST 140 or EVRN 142/GEOG 142/HIST 142; or EVRN 144/GEOG 144/HIST 144 or EVRN 145/GEOG 145/HIST 145; or EVRN 148/GEOG 148; or concurrent enrollment.

EVRN 330. Sculpture Intercepting the Waste Stream. 3 Credits. N
An introductory course using engaged learning to exploring the genre of ecological art practice (eco-art.) Class focuses on the waste stream particularly as it affects the Kansas River. Through remediation events, students build works of art from trash, in turn auctioned for environmental efforts. Creative attention is focused on ecological imbalance. (Same as SCUL 330.) Prerequisite: Visual Art major or minor, or instructor permission.

EVRN 332. Environmental Law. 3 Credits. U
An introduction to how the American legal process improves, transforms, and damages the natural environment. Emphasizes and compares shifting responsibilities of legal forces and institutions: judges and litigants, legislators and statutes, agencies and administrations, and citizens and regulated entities. Prerequisite: EVRN 140/GEOG 140/HIST 140 or EVRN 142/GEOG 142/HIST 142; or EVRN 144/GEOG 144/HIST 144 or EVRN 145/GEOG 145/HIST 145; or EVRN 148/GEOG 148; or concurrent enrollment.

EVRN 335. Introduction to Soil Geography. 4 Credits. N LFE
This course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body; genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken EVRN 535 or GEOG 535. (Same as GEOG 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 and CHEM 191 recommended.

EVRN 336. Ethics, Ideas and Nature. 3 Credits. H
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state in managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and rights ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as HIST 336.)

EVRN 338. Permaculture Design. 6 Credits. N
Students learn how a local, sustainable design system known as permaculture design creates an ecologically sound and economically viable way of living. The course consists of lecture, field, and practicum sessions. Lecture topics include food security, permaculture ethics, ecological principles, system design, sustainable soils, food production, food forests, earth works, and construction of human habitats.

EVRN 347. Environmental History of North America. 3 Credits. H
A survey of changes in the landscape and in people’s perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile and the origins of conservation. (Same as HIST 347.)

EVRN 350. Global Environmental Justice. 3 Credits.
Drawing on interdisciplinary fields of study, this course surveys a wide range of situated environmental injustices and environmental justice movements associated with toxic dumping, oil extraction and mining, climate change, deforestation, agri-business, and tourism. As students gain an understanding of the connections and differences among specific situations, and between environmental justice and other forms of environmentalism, they engage with salient theoretical and practical questions. The content of the course will also be shaped by the interests of students. For example, each student will present on an environmental justice movement of her/his own choosing, on the connections between it and other movements we have been studying, and on the ways this movement can help us understand some of the key practical and theoretical questions raised by environmental justice struggle. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in EVRN 650. Prerequisite: EVRN 140 or EVRN 142 or EVRN 144 or EVRN 145 or EVRN 336; or permission of instructor.

EVRN 362. Art and Ecology: Inhabiting the Ecosphere. 3 Credits. N
An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as SCUL 362.) Prerequisite: Visual Art major or minor, or instructor permission.

EVRN 363. Introduction to Environmental Hydrology and Water Resources. 3 Credits. N
Water is vital to life on earth. In this course we cover components of the water or "hydrologic" cycle, how management has altered them, and how they are predicted to change with the changing climate. We discuss the evolution of water policy, its implications for managements and the economic impact of human perturbation on water. We study the physical processes that govern the water cycle, learn how they are measured, and estimate hydrologic fluxes. (Same as GEOG 336.) Prerequisite: GEOG 104 or GEOL 101.

EVRN 365. Invention of the Tropics. 3 Credits. H
This course surveys the history of the tropical environment and its diverse peoples from early European encounters until the current boom in extractivism and ecotourism. It focuses on portrayals of the tropics in historical travel accounts and films. Through these sources, we will seek to understand cross-cultural interactions, and the ways in which science, technology, and tourism have reconstructed these environments over time. Case studies are drawn from Latin America, Africa, Oceania, and/or Asia. (Same as HIST 365.)

EVRN 371. Environmental Geopolitics. 3 Credits. S
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as GEOG 371 and GIST 371.)

EVRN 374. Vulnerability and Adaptation. 3 Credits. S
The course objective is to understand and analyze human adaptation to environmental change by focusing on disasters and climate change. Each semester, the course rotates topics ranging from oil spills, hurricanes, sea-level rise to infectious disease. It provides undergraduate students with research experience and service learning, and offers opportunities for certificates through the Center for Undergraduate Research and the Center for Civic and Service Responsibility at KU. Students learn theories relevant to the case study, work in groups to generate research themes, conduct literature search and review, learn research methods, and write and present their work.

EVRN 385. Environmental Sociology. 3 Credits. S
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such items as social paradigms, theories, inequalities, movements, and research. (Same as SOC 385.)

EVRN 386. Sociology of Global Food. 3 Credits. U
The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food
activism, technological developments, human/environment relationships, and labor issues. There is a lab component to this course. (Same as SOC 386.) Prerequisite: Junior standing.

EVRN 390. Disaster and Culture. 3 Credits.
This class explores representations of environmental disasters within various forms of cultural expression. Cultural beliefs and practices not only influence the ways environmental disasters are understood and responded to, but also shape the social dynamics that determine a population's vulnerability and resilience to hazards. Thus, while an earthquake may trigger a disaster, its impact largely will be influenced by social factors that pre-date the actual seismic event. The course will apply cultural materials (e.g., film, science writing, literature, policy statements, etc.) that emerge from specific case studies to analyze the social causes and effects of disaster, while drawing on an interdisciplinary set of tools and perspectives (from sociology, literary studies, science, economics, etc.) that animates inquiry.

EVRN 400. Study Abroad Topics in: _____ 1-5 Credits. U
This course is designed for the study of special topics in Environmental Studies. Coursework must be arranged through the Office of Study Abroad. May be repeated for credit if content varies.

EVRN 405. Kansas Power. 3 Credits.
Where does our energy come from? How can we optimize our use of renewable and nonrenewable sources of energy? What are the drivers moving us to more renewable sources of energy? What are the impediments? In this course we will explore the use of fossil fuels, nuclear, wind, geothermal and solar energy in Kansas. We will visit nearby power plants, and alternative energy companies. Students will be expected to design an energy plan for a local entity, and present their ideas. Prerequisite: EVRN 140 and EVRN 142.

EVRN 410. Environmental Applications of Geographic Information Systems. 3 Credits. N
An introduction to the use, display, and analysis of spatial data. Students will acquire a foundational skill-set in geographic information systems and remote sensing using industry-standard GIS software and will apply these skills using environmental data and case studies. Prerequisite: EVRN 148 or GEOG 148; EVRN 103 or HIST 103, EVRN 150 or GEOG 150 or EVRN 347 or HIST 347.

EVRN 412. Ecology: Fundamentals and Applications. 3 Credits.
An introduction to the principles of ecology, with an emphasis on environmental applications. Major topics include physiological and functional ecology, population and community dynamics, biogeography, and ecosystems ecology. Intended for students seeking B.A. or B.G.S. degrees. Prerequisite: EVRN 140 or EVRN 144 or EVRN 148 or consent of the instructor.

EVRN 414. Principles of Ecology. 3 Credits. N
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. (Same as BIOL 414.) Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

EVRN 420. Topics in Environmental Studies: _____ 1-6 Credits. N LFE
Courses on special topics in Environmental Science and/or Policy. These courses may be lecture, discussions, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once.

EVRN 445. Introduction to Environmental Health. 3 Credits.
This course is designed to provide a foundation for understanding how the natural and built environment affect human health in industrialized and developing countries by examining the impact of physical, chemical, and biological factors external to humans. Students will gain an understanding of the interaction of individuals and communities with the environment, the potential impact on health of environmental agents, and specific applications of concepts of environmental health. (Same as HSCI 445.)

EVRN 451. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as BIOL 451 and GEOG 451.)

EVRN 460. Field Ecology. 3 Credits. N LFE
An introduction to research methods for environmental science. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). It emphasizes the development of skills in data analysis and interpretation that are essential to a full understanding of environmental issues. Enrollment limited to environmental studies majors, or by instructor permission. Prerequisite: Junior or Senior standing, completion of the natural sciences requirement of the KU Core (GE3N), and either EVRN 320 or EVRN 332.

EVRN 490. Internship in Environmental Studies. 1-8 Credits. N
Supervised practical experience in a specific environmental area of interest. The advisor will schedule regular meetings to evaluate progress and provide assistance. A written summary of the internship experience and evaluation will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Total credit may not exceed 8 hours. Prerequisite: Junior standing and consent of program director. Restricted to declared Environmental Studies majors. Restricted to students with a 2.5 overall GPA or above.

EVRN 510. Advanced Environmental Applications in Geospatial Techniques. 3 Credits. H/N
This course focuses on applying advanced geospatial mapping and analysis techniques to "real-world" environmental issues. Course content may include lecture/lab time on advanced geospatial topics; a major class project, small-group projects, or individual projects; or half-semester internships with state agencies or campus entities that will culminate in an individual project. The specific nature of projects will be driven largely by student interest and ability, as well as agency/center needs. Prerequisite: EVRN 410 or equivalent course; or permission of the instructor.

EVRN 528. Environmental Justice and Public Policy. 3 Credits. S
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as POLS 528.) Prerequisite: POLS 306, or a statistics class, or consent of instructor.

EVRN 530. Biodiversity Discovery and Assessment. 2 Credits. N
An integrated lecture and laboratory course designed to provide an overview of modern methods in biodiversity exploration and discovery. Lectures cover the theory and practice of planning fieldwork in remote
locations, documenting species and their natural history, how museum collections are made, calculating and comparing species richness estimates, and the process of describing and naming new species. The laboratory component provides students experience in documenting species and their natural history, processing and curating samples of natural history specimens, and the statistical analysis of biodiversity data. (Same as BIOL 530.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

EVRN 531. Tropical Fieldwork in Biodiversity Discovery. 1 Credits. U
An introduction to modern field methods of assessing biodiversity. Fieldwork employs insects and various field methods to estimate and compare species diversity between different habitats and field sites. Taught at different sites in tropical South America over Spring Break. Contact Undergraduate Biology, or the Office of Study Abroad. (Same as BIOL 531.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. Concurrent or prior enrollment of BIOL 530 is strongly encouraged.

EVRN 535. Soil Geography. 4 Credits. N LFE
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as GEOG 535.) Prerequisite: GEOG 104 or GEOL 101 or consent of the instructor; BIOL 100 and CHEM 130 or CHEM 190 and CHEM 191 recommended.

EVRN 536. Environmental Remote Sensing. 3 Credits. NE
Covers fundamentals of remote sensing, including electromagnetic radiation principles and data collection and processing, followed by an introduction to the various remote sensing techniques and their application in understanding and managing environmental systems. Exercises are provided for students to be actively involved in evaluating, critically analyzing and interpreting images and data to determine implications for practice. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 736. Prerequisite: Junior or Senior standing.

EVRN 537. Water Resource Sustainability. 3 Credits. NE
Provides a framework for learning about our water future and ways we might define and achieve sustainability in water use and management. Concerns of ethics, culture, economics, politics, and environmental health will be discussed within the contexts of issues such as the global water crisis, water footprints, water pollution, human water systems, water security, and sustainable water technologies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 737. Prerequisite: Junior/Senior standing.

EVRN 538. Soil Chemistry. 3 Credits. N LFE
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as GEOG 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195 and CHEM 196, MATH 125, or consent of the instructor.

EVRN 540. Ecohydrology. 3 Credits. N
Ecohydrology is the discipline that answers real world hydrologic and biologic questions through integrating knowledge from hydrology, ecology, atmospheric science and biogeochemistry. We focus on the key concepts, methodological approaches and analytical techniques utilized in ecohydrology to understand and quantify: plant water use, evolution of hydrologic properties, groundwater-surface water interactions, controls on landscape patterns, spatial and temporal patterns of soil moisture and nutrient concentrations, and vegetation competition. Students should leave the class having developed critical skills in: 1) reviewing scientific literature, 2) collecting environmental samples, 3) analyzing ecohydrologic data, 4) writing a scientific research paper, 5) working collaboratively and independently. (Same as GEOG 540.) Prerequisite: GEOG 104 or GEOL 101 or EVRN 363 or GEOG 336 or permission of instructor.

EVRN 542. Ethnobotany. 3 Credits. S
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as ANTH 582 and ISP 542.) Prerequisite: EVRN 142, EVRN 145, EVRN 148, ANTH 150/151, ANTH 160/162/360 or permission of instructor.

EVRN 543. Natural Hazards and Environmental Risks. 3 Credits. NE
This course investigates the geophysical processes of the earth-atmospheric system that can create disastrous impacts on human life, society, and economics. Hazards, including earthquakes, tsunamis, floods, hurricanes, mass movements, wildfires, and many others, are examined by analyzing spatial and temporal dynamics as well as any precursory indicators that may be present. Attention is also given to management and mitigation strategies. Case studies are utilized to examine interaction between society and natural hazards. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 743. Prerequisite: Junior/Senior standing.

EVRN 550. Environmental Economics. 3 Credits. U
This course provides an overview of the theory and empirical practice of economic analysis as it applies to environmental issues. Topics include externalities (a type of market failure), the valuation of nonmarket goods, the practice of benefit-cost analysis, and the efficiency and cost effectiveness of pollution control policies. Most importantly, the course permits students to perform economic field research, using state-of-the-art techniques in a manner accessible to undergraduate students. (Same as ECON 550.) Prerequisite: ECON 104 or ECON 105 or ECON 142 or ECON 143.

EVRN 555. Energy and Environment. 3 Credits. NE
This interdisciplinary course provides students with a broad understanding of the current energy system, including its challenges, with focus on changing global energy needs, current energy sources, developing and emerging renewable energy sources, and their economic, environmental, and societal implications. Analysis of energy fundamentals, fossil fuel exploration and use, nuclear energy, renewable energy sources, and subsequent environmental impacts. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 755. Prerequisite: Junior/Senior standing.

EVRN 563. U.S. Environmental Thought in the 20th Century. 3 Credits. H

The course includes 1374 Environmental Studies Program
Explores both leading and dissident ideas that Americans have had about the natural world since 1900. Broad chronological periods are explored in some depth, including the Progressive Era, New Deal, Cold War, the Sixties, and the Reagan Eighties. The course uses articles and books, as well as visual and aural forms of communication. Commercial speech, as well as scholarly and literary works, are considered. (Same as HIST 563.) Prerequisite: EVRN 148 or HIST 129, or by permission of instructor.

EVRN 577. The Andean World. 3 Credits. H
The Andean environment is defined by its mountains, but includes all of the earth’s major biomes: from tropical rainforest to the world’s oldest and driest desert. These diverse landscapes have nurtured one of the most ancient and durable, yet diverse sets of Indigenous cultural lifeways. Most of the Andes was governed by a single power during the Inca and Spanish colonial eras, but the region is now divided between seven independent states with their own regional traditions. The Andean World has long been recognized as a laboratory for understanding the relationships between nature and culture, and the tensions between tradition and revolutionary change. This course will examine the history of this region from a long-term perspective, from its indigenous roots to contemporary struggles over globalization and extractivism. (Same as HIST 577, ISP 577 and LAC 577.) Prerequisite: Prior 300+ level course in related discipline (ANTH, EEB, EVRN, HIST, LAC, SPAN, etc.) or permission of instructor.

EVRN 611. Water Quality, Land Use, and Watershed Ecosystems. 3 Credits. N
Water quality issues are integrated with land use planning and the development of watershed management strategies. Interrelationships among the hydrologic cycle, atmospheric deposition, nutrient transformations and pesticide use are examined in regards to stream, lake, and groundwater quality. Prerequisite: CHEM 110 or CHEM 130 and BIOL 414, or consent of instructor.

EVRN 615. Capstone Project. 3 Credits. N
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their environmental studies major. It reaps the cohort that has separately pursued the BA/BGS and BS tracks and places them in situations in which they address real world environmental issues with a team approach and produce professionally meaningful analytical reports. Prerequisite: Junior standing; EVRN 320, EVRN 332, and EVRN 460. Restricted to declared Environmental Studies majors.

EVRN 616. Environmental Impact Assessment. 3 Credits. N
This course provides an overview of environmental laws and regulations. Additional focus is given to the process described in the National Environmental Policy Act (NEPA). Students will learn when NEPA is triggered, the difference between Environmental Impact Statements (EIS) and Environmental Assessments (EIA), and how to write an EIS/EIA. Prerequisite: An introductory course in environmental law, or consent of instructor.

EVRN 620. Environmental Politics and Policy. 3 Credits. S
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as POLS 624.)

EVRN 624. Independent Study. 1-9 Credits. N
A research course, in any of the fields of environmental studies, consisting of either experimental research, original policy analysis, or the preparation of an extensive paper based on library investigation. Project topic to be agreed upon in advance with supervising faculty member. Prerequisite: Consent of instructor.

EVRN 625. Honors Research in Environmental Studies. 3 Credits. N
A course giving eligible majors the opportunity to earn Departmental Honors by engaging in an intensive program of study leading to an original piece of research. Prerequisite: Senior standing, approval of the Environmental Studies Program, the Honors Project Director, and an overall 3.25 cumulative grade point average during the semester of enrollment. Restricted to declared Environmental Studies majors.

EVRN 628. The Politics of Public Health. 3 Credits. S
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation’s public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as POLS 628.) Prerequisite: POLS 110 and POLS 306 are recommended.

EVRN 630. Sculpture Intercepting the Waste Stream. 3 Credits. N
An introductory course using engaged learning to exploring the genre of ecological art practice (eco-art.) Class focuses on the waste stream particularly as it affects the Kansas River. Through remediation events, students build works of art from trash, in turn auctioned for environmental efforts. Creative attention is focused on ecological imbalance. (Same as SCUL 630.) Prerequisite: Graduate standing or permission of instructor.

EVRN 635. Soil Physics. 3 Credits. N
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as GEOG 635.) Prerequisite: GEOG 335 or EVRN 335; or GEOG 535 or EVRN 535, and MATH 125, PHSX 114; or consent of instructor.

EVRN 640. Natural Resource Management from an Indigenous Perspective. 3 Credits.
The purpose of this course is to provide students with a solid understanding of how crucial the management of natural resources is, with emphasis on Indigenous communities. Indigenous communities are often ignored in such courses even though these peoples have distinctive views of how resources should be managed. This course allows students to focus on case studies and philosophical principles that compare management techniques derived from European based science with those derived from the cultural traditions and beliefs of Indigenous peoples and communities. Prerequisite: EVRN 140 and EVRN 142; or EVRN 144 and EVRN 145.

EVRN 645. Native and Western Views of Nature. 3 Credits.
This course emphasizes comparison of the attitudes and perspectives towards the natural world that have been developed by different cultural traditions. The primary example with which most of us are familiar is the contemporary Western attitude which emerges from traditions derived from Western European philosophy, i.e. the assumption that humans are autonomous from, and in control of, the natural world. A different approach is presented by Traditional Ecological Knowledge (TEK) of Indigenous peoples of the world, which are based on close observation of nature and natural phenomena; combined with a concept of community membership, which differs from that of Western political and social
thought. Prerequisite: EVRN 140 and EVRN 142; or EVRN 144 and EVRN 145.

EVRN 650. Global Environmental Justice. 3 Credits.
Drawing on interdisciplinary fields of study, this course surveys a wide range of situated environmental injustices and environmental justice movements associated with toxic dumping, oil extraction and mining, climate change, deforestation, agri-business, and tourism. As students gain an understanding of the connections and differences among specific situations, and between environmental justice and other forms of environmentalism, they engage with salient theoretical and practical questions. The content of the course will also be shaped by the interests of students. For example, each student will present on an environmental justice movement of her/his own choosing, on the connections between it and other movements we have been studying, and on the ways this movement can help us understand some of the key practical and theoretical questions raised by environmental justice struggle. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in EVRN 350. Prerequisite: EVRN 140 or EVRN 142 or EVRN 144 or EVRN 145 or EVRN 336; or permission of instructor.

EVRN 660. Summer Field Ecology. 3 Credits. N
An introduction to research methods for environmental science. Similar to EVRN 460, formatted for summer term. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). Assignments and group work emphasize analysis and interpretation of field data. (Same as BIOL 660.) Prerequisite: Junior, Senior, or graduate standing, completion of the natural sciences requirement of the KU Core (GE3N).

EVRN 662. Art and Ecology: Inhabiting the Ecosphere. 3 Credits. N
An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as SCUL 630.) Prerequisite: Graduate standing or permission of instructor.

EVRN 673. Environmental Justice. 3 Credits. NW U
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping, and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. (Same as ISP 673.) Prerequisite: Permission of instructor.

EVRN 700. The Anthropocene: Interdisciplinary Perspectives on Environmental Change. 3 Credits.
Have human activities become so pervasive that we have initiated a unique human epoch of earth history? This introductory, interdisciplinary graduate seminar will explore this question while examining the ways that different disciplines approach the understanding of environmental change, its impact on natural and human systems, and how these understandings have changed over time. The course is team-taught. Students will write a research paper on a climate change topic of their choice that reflects the historical and interdisciplinary approaches of the seminar. Prerequisite: Consent of instructor.

EVRN 720. Topics in Environmental Studies: ______. 1-6 Credits.
Courses on special topics in Environmental Studies. These courses may be lecture, seminars, or readings. Students may enroll in more than one interest group but may enroll in a given interest group only once.

EVRN 721. Environmental Regulation and Policy. 3 Credits.
This course provides a survey of the environmental regulations, environmental problems, and environmental solutions that must be dealt with by environmental scientists in agencies and industry. Considers both theoretical and practical/applied aspects of environmental practices.

EVRN 725. Environmental Security. 3 Credits.
This course examines environmental issues, concerns, and policy as they relate to security through the framework of geopolitics. National security and conflict are increasingly discussed in relation to the environment, such as concerns regarding environmental change as well as stresses and demands on natural resources, e.g., water, energy, deforestation, desertification. The course will examine key contributions to the environmental security, resource conflicts, climate security and related literatures.

EVRN 730. Environmental Toxicology. 3 Credits.
Examines the effects of toxic chemicals on individuals, populations, communities and ecosystems. Topics include major classes of pollutants, movement, distribution and fate of pollutants in the environment, mechanisms of action, toxicity testing, and environmental assessment.

EVRN 735. Scientific Communication. 3 Credits.
Principles of English communication skills for the professional scientist. The course begins by exploring the role of narrative in all forms of scientific communication; it then applies the use of narrative tools to scientific writing, message honing and speaking. The course covers written and verbal communication of primary research. Students must have an independent research project on which to focus their communication assignments. (Same as BIOL 735.)

EVRN 736. Environmental Remote Sensing. 3 Credits.
Covers fundamentals of remote sensing, including electromagnetic radiation principles and data collection and processing, followed by an introduction to the various remote sensing techniques and their application in understanding and managing environmental systems. Exercises are provided for students to be actively involved in evaluating, critically analyzing and interpreting images and data to determine implications for practice. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 536. Prerequisite: Graduate standing.

EVRN 737. Water Resource Sustainability. 3 Credits.
Provides a framework for learning about our water future and ways we might define and achieve sustainability in water use and management. Concerns of ethics, culture, economics, politics, and environmental health will be discussed within the contexts of issues such as the global water crisis, water footprints, water pollution, human water systems, water security, and sustainable water technologies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 537. Prerequisite: Graduate standing.

EVRN 740. Soil Science for Environmental Assessment. 3 Credits.
Provides students with a solid understanding of soils in the environment, particularly as it relates to environmental assessment. Topics include soil geomorphology, soil physics/chemistry/biology, management of soils, and
soil contaminants. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor.

EVRN 743. Natural Hazards and Environmental Risks. 3 Credits.
This course investigates the geophysical processes of the earth-atmospheric system that can create disastrous impacts on human life, society, and economics. Hazards, including earthquakes, tsunamis, floods, hurricanes, mass movements, wildfires, and many others, are examined by analyzing spatial and temporal dynamics as well as any precursory indicators that may be present. Attention is also given to management and mitigation strategies. Case studies are utilized to examine interaction between society and natural hazards. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 543. Prerequisite: Graduate standing.

EVRN 747. Fluvial Geomorphology. 3 Credits.
This course develops an understanding of the research processes as applied to river systems by means of qualitative and quantitative research methods and approaches to solve problems. Applications of fluvial principles to river management and stream restoration are examined, as well as interactions between land use and geomorphic processes. Prerequisite: Graduate standing.

EVRN 750. Environmental Air Quality Assessment. 3 Credits.
Addresses scientific, regulatory, and technical aspects of air quality monitoring, including pollutant formation and dispersion, pollution control, national emissions standards, and methods for monitoring pollutants and air quality. Prerequisite: CHEM 130 or CHEM 190 recommended or consent of the instructor.

EVRN 751. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as BIOL 759 and GEOG 759.)

EVRN 755. Energy and Environment. 3 Credits.
This interdisciplinary course provides students with a broad understanding of the current energy system, including its challenges, with focus on changing global energy needs, current energy sources, developing and emerging renewable energy sources, and their economic, environmental, and societal implications. Analysis of energy fundamentals, fossil fuel exploration and use, nuclear energy, renewable energy sources, and subsequent environmental impacts. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 555.

EVRN 771. Project Management for Science and Technical Managers. 3 Credits.
Students will learn to use current project planning tools to develop project plans that aid in bringing a project to completion on time and within budget. They will demonstrate the ability to manage projects within a science organization.

EVRN 772. Organizational Management and Leadership in Science and Technical Organizations. 3 Credits.
Explores concepts and practices in leadership, organizational behavior and change management. Emphasis is placed on understanding dynamics of individuals and groups in organizational structures focused on research and innovation. Students will tackle organizational culture, management approaches, performance-building, and creativity and innovation management in science organizations.

EVRN 773. Organizational Communication and Supervision in Science and Technical Organizations. 3 Credits.
Explores the duties and responsibilities of a supervisor/manager. Addresses management of an integrated team, recruitment and interviewing, professional development of employees, performance management, effective workplace communications; collaboration, and managing organizational conflict.

EVRN 774. Financial Management in Science and Technical Organizations. 3 Credits.
The goal of this course is to gain an understanding of finance, budget, and accounting in a science organization. The student will learn how to interpret and understand basic financial statements; how to make good decisions based on them; learn essential accounting concepts and characteristics of accounting systems; and budgeting/forecasting in a science-based organization.

EVRN 775. Technical Communication for Scientists. 1 Credits.
Addresses challenges and approaches of communicating science concepts and results to technical and non-technical as well as internal and external audiences. Focuses on techniques to improve the effectiveness of written and oral communication, including technical writing of project and research proposals, scientific presentations, and effective workplace communications.

EVRN 776. Patent Law and Intellectual Property Essentials for Scientists. 1 Credits.
This course provides an overview of basic patent law, the patent process, patent interpretation (claims and prior art) and intellectual property law in science.

EVRN 777. Professional Development for Science Managers. 1 Credits.
Addresses professional development of the scientist as managers. Students will develop a personal and professional development plan and understand how to apply it to their own professional career, future career transitions, and lifelong career progression.

EVRN 778. Topics in Science and Technical Management. 1-3 Credits.
Addresses special topics in Science Management. Students may enroll in more than one interest group but may enroll in a given interest group only once.

EVRN 814. Professional Science Masters Environmental Assessment Capstone I. 1 Credits.
A culminating experience to develop a workforce project and produce a written report to be presented orally to a committee that may include an industry member. Students will develop and apply workforce project to the student's place of employment for full-time employees, or an internship or similar individual project for full-time students or students who are not employed in the area of study. This course will initiate the process of project development and will be taken prior to a student's final semester. This project is to be continued in EVRN 815 in the last semester of the student's graduate career. Prerequisite: Minimum 20 credit hours completed in program.

EVRN 815. Professional Science Masters Environmental Assessment Capstone II. 2 Credits.
A culminating experience to develop a workforce project and produce a written report to be presented orally to a committee that may include an industry member. Students will develop and apply workforce project in
the student's place of employment for full-time employees, an internship or similar individual project for full-time students or students who are not employed in the area of study. The students will compile their project results in a formal written report and will give an oral presentation to the Environmental Studies faculty (2 minimum) and the student's employer or mentor. Prerequisite: EVRN 814.

EVRN 915. Capstone. 3 Credits.
The goal of this research seminar is to discuss individual students’ research, culminating in the completion of a paper in Environmental Studies for presentation at a professional meeting and/or publication in a professional journal.

Bachelor of Arts and Bachelor of General Studies in Environmental Studies

Why study environmental studies?
The Environmental Studies Program at the University of Kansas, established in 1971, is one of the oldest environmental studies programs in the country. The KU Environmental Studies Program provides a rigorous interdisciplinary education and stimulates exchange concerning the environment from natural science, social science, and humanities perspectives. Learning Pathways (https://esp.ku.edu/learning-pathways/), thematic areas of study that match student interest to the environmental expertise of our faculty, are a key aspect of our unique program.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. or B.G.S. Major

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN</td>
<td>Environmental Studies Introduction to Science and Culture</td>
<td>10</td>
</tr>
</tbody>
</table>

Majors must complete both of the following:

Global Environment I: The Discovery of Environmental Change. Satisfied by:

- EVRN 140 Global Environment I: The Discovery of Environmental Change
- or EVRN 14: Global Environment I: Discovery of Environmental Change, Honors

Global Environment II: The Ecology of Civilization. Satisfied by:

- EVRN 142 Global Environment II: The Ecology of Human Civilization
- or EVRN 14: Global Environment II: The Ecology of Human Civilization, Honors

Research Methods. Satisfied by one of the following: 3-4
- UBPL 538
- ECON/EVRN 550 Environmental Economics

EVRN 410 Environmental Applications of Geographic Information Systems

EVRN 510 Advanced Environmental Applications in Geospatial Techniques

EVRN 536 Environmental Remote Sensing

GEOL 351 Environmental Geology

Statistics. Satisfied by one of the following: 3-4
- MATH 365 Elementary Statistics
- GEOG 316 Methods of Analyzing Geographical Data
- BIOL 570 Introduction to Biostatistics

Environmental Studies Core Knowledge and Skills
Majors must complete a course in each of the following areas:

Environmental Policy Analysis. Satisfied by:
- EVRN 320 Environmental Policy Analysis 3

Environmental Law. Satisfied by:
- EVRN 332 Environmental Law 3

Field Ecology. Satisfied by:
- EVRN 460 Field Ecology 3

Capstone Experience. Satisfied by:
- EVRN 615 Capstone Project 3

Environmental Studies Required Electives/Options
Majors must select an option or design their own. Self-designed emphases must be approved in their entirety by an environmental studies advisor and the undergraduate studies director before implementation. Each option requires 4 courses at the 300+ level.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 40 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in Environmental Studies can be found here: Environmental Studies Sample 4-year BA plan (p. 1379), or by using the left-side navigation.

Sample 4-years plans for the BGS degree in Environmental Studies can be found here: Environmental Studies Sample 4-year BGS plan (p. 1380), or by using the left-side navigation.

**Departmental Honors**

To graduate with honors in environmental studies, an undergraduate must maintain a minimum grade-point average of 3.5 in the major. The student must also complete an individual honors research project in cooperation with a faculty mentor. This project normally represents 2 semesters of original work, the completion of 3 credit hours of EVRN 624 Independent Study, and 3 credit hours of EVRN 625 Honors Research in Environmental Studies. All 6 hours may be applied to the 12 hours of environmental studies electives required for the major. Upon completion of the research project, honors candidates are required to present the results of their work at the department’s Undergraduate Research Colloquium.

**BA in Environmental Studies**

Below is a sample 4-year plan for students pursuing the B.A. in Environmental Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/ courses/).

### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing)¹</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Literacy)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 140 or 144 (Goal 3 Natural Science, BA Lab Req, Major Requirement)</td>
<td>5</td>
<td>5</td>
<td>10</td>
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<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td>2</td>
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16 16-17

### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 332 (Major Requirement FALL ONLY)³</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
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### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN Elective 300+ (Major Requirement)⁴</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Research Methods Course (Major Requirement)⁵</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>3</td>
<td>3</td>
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</table>

### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 460 or 660 (Major Requirement)³</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁶</td>
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<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁶</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours 120-121

1. The B.A. requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. The B.A. degree requires an additional Quantitative Reasoning course with MATH 101 as a pre-requisite. MATH 365 fulfills this requirement as do the courses on this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/). BIOL 570 and GEOG 316 do not, and will require another Quantitative Reasoning course to fulfill the B.A. degree requirements.

3. EVRN 332 and EVRN 460 are fall only courses; EVRN 320 is a spring only course; EVRN 660 is a summer only course.

4. A total of 12 hours of EVRN 300+ electives are required for the major. Students are encouraged to choose courses based on an emphasis area in consultation with an advisor.
5 Research Methods can be fulfilled by ECON 550/EVRN 550, EVRN 410, EVRN 510, or GEOL 351.
6 Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BGS in Environmental Studies

Below is a sample 4-year plan for students pursuing the BGS in Environmental Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
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<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Literacy)</td>
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<td>MATH 365, GEOG 316, or BIOL 570 (Major Requirement)</td>
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<tr>
<td>EVRN 140 (Goal 3 Natural Science, Major Requirement)</td>
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<td>EVRN 142 (Goal 3 Social Science, Major Requirement)</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 1.1 Critical Thinking</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tbody>
</table>

| Total | 14 | 17 |

Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 332 (Major Requirement FALL ONLY)</td>
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<td>EVRN 320 (Major Requirement SPRING ONLY)</td>
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</tr>
<tr>
<td>Goal 2.2 Communication</td>
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<td>EVRN Elective 300+ (Major Requirement)</td>
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<tr>
<td>Goal 3 Humanities</td>
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<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
</tbody>
</table>

| Total | 13 | 15 |

Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>EVRN Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Research Methods Course, Major Requirement</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 460 or 660 (Major Requirement)</td>
<td>3</td>
<td>EVRN 615 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BGS Career Prep Course (BGS Requirement)</td>
<td>3</td>
<td>EVRN Elective 300+ (Major Requirement)</td>
<td>3</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Hours 120 | |

1 A total of 12 hours of EVRN 300+ electives are required for the major. Students are encouraged to choose courses based on an emphasis area in consultation with an advisor.
2 Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.
3 Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
4 Pre-requisites for EVRN 320 and EVRN 332 are EVRN 140/GEOG 140/HIST 140 or EVRN 142/GEOG 142/HIST 142, or EVRN 144/GEOG 144/HIST 144 or EVRN 145/GEOG 145/HIST 145, or EVRN 148/GEOG 148, or concurrent enrollment.
5 EVRN 140, EVRN 332, and EVRN 460 are Fall only courses. EVRN 142 and EVRN 320 are Spring only courses. EVRN 660 is a summer only course.
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Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.S. Degree

General Education Requirements

In addition to degree and major requirements, all students must complete the KU Core.

Environmental Studies Prerequisite or Co-requisite Knowledge

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Mathematics</strong></td>
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<tr>
<td></td>
<td>Majors must complete the following:</td>
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<tr>
<td></td>
<td>Calculus. Satisfied by one of the following:</td>
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</tr>
<tr>
<td></td>
<td>MATH 115 Calculus I</td>
<td></td>
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<tr>
<td></td>
<td>&amp; MATH 116 and Calculus II</td>
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<tr>
<td></td>
<td>MATH 125 Calculus I</td>
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<tr>
<td></td>
<td>Statistics. Satisfied by one of the following:</td>
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<tr>
<td></td>
<td>MATH 365 Elementary Statistics</td>
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<tr>
<td></td>
<td>GEOG 316 Methods of Analyzing Geographical Data</td>
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<tr>
<td></td>
<td>BIOL 570 Introduction to Biostatistics</td>
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<tr>
<td></td>
<td><strong>Supporting Laboratory Science</strong></td>
<td></td>
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<tr>
<td></td>
<td>Majors must complete one of the following:</td>
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</tr>
<tr>
<td></td>
<td>Principles of Physical Geography. Satisfied by:</td>
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</tr>
<tr>
<td></td>
<td>GEOG 104 Introduction to Physical Geography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; GEOG 105 and Introductory Laboratory in Physical Geography</td>
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<tr>
<td></td>
<td>Introduction to Geology and Geological Fundamentals Laboratory. Satisfied by:</td>
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<td></td>
<td>GEOL 101 The Way The Earth Works</td>
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<td></td>
<td>&amp; GEOL 103 and Geology Fundamentals Laboratory</td>
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<td></td>
<td>Fundamentals of Organic Chemistry and Organic Chemistry Laboratory. Satisfied by:</td>
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<td>CHEM 310 and Organic Chemistry I Laboratory</td>
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<td></td>
<td>&amp; CHEM 331</td>
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<td></td>
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<td></td>
<td>CHEM 330 Organic Chemistry I</td>
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<td>&amp; CHEM 331 and Organic Chemistry I Laboratory</td>
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<tr>
<td></td>
<td><strong>Biology and Ecology</strong></td>
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<td></td>
<td>Majors must complete the following:</td>
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<tr>
<td></td>
<td>Principles of Molecular and Cellular Biology. Satisfied by:</td>
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<tr>
<td></td>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
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<td></td>
<td>or BIOL 151 Principles of Molecular and Cellular Biology, Honors</td>
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<tr>
<td></td>
<td>Principles of Organismal Biology. Satisfied by:</td>
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<tr>
<td></td>
<td>BIOL 152 Principles of Organismal Biology</td>
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<td></td>
<td>or BIOL 153 Principles of Organismal Biology, Honors</td>
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<tr>
<td></td>
<td>Introductory Biology Lab</td>
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<td></td>
<td>BIOL 154 Introductory Biology Lab for STEM Majors</td>
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<tr>
<td></td>
<td>Principles of Ecology. Satisfied by:</td>
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<td></td>
<td>BIOL 414 Principles of Ecology</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Chemistry</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foundations of Chemistry I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 130 General Chemistry I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or CHEM 19 Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; CHEM 191and Foundations of Chemistry I Laboratory, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foundations of Chemistry II. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 135 General Chemistry II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or CHEM 192 Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; CHEM 193and Foundations of Chemistry II Laboratory, Honors</td>
<td></td>
</tr>
</tbody>
</table>
Environmental Studies Core Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 140</td>
<td>Global Environment I: The Discovery of Environmental Change</td>
<td>5</td>
</tr>
<tr>
<td>EVRN 142</td>
<td>Global Environment II: The Ecology of Human Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

Environmental Studies Core Knowledge and Skills

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 320</td>
<td>Environmental Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 332</td>
<td>Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 460</td>
<td>Field Ecology</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 615</td>
<td>Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Environmental Studies Required Electives/Options

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN Elective 300+</td>
<td>Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

- **Major Hours**: Satisfied by 32 hours of major courses.
- **Major Hours in Residence**: Satisfied by a minimum of 15 hours of KU resident credit in the major.
- **Major Junior/Senior Hours**: Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.
- **Major Junior/Senior Graduation GPA**: Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BS in Environmental Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
EVRN Elective 300+ (Major Requirement)*  3  Second Area of Study/Elective/Degree/Junior-Senior Hours*

| Total Hours 120-121 |

1. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

2. A total of 12 hours of EVRN 300+ electives are required for the major. Students are encouraged to choose courses based on an emphasis area in consultation with an advisor.

3. EVRN 332 and EVRN 460 are Fall only courses. EVRN 142 and EVRN 320 are Spring only courses. EVRN 660 is a summer only course.

4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Departmental Honors**

To graduate with honors in environmental studies, an undergraduate must maintain a minimum grade-point average of 3.5 in the major. The student must also complete an individual honors research project in cooperation with a faculty mentor. This project normally represents 2 semesters of original work, the completion of 3 credit hours of EVRN 624 Independent Study, and 3 credit hours of EVRN 625 Honors Research in Environmental Studies. All 6 hours may be applied to the 12 hours of environmental studies electives required for the major. Upon completion of the research project, honors candidates are required to present the results of their work at the department’s Undergraduate Research Colloquium.

**Minor in Environmental Studies**

**Why study environmental studies?**

The Environmental Studies Program at the University of Kansas, established in 1971, is one of the oldest environmental studies programs in the country. The KU Environmental Studies Program provides a rigorous interdisciplinary education and stimulates exchange concerning the environment from natural science, social science, and humanities perspectives. Learning Pathways (https://esp.ku.edu/learning-pathways/), thematic areas of study that match student interest to the environmental expertise of our faculty, are a key aspect of our unique program.

**Requirements for the Minor**

### Environmental Studies Minor Core

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principals of Environmental Studies. Satisfied by 1 of the following options:</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>Global Environment I. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN 140 Global Environment I: The Discovery of Environmental Change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or EVRN 145 Global Environment I: Discovery of Environmental Change, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scientific Principles of Environmental Studies. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN/GEOG 148 Scientific Principles of Environmental Studies</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>Environmental History and Culture. Satisfied by 1 of the following options:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Global Environment II. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN 142 Global Environment II: The Ecology of Human Civilization</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or EVRN 145 Global Environment II: The Ecology of Human Civilization, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment and History. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN/HIST 103 Environment and History</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment, Culture, and Society. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN/GEOG 150 Environment, Culture and Society</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental History of North America. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN/HIST 347 Environmental History of North America</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Policy Analysis. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN 320 Environmental Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Environmental Law. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN 332 Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Research Methods. Satisfied by 1 of the following options:</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>Geospatial Analysis. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN 410 Environmental Applications of Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field Ecology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EVRN 460 Field Ecology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Economics. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON/EVRN 550 Environmental Economics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principles of Geographic Information Systems. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 358 Introduction to Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Geology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOL 351 Environmental Geology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Studies elective at the Junior/Senior Level. Satisfied by 1 additional EVRN course at the Junior/Senior Level (300+).</td>
<td></td>
</tr>
</tbody>
</table>

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**
Satisfied by 18 hours of major courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the major.

**Minor Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

---

**BA in Environmental Studies/ Accelerated Master of Urban Planning**

Only current KU undergraduate students are eligible to apply to the Accelerated Master of Urban Planning/B.A. in Environmental Studies program. If you are not a current undergraduate student at KU, please review the admission requirements the Master of Urban Planning.

The Accelerated Master of Urban Planning/B.A. in Environmental Studies is designed for students who have a passion for sustaining both our natural and built environments. It allows well-qualified students to earn a bachelor’s and a master’s degree in five years, rather than the six years it would take to earn each degree separately. This program combines in-depth training in environmental studies and analysis with a professional degree in urban planning. Graduates are prepared for careers in environmental planning in the public, private and not-for profit sectors.

Only current KU undergraduate students are eligible to apply to the Accelerated Master of Urban Planning/B.A. in Environmental Studies. If you are not a current undergraduate student at KU, please review the admission requirements for the Master of Urban Planning.

Careful course selection and steady progression through the undergraduate career is necessary to ensure all requirements for both degrees may be completed within the 5-year time frame. All prospective students should discuss their interest with the undergraduate advisor for Environmental Studies and the Urban Planning Program director as soon as possible. A meeting with the Urban Planning Program director should take place no later than the student’s junior year to discuss possible admission to the accelerated master’s program.

Prospective students are eligible to apply to the graduate program in spring semester of their junior year. The following requirements must be met by this time:

- On track to complete all requirements for a B.A. or B.G.S. degree in Environmental Studies from KU by the spring semester of the senior year

Applicants must complete an application for graduate study online (https://gradapply.ku.edu/apply/). The following information should be gathered in advance and uploaded with the application:

- Statement of interest that succinctly summarizes the students’ interests, education, their long term career goals, and how the accelerated degree program will help them achieve those goals;
- A copy of the student’s advising report
- The names of three persons qualified to comment on the applicant’s academic abilities and probable success in graduate study. These individuals will be asked to provide a letter of recommendation. At least two should be faculty members who have had the student in class.

Upon review of the application for admission, the Urban Planning Program will notify the student of his or her eligibility to begin coursework in the program. Final acceptance to the Master of Urban Planning graduate program will be contingent upon the following:

- Successful completion of all requirements for the bachelor’s degree;
- Grades of B or above in all Urban Planning graduate-level coursework taken in year 4

Any student who does not meet this minimum grade requirement may continue in the program but must repeat any graduate course for which they did not earn a B or above. Students should still aim to complete all requirements by the end of year 5. Students may also elect to earn only the bachelor’s degree and re-apply to the graduate program at a later time.

This accelerated program uses a carefully planned combination of pre-requisite coursework, graduate-level courses taken for both undergraduate and graduate credit in Year 4, and graduate credit courses taken in Year 5. The student must be approved to begin coursework toward the master’s prior to enrolling in any classes that are to count for both undergraduate and graduate credit. Please see the Sample Academic Plan for more information.

**Requirements for the Bachelor’s Degree**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 140</td>
<td>Global Environment I: The Discovery of Environmental Change</td>
<td>5</td>
</tr>
<tr>
<td>or EVRN 144</td>
<td>Global Environment I: Discovery of Environmental Change, Honors</td>
<td></td>
</tr>
<tr>
<td>EVRN 142</td>
<td>Global Environment II: The Ecology of Human Civilization</td>
<td>5</td>
</tr>
<tr>
<td>or EVRN 145</td>
<td>Global Environment II: The Ecology of Human Civilization, Honors</td>
<td></td>
</tr>
<tr>
<td>Research Methods. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON/EVRN 550</td>
<td>Environmental Economics</td>
<td></td>
</tr>
<tr>
<td>EVRN 410</td>
<td>Environmental Applications of Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td>EVRN 510</td>
<td>Advanced Environmental Applications in Geospatial Techniques</td>
<td></td>
</tr>
<tr>
<td>GEOL 351</td>
<td>Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>Statistics. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td></td>
</tr>
<tr>
<td>GEOG 316</td>
<td>Methods of Analyzing Geographical Data</td>
<td></td>
</tr>
<tr>
<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
<td></td>
</tr>
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</table>

**Environmental Studies Core Knowledge and Skills**
Majors must complete each of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 320</td>
<td>Environmental Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 332</td>
<td>Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 460</td>
<td>Field Ecology</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 615</td>
<td>Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Environmental Studies Required Electives/Options

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 738</td>
<td></td>
<td>3</td>
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</tbody>
</table>

Complete two of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 710</td>
<td>Housing Policy and Planning</td>
<td>6</td>
</tr>
<tr>
<td>UBPL 730</td>
<td>City and County Planning</td>
<td>6</td>
</tr>
<tr>
<td>UBPL 750</td>
<td>Transportation Policy and Planning</td>
<td>6</td>
</tr>
<tr>
<td>UBPL 765</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Students should seek guidance from their advisor and refer to the degree plan for the specific enrollment sequence.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 40 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Requirements for the Master’s Degree

During the Senior Year (Year 4), the student must take the following Urban Planning graduate coursework, in addition to the Major Requirements noted above:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 741</td>
<td>Foundations of Compassionate Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 785</td>
<td>History and Theory of Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 742</td>
<td>Applied Data and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

In Year 5, after the conferment of the undergraduate degree, the student will complete a total of 24 post-baccalaureate graduate credit hours, consisting of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 763</td>
<td>Politics and Public Management</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 850</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>UBPL Elective or Specialization Courses</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

Students in the accelerated masters must successfully pass a comprehensive exam. The examination provides a learning experience that encourages the student to synthesize the knowledge gained through course work and tests the student’s competence as a generalist/specialist planner. The examination consists of the student responding to a scenario or case study in which one is asked to synthesize knowledge gained in one’s course work and apply it within a particular context. No academic credit is given for the examination.

Progression Requirements

Each student’s progress will be monitored at various points during the program:

1. Upon pre-admission acceptance to the accelerated masters, the student will meet with the UBPL Chair to plan the final year of undergraduate courses. Graduate UBPL courses to be taken for elective undergraduate credit, and to outline the schedule of courses.

2. In the final spring semester of undergraduate study (Year 4), the student will meet with the UBPL Chair to review the student’s performance in UBPL courses. The student must earn a grade of “B” or better in these courses to be eligible for regular admission to the Master of Urban Planning degree.

3. Following completion and award of the undergraduate degree (end of Spring Semester Year 4), the admitted student will again meet with the UBPL Chair to review the course plan for the fifth year of study and update as needed. The student’s performance in the graduate-level courses taken as an undergraduate will be evaluated.

4. To continue in the track, students must earn a combined minimum GPA of 3.25 for these courses. At this time, the student will select a specialization area within the planning degree, and will meet with a faculty advisor who is overseeing that specialization to ensure the course plan is accurate.

5. For those students who do not meet the minimum GPA requirement of 3.25 in the first semester of Year 5 an alternative plan of study to address the student’s deficiencies may be developed, at the department’s sole discretion. Students may also be dismissed from the program.

6. If the baccalaureate degree is not completed at the end of Year 4, the student will not be permitted to enroll in courses for graduate credit toward the MUP degree until the baccalaureate degree has been conferred.

Students should complete all requirements for the master’s degree within one year of receiving the bachelor’s degree. If unforeseen circumstances prevent the timely completion of the master’s degree, the student must consult with their graduate advisor to develop an alternative plan for completion.

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3 ENGL 102</td>
<td>3</td>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>3 MATH 365, GEOR 316, or BIOL 570</td>
<td>3-4</td>
<td>MATH 365, GEOR 316, or BIOL 570</td>
<td>3-4</td>
</tr>
<tr>
<td>1st Semester Language (BA 2nd language)</td>
<td>5</td>
<td>2nd Semester Language (BA 2nd language)</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
### Professional Science Masters in Environmental Assessment

The Professional Science Masters (PSM) is a relatively new interdisciplinary graduate degree that combines advanced coursework in science with a set of professional skills courses (project management, technical writing/communications, financial management), and a capstone/internship experience.

### Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

The admissions requirements for the Professional Science Master’s in Applied Science with a concentration in Environmental Assessment include:

1. Bachelor’s degree from an accredited institution. The student must have an undergraduate major in the natural, physical, or applied sciences, engineering, or related fields, OR coursework of at least 20 semester hours in the natural and applied sciences (biology, chemistry, geology, physical geography, physics, and/or engineering). For those without the necessary background courses in undergraduate science and mathematics, some additional coursework will need to be completed prior to the start of the graduate student program.

### Course Requirements

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore</td>
<td>EVRN 148 3 Goal 2.2</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>EVRN 103 3 Goal 4.1</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3rd Semester Language (BA Second Language) 3 4th Semester Language (Major Req.)</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>UBPL 200 (Goal 1.1) 3 Goal 3H</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>EVRN 332 3 EVRN 320 (Major Req.)</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Junior</td>
<td>UBPL 425 (major req) 3 Goal 5</td>
<td>3</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Goal 4.2 Global Awareness</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Elective/ Possible Minor</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Possible Minor Course</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Elective/ Possible Minor</td>
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<td></td>
<td>UBPL 777 3 UBPL Elective or Specialization Course</td>
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### Notes

1. If MATH 365 is not selected, one of the electives in the plan must be switched to a BA Quantitative requirement.

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EVRN 140 or 144 (Goal 3N, BA Lab Req., Major req.) 5 EVRN 142 or 145 (Goal 3, Major Req.) 5

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<tr>
<td>UBPL 777</td>
<td>3</td>
<td>UBPL Elective or Specialization Course</td>
<td>6</td>
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</table>
2. Statement of interest: This 1-2 page narrative should succinctly summarize your education, employment history, your long-term career goals, and how this degree program will help you achieve these goals.

3. At least two letters of recommendation from persons qualified to offer judgment on your work ethic and ability to undertake graduate-level work.

4. International students must also meet the English proficiency (https://gradapply.ku.edu/english-requirements/) and financial requirements.

All PSMs must include a core of business, communication, and project management skills.

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<td>ENTR 701</td>
<td>Entrepreneurship</td>
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<tr>
<td>or PFS 802</td>
<td>Managing Teams and Leading People</td>
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<tr>
<td>or PUAD 854</td>
<td>Innovation and Organizational Change</td>
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<td>PFS 804</td>
<td>Project Management for Professionals</td>
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<td>PFS 730</td>
<td>Writing and Speaking for Decision Makers</td>
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<tr>
<td>or PFS 801</td>
<td>Interpersonal and Persuasive Communication Skills for Managers</td>
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<td>PFS 803</td>
<td>Financial Management for Professional Success</td>
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<tr>
<td>or PUAD 837</td>
<td>Advanced Public Budgeting and Finance</td>
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<td>Or other professional skills courses chosen in consultation with an advisor</td>
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<td>Concentration</td>
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<td>EVRN 616</td>
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<td>EVRN 721</td>
<td>Environmental Regulation and Policy</td>
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<td>Select two from:</td>
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<td>EVRN 611</td>
<td>Water Quality, Land Use, and Watershed Ecosystems</td>
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<td>EVRN 740</td>
<td>Soil Science for Environmental Assessment</td>
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<td>EVRN 750</td>
<td>Environmental Air Quality Assessment</td>
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<td>Related Electives</td>
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<td>Choose 2 courses 1</td>
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<td>EVRN 510</td>
<td>Advanced Environmental Applications in Geospatial Techniques</td>
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<tr>
<td>EVRN 701</td>
<td>Climate Change, Ecological Change and Social Change</td>
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<td>EVRN 730</td>
<td>Environmental Toxicology</td>
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<td>EVRN 736</td>
<td>Environmental Remote Sensing</td>
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<td>EVRN 737</td>
<td>Water Resource Sustainability</td>
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<td>EVRN 743</td>
<td>Natural Hazards and Environmental Risks</td>
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<td>EVRN 747</td>
<td>Fluvial Geomorphology</td>
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<td>EVRN 755</td>
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<td>Professional Science Masters Environmental Assessment Capstone II</td>
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<td>Total Hours</td>
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1 Or other elective chosen in consultation with an advisor

Accelerated Professional Science Masters-Environmental Assessment

The Accelerated Professional Science Masters degree is designed for qualified students enrolled in the KU Bachelor of Science, Bachelor of Arts, or Bachelor of General Studies in Environmental Studies degree track. The program allows students to complete the Professional Science Masters (PSM) in Environmental Assessment graduate degree in a single year (five years total for both degrees). Key loci in the science curriculum of this program are environmental impact assessment; soils, air, water, and ecosystems science; geospatial analysis; environmental health and policy; and an understanding of environmental law and policy and the regulatory environment.

The Professional Science Master’s (PSM) is a relatively new interdisciplinary graduate degree that combines advanced coursework in science with a set of professional skills courses (project management, technical writing/communications, financial management), and a capstone/internship experience. The PSM is designed for graduates who will be employed in private firms, public agencies, and not-for-profit organizations that address a range of environmental issues.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Application Deadlines for FAST-TRACK:

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (http://catalog.ku.edu/graduate-studies/) section of the online catalog.

Early Conditional Admission to the Accelerated Fast Track:

Students apply to the Accelerated Environmental Assessment PSM Program in the spring of their junior year for permission to start the Accelerated track. However, acceptance to the track does not guarantee acceptance to the Environmental Assessment PSM graduate program the following year.

Requirements for Early Conditional Admission (second semester, Junior Year):

- All requirements for a B.S., B.A., or B.G.S. degree in Environmental Studies from KU complete or in progress;
- Two letters of recommendation from faculty qualified to judge the student’s preparation for, and potential to successfully complete, the
accelerated track; at least one of the letters must be from an EVRN faculty member;

- Statement of interest that succinctly summarizes the students’ interests, education, their long-term career goals, and how the accelerated degree program will help them achieve those goals.

Upon acceptance by the Program to the accelerated track, the student will meet with the PSM-EA Program Director, the PSM Graduate Advisor, and the Undergraduate Advisor for Environmental Studies to plan the final year of undergraduate courses, graduate courses to be taken for elective undergraduate credit, and outline the schedule of courses.

In the final semester of their senior year, a student on the accelerated track must contact the PSM-EA Program Director to finalize the application process to the PSM-Environmental Assessment graduate program. In the final semester of undergraduate study (Year 4), the student will meet with the PSM-EA Program Director, the PSM Graduate Advisor, and the Undergraduate Advisor for Environmental Studies together to review the student’s performance in the PSM-EA graduate courses taken for elective undergraduate credit.

Following completion and award of the undergraduate degree (end of Year 4), the admitted student will again meet with the PSM-EA Program Director and the PSM Graduate Advisor to review the courses taken in the final year of undergraduate studies and review/update the course plan for the fifth year of study. The student’s performance in the graduate courses taken for elective undergraduate credit will be evaluated. To continue in the track, students must earn a combined minimum GPA of 3.0 in the 9 credit hours of undergraduate courses, with a grade of “B” or better attained in each course.

If the baccalaureate degree is not completed at the end of Year 4, the student will not be permitted to enroll in courses for graduate credit toward the PSM-EA degree until the baccalaureate degree has been conferred.

**Degree Requirements:**

The KU Environmental Studies accelerated undergraduate-graduate degree track allows qualified EVRN B.S. students to graduate in 5 years with a Professional Science Masters in Environmental Assessment. The fast-track PSM provides excellent KU undergraduates in Environmental Studies accelerated undergraduate-graduate degree track allows qualified EVRN B.S. students to graduate in 5 years with a Professional Science Masters in Environmental Assessment. The fast-track PSM provides excellent KU undergraduates in Environmental Studies an opportunity to complete an PSM in Professional Science Masters-Environmental Assessment within a year of completing the bachelor’s degree.

1. Upon acceptance by the Program to the 4+1 track, the student will meet with the PSM-EA Program Director, the PSM Graduate Advisor, and the Undergraduate Advisor for Environmental Studies to plan the final year of undergraduate courses, graduate courses to be taken for elective undergraduate credit, and outline the schedule of courses.

2. Prior to applying for graduate admission in the final spring semester of undergraduate study (Year 4), the student will meet with the PSM-EA Program Director, the PSM Graduate Advisor, and the Undergraduate Advisor for Environmental Studies to review the student’s performance in the PSM-EA graduate courses taken for elective undergraduate credit during the summer and/or fall. A grade of “B” or better must be attained in these courses to continue in the track.

3. Following completion and award of the undergraduate degree (end of Spring Semester Year 4), the admitted student will again meet with the PSM-EA Program Director and the PSM Graduate Advisor to review the courses taken in the final year of undergraduate studies and review/update the course plan for the fifth year of study. The student’s performance in the graduate courses taken for elective undergraduate credit will be evaluated. To continue in the track, students must earn a combined minimum GPA of 3.0 in the 9 credit hours of undergraduate courses.

4. If the baccalaureate degree is not completed at the end of Year 4, the student will not be permitted to enroll in courses for graduate credit toward the PSM-EA degree until the baccalaureate degree has been conferred.

Students must complete all requirements for the PSM-EA **4+1 within 1 year post-bachelor’s.** If a student does not complete the requirements within 1 year post-bachelor’s, or is at any time determined to be ineligible to continue on the accelerated track, the student may petition the program for admission to the standard 33-hour PSM-EA degree track. Upon acceptance, students will be expected to either 1) repeat for graduate credit PSM coursework taken only for undergraduate credit, or 2) take additional elective coursework to complete the 33 hours. Specific coursework requirements in each case will be by agreement with the adviser.

Total minimum credit hours required (9 of these credit hours will be completed for undergraduate credit) is 33 hours.

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<td>ENTR 701</td>
<td>Entrepreneurship</td>
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<td>ACCT 708</td>
<td>Accounting and Finance for Professionals</td>
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<td>COMS 730</td>
<td>Writing and Speaking for Decision Makers</td>
<td>3</td>
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<td>EVRN 611</td>
<td>Water Quality, Land Use, and Watershed Ecosystems</td>
<td>3</td>
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<td>EVRN 740</td>
<td>Soil Science for Environmental Assessment</td>
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<td>EVRN 750</td>
<td>Environmental Air Quality Assessment</td>
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<td><strong>Electives</strong></td>
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<td>Select 2-4 courses to total at least 6 credit hours</td>
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<td>EVRN 815</td>
<td>Professional Science Masters Environmental Assessment Capstone II</td>
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**Total Hours** 33

**Graduate Certificate in Environmental Assessment**

Industries ranging from architecture, engineering and public policy require continued professional education for a variety of roles. The environmental assessment certificate provides certified specialization that professionals in these and other fields can add to existing credentials. Those in the field of environmental assessment identify possible environmental effects of a project or program, propose measures to decrease adverse effects
and predict those effects. This certificate can be completed in its entirety online, or with an elective course option taken on campus.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Individuals interested in applying to the Graduate Certificate in Environmental Assessment should have a bachelor's degree from an accredited institution in one of the following areas: natural, physical, or applied sciences, engineering, or related fields, OR coursework of at least 20 credit hours in the natural and applied sciences (biology, chemistry, geology, physical geography, environmental sciences, or engineering).

For those without the necessary background courses in undergraduate science, some additional coursework would need to be completed prior to the start of the graduate certificate program. Additional contact information can be found at the KU Edwards Campus website.

Individuals who are not already enrolled as KU graduate students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply/) for admission into the certificate program and submit an application fee along with the following materials:

- A Statement of Interest in the environmental assessment certificate program. This 1-2 page narrative should summarize your education, employment history, your long-term career goals, and how this certificate will help you achieve these goals.
- Official undergraduate transcript.
- A letter of recommendation from someone familiar with your academic work or qualified to offer judgment on your ability to undertake graduate-level work (former professor or instructor, workplace supervisor).

Current KU graduate students wishing to enroll in the Graduate Certificate in Environmental Assessment program will apply through the Graduate School. A student must be in good standing with their graduate degree program and its relationship to your graduate course of study. Awarding of certificates will be handled consistent with guidelines and timing of degree awards of the Graduate School. Completion of the certificate will appear on the graduate transcript. KU graduate students should submit the following materials:

- A Statement of Interest in the environmental assessment certificate program and its relationship to your graduate course of study.
- An unofficial copy of your KU transcript.
- A letter of support from your graduate degree program (your advisor or graduate director).

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Applications may be submitted at https://gradapply.ku.edu/apply (https://gradapply.ku.edu/apply/).

Certificate Requirements

The Certificate in Environmental Assessment is designed for graduates of bachelor’s programs in physical/natural sciences, environmental studies, civil/environmental engineering or related fields who are currently employed in private firms, public agencies, and not-for-profit organizations that address a range of environmental issues. Key foci in the science curriculum of this program are environmental impact assessment; soils, water, and ecosystems science; geospatial analysis; environmental health and policy; and an understanding of environmental law and policy and the regulatory environment.

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<tr>
<th>Code</th>
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<td>Water Quality, Land Use, and Watershed Ecosystems</td>
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<tr>
<td>EVRN 616</td>
<td>Environmental Impact Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 721</td>
<td>Environmental Regulation and Policy</td>
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</table>

1 graduate-level elective, preferably in EVRN, selected in consultation with the advisor

Total Hours 12

Graduate Certificate in Environmental Justice

Broadly defined, “Environmental Justice” is an interdisciplinary field of study that includes (but is not limited to) theories of the environment, theories of justice, environmental law and governance, environmental policy and planning, philosophy, development, sustainability, and political ecology. More narrowly, the United States Environmental Protection Agency defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies.”

Environmental justice emerged from an increased awareness of the disproportionately high impacts of environmental change and degradation on economically and politically disadvantaged communities. It addresses issues such as social, economic and political marginalization of minorities and low income populations.

The Graduate Certificate in Environmental Justice emphasizes the causes and consequences of the distribution of environmental problems. Students focus on why some poor and minority communities are more likely to experience a host of environmental burdens, as well as exploring the impact of that disproportionate environmental exposure. Understanding why some neighborhoods, communities, regions and countries benefit from environmental protection, while others do not, provides students with a concrete skill set and a critical perspective on environmental problems, community organizing and public participation, good governance, and research methods. Students who pursue this certificate will be well situated for careers in public policy, international relations, environmental advocacy, and environmental research.
The Environmental Justice Graduate Certificate can be completed at either Lawrence or Edwards Campus locations.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Individuals who are not already enrolled as KU graduate students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply/) for admission into the certificate program and submit an application fee along with the following materials:

- A Statement of Interest in the environmental justice certificate program. This 1-2 page narrative should summarize your education, employment history, your long-term career goals, and how this certificate will help you achieve these goals.
- Official undergraduate transcript.
- A letter of recommendation from someone familiar with your academic work or qualified to offer judgment on your ability to undertake graduate-level work (former professor or instructor, workplace supervisor).

Current KU graduate students wishing to enroll in the Graduate Certificate in Environmental Justice program must apply through Graduate Studies (https://gradapply.ku.edu/apply/) and submit the required fee. A student must be in good standing with their graduate degree program in order to participate in the certificate program. Awarding of certificates will be handled consistent with guidelines and timing of degree awards of the Office of Graduate Studies. Completion of the certificate will appear on the graduate transcript. KU graduate students should submit the following materials:

- A Statement of Interest in the environmental justice certificate program and its relationship to your graduate course of study.
- An unofficial copy of your KU transcript.
- A letter of support from your graduate degree program (your advisor or graduate director).

Please see the Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/) policy and the KU Edwards Campus page for additional information on admission.

Certificate students must complete 12 graduate credit hours.

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<td>or EVRN 650</td>
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<td>or EVRN 673</td>
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**Required Courses**

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<td>EVRN 730</td>
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<td>or EVRN 730</td>
<td>Geospatial Techniques</td>
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<td>or EVRN 743</td>
<td>Environmental Toxicology</td>
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<tr>
<td>or EVRN 750</td>
<td>Natural Hazards and Environmental Risks</td>
<td></td>
</tr>
<tr>
<td>or ISP 800</td>
<td>Environmental Quality Assessment</td>
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**Science and Technology (Choose one)**

- EVRN 620 | Environmental Politics and Policy         | 3     |
- or EVRN 628 | The Politics of Public Health            |       |
- or EVRN 700 | The Anthropocene: Interdisciplinary       |       |
| or EVRN 701 | Perspectives on Environmental Change      |       |
| or EVRN 737 | Water Resource Sustainability             |       |
| or ISP 800 | Indigenous Issues in the United States   |       |
| or PUAD 853 | Policy Analysis                         |       |

**Total Hours** 12

Elective courses may have prerequisites or other requirements. Students should consult with the graduate advisor of that department to assess whether they will be permitted to enroll in a particular class.

**Graduate Certificate in Environmental Studies**

The Graduate Certificate in Environmental Studies is designed to give students already admitted to a graduate program at KU Lawrence Campus the opportunity for interdisciplinary coursework in Environmental Studies, spanning the humanities, natural/physical sciences, and social sciences.

Thanks to the generous support of the late Ruben Zadigan, a limited number of scholarships are available for students enrolled in the certificate program. Applications for entering the certificate program are automatically reviewed for scholarship funding.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

The Graduate Certificate in Environmental Studies will not be accepting new applicants for the 2022-2023 Academic Year.
Prospective students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply/) for admission into the certificate program and submit an application fee along with the following materials:

To submit an application, proceed to https://gradapply.ku.edu/apply (https://gradapply.ku.edu/apply/) and search for the Graduate Certificate in Environmental Studies and submit required materials.

Applicants must include a cover letter to the Environmental Studies Graduate Director explaining their interest in the certificate and how interdisciplinary training in Environmental Studies helps meet individual goals in research and training.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Submit your graduate application online (http://www.grad.ku.edu/) and submit an application fee along with the following materials:

Lindley Hall
1475 Jayhawk Blvd., Room 215
Lawrence, KS 66045
785-864-8902
http://esp.ku.edu/

The Graduate Certificate in Environmental Studies is designed to give students already admitted to a graduate program at KU the opportunity for interdisciplinary coursework in Environmental Studies, spanning the humanities, natural/physical sciences, and social sciences.

Required coursework:

- EVRN 700 The Anthropocene: Interdisciplinary Perspectives on Environmental Change (3) Have human activities become so pervasive that we have initiated a unique human epoch of earth history? This introductory, interdisciplinary graduate seminar will explore this question while examining the ways that different disciplines approach the understanding of environmental change, its impact on natural and human systems, and how these understandings have changed over time.
- EVRN 915: Capstone (3)

Elective coursework

- Two graduate-level elective courses with at least 50% environmental content, approved by the student’s advisor and the Environmental Studies Graduate Director (6).

Scholarships

Thanks to the generous support of the late Ruben Zadigan, a limited number of scholarships are available for students enrolled in the certificate program. Applications for entering the certificate program are automatically reviewed for scholarship funding.

Department of French, Francophone, and Italian Studies

Why study French and/or Italian?

Speakers of French and Italian span five continents. French is spoken by over 220 million people. Italian is spoken by over 65 million people. By 2050, it is estimated that there will be over 750 million French speakers, 80% of whom will live in Africa, becoming the world’s most spoken language. French and Italian are the international languages of cooking, fashion, theater, the visual arts, dance and architecture. Thousands of US companies do business with Italy and the Francophone world. In an increasingly mobile and interconnected planet, the study of language, literature and culture has never been more crucial for our students’ success. It provides students with a competitive edge in an increasingly internationalized workplace; for example, four out of five new jobs in the US are created as a result of foreign trade. Above all, learning a second language enables a greater understanding of other cultures while enhancing your own.

Undergraduate French

The Department of French, Francophone, and Italian Studies offers a comprehensive undergraduate program in French language, literature, and culture, as well as Francophone literature and culture from around the world. In addition to first and second year courses in basics of grammar and conversation, advanced undergraduate courses in composition, literature, and culture are offered every semester. We offer a summer study abroad option in Paris, and a full semester study abroad program in Angers. Our summer and semester-long study abroad programs in Paris and Angers offer a wide variety of levels to students at all stages of linguistic competence. The major prepares students for a variety of careers in teaching or in graduate studies, as well as in fields such as interpreting, international business, art, art history, and travel. We encourage applicants from traditional and non-traditional backgrounds to investigate French as a major or as a minor field.

Undergraduate Italian

The Department of French, Francophone, and Italian Studies offers a comprehensive undergraduate program in Italian language, literature, and culture, leading to the BA in French with the Italian Option or the Minor in Italian. Italian offers courses in basic grammar, composition and conversation, literature and culture. Our summer study abroad program in Florence offers a wide variety of levels to students at all stages of linguistic competence. The major prepares students for a variety of careers in teaching or in graduate studies, as well as in fields such as interpreting, international business, art, art history, architecture, and travel. We encourage applicants from traditional and non-traditional backgrounds to enrich their time at KU through the study of Italian.

Graduate French

The Department of French, Francophone, and Italian Studies offers M.A. and Ph.D. degrees in French and Francophone language, literature, and culture. Graduate study is supported through teaching assistantships offered to qualified candidates, who receive thorough training in language instruction. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation.

Undergraduate Programs

Course work in the Department of French, Francophone, and Italian Studies gives undergraduates a valuable and useful linguistic tool; offers cultural training for students specializing in other fields; trains majors in the literature, culture, and civilization of France and Italy; and prepares prospective language teachers. The department欢迎 qualified students from all disciplines, regardless of major.

Placement

In general, placement depends on the overall proficiency of the student and on what was accomplished in previous French or Italian courses. A
student entering KU with no previous French should enroll in FREN 110. A student entering KU with no previous Italian should enroll in ITAL 107, ITAL 110, or ITAL 111.

Students with past course work/experience in French should take the online French placement examination (http://languages.ku.edu/placement-exams/) offered through the Ermal Garinger Academic Resource Center (http://egarc.ku.edu/) at KU. Once the student has the placement score, he or she should contact the French language coordinator in the Department of French, Francophone, and Italian Studies to determine which French course is appropriate for his or her level. A student who has four years of high school French and wants to continue the study of French beyond the language requirement generally enrolls in FREN 301 or FREN 326, depending on the placement examination results. Students who feel they are sufficiently prepared to test out of the language requirement may contact the department office to arrange to take a French proficiency test.

Any student with past course work or experience in Italian should consult the Italian program director in the Department of French, Francophone, and Italian Studies to determine which Italian course is appropriate for his or her level.

Retroactive Credit

Students with no prior college or university French or Italian course credit are eligible for retroactive credit according to this formula:

- 3 hours of retroactive credit are awarded to a student with 2 or 3 years of high school French or Italian who enrolls initially at KU in a third-semester French or Italian course (FREN 230 or FREN 231 or ITAL 230) and receives a grade of C– or higher.
- 6 hours of retroactive credit are awarded to a student with 3 or 4 years of high school French or Italian who enrolls initially at KU in a fourth-semester French or Italian course (FREN 240 or FREN 241 or ITAL 240) and receives a grade of C– or higher.
- 9 hours of retroactive credit are awarded to a student with 4 years of high school French or Italian who enrolls initially at KU in a French or Italian course with a fourth-semester course as a prerequisite and receives a grade of C– or higher.

Courses for Nonmajors

All courses are open to nonmajors who meet requirements. Candidates for the B.S. degree in education who want to major or minor in French (p. 222) should consult the School of Education and Human Sciences. Special concentrations in French and Italian are also available through business and journalism.

Graduate Program in French

The Department of French, Francophone, and Italian Studies offers a comprehensive graduate program (M.A. and Ph.D.) in French and Francophone language, literature, and culture. Our faculty (http://frenchitalian.ku.edu/faculty-0/) is dynamic, professionally active, and committed to excellence in scholarship and teaching. The major emphasis of teaching and research is French and Francophone literature. The department also offers courses in literary theory, cultural studies, and film. The department offers a balanced emphasis on all periods from medieval through twentieth and twenty-first centuries. Our students represent a diverse group, and we encourage equally applicants from traditional and nontraditional backgrounds. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation. Please visit the Graduate Program page (https://frenchitalian.ku.edu/overview-phd/) of the department website for additional information.

Departmental Funding

The department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and .50 full-time equivalent (FTE) appointments come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs receive thorough training in language instruction, close mentoring, and the opportunity to teach French at a variety of levels, forming a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Funding page (https://frenchitaliandev.drupal.ku.edu/funding-opportunities/) of our departmental website.

Additional Funding

Other funding opportunities for graduate students include the Office of Study Abroad’s Springer award; the department’s Cornell, Mahieu, and Magerus fellowships; awards for research abroad; and French university exchanges.

Visit the Graduate Studies website for additional information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

Graduate Non-Degree Seeking Status

Students who are interested in enrolling in graduate-level coursework in the Department of French, Francophone, and Italian Studies without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s webpage (http://frenchitalian.ku.edu/nds-overview/) for further details.

Courses

FREN 104. Elementary French, Overseas. 1-5 Credits. U
Basic language instruction in French for beginners participating in study abroad programs in France or a French-speaking country. Graded on a satisfactory/unsatisfactory basis.

FREN 107. Elementary French I for the Professional Schools. 3 Credits.
Essentials of French grammar; practice in speaking, reading, and writing French. Introduction to French business culture. Three hours of class per week. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement.

FREN 110. Elementary French I. 5 Credits. U F1
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing.

FREN 111. Introduction to French I. 3 Credits. U
Introduction to French for special purposes; no previous French required. Provides basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Introduction to the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: Instructor permission required.

FREN 112. Introduction to French II. 3 Credits. U
Continuation of FREN 111. Further development of basic familiarity with the French language, focusing on speaking, listening, reading and the essentials of French grammar. Continued exploration of the culture of the French-speaking world. Three class hours per week; may be delivered by videoconference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: FREN 111 or permission of instructor.

FREN 120. Elementary French II. 5 Credits. U F2
Five hours of class per week. A balanced approach stressing understanding, speaking, reading, and writing. Prerequisite: FREN 110 or by departmental permission.

FREN 130. Critical Issues in Contemporary France. 3 Credits.
France is a society in transition. Profoundly altered by World Wars and the aftermath of a colonial past, French culture has been propelled, in the last century, into the complexities of a modern, globalized world. While we have faced many similar challenges in United States to those confronted by our French counterparts, this course will help us think through the often drastically different outcomes of our respective approaches to such questions as immigration, national identity, education, and the perennial struggle between state and individual rights. This course is offered completely in English. It does not satisfy any requirements of the French major or minor.

FREN 150. Zombies, Aliens, Monsters. 3 Credits.
A comprehensive, interdisciplinary survey of the treatment of the Other in Western culture, predominantly the USA, UK, France, and Australia, that may include vampires, zombies, fairy tales, villains and anti-heroes, the macabre, alien encounters, dystopias and utopias, and deviancy, with particular attention to literature, film and TV, and thought. Taught in English. Does not fulfill any requirement in the French major or minor.

FREN 152. France and the French. 3 Credits. HL H
A comprehensive, interdisciplinary survey of French culture that may include topics ranging from the earliest times to the present, with particular attention to literature, the arts, thought, politics, society, food, and customs. Taught in English. Does not fulfill any requirement in the French major or minor.

FREN 153. Global Cultures: The French Connection. 3 Credits. H/W
A comprehensive, interdisciplinary and critical survey of the French-speaking cultures outside France in North America, the Caribbean, Africa, the Middle East, and Southeast Asia. Will include a variety of cultural topics, with particular attention to, and critique of, French colonization, the effects of empire on indigenous cultures, and postcolonial interactions today between France and its former colonies and protectorates. Taught in English. Does not fulfill any requirement in the French major or minor.

FREN 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in French. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

FREN 205. French Literature in Translation: ______. 3 Credits. HL H
Readings and discussions of representative great masterpieces of French and/or francophone literature from the medieval Arthurian romances and chansons de geste to the present, with particular emphasis on the question of the interrelations of form and content. Includes such authors as Rabelais, Montaigne, Racine, Moliere, Voltaire, Balzac, Flaubert, Baudelaire, Proust, Gide, Camus, and Beckett. Conducted in English. A reading knowledge of French is extremely useful but not a requirement.

FREN 230. Intermediate French I. 3 Credits. U F3
Third-semester course stressing oral and written work in French; systematic review of grammar and introduction to reading in cultural texts. (See also FREN 231, FREN 234.) Prerequisite: FREN 120 or by departmental permission.

FREN 231. Intermediate French I, Honors. 3 Credits. U F3
Similar in approach and content to FREN 230; smaller class size; open to students who had done very good to excellent work in previous French classes. Prerequisite: Grade of B or A in FREN 120 or departmental permission.

FREN 234. Intermediate French I and II. 6 Credits. U F4
One-semester course meeting five times a week for six hours credit. Material same as in FREN 230 and FREN 240. (FREN 234, FREN 240, FREN 241--each completes foreign language requirement.) Prerequisite: FREN 120 or by departmental permission.

FREN 240. Intermediate French II. 3 Credits. U F4
Continuation of FREN 230. (FREN 234, FREN 240, FREN 241--each completes foreign language requirement.) (See also FREN 241.) Prerequisite: FREN 230, FREN 231, or by departmental permission.

FREN 241. Intermediate French II, Honors. 3 Credits. U F4
Similar in approach and content to FREN 240; smaller class size; open to students who have done very good to excellent work in previous French classes. Prerequisite: A grade of A in FREN 230 or FREN 231, or departmental permission.

FREN 285. Headless Men: Conquest and Cultural Exchange Before the Age of Exploration. 3 Credits. HL H
In fourteen hundred and ninety-two, Columbus sailed the ocean blue. But what happened before Columbus' great journey? And, more to the point, why did he and his contemporaries feel entitled to simply claim whatever land they found? This course proposes to explore the medieval experiences of cultural and racial Otherness in order to better understand the roots of some of the assumptions about difference (interpersonal, intercultural, and international) that continue to play out in American society today. Taught in English. (Same as HIST 285.)

FREN 301. French Written and Oral Communication 1. 3 Credits. H/ W FP
Designed to prepare students for oral and written work in advanced-level French. Prerequisite: FREN 234, or FREN 240, or FREN 241, or by departmental permission.

FREN 302. French Written and Oral Communication 2. 3 Credits. H/ W FP
Designed to further students' proficiency in oral and written expression for work in advanced-level French. Prerequisite: FREN 301, or by departmental permission.

FREN 310. French Phonetics. 3 Credits. H/W FP
A course in practical phonetics with exercises stressing rhythm, intonation, and individual sounds. Prerequisite: FREN 240, FREN 241, or by departmental permission.

FREN 315. Le Francais Pratique. 1-6 Credits. H/W FP
Supplementary non-major language course that can be a sequel to the first four semesters of French. Primarily for students studying abroad.
Covers vocabulary study, oral exercises, discussion of texts, writing, and free conversation. Prerequisite: FREN 230/231 or FREN 234, FREN 240/241.

FREN 326. Introduction to French Literature. 3 Credits. HL H FP
Analysis of selected texts from various genres; special emphasis on explication de texte. Prerequisite: FREN 301.

FREN 330. French Language and Civilization I. 3 Credits. H FP
A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad programs.

FREN 334. Cities of the French-Speaking World. 3 Credits. H/W
The course will focus on one major city, or on a group of major cities, former French or Belgian colonies, where French language and Franco-European cultures are still major elements. Emphasis will be on how today's citizens live the cities in their great diversity; how the colonial and decolonial past of each city has affected it; how these cities' responses to globalization are represented through culture and cultural works. Texts, novels, films, print and electronic documents, and other course materials will be used to paint the daily lives, cultural values and challenges of contemporary Francophone global urban communities. Prerequisite: FREN 301, FREN 302, and FREN 326.

FREN 340. French Language and Civilization II. 3 Credits. H FP
A study of French grammar, conversation, and composition, with selected aspects of French civilization. Available to participants in the Summer Language Institutes, and selected Study Abroad Programs.

FREN 350. Applied French Grammar and Composition I. 3 Credits. H/W FP
Systematic grammar review with extensive practice in writing French. Prerequisite: FREN 301 or FREN 326.

FREN 352. French for Journalism and Business. 3 Credits. H/W FP
Practical acquisition of skills necessary to understand the language of journalism and business. Prerequisite: FREN 301.

FREN 375. Intermediate French Conversation. 3 Credits. H/W FP
Three meetings per week. Guided discussions designed to increase fluency, improve pronunciation, and acquire vocabulary. Sections limited to twelve students. Prerequisite: FREN 301 or concurrent enrollment in FREN 301.

FREN 376. Advanced French Conversation. 3 Credits. H/W FP
Three meetings per week. Guided discussions designed to increase fluency, improve pronunciation, and knowledge of French culture and language. Classes have centered around topics such as the French Revolution, the Arts, Renaissance Festivals, and French cinema. Sections limited to twelve students. May be designated a KULAC class at the discretion of the instructor. Prerequisite: FREN 375.

FREN 380. The Middle Ages in the Modern Imagination. 3 Credits. H
Presents authentic French and non-French medieval literary and cultural content in the context of reflection on its role in modern popular culture. Themes may include Joan of Arc, Arthurian legend, the Chronicles of Narnia, Game of Thrones, and troubadour lyric. Taught in English.

FREN 401. Paris, City of Lights and Legends. 3 Credits. HL H
An exploration of the French capital from its origins to present as emblem and icon of the social, literary, cultural, and political development of the French nation and of French ideals. Topics include great persons, events, works, symbols, and myths since the founding of the city to the present. Taught in English. Does not fulfill any requirement in the French major or minor.

FREN 410. Survey of French Culture I. 3 Credits. H/W FP
A survey of the historical, philosophical, literary, and artistic development of France, from the beginning through the 17th century. Prerequisite: FREN 301 and FREN 326.

FREN 420. Survey of French Culture II. 3 Credits. H/W FP
Continuation of FREN 410, from the 18th century to the present. Prerequisite: FREN 301 and FREN 326.

FREN 430. La France d'Aujourd'Hui. 3 Credits. H/W FP
Social, political, and economic trends from 1939 to present, with emphasis on period since 1968. Prerequisite: FREN 301 and FREN 326.

FREN 431. French-Speaking World (Outside France). 3 Credits. H/W
Cultures of the some 235 million persons in the five world areas whose everyday and/or official language is French: Canada; Caribbean (e.g., Haiti, Guadeloupe, Martinique); Europe (e.g., Belgium, Switzerland); Africa and Indian Ocean (23 former French or Belgian colonies); Pacific (e.g., Tahiti, New Caledonia). Also French-speaking settlers in the United States (Louisiana, South Carolina, New England, Kansas). French presence in Indo-China and the Near East. Prerequisite: FREN 301 and FREN 326. (May be taken concurrently with FREN 301 and/or FREN 326.)

FREN 432. Francophone African Literature. 3 Credits. NW H/W
This course is an introduction of 20th Century African literature written in French, covering selected works by major authors from both sub-Saharan Africa and the Maghreb. Attention will be given primarily to the novel, although some poetry will also be read. Topics and themes include negravité, African identity in the wake of colonialism, Islam, and women's writing. Classes will be conducted in English. Students may read the texts in French or in translation. (Same as AAAS 432.) Prerequisite: ENGL 102 and a 200-level English course.

FREN 433. French Global Culture Through Film. 3 Credits. H/W
Discussion of great masterpieces of modern postcolonial Francophone and French global film, with a particular emphasis on how film portrays and conveys important aspects of the cultures of former French colonies and peoples in Quebec, the Caribbean, Africa, and Southeast Asia during and since independence, including immigrant populations in mainland France itself today. The works of a variety of French and indigenous filmmakers and cultures will be covered. Prerequisite: FREN 301, FREN 302, and FREN 326.

FREN 440. Studies in French Culture: ____. 3 Credits. H/W FP
Representative topics are: History of Paris, Role of Women in French Literature and Culture, Interrelationships of the Arts, French-speaking African Culture, Culture of French Canada. May be repeated for credit with departmental permission; may also be repeated as part of major in French language and culture. Prerequisite: FREN 301 and FREN 326.

FREN 441. The Story of French. 3 Credits. H/W
This course provides an overview of the historical development of the French language and an introduction to different varieties of French, as well as some current language-related issues in the French-speaking world. The history of the French language is considered both from an external perspective, by examining important historical events in the language's history, and from an internal perspective, by looking at specific ways the language has changed over time. Variation is examined: how French differs geographically (i.e. dialects and regional varieties in France and in the French-speaking world), socially (i.e. how social groups such as socioeconomic class or sex are reflected in language use), and situationally (i.e. language modification depending on formality, context, etc.). Will include comparisons of spoken versus written French, slang, and le français populaire, as well as current issues, e.g., les néologismes
FREN 443. French Inside Out. 3 Credits. H/W
This course provides an introduction to the structure of modern French and the various subfields of French linguistics. Topics will include major aspects of phonetics/phonology (the sounds/sound system), morphology (word formation), syntax (sentence structure), semantics, pragmatics (language use) and sociolinguistic variation (social, stylistic, geographical), as well as language attitudes and policies in France and other Francophone regions. Students will be introduced to different theoretical approaches to the study of French linguistics and will work on linguistic analyses of first- and second-language data. Taught in French and no prior study of linguistics is necessary to take this course. Prerequisite: FREN 301.

FREN 450. French Literature of the Middle Ages. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and FREN 326.

FREN 455. French Literature of the Renaissance. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and FREN 326.

FREN 460. Identity, Absolutism, and Power in France, 1589-1715. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and 326.

FREN 462. French Literature of the Eighteenth Century. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and 326.

FREN 465. French Literature of the 19th Century. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and FREN 326.

FREN 470. French Literature of the Twentieth Century. 3 Credits. H/W FP
Study of the principal authors, movements, and themes of the period. Prerequisite: FREN 301 and FREN 326.

FREN 471. Transcending Borders: Migrations, Identities, Voices, Narrative. 3 Credits. H/W
Study the themes of borders, migrations, and search for individual and collective identity and voice which define modern French and French-speaking cultures in continental France and around the globe. Authors, cultural movements and themes of the period, with an emphasis on twentieth- and twenty-first centuries. Introduce the student to the principal elements of the cultural, intellectual and artistic climate of the time, including literature, film, and other cultural documents and artefacts, print and electronic, visual and aural. May be taught in French or English. Prerequisite: FREN 301, FREN 302, and FREN 326.

FREN 480. Studies in French Literature: ______. 3 Credits. H/W FP
A study of a period, theme, group of authors, or movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: FREN 301 and FREN 326.

FREN 481. Science-Fiction and Fantasy in French. 3 Credits. H
Study of the key works in different media in French dealing with the theme and traces the development of science-fiction and fantasy from its beginnings to the present day. Prerequisite: FREN 326.

FREN 494. Research Internship. 1-3 Credits. H
Practical research experience in French and Francophone studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. May be used as a component of the Research Experience Program (REP). Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level French course and permission of instructor.

FREN 495. Directed Readings in French. 1-15 Credits. U FP
May be taken more than once, total credit not to exceed fifteen hours. Fields not covered by course work, and/or field of student's special interest. Conferences. Counts as humanities when taken for two or three hours. Prerequisite: Twenty-five hours of French and consent of instructor.

FREN 496. Internship. 1-3 Credits. H
Practical experience in the use of French skills in supervised academic, professional, or study-abroad setting. Credit hours are graded according to the written evaluation provided by the supervisor to the director. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level French course and permission of instructor.

FREN 499. Honors in French. 3 Credits. H/W FP
Various topics in French or Francophone literature, language, culture, or film. May be repeated for credit, total credit not to exceed six hours. Six hours of FREN 499 required for B.A. with Honors in French. Before enrolling, the student must obtain the approval of the faculty member who will direct the Honors project.

FREN 500. Advanced French Phonetics. 3 Credits. H/W FP
Advanced theory and practice of French pronunciation. Not open to students who have taken FREN 310, except by departmental permission. Prerequisite: FREN 301 or FREN 326 or graduate standing.

FREN 530. Studies in Film: ______. 3 Credits. H/W FP
Studies in an aspect of film, a director or group of directors. Emphasis on French film. Given in French or English.

FREN 550. Capstone Seminar in French and Francophone Language, Literature, and Culture. 3 Credits. H/W
Small discussion groups, each designed to consider a specific, clearly defined topic, using an interdisciplinary approach and requiring the demonstration of a comprehensive knowledge of the fundamentals in the field as appropriate to the topic. Class discussion based on student presentation. A final comprehensive project required. All discussion and coursework will be in French. Prerequisite: Senior majors; special department permission for other students.

FREN 592. French Culture Through Film I, Beginnings to 1950. 3 Credits. H/W FP
A survey of the major public images of French culture as surveyed in French silent and sound film from the early 1900s through World War II and its immediate aftermath. Students will view and discuss a selection of films that address crucial aspects of French culture such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, social classes, moral choice, and individual freedoms. The course will include discussion of the cultural and artistic significance of major French film movements like Poetic Realism. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1900-1950. May be taught in French or English. For students who already have some knowledge of French culture.

FREN 593. French Culture Through Film II, 1950-Present. 3 Credits. H/W FP
A survey of the major public images of French culture as surveyed in French silent and sound film from 1950 to present. Students will view and discuss a selection of films that address crucial aspects of French culture...
such as (but not limited to) gender, war and peace, daily life, art and artists, tradition and revolution, city life versus country life, colonialism and post-colonialism, social classes, moral choice, and individual freedoms.

The course will include discussion of the cultural and artistic significance of major French film movements like the New Wave. In addition to viewing and discussing films, students will read and analyze the writings of a number of French intellectuals, writers, and artists who have had a major influence on French culture as it appears in films from 1950-present. May be taught in French or English. For students who already have some knowledge of French culture.

FREN 600. Studies in: ______. 3 Credits. H/W FP

Topics vary by semester. May be repeated for credit. Prerequisite: Departmental permission.

FREN 601. French for Reading Knowledge. 3 Credits.

Special course for candidates for advanced degrees in other departments. Fundamentals of grammar and reading of material of medium difficulty. Intended primarily for graduate students, but open also to seniors planning graduate study. Does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of French. Conducted in English. Prerequisite: Graduate status or instructor permission.

FREN 610. Theme et Version. 3 Credits. H/W FP

Exercises in English-French and French-English translation, designed to enable the student to write with greater clarity and precision in both languages.

FREN 620. Expository French Writing. 3 Credits. H/W FP

Intensive practice in writing French, designed to clarify fine points of grammar and usage and to aid the student in developing an accurate and graceful prose style.

FREN 700. Old French. 3 Credits.

Introduction to grammar and structure through the reading of representative works.

FREN 701. History of the French Language. 3 Credits.

Major aspects of development and growth. Conducted in English.

FREN 703. Structure of Modern French. 3 Credits.

Linguistic analysis of the phonological, morphological, and syntactic structure of modern French. Description in terms of current theories and models. Application of linguistic analyses to the teaching of French.

FREN 704. Methods in Foreign Language Instruction. 3 Credits.

This course provides an overview of current and historical approaches to foreign language teaching. Past and current trends and methodologies of language instruction are examined in order to acquaint students with various approaches. Research findings in second language acquisition are explored and their implications discussed so as to show how these findings lead to more effective classroom practices.

FREN 720. Introduction to Graduate Studies in French. 3 Credits.

This course is an introduction to the skills required of students doing graduate degrees in French; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers.

FREN 730. Introduction to French Poetry. 3 Credits.

A detailed introduction to versification, rhetoric, image and symbol as they apply to the study of poetry. Texts will be chosen from one or more periods of French literature and will include poems in verse and prose.

Considerations and readings on the history of French poetry, on the composition of recuets, on poetic theory, and on the relation of poetry to other genres and media may be incorporated.

FREN 732. Francophone Studies. 3 Credits.

Selected movements, themes, genres, topics in the cultures and/or literatures of the French-speaking world outside France. May be repeated for credit.

FREN 785. French Romantic Movement. 3 Credits.

Major Romantic writers viewed in context of intellectual, esthetic, and social milieu of period 1800-1850.

FREN 790. Contemporary French Writers. 3 Credits.

Major 20th century authors, stressing Proust, Gide, Giraudoux, Claudel, Sartre, and Camus.

FREN 795. Investigation and Conference. 1-3 Credits.

Readings and research projects in French language, literature, and culture for students at the MA level. Directed work to fulfill needs not met by available courses. One-three hours credit in any semester. Maximum credit for MA: Three hours. By special departmental permission only.

FREN 799. Masters Seminar. 1 Credits.

To meet Masters degree requirement for continual enrollment. Graded on a satisfactory/unsatisfactory basis.

FREN 800. Studies in: ______. 3 Credits.

Study of topics not limited to one century. May be repeated for credit.

FREN 810. Criticism and Critical Methods. 3 Credits.

Literary criticism from historical, theoretical, and practical point of view.


Selected topics to be specified. Study of form, movements, or themes in the French Novel, not limited to one century. May be repeated for credit.

FREN 814. Studies in the French Short Story: ______. 3 Credits.

Selected topics to be specified. Study of form and theory of the French short story, not limited to one century.

FREN 842. Arthurian Literature in France. 3 Credits.

Origins and development of Arthurian legend; analysis of major texts. Prerequisite: FREN 700.

FREN 848. Studies in Medieval French Literature: ______. 3 Credits.

Various movements, themes, or genres. May be repeated for credit. Prerequisite: FREN 700.

FREN 858. Studies in Sixteenth Century French Literature: ______. 3 Credits.

Various movements, themes, or genres. May be repeated for credit.


Various movements, themes, or genres. May be repeated for credit.

FREN 878. Studies in Eighteenth Century French Literature: ______. 3 Credits.

Various movements, themes, or genres. May be repeated for credit.

FREN 888. Studies in Nineteenth Century French Literature: ______. 3 Credits.

Various movements, themes, or genres. May be repeated for credit.

FREN 898. Studies in Twentieth Century French Literature: ______. 3 Credits.

Various movements, themes, or genres. May be repeated for credit.

FREN 899. M.A. Thesis. 1-6 Credits.

FREN 900. Seminar in French: ______. 3 Credits.
Topics in literary, linguistic, and cultural research. May be repeated for credit.

FREN 995. Investigation and Conference. 1-3 Credits.
Readings and research projects in French language, literature, and culture for PhD students. Directed work to fulfill needs not met by available courses. One-three hour credit in any semester. Prerequisite: By Special Departmental Permission only.

FREN 999. Ph.D. Dissertation. 1-12 Credits.

Courses
ITAL 101. Studying Abroad: Italy at a Glance. 1 Credits. W
Online one-credit course which aims to prepare students for the study abroad experience in Italy. The course is taught in English and has no prerequisites. Students will improve their knowledge of Italy and gain a better understanding of the environment that they will find abroad. The course includes an overview of Italian habits and practices, a cross-cultural analysis of differences between Italy and the U.S., and an introduction to essential Italian vocabulary for daily usage while studying abroad. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Instructor permission.

ITAL 103. Elementary Italian Language and Civilization. 3 Credits. H
A systematic review of the fundamentals of Italian grammar through practice in conversation and writing, with an introduction to Italian culture. Available only to participants in study abroad programs. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. No prerequisite.

ITAL 107. Elementary Italian Conversation I. 3 Credits. U
First part of a two-course sequence (with 108) for students with no previous study of a foreign language and minimal linguistic background as well as for students in professional schools who plan to participate in study abroad programs in Italy. Offers knowledge of essential grammar and basic oral communication skills through practice in grammar, listening comprehension, and conversation. Active participation required. Completion of both ITAL 107 and ITAL 108 is equivalent to ITAL 110 and allows students to enroll in ITAL 120.

ITAL 108. Elementary Italian Conversation II. 3 Credits. U
A continuation of ITAL 107, second part of a two-course sequence for students with no previous study of a foreign language and minimal linguistic background as well as for students in professional schools who plan to participate in study abroad programs in Italy. Offers knowledge of essential grammar and basic oral communication skills through practice in grammar, listening comprehension, and conversation. Active participation required. Completion of both ITAL 107 and ITAL 108 is equivalent to ITAL 110 and allows students to enroll in ITAL 120. Prerequisite: ITAL 107 or Italian Coordinator's approval.

ITAL 110. Elementary Italian I. 5 Credits. U F1
Introduction to Italian language and culture. Essentials of grammar and practice in speaking, understanding, reading, and writing. Active participation required. Five hours of class per week.

ITAL 111. Accelerated Elementary Italian I. 3 Credits. U F1
This accelerated course covers the same content as ITAL 110 in three hours rather than five and prepares students to move on to ITAL 120 or ITAL 121. Students engage in activities and assignments that help them develop listening, speaking, reading and writing skills. Designed for students who have previous experience studying another foreign language or for those who desire to work at a faster pace. Active participation required.

ITAL 120. Elementary Italian II. 5 Credits. U F2
Five hours of class. Reading of simple texts; diction; speaking; elementary composition. Prerequisite: ITAL 110.

ITAL 121. Accelerated Elementary Italian II. 3 Credits. U F2
This accelerated course covers the same content as ITAL 120 in three hours rather than five and prepares students to move on to ITAL 230. Students engage in activities and assignments that help them develop and reinforce listening, speaking, reading and writing skills. Designed for students who completed ITAL 111 or who excelled in ITAL 110. Active participation required.

ITAL 152. Studies in Italian Heritage. 3 Credits. H
A comprehensive, interdisciplinary survey of the ways in which the historical culture of Italy can be found in Lawrence, KS. Emphasis is on politics, sciences, philosophy, media, and immigration. Uses materials from various KU collections. Taught in English. Does not fulfill any requirement in the Italian major or minor.

ITAL 177. First Year Seminar: _______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Italian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ITAL 203. Intermediate Italian Language and Civilization. 3 Credits. H
A systematic review of Italian grammar through practice in conversation and composition, with an introduction to Italian culture. Available only to participants in study abroad programs. This course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Prerequisite: ITAL 120.

ITAL 230. Intermediate Italian I. 3 Credits. U F3
Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 120 or ITAL 156.

ITAL 240. Intermediate Italian II. 3 Credits. U F4
Continuation of ITAL 230. (ITAL 240 completes foreign language requirement.) Review and expansion of grammatical structures introduced in Elementary Italian I and II, with continued practice in speaking, understanding, reading, and writing, coordinated with the study of cultural texts. Active participation required. Prerequisite: ITAL 230.

ITAL 300. Composition and Conversation. 3 Credits. H/W FP
Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 240 or permission of instructor.

ITAL 301. Introduction to Italian Literature and Textual Analysis. 3 Credits. H/W FP
Readings, textual analysis, and writing on a broad selection of Italian texts from different genres and periods, ranging from the medieval origins to contemporary literary culture. This course develops cultural and critical literacy as well as oral and written proficiency, and is a gateway to upper-division courses in the major and minor. Emphasis on study of Italian literature in its cultural context, history, politics, and society. Prerequisite: ITAL 240 or reading knowledge of Italian.

ITAL 303. Italian Language and Civilization I. 3 Credits. U FP
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the
KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 240.

ITAL 304. Italian Language and Civilization II. 3 Credits. U/F
An advanced study of Italian grammar, conversation, composition, with selected aspects of Italian civilization. Available only to participants in the KU summer language institute or semester abroad program in Florence or Rome. Prerequisite: ITAL 303.

ITAL 315. Advanced Composition and Conversation. 3 Credits. H/W FP
Continuation of ITAL 300. Study of advanced grammatical structures with extensive practice in writing and conversation. Guided discussions on a variety of contemporary Italian literary, journalistic, and cinematic works. Active participation required. Prerequisite: ITAL 300 or permission of instructor.

ITAL 330. Cinematic Rome. 3 Credits. H
A study of cinematic representations of daily life, diversity, urban landscape, and social and political issues in modern and contemporary Rome as presented in different genres. Taught in English. (Same as FMS 330.)

ITAL 331. Mafia Movies. 3 Credits. H
This course investigates representations of the Italian mafia in Italian and American cinema since the 1960s, placing emphasis on conventions of the gangster genre and its evolution. We will examine films in relation to their socio-historical contexts and special attention will be dedicated to Italian films that glamorize the Italian mafia and champion the anti-mafia struggle. Taught in English. (Same as FMS 331.)

ITAL 336. Italy and the Italians. 3 Credits. H
Survey of Italian culture with study of art and architecture, literary masterpieces in translation, science, culinary arts, and cinema. Lecture, discussion, and supportive readings. Not open to native speakers of Italian.

ITAL 340. Studies in Italian Culture: _____ 3 Credits. H
A study of particular aspects of and/or periods in Italian culture. May be repeated for credit with departmental permission. Prerequisite: ITAL 240 or permission of instructor.

ITAL 405. Italian Literature in Translation: _____ 3 Credits. H/W
Major works representing various movements, themes, or genres. May be repeated with departmental permission. All work done in English.

ITAL 410. 19th and 20th Century Short Stories. 3 Credits. H/W FP
A survey of representative short stories of the 19th and 20th Centuries, including Verga, Panzini, Pirandello, Guareschi, Moravia, Calvino, Landolfi, and Bigiaretti. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor.

ITAL 420. 19th and 20th Century Poetry. 3 Credits. H/W FP
A survey of 19th and 20th century poets and their works, including Leopardi, Pascoli, d'Annunzio, Govoni, Palazzeschi, Gozzano, Marinetti, Bocchioni, Ungaretti, Montale, Quasimodo, and Pasolini. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor.

ITAL 440. Italian Renaissance and Early Modern Literature. 3 Credits. H/W FP
Detailed study of selected masterpieces of the Italian Renaissance from the 13th to the 18th centuries. Prerequisite: ITAL 300 or demonstrated knowledge of Italian.

ITAL 450. Studies in Italian Cinema. 3 Credits. H/W
A study of significant moments in Italian film history, including analysis of themes, genres, stylistics, directors, and film culture. May be repeated for credit with departmental permission. Prerequisite: ITAL 336 or ITAL 340 or permission of instructor.

ITAL 465. 19th and 20th Century Novels I. 3 Credits. H/W FP
With Italian 466, a survey of representative 19th and 20th century novels including those of Manzoni, Pirandello, Svevo, Deledda, Vittorini, Moravia, Pavese, Pratolini, Buzzati, Ginzburg, and Calvino. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor.

ITAL 466. 19th and 20th Century Novels II. 3 Credits. H/W FP
See ITAL 465. Prerequisite: ITAL 240 or reading knowledge of Italian or permission of instructor.

ITAL 480. Studies in Italian Literature: _____ 3 Credits. F
A study of a period, theme, group of authors, or cultural movement. Subject matter will vary; may be taken more than once if subject differs. Prerequisite: ITAL 300 or demonstrated knowledge of Italian.

ITAL 495. Directed Readings in Italian. 1-3 Credits. U/F
May be taken more than once, total credit not to exceed nine hours. Various fields of Italian literature. Prerequisite: Consent of instructor, given only to those having demonstrated ease in reading Italian.

ITAL 499. Honors in Italian. 3 Credits. H/F
Various topics in Italian literature or culture. Minimum of three hours of Italian 499 required for a B.A. with Honors in the Italian option of the French degree. Students must discuss Honors eligibility and their topic with a faculty member before enrolling. Honors paper must be written in Italian.

ITAL 502. Dante's Divine Comedy I. 3 Credits. H/W FP
Detailed study of Dante's masterpiece. Attention will also be given to such matters as the development of the Italian language at Dante's period and the relation of the Comedy to Dante's other works. Prerequisite: Reading knowledge of Italian.

ITAL 503. Dante's Divine Comedy II. 3 Credits. H/W
Continuation of ITAL 502. Prerequisite: Completion of ITAL 502.

ITAL 601. Italian for Reading Knowledge. 3 Credits.
Special course for candidates for advanced degrees. Fundamentals of grammar and reading of material of medium difficulty. Open to graduate students and to seniors planning graduate study. Does not satisfy any part of the undergraduate language requirement. Presupposes no previous study of Italian. Conducted in English. Prerequisite: Graduate status or instructor permission.

ITAL 695. Graduate Directed Readings in Italian. 1-3 Credits. U/F
May be taken more than once, total credit not to exceed nine hours. Directed readings, conferences with instructor. Prerequisite: ITAL 495 or consent of instructor.

Bachelor of Arts in French, Francophone and Italian Studies

Why study French and/or Italian?

Speakers of French and Italian span five continents. French is spoken by over 220 million people. Italian is spoken by over 65 million people. By 2050, it is estimated that there will be over 750 million French speakers, 80% of whom will live in Africa, becoming the world’s most spoken language. French and Italian are the international languages of cooking, fashion, theater, the visual arts, dance and architecture. Thousands of US companies do business with Italy and the Francophone world. In an increasingly mobile and interconnected planet, the study of language, literature and culture has never been more crucial for our students’
success. It provides students with a competitive edge in an increasingly internationalized workplace; for example, four out of five new jobs in the US are created as a result of foreign trade. Above all, learning a second language enables a greater understanding of other cultures while enhancing your own.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**French and Italian Programs**

The department offers the major in **French**, an option in **Italian**, and an option in **French and Italian studies**. Prospective majors should consult the department during or before the second semester of the sophomore year.

Students pursuing a major in French or an option in Italian are encouraged to take courses in European studies, European history, art history, and philosophy, as well as English and foreign languages, literatures, and linguistics. Students often combine a major in French or the option in Italian with majors in business, humanities, journalism, the sciences, premedicine, or prelaw.

Language majors are useful in a variety of careers. The study of languages, literatures, and cultures enhances personal growth and broadens professional horizons, allowing fuller participation in an increasingly global community.

**First- and Second-Year Preparation**

The normal course progression for first- and second-year students considering a major in French is FREN 110, FREN 120, FREN 230, and FREN 240. FREN 230 and FREN 240 may be replaced by FREN 234. Eligible students are encouraged to enroll in honors sections of third-semester French (FREN 231) and fourth-semester French (FREN 241). FREN 301 is the prerequisite for all other 300-level courses. FREN 326 is the prerequisite for all 400-level courses. The normal course progression for first- and second-year students considering the option in Italian is ITAL 110, ITAL 120, ITAL 230, and ITAL 240.

Eligible students are encouraged to enroll in intensive sections of first-semester Italian (ITAL 155) and second-semester Italian (ITAL 156).

**Requirements for the B.A. Major**

**French Option**

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td><strong>Fourth Semester Proficiency</strong></td>
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<tr>
<td>Majors must complete courses to gain fourth semester language proficiency. These hours do not contribute to the minimum number of hours required for the major.</td>
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<tr>
<td>Fourth Semester Proficiency. Satisfied by:</td>
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<tr>
<td>FREN 240</td>
<td>Intermediate French II</td>
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<tr>
<td>or FREN 241</td>
<td>Intermediate French II, Honors</td>
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<tr>
<td>or FREN 234</td>
<td>Intermediate French I and II</td>
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<tr>
<td><strong>French Core Knowledge and Skills</strong></td>
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<tr>
<td>Majors choosing this option must complete the following four courses</td>
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<tr>
<td>FREN 301</td>
<td>French Written and Oral Communication 1</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 302</td>
<td>French Written and Oral Communication 2</td>
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<tr>
<td>FREN 310</td>
<td>French Phonetics</td>
<td>3</td>
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<tr>
<td>or FREN 500</td>
<td>Advanced French Phonetics</td>
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<tr>
<td>FREN 326</td>
<td>Introduction to French Literature</td>
<td>3</td>
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<tr>
<td><strong>Code</strong></td>
<td><strong>Title</strong></td>
<td><strong>Hours</strong></td>
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<tr>
<td><strong>French Electives</strong></td>
<td>15</td>
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<tr>
<td>Complete a total of five courses from the two tracks (to include at least two courses from each category). Four of these five courses must be at the 400-level and above. Study-abroad transfer credit for FREN 375 and FREN 376 will count as one 400-level requirement out of the four required 400-level or above courses.</td>
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**I. Language, Culture, and Film**

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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>FREN 350</td>
<td>Applied French Grammar and Composition I</td>
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<tr>
<td>or FREN 352</td>
<td>French for Journalism and Business</td>
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<tr>
<td>FREN 375</td>
<td>Intermediate French Conversation</td>
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<tr>
<td>FREN 376</td>
<td>Advanced French Conversation</td>
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<tr>
<td>FREN 401</td>
<td>Paris, City of Lights and Legends</td>
<td></td>
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<tr>
<td>FREN 410</td>
<td>Survey of French Culture I</td>
<td></td>
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<tr>
<td>FREN 420</td>
<td>Survey of French Culture II</td>
<td></td>
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<tr>
<td>FREN 430</td>
<td>La France d’Aujourd’Hui</td>
<td></td>
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<tr>
<td>FREN 431</td>
<td>French-Speaking World (Outside France)</td>
<td></td>
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<td>FREN 433</td>
<td>French Global Culture Through Film</td>
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<tr>
<td>FREN 434</td>
<td>Cities of the French-Speaking World</td>
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<tr>
<td>FREN 440</td>
<td>Studies in French Culture: ____</td>
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<tr>
<td>FREN 441</td>
<td>The Story of French</td>
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<tr>
<td>FREN 443</td>
<td>French Inside Out</td>
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<tr>
<td>FREN 471</td>
<td>Transcending Borders: Migrations, Identities, Voices, Narrative</td>
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<tr>
<td>FREN 530</td>
<td>Studies in Film: ____</td>
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<tr>
<td>FREN 592</td>
<td>French Culture Through Film I, Beginnings to 1950</td>
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<tr>
<td>FREN 593</td>
<td>French Culture Through Film II, 1950-Present</td>
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**II. Literature**

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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>FREN 432</td>
<td>Francophone African Literature</td>
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<tr>
<td>FREN 450</td>
<td>French Literature of the Middle Ages</td>
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<tr>
<td>FREN 455</td>
<td>French Literature of the Renaissance</td>
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</tbody>
</table>
FREN 460  Identity, Absolutism, and Power in France, 1589-1715
FREN 462  French Literature of the Eighteenth Century
FREN 465  French Literature of the 19th Century
FREN 470  French Literature of the Twentieth Century
FREN 480  Studies in French Literature: _____
FREN 481  Science-Fiction and Fantasy in French

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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>FREN 495</td>
<td>Directed Readings in French</td>
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<tr>
<td>FREN 499</td>
<td>Honors in French</td>
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<tr>
<td>FREN 530</td>
<td>Studies in Film: _____</td>
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<tr>
<td>FREN 550</td>
<td>Capstone Seminar in French and Francophone</td>
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<tr>
<td></td>
<td>Language, Literature, and Culture</td>
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<tr>
<td>FREN 592</td>
<td>French Culture Through Film I, Beginnings</td>
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<td></td>
<td>to 1950</td>
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<tr>
<td>FREN 593</td>
<td>French Culture Through Film II, 1950-Present</td>
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</table>

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Italian Option**

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ITAL 301</td>
<td>Introduction to Italian Literature and Textual Analysis</td>
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<tr>
<td>ITAL 495</td>
<td>Directed Readings in Italian ¹</td>
<td></td>
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<tr>
<td>ITAL 695</td>
<td>Graduate Directed Readings in Italian ¹</td>
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</table>

**Required Electives**
Satisfied by five courses (15 hours) chosen from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ITAL 330</td>
<td>Cinematic Rome</td>
<td></td>
</tr>
<tr>
<td>ITAL 331</td>
<td>Mafia Movies</td>
<td></td>
</tr>
<tr>
<td>ITAL 336</td>
<td>Italy and the Italians</td>
<td></td>
</tr>
<tr>
<td>ITAL 340</td>
<td>Studies in Italian Culture: _____</td>
<td></td>
</tr>
<tr>
<td>ITAL 405</td>
<td>Italian Literature in Translation: _____</td>
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</tr>
<tr>
<td>ITAL 410</td>
<td>19th and 20th Century Short Stories</td>
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</tr>
<tr>
<td>ITAL 420</td>
<td>19th and 20th Century Poetry</td>
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</tr>
<tr>
<td>ITAL 440</td>
<td>Italian Renaissance and Early Modern Literature</td>
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<td>ITAL 450</td>
<td>Studies in Italian Cinema</td>
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<tr>
<td>ITAL 465</td>
<td>19th and 20th Century Novels I</td>
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</tr>
<tr>
<td>ITAL 466</td>
<td>19th and 20th Century Novels II</td>
<td></td>
</tr>
<tr>
<td>ITAL 480</td>
<td>Studies in Italian Literature: _____</td>
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<tr>
<td>ITAL 502</td>
<td>Dante’s Divine Comedy I</td>
<td></td>
</tr>
<tr>
<td>ITAL 503</td>
<td>Dante’s Divine Comedy II</td>
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<td>ITAL 495</td>
<td>Directed Readings in Italian</td>
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</tr>
<tr>
<td>ITAL 695</td>
<td>Graduate Directed Readings in Italian</td>
<td></td>
</tr>
</tbody>
</table>

¹ One approved 3-credit course offered by another department or program and with significant content related to Italian culture (300-500 level) may be counted toward the Italian BA Option.

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 24 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
French and Italian Studies Option

**Fourth Semester Proficiency**
Majors must complete courses to gain fourth semester language proficiency. These hours do not contribute to the minimum number of hours required for the major.

**Fourth Semester Proficiency. Satisfied by:**
- FREN 240 Intermediate French II
- or FREN 241 Intermediate French II, Honors
- ITAL 240 Intermediate Italian II

**French and Italian Studies Core Knowledge and Skills**
Majors choosing this option must complete courses as indicated in following areas:

- **French Grammar and/or Composition. Satisfied by one of the following:**
  - FREN 301 French Written and Oral Communication I
  - FREN 350 Applied French Grammar and Composition I
  - FREN 352 French for Journalism and Business

- **French Conversation. Satisfied by one of the following:**
  - FREN 375 Intermediate French Conversation
  - FREN 376 Advanced French Conversation

- **Italian Grammar and Composition. Satisfied by two courses (6 hours):**
  - ITAL 300 Composition and Conversation
  - ITAL 315 Advanced Composition and Conversation

- **French Literature. Satisfied by two courses:**
  - FREN 326 Introduction to French Literature
  - And an additional course chosen from the following:
  - FREN 432 Francophone African Literature
  - FREN 440 Studies in French Culture: ______
  - FREN 450 French Literature of the Middle Ages
  - FREN 455 French Literature of the Renaissance
  - FREN 460 Identity, Absolutism, and Power in France, 1589-1715
  - FREN 462 French Literature of the Eighteenth Century
  - FREN 465 French Literature of the 19th Century
  - FREN 470 French Literature of the Twentieth Century
  - FREN 480 Studies in French Literature: ______

- **Italian Literature. Satisfied by one course (3 hours):**
  - ITAL 301 Introduction to Italian Literature and Textual Analysis

- **French Culture. Satisfied by one course (3 hours) chosen from the following:**
  - FREN 410 Survey of French Culture I
  - FREN 420 Survey of French Culture II
  - FREN 430 La France d’Aujourd’hui
  - FREN 431 French-Speaking World (Outside France)
  - FREN 440 Studies in French Culture: ______
  - FREN 592 French Culture Through Film I, Beginnings to 1950
  - FREN 593 French Culture Through Film II, 1950-Present

- **Italian Culture. Satisfied by one course (3 hours) chosen from the following:**
  - ITAL 336 Italy and the Italians
  - ITAL 340 Studies in Italian Culture: ______

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

**Major Hours & Major GPA**
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Sample 4-year plans for the BA degree in French and Italian are available here: French & Francophone Studies (p. 1402), Italian Studies (p. 1403), or French, Francophone and Italian Studies (p. 1404), or by using the left-side navigation.

**Departmental Honors in French**
Undergraduate students may graduate with honors in French by completing 6 hours of FREN 499, intensive honors tutorials on limited areas of French or Francophone literature or culture. Consult the department early in the junior year. To begin honors work and to graduate with honors, students must have minimum grade-point average of 3.5 in French.

**Departmental Honors in Italian**
Undergraduate students may graduate with honors in Italian by completing 3 hours of ITAL 499 and one approved 3-hour course in a relevant field in addition to the 24-hour requirement for the option. Consult the department early in the junior year. To begin honors work and to graduate with honors, students must have minimum grade-point average 3.5 in Italian.

**Summer Language Institute in Paris**
The department conducts a 4-week summer institute in Paris focusing on French language and culture. Students take courses in intermediate and advanced French language at L’Etoile, a private language institute in the center of Paris. Before the stay in Paris, students spend four days touring Normandy. Some scholarship aid is available. Consult the department (http://www.frenchitalian.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

**Summer Program in Florence, Italy**
The department conducts a 4- or 8-week summer program for elementary, intermediate, or advanced students of Italian. Students take courses in language and culture at an institute where all instructors are native
Semester and Year Programs in France
A semester program is available in cooperation with CIDEF, the language institute of the Université Catholique de l’Ouest in Angers. Consult the department (http://www.frenchitalian.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

Year-long programs at French institutions are available through the International Student Exchange Program. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

Semester Program in Rome, Italy
The department conducts a semester program in Rome for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live with Italian families. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

BA in French and Francophone Studies
Below is a sample 4-year plan for students pursuing the BA in French and Francophone Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td></td>
</tr>
<tr>
<td>FREN 110 (Major Pre-requisite)</td>
<td>5</td>
<td>FREN 120 (Major Pre-requisite)</td>
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</tr>
<tr>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
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</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
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<td>Goal 2.2 Communication</td>
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<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Goal 3 Social Science</td>
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<table>
<thead>
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<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>FREN 230 (Goal 4.2 Global Awareness, Major Pre-requisite)</td>
<td>3</td>
<td>FREN 240 (Goal 4.2 Global Awareness, Major Pre-requisite, BA Second Language)</td>
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<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<thead>
<tr>
<th>Junior</th>
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<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>FREN 310 (Major Requirement)</td>
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<td>Goal 4.2 Global Awareness</td>
<td>3</td>
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</tr>
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<td>FREN 301 (Major Requirement)</td>
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<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>FREN 326 (Goal 3 Arts and Humanities, Major Requirement)</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>FREN 302 (Major Requirement)</td>
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<tr>
<td>French Language, Culture &amp; Film Elective (300+, Major Requirement)</td>
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<td>French Literature Elective (400+, Major Requirement)</td>
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</tr>
<tr>
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<table>
<thead>
<tr>
<th>Senior</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>French Language, Culture &amp; Film Elective (400+, Major Requirement)</td>
<td>3</td>
<td>FREN 550 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>French Language, Culture &amp; Film or French Literature Elective (400+, Major Requirement)</td>
<td>3</td>
<td>French Literature Elective (400+ Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td></td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
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</tr>
</tbody>
</table>

Total Hours 120
The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

Choose from the list of electives in the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/french-italian/ba/#requirementstext) tab.

Typically KU Core Goal 6 is fulfilled by taking a major course approved to fulfill Goal 6 by visiting the KU Core Website (https://kucore.ku.edu/courses/).

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

## BA in Italian Studies

Below is a sample 4-year plan for students pursuing the BA in Italian Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 110 (Major Pre-requisite)</td>
<td>5</td>
<td>ITAL 120 (Major Pre-requisite)</td>
<td>5</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td><strong>Total</strong></td>
<td>17</td>
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### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 230 (Major Pre-requisite)</td>
<td>3</td>
<td>ITAL 240 (Major Pre-requisite, BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>ITAL Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Arts &amp; Humanities</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>ITAL Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ITAL Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 6 Integration &amp; Creativity (300+)</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>LA&amp;S 492 (Job Search Strategies, or elective)</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

### Total Hours 120

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3 For a list of courses to fulfill the Italian required electives, visit the KU Core website (http://kucore.ku.edu/courses/) tab. Students are encouraged to take ITAL 300-400 level electives offered in English as soon as possible, even starting in their freshman year.
ITAL 301 satisfied either Goal 3 Social Science or Goal 4.2 Global Awareness. ITAL 301 is offered once a year. This course is recommended to be paired with ITAL 315 in the spring, but it may be offered in the fall some years. In that case, the student can take ITAL 300 and ITAL 301 together.

Typically KU Core Goal 6 is fulfilled by taking a major course approved for this goal. See the list of Italian courses available to fulfill Goal 6 by visiting the KU Core Website (https://kucore.ku.edu/courses/).

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

BA in French, Francophone and Italian Studies

Below is a sample 4-year plan for students pursuing the BA in French, Francophone and Italian Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core Website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)(^1)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<tr>
<td>Goal 1.1 Critical Thinking</td>
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<td></td>
</tr>
<tr>
<td>FREN 110 (Major Pre-requisite)</td>
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<td></td>
</tr>
<tr>
<td>ITAL 110 (Major Pre-requisite)</td>
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**Total Hours 16**

### Sophomore

<table>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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</tr>
</thead>
<tbody>
<tr>
<td>FREN 230 (Goal 4.2 Global Awareness, Major Pre-requisite)</td>
<td>3</td>
<td>FREN 240 or 241 (Goal 4.2 Global Awareness, Major Pre-requisite, BA Second Language)</td>
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<tr>
<td>ITAL 230 (Major Pre-requisite)</td>
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<tr>
<td>BA Quantitative Reasoning (QR)</td>
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**Total Hours 16**

### Junior

<table>
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<tr>
<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
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</tr>
<tr>
<td>FREN 375 or 376 (Major Requirement)</td>
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<td>FREN 326 (Goal 3 Arts &amp; Humanities, Major Requirement)</td>
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<td>FREN 301 (Major Requirement)</td>
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<td>FREN 301 (Goal 3 Social Science, Major Requirement)</td>
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<td>ITAL 300 (Major Requirement, Fall only)</td>
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<td>ITAL 315 (Spring only, Major Requirement)</td>
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**Total Hours 15**

### Senior

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<tbody>
<tr>
<td>FREN 432-480 (Choose one. FREN Literature) Major Requirement</td>
<td>3</td>
<td>3 Goal 6 Integration &amp; Creativity(^3)</td>
<td>3</td>
</tr>
<tr>
<td>FREN 410, 420, 430, 431, 440, 441, 443, 530, 550, 592, or 593 (FREN Culture, Major Requirement)</td>
<td>3</td>
<td>ITAL 340 or 336 (ITAL Culture, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^4)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 15**

**Total Hours 120**

---

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Typically KU Core Goal 6 is fulfilled by taking a major course approved for this goal. See the list of French and Italian courses available to fulfill Goal 6 by visiting the KU Core Website (https://kucore.ku.edu/courses/).
Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

<table>
<thead>
<tr>
<th>Minor in French and Francophone Studies</th>
</tr>
</thead>
</table>

**Why study French?**

Speakers of French span five continents. French is spoken by over 220 million people. By 2050, it is estimated that there will be over 750 million French speakers, 80% of whom will live in Africa, becoming the world’s most spoken language. French is the international language of cooking, fashion, theater, the visual arts, dance and architecture. Thousands of US companies do business with the Francophone world. In an increasingly mobile and interconnected planet, the study of language, literature and culture has never been more crucial for our students’ success. It provides students with a competitive edge in an increasingly internationalized workplace; for example, four out of five new jobs in the US are created as a result of foreign trade. Above all, learning a second language enables a greater understanding of other cultures while enhancing your own.

**Minor in French**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prerequisites</strong></td>
<td>Students must complete one of the following, or equivalent placement</td>
<td></td>
</tr>
<tr>
<td>FREN 234</td>
<td>Intermediate French I and II</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 240</td>
<td>Intermediate French II</td>
<td></td>
</tr>
<tr>
<td>or FREN 241</td>
<td>Intermediate French II, Honors</td>
<td></td>
</tr>
</tbody>
</table>

| **Required Courses** | Students must complete the following three courses. Students who have received study abroad transfer credit for both FREN 375 and FREN 376 are exempt from the FREN 302 required class |       |
| FREN 301  | French Written and Oral Communication 1       | 3     |
| FREN 302  | French Written and Oral Communication 2       | 3     |
| FREN 326  | Introduction to French Literature             | 3     |

| **Elective Courses** | Students must complete three additional French courses, at least two of which must be at the 400 level or above. Minors may include one French course taught in English, when available | 9     |

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Summer Language Institute in Paris**

The department conducts a 4-week summer institute in Paris focusing on French language and culture. Students take courses in intermediate and advanced French language at L’Etoile, a private language institute in the center of Paris. Before the stay in Paris, students spend four days touring Normandy. Some scholarship aid is available. Consult the department (http://www.frenchitalian.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

**Summer Program in Florence, Italy**

The department conducts a 4- or 8-week summer program for elementary, intermediate, or advanced students of Italian. Students take courses in language and culture at an institute where all instructors are native speakers. Students live with Italian families and usually have weekends free to travel. Consult the department (http://www.frenchitalian.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

**Semester and Year Programs in France**

A semester program is available in cooperation with CIDEF, the language institute of the Université Catholique de l’Ouest in Angers. Consult the department (http://www.frenchitalian.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

Year-long programs at French institutions are available through the International Student Exchange Program. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

**Semester Program in Rome, Italy**

The department conducts a semester program in Rome for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live in shared apartments with other students at the institute. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

**Semester Program in Florence, Italy**

The department conducts a semester program in Florence for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live with Italian families. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.
Minor in Italian Studies

Why study Italian?

Italian is spoken by over 65 million people. Italian is the international language of cooking, fashion, theater, the visual arts, dance and architecture. Thousands of US companies do business with Italy. In an increasingly mobile and interconnected planet, the study of language, literature and culture has never been more crucial for our students’ success. It provides students with a competitive edge in an increasingly internationalized workplace; for example, four out of five new jobs in the US are created as a result of foreign trade. Above all, learning a second language enables a greater understanding of other cultures while enhancing your own.

Requirements for the Minor in Italian

The department offers minors in both French and Italian. Consult an advisor in the appropriate language.

Minor in Italian

18 credit hours are required, as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisite Knowledge:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITAL 240</td>
<td>Intermediate Italian II</td>
<td></td>
</tr>
<tr>
<td>or equivalent placement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composition and Conversation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied by: ITAL 300 Composition and Conversation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Advanced Composition and Conversation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied by: ITAL 315 Advanced Composition and Conversation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective Courses: (Four)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students choose four courses from among the courses already approved for the BA Option in Italian, one of which must be an Italian Literature course.</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>ITAL 301</td>
<td>Introduction to Italian Literature and Textual Analysis ¹</td>
<td></td>
</tr>
<tr>
<td>ITAL 330</td>
<td>Cinematic Rome</td>
<td></td>
</tr>
<tr>
<td>ITAL 331</td>
<td>Mafia Movies</td>
<td></td>
</tr>
<tr>
<td>ITAL 336</td>
<td>Italy and the Italians</td>
<td></td>
</tr>
<tr>
<td>ITAL 340</td>
<td>Studies in Italian Culture: _____</td>
<td></td>
</tr>
<tr>
<td>ITAL 405</td>
<td>Italian Literature in Translation: _____</td>
<td></td>
</tr>
<tr>
<td>ITAL 410</td>
<td>19th and 20th Century Short Stories</td>
<td></td>
</tr>
<tr>
<td>ITAL 420</td>
<td>19th and 20th Century Poetry</td>
<td></td>
</tr>
<tr>
<td>ITAL 440</td>
<td>Italian Renaissance and Early Modern Literature</td>
<td></td>
</tr>
<tr>
<td>ITAL 450</td>
<td>Studies in Italian Cinema</td>
<td></td>
</tr>
<tr>
<td>ITAL 465</td>
<td>19th and 20th Century Novels I</td>
<td></td>
</tr>
<tr>
<td>ITAL 466</td>
<td>19th and 20th Century Novels II</td>
<td></td>
</tr>
<tr>
<td>ITAL 480</td>
<td>Studies in Italian Literature: _____</td>
<td></td>
</tr>
<tr>
<td>ITAL 502</td>
<td>Dante's Divine Comedy I</td>
<td></td>
</tr>
<tr>
<td>ITAL 503</td>
<td>Dante's Divine Comedy II</td>
<td></td>
</tr>
<tr>
<td>ITAL 495</td>
<td>Directed Readings in Italian ¹</td>
<td></td>
</tr>
<tr>
<td>ITAL 695</td>
<td>Graduate Directed Readings in Italian ¹</td>
<td></td>
</tr>
</tbody>
</table>

¹ One approved 3-credit course offered by another department or program and with significant content related to Italian culture (300-500 level) may be counted toward the Italian minor.

Summer Language Institute in Paris

The department conducts a 4-week summer institute in Paris focusing on French language and culture. Students take courses in intermediate and advanced French language at L’Etoile, a private language institute in the center of Paris. Before the stay in Paris, students spend four days touring Normandy. Some scholarship aid is available. Consult the department (http://www.frenchitalian.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

Summer Program in Florence, Italy

The department conducts a 4- or 8-week summer program for elementary, intermediate, or advanced students of Italian. Students take courses in language and culture at an institute where all instructors are native speakers. Students live with Italian families and usually have weekends free to travel. Consult the department (http://www.frenchitalian.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

Year-long programs at French institutions are available through the International Student Exchange Program. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/).

Semester Program in Rome, Italy

The department conducts a semester program in Rome for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live in shared apartments with other students at the institute. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

Semester Program in Florence, Italy

The department conducts a semester program in Florence for elementary, intermediate, or advanced students. Students take courses in Italian language and culture in a private language institute. All instructors are native speakers, and students live with Italian families. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

Undergraduate Certificate in Francophone Studies

There are currently over 300 million French-speakers worldwide, 60% of whom live outside France. By 2050, there will be an estimated 750 million French-speakers, 80% of whom will live in Africa (“France Diplomatie”). The certificate provides linguistic and cultural cross-disciplinary training, not available in other programs, for students majoring in French and...
Francophone Studies, African and African-American Studies, and related programs, who wish to learn about interactions between French-speaking and indigenous peoples across the Francophone world, from Africa, North America, Indian Ocean, Southeast Asia, and Polynesia. The certificate requires one three-hour gateway course in FREN introducing the student to French-speaking global cultures; one course in an indigenous language (Arabic, Haitian Creole, Wolof, taught by AAAS); and two junior-/senior-level elective courses from related fields.

### Gateway Courses to Francophone Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 153</td>
<td>Global Cultures: The French Connection</td>
<td>3</td>
</tr>
<tr>
<td>FREN 431</td>
<td>French-Speaking World (Outside France)</td>
<td></td>
</tr>
<tr>
<td>FREN/AAAS 432</td>
<td>Francophone African Literature</td>
<td></td>
</tr>
<tr>
<td>FREN 433</td>
<td>French Global Culture Through Film</td>
<td></td>
</tr>
<tr>
<td>FREN 434</td>
<td>Cities of the French-Speaking World</td>
<td></td>
</tr>
<tr>
<td>FREN 440</td>
<td>Studies in French Culture: _____ (Dakar, Cinema Inside and Outside France, or Francophone Cultural Contexts)</td>
<td></td>
</tr>
<tr>
<td>FREN 480</td>
<td>Studies in French Literature: _____ (Francophone Literary Contexts)</td>
<td></td>
</tr>
<tr>
<td>FREN 530</td>
<td>Studies in Film: _____ (Postcolonial Francophone Cinema)</td>
<td></td>
</tr>
</tbody>
</table>

### Languages of the Francophone World

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARAB 110</td>
<td>Elementary Arabic I</td>
<td>3-5</td>
</tr>
<tr>
<td>ARAB 120</td>
<td>Elementary Arabic II</td>
<td></td>
</tr>
<tr>
<td>ARAB 210</td>
<td>Intermediate Arabic I</td>
<td></td>
</tr>
<tr>
<td>ARAB 220</td>
<td>Intermediate Arabic II</td>
<td></td>
</tr>
<tr>
<td>ARAB 310</td>
<td>Advanced Arabic I</td>
<td></td>
</tr>
<tr>
<td>ARAB 320</td>
<td>Advanced Arabic II</td>
<td></td>
</tr>
<tr>
<td>ARAB 401</td>
<td>Readings in Arabic I</td>
<td></td>
</tr>
<tr>
<td>ARAB 402</td>
<td>Readings in Arabic II</td>
<td></td>
</tr>
<tr>
<td>HAIT 110</td>
<td>Elementary Haitian I</td>
<td></td>
</tr>
<tr>
<td>HAIT 120</td>
<td>Elementary Haitian II</td>
<td></td>
</tr>
<tr>
<td>HAIT 350</td>
<td>Advanced Haitian I</td>
<td></td>
</tr>
<tr>
<td>HAIT 360</td>
<td>Advanced Haitian II</td>
<td></td>
</tr>
<tr>
<td>HAUS 110</td>
<td>Elementary Hausa I</td>
<td></td>
</tr>
<tr>
<td>HAUS 120</td>
<td>Elementary Hausa II</td>
<td></td>
</tr>
<tr>
<td>HAUS 210</td>
<td>Intermediate Hausa I</td>
<td></td>
</tr>
<tr>
<td>HAUS 220</td>
<td>Intermediate Hausa II</td>
<td></td>
</tr>
<tr>
<td>HAUS 310</td>
<td>Advanced Hausa I</td>
<td></td>
</tr>
<tr>
<td>HAUS 320</td>
<td>Advanced Hausa II</td>
<td></td>
</tr>
<tr>
<td>HAUS 401</td>
<td>Readings in Hausa I</td>
<td></td>
</tr>
<tr>
<td>HAUS 402</td>
<td>Readings in Hausa II</td>
<td></td>
</tr>
<tr>
<td>WOLO 110</td>
<td>Elementary Wolof I</td>
<td></td>
</tr>
<tr>
<td>WOLO 120</td>
<td>Elementary Wolof II</td>
<td></td>
</tr>
<tr>
<td>WOLO 210</td>
<td>Intermediate Wolof I</td>
<td></td>
</tr>
<tr>
<td>WOLO 220</td>
<td>Intermediate Wolof II</td>
<td></td>
</tr>
<tr>
<td>WOLO 310</td>
<td>Advanced Wolof I</td>
<td></td>
</tr>
<tr>
<td>WOLO 320</td>
<td>Advanced Wolof II</td>
<td></td>
</tr>
<tr>
<td>WOLO 401</td>
<td>Readings in Wolof I</td>
<td></td>
</tr>
<tr>
<td>WOLO 402</td>
<td>Readings in Wolof II</td>
<td></td>
</tr>
</tbody>
</table>

### Thematic Focuses on the Francophone World

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 102</td>
<td>Arabic and Islamic Studies</td>
<td></td>
</tr>
<tr>
<td>AAAS 103</td>
<td>Introduction to Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS 105/ HIST 104</td>
<td>Introduction to African History</td>
<td></td>
</tr>
<tr>
<td>AAAS 115/ HIST 111</td>
<td>Introduction to African History, Honors</td>
<td></td>
</tr>
<tr>
<td>AAAS/HIST 160</td>
<td>Introduction to West African History</td>
<td></td>
</tr>
<tr>
<td>AAAS/LAC 177</td>
<td>First Year Seminar: _______ (Gender Identity in Africa and the Caribbean)</td>
<td></td>
</tr>
<tr>
<td>AAAS 300</td>
<td>African Traditional Religion and Thought</td>
<td></td>
</tr>
<tr>
<td>AAAS 301/ LAC 302</td>
<td>Haiti: Culture and Identity</td>
<td></td>
</tr>
<tr>
<td>AAAS/ANTH 303</td>
<td>Peoples and Cultures of North Africa and the Middle East</td>
<td></td>
</tr>
<tr>
<td>AAAS 305/ HIST 300</td>
<td>Modern Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS/HIST 307</td>
<td>Modern Africa, Honors</td>
<td></td>
</tr>
<tr>
<td>AAAS 320/ HA 390/ AAAS 520/ HA 590</td>
<td>African Studies In: ______ (African Art and Gender)</td>
<td></td>
</tr>
<tr>
<td>AAAS 333</td>
<td>Introduction to Caribbean Literature</td>
<td></td>
</tr>
<tr>
<td>AAAS 349/ REL 350</td>
<td>Islam</td>
<td></td>
</tr>
<tr>
<td>AAAS/GEOG 351</td>
<td>Africa's Human Geographies</td>
<td></td>
</tr>
<tr>
<td>AAAS/HA 353</td>
<td>Modern and Contemporary African Art</td>
<td></td>
</tr>
<tr>
<td>AAAS/ANTH 372</td>
<td>Religion, Power, and Sexuality in Arab Societies</td>
<td></td>
</tr>
<tr>
<td>AAAS 415</td>
<td>Women and Islam</td>
<td></td>
</tr>
<tr>
<td>AAAS 429</td>
<td>Postcolonial Theatre and Drama</td>
<td></td>
</tr>
<tr>
<td>AAAS 433</td>
<td>Islamic Literature</td>
<td></td>
</tr>
<tr>
<td>AAAS 435</td>
<td>Muslim Women's Autobiography</td>
<td></td>
</tr>
<tr>
<td>AAAS 445</td>
<td>Arab Thought and Identity</td>
<td></td>
</tr>
<tr>
<td>AAAS/REL 450</td>
<td>Popular Culture in the Muslim World</td>
<td></td>
</tr>
<tr>
<td>AAAS/LING 470</td>
<td>Language and Society in Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS 527</td>
<td>Popular Culture in Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS/HA 536</td>
<td>Islamic Art and Architecture in Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS 542</td>
<td>The History of Islam in Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS 551/ GEOG 550</td>
<td>Environmental Issues in Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS 552</td>
<td>Classical Islamic Literature</td>
<td></td>
</tr>
<tr>
<td>AAAS/GEOG 553</td>
<td>Geography of African Development</td>
<td></td>
</tr>
<tr>
<td>AAAS 554</td>
<td>Contemporary Health Issues in Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS/HIST/ WGSS 598</td>
<td>Sexuality and Gender in African History</td>
<td></td>
</tr>
<tr>
<td>AAAS 600</td>
<td>Politics in Africa</td>
<td></td>
</tr>
</tbody>
</table>
The appointments are guaranteed, based on funding availability and performance, for up to 3 years for M.A. students, and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach French at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Funding page (https://frenchitaliandev.drupal.ku.edu/funding-opportunities/) of our departmental website.

### Additional Funding

Other funding opportunities for graduate students include the Office of Study Abroad’s Springer award; the department’s Cornell, Mahieu, and Magerus fellowships; awards for research abroad; and French university exchanges.

Visit the Graduate Studies website for additional information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

### Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

### Admission to the M.A. Program in French

In addition to the general admission requirements (https://gradapply.ku.edu/) from the Office of Graduate Studies, applicants should have the equivalent of a major in French at the B.A. level, with a minimum of 9 hours of advanced undergraduate course work in French literature.

Submit your graduate application online (https://gradapply.ku.edu/).

For further information regarding the application process, including department-specific deadlines and required supplemental documentation, please visit the Admissions (http://frenchitaliandev.drupal.ku.edu/generaladmissions/) page of the department website, or contact the department's Graduate Program Coordinator, Aley Pennington, aleypennington@ku.edu.

### M.A. Degree Requirements

1. 30 credit hours, including *

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 704</td>
<td>Methods in Foreign Language Instruction</td>
<td>3</td>
</tr>
<tr>
<td>FREN 720</td>
<td>Introduction to Graduate Studies in French</td>
<td>3</td>
</tr>
<tr>
<td>FREN 610</td>
<td>Theme et Version</td>
<td>3</td>
</tr>
<tr>
<td>or FREN 620</td>
<td>Expository French Writing</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

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AAAS/POLS/ WGSS 662 Gender and Politics in Africa
AAAS/HA 677 African Design
WGSS 664 Women, Health, and Healing in Africa
FREN 431 French-Speaking World (Outside France)  
FREN/AHAS 432 Francophone African Literature  
FREN 433 French Global Culture Through Film  
FREN 434 Cities of the French-Speaking World  
FREN 440 Studies in French Culture: (Tale of Two Cities Paris-Dakar, Cinema Inside and Outside France, or Francophone Cultural Contexts)  
FREN 480 Studies in French Literature: (Francophone Literary Contexts)  
FREN 530 Studies in Film: (Postcolonial Francophone Cinema)  
HIST 327 The Premodern Middle East
HIST 328 The Modern Middle East
HIST 525 France and Its Empire: From Acadia to Zidane
REL 650 Sufism

Total Hours  
12-14

1 Only one of these courses may count toward the requirement of 6 hours in Thematic Study of the Francophone World
2 A minimum of 6 credit hours must be taken at the Junior/Senior Level (300+)

### Master of Arts in French and Francophone Studies

The Department of French, Francophone, and Italian Studies offers a comprehensive graduate program (M.A. and Ph.D.) in French and Francophone language, literature, and culture. Our faculty (http://frenchitalian.ku.edu/faculty-0/) is dynamic, professionally active, and committed to excellence in scholarship and teaching. The major emphasis of teaching and research is French and Francophone literature. The department also offers courses in literary theory, cultural studies, and film. The department offers a balanced emphasis on all periods from medieval through twentieth and twenty-first centuries. Our students represent a diverse group, and we encourage equally applicants from traditional and nontraditional backgrounds. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation. Please visit the Graduate Program page (https://frenchitaliandev.drupal.ku.edu/overview-5/) of the department website for additional information.

### Departmental Funding

The department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year and .50 full-time equivalent (FTE) appointments come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The department’s Graduate Program Coordinator, Aley Pennington, aleypennington@ku.edu.

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* denotes faculty member
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### Departmental Funding

The department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year, .50 full-time equivalent (FTE) appointments come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed, based on funding availability and performance, for up to 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach French at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Funding page (http://frenchitalian.ku.edu/funding-opportunities/) of our departmental website.

### Additional Funding

Other funding opportunities for graduate students include the Office of Study Abroad’s Springer award; the department’s Cornell, Mahieu, and Magerus fellowships; awards for research abroad; and French university exchanges.

Visit the Graduate Studies website for additional information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

### Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

### Admission to the Ph.D. Program in French

In addition to the general admission requirements (https://gradapply.ku.edu/apply/) from the Office of Graduate Studies, applicants should have the equivalent of the M.A. in French offered at KU.
Submit your graduate application online (https://gradapply.ku.edu/apply/). For further information regarding the application process, including department-specific deadlines and required supplemental documentation, please visit the Admissions (http://frenchitalian.ku.edu/graduate-admissions/) page of the department website, or contact the department's Graduate Program Coordinator, Aley Pennington, aley.pennington@ku.edu.

**Ph.D. Degree Requirements**

In addition to the general requirements for the Doctor of Philosophy (http://www.policy.ku.edu/graduate-studies/doctoral-degree-requirements/), a student must complete the following departmental requirements:

1. 24 hours of post-M.A. work (exclusive of dissertation hours). Ph.D. students who did not receive their MA in French at KU must complete a total of 30 post M.A. hours, including*

   - FREN 704 Methods in Foreign Language Instruction
   - FREN 720 Introduction to Graduate Studies in French

   *Ph.D. students who have taken equivalent courses for either or both of these requirements as part of their M.A. studies elsewhere may petition the department for a waiver of FREN 704 and/or FREN 720 to reduce the total required hours. To determine equivalency, the student must submit course materials from the previous institution. Students petitioning this requirement should first consult with the DGS.

2. 6 hours of graduate-level coursework taken outside the department as an interdisciplinary minor field of concentration. These hours will count towards the 24 to 30 hours of post-MA coursework. Students may also apply these 6 hours of graduate-level coursework outside the department toward one of KU’s Graduate Certificates (e.g. African Studies, Women, Gender and Sexuality Studies, etc.).

3. During their last semester of coursework, Ph.D. students must enroll in 3 hours of FREN 995 Investigation and Conference, with the faculty member who typically will become the student’s dissertation director. These hours will count towards the 24 to 30 hours of post-MA coursework.

4. A successful written and oral comprehensive exam, which will be based on a portfolio containing the following items:
   - The 3 reading lists, highlighting which works have already been read
   - Prospectus draft and bibliography
   - Website. The website will include a professional profile, a CV, and pedagogical materials
   - A research paper that has been published or is publishable

5. At least 1 year of teaching in the department

6. A successful dissertation defense

**Research Skills & Responsible Scholarship Requirement**

The university also requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before attempting the comprehensive oral exam. For French doctoral students, this requirement is met by the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>FREN 704</td>
<td>Methods in Foreign Language Instruction</td>
<td>3</td>
</tr>
<tr>
<td>FREN 720</td>
<td>Introduction to Graduate Studies in French</td>
<td>3</td>
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</tbody>
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Proficiency in a second language, which can be a second Romance language, Latin, Greek, German, Arabic, or another language pertinent to the student’s career path and approved by the faculty. (Students specializing in medieval or Renaissance literature are strongly encouraged to take Latin. Students specializing in Francophone Studies are strongly encouraged to take Arabic, Wolof, or Haitian Creole.) Proficiency may be demonstrated by completion of the fourth-semester course (or equivalent) or by examination.

Departmental new graduate student orientation, held each Fall semester during the week prior to the first instructional week of classes.

**Handbook for Graduate Students**

A detailed presentation of departmental processes and regulations may be found in the department’s Graduate Student Handbook (http://www.frenchitalian.ku.edu/graduate-program-manual/).

**Summer Language Institute in Paris**

The department conducts a 6-week summer institute in Paris focusing on French language and culture. Students take courses in intermediate and advanced French language at L’Etoile, a private language institute in the center of Paris. Before the stay in Paris, students spend 10 days to 2 weeks touring regions such as Normandy, Brittany, and the château country along the Loire River. Some scholarship aid is available. Consult the department (http://www.frenchitalian.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information.

**Graduate Study Abroad**

Graduate students have the opportunity to serve as program assistants for the department’s Paris Summer Language Institute. The department also has a graduate exchange agreement with the Université de Franche-Comté, Besançon, France.

**Graduate Certificate in Medieval and Early Modern Studies**

The graduate certificate in Medieval and Early Modern Studies (ca. 500-1700) offers valuable training to students who specialize in Medieval, Early Modern, or Medieval & Early Modern fields. The program integrates important methodologies (in archival research, book history, digital humanities, for example) and a broad spectrum of specialized content. The aim is to enrich the interdisciplinary training of graduate students and foster an intellectual community of students and faculty supporting education and research. We offer a variety of courses from which students tailor electives to best enhance their degree program. This can be especially valuable for doctoral students as humanities faculty positions in early periods ask increasingly for competence across fields, especially in contingent periods.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student.
Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

For admissions requirements to the Medieval and Early Modern Studies Graduate Certificate, please see our website (http://frenchitalian.ku.edu/sls/). For additional information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Applications may be submitted at www.gradapply.ku.edu/apply (https://gradapply.ku.edu/apply/).

The Graduate Certificate in Medieval and Early Modern Studies requires the completion of 12 credits of coursework in the student’s area of research interest chosen from the list of approved courses available on the Department of French, Francophone & Italian Studies website (https://frenchitalian.ku.edu/sls/). The choices must be approved by a Medieval Studies advisor in advance.

**Geography and Atmospheric Science**

Geography as an academic discipline studies the spatial dimensions of, and links between, culture, society, and environmental processes. The study of Atmospheric Science involves weather and climate and how those affect human activity and life on earth. At the University of Kansas, our department's programs work to understand human activity and the physical world.

**Why study geography?**

Because people, places, and environments interact and evolve in a changing world. From conservation to soil science to the power of geographic information science data and more, the study of geography at the University of Kansas prepares future leaders. The study of geography encompasses landscape and physical features of the planet and human activity, the environment and resources, migration, and more. Our program (http://geog.ku.edu/degrees/) has a unique cross-disciplinary nature with pathway options and diverse faculty (http://geog.ku.edu/faculty/) who are passionate about teaching and research. Our students are engaged through internships, undergraduate and graduate research, departmental organizations, and events. Alumni work in a variety of fields including academia, business, conservation, environmental regulation, GIS, regional planning, resource management, soil science, urban planning, and more. A variety of scholarship opportunities are offered through both the University of Kansas and the Department of Geography and Atmospheric Science for qualified undergraduate and graduate students.

**Why study atmospheric science?**

The study of atmospheric processes enables us to understand human interactions with the environment and generate solutions that make a real difference in people’s lives. The atmospheric science program at the University of Kansas is the only one of its kind in the state, following national meteorological guidelines set by both the American Meteorological Society (AMS) and the National Weather Service (NWS). Our program provides students with a solid foundation, but also options. Our students are engaged through research, internships, and several student organizations including the KU Chapter of the American Meteorological Society (AMS), which sponsors an annual Douglas County Severe Weather Symposium, in addition to monthly events. We recently partnered with the National Weather Service to provide opportunities for students to explore work in a variety of NWS regional offices through the Student Career On-Site Training (SCOut) program.

**Facilities**

The Department of Geography and Atmospheric Science is housed in Lindley Hall on the KU Lawrence campus, which includes multiple laboratories, computer labs, and a weather station. Additionally, the KU Field Station just north of Lawrence provides students an outdoor lab for field work, research projects and more. The station, established in 1947, is part of the National Ecological Observatory Network (NEON), a National Science Foundation initiative. Classes are held in both Lindley Hall and the new Earth, Energy, and Environment Center.

Geography labs include multiple computer labs and those for Soils and Geomorphology, Palynology, and Pedology. Additional campus resources include the map collections of the Spencer Research Library and University Map Library. The University of Kansas Undergraduate Research Center is another great resource. The center aids undergraduates interested in doing research, offers funding opportunities, and provides step-by-step workshops which provide students the skills necessary to explore, investigate, and excel.

Atmospheric Science labs include a Meteorology and Climate Hub (MACH) with state-of-the-art AWIPS II software used by the National Weather Service and computer lab and collaborative space dedicated to students doing research. Students also get hands-on experience, from forecasting and providing reports to university radio (KJHK 90.7 FM) and television (KUJH-TV) to research project opportunities through our department and the University of Kansas Undergraduate Research Center.

**Undergraduate Programs**

**Geography**

Geography integrates information from a variety of sources to study the nature of culture areas, the emergence of physical and human landscapes, and problems of interaction between people and the environment. Mapping and other techniques for gathering and displaying spatial information are integral parts of the field. We offer BA, BGS, and BS undergraduate degrees in Geography as well as a minor with an emphasis in General Geography or Geographical Information Science (GIS). We also offer an undergraduate GIS Geographical Information Science Certificate.

**Geography Pathways include:**

- Geopolitics and Political Geography, Geospatial Analytics/Geoinformatics, Climate and People, Soils and Ecohdrology, Urban/Economic Geography, and People, Migration, and Globalization.

**Atmospheric Science**

The atmospheric science program offers undergraduates a fundamental knowledge of the atmosphere and the weather it generates. Interactions between weather phenomena and human decisions and activities give the subject important applications. Several pathways lead to a Bachelor
of Science degree, with concentration options in General Meteorology, Air Pollution Meteorology, Hydrometeorology, and News Media Forecasting. A Minor in Atmospheric Science is also available.

Students from other disciplines such as biology, math, psychology, environmental studies, and other subjects, have chosen to have a double major, adding Atmospheric Science to enhance their education, skills, and career options.

**Courses for Nonmajors**

All geography courses below the 500 level are open to nonmajors, as are several above that level.

**Graduate Programs**

**Geography**

The graduate curriculum emphasizes broad geographic training while encouraging in-depth commitment to specialized concentrations. Students also are encouraged to take course work outside the department that complements their degree programs. Programs are tailored by the student and advisor to conform to the student’s interests and needs, as well as to fulfill the general degree requirements.

The central thrust of the department and the chief capabilities and interests of the faculty fall within these research-teaching areas:

1. Human geography including cultural geography, place, regional development, economic geography, health, diaspora, border conflicts, and environmental policy;
2. Geoinformatics including cartography, geographic information systems (GIS), and remote sensing;
3. Physical geography including geomorphology, soils, ecohydrology, and biogeography;
4. Regional geography including Africa, East Asia, Russia, Latin America, and the United States; and
5. Climatology.

**Atmospheric Science**

The purpose of the program is to expand the student’s knowledge of fundamental atmospheric processes and how the atmosphere interacts with other parts of the environment. Students become familiar with quantitative research methods and how these various approaches can be used to address different problems in atmospheric science. Students gain an in-depth ability to learn specific skills and apply them toward thesis work. These skills consist of, for example, statistical analysis techniques, numerical modeling, or work with atmospheric instrumentation. The breadth of the program and the diverse research topics explored by the faculty are able to accommodate students with a variety of interests.

**Graduate Non-Degree Seeking Students**

Students who are interested in enrolling in graduate level coursework in the Department of Geography and Atmospheric Science without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking status. See the department’s Admission webpage (https://geog.ku.edu/admission/) for further details.

**Courses**

**ATMO 105. Introductory Meteorology. 5 Credits. NE N LFE**

A lecture and laboratory course introducing students to the atmosphere, weather and climate phenomena, and their controlling physical processes. Topics covered include: the structure of the atmosphere, energy and energy budgets, climate and climate change, air pollution, clouds and precipitation, pressure and wind systems, severe weather, and weather forecasting.

**ATMO 177. First Year Seminar: ______. 3 Credits. U**

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Atmospheric Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**ATMO 220. Unusual Weather. 3 Credits. NE N**

An introductory lecture course which surveys the general principles and techniques of atmospheric science and illustrates their application through discussions of natural but unusual weather phenomena such as blizzards, hurricanes, tornados, and chinooks, of the effects of air pollution on weather, and of intentional human alteration of the atmosphere.

**ATMO 321. Climate and Climate Change. 3 Credits. N**

This course is designed to introduce students to the nature of the Earth’s physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as GEOG 321.) Prerequisite: ATMO 105 or GEOG 104.

**ATMO 499. Honors Course in Atmospheric Science. 2-3 Credits. N**

Open to students with nine hours of upper level credit in Atmospheric Science, an average of at least 3.5 in all Atmospheric Science courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members.

**ATMO 505. Weather Forecasting. 3 Credits. N**

A first course in synoptic meteorology designed to introduce students to weather analysis and forecasting through the application of hydrodynamic and thermodynamic principles to operational analysis and forecasting. Topics include analysis and interpretation of surface and upper-air observations and data from satellites, radars, and wind profilers; chart and sounding analysis; and three-dimensional, conceptual models of weather systems. The course includes student-led weather briefings and analysis exercises. Prerequisite: ATMO 105 and MATH 125 or MATH 115.

**ATMO 521. Microclimatology. 3 Credits. N**

A study of climatic environment near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget and water balance. (Same as GEOG 521.) Prerequisite: ATMO 105 and MATH 125.

**ATMO 525. Air Pollution Meteorology. 3 Credits. N**

A study of background levels and concentrated sources of atmospheric pollution together with considerations of pollution buildup in urban areas as related to particular weather conditions. Inadvertent weather modifications and effects of atmospheric pollution on particular weather events and general climate will be discussed. Prerequisite: ATMO 105, MATH 125, EECS 138 and CHEM 130.

**ATMO 531. Topics in Atmospheric Science: ______. 1-3 Credits. N**

An investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well
as related topics in earth and physical sciences. May be repeated if topic differs.

ATMO 605. Operational Forecasting. 2 Credits. N
Students enhance their forecasting expertise by preparing forecasts for presentation to the public through a variety of media. Classroom activities include weekly map discussions and analysis of current weather situations. Forecasting topics such as forecast verification, aviation forecast products, severe weather, flash floods and watches and warnings are examined. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: ATMO 505 and ATMO 640.

ATMO 606. Forecasting Practicum - Private Industry. 2 Credits. N
Practical experience in private industry working with current and/or archived meteorological data. Possibilities include the preparation of forecasts for TV stations and meteorological consulting firms, and working with environmental consulting firms to assess air pollution hazards. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: Instructor permission.

ATMO 607. Forecasting Intern - National Weather Service. 2 Credits. N
Practical experience working in a National Weather Service forecasting center in analyzing weather data and preparing weather forecasts. May be repeated two times for credit. Credit for ATMO 605, ATMO 606, and ATMO 607 is limited to a total of eight hours, six of which may be counted toward a degree in atmospheric science. Prerequisite: Instructor permission.

ATMO 615. Tropical Meteorology. 3 Credits. N
This course presents an undergraduate survey of tropical meteorology with an emphasis on clouds and convection ranging from fair-weather cumulus to hurricanes. Specific topics include the general circulation (climatology, air-sea interactions, Hadley and Walker circulation), convective processes in the topics (diurnal cycles, mesoscale convective systems, convectively coupled waves), and tropical variability (El Nino, Madden-Julian oscillation, monsoons, climate change). The genesis, thermodynamics, dynamics, and other topics related to tropical cyclones and hurricanes are also discussed. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in ATMO 715. Prerequisite: ATMO 640 and/or instructor permission.

ATMO 630. Synoptic Meteorology. 3 Credits. N
Interpretation, development, and analysis of synoptic charts. Prerequisite: ATMO 505 and ATMO 640.

ATMO 634. Physical Climatology. 3 Credits. N
Atmospheric processes are described and discussed in relation to the climate of the earth's surface. Such topics as the greenhouse effect, ozone depletion, and the effect of solar irradiance on climatic change will be included. The physical processes and relationships between various climatic features will be studied. Prerequisite: ATMO 505 and DSCI 301 or MATH 526.

ATMO 640. Dynamic Meteorology. 3 Credits. N
This course introduces the student to the fundamentals of fluid dynamics necessary for understanding large scale atmospheric motions. Fundamental physical laws of conservation of mass, momentum and energy are examined and applied to atmospheric flows. Rotation in the atmosphere is examined quantitatively in terms of both circulation and vorticity. Prerequisite: MATH 127 and PHSX 214 or PHSX 212 and PHSX 236.

ATMO 642. Remote Sensing. 3 Credits.
This course is designed to prepare students to effectively use remotely sensed data in operational or research settings for further work in this field. Topics include radiation and radiation transfer applied to active and remote sensing; radiative properties of space, sun, earth and atmosphere; instrument design considerations and operational characteristics; inversion methods for temperature or concentration profiling; surface temperature measurement; cloud top height determination; rain rate and wind velocity measurement; severe weather detection; satellite photograph interpretation. Prerequisite: ATMO 680, MATH 581.

ATMO 650. Advanced Synoptic Meteorology. 3 Credits. N
Analysis and interpretation of synoptic weather charts including treatment of numerical weather forecasting. Prerequisite: ATMO 630 and ATMO 660.

ATMO 660. Advanced Dynamic Meteorology. 3 Credits. N
Advanced study of the atmosphere including treatment of the vorticity equation. Prerequisite: ATMO 640 and MATH 220 or MATH 320.

ATMO 680. Physical Meteorology. 3 Credits. N
This course is designed to enhance the student's understanding of atmospheric processes through the study of these processes at molecular through micro scales. Topics include the properties and behavior of gases; transfer processes; phase change; solar and earth radiation; cloud drop, ice crystal and precipitation formation; atmospheric electricity; stratospheric chemistry. Prerequisite: MATH 127; PHSX 214, or PHSX 212 and PHSX 236.

ATMO 690. Special Problems in Meteorology. 1-3 Credits. N
Prerequisite: Nine hours in meteorology.

ATMO 697. Seminar for Seniors. 1 Credits. N
Current research in atmospheric science will be discussed. May be repeated for a total of two credit hours. Prerequisite: Senior level in atmospheric science.

ATMO 699. Undergraduate Research. 2 Credits. U
Work on a research project under the supervision of a faculty member. Prerequisite: Nine credit hours in atmospheric science. May be taken up to three times for credit.

ATMO 710. Atmospheric Dynamics. 3 Credits.
Presentation of contemporary approaches to the study of atmospheric dynamics. May include methodologies that provide insight into global, synoptic, mesoscale or microscale motions. Prerequisite: ATMO 660 or equivalent.

ATMO 715. Tropical Meteorology. 3 Credits.
This course presents a survey of tropical meteorology at the graduate level with an emphasis on clouds and convection ranging from fair-weather cumulus to hurricanes. Specific topics include the general circulation (climatology, air-sea interactions, Hadley and Walker circulation), convective processes in the topics (diurnal cycles, mesoscale convective systems, convectively coupled waves), and tropical variability (El Nino, Madden-Julian oscillation, monsoons, climate change). The genesis, thermodynamics, dynamics, and other topics related to tropical cyclones and hurricanes are also discussed. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in ATMO 615. Prerequisite: Instructor consent.

ATMO 720. Atmospheric Modeling. 3 Credits.
Illustration and application of contemporary approaches to mathematical and statistical description of atmospheric phenomena. Prerequisite: Consent of instructor.
ATMO 725. Clouds, Climate and Precipitation. 3 Credits.
This course includes seminar-style lectures and discussions bridging cloud physics, physical climatology, and climate dynamics with a central theme regarding how clouds and precipitation interact with the Earth's climate system. Specific topics include aerosol-cloud interactions, large-scale convective organization in the tropics, mid-latitudes, and polar regions, diabetic feedbacks on the general circulation, natural climate variability, and cloud effects in global climate models. How cloud systems have changed in recent decades, in addition to future model scenarios, are also discussed.

ATMO 731. Advanced Topics in Atmospheric Science: _____ . 1-3 Credits.
Advanced investigation of special topics in atmospheric science. May include topics in dynamic, physical or synoptic meteorology or climatology as well as related topics in earth and physical sciences. May be repeated if topic differs.

ATMO 889. Master's Thesis. 1-10 Credits.
Thesis credit. Graded on a satisfactory progress/limited progress/no progress basis.

ATMO 998. Research in Atmospheric Science. 1-5 Credits.
Individual investigation of special problems in Atmospheric Science.

ATMO 999. Doctoral Dissertation. 1-10 Credits.
Enrollment course for writing doctoral dissertation in Atmospheric Science. Graded on a satisfactory progress/limited progress/no progress basis.

Courses

GEOG 100. World Regional Geography. 3 Credits. SC S
An introductory survey of the environmental setting, historically formative periods, and present-day issues that distinguish the major culture areas of the world.

GEOG 102. People, Place, and Society. 3 Credits. SC S
An examination of the relationships between humans and their environments. The course introduces students to basic concepts in human geography relating to economic activities, landscapes, languages, migrations, nations, regions, and religions. Serves as the basis for further course work in cultural, economic, political, population, and urban geography.

GEOG 103. People, Place, and Society, Honors. 3 Credits. SC S
An introduction to how human societies organize space and modify the world about them. Resultant patterns on the landscape are interpreted through principles of space perception, cultural ecology, diffusion, land use, and location theory. Comparisons are made between urban and rural areas and between subsistence and commercial societies. Open to students who have been accepted into the College Honors Program.

GEOG 104. Introduction to Physical Geography. 3 Credits. NE N
The components of the physical environment are discussed in order to familiarize the student with their distributions and dynamic nature. Major topics include the atmosphere, landforms, soils, and vegetation together with their interrelationships and their relevance to human activity. This course and GEOG 105 together satisfy the laboratory science requirement. Both courses are required for geography majors.

GEOG 105. Introductory Laboratory in Physical Geography. 2 Credits. U LFE
A laboratory course designed to complement GEOG 104 in satisfying the laboratory science requirement. It is required for geography majors.

Laboratory exercises include a wide variety of analyses using data on the atmosphere, hydrosphere, biosphere, and lithosphere. Prerequisite: GEOG 104, which may be taken concurrently.

GEOG 111. Mapping Our Changing World. 4 Credits. N LFE
This course is an introduction to geospatial technologies. It focuses on the conceptual and technical aspects of mapping technologies that transform information about locations, people, objects, environments, events, and phenomena to digital representations of the world and as end-products of geospatial analysis. Topics covered include surveying, aerial photography and photogrammetry, satellite remote sensing, global positioning systems (GPS), geographic information systems (GIS), and thematic mapping. Students will learn how to acquire and develop geospatial data as the sources for mapping, the skills of analyzing and interpreting spatial information, and how geovisualization can be used in addressing real-world problems. (Same as GIST 111.)

GEOG 140. Global Environment I: The Discovery of Environmental Change. 5 Credits. U LFE
This interdisciplinary course and laboratory sections survey the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 140 and HIST 140.)

GEOG 142. Global Environment II: The Ecology of Human Civilization. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the history of human's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the human's engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and HIST 142.)

GEOG 144. Global Environment I: The Discovery of Environmental Change, Honors. 5 Credits. U LFE
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as EVRN 144 and HIST 144.) Open only to students admitted to the University Honors Program or by permission of instructor.

GEOG 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the history of human's relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include
the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity’s engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and HIST 145.) Open only to students admitted to the University Honors Program or by permission of instructor.

GEOG 148. Scientific Principles of Environmental Studies. 3 Credits. NB N
This course provides the scientific knowledge necessary to understand the changing relationships between humans and the natural environment, with an emphasis on the assessment of current environmental problems and critical evaluation of potential solutions. Major topics include fundamental scientific concepts and principles, interactions among the biological and physical components of the environment, implications of a growing human population, water resources, the atmosphere, climate, and energy sources. (Same as EVRN 148.)

GEOG 150. Environment, Culture and Society. 3 Credits. SC S
An introduction to geographic approaches to the study of the environment, emphasizing societal and cultural factors that influence human interaction with the biosphere, hydrosphere, lithosphere, and atmosphere. The course involves analysis of a broad range of contemporary environmental issues from the local to global scales. (Same as EVRN 150.)

GEOG 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Geography. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

GEOG 201. Culture and Health. 3 Credits. H/W
This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as AAAS 203 and GIST 210.)

GEOG 202. Culture and Health, Honors. 3 Credits. H/W
Honors version of AAAS 203, GEOG 201 and GIST 210. This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as AAAS 204 and GIST 211.)

GEOG 304. Environmental Conservation. 3 Credits. NE N
A survey of current methods of describing and modeling the function, structure, and productivity of natural and anthropogenically modified earth resource systems, along with a discussion of contemporary views of what constitutes a natural landscape. Fundamental natural science principles about the interplay among lithospheric, atmospheric, hydrospheric, and biospheric components of earth systems are emphasized. Uses of natural resources, including fossil fuels, minerals, and water are described with attention to the earth's total energy budget. Human activities that affect preservation, conservation, and multiple uses of earth regions receive attention. Systems under stress through population and other contemporary forces serve as examples. (Same as EVRN 304.)

GEOG 311. Introductory Cartography and Geovisualization. 4 Credits. N LFE
This course is an introduction to cartography and focuses on computer-based map making skills. It begins with the history of cartography, cognitive maps, and the use of maps in the past and modern times. Topics covered in this course emphasize spatial data handling, principles of cartography and symbolization, map elements and design, and mapping techniques such as choropleth, proportional symbol and dot maps. Students will learn to adopt appropriate spatial data and mapping techniques to create accurate and creative digital maps reflecting given phenomena.

GEOG 316. Methods of Analyzing Geographical Data. 4 Credits. N LFE
Introduces the benefits and limitations of using quantitative methods to analyze geographical problems. Covers traditional descriptive (e.g., measures of central tendency) and inferential statistics (e.g., hypothesis testing) but also inherently geographical approaches such as shape and point pattern analysis, and spatial autocorrelation. Laboratory emphasizes using the computer to explore and analyze geographical problems.

GEOG 321. Climate and Climate Change. 3 Credits. N
This course is designed to introduce students to the nature of the Earth's physical climate. It introduces the basic scientific concepts underlying our understanding of our climate system. Particular emphasis is placed on energy and water balances and their roles in evaluating climate change. The course also evaluates the impact of climate on living organisms and the human environment. Finally, past climates are discussed and potential future climate change and its impact on humans is evaluated. (Same as ATMO 321.) Prerequisite: ATMO 105 or GEOG 104.

GEOG 332. Glaciers and Landscape. 3 Credits. N
Elements from glaciology, geology, and climatology are merged to examine the interactions between glaciers and their natural environments, including the processes involved in glacier formation, the relationship between glaciers and climate, the mechanisms of glacier flow, and interpretation of the Earth's glacial record. Emphasis is placed on an interdisciplinary approach to study environmental change and paleoclimate reconstruction. Prerequisite: GEOG 104 or GEOL 101, or consent of instructor.

GEOG 335. Introduction to Soil Geography. 4 Credits. N LFE
This course focuses on the properties and processes of soils as they occur in their environment. The student is introduced to the nature of soil as it functions as a body: genesis of soils; properties of soil solids, especially colloids; soil chemical composition, properties, and reactions; interaction between solid, liquid, and gaseous components in soils; plant-soil-water relationships; biological interactions with soil; classification of soils; and the distribution of soils on the landscape. Not open to students who have taken EVRN 535 or GEOG 535. (Same as EVRN 335.) Prerequisite: GEOG 104 or GEOL 101 or consent of instructor; BIOL 100 and CHEM 130 or CHEM 190 and CHEM 191 recommended.

GEOG 336. Introduction to Environmental Hydrology and Water Resources. 3 Credits. N
Water is vital to life on earth. In this course we cover components of the water or "hydrologic" cycle, how management has altered them, and how they are predicted to change with the changing climate. We discuss the evolution of water policy, its implications for managements and the economic impact of human perturbation on water. We study the physical processes that govern the water cycle, learn how they are measured, and estimate hydrologic fluxes. (Same as EVRN 363.) Prerequisite: GEOG 104 or GEOL 101.

GEOG 339. Topics in Physical Geography: _____ 1-3 Credits. N
An investigation of special topics in Physical Geography. May include coursework under headings of soils, vegetation, climate, or geomorphology. May be repeated if topic differs.

**GEOG 351. Africa's Human Geographies. 3 Credits. NW S/W**
An introduction to historical, cultural, social, political, and economic issues in Africa from a geographic perspective. The course begins with the historical geography of humanity in Africa, from ancient times through to the present. Other topics include cultural dynamics, demography, health, rural development, urbanization, gender issues, and political geography. Case studies from Eastern and Southern Africa will be used to illustrate major themes. (Same as AAAS 351.)

**GEOG 352. Economic Geography. 3 Credits. S**
This course offers an overview of contemporary economic geography with an underlying theme of uneven regional development. Topics examined include: the historical context in which capitalism emerged; the major theoretical approaches used to understand the temporal and spatial dynamics of capitalist society; a series of case studies of different economic sectors; and the global economy, including its development with respect to colonialism, neocolonialism, international trade, third world development, and population growth.

**GEOG 354. Globalization: A Geographic Approach. 3 Credits. S**
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. (Same as GIST 354.)

**GEOG 355. Introduction to Geographic Information Systems. 4 Credits. N LFE**
An introduction to computer-based analysis of spatial data. Covers basic principles of collecting, storing, analyzing, and displaying spatial data. Emphasis is on problem-solving activities using common spatial analytical techniques (e.g., map overlay). The student will gain extensive hands-on experience with state-of-the-art GIS software.

**GEOG 360. Computer Programming for Mapping and Spatial Analysis. 3 Credits. N**
This course teaches basic computer programming concepts and skills for mapping and spatial analysis using various scripting languages. The goal is to enable students to write computer programs, develop mapping applications, and perform spatial data analysis. This course will lay the foundation for computerized problem solving skills that can be applied in later courses. This course assumes no previous programming experience.

**GEOG 370. Introduction to Cultural Geography. 3 Credits. H**
Charts some of the major lines of research in cultural geography, including critical theory, political economy, poststructuralist thought, feminism, and global consumption. Through fieldwork, diverse research methods are applied to issues such as community development, cultural patterns on the landscape and global impacts on local economies. Prerequisite: GEOG 100, GEOG 102 or GEOG 103; or consent of instructor.

**GEOG 371. Environmental Geopolitics. 3 Credits. S**
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as EVRN 371 and GIST 371.)

**GEOG 372. Environmental Policy. 3 Credits. N**
An historical and analytical study of the formulation, implementation, and consequences of environmental policy in the United States. Attention is directed at relevant interest groups, issues specific to both rural and urban populations, relationships between national policies and international organizations concerned with environmental problems. Prerequisite: GEOG 148 or EVRN 148; and either EVRN 103 or HIST 103, EVRN 347 or HIST 347, or GEOG 150 or EVRN 150.

**GEOG 373. Borders, Politics, and Territory. 3 Credits. S**
This course considers how humans wield power in the geographical form of borders and territories. At the international level this is called geopolitics, while at the national, provincial, and local levels it is political geography. Rare is a day when headlines fail to portray ongoing negotiations for influence over the places and spaces through which people live and the very lines that divide them. This course traces the historical evolution of borders and territory before exploring contemporary practices of bordering and border crossing in relation to trade, migration, maritime, outer space, air space, environment, cyberspace, governance, and human rights. Prerequisite: GEOG 100 or GEOG 102 or equivalent or consent of instructor.

**GEOG 374. Vulnerability and Adaptation. 3 Credits. S**
The course objective is to understand and analyze human adaptation to environmental change by focusing on disasters and climate change. Each semester, the course rotates topics ranging from oil spills, hurricanes, sea-level rise to infectious disease. It provides undergraduate students with research experience and service learning, and offers opportunities for certificates through the Center for Undergraduate Research and the Center for Civic and Service Responsibility at KU. Students learn theories relevant to the case study, work in groups to generate research themes, conduct literature search and review, learn research methods, and write and present their work.

**GEOG 377. Urban Geography. 3 Credits. S**
This course explores the city from the multiple perspectives of its inhabitants. The cultural viewpoints of place, gender, age, and ethnicity are stressed. Traditional topics such as urban hierarchy, functions of the city, suburbanization, and ongoing changes in core and peripheral areas also receive attention. The distinctive landscapes of individual North American cities are emphasized, but examples also are drawn from throughout the world.

**GEOG 390. Geography of the United States and Canada. 3 Credits. S**
A study of the different physical, economic, and cultural settings in the United States and Canada which form the basis for the various forms of livelihood. Emphasis on the United States. (Same as AMS 390.) Prerequisite: An introductory geography course or background in the United States or Canadian history, social science, or culture or consent of instructor.

**GEOG 395. Environmental Issues of: ______. 3 Credits. S**
This regional geography course examines contemporary environmental issues of a particular region of the world based on the expertise of the professor. Course emphasis is on the interaction of natural, socio-economic, and cultural factors of development that give rise to environmental problems. Students learn how local, national, and international government and non-governmental stakeholders address environmental problems. Course may be repeated with different professors.

**GEOG 396. East Asia. 3 Credits. NW S/W**
This course is an introduction to the contemporary politics, economy, and culture of Korea, China, and Japan in the context of globalization. In addition to the discussion of individual countries, the course examines the cross-cutting themes such as international relations, cultural exchange, and economic development in the region of East Asia.
GEOG 397. Geography of Kansas and the Plains. 3 Credits. S
A study of the different physical, economic, and cultural settings in Kansas and the Plains that form the basis for various kinds of livelihood.

GEOG 399. Topics in Regional Studies: ______. 1-3 Credits. S
An investigation of special topics in Regional Studies. May include coursework related to a specific country or region. May be repeated if topic differs.

GEOG 451. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as BIOL 451 and EVRN 451.)

GEOG 458. Geographical Information Systems: ______. 1-6 Credits. N
An introduction to the organization and components of geographic information systems and their software. Fundamental concepts and their implementation with applications to physical and human systems.

GEOG 490. Geographic Internship. 1-6 Credits. N
Supervised practical experience. The student submits a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Fifteen hours of geography and permission of instructor.

GEOG 498. Special Topics in Geography: ______. 1-5 Credits. U
Prerequisite: Fifteen hours of geography.

GEOG 499. Honors Course in Geography. 2-3 Credits. U
Open to students with nine hours of upper level credit in geography, an average of at least 3.5 in all geography courses, and an overall average of at least 3.25. Includes the preparation of an honors paper and its defense before a committee of at least two regular faculty members.

GEOG 500. Senior Capstone in Geography. 3 Credits. N
The capstone project provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their studies. The major goals of this course are to help students synthesize an integrated view of geography, advance steps toward career preparation, and develop networking and professional skills. The course will provide an overview of geography as a unified, coherent discipline with multiple perspectives, emphasize writing and analytical skills, introduce students to a major research project that integrates elements of physical and human geography, cultivate knowledge for future professional development, and introduce students to professional organizations. Students will gain experience applying and/or interviewing for professional positions and be introduced to multiple professional development and career services on campus. Graduate students may take this course by permission only. Prerequisite: Nine hours in Geography and status as a senior major in the department; or permission of instructor.

GEOG 512. Advanced Cartography and Geovisualization. 4 Credits. N
This is an advanced computer-based scientific cartography course. It covers mapping techniques such as dasymetric mapping, multivariate mapping, cartogram and flow map, map animation, geovisual analytics, web and interactive mapping, and mapping from remotely sensed imagery. This course focuses on practical and hands-on experience. Students will learn theoretical concepts, principles, and design examples, and produce a cartographic portfolio of well-designed and professional maps. Prerequisite: GEOG 311 or equivalent; or consent of instructor.

GEOG 518. Geoinformatics Internship. 1-3 Credits.
Real world experience with geospatial technologies is not only essential for understanding and using geospatial knowledge but also beneficial for students to start a career path in geospatial technologies. Approved internships are supervised development and applications of geospatial technologies in business, government, non-profit, educational or other related fields. They can involve field work, data collection, processing, and analysis. Internship supervisors must agree to mentor the student and to complete necessary evaluations within a timely manner. Prerequisite: GEOG 358 or consent of instructor.

GEOG 521. Microclimatology. 3 Credits. N
A study of climatic environments near the earth-atmosphere interface. Consideration of rural climates in relation to agriculture and urban climates as influenced by air pollution and other factors. Emphasis is on physical processes in the lower atmosphere, distribution of atmospheric variables, the surface energy budget, and water balance. (Same as ATM 521.) Prerequisite: ATM 105 and MATH 125.

Introduction to study of the environment through air photos and satellite imagery, including principles of remote sensing, interactions of electromagnetic energy with the atmosphere and earth's surface, aerial photography, satellite systems, and sensors (electro-optical, thermal, and radar). Emphasis in the latter part of the course is on such applications as global monitoring, land cover mapping, forestry, agriculture, and oceanography. Laboratory emphasizes visual interpretation of aerial photography and satellite imagery and an introduction to digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. Prerequisite: MATH 101 or equivalent. GEOG 358 recommended.

GEOG 528. Spatial Databases. 3 Credits. N
This course covers concepts in spatial databases and their relevance in geographic information systems (GIS) and spatial analysis. It introduces the fundamental theories of data management behind Geographic Information Systems and imparts hands-on experience with mainstream spatial database management systems (DBMS), standard query languages and necessary tools to query/transform geospatial data, and perform spatial and network analysis. The course provides more in-depth coverage on database-oriented approaches for GIS geospatial analysis. Prerequisite: GEOG 358; or instructor permission.

GEOG 531. Topics in Physical Geography: ______. 1-3 Credits. N
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated, if topic differs.

GEOG 532. Geoarchaeology. 3 Credits. N
Application of the concepts and methods of the geosciences to interpretation of the archeological record. The course will focus primarily on the field aspects of geoaarchaeology (e.g., stratigraphy, site formational processes, and landscape reconstruction), and to a lesser extent on the array of laboratory approaches available. (Same as ANTH 517.) Prerequisite: GEOG 104, ANTH 110, or ANTH 310.
GEOG 535. Soil Geography. 4 Credits. N LFE
A broad study of the principles and properties of soils and their distribution on the landscape. Topics covered include: pedology, clay mineralogy, soil physics, soil chemistry, management of soils, soil biology, taxonomy, and soil geomorphology. Laboratory section and a field project are required. Not open to students who have taken GEOG 335 or EVRN 335. (Same as EVRN 535.) Prerequisite: GEOG 104 or GEOL 101 or consent of the instructor; BIOL 100 and CHEM 130 or CHEM 190 and CHEM 191 recommended.

GEOG 538. Soil Chemistry. 3 Credits. N LFE
This course examines the chemical properties and processes of soils and methods of evaluation. Topics include solid and solution speciation, mineral solubility, soil colloidal behavior, ion exchange, surface complexation, soil salinity and sodicity, soil acidity, oxidation-reduction reactions, and kinetics of soil chemical processes. (Same as EVRN 538.) Prerequisite: GEOG 335 or GEOG 535 or EVRN 335 or EVRN 535, CHEM 135 or CHEM 195 and CHEM 196, MATH 125, or consent of the instructor.

GEOG 540. Ecohydrology. 3 Credits. N
Ecohydrology is the discipline that answers real world hydrologic and biologic questions through integrating knowledge from hydrology, ecology, atmospheric science and biogeochemistry. We focus on the key concepts, methodological approaches and analytical techniques utilized in ecohydrology to understand and quantify: plant water use, evolution of hydrologic properties, groundwater-surface water interactions, controls on landscape patterns, spatial and temporal patterns of soil moisture and nutrient concentrations, and vegetation competition. Students should leave the class having developed critical skills in: 1) reviewing scientific literature, 2) collecting environmental samples, 3) analyzing ecohydrologic data, 4) writing a scientific research paper, 5) working collaboratively and independently. (Same as EVRN 540.) Prerequisite: GEOG 104 or GEOL 101 or EVRN 363 or GEOG 336 or permission of instructor.

GEOG 541. Geomorphology. 4 Credits. N LFE
A critical study of land forms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOL 541.) Prerequisite: GEOG 101 and GEOL 103, GEOG 104 and GEOG 105, or GEO 103 and GEO 304.

GEOG 550. Environmental Issues in Africa. 3 Credits. S
Acquaints students with the complexities of debates on environmental problems in Sub-Saharan Africa. Topics addressed may include deforestation, desert expansion, wildlife conservation, soil erosion, climate change, coral reef destruction, water resources development, mangrove preservation, the environmental effects of war, industrialization, and urbanization. Class presentations and projects synthesize the perspectives of both human and physical geography. (Same as AAAS 551.) Prerequisite: GEOG 104 or permission of instructor.

GEOG 552. Topics in Urban/Economic Geography: ______. 1-3 Credits. S
An investigation of special topics in urban/economic geography. May include specific course work under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated.

GEOG 553. Geography of African Development. 3 Credits. W
Acquaints students with the values and social parameters of African agricultural and pastoral practice. Topics include customary land rights, African perspectives on the natural world, gender issues in African agriculture, and the urbanization of African cultures. The course also contrasts African views with those of Western development practitioners and donor agencies. Case studies from different countries are used to highlight the continent's regional differences. (Same as AAAS 553.)

GEOG 556. Geography of the Energy Crisis. 3 Credits. S
A discussion and analysis of the basic facts and causes of energy problems on a national and world scale. Examines current production, consumption, efficiency, reserves, conservation, and other energy policy options, including adjustments that will affect consumer use, national politics, and strategic issues. Prerequisite: GEOG 102.

GEOG 558. Intermediate Geographical Information Systems. 4 Credits. N LFE
An intermediate level course in geographic information science designed for advanced undergraduate and graduate level students who already have an introductory understanding of GIS. Emphasis will be placed on the application of spatial analytical techniques to geographical problem-solving. Topics include spatial data structures, interpolation techniques, terrain analysis, cost surfaces, and database management technique. Students will apply knowledge gained in lecture and reading to natural resource, urban, and scientific applications using state-of-the-art GIS software. Prerequisite: GEOG 358 or consent of instructor.

GEOG 560. GIS Application Programming. 3 Credits. N
This course teaches programming within Geographic Information Systems. Students learn how to customize GIS applications to automate data processing and spatial analysis through programming languages. GIS programming concepts and methods are introduced from the aspects of spatial data management and analysis covering both the vector and raster data models. Prerequisite: GEOG 558 and a course in programming languages.

GEOG 570. Geography of American Indians. 3 Credits. NW S
A survey of the culture and history of selected indigenous peoples of the Americas. Emphasis is placed on the environmental setting, the settlement and subsistence patterns, and the impact of European colonization. Discussion includes present-day ethnic and resource issues.

GEOG 571. Topics in Cultural Geography: ______. 1-3 Credits. S
An investigation of special topics in cultural geography. May include specific course work under the headings of cultural theory and methodology, material culture, foodways, religion, and similar topics. May be repeated, if topic differs.

GEOG 577. Human Dimensions of Global Change. 3 Credits. S
This class introduces concepts such as coupled human and natural systems, social-ecological resilience, and sustainability science, examines people’s responses to major climate, land, water, and coastal change, and discusses case studies. One hour of each seminar will be devoted to individual needs that address topical or methodological issues. Class requirements include presentations, biweekly papers, and a term paper. (Same as GIST 577.) Prerequisite: One of the following: GEOG 100, GEOG 104, GEOG 374, or an Environmental Studies introductory course.

GEOG 582. Geopolitics and Genocide. 2-3 Credits. S
Explores the inherently geographical and geopolitical nature of genocide and related mass violence and introduces an overarching concept, territorial cleansing, that foregrounds the spatial and territorial nature of these events. Detailed studies of cases at a range of scales and locales provide the major context for critical examination and comparison of territorial cleansing concepts. Students enrolling for 3 credits will prepare and present a substantial independent research paper. (Same as GIST 582.) Prerequisite: GEOG 102 or GEOG 103; or ANTH 108 or ANTH 109; or permission of instructor.

GEOG 583. Migration, Diasporas and Development. 3 Credits. S
This course introduces students to key concepts in global migration and its implications on development in migrant sending states particularly
those on the African continent. It will explore the various migration patterns from Africa (e.g., migration between North Africa and Europe in the aftermath of the Arab Spring), South-South migration, the "brain drain" of skilled professionals and its implications for development, and the role of diasporas in development. The course will also assess the integration of migrants in major migrant destination regions. Finally, the course will provide students with an opportunity to critically examine the relationship between migration and development in a particular national context of their choice. (Same as AAAS 583.) Prerequisite: GEOG 102 or consent of instructor.

GEOG 586. Sustainable Food Systems and Food Security in the Global South. 3 Credits. S
The course adopts an interdisciplinary approach to study food systems and food security in the Global South. It incorporates multiple perspectives ranging from the local to the global level to explore the cultural, ecological/environmental, economic, sociopolitical, and ethical dimensions connected to the global food system. It also examines several dimensions of food insecurity. Students will also examine the impact of food insecurity on health as well as racial and economic disparities in access to food. The course will also examine the research and conceptualization of food systems and analyze concepts such as "food deserts," "food oases," "food swamps," and "food grasslands." We will examine food production and food acquisition strategies in low-income areas. Case studies will be drawn on experiences from diverse regions particularly Southern Africa even though other regions such as Latin America and Southeast Asia will be considered. Prerequisite: GEOG 102 or consent of instructor.

GEOG 590. Understanding Central Asia. 3 Credits. NW S/W
An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in REES 710. (Same as REES 510.) Prerequisite: One previous interdisciplinary area studies course or the instructor's permission.

GEOG 591. Geography of Latin America. 3 Credits. SC S/W
A study of the different physical, economic, and cultural settings in Latin America which form the basis for the various forms of livelihood.

GEOG 601. Indigenous Peoples of the World. 3 Credits. S
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GIST 601 and ISP 601.) Prerequisite: Permission of instructor.

GEOG 635. Soil Physics. 3 Credits. N
Provides theoretical and practical foundations for understanding physical properties and processes of variably-saturated porous media. Focus is on the transport, retention, and transformation of water, heat, gas, and solutes through the soil. We examine modern vadose zone measurement methods, analytical tools, and numerical models for data collection and interpretation. (Same as EVRN 635.) Prerequisite: GEOG 335 or EVRN 335; or GEOG 535 or EVRN 535, and MATH 125, PHSX 114; or consent of instructor.

GEOG 648. Location Modeling. 3 Credits. N
This course provides an overview of advanced location analysis and modeling in the context of GIS. Introduces students to principles of location analysis, methods for making strategic location decisions as well as existing classic location problems. Demonstrates analytical approaches by which location problems can be solved using mathematical programming, GIS and other optimization software. This course is a specialized course with an emphasis on the spatial analysis function of Geographic Information Systems, which covers many concrete applications of GIS geospatial analysis in urban planning, transportation, and service systems planning, ranging from firefighting stations to forestry management to transportation facilities. Prerequisite: GEOG 358; or instructor permission.

GEOG 658. Topics in Geospatial Technologies: ______. 1-6 Credits. LFE
An investigation of special topics in geoinformatics. May include specific coursework under the headings of methodology, basic research, thematic or regional applications, geographic information systems (GIS), Global Positioning System (GPS), and geostatistics. May be repeated if topic differs. Prerequisite: GEOG 111 or GEOG 358 or consent of instructor.

GEOG 716. Advanced Geostatistics. 3 Credits.
An introduction to the practical application of advanced geospatial statistical techniques. Potential topics include: spatial regression, interpolation, clustering, and advanced nonparametric statistics. Knowledge of a statistical package and GIS is assumed. Prerequisite: GEOG 358 or equivalent.

GEOG 719. Development of Geographic Thought. 2-3 Credits.
Critical analysis of the growth of geographic thought from antiquity to the present: emphasis on structure of modern geography. Prerequisite: Twenty hours of geography or consent of instructor.

GEOG 726. Remote Sensing of Environment II. 4 Credits.
An overview of techniques for computer analysis of digital data from earth orbiting satellites for environmental applications. Topics covered include: data formats, image enhancements and analysis, classification, thematic mapping, and environmental change detection. The laboratory exercises provide hands-on experience in computer digital image processing in the department's NASA Earth Science Remote Sensing Laboratory. Prerequisite: Introductory statistics and GEOG 526 or equivalent.

GEOG 731. Topics in Physical Geography: ______. 1-3 Credits.
An investigation of special topics in physical geography. May include specific course work under the headings of geomorphology, climatology, soils, vegetation, quaternary, paleoenvironments, hydrology, etc. May be repeated.

GEOG 752. Topics in Urban/Economic Geography: ______. 1-3 Credits.
An investigation of special topics in urban/economic geography. May include specific coursework under the headings of energy, economic development, international trade, environmental perception, housing, transportation, and migration. May be repeated.

GEOG 758. Geographic Information Science. 3 Credits.
This course integrates topics in geographical information science (GISc) with spatial analytical techniques to solve spatial problems. Focuses on the most current research in GISc and its relevance to the environmental sciences, natural resource management, and spatial decision-making. Students are expected to apply the concepts and techniques learned in this class to their own research projects. Prerequisite: GEOG 316 and GEOG 558, or consent of instructor.

GEOG 759. Ecosystems Stewardship. 3 Credits.
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge
that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as BIOL 759 and EVRN 751.)

GEOG 771. Topics in Cultural Geography. 1-3 Credits.
An investigation of special topics in cultural geography. May include specific course methodology, material culture, foodways, religion, and similar topics. May be repeated.

GEOG 781. Environmental Geopolitics. 3 Credits.
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. This course is a more advanced and rigorous version of the undergraduate version of this course. It is not open to students who have taken or are enrolled in GEOG 371 or EVRN 371, Environmental Geopolitics.

GEOG 805. Perspectives in Geography. 2 Credits.
This course provides background on the discipline of geography and how it is practiced by the faculty in the department. It provides a foundation of knowledge of geography’s role within the human and physical sciences as well as the humanities. Students will gain a critical perspective into the breadth of geography, including the ways in which geographers view the world through the lenses of place, space, and scale and the debates and approaches within the changing landscape of geographic inquiry.

GEOG 806. Proposal Writing and Research Design. 2 Credits.
The course is designed to assist graduate students in developing their research project, including refining research questions, creating a literature review, and defining appropriate methods to aid in successfully answering their questions. Learning outcomes include the production of an individual draft research proposal based upon the student’s research design.

GEOG 875. Qualitative Research Methods. 3 Credits.
This course provides background on qualitative research methods used in human geography. Students will gain a critical perspective into relevant issues of qualitative methods with specific regard to ethical concerns related to human subjects research within the social sciences and humanities and the debates and approaches within the changing landscapes of qualitative methods. Students will have the opportunity to practice these techniques and strategies in a group research project. Prerequisite: GEOG 805 or consent of instructor.

GEOG 890. Geographic Internship. 1-6 Credits.
Supervised professional experience. The student submits to the program committee a proposal describing the internship prior to enrollment. Upon acceptance, regularly scheduled meetings with the advisor provide assistance, guidance and evaluation of progress in the professional experience. A written summary of the experience or outcomes of the research project are prepared independently by the student, a representative of the host agency, and the advisor. Total credit not to exceed six hours. Prerequisite: Twelve hours of graduate level geography courses and consent of program committee.

GEOG 898. Readings in Geography. 1-4 Credits.
GEOG 899. Master’s Thesis. 1-10 Credits.
Thesis credit. Graded on a satisfactory progress/limited progress/no progress basis.

GEOG 980. Seminar in Geography: 1-3 Credits.
GEOG 998. Research in Geography. 1-5 Credits.
GEOG 999. Doctoral Dissertation. 1-10 Credits.
Dissertation credit. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts and Bachelor of General Studies in Geography

Why study geography?
The BA and BGS degrees each offer a different educational experience and students should carefully consider which degree is most appropriate to meet their educational goals.

Bachelor of Arts (BA)
The Bachelor of Arts in Geography provides a broad liberal arts education and touches on all aspects of Geography. Study includes a minimum of 33 credit hours in Geography: a core of eighteen hours in regional, physical, human, and statistical geography plus another fifteen hours of electives. Students need to meet the KU Core requirements and/or requirements set by the College of Liberal Arts and Sciences including a non-English language. Students taking the B.A. degrees should note that most Geography graduate programs require a statistics course, e.g., GEOG 316, and we highly recommend a basic course in GIS, e.g., GEOG 358.

Bachelor of General Studies (BGS)
The Bachelor of General Studies degree allows for more specialization in a student’s main area of interest while still providing a solid foundation. There are fewer principal courses required, but students must complete a concentration (three upper division courses) or a minor in a second field of study (usually 18 hours). There is no non-English language requirement for the BGS. Please note that most geography graduate programs require a statistics course, e.g., GEOG 316, and we highly recommend a basic course in GIS, e.g., GEOG 358.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

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Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Geography Programs

The B.A., B.G.S., and B.S. in geography provide general liberal arts enrichment, preparation for graduate work, and training for careers in geography and related fields. Geography may be combined with another program as a double major, or courses in another area may simply be added to those in geography.

First- and Second-Year Preparation

Students should begin the major by meeting the core requirements and preparing for major courses.

Requirements for the B.A. or B.G.S. Major

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 100</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>People, Place, and Society</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 142</td>
<td>Global Environment II: The Ecology of Human Civilization</td>
<td>5</td>
</tr>
<tr>
<td>GEOG 145</td>
<td>Global Environment II: The Ecology of Human Civilization, Honors</td>
<td>5</td>
</tr>
<tr>
<td>GEOG 358</td>
<td>Introduction to Geographic Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 111</td>
<td>Mapping Our Changing World</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 316</td>
<td>Methods of Analyzing Geographical Data</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 500</td>
<td>Senior Capstone in Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 104</td>
<td>(Goal 3 Natural Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>(BA Laboratory/Field Experience (LFE), Major Requirement)</td>
<td>2</td>
</tr>
</tbody>
</table>

Geography Required Elective Hours

8-10 additional credit hours selected from any GEOG 177: First Year Seminar course, and from any 300-600 level GEOG classes for a total of at least 33 credit hours in major courses.

Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours

Satisfied by 33 hours of major courses.

Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA

Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in Geography can be found here: Geography (p. 1421), or by using the left-side navigation.

Sample 4-year plans for the BGS degree in Geography can be found here: Geography (p. 1422), or by using the left-side navigation.

Departmental Honors in Geography

To be accepted as a candidate for honors, an undergraduate major must have completed at least 9 hours of upper-division credit in geography with a grade-point average of 3.5 in all geography courses. In addition to outstanding work in geography, the program requires GEOG 499, an independent study course consisting of an honors paper.

The student presents the results of this paper in an oral examination to a committee of at least 2 faculty members, normally from the geography department, chaired by the GEOG 499 supervisor. To graduate with honors, the student must complete the paper and the examination and maintain the 3.5 grade-point average.

BA in Geography

Below is a sample 4-year plan for students pursuing the BA in Geography. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td></td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>GEOG 100, 102, 103, 142, or 145 (Goal 3 Social Science, Major Requirement)</td>
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<td></td>
</tr>
<tr>
<td>GEOG 104 (Goal 3 Natural Science, Major Requirement)</td>
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<td>Goal 1.2 Quantitative Literacy</td>
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</tr>
<tr>
<td>GEOG 105 (BA Laboratory/Field Experience (LFE), Major Requirement)</td>
<td>2</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total: 16

14
Below is a sample 4-year plan for students pursuing the BGS in Geography. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website. (http://kucore.ku.edu/courses/)

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td></td>
<td>GEOG 102</td>
<td>Goal 2.1 Written Communication (1 of 2)</td>
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<td>GEOG 103</td>
<td>Goal 3 Social Science, Major Requirement</td>
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<tr>
<td></td>
<td></td>
<td>GEOG 104</td>
<td>Goal 3 Social Science, Major Requirement</td>
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<td>GEOG 105</td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ENGL 101</td>
<td>1st Semester Language, or 1st semester of Another Language (BA Second Language)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>ENGL 102</td>
<td>1st Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>ENGL 103</td>
<td>Goal 1.1 Literacy (MATH 101 Recommended)</td>
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### Sophomore

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td></td>
<td>GEOG 358</td>
<td>Goal 2.2 Communication</td>
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<td>Goal 3 Arts and Humanities</td>
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<td>3rd Semester Language (BA Second Language)</td>
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<td></td>
<td></td>
<td>GEOG Elective</td>
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</table>

### Junior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
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<th>Hours</th>
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<tbody>
<tr>
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<td>GEOG 316</td>
<td>Goal 2.2 Communication</td>
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<td></td>
<td></td>
<td>Goal 4.1 US Diversity</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td></td>
<td></td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td>GEOG Elective</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td></td>
<td></td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Students can also choose to complete GEOG 140 or GEOG 144 instead of GEOG 104 and GEOG 105.
3. Students will earn Goal 3 Social Science credit if they take GEOG 102, GEOG 103, GEOG 142 or GEOG 145, but if a student chooses GEOG 100 then they will fulfill Goal 4.2 Global Awareness and should plan to take a course that fulfills Goal 3 Social Science in place of the planned goal 4.2 Global Awareness.
4. B-10 additional credit hours selected from any GEOG 177 First Year Seminar: _____ course, and from any 300-600 level GEOG classes for a total of at least 33 credit hours in major courses.
5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in Geography

Below is a sample 4-year plan for students pursuing the BGS in Geography. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website. (http://kucore.ku.edu/courses/)
### Bachelor of Science in Geography

#### Why study geography?

A much more specialized degree, the Bachelor of Science offers concentrated specializations in one of two aspects of Geography: physical geography or geographic information science (GIS). The BS has fewer general education requirements and require solid backgrounds in mathematics and basic science.

There are two B.S. degree options:

- **Physical Geography Option**
  - Students prepare for a career in environmental assessment and problem solving. Basic requirements include preparation in chemistry, biology, physics and mathematics. Advanced course work includes the study of the processes that affect the physical environment (soils, vegetation, climate and geomorphology), and techniques for performing statistical and computational analysis of these processes (statistics, GIS and remote sensing).

- **Geographical Information and Analysis Option**
  - Students prepare for a career in the area of geographic information science and problem solving using a variety of spatial analysis techniques. Basic requirements include preparation in mathematics, science and computer science. Advanced course work includes work in cartography, GIS, remote sensing, spatial statistics, spatial analysis and data presentation and visualization. In addition, students are expected to take some coursework in one of the other areas of geography (physical, human, and regional).

Beyond the basic requirements listed under each option, both Geography B.S. degrees have a common set of general education requirements, including courses in English, mathematics, communications, humanities, social sciences and a history or philosophy of science course. Some students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### B.S. in Geography Bachelor's: Fall 2022-23

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
<th>Spring</th>
<th>Hour</th>
<th>Requirement</th>
<th>Requirement SPRING ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>16</td>
<td>4 GEG 111 or 358</td>
<td>3</td>
<td>Goal 3 Arts and Humanities</td>
<td>Goal 5 Social Responsibility and Ethics</td>
</tr>
<tr>
<td>GEOG 358 (Major Requirement)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>15</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 8-10 additional credit hours selected from any GEOG 177 First Year Seminar: ______ course, and from any 300-600 level GEOG classes for a total of at least 33 credit hours in major courses.

3 Students can also choose to complete GEOG 140 or GEOG 144 instead of GEOG 104 and GEOG 105.

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5 Please note:

   All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

   The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

   There are two B.S. degree options:

   - **Physical Geography Option**
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Beyond the basic requirements listed under each option, both Geography B.S. degrees have a common set of general education requirements, including courses in English, mathematics, communications, humanities, social sciences and a history or philosophy of science course. Some students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

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- **Physical Geography Option**
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Beyond the basic requirements listed under each option, both Geography B.S. degrees have a common set of general education requirements, including courses in English, mathematics, communications, humanities, social sciences and a history or philosophy of science course. Some
courses are shared by the two options; however, different course selection menus apply for the remaining requirements.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

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**Geography Programs**

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**First- and Second-Year Preparation**

Students should begin the major by meeting the core requirements and preparing for major courses.

**Requirements for the B.S. Degree**

Geography B.S. General Education Requirements

**Written Communication – Core Skill and Critical Inquiry.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td></td>
</tr>
</tbody>
</table>

Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

**Critical Reading and Writing**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td></td>
</tr>
</tbody>
</table>

Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

or ENGL 109Honors Introduction to English

AP English Literature & Composition score of 4 or above

Equivalent transfer course

**Sophomore Reading and Writing II**

Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____</td>
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</tr>
<tr>
<td>or ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar: _____</td>
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</tr>
</tbody>
</table>

AP English Literature & Composition score of 3 or above

Equivalent transfer course

**Communications.** Satisfied by COMS 130 (COMS 230, PHIL 148, PHIL 310 or exemption).

**History or philosophy of science.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 103</td>
<td>Environment and History</td>
<td></td>
</tr>
<tr>
<td>HIST 305</td>
<td>The Scientific Revolution</td>
<td></td>
</tr>
<tr>
<td>HIST 347</td>
<td>Environmental History of North America</td>
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<tr>
<td>HIST 407</td>
<td>History of Science in the United States</td>
<td></td>
</tr>
<tr>
<td>PHIL 370</td>
<td>Moral Issues in Medicine</td>
<td></td>
</tr>
<tr>
<td>PHIL 375</td>
<td>Moral Issues in Computer Technology</td>
<td></td>
</tr>
<tr>
<td>PHIL 380</td>
<td>Environmental Ethics</td>
<td></td>
</tr>
<tr>
<td>PHIL 620</td>
<td>Philosophy of Natural Science</td>
<td></td>
</tr>
<tr>
<td>PHIL 622</td>
<td>Philosophy of Social Science</td>
<td></td>
</tr>
</tbody>
</table>

**Humanities - Understanding the Human Condition.** Satisfied by completing 2 principal courses in the humanities. Approved courses may be searched for availability through the Kyou portal.

**Social and Behavioral Sciences - Understanding Society and Behavior.** Satisfied by completing 2 principal courses in the social sciences. Approved courses may be searched for availability through the Kyou portal.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 44 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of
study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Physical Geography Option**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Geography Prerequisite or Co-requisite Knowledge</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calculus I. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 125  Calculus I</td>
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<tr>
<td></td>
<td>Calculus II. Satisfied by one of the following:</td>
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<tr>
<td></td>
<td>MATH 126  Calculus II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(MATH 220 and 320 are also recommended)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physics I. Satisfied by one of the following:</td>
<td>4-5</td>
</tr>
<tr>
<td></td>
<td>PHSX 211  General Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 216  and General Physics I Laboratory (recommended)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 114  College Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 201  and Calculus Supplement to College Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 216  and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physics II. Satisfied by one of the following:</td>
<td>4-5</td>
</tr>
<tr>
<td></td>
<td>PHSX 212  General Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 236  and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 115  College Physics II</td>
<td></td>
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<tr>
<td></td>
<td>&amp; PHSX 202  and Calculus Supplement to College Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 236  and General Physics II Laboratory</td>
<td></td>
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<tr>
<td></td>
<td>Biology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 150  Principles of Molecular and Cellular Biology</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>&amp; BIOL 152  and Principles of Organismal Biology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; BIOL 154  and Introductory Biology Lab for STEM Majors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chemistry. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 130  General Chemistry I</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>&amp; CHEM 135  and General Chemistry II (or CHEM 190 and CHEM 191 and CHEM 196)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Information Technology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EECS 138  Introduction to Computing: ______</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Geography Overview Courses</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principles of Physical Geography. Satisfied by:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GEOG 104  Introduction to Physical Geography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introductory Laboratory in Physical Geography.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>GEOG 105  Introductory Laboratory in Physical Geography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One course in Human or Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Core System Courses</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Climate:</td>
<td></td>
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<tr>
<td></td>
<td>GEOG 321  Climate and Climate Change</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Hydrology:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 336  Introduction to Environmental Hydrology and Water Resources</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or CE 455  Hydrology</td>
<td></td>
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<tr>
<td></td>
<td>Soil Geography:</td>
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<tr>
<td></td>
<td>GEOG 335  Introduction to Soil Geography</td>
<td>4</td>
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<tr>
<td></td>
<td>or GEOG 353  Soil Geography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Glaciology:</td>
<td></td>
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<tr>
<td></td>
<td>GEOG 332  Glaciers and Landscape</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Biogeography:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 414  Principles of Ecology</td>
<td>3</td>
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</tbody>
</table>

**Geoinformatics Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td>Methods of Analyzing Geographical Data. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 316  Methods of Analyzing Geographical Data</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Principles of Geographic Information Systems. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 358  Introduction to Geographic Information Systems</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>One 500-level or above course from GIS Studies. (GEOG 526 Remote Sensing of Environment I recommended)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Senior Capstone</strong></td>
<td></td>
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<tr>
<td></td>
<td>Satisfied by the following:</td>
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</tr>
<tr>
<td></td>
<td>GEOG 500  Senior Capstone in Geography</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Elective Courses</strong></td>
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<tr>
<td></td>
<td>Select two or more of the following:</td>
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<tr>
<td></td>
<td>Ecodynamics:</td>
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<tr>
<td></td>
<td>GEOG 540  Ecodynamics</td>
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</tr>
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<td></td>
<td>Climate:</td>
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<tr>
<td></td>
<td>GEOG 521  Microclimatology</td>
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<td>Geomorphology:</td>
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<tr>
<td></td>
<td>GEOG 532  Georarchaeology</td>
<td></td>
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<td></td>
<td>GEOG 541  Geomorphology</td>
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<tr>
<td></td>
<td>Soil Geography:</td>
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<td></td>
<td>GEOG 538  Soil Geography</td>
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<tr>
<td></td>
<td>Other advanced courses in Physical Geography</td>
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**Geographical Information and Analysis Option**

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<th>Hours</th>
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<tbody>
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<td></td>
<td><strong>Geography Prerequisite or Co-requisite Knowledge</strong></td>
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<tr>
<td></td>
<td>Calculus I. Satisfied by one of the following:</td>
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<tr>
<td></td>
<td>MATH 125  Calculus I</td>
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<tr>
<td></td>
<td>or MATH 145  Calculus I, Honors</td>
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<td></td>
<td>Calculus II. Satisfied by one of the following:</td>
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<tr>
<td></td>
<td>MATH 126  Calculus II</td>
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<tr>
<td></td>
<td>or MATH 146  Calculus II, Honors</td>
<td></td>
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<tr>
<td></td>
<td>General Physics I. Satisfied by one of the following:</td>
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<tr>
<td></td>
<td>PHSX 211  General Physics I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHSX 114  College Physics I</td>
<td>5</td>
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<td></td>
<td>&amp; PHSX 201  and Calculus Supplement to College Physics I</td>
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<td></td>
<td>&amp; PHSX 216  and General Physics I Laboratory</td>
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<td>General Physics II. Satisfied by one of the following:</td>
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<tr>
<td></td>
<td>PHSX 212  General Physics II</td>
<td>3</td>
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<tr>
<td></td>
<td>PHSX 115  College Physics II</td>
<td>5</td>
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<tr>
<td></td>
<td>&amp; PHSX 202  and Calculus Supplement to College Physics II</td>
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<tr>
<td></td>
<td>&amp; PHSX 236  and General Physics II Laboratory</td>
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<tr>
<td></td>
<td>Computing Fundamentals. Satisfied by:</td>
<td></td>
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<tr>
<td></td>
<td>GEOG 360  Computer Programming for Mapping and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or EECS 138  Introduction to Computing: ______</td>
<td></td>
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<tr>
<td></td>
<td><strong>Overview Geography Courses</strong></td>
<td>18</td>
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<tr>
<td></td>
<td>Principles of Physical Geography or Scientific Principles of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Studies. Satisfied by one of the following:</td>
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<tr>
<td></td>
<td>GEGO 304  Introduction to Physical Geography</td>
<td></td>
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<tr>
<td></td>
<td>&amp; GEGO 105  and Introductory Laboratory in Physical Geography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 140  Global Environment I: The Discovery of Environmental Change</td>
<td></td>
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<tr>
<td></td>
<td>Maps and Mapping or Computers, Maps, and Geographical Analysis. Satisfied by:</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science in Atmospheric Science

Departmental Honors in Geography

To be accepted as a candidate for honors, an undergraduate major must have completed at least 9 hours of upper-division credit in geography with a grade-point average of 3.5 in all geography courses. In addition to outstanding work in geography, the program requires GEOG 499, an independent study course consisting of an honors paper.

The student presents the results of this paper in an oral examination to a committee of at least 2 faculty members, normally from the geography department, chaired by the GEOG 499 supervisor. To graduate with honors, the student must complete the paper and the examination and maintain the 3.5 grade-point average.

Bachelor of Science in Atmospheric Science

The Bachelor of Science in Atmospheric Science (B.S.) is designed to meet the recommendations of the American Meteorological Society for a bachelor’s degree in meteorology/atmospheric science. There are four options, each of which meet these recommendations.

1. General Option

This option is for students who want a broad background in atmospheric science. It is also the most suitable option for those who are aiming at a career in weather forecasting. It includes a third semester of synoptic meteorology as well as an air pollution course.

2. Air Pollution Option

Students prepare for a career emphasizing environmental aspects of meteorology. This option includes an additional semester of chemistry as well as environmental studies.

3. Hydrometeorology Option

Students prepare for a career involving the interface between meteorology and hydrology. These studies have important applications to flash floods, droughts and water supply. This option includes additional courses on fluid flow and hydrology from the School of Engineering.

4. News Media Option

This option is for students who wish to enter careers whose main function is to provide information to the general public. It requires additional courses from the School of Journalism.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://iss.ku.edu/) for information about international admissions.
Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Advising**

Students who may decide to major in atmospheric science should confer early with a departmental representative about the selection of courses.

**Requirements for the B.S. Degree in Atmospheric Science**

4 specialized options are available for students who plan professional careers in meteorology or atmospheric science. The **general meteorology** option satisfies all the traditional professional meteorology requirements for employment with the National Weather Service, airlines, or other agencies. The **air pollution meteorology** option meets the need for trained specialists. The **hydrometeorology** option may lead to a career as a meteorologist in one of the many water-related activities in private and governmental agencies. The **news media forecasting** option can lead to a career forecasting the weather on television or radio. The B.S. degree with any of these specialties also prepares students to begin graduate programs in meteorology or atmospheric science.

**Written Communication - Core Skill and Critical Inquiry**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td><strong>Composition</strong></td>
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<tr>
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<td>Satisfied by one of the following:</td>
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</tr>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td></td>
</tr>
<tr>
<td>ACT English score of 27 or above or SAT English score of 600 or above</td>
<td></td>
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<tr>
<td>AP English Literature &amp; Composition score of 3 or above</td>
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<tr>
<td></td>
<td>Equivalent transfer course</td>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td><strong>Critical Reading and Writing</strong></td>
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<tr>
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<td>Satisfied by one of the following:</td>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 105</td>
<td>Honors Introduction to English</td>
<td></td>
</tr>
<tr>
<td>AP English Literature &amp; Composition score of 4 or above</td>
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</tr>
<tr>
<td></td>
<td>Equivalent transfer course</td>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Sophomore Reading and Writing II</strong></td>
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</tr>
<tr>
<td></td>
<td>Satisfied by one of the following:</td>
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</tr>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
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<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
<td></td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
<td></td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing (recommended)</td>
<td></td>
</tr>
<tr>
<td>AP English Literature &amp; Composition score of 5 or above</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Equivalent transfer course</td>
<td></td>
</tr>
</tbody>
</table>

1 Requirement must be completed during initial term of admission at KU.
2 Requirement must be completed within the first academic year at KU.

**Communication - Core Skills and Critical Inquiry. Satisfied by the following:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td><strong>Atmospheric Science Prerequisite or Co-requisite Knowledge</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computing and Programming. Satisfied by the following:</td>
<td></td>
</tr>
<tr>
<td>EECS 138</td>
<td>Introduction to Computing: _____ (Fortran preferred; C++ and Matlab accepted)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 104</td>
<td>Introduction to Physical Geography. Satisfied by the following:</td>
<td>3</td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 145</td>
<td>Calculus I, Honors</td>
<td></td>
</tr>
<tr>
<td>Equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 146</td>
<td>Calculus II, Honors</td>
<td></td>
</tr>
<tr>
<td>Equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 191</td>
<td>Foundations of Chemistry I Laboratory, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 147</td>
<td>Calculus III, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 291</td>
<td>Elementary Linear Algebra, Honors</td>
<td></td>
</tr>
</tbody>
</table>
Applied Differential Equation. Satisfied by the following:
MATH 320 Elementary Differential Equations 3
or MATH 220 Applied Differential Equations

Statistics. Satisfied by the following:
MATH 526 Applied Mathematical Statistics I 3
or BSAN 202 Statistics

Numerical Methods. Satisfied by the following:
MATH 581 Numerical Methods 3

GEOG 358 Introduction to Geographic Information Systems 4

**Atmospheric Science Core Knowledge and Skills**

Majors must complete all of the following:

**Introductory Meteorology.** Satisfied by:
ATMO 105 Introductory Meteorology 5

**Climate and Climate Change.** Satisfied by:
ATMO/GEOG 321 Climate and Climate Change 3

**Weather Forecasting.** Satisfied by:
ATMO 505 Weather Forecasting 3

**Microclimatology.** Satisfied by:
ATMO/GEOG 521 Microclimatology 3

**Synoptic Meteorology.** Satisfied by:
ATMO 630 Synoptic Meteorology 3

**Dynamic Meteorology.** Satisfied by:
ATMO 640 Dynamic Meteorology 3

**Remote Sensing.** Satisfied by:
ATMO 642 Remote Sensing 3

**Advanced Dynamic Meteorology.** Satisfied by:
ATMO 660 Advanced Dynamic Meteorology 3

**Physical Meteorology.** Satisfied by:
ATMO 680 Physical Meteorology 3

**Seminar for Seniors.** Satisfied by:
ATMO 697 Seminar for Seniors 1

**Total Hours** 77-80

**Meteorology Option**

Students selecting this major must select one of the following options:

**General Meteorology Option**

This option satisfies all the traditional professional meteorology requirements for employment with the National Weather Service, airlines, or other agencies.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 525</td>
<td>Air Pollution Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 605</td>
<td>Operational Forecasting</td>
<td>2</td>
</tr>
<tr>
<td>ATMO 650</td>
<td>Advanced Synoptic Meteorology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Air Pollution Meteorology Option**

This option meets the need for trained specialists.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 525</td>
<td>Air Pollution Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 605</td>
<td>Operational Forecasting</td>
<td>2</td>
</tr>
<tr>
<td>ATMO 650</td>
<td>Advanced Synoptic Meteorology</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 195 &amp; CHEM 196</td>
<td>Foundations of Chemistry II, Honors &amp; Foundations of Chemistry II Laboratory, Honors</td>
<td>5</td>
</tr>
<tr>
<td>CE 477</td>
<td>Introduction to Environmental Engineering and Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**Hydrometeorology Option**

This option may lead to a career as a meteorologist in one of the many water-related activities in private and governmental agencies.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 525</td>
<td>Air Pollution Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 605</td>
<td>Operational Forecasting</td>
<td>2</td>
</tr>
<tr>
<td>CE 260</td>
<td>Statics and Dynamics</td>
<td>5</td>
</tr>
<tr>
<td>CE 330</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CE 455</td>
<td>Hydrology</td>
<td>3</td>
</tr>
</tbody>
</table>

**News Media Forecasting Option**

This option can lead to a career forecasting the weather on television or radio.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 605</td>
<td>Operational Forecasting</td>
<td>2</td>
</tr>
<tr>
<td>ATMO 650</td>
<td>Advanced Synoptic Meteorology</td>
<td>3</td>
</tr>
<tr>
<td>ATMS 302</td>
<td>Information Exploration</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 415</td>
<td>Multimedia Reporting</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Hours & Major GPA**

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 33 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.
**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Departmental Honors in Atmospheric Science**
To be accepted as a candidate for honors, an undergraduate major must have completed at least 9 hours of upper-division credit in atmospheric science with a grade-point average of 3.5 in all atmospheric science courses. In addition, the program requires ATMO 499, an independent study course consisting of the creation of an honors paper. The student presents the results of this paper in an oral examination to a committee of a minimum of 2 faculty members, normally from the geography department, and chaired by the ATMO 499 supervisor. To graduate with honors, the student must complete the paper and the examination and maintain the 3.5 grade-point average.

**BS in Geography with concentration in Geographical Information & Analysis**
Below is a sample 4-year plan for students pursuing the BS in Geography with a concentration in Geographical Information & Analysis. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BS Writing 1) BS Writing 1</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BS Writing II)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities (Goal 3)</td>
<td>3</td>
<td>MATH 126 (Major Pre-requisite)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Mathematics, BS Code H Course 1 of 2</td>
<td>4</td>
<td>CHEM 135 (Major Pre-requisite)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 130 (Goal 3 Natural Science, Major Pre-requisite)</td>
<td>5</td>
<td>COMS 130 (Goal 2.2 Communication, BS Communication)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore Reading &amp; Writing Course (Goal 1.1 Critical Thinking, BS Writing 3)</td>
<td>3</td>
<td>Humanities (Goal 4.1 US Diversity, BS Code H Course 2 of 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History or Philosophy of Science (BS General Education)</td>
<td>3</td>
<td>Social Science Course (Goal 3 Social Science, BS Code S Course 1 of 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSX 211 (Goal 1.1 Critical Thinking, Major Pre-requisite)</td>
<td>4</td>
<td>PHSX 212 (Major Pre-requisite)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Hours | 120 |

1. Geography BS majors are required to complete a third English, and a list of possible courses can be found under the Degree Requirements tab.
2. Geography BS majors are required to take a course in History or Philosophy of Science. A list of possible courses can be found under the Degree Requirements tab.
3. All major required Geography courses and most Geography elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.
Six Geographic Information Science Core courses are required with at least one from each of the following categories: Cartography and Visualization, Geographical Information Systems, Remote Sensing, and Statistics. A list of courses for each can be found under the Degree Requirements tab.

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level. The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BS in Geography with concentration in Physical Geography**

Below is a sample 4-year plan for students pursuing the BS in Geography with a concentration in Physical Geography. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BS Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BS Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Humanities (Goal 3 Humanities, BS Code H Course 1 of 2)</td>
<td>3 MATH 126 (Major Pre-requisite)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Literacy, Major Pre-requisite)</td>
<td>4 COMS 130 (Goal 2.2 Communication, BS Communication)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 130 (Goal 3 Natural Science, Major Pre-requisite)</td>
<td>5 CHEM 135 (Major Pre-requisite)</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

15 15

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore Reading &amp; Writing Course (Goal 1.1 Critical Thinking, BS Writing 3)</td>
<td>3 Humanities (Goal 4.1 US Diversity, BS Code H Course 2 of 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History or Philosophy of Science (BS General Education)</td>
<td>3 Social Science Course (Goal 3 Social Science, BS Code S Course 1 of 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSX 211 &amp; PHSX 216 (Goal 1.1 Critical Thinking, Major Pre-requisite)</td>
<td>5 PHSX 212 &amp; PHSX 236 (Major Pre-requisite)</td>
<td>4</td>
<td></td>
</tr>
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</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Science Course (Goal 4.2 Global Awareness, BS Code S Course 2 of 2)</td>
<td>3 GEOG 332 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 152 (Major Pre-requisite)</td>
<td>3 GEOG 336 or CE 455</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EECS 138 (Major Pre-requisite)</td>
<td>3 GEOG 358 (Major Requirement)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>GEOG 316 (Major Requirement FALL ONLY)</td>
<td>4 Human or Regional Geography (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GEOG 321 (Major Requirement)</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
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</tbody>
</table>

16 16

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3 GEOG 500 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GEOG 335 or 535 (Major Requirement)</td>
<td>4 GEOG Elective Course 300+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 414 (Major Requirement)</td>
<td>3 GEOG Elective Course 300+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GIS Studies Course 500+ (Major Requirement)</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16 16

**Total Hours 120**

1 Geography BS majors are required to complete a third English, and a list of possible courses can be found under the Degree Requirements tab.

2 A list of possible courses for History or Philosophy of Science can be found under the Degree Requirements tab.

3 All major required Geography courses and most Geography elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.

4 Geography BS with a concentration in Physical Geography requires 9.0 hours of elective course work chosen from courses in the following categories: Ecological Hydrology, Climate, Geomorphology, Soil Geography, and other advanced courses in Physical Geography. A list of possible courses can be found on the Degree Requirements tab.

5 GEOG 526 is recommended.
Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BS in Atmospheric Science with concentration in Air Pollution Meteorology**

Below is a sample 4-year plan for students pursuing the BS in Atmospheric Science with a concentration in Air Pollution Meteorology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/B.S. Degree Requirement)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 105 (Goal 3 Natural Science, Major Requirement)</td>
<td>5</td>
<td>ATMO 321 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Literacy, B.S. Degree Requirement)</td>
<td>4</td>
<td>MATH 126 (B.S. Degree Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 130 (B.S. Degree Requirement)</td>
<td>5</td>
<td>CHEM 135 (B.S. Degree Requirement)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>15</strong></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 127 (B.S. Degree Requirement)</td>
<td>4</td>
<td>ATMO 521 (Major Requirement SPRING-EVEN YEARS ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 505 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>EECS 138 (Python preferred) B.S. Degree Requirement</td>
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</tr>
<tr>
<td>PHSX 211 (Goal 1.1 Critical Thinking, B.S. Degree Requirement)</td>
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<td>MATH 290 (B.S. Degree Requirement)</td>
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<td>PHSX 216 (B.S. Degree Requirement)</td>
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<td>GEOG 104 (B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 148 (B.S. Degree Requirement)</td>
<td>3</td>
<td>PHSX 212 (B.S. Degree Requirement)</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 640 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 630 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 680 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 660 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>CE 477 (Major Requirement)</td>
<td>3</td>
<td>MATH 526 (B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 220 (B.S. Degree Requirement)</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td></td>
</tr>
<tr>
<td>COMS 130 (Goal 2.2 Communication, B.S. Degree Requirement)</td>
<td>3</td>
<td>Goal 4.1 U.S. Diversity</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>12</strong></td>
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<table>
<thead>
<tr>
<th>Senior</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 358 (B.S. Degree Requirement)</td>
<td>4</td>
<td>ATMO 525 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 581 (BS Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 642 (Goal 6 Integration &amp; Creativity, Major Requirement SPRING-ODD YEARS ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 362, 203, 205, 209, 210, or 211 (B.S. Degree Requirement)</td>
<td>3</td>
<td>ATMO 697 (Major Requirement)</td>
<td>1</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Area of Study/Elective/Degree/Junior-Senior Hours</strong></td>
<td><strong>2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 120**

1. ATMO 521 and ATMO 642 are taught only in the even or odd years and must be planned carefully. Students will need to adjust what year they take the course as well as the prerequisites for the course based on when they start the above plan. Please consult with your advisor.

2. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific
The requirements for the BS in Atmospheric Science with concentration in General Meteorology are outlined below. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website.

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>ENGL 101 (Goal 2.1 Written Communication/BS Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BS Writing II)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATMO 105 (Goal 3 Natural Science, Major Requirement)</td>
<td>5</td>
<td>ATMO 321 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 125 (Goal 1.2 Quantitative Literacy, B.S. Degree Requirement)</td>
<td>4</td>
<td>GEOG 104 (B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 130 (B.S. Degree Requirement)</td>
<td>5</td>
<td>MATH 126 (B.S. Degree Requirement)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>13</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Bachelor of Science (B.S.) Degree Requirement**

3 in Goal 1.2 Quantitative Literacy
3 in Goal 2.1 Written Communication
3 in Goal 3 Natural Science
3 in Goal 4.1 U.S. Diversity
3 in Goal 4.2 Global Awareness
3 in Goal 5 Social Responsibility & Ethics

**Second Area of Study/Elective/Degree**

2

**Junior**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td>ATMO 640 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 630 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ATMO 680 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 660 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>COMS 130 (Goal 2.2 Communication, B.S. Degree Requirement)</td>
<td>3</td>
<td>MATH 526 (B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior</td>
<td>ATMO 650 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 697 (Major Requirement)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>GEG 358 (B.S. Degree Requirement)</td>
<td>4</td>
<td>ATMO 642 (Goal 6 Integration &amp; Creativity, Major Requirement SPRING-ODD YEARS ONLY)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 581 (B.S. Degree Requirement)</td>
<td>3</td>
<td>ATMO 605 (Major Requirement SPRING ONLY)</td>
<td>2</td>
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<tr>
<td></td>
<td>ENGL 362, 203, 205, 209, 210, or 211 (B.S. Degree Requirement)</td>
<td>3</td>
<td>ATMO 525 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EVRN 148 (B.S. Degree Requirement)</td>
<td>3</td>
<td>ATMO 642 (Goal 6 Integration &amp; Creativity, Major Requirement SPRING-ODD YEARS ONLY)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 120**

1. ATMO 521 and ATMO 642 are taught only in the even or odd years and must be planned carefully. Students will need to adjust what year they take the course as well as the prerequisites for the course based on when they start the above plan. Please consult with your advisor.

2. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

---

### BS in Atmospheric Science with concentration in Hydrometeorology

Below is a sample 4-year plan for students pursuing the BS in Atmospheric Science with a concentration in Hydrometeorology. To view
the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BS Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BS Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 105 (Goal 3 Natural Science, Major Requirement)</td>
<td>5</td>
<td>ATMO 321 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Literacy, B.S. Degree Requirement)</td>
<td>4</td>
<td>MATH 126 (B.S. Degree Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 130 (B.S. Degree Requirement)</td>
<td>5</td>
<td>EVRN 148 (B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>17</td>
<td><strong>13</strong></td>
<td></td>
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</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 505 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 521 (Major Requirement SPRING-EVEN YEARS)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 127 (B.S. Degree Requirement)</td>
<td>4</td>
<td>EECS 138 (Fortran Preferred, C++ &amp; Matlab accepted), B.S. Degree Requirement</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 211 (Goal 1.1 Critical Thinking, B.S. Degree Requirement)</td>
<td>4</td>
<td>MATH 290 (B.S. Degree Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>PHSX 216 (B.S. Degree Requirement)</td>
<td>1</td>
<td>PHSX 212 (B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 104 (B.S. Degree Requirement)</td>
<td>3</td>
<td>PHSX 236 (B.S. Degree Requirement)</td>
<td>1</td>
</tr>
<tr>
<td>COMS 130 (Goal 2.2 Communication, B.S. Degree Requirement)</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>15</td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 640 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 630 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 680 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 660 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>CE 260 (Major Requirement)</td>
<td>5</td>
<td>MATH 526 (B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 220 or 320 (B.S. Degree Requirement)</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>17</td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 358 (B.S. Degree Requirement)</td>
<td>4</td>
<td>ATMO 697 (Major Requirement)</td>
<td>1</td>
</tr>
<tr>
<td>CE 330 (Major Requirement)</td>
<td>3</td>
<td>ATMO 642 (Goal 6 Integration &amp; Creativity, Major Requirement SPRING-ODD YEARS ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 581 (BS Requirement)</td>
<td>3</td>
<td>ATMO 525 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td>ATMO 605 (Major Requirement SPRING ONLY)</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 203, 205, 209, 210, or 362 (Goal 3 Arts and Humanities, B.S. Degree Requirement)</td>
<td>3</td>
<td>CE 455 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>16</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

1. ATMO 521 and ATMO 642 are taught only in the even or odd years and must be planned carefully. Students will need to adjust what year they take the course as well as the prerequisites for the course based on when they start the above plan. Please consult with your advisor.

2. ENGL 362 does not count as a Goal 3 Arts and Humanities requirement and if that course is opted for then the student will need to complete their Goal 3 Arts and Humanities in another way.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BS in Atmospheric Science with concentration in News Media Forecasting**

Below is a sample 4-year plan for students pursuing the BS in Atmospheric Science with a concentration in News Media Forecasting. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tr>
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<td>MATH 126 (B.S. Degree Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 130 (B.S. Degree Requirement)</td>
<td>5</td>
<td>EVRN 148 (B.S. Degree Requirement)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>17</td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 640 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 630 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 680 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ATMO 660 (Major Requirement SPRING ONLY)</td>
<td>3</td>
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<td>Goal 3 Social Science</td>
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<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 358 (B.S. Degree Requirement)</td>
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<td>ATMO 697 (Major Requirement)</td>
<td>1</td>
</tr>
<tr>
<td>CE 330 (Major Requirement)</td>
<td>3</td>
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<td>3</td>
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<tr>
<td>MATH 581 (BS Requirement)</td>
<td>3</td>
<td>ATMO 525 (Major Requirement SPRING ONLY)</td>
<td>3</td>
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<tr>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td>ATMO 605 (Major Requirement SPRING ONLY)</td>
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</tr>
<tr>
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<td>3</td>
<td>CE 455 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>16</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>
Minor in Geography

Why study geography?

We offer an undergraduate minor with two options, which augment other fields of study and broaden career opportunities: General Geography or Geographical Information Science (GIS). A minor in Atmospheric Science is also available from the Department. You should carefully consider which minor best meets your academic goals before choosing one.

Minor in Geography - General Geography Option:

Students take 18 hours of Geography courses with at least 12 hours from courses numbered 300 or above. Students must have a minimum grade point average of 2.0 in courses taken for the minor.

Minor in Geography - Geographic Information Science (GIS) Option:

The minor requires GEOG 111, GEOG 316, and GEOG 358. Three additional courses from the geographic information science group (at 300 or above), and a minimum grade point average of 2.0 in the courses taken for the minor.

Requirements for the Minor in Geography

The department offers 2 minor options. The first is a general option in geography. The second option is specifically designed to give students a background in geoinformatics. Students should carefully consider which option best meets their academic goals before choosing one.

Geography General Option

Students selecting this minor must complete 6 GEOG courses (18 hours), 12 hours of which must be taken at the 300 level or above.
### Geoinformatics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maps and Mapping/computers, Maps, and Geographical Analysis. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 111</td>
<td>Mapping Our Changing World</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 316</td>
<td>Methods of Analyzing Geographical Data. Satisfied by:</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 358</td>
<td>Principles of Geographic Information Systems. Satisfied by:</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 458</td>
<td>Introduction to Geographic Information Systems.</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 311</td>
<td>Three additional courses from Geoinformatics group 300-level or above from the list below:</td>
<td></td>
</tr>
<tr>
<td>GEOG 311</td>
<td>Introductory Cartography and Geovisualization</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 360</td>
<td>Computer Programming for Mapping and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 458</td>
<td>Geographical Information Systems:</td>
<td>1-6</td>
</tr>
<tr>
<td>GEOG 512</td>
<td>Advanced Cartography and Geovisualization</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 526</td>
<td>Remote Sensing of Environment I</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 528</td>
<td>Spatial Databases</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 558</td>
<td>Spatial Data Analysis</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 560</td>
<td>GIS Application Programming</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 648</td>
<td>Geographic Information Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 658</td>
<td>Topics in Geospatial Technologies:</td>
<td>1-6</td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 726</td>
<td>Remote Sensing of Environment II</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 758</td>
<td>Geographic Information Science</td>
<td>3</td>
</tr>
</tbody>
</table>

### Geography Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

- **Minor Hours**
  Satisfied by 18 - 21 hours of minor courses. Students choosing the Geoinformatics option will complete a minimum of 21 hours.

- **Minor Hours in Residence**
  Satisfied by a minimum of 9 hours of KU resident credit in the minor.

- **Minor Junior/Senior (300+) Hours**
  Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

- **Minor Graduation GPA**
  Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Minor in Atmospheric Science

#### Why study atmospheric science?

The minor in Atmospheric Science (https://geog.ku.edu/atmospheric-science-minor) augments other fields of study and broadens career opportunities. The minor requires ATMO 105, ATMO 321, and ATMO 505 plus three courses from the following: ATMO 521, ATMO 525, ATMO 630, ATMO 640, ATMO 642, or ATMO 680. Students must have a minimum grade point average of 2.0 in courses taken for the minor.

### Requirements for the Minor in Atmospheric Science

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Atmospheric Science Prerequisite or Co-requisite Knowledge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus I. Satisfied by the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 145</td>
<td>Calculus I, Honors</td>
<td></td>
</tr>
<tr>
<td>Calculus II. Satisfied by the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 146</td>
<td>Calculus II, Honors</td>
<td></td>
</tr>
<tr>
<td><strong>General Physics I. Satisfied by the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td></td>
</tr>
<tr>
<td>PHSX 216</td>
<td>and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 213</td>
<td>General Physics I, Honors</td>
<td></td>
</tr>
<tr>
<td><strong>Introductions to Meteorology. Satisfied by the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATMO 105</td>
<td>Introductory Meteorology</td>
<td>5</td>
</tr>
<tr>
<td><strong>Climate and Climate Change. Satisfied by the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATMO/GEOG 321</td>
<td>Climate and Climate Change</td>
<td>3</td>
</tr>
<tr>
<td><strong>Weather forecasting. Satisfied by the following:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATMO 505</td>
<td>Weather Forecasting</td>
<td>3</td>
</tr>
</tbody>
</table>
| **Atmospheric Science Required Electives**
  Select three of the following: |
| ATMO 521 | Microclimatology                                                     | 9     |
| ATMO 525 | Air Pollution Meteorology                                           |       |
| ATMO 630 | Synoptic Meteorology                                                 |       |
| ATMO 640 | Dynamic Meteorology                                                  |       |
| ATMO 642 | Remote Sensing                                                       |       |
| ATMO 680 | Physical Meteorology                                                |       |

### Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

- **Minor Hours**
  Satisfied by 20 hours of minor courses.

- **Minor Hours in Residence**
  Satisfied by a minimum of 9 hours of KU resident credit in the minor.

- **Minor Junior/Senior (300+) Hours**
  Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.

- **Minor Graduation GPA**
  Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Undergraduate Certificate in Climate and Climate Change

Climate Change is an increasingly important societal issue since it will impact how we secure water, energy, and food in the near future. The
primary cause of current trends in global climate are emissions of carbon
dioxide and other greenhouse gasses into the atmosphere since the
start of the Industrial Revolution and the rise of fossil fuels as primary
energy sources. In 2013 the Intergovernment Panel on Climate Change
concluded that "the human influence on the climate system is clear.
This is evident from the increasing greenhouse gas concentrations
in the atmosphere, positive radiative forcing, observed warming, and
understanding of the climate system."

The potential impacts from a changing climate are widespread and range
from a rise in global sea level as ocean waters are heated and ice stored
on land is transferred to the oceans at increasing rates; increasing surface
temperatures; more widespread drought events of longer duration; and
the possibility of more frequent and more intense hurricanes making
landfall in the region surrounding the Gulf of Mexico. To cope with these
consequences, and to build a more resilient society and infrastructure,
there is an urgent need for an informed citizenry. It is critical to educate
future decision makers who can influence national and international
policies and adopt a more rational approach to dealing with impacts of
climate change.

General requirements:

Students must maintain a 2.0 GPA in courses taken in the certificate
program and maintain good standing in any University program of study
for which they are enrolled. Students are encouraged to meet with the
certificate Director to discuss progress in the program.

Course requirements:

To complete the certificate, 12-13 credit hours must be completed.
Among them 6 credit hours are from two required core courses and the
additional 6-7 credit hours are from electives.

<table>
<thead>
<tr>
<th>Code Courses</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO/GEOG 321</td>
<td>Climate and Climate Change</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 371</td>
<td>Environmental Geopolitics</td>
<td>3</td>
</tr>
<tr>
<td>Elective Courses</td>
<td></td>
<td>6-7</td>
</tr>
<tr>
<td>ATMO 521</td>
<td>Microclimatology</td>
<td></td>
</tr>
<tr>
<td>ATMO 634</td>
<td>Physical Climatology</td>
<td></td>
</tr>
<tr>
<td>ATMO 680</td>
<td>Physical Meteorology</td>
<td></td>
</tr>
<tr>
<td>GEOG 332</td>
<td>Glaciers and Landscape</td>
<td></td>
</tr>
<tr>
<td>GEOG 336</td>
<td>Introduction to Environmental Hydrology and Water Resources</td>
<td></td>
</tr>
<tr>
<td>GEOG 372</td>
<td>Environmental Policy</td>
<td></td>
</tr>
<tr>
<td>GEOG 526</td>
<td>Remote Sensing of Environment I</td>
<td></td>
</tr>
<tr>
<td>GEOG 556</td>
<td>Geography of the Energy Crisis</td>
<td></td>
</tr>
<tr>
<td>GEOG 577</td>
<td>Human Dimensions of Global Change</td>
<td></td>
</tr>
</tbody>
</table>

Undergraduate Certificate in Geographic Information Science

"Everything is related to everything else, but near things are more related
distant things," said renowned geographer and cartographer Waldo
Tobler. A certificate in Geographic Information Science (GIS) capitalizes
on this by blending field equipment, computer hardware and software,
data, and people to capture, manage, display, analyze, and distribute all
forms of geographically referenced information. Through the application
of GIS and its principles, you can perform quantitative analyses to make
informed decisions and provide logistical support in virtually any field.
Effective use of GIS has evolved into a requisite skill for most agencies in
both the public and private sectors, and provides a transformative tool to
address academic research. Students from such diverse disciplines as
graphy, atmospheric science, biology, engineering, economics, urban
planning, landscape architecture, and sociology benefit from applying
GIS and related technologies such as global positioning systems (GPS),
remote sensing, spatial statistics, and computer programming to use
location-based data. GIS has found wide applications in the sciences and
engineering, as well as in business, government, military, and consumer
areas. The director of the certificate program is available to meet with
each student and design a curriculum that best meets your interests,
goals, and academic level.

The certificate program is designed to provide undergraduate students
with the knowledge and skills necessary to succeed in the rapidly
expanding field of geographic information science (GIscie) or apply
GIS science concepts in their own fields of study. A certificate in GIS shows
employers you have the critical skills necessary to perform in public,
private, and academic settings.

Students interested in pursuing the certificate should review the
requirements and meet with Undergraduate Academic Advisor, or the GIS
program director, Professor Xiong Li (ili@ku.edu). The University of
Kansas is a member of University Consortium for Geographic Information
Science (UGGIS).

General requirements:

Students must maintain a 2.5 GPA in courses taken in the certificate
program. A student pursuing the certificate can take no longer than
7 years to pursue the certificate unless a leave of absence or other
extenuating circumstances are present.

Course requirements:

To complete the certificate, 14 credit hours must be completed within
7 academic years. Among them 8 credit hours are from two required
core GIS courses and additional 6 credit hours are from electives. Only
one course outside of the department can be included in these 14 credit
hours.

Courses may be waived in consultation with the Director if the student
can demonstrate satisfactory completion of similar coursework. If transfer
courses are to be used to meet program requirements, the student must
furnish the program director with a certified university transcript and, in
some instances, a copy of the class syllabus. A maximum of 6 transfer
credit hours may be used to meet program requirements.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Geographic Information Systems Courses</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>GEOG 358</td>
<td>Introduction to Geographic Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 558</td>
<td>Spatial Data Analysis</td>
<td>4</td>
</tr>
<tr>
<td>Elective courses</td>
<td></td>
<td>6</td>
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<tr>
<td>Geographic Information Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 528</td>
<td>Spatial Databases</td>
<td></td>
</tr>
<tr>
<td>GEOG 648</td>
<td>Location Modeling</td>
<td></td>
</tr>
<tr>
<td>GEOG 658</td>
<td>Topics in Geospatial Technologies:</td>
<td></td>
</tr>
<tr>
<td>GEOG 758</td>
<td>Geographic Information Science Programming</td>
<td></td>
</tr>
</tbody>
</table>
Graduate Admission

Applicants without prior training in geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systematic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees.

The following items must be received to complete the application file:

Items 1 through 5 can be submitted on-line.

1. A completed Graduate Application Form (https://gradapply.ku.edu/apply/).
2. A current resume/CV.
3. A Statement of Interest and Goals. This is included in the online application form. The Graduate Studies Committee places considerable importance on the thoughtfulness of your remarks – in particular, we are interested in learning about (1) your specific interests within geography or atmospheric science and why they are important and interesting to you, (2) what you envision as your educational and career objectives and how a degree from KU Geography & Atmospheric Science helps to meet those objectives, and (3) which of our faculty members you think would be an appropriate graduate advisor and mentor.
4. A scanned copy of an official transcript can be uploaded at the time of application. Official, degree conferred transcripts will be required prior to the second semester of study. NOTE: Documents uploaded with your application are not considered official. KU does not consider transcripts that come from applicants or that have been in the applicant's possession as official.
5. Three confidential letters of recommendation sent by referees who are familiar with your academic and/or professional activities and who can address your likelihood of success in graduate school. If possible, we prefer letters from professors, but applicants returning to school after a lengthy absence may substitute letters from supervisors. Note that it is the responsibility of the applicant to request and to confirm that the required letters have been sent by the deadline. When using the on-line reference form to list references, you must include valid e-mail addresses. Once you have completed and submitted your application, your references will be contacted directly via email with directions for submitting their letters of recommendation.

**Graduate Record Examination (GRE) scores are not required for the application. Applicants may choose to submit GRE scores if they feel it will help inform the department of their academic abilities. However, choosing not to submit scores will not affect your chances of admission.**

ADDITIONAL REQUIREMENTS

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

NON-DEGREE SEEKING STUDENTS

Non-degree seeking students (NDS) are admitted on a rolling basis and must submit an application (https://gradapply.ku.edu/apply/). Applications are accepted on a rolling basis. Applicants must include the materials below in their application.

1. Copy of official transcripts including proof of a bachelor's degree.
2. Proof of English proficiency, if it is a second language.

Submit your graduate application online (https://gradapply.ku.edu/apply/). For questions, contact:

The Graduate Program Coordinator

Geography M.A. Degree Requirements

The program continues the general training of the undergraduate degree but also provides for concentration in preparation either for employment or further study. The 30-credit-hour minimum for the M.A. thesis program
must include at least 6 additional hours within the department beyond the required courses and 6 hours of GEOG 899. A maximum of 6 credits of 500 and 600 level courses may count toward the required hours for the master's degree. If the student elects to take a 500 or 600 level Techniques/Research Methods course (see below), the maximum allowable is 9 credits. The M.A. degree requires a proposal defense and a final oral examination. Students with 6 or more hours of Incomplete are denied permission to enroll until these hours are reduced to the allowable limit (5 hours).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 805</td>
<td>Perspectives in Geography</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 980</td>
<td>Seminar in Geography: _____ (Colloquium for 1 credit hour during each of the first 2 semesters of residence at KU)</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 899</td>
<td>Master's Thesis</td>
<td>6</td>
</tr>
</tbody>
</table>

Orientation before classes begin in the fall semester (non-credit)
Non-credit 8-hour Responsible Scholarship session held before classes start in the spring semester

One course from the Techniques/Research Methods Concentration: 3-4
GEOG 512 Advanced Cartography and Geovisualization
GEOG 526 Remote Sensing of Environment I
GEOG 528 Spatial Databases
GEOG 558 Spatial Data Analysis
GEOG 716 Advanced Geostatistics
GEOG 875 Qualitative Research Methods

Graduate Level coursework, chosen in consultation with an advisor. 6 credit hours of which must be in the home department.

Total Hours 30-31

**Handbook for Graduate Students**
Detailed information on departmental regulations is included in Policies for Graduate Study in Geography at the University of Kansas, available on the department's website (http://www.geog.ku.edu/).

**Master of Urban Planning and Master of Arts in Geography**

**Dual Degree for Master of Arts in Geography and Master of Urban Planning**

Urban planning is a professional field that addresses the health, welfare, and sustainability of our cities, towns, regions, natural, and rural areas. Planners are problem-solvers. They deal with both short- and long-range planning projects at scales from small to large. Planners seek to enhance overall quality of life by addressing aspects of communities such as housing, land use, transportation, and responsible development that preserves the natural environment. The Master of Urban Planning is an accredited, professional degree that prepares students to excel in planning practice. It is the normal academic qualification for planning and planning-related positions. Graduates are prepared for careers in the public sector (local, state, national, international governments and agencies), private sector (consulting firms, development companies), and not-for-profits (housing authorities, nonprofits) helping make communities better places.

The Master of Arts in Geography program develops a concentration in preparation for a career or further study. The student takes courses in several areas of the discipline. Our faculty are integral to graduate studies and have expertise in Human and Cultural Studies with a particular emphasis on Place, Economic Geography, Health and Diaspora, Environmental Policy, Borders and Border Conflicts, and more. Learn more about our faculty (http://geog.ku.edu/faculty/) on our website.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

**Dual Degree application for Master of Arts in Geography and Master of Urban Planning**

Admission details, including required application materials for the M.A. in Geography (https://geog.ku.edu/admission/) and Master of Urban Planning (https://urbanplanning.ku.edu/application/), can be found on their respective web pages. Entering students should submit separate applications to each program.

Applicants without prior training in Geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systematic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees.

Submit your graduate application online (https://gradapply.ku.edu/apply/).

**M.U.P. Degree Requirements**

The M.U.P. portion of the dual degree requires 36 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 741</td>
<td>Foundations of Compassionate Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 742</td>
<td>Applied Data and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 763</td>
<td>Politics and Public Management</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 777</td>
<td>Equity, Justice, and American Cities</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 780</td>
<td>Climate Change and Hazards Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 785</td>
<td>History and Theory of Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialization Courses in Urban Planning 12

Total Hours 36

**M.A. in Geography Degree Requirements**

The M.A. in Geography portion of the dual degree requires a minimum of 30 credit hours. A maximum of 6 credits of 500 and 600 level courses may be included in the program. If a 500 or 600 level course is taken to fulfill
the required Techniques/Research Methods course, those credits will not count toward this maximum.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 808</td>
<td>Perspectives in Geography</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 898</td>
<td>Seminar in Geography: ______. (Colloquium must be taken for 1 credit hour each during the first two semesters of residence)</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 899</td>
<td>Master's Thesis (The Chair of the Master's thesis committee must come from the Department of Geography. At least one thesis committee member must come from the Urban Planning Program.)</td>
<td>6</td>
</tr>
<tr>
<td>GEOG 512</td>
<td>Advanced Cartography and Geovisualization</td>
<td>3-4</td>
</tr>
<tr>
<td>GEOG 526</td>
<td>Remote Sensing of Environment 1</td>
<td></td>
</tr>
<tr>
<td>GEOG 528</td>
<td>Spatial Databases</td>
<td></td>
</tr>
<tr>
<td>GEOG 558</td>
<td>Spatial Data Analysis</td>
<td></td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td></td>
</tr>
<tr>
<td>GEOG 875</td>
<td>Qualitative Research Methods</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduate Level coursework</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>30-31</strong></td>
</tr>
</tbody>
</table>

**Graduate Admission**

Entering students are expected to have completed an undergraduate degree in a physical science (e.g., physics, chemistry, atmospheric science, oceanography), mathematics, or engineering and studied mathematics, including vector calculus and ordinary differential equations. Courses taken to remedy deficiencies may not count toward graduate degrees.

The following items must be received to complete the application file:

**Items 1 through 5 can be submitted on-line.**

1. A completed Graduate Application Form (https://gradapply.ku.edu/apply).
2. A current resume/CV.
3. A Statement of Interest and Goals. This is included in the online application form. The Graduate Studies Committee places considerable importance on the thoughtfulness of your remarks – in particular, we are interested in learning about (1) your specific interests within geography and why they are important and interesting to you, (2) what you envision as your educational and career objectives and how a degree from KU Geography helps to meet those objectives, and (3) which of our faculty members you think would be an appropriate graduate advisor and mentor.
4. A scanned copy of an official transcript can be uploaded at the time of application. Official, degree conferred transcripts will be required prior to the second semester of study. **NOTE:** Documents uploaded with your application are not considered official. KU does not consider transcripts that come from applicants or that have been in the applicant’s possession as official.
5. **Three confidential letters of recommendation** sent by referees who are familiar with your academic and/or professional activities and who can address your likelihood of success in graduate school.

If possible, we prefer letters from professors, but applicants returning to school after a lengthy absence may substitute letters from supervisors. Note that it is the responsibility of the applicant to request and to confirm that the required letters have been sent by the deadline. When using the on-line reference form to list references, you must include valid e-mail addresses. Once you have completed and submitted your application, your references will be contacted directly via email with directions for submitting their letters of recommendation.

**Graduate Record Examination (GRE) scores are not required for the application. Applicants may choose to submit GRE scores if they feel it will help inform the department of their academic abilities. However, choosing not to submit scores will not affect your chances of admission.**

**ADDITIONAL REQUIREMENTS**

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

**NON-DEGREE SEEKING STUDENTS**

Non-degree seeking students (NDS) are admitted on a rolling basis and must submit an online application (https://gradapply.ku.edu/apply). Applications are accepted on a rolling basis. Applicants must include the materials below in their application.

**Check out our website (http://geog.ku.edu/) for more information.**
1. Copy of official transcripts including proof of a bachelor's degree.
2. Proof of English proficiency, if it is a second language.

Submit your graduate application online (https://gradapply.ku.edu/apply/). For questions, contact:

The Graduate Program Coordinator

**Atmospheric Science M.S. Degree Requirements**

The purpose of the program is to expand the student's knowledge of fundamental atmospheric processes and how the atmosphere interacts with other parts of the environment. Students become familiar with quantitative research methods and how these various approaches can be used to address different problems in atmospheric science. Students gain an in depth ability to learn specific skills and apply them toward his/her thesis work. These skills consist of, for example, statistical analysis techniques, numerical modeling, or work with atmospheric instrumentation. The breadth of the program and the diverse research topics explored by the faculty are able to accommodate students with a variety of interests.

Required credit hours:
30 credits 500 level or above.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 710</td>
<td>Atmospheric Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 720</td>
<td>Atmospheric Modeling</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Attend the Department's New Graduate Student Orientation (non-credit)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 980</td>
<td>Seminar in Geography: _____ (Colloquium for 1 credit hour during each of the first 2 semesters of residence at KU.)</td>
<td>2</td>
</tr>
</tbody>
</table>

Select 3 credit hours of electives in atmospheric science electives at the 700 level or above

Select 6 credit hours of electives at the 500 level or above outside the geography department

A maximum of 6 hours of 500- and 600-level atmospheric science courses may be included in the program, excluding ATMO 505

ATMO 899 Master's Thesis 4

Total Hours 30

**Thesis**

A master's thesis is a demonstration of a student's ability to formulate an atmospheric science research problem, collect and analyze relevant data, synthesize appropriate literature, arrive at logical conclusions, and present the entire exercise in a public academic forum. The thesis should address an original problem of scientific importance, though at the M.S. level, the research will to a significant degree be guided by the faculty advisor.

**Thesis proposal**

During the second semester in the program, the student must submit to his committee a thesis research plan. All M.S thesis proposals are expected to contain three basic elements:

1. A statement of the research problem or questions to be investigated.
2. A survey of relevant literature and how it relates to the student's research problem
3. An outline of the general methodology, if not specific techniques, to be utilized in addressing the research problem or answering the basic research questions.

**Thesis seminar and defense**

Students are required to make a formal presentation to the faculty and fellow students in the form of a research seminar, and subsequently defend orally to their committee the results of their thesis research. Ideally, the final examination takes place immediately following the research seminar, but if necessary the two can be scheduled at separate times.

As part of their research training, graduate students are expected to attend departmental colloquia and seminars.

Further details regarding degree requirements can be found in the Department's Graduate Student Handbook. Please also see the Graduate Studies section of the online catalog.

**Master of Science in Geography**

**Graduate Programs**

**Geography**

The graduate curriculum emphasizes broad geographic training while encouraging in-depth commitment to specialized concentrations. Students also are encouraged to take course work outside the department that complements their degree programs. Credit-hour requirements below are considered minimums for degree programs. Programs are tailored by the student and advisor to conform to the student’s interests and needs, as well as to fulfill the general degree requirements.

The central thrust of the department and the chief capabilities and interests of the faculty fall within these research-teaching areas:

1. Human geography including cultural geography, regional development, and environmental policy;
2. Geoinformatics including cartography, geographic information systems, and remote sensing;
3. Physical geography including geomorphology, soils, and biogeography;
4. Regional geography including Africa, East Asia, Russia, Latin America, and the United States; and
5. Atmospheric science and climatology.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.
Graduate Admission

Entering students are expected to have a B.S. degree in geography or in related physical science, earth science, mathematics, or engineering disciplines.

Applicants without prior training in geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systemic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees.

The following items must be received to complete the application file:

Items 1 through 5 can be submitted on-line.

1. **A completed** Graduate Application Form (https://gradapply.ku.edu/apply/).
2. **A current resume/CV.**
3. **A Statement of Interest and Goals.** This is included in the on-line application form. The Graduate Studies Committee places considerable importance on the thoughtfulness of your remarks – in particular, we are interested in learning about (1) your specific interests within geography and why they are important and interesting to you, (2) what you envision as your educational and career objectives and how a degree from KU Geography helps to meet those objectives, and (3) which of our faculty members you think would be an appropriate graduate advisor and mentor.
4. **A scanned copy of an official transcript** can be uploaded at the time of application. **Official, degree conferred transcripts will be required prior to the second semester of study.** NOTE: Documents uploaded with your application are not considered official. KU does not consider transcripts that come from applicants or that have been in the applicant's possession as official.
5. **Three confidential letters of recommendation** sent by referees who are familiar with your academic and/or professional activities and who can address your likelihood of success in graduate school.
   If possible, we prefer letters from professors, but applicants returning to school after a lengthy absence may substitute letters from supervisors. Note that it is the responsibility of the applicant to request and to confirm that the required letters have been sent by the deadline. When using the on-line reference form to list references, you must include valid e-mail addresses. Once you have completed and submitted your application, your references will be contacted directly via email with directions for submitting their letters of recommendation.

**Graduate Record Examination (GRE) scores are not required for the application. Applicants may choose to submit GRE scores if they feel it will help inform the department of their academic abilities. However, choosing not to submit scores will not affect your chances of admission.**

**ADDITIONAL REQUIREMENTS**

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

**NON-DEGREE SEEKING STUDENTS**

Non-degree seeking students (NDS) are admitted on a rolling basis and must submit an application (https://gradapply.ku.edu/apply/). Applications are accepted on a rolling basis. Applicants must include the materials below in their application.

1. Copy of official transcripts including proof of a bachelor's degree.
2. Proof of English proficiency, if it is a second language.

Submit your graduate application online (https://gradapply.ku.edu/apply/). For questions, contact:

**The Graduate Program Coordinator**

**M.S. Degree Requirements**

The program requires a 30 credit hour minimum. A maximum of 6 credits of 500 and 600 level courses may count toward the required hours for the master's degree. Students must pass an oral examination and write a thesis. In addition, students are required to participate in the orientation before classes begin in the fall semester and GEOG 980 (Colloquium) for 1 credit hour during each of the first 2 semesters in residence at KU.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 805</td>
<td>Perspectives in Geography</td>
<td>2</td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 980</td>
<td>Seminar in Geography: _____ (Colloquium for 1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>credit hour during each of the first 2 semesters of residence at KU)</td>
<td></td>
</tr>
<tr>
<td>GEOG 899</td>
<td>Master's Thesis</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Orientation before classes begin in the Fall semester (non-credit)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Responsible Scholarship (non-credit 8-hour session at the start of the Spring semester)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Additional graduate level coursework, with no less than 6 credit hours within the Department; at least three courses should be in the area of Physical Geography or Methods and Techniques.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Doctor of Philosophy in Atmospheric Science**

Atmospheric Science is the study of weather and climate. The atmosphere is a key component of the environment and affects many human activities ranging from daily weather prediction to the understanding of climate and human health. Our program provides graduate students with the advanced training to address a host of meteorological and climate related issues facing humans today.

By the end of the program, Ph.D. students will be able to perform independent, creative research within their chosen sub-discipline. In addition to becoming an expert in their sub-discipline, students will obtain a solid background in the fundamentals of atmospheric physics and applied mathematics. The student’s research will often require knowledge of subject fields outside of atmospheric science that is related to their dissertation, which could include oceanography, physics, geophysics, mathematics, statistics, engineering, or similar fields.

Early in their program, students will take fundamental courses in atmospheric science including atmospheric dynamics, numerical modeling, and advanced statistics. A majority of the student's time will be devoted to their research project.

KU offers a variety of specializations including:
Atmospheric dynamics
Cloud microphysics
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Entering students are expected to have a M.S. degree in atmospheric science or in another physical science, mathematics or engineering. Entering students will be expected to have studied mathematics, including vector calculus and ordinary differential equations. They should also have taken the equivalent of at least 2 semesters of calculus-based physics and one of chemistry.

The following items must be received to complete the application file:

1. A completed Graduate Application Form (https://gradapply.ku.edu/apply/).
2. A current resume/CV
3. A Statement of Interest and Goals. This is included in the online application form. The Graduate Studies Committee places considerable importance on the thoughtfulness of your remarks – in particular, we are interested in learning about (1) your specific interests within Atmospheric Science and why they are important and interesting to you, (2) what you envision as your educational and career objectives and how a degree from KU Geography & Atmospheric Science helps to meet those objectives, and (3) which of our faculty members you think would be an appropriate graduate advisor and mentor.
4. A scanned copy of an official transcript can be uploaded at the time of application. Official, degree conferred transcripts will be required prior to the second semester of study. Note: Documents uploaded with your application are not considered official. KU does not consider transcripts that come from applicants or that have been in the applicant's possession as official.
5. Three confidential letters of recommendation sent by referees who are familiar with your academic and/or professional activities and who can address your likelihood of success in graduate school. If possible, we prefer letters from professors, but applicants returning to school after a lengthy absence may substitute letters from supervisors. Note that it is the responsibility of the applicant to request and to confirm that the required letters have been sent by the deadline. When using the on-line reference form to list references, you must include valid e-mail addresses. Once you have completed and submitted your application, your references will be contacted directly via email with directions for submitting their letters of recommendation.

**Graduate Record Examination (GRE) scores are not required for the application. Applicants may choose to submit GRE scores if they feel it will help inform the department of their academic abilities. However, choosing not to submit scores will not affect your chances of admission.**

ADDITIONAL REQUIREMENTS

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Submit your graduate application online (https://gradapply.ku.edu/). For questions, contact:

The Graduate (https://geog.ku.edu/staff/) Program Coordinator

Upon a student’s admission to the department, the Graduate Studies Committee (GSC) will appoint an advisor. Early in the first semester (preferably in the first week of classes), the student should meet with this advisor to outline a tentative program of coursework for the degree. Such programs should be solidified by the time of enrollment for the second semester and submitted to the GSC for approval. The student and advisor then continue to discuss and update programs each semester, bearing in mind that any substantive changes must be approved by the GSC.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 710</td>
<td>Atmospheric Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>ATMO 720</td>
<td>Atmospheric Modeling</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 980</td>
<td>Seminar in Geography: _____ (Colloquium for 1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>credit hour during each of the first 2 semesters</td>
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<tr>
<td></td>
<td>of residence at KU.)</td>
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</tr>
<tr>
<td>500 level and above courses in mathematics, engineering, or other research skill courses approved by student’s committee</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Electives 15-24

Electives are selected with approval of the committee and are tailored to fit the needs of the individual student (e.g. oriented to a subfield in meteorology, climatology, or other specializations) Sample courses include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 731</td>
<td>Advanced Topics in Atmospheric Science: _____</td>
<td></td>
</tr>
<tr>
<td>MATH 647</td>
<td>Applied Partial Differential Equations</td>
<td></td>
</tr>
<tr>
<td>MATH 781</td>
<td>Numerical Analysis I</td>
<td></td>
</tr>
<tr>
<td>GEOG 558</td>
<td>Spatial Data Analysis</td>
<td></td>
</tr>
<tr>
<td>GEOG 758</td>
<td>Geographic Information Science</td>
<td></td>
</tr>
<tr>
<td>GEOG 538</td>
<td>Soil Chemistry</td>
<td></td>
</tr>
<tr>
<td>BIOL 513</td>
<td>Virology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
<td></td>
</tr>
<tr>
<td>BIOL 594</td>
<td>Forest Ecosystems</td>
<td></td>
</tr>
<tr>
<td>BIOL 841</td>
<td>Biometry I</td>
<td></td>
</tr>
<tr>
<td>CE 730</td>
<td>Intermediate Fluid Mechanics</td>
<td></td>
</tr>
</tbody>
</table>
Comprehensive Examination Process

All candidates must pass a comprehensive written examination. Program sheets are available in the department office and must be filed before the oral examination can be scheduled. The student will have a dissertation committee consisting of at least 5 faculty members. At least 4 of these faculty must regularly teach in the atmospheric sciences program. One of the faculty members on the committee must be from outside the geography and atmospheric science department.

RSRS Requirement

The Research Skill and Responsible Scholarship (RSRS) requirement will be met by 6 credits at the 500 level or above in mathematics and/or engineering. Alternatively, 8 credits at the 500 level or above in a related discipline which are approved by student's graduate committee may also be used for the RSS requirement. The courses for the RSRS requirement must be taken during the PhD program. Students must participate in the existing Geography Department ethical scholarship program.

Dissertation Requirements

The student must submit a dissertation approved by his/her graduate committee. All candidates must pass a final oral examination and must submit an approved dissertation to UMI. The dissertation will be defended in a public presentation.

Doctor of Philosophy in Geography

The PhD program is for students interested in research, teaching opportunities, careers with NGOs, government consulting and more. The program offers concentrations in cultural-regional geography of Africa, East Asia, Latin America, Russia/Eurasia, and the United States; geographic information science (including cartography and remote sensing); and physical/environmental geography. The program includes courses, seminars, individual research and reading, and preparation of a dissertation. Although no “outside minor” is formally required of candidates, the department favors study in auxiliary departments. Learn more about our faculty (http://geog.ku.edu/faculty/) on our website.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants without prior training in geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systematic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees.

The following items must be received to complete the application file:

Items 1 through 5 can be submitted on-line.

1. A completed Graduate Application Form (https://gradapply.ku.edu/apply).
2. A current resume/CV
3. A Statement of Interest and Goals. This is included in the online application form. The Graduate Studies Committee places considerable importance on the thoughtfulness of your remarks – in particular, we are interested in learning about (1) your specific interests within geography or atmospheric science and why they are important and interesting to you, (2) what you envision as your educational and career objectives and how a degree from KU Geography & Atmospheric Science helps to meet those objectives, and (3) which of our faculty members you think would be an appropriate graduate advisor and mentor.
4. A scanned copy of an official transcript can be uploaded at the time of application. Official, degree conferred transcripts will be required prior to the second semester of study. NOTE: Documents uploaded with your application are not considered official. KU does not consider transcripts that come from applicants or that have been in the applicant’s possession as official.
5. Three confidential letters of recommendation sent by referees who are familiar with your academic and/or professional activities and who can address your likelihood of success in graduate school. If possible, we prefer letters from professors, but applicants returning to school after a lengthy absence may substitute letters from supervisors. Note that it is the responsibility of the applicant to request and to confirm that the required letters have been sent by the deadline. When using the on-line reference form to list references, you must include valid e-mail addresses. Once you have completed and submitted your application, your references will be contacted directly via email with directions for submitting their letters of recommendation.

**Graduate Record Examination (GRE) scores are not required for the application. Applicants may choose to submit GRE scores if they feel it will help inform the department of their academic abilities. However, choosing not to submit scores will not affect your chances of admission.**

ADDITIONAL REQUIREMENTS

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Submit your graduate application online (https://gradapply.ku.edu/apply/).

For questions, contact:

The Graduate (https://geog.ku.edu/staff/) Program Coordinator

Geography Ph.D. Degree Requirements

The aspirant is expected to demonstrate proficiency in research and achieve a teaching competence in geography. The student may concentrate in 1 area or may offer a concentration in a second area in the department or an outside discipline. Whatever the choice, the student
develops the plan of research and study with the advice and supervision of professors in the chosen area(s) of concentration who also sit on the student’s examination and dissertation committees. A minimum of 30 hours of course and seminar work in addition to dissertation credit usually is required beyond the M.A.

Required Courses

GEOG 805 (History of Geographic Thought); GEOG 980 Seminar in Geography: _______ (Colloquium) for 1 credit hour during each of the first 2 semesters of residence at KU. Non-credit 8-hour Responsible Scholarship session held just before classes start in the spring semester; attend the Department’s New Graduate Student Orientation (non-credit).

Research Skills Requirement

Research skills are important elements of any graduate program and should complement the student’s research topic. Coursework necessary to meet this requirement should commence early in the program. Selection of a particular Research Skills option must be approved by the student’s advisor and student’s committee members. A student’s Research Skills requirement may be met by 1 of the following:

1. Demonstrate a reading, writing, and speaking capability in a single foreign language sufficient to enable the student to do field work without an interpreter. An examination for competence, including written and oral portions, will be conducted by the appropriate language department having expertise in that language.

2. Demonstrate a satisfactory capability in 1 research skill from the list below. The actual courses must be approved by the student’s advisor and committee members.
   a. Computer Science--complete a computer-programming course in the Department of Electrical Engineering and Computer Science (e.g., C++, Fortran, or Visual Basic) with a grade of B or higher and create a substantial computer program that illustrates a geographic application of that language. Both the course and computer program must be approved by the Computer Programming Committee of the Department of Geography.
   b. Mathematics--complete 9 hours of courses at the 500-level or above with a grade of B or higher.
   c. Statistics--complete 9 hours of courses outside the Geography Department at the 500-level or above with a grade of B or higher.
   d. An outside discipline relevant to the student’s field(s) of specialization within geography (e.g. anthropology, biology, economics, geology, history, or psychology) -- complete 9 hours of courses at the 500-level or above with a grade of B or higher. (Atmospheric science courses may be used for this option, but not courses listed or cross-listed as geography.) Students may petition the Graduate Affairs Committee to have 9 hours of courses at the 500-level or above in multiple departments fulfill this requirement.

Students whose native language is not English may, in some cases, use their native language to fulfill Research Skills but only if the language is considered an adequate research tool for their program and is endorsed by the student’s advisor and committee members. Using a native language to fulfill the Research Skills requirement must have GSC approval.

In addition, the department requires that any PhD student admitted after Fall 2011 must successfully complete the Responsible Scholarship seminar offered by the department.

Handbook for Graduate Students

Further details regarding degree requirements can be found in the Department’s Graduate Student Handbook.

Graduate Certificate in Geographic Information Science

"Everything is related to everything else, but near things are more related than distant things," said renowned geographer and cartographer Waldo Tobler. A certificate in Geographic Information Science (GIS) capitalizes on this by blending field equipment, computer hardware and software, data, and people to capture, manage, display, analyze, and distribute all forms of geographically referenced information. Through the application of GIS and its principles, you can perform quantitative analyses to make informed decisions and provide logistical support in virtually any field.

Effective use of GIS has evolved into a requisite skill for most agencies in both the public and private sectors, and provides a transformative tool to address academic research. Students from such diverse disciplines as geography, atmospheric science, biology, engineering, economics, urban planning, landscape architecture, and sociology benefit from applying GIS and related technologies such as global positioning systems (GPS), remote sensing, spatial statistics, and computer programming to use location-based data. GIS has found wide applications in the sciences and engineering, as well as in business, government, military, and consumer areas. The director of the certificate program is available to meet with each student and design a curriculum that best meets your interests, goals, and academic level.

The certificate program is designed to provide graduate students with the knowledge and skills necessary to succeed in the rapidly expanding field of geographic information science (GiScience) or apply GiScience concepts in their own field of study. Attaining the certificate shows employers you have the critical skills necessary to perform in public, private, and academic settings. It complements the existing M.A., M.S., and Ph.D. degrees and builds upon the existing graduate concentrations in GiScience within the department.

The University of Kansas is a member of University Consortium for Geographic Information Science (UCGIS).

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

The director of the certificate program, Professor Xingong Li (https://geog.ku.edu/people/xingong-li/), will be available to meet with each student and design a curriculum that best meets the student’s needs. Each student will have a personalized plan depending on their interests and, if applicable, current enrollment in a graduate program. All prospective students must complete the online application (https://
Select an additional 5-6 credit hours of electives from the following undergraduate credit.

In cases where students have completed the same course for Core courses may be waived and replaced with approved electives.

Select 2 of the 3 core GIS courses (6-7 credit hours) listed below:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GEOG 528</td>
<td>Spatial Databases</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 558</td>
<td>Spatial Data Analysis</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 560</td>
<td>GIS Application Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

Core courses may be waived and replaced with approved electives in cases where students have completed the same course for undergraduate credit.

Select an additional 5-6 credit hours of electives from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 642</td>
<td>Remote Sensing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 512</td>
<td>Advanced Cartography and Geovisualization</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 518</td>
<td>Geoinformatics Internship</td>
<td>1-3</td>
</tr>
<tr>
<td>GEOG 526</td>
<td>Remote Sensing of Environment I</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 648</td>
<td>Location Modeling</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 658</td>
<td>Topics in Geospatial Technologies: _____</td>
<td>1-6</td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 726</td>
<td>Remote Sensing of Environment II</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 758</td>
<td>Geographic Information Science</td>
<td>3</td>
</tr>
</tbody>
</table>

GEOG 898  Readings in Geography  1-4
Any graduate-level GIS application course from another department/school (in consultation with advisor)
Or, a third core course from the core GIS courses listed above

At least once per year students are required to meet with the certificate Director to discuss progress in the program.

A student can take no longer than 4 years to pursue the certificate unless a leave of absence or other extenuating circumstances are present. In either event a petition letter must be submitted to the Director during the 4th year of enrollment.

Department of Geology

The Department of Geology

In Geology, you get to apply techniques and knowledge from chemistry, physics, biology, and math to answer important questions about Earth processes, history, and future. Geologists are in demand to evaluate geologic hazards, evaluate natural resources, and develop solutions to environmental challenges confronting our society.

Financial Aid

Undergraduate Scholarships

The department awards scholarships from its endowment to meritorious incoming or continuing students in geology. Scholarships also are awarded to students enrolled in Field Courses. For information, contact the chair.

KU Financial Aid

All undergraduates who wish to be considered for KU financial aid must complete applications with Financial Aid and Scholarships. (https://financialaid.ku.edu/)

Graduate Assistantships, Scholarships, and Fellowships

All prospective graduate students are considered for employment and financial aid. Employment may be in the form of teaching assistantships or research assistantships. Research assistantships may be supported with funds from external grants, KUEA funds, or appointments in other units on campus, such as the Kansas Geologic Survey or the Biodiversity Institute.

Graduate students are eligible for scholarships from the Geology Associates Program, as well as fellowship funds to support living expenses, field/laboratory research, and tuition and fees. Endowed scholarships include the Angino, Hall, Henbest, Holden, Ireland, McGee, Moore, Patterson, Peoples, and Walters scholarship funds. Other scholarships are awarded from donations from individuals and corporations. Scholarships are awarded on the basis of academic excellence; some funds are designated for protected minorities or women.

Through the Selig Fund and other donations, the department supports graduate student field work. Through the McCollum Fund and other donations, the department underwrites partially some other research expenses, such as purchase of time on analytical equipment. Funding requires an acceptable thesis or dissertation proposal. Students who have no other sources of research support are given preference. Degree-
Specialties
The Department of Geology strives in offering a variety of specialties to match student’s professional goals and attributes. We have trained faculty in the following specialties: tectonics, geophysics, sedimentary, stratigraphy, carbonates, stable-isotopes, siliciclastic/sequence stratigraphy, geomicrobiology, hydrogeology, paleontology, glaciology, and petroleum geology. Check out our faculty (http://geo.ku.edu/faculty/) today!

Careers
Career Opportunities
We train students for academic, government, and industry careers across the geosciences. On-campus interviews for industry internship opportunities occur annually.

Practice as a professional geologist often requires course work and training beyond the baccalaureate level.

Licensure
Formal study of geology at an accredited college or university is a principal requirement for becoming licensed to practice geology. During the senior year, students who plan to become licensed geologists should take the Fundamentals of Geology examination, offered twice a year. Information on registration is available from the department office or from the Kansas Board of Technical Professions. After passing the examination and after further practice, candidates can sit for the Practice of Geology examination to become licensed. Regulations for licensure may vary from state to state.

Undergraduate Programs
Geology is an interdisciplinary science that applies the principles of chemistry, physics, biology, and other fields to the study of the earth, its resources, and its natural processes. The field has many subdisciplines and specialties that offer stimulating challenges and careers. KU offers broad undergraduate programs in geology and geophysics but emphasizes research in paleontology, sedimentology, crustal evolution, hydrogeology, geobiology, seismology, applied geophysics, glaciology, and geomorphology.

Courses for Nonmajors
The department offers several courses of interest to nonmajors who wish to learn more about geology and related areas such as environmental science, oceanography, and economic resources. Principal courses include GEOL 101, GEOL 105, GEOL 121, GEOL 171, GEOL 302, and GEOL 351. GEOL 103 may be taken in conjunction with either GEOL 101 or GEOL 105 to fulfill the CLAS laboratory science requirement. GEOL 304, GEOL 360, and GEOL 552 all offer opportunities to study more specialized aspects of the earth and do not require advanced prerequisites.

Summer Field Courses
All undergraduate degree programs require field courses during 2 summers. Students should plan to take GEOL 360 in the summer after completing the introductory course. GEOL 560 and GEOL 561 (if required by the program) ideally are taken in the summer between the junior and senior years. Substantial scholarship support is available for geology majors who enroll in those courses.

Combined Degree Programs
A student may combine an interest in geology with a degree in business, education, or journalism.

Graduate Programs
The department offers the M.S. and Ph.D. in geology but permits specialization in a number of areas of geology and in geophysics and hydrogeology. Active areas of instruction and research include geophysics, geomorphology, geochemistry, microbial biogeochemistry, paleontology, sedimentology, tectonics, and petroleum geology. Students also may work with faculty supervisors at the Kansas Geological Survey and at Kansas State University.

Students who are interested in enrolling in graduate level coursework in the Department of Geology without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s admission webpage (https://geo.ku.edu/graduate-admissions/) for further details.

Courses
GEOL 101. The Way The Earth Works. 3 Credits. NE N
Introduction to the principles of earth science. Study of the formation, occurrence, and structure of minerals and rocks; action of streams, oceans, glaciers, and other agents in the formation and modification of the landscape; volcanism, earthquakes, and plate tectonics. Discussion of earth processes in the context of sustainable energy, environmental concerns, climate and other topical issues. This course satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Course may be offered in lecture or online format.

GEOL 103. Geology Fundamentals Laboratory. 2 Credits. U LFE
A course in geologic laboratory studies. This course plus GEOL 101, GEOL 105, GEOL 106, or GEOL 121 satisfies the College laboratory science requirement. Gives students practical, hands-on experience with identifying earth materials (rocks, minerals, fossils), understanding their relationships to earth processes, understanding topographic and geologic maps, interpreting results of surficial processes, and learning about deep-earth processes such as earthquakes. Includes short field trips to see geologic structures and results of local geologic processes. This lab course may be offered in on-campus lab or online format. Prerequisite: Previous or concurrent enrollment in GEOL 101, GEOL 105, GEOL 106 or GEOL 121.

GEOL 105. History of the Earth. 3 Credits. NE N
An introduction to the physical and biological history of the earth, the methods used to decipher earth history, and the development of the geological sciences. This course with GEOL 103 satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 103 is recommended for students taking both. Not open to students who have taken GEOL 106 or GEOL 304.

GEOL 108. Troubled Waters: Water Resource Issues and Principles. 3 Credits. N
Worldwide, water security is necessary for life, and food, industry, and energy production, and is increasingly the source of conflict. This course explores water in the environment and the fundamental interactions between humans and water. Key topics and issues addressed include fundamentals of water and the water cycle; water in geologic processes; water availability, development and sustainability; climate effects including flooding and drought; economics; pollution, disease, sanitation, and health; culture, policy and law, and other challenging issues. Case studies explore examples from Kansas and around the world.

**GEOL 121. Life Through Time: DNA to Dinosaurs. 3 Credits. NB**

This course leads students on a journey through time to explore the interconnection between life and the geology of Earth, including our own complex relationship with the world around us. If taken with GEOL 122, this course satisfies the College laboratory science requirement. Concurrent enrollment in GEOL 122 is required for students taking both.

**GEOL 122. Life Through Time: DNA to Dinosaurs Laboratory. 1 Credits. N LFE**

This online companion to GEOL 121 allows students a hands-on exploration of the principles and practices of paleontology research. Students will be guided through an individual term-length research project--from shaping a research question to collecting and analyzing data to drawing conclusions to presenting in front of an audience. This lab will not only allow students to explore the fossil record but it will bring them into the scientific conversation. Prerequisite: Corequisite: Students must be concurrently enrolled in GEOL 121.

**GEOL 171. Earthquakes and Natural Disasters. 3 Credits. NE**

Addresses the subject of natural disasters with concentration on earthquake effects and their mitigation. Briefly treats volcanic eruptions, tidal waves, floods, global warming, severe weather, and catastrophic meteorite impacts from the perspective of geological and human significance. Provides a basic background into earth-science processes.

**GEOL 172. Earthquakes and Natural Disasters Laboratory. 1 Credits. N**

This online companion to GEOL 171 allows students a hands-on exploration of the principles and practices of paleontology research. Students will be guided through an individual term-length research project--from shaping a research question to collecting and analyzing data to drawing conclusions to presenting in front of an audience. This lab will not only allow students to explore details of natural disasters, but it will bring them into the scientific conversation. Prerequisite: Corequisite: Students must be concurrently enrolled in GEOL 121.

**GEOL 177. First Year Seminar: _____. 3 Credits. NE**

A limited-enrollment, seminar course for first-time freshmen, organized around current issues in geology. May not contribute to major requirements in geology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**GEOL 190. Introduction to Quantitative Geoscience. 3 Credits. N**

This applied, introductory-level program will explore topics in geology, hydrogeology, physics, chemistry, and biology from a mathematical perspective. The course is designed for students with a desire to expand their mathematical skills, building on practical applications in the natural sciences. The study of lab and field sciences and mathematical problem-solving through rigorous, quantitative, and interdisciplinary investigations will be emphasized. The course will take students from a review of arithmetic and algebraic manipulations, to the use of logarithms, and functions, through series, trigonometry and graphing, and finish with an introduction to the elements of calculus and statistics. The course will utilize Excel as platform for calculating and graphing numerical examples of the problems presented. We expect students in this course to emerge with confidence in the basic use of mathematics commonly applied to investigate and model the natural world. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

**GEOL 301. Introduction to Oceanography. 3 Credits. N**

The online course is an introduction to the ocean and its oceans, including the discussion of the history of ocean exploration using the approach of the scientific method. The course will explore theories that describe the origin of the solar system, the earth, the atmosphere, and the oceans, in addition to a discussion of the origin of life on the earth. The course will cover the essential physics, chemistry, geology, biology, and the concepts of plate tectonics, as applied to understanding the oceans and seas. This course cannot be taken if a student has completed GEOL 302.

**GEOL 302. Oceanography. 4 Credits. NE N LFE**

An introduction to the origins, nature, and dynamics of the world’s oceans, including aspects of geology, chemistry, biology, physics, and meteorology that are involved in ocean processes. The relations between the oceans and humans in the past, present, and future, and instruction in scientific reasoning as it applies to oceanography. Laboratory exercises in critical thinking about oceanography. This course cannot be taken if a student has completed GEOL 301. Prerequisite: An introductory science course.

**GEOL 304. Historical Geology. 3 Credits. N**

An introduction to the physical and biological history of the Earth, the methods used to decipher earth history, and the development of the geological sciences. Concepts of lithostratigraphy, chronostratigraphy and biostratigraphy, and methods of analysis of stratigraphic data focus on the interpretation of Earth history. Prerequisite: GEOL 101 and GEOL 103.

**GEOL 311. Mineralogy and Structure of the Earth. 3 Credits. N LFE**

Basic identification and properties of rocks and minerals in the context of whole-earth structure and evolution. Includes basic chemical equilibria for rock and mineral systems and their bearing on processes involved with formation and evolution of Earth’s crust, mantle, and core. Two lectures and one lab per week. Prerequisite: GEOL 101, CHEM 130, and eligibility for MATH 125 or MATH 115.

**GEOL 312. Mineral Structures and Equilibria Laboratory. 1 Credits. U LFE**

A laboratory to accompany GEOL 311. Presents more rigorous analysis of the structures, compositions, and chemical equilibria governing the formation and stability of common rock-forming mineral systems. Prerequisite: GEOL 311 (may be taken concurrently), CHEM 130, and eligibility for MATH 125 or MATH 115.

**GEOL 315. Gemstones. 3 Credits. NE N**

The properties, occurrence, description, determination, mineral affinities, and legend and lore of gems, ornamental stones, and gem materials.

**GEOL 316. Geochemistry. 3 Credits. N**

The course is intended to be an introduction to all types of geochemistry. It focuses on the chemistry of the natural world and the chemical evolution of the Earth over geological time. The course is composed of three modules: (a) geochemical fundamentals; (b) natural and anthropogenically perturbed aspects of the Earth’s hydrosphere and its interaction with surficial rocks, sediments, soils, the biosphere and the atmosphere and (c) the origin and evolution of Earth (crust-mantle-core) and the solar system through nuclear and high temperature chemical processes. Prerequisite: GEOL 101, CHEM 130 or 190; and eligibility for MATH 115.

**GEOL 331. Sedimentology and Stratigraphy. 4 Credits. N LFE**
Basic principles used in the study of sedimentology and stratigraphy. Physical, chemical, and biological processes in sedimentary environments applied to the recognition of the depositional environment, preservation, and alteration of sedimentary rocks. Field and laboratory study of sedimentary rocks with emphasis on interpretation of original depositional environments and preservation in the stratigraphic record. Prerequisite: GEOL 101 and GEOL 103; and GEOL 304 or taken concurrently.

GEOL 332. Sedimentology for Petroleum Engineers. 4 Credits. N
This course is designed for Petroleum Engineering majors. It covers basic principles used in the study of sedimentary environments. Topics include classification of sedimentary rocks, diagenesis and the alteration of sedimentary rocks. Surface processes and recognition of depositional environments in the rock record is emphasized. Basic concepts of stratigraphy are introduced. Emphasis is placed on practical examples relating to petroleum reservoirs. Lecture, lab and field trips. Prerequisite: GEOL 101 and GEOL 103 and Petroleum Engineering Major.

GEOL 351. Environmental Geology. 3 Credits. NE N
An introductory course dealing with the implications of geologic processes and materials for civilization. Topics to be considered include: geologic hazards such as floods, landslides, earthquakes, and volcanism; the availability of water, mineral, and energy resources; and the environmental impact of resource utilization. The importance of recognizing geologic constraints in land use planning and engineering projects is emphasized and illustrated by examples.

GEOL 360. Field Investigation. 2 Credits. N
Summer session. A field-geology course that provides beginning geology students with an initial understanding of the nature of geological evidence in the field, the breadth of geological phenomena, and the importance of the interplay of information from many geological disciplines in solving problems. Given at various geologically diverse locations. Fee. Prerequisite: GEOL 101.

GEOL 370. Study Abroad in Greece: Natural Environment and Civilizations. 3 Credits. N
This course examines the profound influence of the natural environment on the development of civilizations and the course of history. Geologic processes responsible for natural resources, water, landscapes, natural hazards and climate are presented in the context of their impact on ancient Greek society. The class visits sites of geologic and historic interest such as Athens, Delphi, Mycenae and the Aegean Sea islands including Santorini volcano. Examples from other eras and regions of the world are discussed along with present-day analogues. Prerequisite: An introductory geology course or permission of the instructor.

GEOL 391. Special Studies in Geology. 1-6 Credits. N
Special reports upon subjects in which students have a particular interest. Prerequisite: Fifteen hours of geology.

GEOL 399. Senior Honors Research. 2-5 Credits. N
Normally two to five hours in any one semester with a maximum of eight hours. An undergraduate research course, in any of the fields of geology, open by permission of the department to seniors in the College who have an average grade of B or higher in geology courses. Prerequisite: Thirty hours of geology, five of which may be taken concurrently with this course.

GEOL 501. Simple Error Analysis with Matlab. 2 Credits. N
This course covers basic error analysis as it applies to geology. The course will emphasize the description and propagation of errors in data collection and reduction. Subjects include: how to report data and associated errors, error propagation in simple and complex equations, the Normal, Gaussian, and Poisson distributions, linear and higher order regression, and X-squared test. Prerequisite: MATH 125.

GEOL 502. Linear Algebra for Earth Scientists. 2 Credits. N
This course covers basic linear algebra as it applies to geology and emphasizes the description and use of linear algebra to solve geologic problems. Subjects include: how to solve systems of equations, determinants, inversion, vector spaces, matrix manipulation, eigenvectors and values, least squares solutions, and orthogonality. Prerequisite: MATH 125.

GEOL 503. Numerical Methods in the Earth Sciences. 2-3 Credits. N
The class will provide an introduction to writing and testing code in the numerical computing environment MATLAB, using examples from Earth Science disciplines to introduce basic concepts and develop progressively more complex code. Prerequisite: MATH 125 and prior completion or co-enrollment in GEOL 502.

GEOL 511. Raman Spectroscopy of Crystalline Solids. 3 Credits. N
This course introduces students to Raman scattering in crystalline solids. This class with cover light and polarization of light, phonons and magnons, Raman scattering, Raman Tensor, wave vectors and k space, reciprocal space and Brillouin zones (and zone edge), group theory and character tables, polarized Raman scattering (symmetry of zone center phonons), Frohlich intraband electro-optical coupling and other multi-photonon Resonance Raman mechanisms in crystalline solids, and phonon confinement in nanomaterials. Prerequisite: GEOL 311 or PHSX 212.

GEOL 512. Igneous and Metamorphic Petrology. 3 Credits. N
The study of minerals, rocks and fluids within the earth's crust and mantle to elucidate their mechanisms of formation and the pressure-temperature-composition conditions within the earth. The course emphasizes equilibrium thermodynamics, phase equilibria, fractionation mechanisms, tectonic control of petrogenesis, and quantitative analysis of mineral parageneses. Prerequisite: GEOL 311 and first semester calculus, or permission of instructor.

GEOL 513. Petrology Laboratory. 1 Credits. U LFE
A laboratory course to accompany GEOL 512. Material covered will include the use of the polarizing microscope in study of rocks in thin sections; identification of rock-forming minerals in thin section; study of textures as guides to the crystallization process; calculations of chemical changes during fractional crystallization and partial melting. Students will also make extensive study of igneous and metamorphic rocks in hand specimens, accompanied by thin section study, with emphasis on composition, texture, and structure. Students must co-enroll in GEOL 512. Prerequisite: GEOL 312. Concurrent enrollment in GEOL 512 required.

GEOL 521. Paleontology. 3 Credits. N
A study of the structure and evolution of ancient life; the nature and diversity of life through time; the interactions of ancient organisms with their environments and the information that the study of fossils provides about ancient environments; the use of fossils to determine the ages of rocks and the timing of past events in earth history; and the patterns of extinction through time. (Same as BIOL 622.) Prerequisite: BIOL 100 or BIOL 152 or GEOL 105 or GEOL 304.

GEOL 523. Paleontology Laboratory. 1 Credits. U LFE
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as BIOL 623.)

GEOL 524. Mammalian Paleontology. 3 Credits.
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as BIOL 524.) Prerequisite: One of the following: BIOL 225, BIOL 412, BIOL 413, GEOL 304, GEOL 521, or consent of the instructor.
GEOL 525. Geobiology: The Coevolution of Life and Rocks. 3 Credits. N
This course is an exploration of the parallel evolution of life and the Earth. In the almost 4 billion years since life first appeared, biological processes have been influencing and been influenced by physical and chemical processes in the atmosphere, cryosphere, hydrosphere, and inside the Earth. Microbial processes helped form fossils, reefs, and the oxygen we all breathe; the traces microbes leave behind in the rock record inform our understanding of how life originated and evolved on Earth, what environmental changes triggered the Big Five mass extinctions, and guide NASA's exploration of the solar system. Prerequisite: BIOL 152 and GEOL 101.

GEOL 533. Shales and Other Mudstones. 3 Credits. N
This course defines mudstones and shales. Deposition and constituents of fine-grained sediment; geochemistry, diagenesis and lithification of such deposits. Organic constituents of mudstone and their function as sources of crude oil and natural gas. Petrophysics and mechanical properties of mudstones and their potential as reservoirs of hydrocarbons. Not open to students with credit in GEOL 733. Prerequisite: GEOL 331.

GEOL 535. Petroleum and Subsurface Geology. 4 Credits. N LFE
A general study of the occurrence, properties, origin, and migration of petroleum. Studies of various oil fields and oil-bearing basins. Laboratory studies include well logs, subsurface mapping, and cross-sections. Prerequisite: GEOL 331 and either GEOL 562 or C&PE 327, or permission of instructor.

GEOL 536. Geological Log Analysis. 1 Credits. U
Application of well logging measurements to interpretation subsurface. Not open to students who have completed or are taking C&PE 528. Prerequisite: GEOL 101.

GEOL 537. Petroleum Reservoir Characterization. 3 Credits. N
Geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve oil recovery. Students who have completed GEOL 837 may not take GEOL 537 for credit. Prerequisite: GEOL 535 and permission of instructor.

GEOL 538. Basin Analysis. 3 Credits. N
Overview of sedimentary basins, mechanisms of basin formation, and basin evolution through time. Topics include lithospheric stretching and flexure to form sedimentary basins, geohistory analysis and backstripping, and thermal history and controls on basin fill. This course consists of lectures, exercises, and a field trip. This course is available at both the 500 and 700 level with additional assignments required at the 700 level. Not open to students with credit in GEOL 738. Prerequisite: GEOL 331 and GEOL 562.

GEOL 539. Sequence Stratigraphy. 3 Credits. N
Principles and practical applications of sequence stratigraphy, the process of studying and correlating depositional stratal successions in a chronostratigraphic framework. The concepts of depositional sequences, parasequences, bounding surfaces, systems tracts and incised valleys are studied through class exercises and a regional field trip. Seismic stratigraphic techniques and concepts are covered in the latter part of the course. This course is available at both the 500 and 700 level with additional assignments required at the 700 level. Not open to students with credit in GEOL 739. Prerequisite: GEOL 331 or GEOL 332.

GEOL 541. Geomorphology. 4 Credits. N LFE
A critical study of landforms in relation to tectonics, climatic environment, and geologic processes. The use of geomorphic methods in the interpretation of Cenozoic history is emphasized. Laboratory exercises in analysis of field observations, maps, and photographs. Required field trip and fee. (Same as GEOG 541.) Prerequisite: GEOL 101 and GEOL 103, GEOG 104 and GEOG 105, or GEOL 304 and GEOL 103.

GEOL 542. Energy and Society. 3 Credits. N
In this course, you will gain the necessary understanding of energy technologies and policies to evaluate options for energy usage and its socioeconomic and environmental impacts. You will analyze different opportunities and impacts of energy systems that exist within and between groups defined by national, regional, household, ethnic, and gender distinctions. Analysis of the range of current and future energy choices will be stressed, as well as the role of energy in determining local environmental conditions and global climate. Prerequisite: A course in Biology, Chemistry, Physics, or Geology.

GEOL 543. Environmental Ethics: A View from the National Parks. 3 Credits.
To what extent are our National Parks protected from pollution, invasive species, mining, climate change and tourism? In this course you will learn about the geologic processes that form our National Parks as well as the competing interests that stakeholders have on the land. Prerequisite: A course in Biology, Chemistry, Physics, or Geology.

GEOL 548. Geology and Culture of Polynesia. 3 Credits. N
Polynesia, encompassing over 1,000 islands in the southern and central Pacific Ocean, was the last region of the Earth to be settled by humans. Around 3000-1000 BCE, people from northwest Melanesia first reached one of these islands, and over the next few centuries spread to colonize all of the islands. However, despite the fact that all of the Polynesian islands were settled by colonists who stemmed from a single population with a shared culture, language, technology, and agriculture, the cultures of these islands are incredibly rich and varied. In this course we will examine some of the cultural mores and practices of the Polynesian islands, including how these were shaped by the climate, geology, soil, hydrology, and marine resources of each individual island. In this course we will examine these factors and assess their potential impact on the cultures present in the region. Prerequisite: A course in Biology, Chemistry, Physics, or Geology.

GEOL 552. Introduction to Hydrogeology. 3 Credits. N

GEOL 554. Contaminants in Groundwater. 3 Credits. N
This course introduces the basics of groundwater flow, water quality, and contaminant transport from a qualitative perspective. The course also surveys common groundwater pollutants, such as heavy metals, organic compounds, radionuclides, salts, non-aqueous phase liquids, risk analysis, and forensic hydrogeology. Students are expected to work together to complete weekly reading assignments. A course field trip forms the basis for a term report that is expected to incorporate concepts and tools covered during the lectures and readings. This course requires no calculations, but mathematical and chemical terms are presented. Prerequisite: One semester of general chemistry, and at least one 100 level course or higher in Geology or physical geography (GEOG 104 or GEOG 105), or permission of the instructor.

GEOL 555. Climate Science. 3 Credits. N
This course explores the science of climate change. Students will learn how the climate system works; what factors cause climate to change across different time scales and how those factors interact; how scientists use models, observations and theory to make predictions about future climate; and the possible consequences of climate change for our planet. Students will learn how climate change today is different from past climate cycles and how satellites and other technologies are revealing the global signals of a changing climate. Finally, the course looks at the connection between human activity and the current warming trend and considers some of the potential social, economic and environmental consequences of climate change. Prerequisite: GEOL 101 or GEOL 121.

**GEOL 556. Field Methods in Hydrology. 3 Credits. N**

The course offers an overview on basic field methods for characterization of hydrologic systems. Topics to be covered include physical and chemical characterization techniques, such as: how to measure water levels; perform single well and aquifer tests; unsaturated zone characterization; groundwater-surface water characterization techniques, and geophysical techniques for hydrogeology. Additionally, the class will visit a variety of sites of hydrologic interest. Prerequisite: GEOL 552 or permission from instructor.

**GEOL 558. Applied Groundwater Modeling. 3 Credits. N**

This course focuses on how to construct simple to complex computer models of groundwater systems and systems in which water flows between groundwater and surface water bodies such as springs, streams and lakes. We consider water flow, transport of solutes, density effects (from saltwater or brines), and the use of groundwater and surface water (demand-driven, supply-limited problems), and managed aquifer recharge (MAR). We consider three aspects of model development: (1) how to compare the computer models we construct to the systems modelers intend them to represent. (2) how accurate the models are likely to be and how uncertainty can be quantified, and (3) how useful the models are in practice. Prerequisite: GEOL 101 or permission from instructor.

**GEOL 560. Introductory Field Geology. 3 Credits. N**

Summer session. The study of the principles of field geology and the application of field methods to solve geological problems. Includes use of topographic maps and aerial photographs for geological mapping, the study of stratigraphic methods by measuring sections, and working field trips to areas of regional geological interest. Given at the University of Kansas Geology Field Camp near Canon City, Colorado. Fee. Prerequisite: GEOL 331, GEOL 360, and GEOL 562, or consent of instructor.

**GEOL 561. Field Geology. 3 Credits. N**

Summer session. The application of the principles of field geology to solve complex geological problems in the field. Given at the University of Kansas Geology Field Camp near Canon City, Colorado, or at other sites as appropriate. Fee. Prerequisite: GEOL 560.

**GEOL 562. Structural Geology. 4 Credits. N LFE**

A study of primary and secondary rock-structures and their genesis. Includes techniques of structural analysis and introduces mechanics of rock deformations. Lectures, laboratory, and required field trip. Prerequisite: GEOL 311; PHSX 111, PHSX 114, or PHSX 211 and PHSX 216; and MATH 115 or MATH 126.

**GEOL 563. Tectonics and Regional Geology. 3 Credits. NE N**

Topics vary with demand and include fundamental features of plate tectonics, interpretation and distribution of regional geology of mountain belts with emphasis on tectonic setting and processes, regional geology, and tectonics of selected mountain belts. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in GEOL 763. Prerequisite: GEOL 562, GEOL 512, or GEOL 331, and GEOL 572.

**GEOL 572. Geophysics. 3 Credits. N**

Introductory study of gravitational, magnetic, electrical, and thermal properties of the earth. Measurements, interpretation, and applications to exploration, earth structure, and global tectonics. Prerequisite: An introductory course in geology; MATH 116 or MATH 126; and PHSX 115 or PHSX 212 and PHSX 236. PHSX 115 or PHSX 212 may be taken concurrently.

**GEOL 575. Seismic Exploration. 3 Credits. N**

Application of seismic reflection and refraction techniques to the description of near-surface geology and the exploration for energy and mineral resources. Theory of seismic information, data collection, data processing using computers, and geologic interpretation. Prerequisite: A course in computer programming, either FORTRAN or C, which may be taken concurrently. An introductory geophysics course, such as GEOL 572.

**GEOL 577. Environmental Geophysics. 3 Credits. N**

Application of the methods of geophysical exploration to evaluate, mitigate, and prevent environmental problems below the surface of the earth. Development of fundamental principles and discussion of environmental case histories using seismic, gravity, magnetic, electromagnetic, electrical, and radar methods. Prerequisite: An introductory course in geology; MATH 116 or MATH 126; and PHSX 115, PHSX 214, or PHSX 212 and PHSX 236.

**GEOL 578. Seismic Data Analysis and Interpretation. 3 Credits. N**

Interpretation methods applied to seismic exploration and reservoir characterization. Topics include: rock physics, the convolutional model, synthetic seismograms, seismic response of hydrocarbon reservoirs, resolution, seismic velocity, depth conversion, seismic attributes, AVO, inversion, seismic anisotropy, 3-D & 4-D interpretation, S-wave and converted wave interpretation, laboratory use of commercial seismic interpretation software. Prerequisite: GEOL 572 or consent of the instructor.

**GEOL 579. Hydrogeophysics. 3 Credits. N**

This course is designed to introduce students to current hydrogeophysics research. Students will learn about determining, predicting, and studying the physical properties and hydrologic processes associated with groundwater flow, contaminant transport, and microbemineral interactions using geophysical measurements at different scales. This course combines lectures, literature review and discussion, and student presentations. Not open to students with credit in GEOL 779. Prerequisite: GEOL 101 or GEOL 121.

**GEOL 591. Topics in Geology: _____ 1-5 Credits. N**

May include lectures, discussions, readings, laboratory, and field work in geology. Will be given as needed. May be taken more than once.

**GEOL 715. Geochemistry. 3 Credits.**

Application of chemical equilibria and kinetics to geological environments and processes, with emphasis on processes involving solution equilibria. Includes introduction to thermodynamic aspects of equilibria.

**GEOL 717. Geochronology. 3 Credits.**

Principles and applications of natural radioactive systems for geochronology and cosmochronology, including use of radiogenic isotopes as geochemical tracers. Prerequisite: GEOL 512 or consent of instructor.

**GEOL 718. Stable Isotope Geochemistry. 1-3 Credits.**

Principles and applications of equilibria among stable isotopes in the geological environment, with emphasis on the isotopic systems of
GEOL 723. Museum Internship. 1-6 Credits.
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. Graded on a satisfactory/unsatisfactory basis. (Same as AMS 799, ANTH 799, and MUSE 799.)

GEOL 728. Paleopedology. 3 Credits.
Paleopedology is the study of ancient soils preserved in the geologic record. The course covers concepts of paleopedology and its applications to the interpretation of paleoenvironmental, paleoecologic, and paleohydrogeologic settings and its use in sequence stratigraphy and paleoclimatology. Prerequisite: GEOG 535 or GEOL 331; or consent of the instructor.

GEOL 729. Ichnology. 3 Credits.
Ichnology is the study of organism-substrate interactions. The class will cover concepts and applications of ichnology in the marine and continental realms, including the behavior of such organisms as microbes, plants, invertebrates, and vertebrates preserved in the geologic record as trace fossils. Ichnology is applied in geology and in the petroleum industry to interpret ancient environments, hydrogeology, ecology, and climate. Prerequisite: GEOL 331 or GEOL 521; or consent of the instructor.

GEOL 731. Terrigenous Depositional Systems. 4 Credits.
Processes that operate in recent sedimentary environments, responses of sediment to those processes, and criteria for determining depositional environments of ancient sedimentary rocks. Lectures, practical exercises, and field trips. Prerequisite: GEOL 331.

GEOL 732. Carbonate Depositional Systems. 3 Credits.
Patterns and processes of contemporaneous carbonate deposition and diagenesis, depositional models; applications to interpretation of carbonate rocks. Lecture, discussion, laboratory and field trips.

GEOL 733. Shales and Other Mudstones. 3 Credits.
This course defines mudstones and shales. Deposition and constituents of fine-grained sediment; geochemistry, diagenesis and lithification such of deposits. Organic constituents of mudstone and their function as sources of crude oil and natural gas. Petrophysics and mechanical properties of mudstones and their potential as reservoirs of hydrocarbons. Not open to students with credit in GEOL 533. Prerequisite: GEOL 331.

GEOL 738. Basin Analysis. 3 Credits.
Overview of sedimentary basins, mechanisms of basin formation, and basin evolution through time. Topics include lithospheric stretching and flexure to form sedimentary basins, geohistory analysis and backstripping, and thermal history and controls on basin fill. This course consists of lectures, exercises, and a field trip. This course is available at both the 500 and 700 level with additional assignments required at the 700 level. Not open to students with credit in GEOL 538. Prerequisite: GEOL 331 and GEOL 562.

GEOL 739. Sequence Stratigraphy. 3 Credits.
Principles and practical applications of sequence stratigraphy, the process of studying and correlating depositionally linked stratigraphic successions in a chronostratigraphic framework. The concepts of depositional sequences, parasequences, bounding surfaces, systems tracts and incised valleys are studied through class exercises and a regional field trip. Seismic stratigraphic techniques and concepts are covered in the latter part of the course. This course is available at both the 500 and 700 level with additional assignments required at the 700 level. Not open to students with credit in GEOL 539. Prerequisite: GEOL 331 or GEOL 332.

GEOL 751. Physical Hydrogeology. 3 Credits.
Study of fluid flow in subsurface hydrologic systems. Investigation of the ground water environment including porosity, and hydraulic conductivity and their relationship to typical geologic materials. Examination of Darcy's law and the continuity equation leading to the general flow equations. Discussion of typical hydraulic testing methods to estimate aquifer parameters in various situations and apply these to water resource problems. Study of the basic mechanisms that determine the behavior of typical regional flow systems. (Same as CE 752.)

GEOL 753. Chemical and Microbial Hydrogeology. 3 Credits.
Lecture and discussion of chemical and microbiological controls on groundwater chemistry. Topics include thermodynamic and microbiological controls on water-rock reactions; kinetics; and microbiological, chemical and isotopic tools for interpreting water chemistry with respect to chemical weathering and shallow diagenesis. Origins of water chemistry, changes along groundwater flow paths, and an introduction to contaminant biogeochemistry will be discussed through the processes of speciation, solubility, sorption, ion exchange, oxidation-reduction, elemental and isotopic partitioning, microbial metabolic processes and microbial ecology. An overview of the basics of environmental microbiology, including cell structure and function, microbial metabolism and respiration, microbial genetics and kinetics of microbial growth will be covered. (Same as CE 753.) Prerequisite: One year of chemistry, one year of calculus, one year of biology, an introductory course in hydrogeology, or consent of the instructors.

GEOL 754. Contaminant Transport. 3 Credits.
A study of the transport of conservative and non-conservative pollutants in subsurface waters. Case studies are used to illustrate and develop a conceptual understanding of such processes as diffusion, advection, dispersion, retardation, chemical reactions, and biodegradation. Computer models are developed and used to quantify these processes. (Same as CE 754.) Prerequisite: Introductory Hydrogeology or consent of instructor.

GEOL 755. Site Assessment. 3 Credits.
Site Assessment encompasses both the academic and applied aspects of environmental geology. The student is presented with the historical, regulatory and risk characteristics of environmental issues as well as specific geologic principles such as GIS and remote sensing, geophysics, geomorphology and surface and groundwater practices. Site assessment concepts include surface and subsurface sampling, analyses and interpretations, conceptual site models, environmental geologic forensics, and environmental Phase I site assessments (USEPA and ASTM). Environmental geology project management principles and practices are examined in detail. These core aspects of the course form the basic structure in understanding and applying environmental remediation and state-of-the-art/state-of-the-practice processes. Case studies are researched and analyzed for the assessment phase of the program.

GEOL 758. Applied Groundwater Modeling. 3 Credits.
This course focuses on how to construct simple to complex computer models of groundwater systems and systems in which water flows between groundwater and surface water bodies such as springs, streams and lakes. We consider water flow, transport of solutes, and density effects (from saltwater or brines). We consider the conjunctive use of groundwater and surface water (demand-driven, supply-limited problems), and managed aquifer recharge (MAR). We consider three aspects of model development: (1) how to compare the computer models we construct to the systems modelers intend them to represent, (2) how accurate the models are likely to be and how uncertainty can be quantified, and (3) how useful the models are in practice. (Same as CE 731.) Prerequisite: GEOL 751 or CE 752, or approved by the professor.

GEOL 761. Topics in Regional Field Geology: _______. 1-5 Credits.
A detailed field study of a carefully selected area that includes features of several phases of geology. Field trip fee. Prerequisite: GEOL 561 or equivalent and departmental approval.

GEOL 763. Tectonics and Regional Geology. 3 Credits.
Topics vary with demand and include fundamental features of plate tectonics, interpretation and distribution of regional geology of mountain belts with emphasis on tectonic setting and processes, regional geology, and tectonics of selected mountain belts. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in GEOL 563. Prerequisite: GEOL 562, GEOL 512, or GEOL 331, and GEOL 572.

GEOL 771. Advanced Geophysics: _____ 1-3 Credits.
Topics vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics-tectonophysics, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as PHSX 727.) Prerequisite: GEOL 572 or consent of instructor.

GEOL 772. Geophysical Data Analysis. 3 Credits.
Fourier analysis, sampling theory, prediction and interpolation of geophysical data, filtering theory, correlation techniques, deconvolution. Examples will be chosen from various fields of geophysics. Prerequisite: MATH 250/AE 250/ARCE 250/CE 250/C&PE 250/EECS 250/EPHX 250/ME 250 and GEOL 572.

GEOL 773. Seismology. 3 Credits.

GEOL 779. Hydrogeophysics. 3 Credits.
This course is designed to introduce students to current hydrogeophysics research. Students will learn about determining, predicting, and studying the physical properties and hydrologic processes associated with groundwater flow, contaminant transport, and microbemineral interactions using geophysical measurements at different scales. This course combines lectures, literature review and discussion, and student presentations. Not open to students with credit in GEOL 579.

GEOL 780. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

GEOL 781. Introduction to Museum Exhibits. 3 Credits.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, BIOL 787, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

GEOL 783. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

GEOL 784. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

GEOL 785. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, BIOL 798, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

GEOL 791. Advanced Topics in Geology: _____ 1-5 Credits.
Selected offerings in geology. Intended primarily for graduate students and qualified seniors. May include lectures, discussions, reading, laboratory and field work. May be taken more than once.

GEOL 814. Professional Science Masters Environmental Geology Capstone I. 1 Credits.
A culminating experience to develop a workforce project and produce a written report to be presented orally to a committee that may include an industry member. Students will develop an applied workforce project in the student's place of employment for full-time employees, or an internship or similar individual project for full-time students or students who are not employed in the area of study. This course will initiate the process of project development and will be taken prior to a student's final semester. This project is to be continued in GEOL 815 in the last semester of the student's graduate career. Prerequisite: Minimum 20 credit hours completed in program.

GEOL 815. Professional Science Masters Environmental Geology Capstone II. 2 Credits.
A culminating experience to develop a workforce project and produce a written report to be presented orally to a committee that may include an industry member. Students will develop an applied workforce project in the student's place of employment for full-time employees, an internship or similar individual project for full-time students or students who are not employed in the area of study. The students will compile their project results in a formal written report and will give an oral presentation to the Environmental Studies faculty (2 minimum) and the student's employer or mentor. Prerequisite: GEOL 814.

GEOL 837. Geoscience and Petroleum Engineering. 3 Credits.
Advanced geological, geophysical, and engineering characterization of a petroleum reservoir. Includes mapping; petrophysical, production, and pressure analysis; and numerical modeling. Considers economic analysis of steps to improve recovery. Students who have completed GEOL 537 may not take GEOL 837 for credit.
Why study geology?

In Geology you get to apply techniques and knowledge from chemistry, physics, biology and math to answer important questions about Earth processes, history and future. Geologists are in demand to evaluate geologic hazards, evaluate natural resources, and understand the environment.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Geology Programs

The B.A. program (https://geo.ku.edu/geology-undergraduate-ba/) allows many free electives for background courses in the sciences or liberal arts. The program permits study of traditional geology (with emphasis on the solid earth, the earth’s surface, or environmental geology and natural resources), environmental geology (with emphasis on water or urban environmental geology), or an individually tailored program.

Bachelor of Arts in Geology

Why study geology?

In Geology you get to apply techniques and knowledge from chemistry, physics, biology and math to answer important questions about Earth processes, history and future. Geologists are in demand to evaluate geologic hazards, evaluate natural resources, and understand the environment.
### Requirements for the B.A. Major

**Geology Major Course Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>Geology Prerequisite or Co-requisite Knowledge</strong></td>
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<tr>
<td>Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.</td>
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<tr>
<td>Calculus I. Satisfied by:</td>
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<tr>
<td>GEOL 190</td>
<td>Introduction to Quantitative Geoscience (or MATH 115 or MATH 125)</td>
<td>3</td>
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<tr>
<td>Foundations of Chemistry I. Satisfied by:</td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
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<tr>
<td>Physics. Satisfied by one of the following:</td>
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<tr>
<td>PHSX 111</td>
<td>Introductory Physics</td>
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<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
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<td>PHSX 211</td>
<td>General Physics I</td>
<td>5</td>
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<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
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<tr>
<td>Biology. Satisfied by:</td>
<td></td>
<td></td>
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<tr>
<td>BIOL 100 &amp; BIOL 102</td>
<td>Principles of Biology and Principles of Biology Laboratory (or higher level biology course)</td>
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<tr>
<td>Information Technology. Satisfied by:</td>
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<tr>
<td>EECS 138</td>
<td>Introduction to Computing: _____</td>
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<tr>
<td><strong>Geology Core Knowledge and Skills</strong></td>
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<tr>
<td>Majors must complete the following core courses:</td>
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<tr>
<td>Introduction to Geology. Satisfied by:</td>
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<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td>3</td>
</tr>
<tr>
<td>Geology Fundamentals Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 103</td>
<td>Geology Fundamentals Laboratory</td>
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<tr>
<td>Mineralogy and Structure of the Earth. Satisfied by:</td>
<td></td>
<td></td>
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<tr>
<td>GEOL 311</td>
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<tr>
<td>Sedimentology and Stratigraphy. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 331</td>
<td>Sedimentology and Stratigraphy</td>
<td>4</td>
</tr>
<tr>
<td>Field Investigation. Satisfied by:</td>
<td></td>
<td></td>
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<tr>
<td>GEOL 360</td>
<td>Field Investigation</td>
<td>2</td>
</tr>
<tr>
<td>Paleontology. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 521</td>
<td>Paleontology</td>
<td>3</td>
</tr>
<tr>
<td>Introductory Field Geology. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 560</td>
<td>Introductory Field Geology</td>
<td>3</td>
</tr>
<tr>
<td>Structural Geology. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 562</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td><strong>Geology Required Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majors must complete a minimum of 15 hours in geology or related courses. Several possible tracks of upper-level course work are given below.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General Geology Options</strong></td>
<td></td>
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</tr>
<tr>
<td>Concentrate on traditional geology with emphasis on the solid earth and the earth's interior, earth surface processes, or environmental geology and natural resources.</td>
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</tr>
</tbody>
</table>

### Environmental Geology Options

Concentrate on environmental geology with emphasis on water and the environment or urban environmental geology.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water, Geology, and the Environment</strong></td>
<td></td>
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<tr>
<td>GEOL 302</td>
<td>Oceanography</td>
<td>4</td>
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<td>GEOL 351</td>
<td>Environmental Geology</td>
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<tr>
<td>GEOL 391</td>
<td>Special Studies in Geology</td>
<td>1-6</td>
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<tr>
<td>GEOL 541</td>
<td>Geomorphology</td>
<td>4</td>
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<tr>
<td>GEOL 552</td>
<td>Introduction to Hydrogeology</td>
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</tr>
<tr>
<td>CE 477</td>
<td>Introduction to Environmental Engineering and Science</td>
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</tr>
<tr>
<td>BIOL 661</td>
<td>Ecology of Rivers and Lakes</td>
<td>3</td>
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<tr>
<td><strong>Urban Environmental Geology</strong></td>
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<td>GEOL 351</td>
<td>Environmental Geology</td>
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<tr>
<td>ATMO 525</td>
<td>Air Pollution Meteorology</td>
<td>3</td>
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<tr>
<td>CE 477</td>
<td>Introduction to Environmental Engineering and Science</td>
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</tr>
<tr>
<td>GEOG 304</td>
<td>Environmental Conservation</td>
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</tr>
<tr>
<td><strong>Other Elective Courses</strong></td>
<td></td>
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</table>
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the [Semester/Cumulative GPA Calculator](http://clas.ku.edu/undergrad/tools/gpa/).

Sample 4-year plans for the BA degree in Geology with the following concentrations can be found here: General Geology (p. 1455) and Environmental Geology (p. 1456), or by using the left-side navigation.

**Departmental Honors**

Pursuit of departmental honors in Geology is by invitation from the Department of Geology honors coordinator. Requirements include:
3.50 or higher KU geology-courses GPA at graduation.
Completion of at least 2 credit hours of GEOL 399.

Completion and successful defense of an honor’s thesis. Additional requirements and more information may be obtained from the Department of Geology honors coordinator and web site.

**BA in Geology with concentration in General Geology**

Below is a sample 4-year plan for students pursuing the BA in Geology with a concentration in General Geology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td>1st</td>
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<td>ENGL 102</td>
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<td>(Goal 2.1</td>
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<td>Communication/</td>
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<td>Communication/</td>
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<tr>
<td></td>
<td>BA Writing I</td>
<td></td>
<td>BA Writing II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 101</td>
<td>3</td>
<td>MATH 115</td>
<td>3-4</td>
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<tr>
<td></td>
<td>or GEOL 190</td>
<td></td>
<td>or 125 (BA</td>
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<td>Quantitative</td>
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<td>Reasoning (QR),</td>
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<tr>
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<td>Reasoning</td>
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<td>Major Pre-requisite</td>
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**Sophomore**

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<th>Fall</th>
<th>Hours</th>
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<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
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<td>ENGL 101</td>
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<td>BA Writing I</td>
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<td>BA Writing II</td>
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<td>MATH 101</td>
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<td>MATH 115</td>
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<td>or GEOL 190</td>
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<td>or 125 (BA</td>
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<td>BIOL 106</td>
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**BA in Geology with concentration in General Geology**

Below is a sample 4-year plan for students pursuing the BA in Geology with a concentration in General Geology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Semester</th>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
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<td>ENGL 102</td>
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<tr>
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<td>BA Writing I</td>
<td></td>
<td>BA Writing II</td>
<td></td>
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<tr>
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<td>MATH 101</td>
<td>3</td>
<td>MATH 115</td>
<td>3-4</td>
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<tr>
<td></td>
<td>or GEOL 190</td>
<td></td>
<td>or 125 (BA</td>
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**Junior**

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<tbody>
<tr>
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<td>ENGL 102</td>
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</tr>
<tr>
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<td>BA Writing I</td>
<td></td>
<td>BA Writing II</td>
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<td>MATH 101</td>
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<td>MATH 115</td>
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<td>or GEOL 190</td>
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<td>or 125 (BA</td>
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<td>Reasoning (QR),</td>
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**Senior**

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<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>ENGL 102</td>
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<tr>
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<td>MATH 101</td>
<td>3</td>
<td>MATH 115</td>
<td>3-4</td>
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<tr>
<td></td>
<td>or GEOL 190</td>
<td></td>
<td>or 125 (BA</td>
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<td>Reasoning</td>
<td></td>
<td>Major Pre-requisite</td>
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</tbody>
</table>

**Departmental Honors**

Pursuit of departmental honors in Geology is by invitation from the Department of Geology honors coordinator. Requirements include:
3.50 or higher KU geology-courses GPA at graduation.
Completion of at least 2 credit hours of GEOL 399.

Completion and successful defense of an honor’s thesis. Additional requirements and more information may be obtained from the Department of Geology honors coordinator and web site.

**BA in Geology with concentration in General Geology**

Below is a sample 4-year plan for students pursuing the BA in Geology with a concentration in General Geology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
### BA in Geology with concentration in Environmental Geology

Below is a sample 4-year plan for students pursuing the BA in Geology with a concentration in Environmental Geology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
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<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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</tr>
<tr>
<td>MATH 101 or GEOL 190 (Goal 1.2 Quantitative Reasoning)</td>
<td>3 MATH 115 or 125 (BA Quantitative Reasoning, Major Pre-requisite)</td>
<td>3-4</td>
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</tr>
<tr>
<td>BIOL 100 (Goal 3 Natural Science, Major Pre-requisite)</td>
<td>3 CHEM 130 (Major Pre-requisite)</td>
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<tr>
<td>BIOL 102 (BA Laboratory/Field Experience (LFE), Major Pre-requisite)</td>
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<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3-5 GEOL 360 (Summer only, Major Requirement)</td>
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<td>3 Goal 2.2 Communication</td>
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<td>EECS 138 (Major Pre-requisite)</td>
<td>3 GEOL 331 (Major Pre-requisite)</td>
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<tr>
<td>GEOL 101 (Major Pre-requisite)</td>
<td>3 PHSX 111, 114, or 211 and 216 (Major Pre-requisite)</td>
<td>3-5</td>
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</tbody>
</table>

**The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.**

**Geology majors are required to complete 15 hours of elective. The General Geology track offers electives in Solid Earth, Surface Earth, and Geology and Natural Resources. For a list of applicable electives see the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/geology/ba/#requirementstext) tab.**

**All major required Geology courses and most Geology elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.**

**Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.**

**Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.**

### Total Hours 120-125

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Geology majors are required to complete 15 hours of elective. The General Geology track offers electives in Solid Earth, Surface Earth, and Geology and Natural Resources. For a list of applicable electives see the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/geology/ba/#requirementstext) tab.

3. All major required Geology courses and most Geology elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.

4. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

5. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GEOL 103</td>
<td>(Major Requirement)</td>
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<td>2</td>
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<td></td>
<td>Junior Fall</td>
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<tr>
<td></td>
<td>Goal 3 Arts and Humanities</td>
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</tr>
<tr>
<td></td>
<td>3 Goal 4.2 Global Awareness</td>
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</tr>
<tr>
<td></td>
<td>3 GEOL 560 (Summer only) Goal 6 Integration &amp;</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Creativity, Major Requirement</td>
<td></td>
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<tr>
<td></td>
<td>Goal 3 Social Science</td>
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<tr>
<td></td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
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</tr>
<tr>
<td></td>
<td>Goal 4.1 US Diversity</td>
<td>4</td>
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<td></td>
<td>3 GEOL 562 (Major Requirement)</td>
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<td>GEOL 311 (Major Requirement)</td>
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<tr>
<td></td>
<td>3 Second Area of Study/Elective/ Degree/Junior-</td>
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<td>Senior Hours</td>
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<td>GEOL Elective 300+ (Major Requirement)</td>
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<td>Senior Fall</td>
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<td></td>
<td>GEOL 521 (Major Requirement)</td>
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<td></td>
<td>3 GEOL Elective 300+ (Major Requirement)</td>
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<tr>
<td></td>
<td>GEOL Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 GEOL Elective 300+ (Major Requirement)</td>
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<tr>
<td></td>
<td>LA&amp;S 490 (Recommended, or elective)</td>
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<td></td>
<td>Second Area of Study/Elective/ Degree/Junior-</td>
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<td></td>
<td>Senior Hours</td>
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<tr>
<td></td>
<td>Second Area of Study/Elective/ Degree/Junior-</td>
<td>2</td>
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<td>Senior Hours</td>
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<tr>
<td></td>
<td>Total Hours</td>
<td>120-125</td>
</tr>
</tbody>
</table>

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Geology majors are required to complete 15 hours of elective. The Environmental Geology track offers electives in Water, Geology, and the Environment; Urban Environmental Geology; and Other Electives. For a list of applicable electives see the degree requirements tab.

3 All major required Geology courses and most Geology elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.

4 Visit this website for a list of courses that fulfill the BA Quantitative Reasoning requirement.

5 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Bachelor of Science in Geology

Why study geology?

In Geology you get to apply techniques and knowledge from chemistry, physics, biology and math to answer important questions about Earth processes, history and future. Geologists are in demand to evaluate geologic hazards, evaluate natural resources, and understand the environment.

The B.S. program provides intensive training in geology and other sciences. B.S. majors may emphasize traditional geology, environmental geology (with a specialized track in hydrogeology), engineering geology, geophysics, or earth and space science licensure. The hydrogeology track, the engineering geology option, and the geophysics option combine basic training in geology with training in mathematics, engineering, physics, and geophysics. The environmental geology option combines training in geology with many different sciences.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions for application deadlines and specific admission requirements.
Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Geology Programs**

The B.S. program provides intensive training in geology and other sciences. B.S. majors may emphasize traditional geology, environmental geology (with a specialized track in hydrogeology), engineering geology, geophysics, or earth and space science licensure. The hydrogeology track, the engineering geology option, and the geophysics option combine basic training in geology with training in mathematics, engineering, physics, and geophysics. The environmental geology option combines training in geology with many different sciences.

Degree requirements may be altered to suit particular needs of a student upon petition to the undergraduate studies committee and in consultation with a geology faculty advisor. Special consideration is given to students with strong backgrounds in supporting sciences and students with superior records who decide to major in geology late in their programs.

**First- and Second-Year Preparation**

Students interested in geology, especially in the B.S. degree, should see a department advisor as soon as possible. They should enroll in mathematics, chemistry, and English in addition to Introduction to Geology and electives. Students should take GEOL 360 as soon as possible.

**Advising**

Developing a strong relationship with a faculty advisor helps students get the most out of their educational programs in the shortest time. Most courses for majors are offered in only one semester each year. Advisors can guide the student through complexities of the curriculum or into a specialized program.

**Requirements for the B.S. Degree**

The B.S. program provides intensive training in geology and other sciences. B.S. majors may emphasize traditional geology, environmental geology (with a specialized track in hydrogeology), engineering geology, geophysics, or earth and space science licensure. The hydrogeology track, the engineering geology option, and the geophysics option combine basic training in geology with training in mathematics, engineering, physics, and geophysics. The environmental geology option combines training in geology with many different sciences.

Degree requirements may be altered to suit particular needs of a student upon petition to the undergraduate studies committee and in consultation with a geology faculty advisor. Special consideration is given to students with strong backgrounds in supporting sciences and students with superior records who decide to major in geology late in their programs.

**General Geology Option**

**Written Communication - Core Skill and Critical Inquiry.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td>Composition</td>
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<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACT English score of 27 or above or SAT English score of 600 or above</td>
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<tr>
<td></td>
<td>AP English Literature &amp; Composition score of 3 or above</td>
<td></td>
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<tr>
<td></td>
<td>Equivalent transfer course</td>
<td></td>
</tr>
</tbody>
</table>

**Critical Reading and Writing**

Satisfied by one of the following: Requirement must be completed during initial term of admission at KU.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
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<tr>
<td>or ENGL 105</td>
<td>Honors Introduction to English</td>
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</tr>
<tr>
<td></td>
<td>AP English Literature &amp; Composition score of 4 or above</td>
<td></td>
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<tr>
<td></td>
<td>Equivalent transfer course</td>
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</table>

**Sophomore Reading and Writing II**

Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar: _____</td>
<td></td>
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<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AP English Literature &amp; Composition score of 5 or above</td>
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<td></td>
<td>Equivalent transfer course</td>
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</tbody>
</table>

**Communications.**

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

**Humanities - Understanding the Human Condition.** Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.

**Social and Behavioral Sciences - Understanding Society and Behavior.** Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.

**Geology Prerequisite or Co-requisite Knowledge**

Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Calculus I. Satisfied by:</td>
<td></td>
</tr>
</tbody>
</table>
MATH 125  Calculus I (Prerequisite: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics or 640 or higher on the SAT; or a qualifying score on the mathematics placement test.) 4

Calculus II. Satisfied by:
MATH 126  Calculus II 4

Chemistry. Satisfied by:
CHEM 130  General Chemistry I 10
& CHEM 135  and General Chemistry II

Physics. Satisfied by:
PHSX 211  General Physics I 5
& PHSX 216  and General Physics I Laboratory

PHSX 212  General Physics II 4
& PHSX 236  and General Physics II Laboratory

Biology. Satisfied by BIOL:

Biological Technology. Satisfied by one of the following:
EECS 138  Introduction to Computing: _____ 3

C&PE 325  Numerical Methods and Statistics for Engineers 3

Geology Core Knowledge and Skills
Majors must complete the following core courses:

Introduction to Geology. Satisfied by:
GEOL 101  The Way The Earth Works 3

Geology Fundamentals Laboratory. Satisfied by:

GEOL 103  Geology Fundamentals Laboratory 2

Historical Geology. Satisfied by:

GEOL 304  Historical Geology 3

Mineralogy and Structure of the Earth. Satisfied by:

GEOL 311  Mineralogy and Structure of the Earth 3

Mineral Structures and Equilibria Laboratory. Satisfied by:

GEOL 312  Mineral Structures and Equilibria Laboratory 1

Sedimentology and Stratigraphy. Satisfied by:

GEOL 331  Sedimentology and Stratigraphy 4

Field Investigation. Satisfied by:

GEOL 360  Field Investigation 2

Igneous and Metamorphic Petrology. Satisfied by:

GEOL 512  Igneous and Metamorphic Petrology 3

Petrology Laboratory. Satisfied by:

GEOL 513  Petrology Laboratory 1

Introductory Field Geology. Satisfied by:

GEOL 560  Introductory Field Geology 3

Field Geology. Satisfied by:

GEOL 561  Field Geology 3

Structural Geology. Satisfied by:

GEOL 562  Structural Geology 4

Geology Required Electives 18

At least one course from each of the three categories listed below:
Life; Water & Climate; Rocks. Additional elective credit requirements fulfilled by 500 level and above geology courses, although only one geology course fulfilling KU Core Goal 4 or 5 may count towards these 9 hours. Additionally, 3 hours of GEOL 121, if taken before the student has completed 60 hrs, GEOL 391 or GEOL 399 can also count towards these 9 credit hours.

Life

GEOL 316  Geochemistry
GEOL 521  Paleontology
GEOL 525  Geobiology: The Coevolution of Life and Rocks
GEOL 591  Topics in Geology: _____ (Geobiology)

Rocks

GEOL 501  Simple Error Analysis with Matlab
GEOL 502  Linear Algebra for Earth Scientists
GEOL 503  Numerical Methods in the Earth Sciences
GEOL 511  Raman Spectroscopy of Crystalline Solids
GEOL 533  Shales and Other Mudstones
GEOL 536  Geological Log Analysis
GEOL 537  Petroleum Reservoir Characterization
GEOL 538  Basin Analysis
GEOL 535  Petroleum and Subsurface Geology
GEOL 572  Geophysics

Water and Climate

GEOL 552  Introduction to Hydrogeology
GEOL 554  Contaminants in Groundwater
GEOL 555  Climate Science
GEOL 558  Applied Groundwater Modeling
GEOL 577  Environmental Geophysics
GEOL 579  Hydrogeophysics
GEOL 591  Topics in Geology: _____ (Climate: Past, Present and Future)

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 50 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Engineering Geology Option

Written Communication - Core Skill and Critical Inquiry.
### Bachelor of Science in Geology

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td></td>
<td><strong>Composition</strong></td>
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<tr>
<td></td>
<td>Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.</td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
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<td>ACT English score of 27 or above or SAT English score of 600 or above</td>
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<td></td>
<td>AP English Literature &amp; Composition score of 3 or above</td>
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<tr>
<td></td>
<td>Equivalent transfer course</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Critical Reading and Writing</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by one of the following. Requirement must be completed within the first academic year at KU.</td>
<td></td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
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<tr>
<td></td>
<td>or ENGL 105 Honors Introduction to English</td>
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<tr>
<td></td>
<td>AP English Literature &amp; Composition score of 4 or above</td>
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<td>Equivalent transfer course</td>
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<td></td>
<td><strong>Sophomore Reading and Writing II</strong></td>
<td></td>
</tr>
<tr>
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<td>Satisfied by one of the following:</td>
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<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
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<td>Equivalent</td>
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<td></td>
<td><strong>Communications.</strong></td>
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<td></td>
<td>Satisfied by:</td>
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</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Humanities - Understanding the Human Condition.</strong> Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Social and Behavioral Sciences - Understanding Society and Behavior.</strong> Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.</td>
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<tr>
<td></td>
<td><strong>Geology Prerequisite or Co-requisite Knowledge</strong></td>
<td></td>
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<tr>
<td></td>
<td>Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.</td>
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<td>Mathematics. Satisfied by:</td>
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<tr>
<td>MATH 125</td>
<td>Calculus I</td>
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<td>MATH 126</td>
<td>Calculus II</td>
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<td>MATH 220</td>
<td>Applied Differential Equations</td>
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<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
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<td>Chemistry. Satisfied by:</td>
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<td>CHEM 130</td>
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<td>&amp; CHEM 135 General Chemistry II</td>
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<td>Physics. Satisfied by:</td>
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<td>PHSX 211</td>
<td>General Physics I</td>
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<td>&amp; PHSX 216</td>
<td>General Physics I Laboratory</td>
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<td>PHSX 212</td>
<td>General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>&amp; PHSX 236</td>
<td>General Physics II Laboratory</td>
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<tr>
<td></td>
<td>Information Technology. Satisfied by one of the following:</td>
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<tr>
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<td>EECS 138</td>
<td>Introduction to Computing: _____</td>
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<tr>
<td>C&amp;PE 325</td>
<td>Numerical Methods and Statistics for Engineers</td>
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<td>Statics. Satisfied by:</td>
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<td>Dynamics. Satisfied by:</td>
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<td>Fluid Mechanics. Satisfied by:</td>
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<td>CE 330</td>
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<td>Hydrology. Satisfied by:</td>
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<td>CE 455</td>
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<td>Soil Mechanics. Satisfied by:</td>
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<td>CE 487</td>
<td>Soil Mechanics</td>
<td>4</td>
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<td></td>
<td><strong>Geology Core Knowledge and Skills</strong></td>
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<tr>
<td></td>
<td>Majors must complete the following core courses:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction to Geology. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td>3</td>
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<td>GEOL 103</td>
<td>Geology Fundamentals Laboratory</td>
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<td>GEOL 304</td>
<td>Historical Geology</td>
<td>3</td>
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<tr>
<td></td>
<td>Mineralogy and Structure of the Earth. Satisfied by:</td>
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<tr>
<td>GEOL 311</td>
<td>Mineralogy and Structure of the Earth</td>
<td>3</td>
</tr>
<tr>
<td>Mineral Structures and Equilibria Laboratory. Satisfied by:</td>
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<td>GEOL 312</td>
<td>Mineral Structures and Equilibria Laboratory</td>
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<td></td>
<td>Sedimentology and Stratigraphy. Satisfied by:</td>
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<td>GEOL 331</td>
<td>Sedimentology and Stratigraphy</td>
<td>4</td>
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<td></td>
<td>Environmental Geology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>GEOL 351</td>
<td>Environmental Geology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Field Investigation. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>GEOL 360</td>
<td>Field Investigation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Igneous and Metamorphic Petrology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>GEOL 512</td>
<td>Igneous and Metamorphic Petrology</td>
<td>3</td>
</tr>
<tr>
<td>Petrology Laboratory. Satisfied by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 513</td>
<td>Petrology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Geomorphology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>GEOL 541</td>
<td>Geomorphology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Introductory Field Geology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>GEOL 560</td>
<td>Introductory Field Geology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Field Geology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>GEOL 561</td>
<td>Field Geology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Structural Geology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>GEOL 562</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Geophysics or Geodynamics and Plate Tectonics. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>GEOL 572</td>
<td>Geophysics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Geology or Civil Engineering Required Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete three additional geology or civil engineering courses, at least two of which must be from the following:</td>
<td></td>
</tr>
<tr>
<td>GEOL 521</td>
<td>Paleontology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 535</td>
<td>Petroleum and Subsurface Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 715</td>
<td>Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 751</td>
<td>Physical Hydrogeology</td>
<td>3</td>
</tr>
<tr>
<td>CE 770</td>
<td>Concepts of Environmental Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CE 771</td>
<td>Environmental Engineering Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>
Electives may include an upper-division course in statistics:

- MATH 365 Elementary Statistics 3
- or BIOL 570 Introduction to Biostatistics

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 45 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major.

**Environmental Geology Option**

**Written Communication - Core Skill and Critical Inquiry.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 105</td>
<td>Honors Introduction to English</td>
<td></td>
</tr>
<tr>
<td>AP English Literature &amp; Composition score of 3 or above</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Critical Reading and Writing**
Satisfied by one of the following. Requirement must be completed within the first academic year at KU.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar: _____</td>
<td></td>
</tr>
<tr>
<td>or ENGL 209</td>
<td>Introduction to Fiction</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 210</td>
<td>Introduction to Poetry</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 211</td>
<td>Introduction to the Drama</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 362</td>
<td>Foundations of Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore Reading and Writing II**
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 150</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 152</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 155</td>
<td>Honors Introduction to English</td>
<td></td>
</tr>
<tr>
<td>or ENGL 157</td>
<td>AP English Literature &amp; Composition score of 4 or above</td>
<td></td>
</tr>
</tbody>
</table>

**Communications.**

**Humanities - Understanding the Human Condition.** Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyoun portal.

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

**Social and Behavioral Sciences - Understanding Society and Behavior.** Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyoun portal. An introductory course in economics is recommended.

**Geology Prerequisite or Co-requisite Knowledge**
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

- Calculus I. Satisfied by:
  - MATH 125 Calculus I 4
  - MATH 126 Calculus II 4
- Chemistry. Satisfied by:
  - CHEM 130 General Chemistry I 10
  - CHEM 135 and General Chemistry II

**Physics.** Satisfied by:

- Select one of the following:
  - PHSX 211 General Physics I 5
  - PHSX 212 and General Physics I Laboratory
  - PHSX 216 General Physics II 4
  - PHSX 236 and General Physics II Laboratory (recommended)
  - PHSX 114 College Physics I 2-8
  - PHSX 115 and College Physics II

**Biology.** Satisfied by:

- BIOL 150 Principles of Molecular and Cellular Biology 6
- BIOL 152 and Principles of Organismal Biology

**Information Technology.** Satisfied by one of the following:

- EECS 138 Introduction to Computing: _____ 3
- C&PE 325 Numerical Methods and Statistics for Engineers 3

**Geology Core Knowledge and Skills**
Majors must complete the following core courses:

- Introduction to Geology. Satisfied by:
  - GEOL 101 The Way The Earth Works 3
- Geology Fundamentals Laboratory. Satisfied by:
  - GEOL 103 Geology Fundamentals Laboratory 2
- Historical Geology. Satisfied by:
  - GEOL 304 Historical Geology 3
- Mineralogy and Structure of the Earth. Satisfied by:
  - GEOL 311 Mineralogy and Structure of the Earth 3
- Sedimentology and Stratigraphy. Satisfied by:
  - GEOL 331 Sedimentology and Stratigraphy 4
- Environmental Geology. Satisfied by:
  - GEOL 351 Environmental Geology 3
- Field Investigation. Satisfied by:
  - GEOL 360 Field Investigation 2
Paleontology. Satisfied by:
GEOL 521 Paleontology 3

Geomorphology. Satisfied by:
GEOL 541 Geomorphology 4

Introduction to Hydrogeology. Satisfied by:
GEOL 552 Introduction to Hydrogeology 3

Introductory Field Geology. Satisfied by:
GEOL 560 Introductory Field Geology 3

Structural Geology. Satisfied by:
GEOL 562 Structural Geology 4

Geophysics. Satisfied by:
GEOL 572 Geophysics 3

Geology Required Electives
Majors must complete additional courses to total at least nine hours numbered 500 or above. The following are recommended:
GEOL 391 Special Studies in Geology 1-6
GEOL 535 Petroleum and Subsurface Geology 4
GEOL 715 Geochemistry 3
GEOL 751 Physical Hydrogeology 3
CE 770 Concepts of Environmental Chemistry & CE 771 and Environmental Engineering Laboratory 6
GEOG 535 Soil Geography 4
GEOG 558 Spatial Data Analysis 4
GEOL 753 Chemical and Microbial Hydrogeology 3
BIOI 400 Fundamentals of Microbiology 3

Environmental Hydrogeology Track
Besides the general program above, a specialized track in hydrogeology satisfies degree requirements. In addition to College, supporting science, and geology courses, the environmental hydrogeology track requires the following mathematics and civil engineering/physics courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>CE 330</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition, Technical Electives (9 hours). These normally are chosen from courses numbered 500 or above in geology, physics, mathematics, chemistry, engineering or computer science. Courses numbered below 500 must be approved by a geology advisor.

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 49 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 45 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Geophysics Option
Written Communication - Core Skill and Critical Inquiry.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

ACT English score of 27 or above or SAT English score of 600 or above
AP English Literature & Composition score of 3 or above
Equivalent transfer course

Critical Reading and Writing
Satisfied by one of the following. Requirement must be completed during initial term of admission at KU.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
</tbody>
</table>
or ENGL 105 | Honors Introduction to English              |       |

AP English Literature & Composition score of 4 or above
Equivalent transfer course

Sophomore Reading and Writing II
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 203</td>
<td>Topics in Reading and Writing: _____</td>
<td>3</td>
</tr>
</tbody>
</table>
or ENGL 205 | Freshman-Sophomore Honors Proseminar: _____ |       |
| ENGL 209 | Introduction to Fiction                    | 3     |
| ENGL 210 | Introduction to Poetry                     | 3     |
| ENGL 211 | Introduction to the Drama                  | 3     |
| ENGL 362 | Foundations of Technical Writing           | 3     |

AP English Literature & Composition score of 5 or above
Equivalent

Humanities - Understanding the Human Condition. Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.

Social and Behavioral Sciences - Understanding Society and Behavior. Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

Geology Prerequisite or Co-requisite Knowledge
Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>Hours</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>MATH 320</td>
<td>Elementary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130 &amp; CHEM 135</td>
<td>General Chemistry I and General Chemistry II</td>
<td>10</td>
</tr>
<tr>
<td>PHSX 211 &amp; PHSX 216</td>
<td>General Physics I and General Physics I Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>PHSX 212 &amp; PHSX 236</td>
<td>General Physics II and General Physics II Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 521</td>
<td>Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 531</td>
<td>Electricity and Magnetism</td>
<td>3</td>
</tr>
<tr>
<td>or EECS 220</td>
<td>Electromagnetics I</td>
<td></td>
</tr>
<tr>
<td>EEC 138</td>
<td>Introduction to Computing: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

Earth and Space Science Licensure Option

This program fulfills the requirements for a Bachelor of Science degree in geology. The program also meets course requirements necessary to gain state licensure eligibility in earth and space science to become a secondary teacher in Kansas, but completion of the program does not guarantee the student's licensure. This list is a guideline. Contact the geology department for further information about meeting degree and additional licensure requirements. You may also contact the UKanTeach Office for information about similar tracks resulting in eligibility for licensure in this and other science and mathematics fields.

Written Communication - Core Skill and Critical Inquiry.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ACT English score of 27 or above or SAT English score of 600 or above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP English Literature &amp; Composition score of 3 or above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or ENGL 105</td>
<td>Honors Introduction to English</td>
<td></td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 105</td>
<td>Critical Reading and Writing</td>
<td></td>
</tr>
<tr>
<td>or ENGL 205</td>
<td>Freshman-Sophomore Honors Proseminar: _____</td>
<td></td>
</tr>
<tr>
<td>ENGL 209</td>
<td>Introduction to Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 210</td>
<td>Introduction to Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 211</td>
<td>Introduction to the Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 362</td>
<td>Foundations of Technical Writing</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Science in Geology

### AP English Literature & Composition score of 5 or above
Equivalent

### Communications.

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

### Humanities - Understanding the Human Condition.
Satisfied by completing 2 courses (requirement code H). Approved courses may be searched for availability through the Kyou portal.

### Social and Behavioral Sciences - Understanding Society and Behavior.
Satisfied by completing 2 courses (requirement code S). Approved courses may be searched for availability through the Kyou portal. An introductory course in economics is recommended.

### Geology Prerequisite or Co-requisite Knowledge

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
</tbody>
</table>
& CHEM 135 | and General Chemistry II                  | 3     |
| CHEM 598 | Research Methods                           | 3     |

### Geology Core Knowledge and Skills

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 103</td>
<td>Geology Fundamentals Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 304</td>
<td>Historical Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 311</td>
<td>Mineralogy and Structure of the Earth</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 331</td>
<td>Sedimentology and Stratigraphy</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 360</td>
<td>Field Investigation</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 521</td>
<td>Paleontology</td>
<td>4</td>
</tr>
</tbody>
</table>
& GEOL 523 | and Paleontology Laboratory            | 4     |

### Space Science Core Knowledge and Skills

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATMO 105</td>
<td>Introductory Meteorology</td>
<td>5</td>
</tr>
<tr>
<td>ASTR 191</td>
<td>Contemporary Astronomy</td>
<td>3</td>
</tr>
</tbody>
</table>

### Earth and Space Required Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 121</td>
<td>(If taken before the completion of 60 hours)</td>
<td>3</td>
</tr>
</tbody>
</table>
& ASTR 390 | or GEOL 399.                                    | 3     |

### Research Methods

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA&amp;S 290</td>
<td>Approaches to Teaching Science and Mathematics</td>
<td>1</td>
</tr>
<tr>
<td>LA&amp;S 291</td>
<td>Approaches to Teaching Science and Mathematics</td>
<td>1</td>
</tr>
</tbody>
</table>

### Liberal Arts and Sciences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;T 448</td>
<td>Reading and Writing across the Curriculum and 16 hours of courses approved by UKanTeach in curriculum and teaching. These should include courses such as Classroom Interactions (3), Knowing and Learning (3), Project Based Instruction (3), Student Teaching (6), and Special Topics Seminar (1).</td>
<td></td>
</tr>
</tbody>
</table>

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

### Major Hours

Satisfied by 46 hours of major courses.

### Major Hours in Residence

Satisfied by a minimum of 15 hours of KU resident credit in the major.

### Major Junior/Senior Hours

Satisfied by a minimum of 34 hours from junior/senior courses (300+) in the major.

### Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
Departmental Honors

Pursuit of departmental honors in Geology is by invitation from the Department of Geology honors coordinator.

Requirements include:
3.50 or higher KU geology-courses GPA at graduation.
Completion of at least 2 credit hours of GEOL 399.
Completion and successful defense of an honor's thesis.
Additional requirements and more information may be obtained from the Department of Geology honors coordinator and web site.

BS in Geology with concentration in Earth & Space Science

Below is a sample 4-year plan for students pursuing the BS in Geology with a concentration in Earth and Space Science. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website. (http://kucore.ku.edu/courses/)

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3 ENGL 102</td>
<td>3</td>
<td>(Goal 2.1 Written Communication (1 of 2))</td>
<td></td>
</tr>
<tr>
<td>MATH 125</td>
<td>4 MATH 126</td>
<td>4</td>
<td>(Goal 1.2 Quantitative Reasoning, Major Pre-requisite)</td>
<td></td>
</tr>
<tr>
<td>CHEM 130</td>
<td>5 CHEM 135</td>
<td>5</td>
<td>(Goal 3 Natural Science, Major Pre-requisite)</td>
<td></td>
</tr>
<tr>
<td>BIOL 150</td>
<td>3 LA&amp;S 291</td>
<td>1</td>
<td>(Major Pre-requisite)</td>
<td></td>
</tr>
<tr>
<td>LA&amp;S 290</td>
<td>1 GEOL 101 &amp; GEOL 103</td>
<td>5</td>
<td>(Major Requirement)</td>
<td></td>
</tr>
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<td><strong>16</strong></td>
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<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Science Course (Goal 3 Social Science)</td>
<td>3</td>
<td>2</td>
<td>(Major Requirement)</td>
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<tr>
<td>HIST 510 (Goal 3 Humanities, UKAN Teach)</td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td>16</td>
<td>5-14</td>
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<table>
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<tr>
<th>Junior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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</tr>
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<tbody>
<tr>
<td>COMS 130</td>
<td>3 GEOL 304</td>
<td>3</td>
<td>(Goal 2.2 Communication)</td>
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<td></td>
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<tr>
<td></td>
<td>3 GEOL 560 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
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<table>
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<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3 C&amp;T 500</td>
<td>1-6</td>
<td>(UKAN Teach)</td>
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</tr>
<tr>
<td>CHEM 598</td>
<td>3 C&amp;T 598</td>
<td>1-5</td>
<td>(UKAN Teach)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 562</td>
<td>4 GEOL 500+ elective</td>
<td>3</td>
<td>(Major Requirement)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>3</td>
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<td></td>
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</tr>
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<td>16</td>
<td>5-14</td>
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</tr>
</tbody>
</table>

Total Hours 120-129
Geology BS majors are required to complete a third English, and a list of possible courses can be found under the Degree Requirements tab.

All major required Geology courses and most Geology elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.

GEOL 360, GEOL 560, and GEOL 561 are offered only in the summer.

The Earth and Space Science concentration must complete electives in one of the following two areas: Geology Focus or Astronomy Focus. Course specifics are listed under the Degree Requirements tab.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BS in Geology with concentration in Engineering Geology

Below is a sample 4-year plan for students pursuing the BS in Geology with a concentration in Engineering Geology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Reasoning, Major Pre-requisite)</td>
<td>4</td>
<td>MATH 126 (Major Pre-requisite)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 101 &amp; GEOL 103 (Goal 3 Natural Science, Major Requirement)</td>
<td>5</td>
<td>PHSX 211 &amp; PHSX 216 (Major Pre-requisite)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 362</td>
<td>3</td>
<td>MATH 290 (Major Pre-requisite)</td>
<td></td>
<td>GEOL 360 (Major Pre-requisite)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MATH 220 (Major Pre-requisite)</td>
<td>3</td>
<td>CE 201 (Major Pre-requisite)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 122

1 All major required Geology courses and most Geology elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.

2 GEOL 360, GEOL 560, and GEOL 561 are offered only in the summer.
3 The Engineering Geology concentration must complete three additional geology or civil engineering courses, at least two of which must be from the list provided under the Degree Requirements tab.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**BS in Geology with concentration in Environmental Geology**

Below is a sample 4-year plan for students pursuing the BS in Geology with a concentration in Environmental Geology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 or 105 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Reasoning, Major Pre-requisite)</td>
<td>4</td>
<td>MATH 126 (Major Pre-requisite)</td>
<td>4</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>PHSX 211 &amp; PHSX 216 (Goal 3 Natural Science, Major Pre-requisite)</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 101 &amp; GEOL 103 (Major Requirement)</td>
<td>5</td>
<td>GEOL 304 (Major Requirement)</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Hours | 15 | 15 |

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>GEOL 360 (Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 130 (Major Pre-requisite)</td>
<td>5</td>
<td>CHEM 135 (Major Pre-requisite)</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 150 (Major Pre-requisite)</td>
<td>3</td>
<td>BIOL 152 (Major Pre-requisite)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Hours | 12 | 12 |

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>GEOL 521 (Major Requirement)</td>
<td>3</td>
<td>GEOL 560 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>GEOL 552 (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EECS 138, CPE 325, or GEOL 503 (Major Pre-requisite)</td>
<td>3</td>
<td>GEOL 562 (Major Requirement)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 351 (Major Requirement)</td>
<td>3</td>
<td>GEOL 500+ Elective (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 541 (Major Requirement)</td>
<td>3</td>
<td>COMS 130 (Goal 2.2 Communication)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Hours | 16 | 16 | 3 |

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>GEOL 500+ Elective (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 572 (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/ Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 500+ Elective (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/ Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/ Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/ Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Hours | 12 | 12 |

1. All major required Geology courses and most Geology elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.
2. GEOL 360, GEOL 560, and GEOL 561 are offered only in the summer.
3. Geology BS majors are required to complete a third English, and a list of possible courses can be found under the Degree Requirements tab.
4. The Environmental Geology concentration must complete at least 9.0 hours of additional major course work at the 500-level or above. A list of recommended courses can be found on the Degree Requirements tab.
Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BS in Geology with concentration in General Geology

Below is a sample 4-year plan for students pursuing the BS in Geology with a concentration in General Geology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Reasoning, Major Pre-requisite)</td>
<td>4</td>
<td>MATH 126 (Major Pre-requisite)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>PHSX 211 &amp; PHSX 216 (Goal 3 Natural Science, Major Pre-requisite)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>GEOL 101 &amp; GEOL 103 (Major Requirement)</td>
<td>5</td>
<td>GEOL 304 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>GEOL 360 (Major Requirement)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMS 130 (Goal 2.2 Communication)</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 130 (Major Pre-requisite)</td>
<td>5</td>
<td>EECS 138 or GEOL 503 (Major Pre-requisite)</td>
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<table>
<thead>
<tr>
<th>Junior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>GEOL 562 (Major Requirement)</td>
<td>4</td>
<td>GEOL 560 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSX 212 &amp; PHSX 236 (Major Pre-requisite)</td>
<td>4</td>
<td>GEOL 512 &amp; GEOL 513 (Major Requirement)</td>
<td>4</td>
<td>GEOL 561 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 152</td>
<td>3</td>
<td>GEOL 500+ Elective - First Category (Major Requirement)</td>
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</tbody>
</table>

| Second Area of Study/Elective/ Degree/Junior-Senior Hours | 3 | Second Area of Study/Elective/ Degree/Junior-Senior Hours | 3 |

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>GEOL 521 &amp; GEOL 523 (Major Requirement)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 500+ Elective - Second Category (Major Requirement)</td>
<td>3</td>
<td>GEOL 500+ Elective - Third Category</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 500+ Elective (Major Requirement)</td>
<td>3</td>
<td>GEOL 500+ Elective (Major Requirement)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 500+ Elective (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/ Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Second Area of Study/Elective/ Degree/Junior-Senior Hours | 3 |

| Total Hours 120 | 15 | 13 |

1. All major required Geology courses and most Geology elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.
2. Geology BS majors are required to complete a third English, and a list of possible courses can be found under the Degree Requirements tab.
3 GEOL 360, GEOL 560, and GEOL 561 are offered only in the summer.

4 Geology majors must complete 18.0 hours of elective coursework, and three courses must come from each of the following categories: Life; Rocks; Water and Climate. A complete course list can be found under the Degree Requirements tab.

5 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BS in Geology with concentration in Geophysics

Below is a sample 4-year plan for students pursuing the BS in Geology with a concentration in Geophysics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Reasoning, Major Pre-requisite)</td>
<td>4 MATH 126 (Major Pre-requisite)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3 PHSX 211 &amp; PHSX 216 (Major Pre-requisite)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 101 &amp; GEOL 103 (Goal 3 Natural Science, Major Requirement)</td>
<td>5 GEOL 304 (Major Requirement)</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1.1 Critical Thinking 2</td>
<td>3 Goal 4.1 US Diversity</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td></td>
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</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 127 (Major Pre-requisite)</td>
<td>4 COMS 130 (Goal 2.2 Communication)</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 130 (Major Pre-requisite)</td>
<td>5 PHSX 212 &amp; PHSX 236</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 311 &amp; GEOL 312 (Major Requirement)</td>
<td>4 GEOL 331 (Major Requirement)</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 290 (Major Pre-requisite)</td>
<td>2</td>
<td>2</td>
<td>2</td>
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</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Social Science</td>
<td>3 Goal 4.2 Global Awareness</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 320 (Major Pre-requisite)</td>
<td>3 PHSX 313 (Major Pre-requisite)</td>
<td>3</td>
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<td></td>
</tr>
<tr>
<td>EECS 138 or GEOL 503 (Major Pre-requisite)</td>
<td>3 GEOL 512 (Major Requirement)</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 572 (Major Requirement)</td>
<td>3 GEOL 562 (Major Requirement)</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 120-123**

1 All major required Geology courses and most Geology elective courses numbered 300 and above are offered once a year, either in the fall, spring or summer term.
Geology BS majors are required to complete a third English, and a list of possible courses can be found under the Degree Requirements tab.

GEOL 360, GEOL 560, and GEOL 561 are offered only in the summer.

Majors with a concentration in Geophysics are required to complete 9.0 hours of additional Geology courses. A list of possible courses can be found on the Degree Requirements tab.

Majors with a concentration in Geophysics are required to complete 6.0 hours of Technical Required Elective courses. A list of courses can be found under the Degree Requirements tab.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Minor in Geology**

**Why study geology?**

In Geology you get to apply techniques and knowledge from chemistry, physics, biology, and math to answer important questions about Earth processes, history, and future. Geologists are in demand to evaluate geologic hazards, evaluate natural resources, and understand the environment.

Our Geology Minor (https://geo.ku.edu/geology-undergraduate-minor/) is built to be flexible depending on your interests! This is a great way to show future employers that you're dedicated to geology, but without taking the full suite of Major hours.

**Requirements for the Minor**

The minor requires 18 to 23 hours of geology courses, of which 12 hours must be junior/senior hours or higher (courses numbered 300 or above).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 101</td>
<td>The Way The Earth Works 1</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 103</td>
<td>Geology Fundamentals Laboratory 1</td>
<td>2</td>
</tr>
<tr>
<td>GEOL 331</td>
<td>Sedimentology and Stratigraphy 1</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 360</td>
<td>Field Investigation</td>
<td></td>
</tr>
<tr>
<td>GEOL 533</td>
<td>Shales and Other Mudstones</td>
<td></td>
</tr>
<tr>
<td>GEOL 535</td>
<td>Petroleum and Subsurface Geology 1, 2</td>
<td></td>
</tr>
<tr>
<td>GEOL 536</td>
<td>Geological Log Analysis 2</td>
<td></td>
</tr>
<tr>
<td>GEOL 562</td>
<td>Structural Geology</td>
<td></td>
</tr>
<tr>
<td>GEOL 572</td>
<td>Geophysics</td>
<td></td>
</tr>
<tr>
<td>GEOL 578</td>
<td>Seismic Data Analysis and Interpretation</td>
<td></td>
</tr>
<tr>
<td>GEOL 731</td>
<td>Terrigenous Depositional Systems</td>
<td></td>
</tr>
<tr>
<td>GEOL 732</td>
<td>Carbonate Depositional Systems</td>
<td></td>
</tr>
</tbody>
</table>

1. Course required for the undergraduate BS in Petroleum Engineering major
2. Not open for credit toward the minor for students who are majoring in Petroleum Engineering

**Master of Science in Geology**

**Geology Graduate Programs**

KU Geology is comprised of students, faculty, staff, and alumni who are inspired by a collaborative and multidisciplinary mission to undertake scientific discovery that benefits society.

Our program is large enough to be led by world-renowned faculty with expertise in areas that span the geosciences, from energy to the environment, volcanology to the cryosphere, microbes to ancient rock, and more. At the same time, we are small enough to offer personalized, student-centered learning experiences. We are located in the world class Earth, Energy, and Environment Center (https://eeec.ku.edu/), which houses state-of-the-science laboratories, collaborative spaces, and classrooms.

Our program provides students with a comprehensive curriculum in geoscience with unique research opportunities, including acclaimed field experiences. KU Geology runs one of the oldest field camps in the nation.
You will need the following for your application:

- Admission evaluation.
- Faculty supervisor in the Geology Department. Their evaluation for all applicants to contact and communicate with a potential PGEC for the department of their academic abilities. However, **Graduate Record Examination (GRE) scores are not required for the graduate program.**

The Department of Geology will review your application only after it will help inform the department of their academic abilities. However, **Graduate Record Examination (GRE) scores are not required for the graduate program.**

We invite you to explore further information about KU Geology on our website (http://geo.ku.edu/) and we welcome all inquiries related to our program.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Admission is based on academic records including GPA and general preparedness in geology and supporting sciences, letters of recommendation, and the applicant's stated academic and professional interests and goals. An attempt is made to balance the interests of students with the availability of faculty members to supervise them and laboratory space in which they may work.

**Graduate Record Examination (GRE) scores are not required for the application.** Applicants may choose to submit GRE scores if they feel it will help inform the department of their academic abilities. However, choosing not to submit scores will not affect your chances of admission.**

The Department of Geology will review your application only after the application process is complete. Please note that it is essential for all applicants to contact and communicate with a potential faculty supervisor in the Geology Department. Their evaluation and acceptance of graduate students is an important part of the admission evaluation.

You will need the following for your application:

1. **Official transcripts and proof of graduation:** U.S. universities generally indicate on transcripts if a degree has been conferred. However, if such a statement does not appear on a transcript, separate proof in the form of a degree certificate or diploma, issued directly by the institution, is required. Photocopies are not accepted. Transcripts from all post secondary institutions that you have attended are necessary for your application. Failure to provide them could result in delay processing your application. If a student is admitted before completing his or her undergraduate degree, the documentation proving he or she did graduate must be supplied to the Dept. of Geology before the end of the student's first semester at KU.

2. **Letters of Recommendation:** You will be asked for the names and email addresses of three people who can write a recommendation letter describing your qualifications for graduate school in geology. Once you submit the application, an email will be sent requesting a letter from each person that you name. Once the applicant submits the online application form (see point 1), referees will receive an email notification with detailed instructions on how to submit a letter of reference.

3. **Resume/CV:** Please include awards, extra curricular activities (student organizations, community outreach), presentations, and publications.

4. **Personal Statement:** This is included in the on-line application form and should be about 2 pages, typed. The Graduate Studies Committee places considerable importance on the thoughtfulness of your remarks – in particular, we are interested in learning about (1) your specific interests within geology and why they are important and interesting to you, (2) what you envision as your educational and career objectives and how a degree from KU Geology helps to meet those objectives, and (3) which of our faculty members you think would be an appropriate graduate advisor and mentor.

**ADDITIONAL REQUIREMENTS**

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

The Department of Geology will review your application only after the application process is complete.

Submit your graduate application online (https://gradapply.ku.edu/apply/).

Inquiries may be sent to the department Graduate Program Coordinator

**M.S. Degree Requirements**

Details of the regulations on graduate study are included in the department’s Ground Rules for Graduate Students, that is made available to admitted students online through Blackboard.

Prerequisites normally include credit in one year each of general biology, general chemistry, general physics, and calculus, plus junior- or senior-level courses in mineralogy, petrology, structural geology, paleontology, stratigraphy, geophysics, and a summer course in field geology. Students planning to specialize in geophysics also should have more advanced backgrounds in calculus and physics. Incoming graduate students meet with a departmental advisory review committee before enrollment to identify deficiencies and strengths and to set up curricula aimed at providing a broad background in geology at the intermediate to advanced level during the first year. Some deficiencies may be waived at this time if they are deemed nonessential.

Geology has many subdisciplines, and the department tailors each student's curriculum to the needs of the individual. There is no departmental core curriculum or list of required courses.

**Thesis Option (M.S. Degree)**

The master's degree curriculum requires completion of 30 credit hours, including up to six credit hours for thesis research, and an acceptable master's thesis. At least 50% of coursework for the master's degree must be taken at 700 level or above. The student sets the curriculum in consultation with a 3-member advisory committee selected from the Graduate Faculty and approved by the Graduate Advisor. Course work counted toward the degree must be distributed to provide a...
comprehensive general knowledge of geology in addition to specialized knowledge required for the thesis. It may include courses in departments other than Geology.

Although the Department of Geology does not award a master’s degree in geophysics, students can specialize in geophysics at the master’s level. The requirements for the degree are overseen by geophysics faculty within the Department and scientists on the staff of the Kansas Geological Survey. Geophysics research projects are also supervised by Departmental geophysics faculty and scientists on the staff of the Survey. Similar arrangements with faculty outside the Department can be made for students specializing in geobiology, glaciology, hydrogeology, paleontology, sedimentology, or tectonics.

Students seeking to earn an M.S. in geology must maintain at least a 3.0 grade-point average in geology and supporting science courses and pass a final oral general examination with emphasis on the areas of geology relevant to the thesis project.

Nonthesis Option (M.S. Degree)

A student may complete an M.S. degree program based primarily on coursework and specialized skills. For this degree, a minimum of 36 credit hours of graduate-level study must be completed, including two written reports based on small projects (non-thesis with projects) or a single written report on a prescribed topic (non-thesis without projects). At least 50% of coursework for the master’s degree must be taken at 700 level or above. The student determines the structure of the curriculum and projects in consultation with an advisory committee of 5 faculty members. A student must declare an intention to follow the non-thesis option during the first semester of graduate study. The nonthesis degree is a terminal degree and normally cannot lead to doctoral study. In addition to maintaining a 3.0 grade-point average in course work, the student must demonstrate proficiency in the areas of geology covered by the program. This is accomplished by satisfactory performance on a series of written examinations assembled and administered by the advisory committee (non-thesis with projects) or an oral examination (non-thesis without projects). These constitute the final examination for the degree and may be repeated once, if necessary.

During or after the period of residence, a student who wishes to change to an M.S. (thesis) program or a Ph.D. program must petition the Geology Graduate Studies Committee.

Professional Science Masters in Environmental Geology

The Department of Geology in collaboration with the KU Edwards Campus now offers an online professional science masters (PSM) degree in environmental geology. This applied two-year program separates itself from traditional thesis-based research MS degrees in Geology and/or Hydrogeology through its direct integration of management, communication, and case study based coursework, with a focus of developing future government and industry professional leaders in environmental geology with a broad toolbox to address environmental problems.

Coursework for the PSM in Environmental Geology degree (https://edwardscampus.ku.edu/environmental-geology-masters/) is offered online, with the exception of the three (3) required 1-credit-hour field techniques courses, offered in-person at the Edwards Campus. These courses are in a workshop format that will be a single day or a weekend.

Environmental geology is an interdisciplinary field that seeks to address and study anthropogenically-derived and naturally occurring environmental hazards on Earth. The field is grounded in basic geological sub-disciplines such as mineralogy, sedimentology and stratigraphy but has primary focus on hydrogeology, geochemistry, geophysics and components of engineering geology. These sub-disciplines and the associated field and laboratory techniques in the form of a PSM program lead to an applied understanding of how to utilize geophysical, geochemical and hydrogeological techniques to evaluate, remediate, and monitor the impact or potential impact of contamination.

Contact:

Dr. Marcia Schulmeister, Ph.D., P.G., F. GSA
Department of Geology and PSM-EG
The University of Kansas
mschulme@ku.edu
913-897-8426
https://geo.ku.edu/people/marcia-schulmeister (https://geo.ku.edu/people/marcia-schulmeister/)
or
gеology@ku.edu
(785) 864-4974

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

PSM-Environmental Geology Degree - Admissions Requirements:

1. Bachelor’s degree from an accredited institution; the applicant must have an undergraduate major in geology or closely related field (natural, physical, or applied sciences, engineering) OR coursework of at least 20 credit hours in the natural and applied sciences (biology, chemistry, geology, physical geography, environmental sciences, or engineering

2. A minimum grade-point average of B (3.0 on a 4.0 scale) for all previous university work is required (department requirement). Under extenuating circumstances an average below 3.0 can be considered.

3. Graduate Record Examination (GRE) (school code 6871):
   a. The GRE is not required for applicants with an undergraduate degree in Geology from the University of Kansas with at least a grade-point average of B (3.0 on a 4.0 scale);
   b. The GRE may be waived, upon departmental review, if the applicant has 2+ years of qualified professional and related experience, or has successfully passed the ASBOG Fundamentals of Geology examination.
   c. For applicants with an undergraduate cumulative GPA of 3.0 or greater, the GRE is recommended, but not required;
d. For applicants with less than a 3.0, GRE scores are required. GRE scores should be from a test date within the last 5 years.

4. Statement of interest: This 1-2 page narrative should succinctly summarize the applicant’s education, employment history, long-term career goals, and how this degree program will help achieve these goals.

5. Three (3) letters of recommendation from persons qualified to offer judgment on the applicant’s ability to undertake graduate-level work;

6. International students must also meet the English proficiency (https://gradapply.ku.edu/english-requirements/), visa/I20, and financial requirements.

Applications Deadlines

- Spring: December 15
- Summer: May 15
- Fall: August 1

This program may be completed entirely online, with the exception of the required Field Workshops. The Field Workshops are offered at the KU Edwards Campus in Overland Park or at the KU Lawrence Campus, and can be completed over one day or weekend.

The PSM-Environmental Geology degree requires a minimum of 36 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PFS 804</td>
<td>Project Management for Professionals</td>
<td>3</td>
</tr>
<tr>
<td>PFS 802</td>
<td>Managing Teams and Leading People</td>
<td>3</td>
</tr>
<tr>
<td>or PUAD 854</td>
<td>Innovation and Organizational Change</td>
<td>3</td>
</tr>
<tr>
<td>PFS 803</td>
<td>Financial Management for Professional Success</td>
<td>3</td>
</tr>
<tr>
<td>PFS 730</td>
<td>Writing and Speaking for Decision Makers</td>
<td>3</td>
</tr>
<tr>
<td>or PFS 801</td>
<td>Interpersonal and Persuasive Communication Skills for Managers</td>
<td>3</td>
</tr>
</tbody>
</table>

Or other professional skills courses chosen in consultation with an advisor

Science Concentration (12 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 721</td>
<td>Environmental Regulation and Policy</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 751</td>
<td>Physical Hydrogeology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 753</td>
<td>Chemical and Microbial Hydrogeology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 755</td>
<td>Site Assessment</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Electives in Field Methods (Choose 3 of the following)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 536</td>
<td>Geological Log Analysis</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 855</td>
<td>Field and Laboratory Methods: Environmental Geophysics</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 856</td>
<td>Field and Laboratory Methods Special Topics: ____</td>
<td>1</td>
</tr>
</tbody>
</table>

Other Electives (Choose at least 6 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 577</td>
<td>Environmental Geophysics</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 715</td>
<td>Geochemistry</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 791</td>
<td>Advanced Topics in Geology: ____</td>
<td>1-5</td>
</tr>
<tr>
<td>EVRN 510</td>
<td>Advanced Environmental Applications in Geospatial Techniques</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 730</td>
<td>Environmental Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 736</td>
<td>Environmental Remote Sensing</td>
<td>3</td>
</tr>
</tbody>
</table>

Doctor of Philosophy in Geology

Geology Graduate Programs

KU Geology is comprised of students, faculty, staff, and alumni who are inspired by a collaborative and multidisciplinary mission to undertake scientific discovery that benefits society.

Our program is large enough to be led by world-renowned faculty with expertise in areas that span the geosciences, from energy to the environment, volcanology to the cryosphere, microbes to ancient rock, and more. At the same time, we are small enough to offer personalized, student-centered learning experiences. We are located in the world class Earth, Energy, and Environment Center (https://eeec.ku.edu/), which houses state-of-the-science laboratories, collaborative spaces, and classrooms.

Our program provides students with a comprehensive curriculum in geoscience with unique research opportunities, including acclaimed field experiences. KU Geology runs one of the oldest field camps in the nation (established in 1922 in Cañon City, CO) and our program emphasizes field instruction at all levels and in locations near and far.

Our students are generously supported by scholarships and resources (http://geo.ku.edu/facilities/) that allow them to take advantage of all that KU Geology has to offer. Geoscience is a prolific field, with high demand for our graduates in careers that significantly impact society. We maintain a long tradition of connecting our graduates to career and interview opportunities, as well as to our GHawk Community of successful geoscience alumni and professionals around the world.

We invite you to explore further information about KU Geology on our website (http://geo.ku.edu/) and we welcome all inquiries related to our program.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Admission is based on academic records including GPA and general preparedness in geology and supporting sciences, letters of recommendation, and the applicant’s stated academic and professional interests and goals. An attempt is made to balance the interests of students with the availability of faculty members to supervise them and
laboratory space in which they may work. Students with exceptional records may be invited to study for the Ph.D. without first earning the M.S. degree.

**Graduate Record Examination (GRE) scores are not required for the application. Applicants may choose to submit GRE scores if they feel it will help inform the department of their academic abilities. However, choosing not to submit scores will not affect your chances of admission.**

The Department of Geology will review your application only after the application process is complete. *Please note that it is essential for all applicants to contact and communicate with a potential faculty supervisor in the Geology Department. Their evaluation and acceptance of graduate students is an important part of the admission evaluation.*

You will need the following for your application:

1. **Official transcripts and proof of graduation:** U.S. universities generally indicate on transcripts if a degree has been conferred. However, if such a statement does not appear on a transcript, separate proof in the form of a degree certificate or diploma, issued directly by the institution, is required. Photocopies are not accepted. Transcripts from all post secondary institutions that you have attended are necessary for your application. Failure to provide them could result in delay processing your application. If a student is admitted before completing his or her undergraduate degree, the documentation proving he or she did graduate must be supplied to the Dept. of Geology before the end of the student’s first semester at KU.

2. **3 Letters of Recommendation:** You will be asked for the names and email addresses of three people who can write a recommendation letter describing your qualifications for graduate school in geology. Once you submit the application, an email will be sent requesting a letter from each person that you name. Once the applicant submits the online application form (see point 1), referees will receive an email notification with detailed instructions on how to submit a letter of reference.

3. **Resume/CV:** Please include awards, extra curricular activities (student organizations, community outreach), presentations, and publications.

4. **Personal Statement:** This is included in the on-line application form and should be about 2 pages, typed. The Graduate Studies Committee places considerable importance on the thoughtfulness of your remarks – in particular, we are interested in learning about (1) your specific interests within geology and why they are important and interesting to you, (2) what you envision as your educational and career objectives and how a degree from KU Geology helps to meet those objectives, and (3) which of our faculty members you think would be an appropriate graduate advisor and mentor.

**ADDITIONAL REQUIREMENTS**

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

The Department of Geology will review your application only after the application process is complete.

Submit your graduate application online (https://gradapply.ku.edu/). (https://gradapply.ku.edu/apply/)

Inquiries may be sent to the department Graduate Program Coordinator.

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**Ph.D. Degree Requirements**

Doctoral students can specialize in any area of faculty expertise, including sedimentology, paleontology, tectonics, geobiology, glaciology, geophysics and hydrogeology. Prospective Ph.D. candidates are subject to the same initial requirements as master’s students. The master’s degree is not a prerequisite for doctoral aspirancy. A student with a good background and good performance during the first two semesters may be invited to proceed directly toward the doctorate.

The student’s advisory committee and the student construct a curriculum that offers the best preparation for the chosen field of interest and satisfies the research skills requirement. Each student is expected to enroll in courses in supporting fields to develop a multidisciplinary approach to geology. The student must maintain at least a 3.0 grade-point average in geology and supporting science courses.

**Research Skills & Responsible Scholarship Requirements**

The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. Doctoral students in geology meet this requirement by the following:

- Completion of GEOL 791: Ethics in the Geosciences with a grade of “B” or higher.
- With the approval of the advisory committee, the student may meet the research skills requirement by taking either a curriculum of at least three graduate-level courses outside the department that are relevant to the specialty, or by completing a combination of languages, research skills, and courses.

Either coursework plan must be approved by the Director of Graduate Studies, and a list of these courses must be in the student’s file.

Please contact your advisor or the Director of Graduate Studies for further information about research skills and responsible scholarship, and see the current policy on Doctoral Research Skills and Responsible Scholarship in the Graduate Studies section of the online catalog and in the KU Policy Library.

**Admission to Candidacy**

To be admitted to Ph.D. candidacy, a student must pass an oral comprehensive examination on the specialty in geology in which the student is doing doctoral research and on other relevant areas of geology and supporting sciences. The student must prepare and have approved a research proposal based on the doctoral research project before the oral comprehensive examination. The examination is conducted by a 5-member faculty committee; one member of the committee must be from a KU department other than geology and is appointed by Graduate Studies on recommendation of the department. The same committee is also responsible for conducting a final oral examination based on the doctoral dissertation. Three members of the committee supervise research and preparation for the dissertation.

**Shared Doctoral Program with Kansas State University**

The Department has a shared education program whereby doctoral students may study under the direction of a faculty member of the
Department of Geology at Kansas State University, with a KU faculty member as co-chair of the dissertation committee. After one year of course work in Lawrence to fulfill the residency requirement, students may enroll at Kansas State University. Degrees are awarded by KU. For specific information on departmental practices in shaping individual curricula, in controlling general examinations, and in evaluating dissertation proposals, contact the department Director of Graduate Studies.

**Graduate Certificate in Environmental Geology**

The Department of Geology in collaboration with the KU Edwards Campus now offers an online graduate certificate in environmental geology. The certificate consists of 14 credit hours and coursework is completed online, with the exception of the required 1-credit-hour field techniques course, offered on-site at the Edwards or Lawrence campuses (or at a regional location), one per semester, on 1-2 weekdays or a weekend.

The certificate is a subset of the graduate science courses from the Professional Science Masters in Environmental Geology (PSM-EG) degree program. The graduate certificate can be completed as a stand-alone graduate certificate; as a graduate certificate paired with an appropriate graduate degree that the student is simultaneously enrolled in; or as a precursor to starting the full PSM-EG program.

Contact:

Dr. Marcia Schulmeister, Ph.D., P.G., F. GSA
Department of Geology and PSM-EG
The University of Kansas
mschulme@ku.edu
913-897-8426
https://geo.ku.edu/people/marcia-schulmeister (https://geo.ku.edu/people/marcia-schulmeister/)

or

geology@ku.edu (geology@ku.edu)
(785) 864-4974

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Certificate in Environmental Geology – Admissions Requirements:**

Individuals interested in applying to the Graduate Certificate in Environmental Geology should have a bachelor’s degree from an accredited institution in geology or closely related field (natural, physical, or applied sciences, engineering) OR coursework of at least 20 credit hours in the natural and applied sciences (biology, chemistry, geology, physical geography, environmental sciences, or engineering). For those without the necessary background courses in undergraduate science and mathematics, some additional coursework may need to be completed prior to the start of the graduate certificate program. Prospective applicants to the program are encouraged to contact the program to discuss past coursework.

**Individuals who are not already enrolled** as KU graduate students must complete an application to the Graduate School for admission into the certificate program and submit an application fee along with the following materials:

- Statement of interest: This 1-2 page narrative should succinctly summarize the applicant’s education, employment history, long-term career goals, and how this graduate certificate will help achieve these goals.
- Official undergraduate transcript.
- A letter of recommendation from persons qualified to offer judgment on the applicant’s ability to undertake graduate-level work; (former professor of instructor, workplace supervisor).

**Current KU graduate students** wishing to enroll in the Graduate Certificate in Environmental Geology program will apply through the Graduate School. A student must be in good standing with their graduate degree program in order to participate in the certificate program. A graduate GPA of 3.0 or higher is required for admission. Awarding of certificates will be handled consistent with guidelines and timing of degree awards of the Graduate School. Completion of the certificate will appear on the graduate transcript. KU graduate students should submit the following materials:

- A Statement of Interest in the environmental geology certificate program and its relationship to the applicant’s current graduate course of study.
- An unofficial copy of the applicant’s KU transcript.
- A letter of endorsement/support from the applicant’s graduate degree program (thesis/dissertation advisor or graduate director).

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Applications may be submitted at https://gradapply.ku.edu/apply (https://gradapply.ku.edu/apply/).

This program may be completed entirely online, with the exception of the required Field Workshops. The Field Workshops are offered at the KU Edwards Campus in Overland Park or at the KU Lawrence Campus, and can be completed over one day or weekend.

Students must complete 5 courses for a total of 13 graduate credit hours:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EVRN 721</td>
<td>Environmental Regulation and Policy</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 751</td>
<td>Physical Hydrogeology (Students with no previous hydrology courses must take GEOL 552. Introduction to Hydrogeology prior to taking this course: GEOL 552 will not count toward graduate elective credits for the environmental geology degree or certificate.)</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 753</td>
<td>Chemical and Microbial Hydrogeology</td>
<td>3</td>
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<tr>
<td>GEOL 755</td>
<td>Site Assessment</td>
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Global and International Studies

Why Global and International Studies?

Global and International Studies will give you the tools to understand the rapid and profound changes that are occurring around the world. Today’s job market demands employees who are able to negotiate the cross-cultural, multilingual environment increasingly the norm across the professions.

The programs in Global and International Studies at KU emphasize cultural and language knowledge, overseas experience, critical thinking, and research skills that give our students a leg up in both the general job market and in international careers. Our programs are strongly enhanced by the impressive array of international resources available at KU, such as KU’s nationally-ranked Office of Study Abroad, and the vast number of foreign languages offered, including many of the languages the US government considers “critical languages,” which provide a huge advantage to graduates applying to foreign service and intelligence careers.

Undergraduate Programs

Global and International Studies (GIST) at KU offers an interdisciplinary program in which faculty and students think critically about some of the most fundamental issues facing societies today: population growth, politics and governance, migration, the global economy, poverty and inequality, religion, race and ethnicity, gender and sexuality, peace and conflict, and climate change. Through an investigation of these topics, GIST majors acquire an enriched understanding of the world today, which is not only a desirable end in itself but also a useful background for professional careers in different geographical and cultural areas. A major in GIST is helpful for careers in journalism, foreign service, business and industry, education, law, politics and government, and social service agencies. Students also have the opportunity to receive a minor in GIST.

Within the GIST BA, students interested is specializing in studies on Europe, Latin American and Caribbean, or Middle East regions can take advantage of concentrations within the degree. These concentrations provide the structure for students to take a deep look at the languages, culture, politics, and related issues within a particular area of the world.

Students are also strongly encouraged to add to their global and international expertise by incorporating double-majors or minors in KU’s other relevant disciplines like Political Science, Geography, History, or Sociology, or from other Schools (such as Business and Journalism). The possibility for overlapping coursework make it a strategic and efficient opportunity to further your educational expertise and portfolio on the global job market.

The Center for Global and International Studies also provides a minor in Middle East Studies, European Studies, and Peace and Conflict Studies as well as a South Asian Culture Certificate for undergraduates.

Graduate Programs

The Master of Arts in Global and International Studies provides an analytically sophisticated understanding of the contemporary global arena and cultivates the skills and knowledge to operate in a world where traditional boundaries are disappearing. Through the 33-credit hour program, students develop a specialization in a world region and can pursue interests in global politics, society, and culture across a broad range of courses in the humanities and social sciences.

Students in Global and International Studies have access to courses by top-notch research faculty across a wide variety of relevant disciplines at KU’s main campus in Lawrence (http://www.ku.edu/). Besides access to quality instruction and content, our students have access to the amazing international resources that put KU on the top shelf for international education—a nationally-ranked Study Abroad Program, instruction in 40 foreign languages, and local, national, and international internship opportunities. Non-degree seeking students who have completed an undergraduate degree may apply to take graduate-level courses in GIST.

GIST “Traditional” Master’s

The self-tailoring and interdisciplinary field of Global and International Studies prepares graduate students with marketable skills (such as professional certification opportunities and research and writing skills) and the knowledge to deal with contemporary global issues. This is critical in our contemporary world in which both problems and opportunities increasingly transcend national boundaries.

KU’s Master of Arts in Global and International Studies is designed for those who seek a better understanding of international issues that shape public policy and the global economy and who want to have an impact in these areas.

Students in our "traditional" Master of Arts in Global and International Studies (https://global.ku.edu/global-ma/) have the option to follow the broad GISt coursework, or choose one of our two concentrations, Latin American and Caribbean Studies or Contemporary East Asia Studies.

GIST Interagency Studies Master’s

The Interagency concentration (https://global.ku.edu/global-interagency-studies-track/) of the Master’s degree program in Global and International Studies is a one-year program designed primarily for officers pursuing their Intermediate Level Education (ILE) program at the Command and General Staff College (CGSC) at Ft. Leavenworth.

The objective of the Interagency Studies Program (ISP), is to prepare military officers for working in interagency environments by expanding their abilities to conceptualize and address issues beyond their military training. The program offers coursework from multiple disciplines with an array of theoretical frameworks. The ISP curriculum consists of 30 credit hours, with KU granting 6 hours of credit for ILE education. The remaining 24 credit hours come from 8 KU courses taught at in the evening at Ft. Leavenworth, along with courses at the Command and General Staff College. The evening classes run the length of the academic year - 3 courses August - December, 3 courses January - April, and 2 courses May - June. The program culminates with a final paper demonstrating the application of program knowledge to a military (preferably interagency) issue, which can be submitted to relevant journal outlets in military studies.
Center for Global and International Studies

The Center for Global and International Studies (http://global.ku.edu/) supports and promotes global and international studies at KU. In collaboration with International Programs and the area centers, CGIS works to provide a single point of contact for faculty with international expertise to help facilitate interdisciplinary research and teaching opportunities. Building on longstanding institutional strength in international studies, the center focuses on topics and themes of transnational scope and on world areas of economic and strategic importance not covered by the existing area studies centers.

CGIS prepares students for careers in an increasingly interconnected world by housing undergraduate and graduate degrees in global and international studies and by supporting the introduction of new course offerings and study abroad opportunities. In addition, the center offers outreach activities (https://global.ku.edu/podcasts/) to K-12 teachers, businesses, and governmental agencies across the region and serves as a resource for the local and international community.

Courses

CEAS 200. Topics in East Asian Studies: ______. 1-3 Credits. U
An introductory interdisciplinary topics course addressing contemporary issues related to one or more East Asian countries. Format and content will vary. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes.

CEAS 500. Seminar in East Asian Studies: ______. 1-3 Credits. U
An interdisciplinary seminar addressing contemporary issues related to one or more East Asian countries. Prerequisites to be determined by instructor(s) on the basis of course content. Does not count toward the EALC major or minor requirements unless otherwise indicated by EALC in the Schedule of Classes.

CEAS 610. Minorities in Japan. 3 Credits. S
This course offers a sociological and historical exploration of Japan’s minorities: the Ainu, Okinawans, Burakumin, and Zainichi Koreans who are often excluded from narratives of Japanese history. Exclusion of the minority issue not only overlooks the existence of minority populations in Japan but also contributes to misconceptions of Japan as a homogeneous country. The course objective is to challenge the conventional master narrative of racial and cultural homogeneity. We shed light on Japan’s minorities, their historical experiences, current struggles, and future challenges. This course is taught at the 300 and 600-levels, with additional assignments required at the 600-level. (Same as EALC 610.) Prerequisite: An introductory East Asian Studies course or consent of the instructor.

CEAS 701. Professionalization Seminar in East Asian Studies. 3 Credits.
This graduate seminar’s main objective is to prepare students to be professional scholars and educators in East Asian Studies and in global contexts. The course focuses on development of professional networks, co-development of ideas, and opportunities for collaboration with other professionals. Students will develop and refine a wide range of skills crucial to students’ success in graduate school and their careers. Students will organize workshops to present their work and to generate materials for conferences, peer reviews, grant writing, CV preparation, job interviews, and much more. Graduate students with nonacademic as well as academic career goals are welcome in the seminar.

CEAS 704. Contemporary East Asia. 3 Credits.
This graduate seminar explores rapidly changing societies in contemporary East Asia, particularly China, Japan, and Korea. The course provides a critical overview of East Asia and its diversity and complexity using cross-cultural perspectives and interdisciplinary social science approaches, and situates East Asian societies in the context of globalization. (Same as EALC 704.)

CEAS 710. Research Design for International Area Studies. 3 Credits.
This course addresses the challenges for students engaged in graduate research projects and theses in an interdisciplinary and international context. The course will guide the students through the structures of research design processes for various epistemological approaches, and will assist students in formulating strong research questions, reviewing and situating their own work within the literature, working with the library and subject librarians, appropriating theory, and modeling writing conventions for research within their selected epistemological community. Students will also be exposed to a variety of research methods and will practice designing projects utilizing a select number of them. During the course of the semester, students will be working toward a plan for a substantial graduate research project. (Same as GIST 710 and LAC 710.) Prerequisite: Consent of instructor.

CEAS 788. Topics in East Asian Studies: ______. 3 Credits.
An interdisciplinary graduate seminar addressing contemporary issues related to one or more East Asian countries. Course may be taken more than once if topic varies. This course may be cross-listed or meet with a 500 level seminar. Enrollment in this course will require additional assignments beyond those required of a 500 level seminar. Prerequisite: Graduate standing or consent of instructor.

CEAS 802. Research Seminar. 3 Credits.
Students will work with the instructor and, when appropriate, an additional faculty advisor to design, research and write up a research paper on an East Asian topic of their choosing. Students enrolling in this course are expected to have taken a social science research methods class prior to taking this course and to apply those methods to the research process. A core course for the MA in Contemporary East Asian Studies. Prerequisite: Permission of the instructor.

CEAS 898. Thesis and Research Project Writing. 3 Credits.
This course is primarily designed to guide MA students through the writing development of their concluding graduate research, whether a final graduate research project or a thesis. Students will learn and apply the practices of effective communication and writing of research while completing the various components of their final projects. The intention of the class is to help students complete a high quality draft of their research, though deadlines and assignment may relate to practice in graduate level research writing in general. Within an interdisciplinary framework and an understanding of rhetorical distinctions across various epistemologies, students will practice relevant modeling of academic literature reviews, transparency in communicating research practices, analyzing/interpreting texts, data, or other information, and introducing and concluding their work. (Same as GIST 898.) Prerequisite: GIST 710.

Courses

EURS 150. Study Abroad Topics in European Studies: ______. 1-5 Credits. U
This course is designed for the study of special topics in European Studies at the 100-level (Freshman/Sophomore level). Coursework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies.

EURS 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in European Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

EURS 302. European Culture and Society 1945 to Present. 3 Credits. \( H \)
The course provides historical, cultural, and political overviews of Europe since 1945 with particular emphasis on the contribution of French and Italian culture and society. The course emphasizes Europe's contribution to Western intellectual thought, social movements, arts and literature, and global society.

EURS 315. Magic, Murder, Monsters: German Literature and the Modern Era. 3 Credits. \( H \)
Introduction in English to German writers 1750-present featuring texts about the supernatural and monstrous. Students examine how encounters with magic and construction of monsters reflect particular cultural anxieties, fears, and ideals as relating to historical developments, industrialization, and scientific advancement. Discussion of themes such as gender, sexuality, class, race, empire, war, politics, and technology in German-speaking Europe. Readings include works in translation by influential German writers. Open to first-year students and non-majors. GERM 315 is required for admission to all courses beyond GERM 402 except GERM 462. (Same as GERM 315.)

EURS 350. Study Abroad Topics in: luxurious. 1-5 Credits. \( H \)
This course is designed for the study of special topics in European Studies at the Junior/Senior level. Cousework must be arranged through the KU Office of Study Abroad and approved by a faculty advisor in European Studies. May be repeated for credit if content varies.

EURS 430. European Civilization in World Context: luxurious. 3 Credits. \( H \)
An introduction to the literature of encounters between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-Saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as HUM 430.) Prerequisite: HUM 114 or HUM 204 and HUM 115 or HUM 205.

EURS 500. Seminar in European Studies. 3 Credits. \( H \)
Provides an interdisciplinary approach to the study of modern European civilization. By discussing both classic and contemporary, controversial readings each week and writing several papers during the semester, students acquire an understanding of the development of modern European culture and society and Europe's contemporary problems. Topics for discussions and papers are drawn from the following subjects: the economic and political integration of European states; modernism and anti-modernism in European culture; imperialism, migration, and ethnic and racial division in European society; democracy versus dictatorship; American-European relations; mass culture, urban development, and the welfare state; and contrasts and comparisons between European Cultures—East and West, North and South. Seminar discussions are led by invited European Studies faculty as well as the instructor or instructors. Required of all European Studies majors. Prerequisite: Junior standing or consent of instructor.

EURS 501. Research for Honors in European Studies. 3 Credits. \( W \)
Research for a European Studies honors project, on a topic chosen in conjunction with the faculty advisor. Emphasis on independent study and writing. Open to students with previous coursework that counts toward the European Studies co-major at the 400 level, an overall 3.25 GPA, and at least a B+ average in advanced work in European Studies. Prerequisite: At least one course for the EURS co-major at the 400 level and permission of the Academic Director.

EURS 502. European Studies Honors Project. 3 Credits. \( H/W \)
Continuation of EURS 501. Student must defend completed honors project in an oral examination before a thesis committee of three faculty members. The committee determines whether the student earns Honors. See Departmental Honors section of catalog for more information. Prerequisite: EURS 501.

EURS 504. Europe Today. 3 Credits. \( H \)
An exploration of major social, political and economic developments post World War II including the rise of the European Union, the integration of Eastern and Western Europe, the growing role of Islam, attitudes towards the United States, and Europe's role in the world economy. Topics may vary based on current events. (Same as HUM 505.) Prerequisite: Junior or senior standing or consent of instructor.

EURS 507. Research in European Collections. 1-3 Credits. \( H \)
This course allows students in the European Studies Co-Major and related disciplines to receive credit for research related to European Collections in one or more of the following institutions: Watson and Spencer Research Libraries, the Dole Institute, the Eisenhower and Truman Presidential Libraries, the U.S. Army Combined Arms Research and Foreign Military Studies Office at Fort Leavenworth, the Linda Hall Library in Kansas City, and the Winston Churchill Collection at the Westminster College Library in Fulton, Missouri. May be taken in place of EURS 501 by European Studies Honors Students if taken for three credit hours. Permission of instructor necessary.

EURS 511. Topics in European Studies: luxurious. 3 Credits. \( H \)
A study of significant themes, movements, or problems in European history, literature, politics, society, or culture. May also relate European issues to issues in other world areas (Africa, North America, Asia, etc.) May be repeated for credit when topic varies.

EURS 550. Classics of Peace Literature. 3 Credits. \( H \)
A study of influential proposals for world peace from Erasmus' The Complaint of Peace (1515) to the 1995 Hague Appeal for World Peace. Selected writings by such authors as Erasmus, Hugo Grotius, Jean-Jacques Rousseau, Immanuel Kant, Henry Thoreau, Henri Dunant, Berthe von Suttner, Woodrow Wilson, Mahatma Gandhi, and Martin Luther King, Jr., are considered. (Same as PCS 550.) Prerequisite: HUM 204 or HUM 205.

EURS 556. The Literature of Human Rights. 3 Credits. \( H \)
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as PCS 556.) Prerequisite: Junior/Senior standing or consent of instructor.

EURS 580. Directed Study. 1-3 Credits. \( H \)
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required.

EURS 604. The European Union. 3 Credits. \( S \)
This course will introduce students to the politics of the European Union. The course will cover three closely connected topics. First, it will discuss the institutional make-up of the EU, such as the European commission, the European parliament, the European Council, and the European court of justice. It will assess how well these institutions deal with the growing importance of transnational issues, such as migration and economic
policy issues. Second, the course will examine how national governments pursue national interests at the level of the European Union. Third, the class will study how well the EU represents the citizens of European countries. Finally, the course will assess the extent to which the EU has successfully developed into a supra-national federation. (Same as POLS 643.) Prerequisite: Sophomore standing or consent of instructor.

Courses

GIST 111. Mapping Our Changing World. 4 Credits. N LFE
This course is an introduction to geospatial technologies. It focuses on the conceptual and technical aspects of mapping technologies that transform information about locations, people, objects, environments, events, and phenomena to digital representations of the world and as end-products of geospatial analysis. Topics covered include surveying, aerial photography and photogrammetry, satellite remote sensing, global positioning systems (GPS), geographic information systems (GIS), and thematic mapping. Students will learn how to acquire and develop geospatial data as the sources for mapping, the skills of analyzing and interpreting spatial information, and how geovisualization can be used in addressing real-world problems. (Same as GEOG 111.)

GIST 139. The Global Cold War. 3 Credits. H
This course provides an immersive introduction to the global Cold War and its legacies. It explores how the contest between capitalism and communism unfolded not only in the United States and the Soviet Union, but also in Asia, Africa, Europe, Latin America, and the Middle East. Through interactive lectures, discussions, and role-playing games, students will learn to “think globally,” gain an understanding of imperialism, nationalism, and decolonization, and discover how the Cold War shaped culture, economics, politics, the environment, and the international system in ways that remain relevant today. (Same as HIST 139.)

GIST 177. First Year Seminar: _____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Global & International Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

GIST 201. Topics in: _____. 1-3 Credits. U
An interdisciplinary study of international topics. Designed especially for freshmen and sophomores. May be repeated for credit if content varies.

GIST 203. Topics in Middle Eastern Studies: _____. 1-3 Credits. U
An interdisciplinary study of topics related to the Middle East. Designed especially for freshmen and sophomores. May be repeated for credit if content varies.

GIST 205. Muslim Lives: Politics, Culture, and Society. 3 Credits. S
The course provides a general introduction to Muslim communities and societies by surveying some of the major aspects of Muslims’ lived experiences from the early Islamic period to the modern globalized world. It will challenge the essentialized notion of a “Muslim world,” which is usually presented as a monolithic society. Through the course, students will develop a basic understanding of the rich diversity of Muslim communities in terms of cultural mores, religious practices, and sociopolitical conditions. Religious and sociopolitical practices will be analyzed in their ethical and moral perspectives. (Same as SLAV 205.)

GIST 210. Culture and Health. 3 Credits. H/W
This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as AAAS 203 and GEOG 201.)

GIST 211. Culture and Health, Honors. 3 Credits. H/W
Honors version of AAAS 203. GEOG 201 and GIST 210. This course offers a holistic, interdisciplinary approach to understandings of health, well-being, and disease within and across cultures. It draws upon the subfields of anthropology, as well as the humanities, natural sciences, and social sciences. This course should be of special interest to premedical students and majors in the allied health professions. (Same as AAAS 204 and GEOG 202.)

GIST 220. Introduction to Global and International Studies. 3 Credits. S
This course provides an overview to the major approaches and themes involved in the study of world cultures, politics, and societies from a multi-disciplinary perspective. Topics of global importance, such as the construction and maintenance of cultures, comparative political systems, global and regional economies, popular culture, gender and the environment will be covered through their manifestations in particular regional and global contexts. Students will be challenged to address their own views and existing approaches to global dynamics from a critical and reflective perspective.

GIST 303. Language, Gender, and Sexuality. 3 Credits. S
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as ANTH 325, JWSH 305, SLAV 305 and WGSS 325.)

GIST 304. Globalization and Afro-Brazilian Culture. 3 Credits. W
During this study abroad experience, students will explore how Afro-Brazilian cultural elements, such as the music of Afro groups, the art form/martial art/dance capoeira, and the candomblé religion became realities around the world. Guest lecturers will present on topics such as Brazilian history, music, religion, dance, education, Carnival, and tourism. Planned site visits include temples of Afro-Brazilian religions such as candomblé and syncretic Catholic churches such as the Church of Our Lady of the Black Rosary. The program is based in Salvador, one of the Brazilian cities where African influence is the most visible and celebrated. This course and study abroad program is open to all majors.

GIST 305. World Indigenous Literatures. 3 Credits. NW H
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and film. (Same as ENGL 305 and ISP 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

GIST 306. Global Environmental Literature. 3 Credits. H
An examination of a variety of literary and other representations of human and non-human environments and environmentalism. Particular attention will be paid to how race, gender, class, sexuality, and geography produce and are produced by those representations. (Same as ENGL 306
This course introduces students to the relationships the people of India have had with their landscape from ancient times to the present. Students will learn about diverse ecosystems and the indigenous peoples they have harbored from the high Himalayas altitudes to the coastal regions, from the desolate arid deserts to the rain forests of India. The class will discuss how the very nature of the relationship of the people with their land has changed over the long course history of South Asia with specific case studies of environmental challenges, failures and successes. Examples of possible cases include: the Chipko movement led by the women of the Himalayas to save their forests from loggers; the traditions of creating lakes and water conservation lifestyles in the arid region of Rajasthan; and nature worship and cases of leopards and tigers receiving protection by the very villages they terrorize. (Same as ANTH 323.)

GIST 325. Peoples and Cultures of South Asia. 3 Credits. S
This course provides an introduction to the diversity of peoples in South Asia, including India, Pakistan, Nepal, Bangladesh and Bhutan. The particular cultures and language of the indigenous peoples in the region are highlighted through academic sources and the direct study of reproductions of these cultures in literature and film.

GIST 329. Israeli-Palestinian Conflict: An Introduction. 3 Credits. S
This course provides an introduction to the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. (Same as HIST 482 and JWSH 329.)

GIST 335. Iran Through Literature and Film. 3 Credits. W
This course examines aspects of Iranian society through literature and film. Students will analyze selected Iranian texts in their historical, social, and political contexts to examine and gain a comprehensive understanding of the complex and pressing issues facing the modern Iranian society. The course will utilize nationalist, Marxist, feminist, and Islamist paradigms to provide a theoretical framework for discussions and to better understand the crosscurrent of ideas in contemporary Iran. No knowledge of Persian language required because all the texts will be available in English translation and subtitles.

GIST 350. Study Abroad Topics in: ______. 1-5 Credits. U
This course is designed for the study of special topics in global and international studies at the junior/senior level. Course work must be arranged through the KU Office of Study Abroad and approved by a faculty adviser in Global and International Studies. May be repeated for credit if content varies.

GIST 354. Globalization: A Geographic Approach. 3 Credits. S
This course is designed to provide a broad overview of some major facets of the historical, economic, political, cultural, and geographical dimensions of contemporary globalization, the process by which individual regions and nations have become progressively linked to, and structured by, the world-system of states and markets, and the cultural contradictions associated with this process. (Same as GEOG 354.)

GIST 355. International Women's Rights. 3 Credits. SC
Women face discrimination and abuse around the world: at home, in the workplace, and in the public sphere. How are these systems of oppression connected? How are women working together for change, and what can you do to support their efforts? This course will investigate what feminist solidarity looks like around the world, with an emphasis on connections across different cultural and political contexts. (Same as WGSS 355.)

GIST 371. Environmental Geopolitics. 3 Credits. S
This course examines how human relationships with the biophysical world are politicized. Examines key contributions to debates surrounding environmental security, resource conflicts, and related issues, as well as geopolitical assumptions on which these debates build. (Same as EVRN 371 and GEOG 371.)

GIST 376. Immigrants, Refugees, and Diasporas. 3 Credits. H
This course looks at people who choose to cross political borders, are forced to flee beyond them, or constitute ethnic minorities living outside a homeland. Examining these groups from a global historical perspective, this course explores how ethical debates about the rights of non-citizens and ethnic outsiders have evolved in the modern age. Students learn about important issues that have affected the lives of immigrants, refugees, and diasporas, including citizenship, mobility, cultural representation, asylum policies, and the concept of human rights. The course concludes with a look at contemporary manifestations of these issues, from debates over the place of Muslims in Europe to discussions about immigration policy in the United States. (Same as HIST 376.)

GIST 420. Analyzing Contemporary Global Issues. 3 Credits. S/W
This course enhances students’ ability to critically analyze the intricacies of current international issues through three core goals. First, the content of the course is unique each semester as it targets major international issues in the moment, so students gain an in-depth understanding about things happening in the world around them. Second, the course refines students’ critical writing skills by combining the critical thinking skills needed for issue analysis with the writing skills required to disseminate their thoughts in a variety of forms. Finally, for GIST majors specifically, the course offers an ideal preparation for the senior capstone experience.

GIST 465. Genocide and Ethnocide. 3 Credits. S
This course provides students with a conceptual and historical synopsis of genocide and ethnocide from an anthropological perspective. Taking its lead from a human rights orientation, the course assesses why such atrocities must be confronted. This includes grappling with ethical, legal and definitional ambiguities surrounding the concepts of genocide and ethnocide. We will explore a range of cases in the 20th and 21st centuries, while focusing on diverse conditions leading to genocide, ethnocide, population displacements, human trafficking and the modern phenomena of refugee camps. The course will analyze the role of the modern state, colonialism, political ideologies, ethnicity and nationalism as major forces underpinning ethnocide and genocidal campaigns. Based primarily on a select review of cases of ethnocide and genocide, the class examines how to spread global awareness and communal engagement by actively protecting human rights. (Same as ANTH 465.)

GIST 471. Politics of Human Trafficking. 3 Credits. S
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 714, POLS 714, or GIST 714. (Same as POLS 471 and WGSS 514.) Prerequisite: Sophomore standing or consent of instructor.

GIST 493. Directed Readings. 3 Credits. U
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director.

GIST 495. Global Internship. 3 Credits. U
Semester-long internship with a business or organization located abroad or that provides a global or international working context for the intern. The assessment component normally requires the submission of a reflective internship journal documenting work experiences within this unique context, and a final paper on a relevant theme that is determined by instructor and student based on context. This course is available to GIST majors and minors only. Prerequisite: Consent of instructor.

GIST 501. Topics in: ______. 1-3 Credits. U
An interdisciplinary study of international topics. Designed especially for juniors and seniors. May be repeated for credit if content varies.

GIST 502. Advanced Topics in South Asian Studies: ______. 1-3 Credits. U
An interdisciplinary study of topics related to South Asia. May be repeated for credit if content varies. Prerequisite depends on specific topic offered.

GIST 503. Advanced Topics in Middle East Studies: ______. 3 Credits. U
An interdisciplinary study of topics related to the Middle East. May be repeated for credit if content e depends on specific topic offered.

GIST 529. Globalization. 3 Credits. S
Addresses sociological aspects of the growth of transnational economic, cultural, institutional, and political interconnections, the freer and faster movement of goods, images, ideas, people, and institutional forms across national borders, and the consequences and problems of these processes. The focus is on recent (later 20th century to the present) global restructuring in the context of historical shifts in capitalist development. (Same as SOC 529.) Prerequisite: SOC 104 or GIST 220.

GIST 555. Literature and Society in the Contemporary Middle East. 3 Credits. NW H/W
This course offers a general introduction to the modern Middle Eastern literatures in English translation. Through analyses of selected short stories and novels from Arabic, Turkish and Persian literature, the students develop an understanding of the issues that shape everyday life in the Contemporary Middle East. The course investigates issues of nation and national identity, war, ethnicity, class, religion, and gender and sexuality. We use a variety of paradigms, namely nationalist, Marxist, feminist, and Islamist, to provide a theoretical framework for discussion of the selected works. No prior knowledge of Arabic, Turkish or Persian language is needed. Prerequisite: Junior or Senior standing or consent of instructor.

GIST 550. Issues in Global Studies: ______. 3 Credits. U
An interdisciplinary study of topics with particular emphasis on issues of global importance—i.e. transnational and trans-regional. May be repeated for credit if content varies. Prerequisite: GIST 220.

GIST 560. The Literature of Human Rights. 3 Credits. H
Examines in literature, art, and film from about 1800 to the present, both sides of the ongoing debate surrounding the idea that all human persons possess inalienable rights because all persons possess intrinsic value as persons, value independent of race, gender, caste or class, wealth, age, sexual preference, etc. Anti- and pro-rights proponents are paired and studied with equal care. (Same as EURS 565 and PCS 565.) Prerequisite: Junior/Senior standing or consent of instructor.

GIST 565. Gender, Culture, and Migration. 3 Credits. S
This course examines the gendered experiences of transnational migration through a combination of ethnography, literature, film, and news media. How do different people experience the desire to migrate, the logistics of movement, and life in a faraway place? How does mobility shape ideas of family, community, and nation? How do class, race, sexuality, and legal status also inflect these experiences, especially in rendering certain groups vulnerable to abuse and exploitation? Attention will also be paid to gendered thinking against migration, including the ways gender and sexuality inflect xenophobia, border enforcement, refugee recognition, deportation policy, and contemporary political debates. (Same as WGSS 565.) Prerequisite: Any 100 level AAAS course, WGSS 101, AMS 100, AMS 110, or GIST 220.

GIST 570. Anthropology of Violence. 3 Credits. S Introduces students to the comparative and cross-cultural study of violence. The course begins by surveying different anthropological approaches to the study of violence, with special attention paid to classical social theorists as well as ethnographic works. Topics may include (post) coloniality and identity politics, nationalism, race, religion, and political culture; geographic areas to be covered may include Africa, Europe, Latin America, the Middle East, and South Asia. (Same as ANTH 570.) Prerequisite: Junior standing or above or permission of instructor.

GIST 577. Human Dimensions of Global Change. 3 Credits. S This class introduces concepts such as coupled human and natural systems, social-ecological resilience, and sustainability science, examines people's responses to major climate, land, water, and coastal change, and discusses case studies. One hour of each seminar will be devoted to individual needs that address topical or methodological issues. Class requirements include presentations, biweekly papers, and a term paper. (Same as GEG 577.) Prerequisite: One of the following: GEG 100, GEG 104, GEG 374, or an Environmental Studies introductory course.

GIST 582. Geopolitics and Genocide. 2-3 Credits. S Explores the inherently geographical and geopolitical nature of genocide and related mass violence and introduces an overarching concept, territorial cleansing, that foregrounds the spatial and territorial nature of these events. Detailed studies of cases at a range of scales and locales provide the major context for critical examination and comparison of territorial cleansing concepts. Students enrolling for 3 credits will prepare and present a substantial independent research paper. (Same as GEG 306.) Prerequisite: GEG 102 or GEG 103; or ANTH 108 or ANTH 109; or permission of instructor.

GIST 585. Transnational Terrorism. 3 Credits. S The course provides a study of the patterns of transnational terrorism. First, it introduces students to the analytical study of terrorism. The course traces the evolution of terrorism, from the French Revolution to the modern day era. It also covers how scholarship defines, conceptualizes, and measures terrorism. The second goal is to introduce students to key scholarly debates within the literature. Some of the example questions we ask are: are democracies more vulnerable to terrorism? Does globalization render states open to being attacked by transnational actors? Is torture warranted as an effective counterterrorism tactic? The readings draw on empirical scholarship on the causes and consequences of transnational terrorism. (Same as POLS 582.) Prerequisite: Sophomore level or consent of instructor.

GIST 601. Indigenous Peoples of the World. 3 Credits. S A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GEOG 601 and ISP 601.) Prerequisite: Permission of instructor.

GIST 610. Interdisciplinary Methods for Global Contexts. 3 Credits. S An introduction to a variety of widely-employed quantitative and qualitative research methods in the social sciences and humanities, including methods such as statistical analysis, ethnography, and content analysis. Prerequisite: GIST 220 or consent of the instructor.

GIST 624. Social Movements in the Middle East. 3 Credits. S Using the major theories and approaches comparatively applied to social movements around the world, this course critically analyzes historical and existing cases of social movements and "nonmovements" in the Middle East. We cover examples of Islamist (and post-Islamist), women's, nationalist, democratic, youth and labor movements and their impact on the region. Contextual factors like technology and social networking, regime type, institutions, and socioeconomic structures are also considered for their role in supporting or inhibiting collective action. Prerequisite: GIST 220 or POLS 150.

GIST 633. Iran, Turkey, and the Kurds. 3 Credits. NW S This course examines the contemporary political and social dynamics within these three communities residing along the northern stretch of what is commonly referred to as the Middle East. Using social and political theory as a starting point, students will comparatively study critical elements and issues facing the members of these societies. Issues and themes for comparison will include the structure and institutions of politics, nation-building and nationalism, Islam and politics, women and politics, and regional and global engagement. (Same as POLS 633.) Prerequisite: GIST 220, POLS 150, SOC 130, or consent of instructor.

GIST 667. Iran and Politics. 3 Credits. W This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as POLS 667 and SOC 640.) Prerequisite: A principal course in sociology, POLS 150, or consent of instructor.

GIST 678. Chinese Foreign Policy. 3 Credits. S/W In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as EALC 678 and POLS 678.) Prerequisite: Sophomore level or consent of the instructor.

GIST 686. International Human Rights. 3 Credits. S The course introduces students to historical and philosophical bases of contemporary human rights, theoretical approaches and methodological challenges to studying human rights questions, and acquaints them with the main topics, controversies, and tensions in the scholarship, practice and politics of human rights. (Same as POLS 686.) Prerequisite: Sophomore level or consent of instructor is required.

GIST 698. Capstone Seminar. 3 Credits. H A seminar designed to introduce students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: GIST 610 or consent of the instructor.

GIST 699. Capstone Seminar, Honors. 3 Credits. H
A seminar designed to introduce honors students to the theory and practice of global and international studies. A research paper will be required. May not be repeated for credit. Prerequisite: 12 hours of junior/senior level and above courses that satisfy requirements for the major.

**GIST 701. Approaches to International Studies. 3 Credits.**
This course examines various approaches to the study of cultures, politics, and societies in their global and international contexts through the exploration of a series of exemplary works of global/international research from a variety of disciplines (eg. anthropology, sociology, political science, economics, geography, history, etc.). The course will cover the major contributions of these disciplines in their approaches to global questions and themes and will provide a multi-disciplinary framework within which students can begin exploring their own global and international research questions. The course also provides an introduction to the major regions and many of the themes that students will be able to specialize in during the course of the MA program.

**GIST 702. Globalization. 3 Credits.**
A central issue in international studies is globalization, the increasing interconnectedness of societies and economies. This course examines globalization from an historical and contemporary perspective. Major topics include (but are not necessarily limited to) the historical expansion of the West since 1500, the growth of international economic institutions, conflict among global cultures, the future of state sovereignty, and the challenges of economic integration.

**GIST 705. Globalization in History. 3 Credits.**
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and spread of international institutions. The current world problems investigated will vary, but may include issues such as environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as HIST 705.)

**GIST 707. Studying Modern Islam. 3 Credits.**
An in-depth introduction to the issues involved in the academic study of modern Islam. In this class students will investigate the ideas, assumptions and historical circumstances that gave rise to and continue to influence scholarly approaches to Islam. Topics may include the Orientalism, gender studies, colonialism, secularism, Islamism and the concept of modernity. Students will apply what they learn to the study of Islam in contemporary Egypt.

**GIST 709. Research Design. 1-3 Credits.**
This course guides new graduate students through the process of designing and developing an original research project. The fundamentals of interdisciplinary research will be the instructional framework within which students will design their own original research project. Instruction regarding the review of literature, methodology, and how to structure and scale the project will be given. Students taking this course will be required to take the companion course, GIST 810.

**GIST 710. Research Design for International Area Studies. 3 Credits.**
This course addresses the challenges for students engaged in graduate research projects and theses in an interdisciplinary and international context. The course will guide the students through the structures of research design processes for various epistemological approaches, and will assist students in formulating strong research questions, reviewing and situating their own work within the literature, working with the library and subject librarians, appropriating theory, and modeling writing conventions for research within their selected epistemological community. Students will also be exposed to a variety of research methods and will practice designing projects utilizing a select number of them. During the course of the semester, students will be working toward a plan for a substantial graduate research project. (Same as CEAS 710 and LAC 710.) Prerequisite: Consent of instructor.

**GIST 714. Politics of Human Trafficking. 3 Credits.**
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in GIST 471, POLS 471, or WGSS 514. (Same as POLS 714 and WGSS 714.) Prerequisite: Graduate standing.

**GIST 750. Topics in International Studies: _____ 3 Credits.**
A study of one or more selected topics in international studies. Course may be taken more than once.

**GIST 751. Human Rights and U.S. National Security. 3 Credits.**
This course explores the history, debates, and contemporary issues related to human rights and U.S. national security policy. Through lecture, practical exercises, and class-led discussions, the course will cover relevant and timely issues such as human rights and counter-terrorism, security assistance and cooperation, peacekeeping and protection of civilians, and global criminal accountability. Prerequisite: Graduate standing or consent of instructor.

**GIST 752. International Conflict Prevention and Resolution. 1 Credits.**
This course examines three connected fields of study related to armed conflict and acute violence from the perspective of US policymakers: the nature of contemporary conflict and its causes; mediation, and peacebuilding; and the policy options for preventing or managing conflict. Throughout the short course, students will explore the major analytical frameworks and theories used to examine conflict, and the major approaches applied to address it, including contemporary approach to stabilization and reducing state fragility.

**GIST 783. Theories of Conflict, Security and Peace. 3 Credits.**
Armed conflicts can be caused by a myriad of factors; thus, conflict studies in international relations provide useful theories and methods through which inter- and intra-state conflict may be analyzed. The goal of this course is an analytical understanding of the conditions, processes, and events that lead to the outbreak and escalation of war. This course focuses predominantly on the causes of interstate conflict, global security, and conflict resolution but also includes a brief examination of the causes of civil war. The course highlights the complexity of the subject matter, scrutinizing war through the many lenses of peace and conflict theory, including but not limited to realism and the balance of power, levels of analysis, misperception, rivalries, grievances, bargaining, and insecurity.

**GIST 793. Directed Readings. 1-5 Credits.**
Individual and supervised readings in a selected area of international studies. Course is repeatable with permission of the program director.
GIST 810. Graduate Writing Experience. 1-3 Credits.
This course guides students through the process of effectively communicating the findings of original research through formal writing. The purpose of the course is to provide writing guidance and instruction to students conducting ongoing research, so that they are familiar with successful ways of communicating research to academic and professional audiences. Depending on the career objectives of the student, the writing project will be tailored to address the relevant audience—academic or professional. The fundamental components of the research writing process will be individualized to correspond with student’s research goals. Prerequisite: GIST 709.

GIST 818. Islamic Law. 2-4 Credits.
Examines the history, doctrine, texts, and role of Islamic law (Shari’a) throughout the world. This course complements (but is independent of) LAW 879. The course focuses on the background and birth of the Arab-Islamic Empire, the life and times of the Prophet Muhammad (PBUH), the development of Islam, the Rashidun, Umayyad, and Abbasid Caliphaties, Moghul and Ottoman Empires, the Koran and Sunnah and other sacred texts, the Sunni-Shi’a split, the principal schools of Islamic law, the status of women and religious minorities, and principles of the substantive areas of law, including criminal, family, inheritance, contract, property, business, banking, and international law (including law of war). Also covered are issues of economic growth, marginalization, and terrorism. (Same as LAW 918.)

GIST 897. Examination Preparation. 1 Credits.
Independent study in preparation for the Comprehensive M.A. examination. May be repeated. Graded on a satisfactory/unsatisfactory basis.

GIST 898. Thesis and Research Project Writing. 3 Credits.
This course is primarily designed to guide MA students through the writing development of their concluding graduate research, whether a final graduate research project or a thesis. Students will learn and apply the practices of effective communication and writing of research while completing the various components of their final projects. The intention of the class is to help students complete a high quality draft of their research, though deadlines and assignment may relate to practice in graduate level research writing in general. Within an interdisciplinary framework and an understanding of rhetorical distinctions across various epistemologies, students will practice relevant modeling of academic literature reviews, transparency in communicating research practices, analyzing/interpreting texts, data, or other information, and introducing and concluding their work. (Same as CEAS 898.) Prerequisite: GIST 710.

GIST 899. Thesis. 1-6 Credits.
Enrollment for writing thesis for master’s degree. Graded on a satisfactory progress/limited progress/no progress basis.

Courses

KQKL 110. Elementary Kaqchikel Maya I. 3 Credits. U F1
An orientation to Kaqchikel Maya language and culture for beginning students. Includes elements of grammar, conversation, and composition. Kaqchikel is the first language of approximately 500,000 people of highland Guatemala and one of roughly 30 Mayan languages. This course is offered at the 100 and 600 level with additional assignments at the 600 level. Not open to students with credit in KQKL 600.

KQKL 114. Elementary Kaqchikel Maya II. 3 Credits. U F2
Continuation of KQKL 110. Prerequisite: Completion of KQKL 110 or equivalent.

KQKL 230. Intermediate Kaqchikel Maya I. 3 Credits. U F3
Continuation of KQKL 114. Prerequisite: Completion of KQKL 114 or equivalent.

KQKL 234. Intermediate Kaqchikel Maya II. 3 Credits. U F4
Continuation of KQKL 230. Prerequisite: Completion of KQKL 230 or equivalent

KQKL 350. Advanced Kaqchikel Maya I. 3 Credits. FP
Advanced study of Kaqchikel Maya, continuation of KQKL 234. Prerequisite: KQKL 234 or equivalent.

KQKL 360. Advanced Kaqchikel Maya II. 3 Credits.
Advanced study of Kaqchikel Maya, continuation of KQKL 350. Prerequisite: Completion of KQKL 350 or equivalent.

KQKL 500. Directed Studies in Kaqchikel Maya. 3 Credits.
Advanced work in Kaqchikel language and culture. May be taken more than once. Prerequisite: KQKL 360 or equivalent.

KQKL 600. Elementary Kaqchikel Maya I. 3 Credits. U
An orientation to Kaqchikel Maya language and culture for beginning students. Includes elements of grammar, conversation, and composition. Kaqchikel is the first language of approximately 500,000 people of highland Guatemala and one of roughly 30 Mayan languages. This course is offered at the 100 and 600 level with additional assignments at the 600 level. Not open to students with credit in KQKL 110. Prerequisite: Instructor permission.

Courses

LAC 100. Latin American Culture and Society. 3 Credits. SC S
An introduction to the interdisciplinary study of Latin America, as manifest in the arts and literature, history, and in environmental, political, economic, and social realities. Explores and critiques the principal themes and methodologies of Latin American Studies, with an aim towards synthesizing contributions from several different disciplines. Emphasizes the unique insights and perspectives possible by interdisciplinary collaboration and provides students with a basic knowledge base for understanding Latin America today. (Same as HIST 124.)

LAC 177. First Year Seminar: _____ . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Latin Area and Caribbean Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

LAC 300. Interdisciplinary Themes in Latin American Studies. 3 Credits. U
This course offers an in-depth examination of several key themes in Latin American Studies. Emphasis is placed on exploring the utility of interdisciplinary methods and on becoming familiar with the theoretical framework that underpins the field. Prior completion of LAC 100 recommended.

LAC 302. Topics in Latin American Area Studies: _____ . 1-3 Credits. U
Investigation of special topics on Latin America at the undergraduate level.

LAC 310. Topics in LAC - Anthropology: _____ . 3 Credits. W
A Latin American and Caribbean topics course with content related to the Anthropology disciplinary group of the Latin American studies major. May be repeated for credit.

LAC 311. Topics in LAC - History: _____ . 3 Credits. U
A Latin American and Caribbean topics course with content related to the History disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 312. Topics in LAC - Spanish American Literature and Culture:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Spanish American Literature and Culture disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 313. Topics in LAC - Brazilian Literature and Culture:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Brazilian Literature and Culture disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 314. Topics in LAC - Latino and Caribbean Literature:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Latino/a and Caribbean Literature disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 315. Topics in LAC - Film Music Arts:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Film, Music, Arts disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 316. Topics in LAC - Geography and Environment:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Geography and Environment disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 317. Topics in LAC - Politics, Society, Business and Economy:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Politics, Society, Business and Economy disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 318. Topics in LAC - Transatlantic and Transnational:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Transatlantic and Transnational disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 319. Topics in LAC - Methodology and Theory:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Methodology and Theory disciplinary group of the Latin American studies major. May be repeated for credit.

**LAC 320. Modern Latin America.** 3 Credits. H
A survey of Latin America since the 1800s. Students will examine the emergence of national identities and the processes of modernization and globalization in the region. The course also examines how race, social structures, and politics evolved after independence in the region, giving particular attention to the legacies of colonialism. Course readings and lectures highlighting unique national experiences and continuities across the region. This course is offered at the 100 and 300 level with additional assignments at the 300 level. Not open to students who have taken HIST 121. (Same as HIST 315.)

**LAC 332. Language and Society in Latin America.** 3 Credits. W
This course examines the diversity of languages and cultures that make up Latin America and the Caribbean, including the influence of colonial Spanish and Portuguese as well as the many Indigenous, Afro-Caribbean, and Creole languages and cultures that can be found in Latin America. Attention is paid to the multifaceted relations between language and ethnic group, as well as to dynamics of gender and social class within Latin American cultures. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in LAC 632.

**LAC 334. Indigenous Traditions of Latin America.** 3 Credits. NW S/W
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken LAC 634. (Same as ANTH 379.)

**LAC 499. Honors Course in Latin American Studies.** 3 Credits. H
Intensive study and research under faculty direction. Open to students wishing to graduate with honors in Latin American Studies and having a grade point average of at least 3.5 in Latin American Studies and at least 3.25 overall. Requires an interdisciplinary project concerning a specific topic involving at least two disciplines. Must be directed by a faculty member in Latin American Studies, approved by the Center Associate Director, and defended before a committee of at least three faculty members. To earn departmental honors, a student must take the course for two semesters (with a minimum grade of B the first semester, and an A the second).

**LAC 500. Directed Study in Latin American Area Studies.** 1-3 Credits.
Independent study and directed reading on special topics.

**LAC 501. Multilingualism and Multiculturalism in Latin America.** 3 Credits. H
Examines the sociolinguistic issues of multilingual countries in Latin America from an interdisciplinary perspective. Topics include but are not limited to linguistic inequality, the language of politics, language and education, urban and rural linguistic interaction, and indigenous and creole languages. Prerequisite: A liberal arts course with Latin American content.

**LAC 505. U.S. Latino and Latin American Film and Literature.** 3 Credits. H
This course follows the development of U.S. Latino and Latin American cinema from its origins to the present and its relationship with literary discourse. U.S. Latino/Latin American cinema can be seen as a specific practice that cannot be reduced in all its manifestations to the institutional mode of production of the dominant Hollywood model. The course examines the creation of a national cinema that seems to be more dependent on a literary canon. Knowledge of Spanish is not required.

**LAC 510. Topics in LAC - Anthropology:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Anthropology disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

**LAC 511. Topics in LAC - History:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the History disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

**LAC 512. Topics in LAC - Spanish American Literature and Culture:** _____  3 Credits.
A Latin American and Caribbean topics course with content related to the Spanish American Literature and Culture disciplinary group of the
Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 513. Topics in LAC - Brazilian Literature: ______. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Brazilian Literature and Culture disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 514. Topics in LAC - Latino and Caribbean Literature: ______. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Latino/a and Caribbean Literature disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 515. Topics in LAC - Film Music Arts: ______. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Film, Music, Arts disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 516. Topics in LAC - Geography and Environment: ______. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Geography and Environment disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 517. Topics in LAC - Politics, Society, Business and Economy: ______. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Politics, Society, Business and Economy disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 518. Topics in LAC - Transatlantic and Transnational: ______. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Transatlantic and Transnational disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 519. Topics in LAC - Methodology and Theory: ______. 3 Credits. U
A Latin American and Caribbean topics course with content related to the Methodology and Theory disciplinary group of the Latin American studies major. May be repeated for credit. Prerequisite: LAC 100 or HIST 124 or LAC 300 or any LAC course at the 300 level.

LAC 550. Capstone in Latin American and Caribbean Studies. 3 Credits. U
The capstone course in the major offers interdisciplinary approaches to a thematic topic or focus related to Latin America/ the Caribbean and contains substantial writing and independent research requirements. By the end of the class and culminating their study of the field at KU, students will be able to discuss the course topic from a variety of theoretical, methodological, and disciplinary perspectives. Prerequisite: Completion of at least 18 credits toward the LAA major, or permission of instructor.

LAC 552. Foodways: Latin America. 3 Credits. H
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HUM 552, and ISP 552.) Prerequisite: Upper division course on Latin America or permission of the instructor.

LAC 556. Pre-Hispanic Mexico and Central America. 3 Credits. NW S/W
A survey of indigenous, Pre-Hispanic cultures of Mexico and Central America, including Olmecs, Teotihuacans, Mayas, Zapotecs, Toltecs, and Aztecs. This course teaches how to interpret art, architecture, artifacts, and culture change in the context of iconography and symbols, metaphysical beliefs and ritual practices, crafts and technologies, trade and exchange, social inequality and conflict resolution, and the relationships among these cultures and their environments. (Same as ANTH 506 and HIST 571.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, Indigenous Studies, History, or permission of instructor.

LAC 557. The Ancient Maya. 3 Credits. S/W
An intensive examination of current scholarship on the ancient Maya civilization of Mexico and Central America. The course will consider Maya culture from its roots in early villages of the Preclassic period to the warring city-states of the Postclassic period. Topics will include settlement and subsistence systems, sociopolitical evolution, art and architecture, myth and symbolism, and Maya hieroglyphic writing. An important theme of the course will be the relevance of the Precolumbian Maya for understanding complex societies and contemporary Latin American Culture. (Same as ANTH 507.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, or Indigenous Studies, or permission of instructor.

LAC 558. Ancient American Civilizations: The Central Andes. 3 Credits. W
An archaeological survey of the ancient peoples of Peru and neighboring countries in South America. The origins of complex societies on the coast and in the Andean highlands will be reviewed with special consideration of the role of “vertical” environments in the development of Andean social and economic systems. Cultures such as Chavin, Moche, Nazca, Huari, Tiahuanaco, Chimu, and the rise of the imperial Inca state will be examined through artifacts, architectural remains, and ethnohistoric documents. (Same as ANTH 508 and HIST 572.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, History, or Indigenous Studies, or permission of instructor.

LAC 559. Ancient Central America. 3 Credits. NW S
This course will examine the Precolumbian cultures of the region situated between Mesoamerica to the north and the Central Andes to the south, focusing principally on the countries of Honduras, Nicaragua, Costa Rica, Panama, and Colombia. Once regarded as an "Intermediate Area" on the peripheries of the ancient civilizations to the north and south, the area of southern Central America and northern South America is now recognized as a center of innovation from very remote times up until the Spanish Conquest. The archaeological remains of stone tools, pottery, jade carvings, gold and copper ornaments, and a wide variety of structures will be interpreted within the context of information on subsistence, settlement patterns, social organization and religious ideology. Issues of the relationships with populations of regions in major culture areas to the north and south will also be considered in detail. (Same as ANTH 509.) Prerequisite: ANTH 110 or ANTH 115.

LAC 561. Indigenous Development in Latin America. 3 Credits. S
Surveys the history of the development enterprise since WWII, examines the marginalization and impoverishment of Latin America's indigenous peoples, and provides training to carry out projects for and with them to
enhance their quality of life. Development is understood as not merely technological or economic, but also social, emotional, and educational. Students work in teams to design their own mock development project. A 3-credit non-obligatory companion course, Applied Anthropological Field School among the Ch'orti' Maya, will follow in the intersession after each version of this course. (Same as ANTH 561.) Prerequisite: ANTH 100, ANTH 108, ANTH 160 or LAC 100; or consent of instructor.

LAC 562. 3 Credits. SC H
This class surveys the relations between Mexico and the U.S. as nations, and among Mexicans, Mexican Americans, and Anglo Americans (to a lesser extent other U.S. citizens) in historical perspective. Issues of sovereignty, national and ethnic identity, immigration, migration, labor relations, popular culture, media, and transnational economics are covered. (Same as ANTH 562.) Prerequisite: ANTH 108 or ANTH 308 or ANTH 160 or ANTH 360 or LAC 100.

LAC 577. 3 Credits. H
The Andean environment is defined by its mountains, but includes all of the earth's major biomes: from tropical rainforest to the world's oldest and driest desert. These diverse landscapes have nurtured one of the most ancient and durable, yet diverse sets of Indigenous cultural lifeways. Most of the Andes was governed by a single power during the Inca and Spanish colonial eras, but the region is now divided between seven independent states with their own regional traditions. The Andean World has long been recognized as a laboratory for understanding the relations between nature and culture, and the tensions between tradition and revolutionary change. This course will examine the history of this region from a long-term perspective, from its indigenous roots to contemporary struggles over globalization and extractivism. (Same as EVRN 577, HIST 577 and ISP 577.) Prerequisite: Prior 300+ level course in related discipline (ANTH, EEB, EVRN, HIST, LAC, SPAN, etc.) or permission of instructor.

LAC 578. Multidisciplinary Field School in Partnership with the Chorti Maya. 3 Credits. S
Teams of interdisciplinary students partner with the Chorti Maya of Guatemala and Honduras to share information and experiences. One third of the course consists of readings and 4-5 orientation sessions on campus, and two thirds entails two weeks in Central America. Examples of activities might include historical research, water testing and improvement, photography, art, music, tourism consultation, marketing of crafts, human rights advocacy, web design, computer training, and museum work, among others. There are no prerequisites, but students with a working knowledge of Spanish will receive preference for admission. (Same as ANTH 587.)

LAC 602. Topics in Latin American Studies: ____. 1-3 Credits. U
Investigation of special topics on Latin America.

LAC 632. Language and Society in Latin America. 3 Credits.
This course examines the diversity of languages and cultures that make up Latin America and the Caribbean, including the influence of colonial Spanish and Portuguese as well as the many Indigenous, Afro-Caribbean, and Creole languages and cultures that can be found in Latin America. Attention is paid to the multifaceted relations between language and ethnic group, as well as to dynamics of gender and social class within Latin American cultures. Students will conduct independent research on non-dominant languages and cultures in Latin America. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in LAC 332. Prerequisite: Any previous LAC course.

LAC 634. Indigenous Traditions of Latin America. 3 Credits. NW S/W
A survey of the major indigenous traditions of Mesoamerica, the Andes, and lowland tropical Latin America. Coverage emphasizes how indigenous cultural traditions and societies have both continued and changed since the European Invasion and addresses such current issues as language rights, territorial rights, sovereignty, and state violence. Students enrolled in the 600-level section will be required to complete additional research and class leadership tasks. Not open to students who have taken ANTH 379 or LAC 334.

LAC 701. Interdisciplinary Seminar in Latin American Culture and Problems. 3 Credits.
An interdisciplinary seminar incorporating significant and pertinent materials from the fields of anthropology, economics, geography, history, political science, sociology, and Spanish and Portuguese literature. Required of all graduate students enrolled in the Master of Arts program in Latin American Area Studies. Prerequisite: LAC 710 (may be taken simultaneously with LAC 701 if both courses offered during same semester.)

LAC 702. Topics in Latin American Studies: ____. 3 Credits.
Investigation of special topics on Latin America. Topics are drawn from many disciplines within Latin American and Caribbean Studies. Course can be repeated for credit as the topic changes.

LAC 710. Research Design for International Area Studies. 3 Credits.
This course addresses the challenges for students engaged in graduate research projects and theses in an interdisciplinary and international context. The course will guide the students through the structures of research design processes for various epistemological approaches, and will assist students in formulating strong research questions, reviewing and situating their own work within the literature, working with the library and subject librarians, appropriating theory, and modeling writing conventions for research within their selected epistemological community. Students will also be exposed to a variety of research methods and will practice designing projects utilizing a select number of them. During the course of the semester, students will be working toward a plan for a substantial graduate research project. (Same as CEAS 710 and GIST 710.) Prerequisite: Consent of instructor.

LAC 800. Investigation and Conference. 1-6 Credits.
Investigation and research of interdisciplinary topics in Latin American Studies.

LAC 899. Thesis/Non-Thesis. 1-6 Credits.
Prerequisite: Consent of instructor.

Courses

PCS 120. Introduction to Peace and Conflict Studies. 3 Credits. HT H
An introduction to the content and methods of peace studies. Peace studies is a multidisciplinary and interdisciplinary approach to the study of war and peace. Building on and integrating the work of various fields of study, the course examines the causes of structural and direct violence within and among societies and the diverse ways in which humans have sought peace, from conquest and balance of power to international organizations and nonviolent strategies.

PCS 329. History of War and Peace. 3 Credits. HL H
A study of the changing nature of warfare and the struggle to bring about peace. Topics include pacifism, the "military revolution" that created the first professional armies; the development of diplomatic immunity, truces, and international law; the peace settlements of Westphalia, Utrecht, Vienna, Versailles, and San Francisco; the creation of peace movements and peace prizes; the evolution of total war, civil war, and guerrilla warfare
Bachelor of Arts in Global and International Studies

Why choose a Global and International Studies degree?

Global and International Studies will give you the tools to understand the rapid and profound changes occurring around the world. As a degree of study, it is useful for careers in business and the private sector, non-profit work, and foreign and civil service. Students have also used the degree...
as a precursor to graduate study and law school. The interdisciplinary curriculum provides a great deal of flexibility to tailor your program toward your career aspirations. We live in a world where a great demand exists in most career fields for the understanding of contemporary global dynamics, language and cultural study, and research and writing development our degree provides.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the credittransfer.ku.edu/ website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Requirements for the B.A. Major**

**Global and International Concentration**

Global & International Core Knowledge and Skills (6 hours/2 units). Satisfied by the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 220</td>
<td>Introduction to Global and International Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must take:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 100</td>
<td>General Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 160</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 162</td>
<td>The Varieties of Human Experience, Honors</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 360</td>
<td>The Varieties of Human Experience</td>
<td>3</td>
</tr>
<tr>
<td>ECON 104</td>
<td>Introductory Economics</td>
<td>4</td>
</tr>
<tr>
<td>or ECON 105</td>
<td>Introductory Economics, Honors</td>
<td>3</td>
</tr>
<tr>
<td>ECON 144</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 145</td>
<td>Principles of Macroeconomics, Honors</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 100</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>People, Place, and Society</td>
<td>3</td>
</tr>
<tr>
<td>or GEOG 103</td>
<td>People, Place, and Society, Honors</td>
<td>3</td>
</tr>
<tr>
<td>GIST 210</td>
<td>Culture and Health</td>
<td>3</td>
</tr>
<tr>
<td>or GIST 211</td>
<td>Culture and Health, Honors</td>
<td>3</td>
</tr>
<tr>
<td>HIST/EVRN 103</td>
<td>Environment and History</td>
<td>3</td>
</tr>
</tbody>
</table>

**HIST/EVRN/ GIST 210**  Global Environment I: The Discovery of Environmental Change 5
**or HIST 144**  Global Environment I: Discovery of Environmental Change, Honors 3

**HIST/EVRN/ GEOG 142**  Global Environment II: The Ecology of Human Civilization 5
**or HIST 145**  Global Environment II: The Ecology of Human Civilization, Honors 3

**POLS 150**  Introduction to Comparative Politics 3
**or POLS 151**  Introduction to Comparative Politics Honors 3

**POLS 170**  Introduction to International Politics 3
**or POLS 171**  Introduction to International Politics Honors 3

**REL 104**  Introduction to Religious Studies 3
**SOC 130**  Comparative Societies 3
**or SOC 131**  Comparative Societies, Honors 3

**Additional Language (3-5 hours/1 unit). Satisfied by:**

Completion of one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above) or any available additional language course (3-5 hours).

The **Capstone Research Coursework (6 hours/2 units). Satisfied by the completion of the following two courses:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 610</td>
<td>Interdisciplinary Methods for Global Contexts</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must complete the prerequisite GIST 220 before GIST 610 3

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 698</td>
<td>Capstone Seminar</td>
<td>3</td>
</tr>
<tr>
<td>or GIST 699</td>
<td>Capstone Seminar, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must complete GIST 610 before GIST 698 or GIST 699 3

**Issues in Global Studies (9 hours/3 units).** Majors must take three courses from an approved list of GIST courses focusing on contemporary global themes on subjects such as human trafficking, the global environment, terrorism, transnational migration and borders, global issues in gender, citizenship, indigenous peoples, the global economic system, and globalization at the 300-level or above. Courses offered as: GIST 550: Issues in Global Studies:_______ are always approved to fulfill this requirement.

**Issues in Global Studies (9 hours/3 units)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 305</td>
<td>World Indigenous Literatures</td>
<td>3</td>
</tr>
<tr>
<td>GIST 306</td>
<td>Global Environmental Literature</td>
<td>3</td>
</tr>
<tr>
<td>GIST 308</td>
<td>Key Themes in Modern Global History</td>
<td>3</td>
</tr>
<tr>
<td>GIST 314</td>
<td>Globalization: History and Theory</td>
<td>3</td>
</tr>
<tr>
<td>GIST 354</td>
<td>Globalization: A Geographic Approach</td>
<td>3</td>
</tr>
<tr>
<td>GIST 371</td>
<td>Environmental Geopolitics</td>
<td>3</td>
</tr>
<tr>
<td>GIST 376</td>
<td>Immigrants, Refugees, and Diasporas</td>
<td>3</td>
</tr>
<tr>
<td>GIST 420</td>
<td>Analyzing Contemporary Global Issues</td>
<td>3</td>
</tr>
<tr>
<td>GIST 465</td>
<td>Genocide and Ethnocide</td>
<td>3</td>
</tr>
<tr>
<td>GIST 495</td>
<td>Global Internship</td>
<td>3</td>
</tr>
<tr>
<td>GIST 529</td>
<td>Globalization</td>
<td>3</td>
</tr>
<tr>
<td>GIST 550</td>
<td>Issues in Global Studies:_______</td>
<td>3</td>
</tr>
<tr>
<td>GIST 560</td>
<td>The Literature of Human Rights</td>
<td>3</td>
</tr>
<tr>
<td>GIST 565</td>
<td>Gender, Culture, and Migration</td>
<td>3</td>
</tr>
<tr>
<td>GIST 570</td>
<td>Anthropology of Violence</td>
<td>3</td>
</tr>
</tbody>
</table>
International Electives (9 hours/3 units). Majors must take three courses from the list of approved international elective courses at the 300-level or above. Students are strongly encouraged to strategically select a cluster of three courses that would help them to fulfill KU Core requirements, or maximize a double-major with another program. For example, students double-majoring in geography or history should select their international electives from the list of approved GEOG or HIST courses. Students may, however, select from any of the approved courses available.

The following list shows examples of commonly taught approved international electives. To see a full list of approved courses for the international elective, consult our website (http://global.ku.edu/courses-1/). Other courses may also be approved in consultation with the department.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 577</td>
<td>Human Dimensions of Global Change</td>
<td></td>
</tr>
<tr>
<td>GIST 582</td>
<td>Geopolitics and Genocide</td>
<td></td>
</tr>
<tr>
<td>GIST 585</td>
<td>Transnational Terrorism</td>
<td></td>
</tr>
<tr>
<td>GIST 601</td>
<td>Indigenous Peoples of the World</td>
<td></td>
</tr>
<tr>
<td>GIST 667</td>
<td>Islam and Politics</td>
<td></td>
</tr>
<tr>
<td>GIST 686</td>
<td>International Human Rights</td>
<td></td>
</tr>
<tr>
<td>SOC 321</td>
<td>Wealth, Power, and Inequality</td>
<td></td>
</tr>
<tr>
<td>SOC 425</td>
<td>Sociology of Global Health</td>
<td></td>
</tr>
<tr>
<td>SOC 437</td>
<td>Global Ethnic and Racial Relations</td>
<td></td>
</tr>
<tr>
<td>SOC 462</td>
<td>Violence and Society</td>
<td></td>
</tr>
<tr>
<td>SOC 629</td>
<td>Sociology of Sport</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 350</td>
<td>Islam</td>
<td></td>
</tr>
<tr>
<td>REL 507</td>
<td>Religion in India</td>
<td></td>
</tr>
</tbody>
</table>

European Concentration

European Concentration Core Knowledge and Skills (9 hours/3 units). Satisfied by taking each of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 220</td>
<td>Introduction to Global and International Studies</td>
<td>3</td>
</tr>
<tr>
<td>HIST 115</td>
<td>French Revolution to the Present: Europe 1789-Present</td>
<td>3</td>
</tr>
<tr>
<td>or HUM 205</td>
<td>Western Civilization II</td>
<td></td>
</tr>
<tr>
<td>EURS 500</td>
<td>Seminar in European Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Language (3-5 hours/1 unit). Satisfied by:
Completion of one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above) or any available additional language course (3-5 hours). All language study must be in modern western European languages (e.g. French, German, Italian, Portuguese, Polish, Spanish).

The Capstone Research Coursework (6 hours/2 units). Satisfied by the completion of the following two courses, with a senior project specifically focused on a European topic:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 610</td>
<td>Interdisciplinary Methods for Global Contexts</td>
<td>3</td>
</tr>
<tr>
<td>GIST 698</td>
<td>Capstone Seminar, Honors</td>
<td>3</td>
</tr>
<tr>
<td>EURS 500</td>
<td>Seminar in European Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Upper-Division General European Electives (6 hours/2 units). Satisfied by two courses focused on Europe in general at the 300-level or above. The following list shows examples of commonly taught approved electives; speak with the Undergraduate Advisor for GIST for a complete list of approved courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 610</td>
<td>Economic History of Europe</td>
<td>3</td>
</tr>
<tr>
<td>EURS 302</td>
<td>European Issues of the European Union</td>
<td>3</td>
</tr>
<tr>
<td>EURS 511</td>
<td>European Studies: _______</td>
<td>3</td>
</tr>
<tr>
<td>EURS 604</td>
<td>The European Union</td>
<td>3</td>
</tr>
<tr>
<td>HA 564</td>
<td>European Art, 1900-1945</td>
<td>3</td>
</tr>
<tr>
<td>HIST 527</td>
<td>Recent European History, 1870 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 528</td>
<td>European History of Europe</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 592</td>
<td>Contemporary Continental Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 652</td>
<td>Politics in Europe</td>
<td>3</td>
</tr>
<tr>
<td>POLS 669</td>
<td>Topics in Comparative Politics: ______ (when covering Europe)</td>
<td>2-3</td>
</tr>
<tr>
<td>POLS 689</td>
<td>Topics in International Relations: (when covering Europe)</td>
<td>2-3</td>
</tr>
</tbody>
</table>
Upper-Division National or Regional Electives (9 hours/3 units). Satisfied by three courses focused on a region or country within Europe at the 300-level or above. The following list shows examples of commonly taught approved electives; speak with the Undergraduate Advisor for GIST for a complete list of approved courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 563</td>
<td>Current Economic Issues of East Europe</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 309</td>
<td>The British Novel</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 314</td>
<td>Major British Writers after 1800</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 315</td>
<td>Studies in British Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 530</td>
<td>Irish Literature and Culture: _____</td>
<td>3</td>
</tr>
<tr>
<td>FREN 152</td>
<td>France and the French</td>
<td>3</td>
</tr>
<tr>
<td>GERM 315</td>
<td>Magic, Murder, Monsters: German Literature and</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>the Modern Era</td>
<td></td>
</tr>
<tr>
<td>GERM 320</td>
<td>Border Crossings in German Culture</td>
<td>3</td>
</tr>
<tr>
<td>GERM 328</td>
<td>The Arts in German-Speaking Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 341</td>
<td>Hitler and Nazi Germany</td>
<td>3</td>
</tr>
<tr>
<td>HIST 525</td>
<td>France and Its Empire: From Acadia to Zidane</td>
<td>3</td>
</tr>
<tr>
<td>HIST 548</td>
<td>Rise of Modern Britain</td>
<td>3</td>
</tr>
<tr>
<td>ITAL 301</td>
<td>Introduction to Italian Literature and Textual</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Analysis</td>
<td></td>
</tr>
<tr>
<td>ITAL 336</td>
<td>Italy and the Italians</td>
<td>3</td>
</tr>
<tr>
<td>POLS 655</td>
<td>Politics of East-Central Europe</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 453</td>
<td>Twentieth Century Spanish Studies: _____</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 470</td>
<td>Studies in Spanish Culture and Civilization: ____</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Latin American and Caribbean CONCENTRATION

Latin American and Caribbean Concentration Core Knowledge and Skills (9 hours/3 units). Satisfied by taking each of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAC Concentration Core Knowledge and Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIST 220</td>
<td>Introduction to Global and International Studies</td>
<td>3</td>
</tr>
<tr>
<td>LAC 100</td>
<td>Latin American Culture and Society</td>
<td>3</td>
</tr>
<tr>
<td>LAC 300</td>
<td>Interdisciplinary Themes in Latin American Studies</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or LAC 310 Topics in LAC - Anthropology: _____</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or LAC 332 Language and Society in Latin America</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or LAC 334 Indigenous Traditions of Latin America</td>
<td></td>
</tr>
</tbody>
</table>

Additional Language (3-5 hours/1 unit). Satisfied by:
Completion of one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above) or any available additional language course (3-5 hours). All language study must be in Latin American Caribbean languages (e.g. Spanish, Portuguese, or Indigenous Latin American Languages).

The Capstone Research Coursework (6 hours/2 units). Satisfied by the completion of the following two courses, with a senior project specifically focused on a Latin American and Caribbean topic:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 610</td>
<td>Interdisciplinary Methods for Global Contexts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Students must complete the prerequisite GIST 220 before GIST 610</td>
<td></td>
</tr>
<tr>
<td>GIST 698</td>
<td>Capstone Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

or GIST 699 Capstone Seminar, Honors

Students must complete GIST 610 before GIST 698 or GIST 699

Upper-Division Latin American and Caribbean Electives (9 hours/3 units). Satisfied by taking three LAC (or crosslisted) courses at the 300-level or above (this can include LAC 300, 310, 332, or 334).

Upper-Division Interdisciplinary Electives (6 hours/2 units). Satisfied by taking two courses focusing on the Latin American and Caribbean region from related departments at the 300-level or above. The following list shows examples of commonly taught approved electives; speak with the Undergraduate Advisor for GIST for a complete list of approved courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 301</td>
<td>Haiti: Culture and Identity</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 333</td>
<td>Introduction to Caribbean Literature</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 574</td>
<td>Slavery in the New World</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 379</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 380</td>
<td>Peoples of South America</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 382</td>
<td>People and the Rain Forest</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 339</td>
<td>Introduction to Caribbean Literature</td>
<td>3</td>
</tr>
<tr>
<td>FMS 316</td>
<td>Cinemas of the Southern Cone: Argentina, Chile, and Uruguay</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 591</td>
<td>Geography of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 365</td>
<td>Invention of the Tropics</td>
<td>3</td>
</tr>
<tr>
<td>HIST 368</td>
<td>A History of Afro-Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 575</td>
<td>The Many Faces of Mexico</td>
<td>3</td>
</tr>
<tr>
<td>PORT 300</td>
<td>Brazilian Culture</td>
<td>3</td>
</tr>
<tr>
<td>PORT 471</td>
<td>Studies in Brazilian Culture and Civilization:</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>Studies in Brazilian Film:</td>
<td></td>
</tr>
<tr>
<td>PORT 565</td>
<td>Studies in Brazilian Film:</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 346</td>
<td>Transatlantic Hispanic Cultures</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 447</td>
<td>Latin American Cultures:</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 475</td>
<td>Studies in Latin-American Literature and Culture:</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>____</td>
<td></td>
</tr>
<tr>
<td>SPAN 560</td>
<td>Colloquium on Latin American Film</td>
<td>3</td>
</tr>
</tbody>
</table>

Middle East CONCENTRATION

Middle East Concentration Core Knowledge and Skills (6 hours/2 units). Satisfied by taking each of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 220</td>
<td>Introduction to Global and International Studies</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 102</td>
<td>Arabic and Islamic Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Language (3-5 hours/1 unit). Satisfied by:
Completion of one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above) or any available additional language course (3-5 hours). All language study must be in Middle East languages (e.g. Arabic, Turkish, Persian, or Hebrew).

The Capstone Research Coursework (6 hours/2 units). Satisfied by the completion of the following two courses, with a senior project specifically focused on a Middle East topic:
Students must complete the prerequisite GIST 220 before GIST 610 or GIST 699. Students must complete GIST 610 before GIST 698 or GIST 699.

**Upper-Division Concentration Electives (9 hours/3 units).** Satisfied by taking three of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 349/REL 350</td>
<td>Islam</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 303</td>
<td>Peoples and Cultures of North Africa and the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>GIST 535</td>
<td>Literature and Society in the Contemporary Middle East</td>
<td>3</td>
</tr>
<tr>
<td>HIST 328</td>
<td>The Modern Middle East</td>
<td>3</td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>POLS 667</td>
<td>Islam and Politics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Upper-Division Interdisciplinary Electives (9 hours/3 units).** Satisfied by taking three Middle East electives at the 300-level or above. The following list shows examples of commonly taught approved electives; speak with the Undergraduate Advisor for GIST for a complete list of approved courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 415</td>
<td>Women and Islam</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 433</td>
<td>Islamic Literature</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 543</td>
<td>Language and Culture in Arabic-Speaking Communities</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 372</td>
<td>Religion, Power, and Sexuality in Arab Societies</td>
<td>3</td>
</tr>
<tr>
<td>GIST 624</td>
<td>Social Movements in the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>GIST 633</td>
<td>Iran, Turkey, and the Kurds</td>
<td>3</td>
</tr>
<tr>
<td>HIST 327</td>
<td>The Premodern Middle East</td>
<td>3</td>
</tr>
<tr>
<td>HIST 328</td>
<td>The Modern Middle East</td>
<td>3</td>
</tr>
<tr>
<td>HIST 570</td>
<td>The Middle East After World War II</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 330</td>
<td>Mystical Tradition in Judaism</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 410</td>
<td>Israel: From Idea to State</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 414</td>
<td>Israel/Palestine: The War of 1948</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 426</td>
<td>Polis and Public Opinion in Israel</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 681</td>
<td>Regimes in the Middle-East and North Africa</td>
<td>3</td>
</tr>
<tr>
<td>REL 355</td>
<td>Muslim Societies</td>
<td>3</td>
</tr>
<tr>
<td>REL 557</td>
<td>Modern Islamic Reform Movements</td>
<td>3</td>
</tr>
<tr>
<td>SOC 532</td>
<td>Sociology of the Middle East</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 11 units (minimum of 33 credit hours) of major courses.

**Overlapping Courses**

Students in the GIST major can overlap relevant coursework with other programs; however, in order to ensure interdisciplinary breadth, they can only take up to 5 courses offered or cross-listed by any single other academic program.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 21 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Sample 4-year plans for the BA degree in Global and International Studies with the following concentrations can be found here: Global and International (p. 1493), European (p. 1492), Latin American & Caribbean (p. 1494), Middle East (p. 1495), or by using the left-side navigation.

**Departmental Honors**

To graduate with departmental honors in Global and International Studies, students must complete all requirements for the major plus GIST 699 (Honors Capstone) with a 3.5 grade-point average in the major. The honors seminar allows students to receive research assistance from three-member faculty committee while writing their theses.

To enroll in the program, students must have a 3.5 grade-point average in the courses making up the Global and International Studies major. Students must obtain approval of their research topic by the instructor with advice from committee members. Each student will defend their honor’s thesis in an oral examination before their thesis committee. The student’s committee includes the GIST 699 instructor and two university faculty members the student chooses with the assistance of the instructor.

**BA in Global and International Studies with concentration in European**

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA 1st Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA 2nd Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>GIST 220 (Goal 1.1 Critical Thinking, FALL ONLY)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>HIST 115 or HUM 205 (Major Requirement)</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA 3rd Second Language)</td>
<td>3</td>
<td>4th Semester Language (BA 4th Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3 Goal 3 Social Science (Could be major course)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3 Upper-Division General European Elective³</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1 Upper-Division National or Regional Elective (consider courses that also fulfill Goal 4.2)³</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Upper-Division General European Elective⁵</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>EURS 500</td>
<td>3</td>
</tr>
<tr>
<td>Upper-Division National or Regional Elective³</td>
<td>3</td>
<td>Upper-Division National or Regional Elective³</td>
<td>3</td>
</tr>
<tr>
<td>Additional Language Course 300+ (Major Requirement)⁴</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 610 (FALL ONLY)</td>
<td>3</td>
<td>GIST 698 or 699 (Goal 6 Integration and Creativity, Major Requirement, SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. A list of approved courses for the Upper-Division General European Electives and the Upper-Division National or Regional Electives may be found under the “Degree Requirements” tab for the major.

4. This major requirement can be fulfilled by completion of one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above), or any available additional language course (3-5 hours).

5. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level. The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Global and International Studies with concentration in Global and International

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)¹</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>GIST 220 (Goal 1.1 Critical Thinking, FALL ONLY)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GIST Core Knowledge Course³</td>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities (could be approved GIST major course)</td>
<td>3</td>
<td>Goal 3 Social Science (Could be approved GIST major course)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
</tr>
<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
<td>GIST “Issues in Global Studies” Course⁵</td>
<td>3</td>
</tr>
<tr>
<td>GIST “Issues in Global Studies” Course⁵</td>
<td>3</td>
<td>GIST International Electives Course (Could be approved Goal 4.2 Global Awareness)⁵</td>
<td>3</td>
</tr>
</tbody>
</table>
### BA in Global and International Studies with concentration in Latin American and Caribbean

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 BA Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>GIST 220 (Goal 1.1 Critical Thinking, FALL ONLY)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>LAC 100 (Goal 4.2 Global Awareness)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours 120</strong></td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Approved GIST core courses: ANTH 100, ANTH 160, ANTH 162, ANTH 360, ECON 104, ECON 105, ECON 144, ECON 145, GEOG 100, GEOG 102, GEOG 103, GIST 210, GIST 211, HIST 103/EVRN 103, HIST 140/EVRN 140/GEOG 140, HIST 144/EVRN 144/GEOG 144, HIST 142/EVRN 142/GEOG 142, HIST 145/EVRN 145/GEOG 145, POLS 150, POLS 151, POLS 170, POLS 171, REL 104, SOC 130 or SOC 131

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>LAC 300, 310, 332, or 334</td>
<td>3</td>
</tr>
<tr>
<td>BA Laboratory/Field Experience</td>
<td>1</td>
<td>Upper-Division Latin American and Caribbean Studies Elective</td>
<td>3</td>
</tr>
<tr>
<td>Upper-Division Latin American and Caribbean Studies Elective</td>
<td>3</td>
<td>Interdisciplinary Elective</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>1</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
</tr>
</tbody>
</table>

### Junior

#### Fall

<table>
<thead>
<tr>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Upper-Division Latin American and Caribbean Studies Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Senior

#### Fall

<table>
<thead>
<tr>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 GIST 698 or 699 (Goal 6 Integration and Creativity, Major Requirement, SPRING ONLY)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. The Latin American & Caribbean Studies concentration requires 4th level language proficiency in Spanish or Portuguese.

4. A list of courses that fulfill the Upper-Division Latin American and Caribbean Electives, and the Upper-Division Interdisciplinary Electives may be found on the "Degree Requirements" tab for the major.

5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

6. This major requirement can be fulfilled by completion of one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above), or any available additional language course (3-5 hours).

---

**Please note:**

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

---

**BA in Global and International Studies with concentration in Middle East**

### Freshman

#### Fall

<table>
<thead>
<tr>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5 1st Semester Language (BA 2nd Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>3 GIST 220 (Goal 1.1 Critical Thinking, FALL ONLY)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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**Sophomore**

#### Fall

<table>
<thead>
<tr>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 4th Semester Language (BA Second Language)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Goal 3 Social Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Upper-Division Concentration Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3 Upper-Division Interdisciplinary Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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**Goal 3 Natural Science**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Upper-Division Interdisciplinary Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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**BA Laboratory/Field Experience (LFE)**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

---

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. The Latin American & Caribbean Studies concentration requires 4th level language proficiency in Spanish or Portuguese.

4. A list of courses that fulfill the Upper-Division Latin American and Caribbean Electives, and the Upper-Division Interdisciplinary Electives may be found on the "Degree Requirements" tab for the major.
### Minor in European Studies

#### Why minor in European Studies?

The interdisciplinary European Studies Program is housed in the Center for Global & International Studies, which also provides a home for Middle East Studies and the Undergraduate Certificate in South Asian Studies. European Studies offers an intellectually engaging minor for students interested in exploring the languages, cultures, history, politics, and economies of Europe and individual European countries. Students integrate the minor most frequently with their study of Global & International Studies, a modern European language, History, Political Science, and English. The program provides students opportunities to attend lectures and panel discussions by leading scholars, conduct research, study abroad, and complete internships, all of which help prepare them for careers in a rapidly changing world and global economy. The European Studies Program also serves as a point of contact and organization for College and University faculty with expertise in European studies, promoting both faculty and student expertise by collaborating with local, regional, and national organizations and institutions.

#### Requirements for the Minor

Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURS 500</td>
<td>Seminar in European Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

1 approved modern European history course

### European Studies Minor Core Knowledge and Skills

Additional foreign language (3 hours). Completion of one additional foreign language course (3 hours) beyond the 4th semester proficiency language requirement (300 level or above), or any available additional language course (3-5 hours) in a modern western European language (French, German, Italian, Portuguese, Polish, Spanish).

Foundational Course: Seminar in European Studies. Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EURS 500</td>
<td>Seminar in European Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

1 approved modern European history course

European Studies Minor Electives.

Select three of the following options:

- 1 approved European politics course
- 1 approved European economics or business course
- 1 approved general European culture or history course
- 1 approved national or regional European course

A current list of approved courses for the minor is available on the European Studies website and from the Program's Advising Specialist and Academic Director.
Global and International Studies Minor

Why minor in Global and International Studies?

Global and International Studies will give you the tools to understand the rapid and profound changes occurring around the world. As a degree of study, it is useful for careers in business and the private sector, non-profit work, and foreign and civil service. Students have also used the degree as a precursor to graduate study and law school. The interdisciplinary curriculum provides a great deal of flexibility to tailor your program toward your career aspirations. We live in a world where a great demand exists in most career fields for the understanding of contemporary global dynamics, language and cultural study, and research and writing development our degree provides.

Requirements for the Minor

Students selecting this minor must complete the following:

GIST Minor Core Requirements

Global & International Studies Core Knowledge and Skills. Satisfied by completion of GIST 220, and one course from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 220</td>
<td>Introduction to Global and International Studies</td>
<td>3</td>
</tr>
<tr>
<td>and one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GIST 210/ GEOG 201/ AAAS 203</td>
<td>Culture and Health</td>
<td>3</td>
</tr>
<tr>
<td>or GIST 211</td>
<td>Culture and Health, Honors</td>
<td></td>
</tr>
<tr>
<td>or GEOG 202</td>
<td>Culture and Health, Honors</td>
<td></td>
</tr>
<tr>
<td>or AAAS 204</td>
<td>Culture and Health, Honors</td>
<td></td>
</tr>
<tr>
<td>GEG 100</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEG 102</td>
<td>People, Place, and Society</td>
<td>3</td>
</tr>
<tr>
<td>or GEG 103</td>
<td>People, Place, and Society, Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH 108</td>
<td>Introduction to Cultural Anthropology</td>
<td>3-4</td>
</tr>
</tbody>
</table>

or ANTH 109 | Introduction to Cultural Anthropology, Honors |

or ANTH 308 | Fundamentals of Cultural Anthropology |

ANTH 160 | The Varieties of Human Experience |

or ANTH 360 | The Varieties of Human Experience |

ECON 104 | Introductory Economics |

or ECON 105 | Introductory Economics, Honors |

ECON 144 | Principles of Macroeconomics |

or ECON 145 | Principles of Macroeconomics, Honors |

POLS 150 | Introduction to Comparative Politics |

or POLS 151 | Introduction to Comparative Politics, Honors |

POLS 170 | Introduction to International Politics |

or POLS 171 | Introduction to International Politics, Honors |

HIST 103 | Environment and History |

HIST/EVRN/GEOG 140 | Global Environment I: The Discovery of Environmental Change |

HIST/EVRN/GEOG 142 | Global Environment II: The Ecology of Human Civilization |

REL 106 | Asian Religions |

or REL 107 | Jews, Christians, Muslims |

SOC 130 | Comparative Societies |

or SOC 131 | Comparative Societies, Honors |

ABSC 150 | Community Leadership |

Issues in Global Studies: (6 hours/2 courses). Minors must take 2 courses from an approved list of GIST courses focusing on contemporary global themes on subjects such as human trafficking, the global environment, terrorism, transnational migration and borders, global issues in gender, citizenship, indigenous peoples, the global economic system, and globalization. Courses offered as: GIST 550: Issues in Global Studies:_______ are always approved to fulfill this requirement.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 305</td>
<td>World Indigenous Literatures</td>
<td></td>
</tr>
</tbody>
</table>

GIST 306 | Global Environmental Literature |

GIST 308 | Key Themes in Modern Global History |

GIST 314 | Globalization: History and Theory |

GIST 354 | Globalization: A Geographic Approach |

GIST 371 | Environmental Geopolitics |

GIST 376 | Immigrants, Refugees, and Diasporas |

GIST 465 | Genocide and Ethnocide |

GIST 495 | Global Internship |

GIST 529 | Globalization |

GIST 550 | Issues in Global Studies:_______ |

GIST 560 | The Literature of Human Rights |

GIST 565 | Gender, Culture, and Migration |

GIST 570 | Anthropology of Violence |

GIST 582 | Geopolitics and Genocide |

GIST 601 | Indigenous Peoples of the World |

GIST 667 | Islam and Politics |

GIST 686 | International Human Rights |

SOC 321 | Wealth, Power, and Inequality |

SOC 425 | Sociology of Global Health |

SOC 437 | Global Ethnic and Racial Relations |
Overlapping Courses

Minor Hours

Satisfied by 18 hours of minor courses.


Global & International Studies International Electives. (6 hours/2 courses) Minors must take 2 courses from the list of approved international elective courses. Students are strongly encouraged to strategically select courses that would help them to maximize its linkage to another major or minor with another program, or use the electives to help fulfill requirements from the KU Core. Students may, however, select from any of the approved courses available.

The following list shows the most commonly taught approved international electives. To see a full list of approved courses for the international elective, consult our website (http://global.ku.edu/courses-1/). Other courses may also be approved in consultation with the department.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 305</td>
<td>Modern Africa</td>
<td></td>
</tr>
<tr>
<td>AAAS 372</td>
<td>Religion, Power, and Sexuality in Arab Societies</td>
<td></td>
</tr>
<tr>
<td>AMS 332</td>
<td>The United States in Global Context</td>
<td></td>
</tr>
<tr>
<td>ANTH 379</td>
<td>Indigenous Traditions of Latin America</td>
<td></td>
</tr>
<tr>
<td>COMS 246</td>
<td>Introduction to Intercultural Communication</td>
<td></td>
</tr>
<tr>
<td>ECIV 304</td>
<td>Eastern Civilizations</td>
<td></td>
</tr>
<tr>
<td>ECON 604</td>
<td>International Trade</td>
<td></td>
</tr>
<tr>
<td>EURS 604</td>
<td>The European Union</td>
<td></td>
</tr>
<tr>
<td>EVRN 320</td>
<td>Environmental Policy Analysis</td>
<td></td>
</tr>
<tr>
<td>FMS 313</td>
<td>History of the International Sound Film Post 1950</td>
<td></td>
</tr>
<tr>
<td>GEOG 370</td>
<td>Introduction to Cultural Geography</td>
<td></td>
</tr>
<tr>
<td>GEOG 553</td>
<td>Geography of African Development</td>
<td></td>
</tr>
<tr>
<td>GEOG 591</td>
<td>Geography of Latin America</td>
<td></td>
</tr>
<tr>
<td>GIST 325</td>
<td>Peoples and Cultures of South Asia</td>
<td></td>
</tr>
<tr>
<td>GIST 624</td>
<td>Social Movements in the Middle East</td>
<td></td>
</tr>
<tr>
<td>HIST 328</td>
<td>The Modern Middle East</td>
<td></td>
</tr>
<tr>
<td>HIST 398</td>
<td>Introduction to History of Japan: Anime to Zen</td>
<td></td>
</tr>
<tr>
<td>IBUS 410</td>
<td>Introduction to International Business</td>
<td></td>
</tr>
<tr>
<td>IBUS 480</td>
<td>International Management</td>
<td></td>
</tr>
<tr>
<td>LAC 100</td>
<td>Latin American Culture and Society</td>
<td></td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
<td></td>
</tr>
<tr>
<td>POLS 670</td>
<td>United States Foreign Policy</td>
<td></td>
</tr>
<tr>
<td>POLS 678</td>
<td>Chinese Foreign Policy</td>
<td></td>
</tr>
<tr>
<td>REES 110</td>
<td>Understanding Russia and Eastern Europe</td>
<td></td>
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<tr>
<td>REES 220</td>
<td>Societies and Cultures of Eurasia</td>
<td></td>
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<tr>
<td>REL 350</td>
<td>Islam</td>
<td></td>
</tr>
<tr>
<td>REL 507</td>
<td>Religion in India</td>
<td></td>
</tr>
<tr>
<td>SOC 312</td>
<td>Population and Society</td>
<td></td>
</tr>
<tr>
<td>SOC 321</td>
<td>Wealth, Power, and Inequality</td>
<td></td>
</tr>
<tr>
<td>WGSS 321</td>
<td>From Mystics to Feminists: Women's History in Europe 1600 to the Present</td>
<td></td>
</tr>
</tbody>
</table>

Minor in Latin American Area Studies

Students in the GIST minor can overlap relevant coursework with other programs; however, in order to ensure interdisciplinary breadth, they can only take up to 3 courses offered or cross-listed by any single other academic program.

Minor Hours in Residence

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Minor in Latin American Area Studies

The Undergraduate Minor in Latin American Area Studies provides students with a solid foundation of instruction on Latin American topics to supplement their primary field. There are two tracks within the minor: the General Latin American and Caribbean Studies Track and the Indigenous Studies in Latin America (ISLA) Minor Track. Both tracks require 2 hours of core classes followed by 15 hours of upper-division electives from a wide variety of courses approved by the center. No more than 1 course (3 hours) may be shared with the student's major. The General Track has no requirement of language courses. The ISLA Track requires two semesters of an indigenous language spoken in Latin America. For the General Track and the ISLA Track, students may choose any course they wish to study including F’s and repeated courses. See the Undergraduate minor in Latin American Area Studies in Latin America (ISLA) Minor Track.

The General Track is for students from several departments and schools who do not wish to concentrate in language studies, but who are interested in aspects such as the history, culture, geography, anthropology, art history, politics, business or journalism of Latin America. This minor will be a great complement to a degree in, for example, business or architecture. There is great flexibility for students who wish to create their own program in order to acquire knowledge in various disciplines subjects. The ISLA track is for similar students who are particularly interested in indigenous peoples of the Western Hemisphere and wish to study an indigenous language. In particular, the ISLA track allows students to integrate coursework in indigenous population of what is now the United States with coursework on such populations elsewhere in the Western Hemisphere.

The Latin American & Caribbean Studies advisor (https://clacs.ku.edu/people/melissa-foree/) will be glad to speak with any student who may be interested in obtaining the minor. If you would like to make an appointment with the undergraduate advisor or have any questions about the new minor, please contact the Center of Latin American & Caribbean Studies (https://clacs.ku.edu/).

The Undergraduate Minor in Latin American Area Studies provides students with a basic foundation of knowledge on Latin America & the Caribbean to complement their primary area(s) of expertise. There are two options: the General Latin American and Caribbean Studies Option and the Indigenous Studies in Latin America (ISLA) Option.
The General Option is for students interested in building knowledge of Latin America & the Caribbean in such areas as anthropology, art history, business, film, geography, history, indigenous studies, literature, journalism, politics, and theatre.

1. Two Required Courses (6 hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAC 100</td>
<td>Latin American Culture and Society</td>
<td>3</td>
</tr>
<tr>
<td>LAC 300</td>
<td>Interdisciplinary Themes in Latin American Studies</td>
<td>3</td>
</tr>
<tr>
<td>LAC 332</td>
<td>Language and Society in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>LAC 334</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 379</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Four additional upper-division LAC electives (12 hours). Students may take any upper-division LAC course or its cross-listed number as an elective.

The ISLA Option is for students interested in indigenous people of Latin America and who wish to study an indigenous language.

1. Two Required Courses (6 hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAC 302</td>
<td>Topics in Latin American Area Studies:</td>
<td>3</td>
</tr>
<tr>
<td>LAC 602</td>
<td>Topics in Latin American Studies:</td>
<td>3</td>
</tr>
<tr>
<td>KQKL 110/</td>
<td>Elementary Kaqchikel Maya I</td>
<td>3</td>
</tr>
<tr>
<td>LAC 602</td>
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<td>3</td>
</tr>
<tr>
<td>KQKL 114</td>
<td>Elementary Kaqchikel Maya II</td>
<td>3</td>
</tr>
<tr>
<td>KQKL 230</td>
<td>Intermediate Kaqchikel Maya I</td>
<td>3</td>
</tr>
<tr>
<td>KQKL 234</td>
<td>Intermediate Kaqchikel Maya II</td>
<td>3</td>
</tr>
<tr>
<td>KQKL 350</td>
<td>Advanced Kaqchikel Maya I</td>
<td>3</td>
</tr>
<tr>
<td>KQKL 360</td>
<td>Advanced Kaqchikel Maya II</td>
<td>3</td>
</tr>
<tr>
<td>KQKL 500</td>
<td>Directed Studies in Kaqchikel Maya</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Two Latin American indigenous language courses (6 hours).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAC 100</td>
<td>Latin American Culture and Society</td>
<td>3</td>
</tr>
<tr>
<td>LAC 300</td>
<td>Interdisciplinary Themes in Latin American Studies</td>
<td>3</td>
</tr>
<tr>
<td>LAC 332</td>
<td>Language and Society in Latin America</td>
<td>3</td>
</tr>
<tr>
<td>LAC 334</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 379</td>
<td>Indigenous Traditions of Latin America</td>
<td>3</td>
</tr>
</tbody>
</table>

3. Two additional upper-division LAC electives (6 hours). Students may take any upper-division LAC course or its cross-listed number as an elective.

A minimum of 12 credit hours must be taken at the 300+ level to complete the minor.

If a student would like to apply a non-LAC (or cross-listed) course with at least 25% Latin American and/or Caribbean content (which may include assignments) for either minor, they can seek approval from the CLACS Undergraduate Coordinator by sharing the syllabus. No more than 2 such courses may count toward the minor.

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**Middle East Studies Minor**

**Middle East Studies Minor**

Why study the “Middle East”? The countries within and neighboring what is commonly referred to as the Middle East continue to play an important role in global affairs and dynamics. The economic and business elements of the region along with its political, cultural, and social realities factor heavily into contemporary world developments. Within such a context, for intrinsic and extrinsic reasons, there are strong reasons to focus one’s study on this area of the world. KU combines education in Arabic, Persian, Turkish, and Hebrew with a rich selection of courses on or related to the region, including courses in Islamic studies, language, culture and art, history, and contemporary social and political dynamics. The minor also complements many majors within the College as well as other degrees across the University. The area’s languages and knowledge of cultures, society, and politics in the region can prepare students for careers in business and the private sector, foreign or civil service, or jobs with non-profit organizations.

**Requirements for the Minor**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 350/</td>
<td>Islam</td>
<td>3</td>
</tr>
<tr>
<td>AAAS 349</td>
<td>or AAAS 102 Arabic and Islamic Studies</td>
<td>3</td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 328</td>
<td>The Modern Middle East</td>
<td>3</td>
</tr>
<tr>
<td>or ANTH 303</td>
<td>Peoples and Cultures of North Africa and the Middle East</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives**

These courses allow students to deepen their knowledge of the countries and issues in the region. Students must take at least one course from each emphasis—i.e., social science and humanities, as listed below—but can choose to take three courses from one emphasis and one from the other or take two from each.

Regularity offered and upcoming elective options are:

Social science emphasis: (minimum 3 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 303</td>
<td>Peoples and Cultures of North Africa and the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 372</td>
<td>Religion, Power, and Sexuality in Arab Societies</td>
<td>3</td>
</tr>
<tr>
<td>GIST 624</td>
<td>Social Movements in the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>GIST 633</td>
<td>Iran, Turkey, and the Kurds</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 329</td>
<td>Israeli-Palestinian Conflict: An Introduction</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 410</td>
<td>Israel: From Idea to State</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 414</td>
<td>Israel/Palestine: The War of 1948</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 420</td>
<td>Politics and Government in Israel</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 426</td>
<td>Polls and Public Opinion in Israel</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 440</td>
<td>International Relations of the Middle-East</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 681</td>
<td>Regimes in the Middle-East and North Africa</td>
<td>3</td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>POLS/GIST 667</td>
<td>Islam and Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 670</td>
<td>United States Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>SOC 532</td>
<td>Sociology of the Middle East</td>
<td>3</td>
</tr>
</tbody>
</table>
Minor in Peace and Conflict Studies

Why study Peace and Conflict Studies?

This multidisciplinary program enables students to examine conflict within and between societies as well as ways that humans address conflict through war, mediation, law, diplomacy, institutions, and peaceful resistance.

Requirements for the Minor

Students selecting this minor must complete each of the following:

### Introduction to Peace and Conflict Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS 120</td>
<td>Introduction to Peace and Conflict Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

### Peace and Conflict Studies Core Knowledge and Skills

Satisfied by 2 courses (6 hours) from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG/EVRN 371</td>
<td>Environmental Geopolitics</td>
<td></td>
</tr>
<tr>
<td>HIST 314</td>
<td>Globalization: History and Theory</td>
<td></td>
</tr>
<tr>
<td>PCS 550</td>
<td>Classics of Peace Literature</td>
<td></td>
</tr>
<tr>
<td>POLS 679</td>
<td>International Conflict</td>
<td></td>
</tr>
</tbody>
</table>

### Peace and Conflict Studies Required Elective

Satisfied by 2 courses (6 hours) from the following or from the core courses listed above:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 465</td>
<td>Genocide and Ethnicocide</td>
<td></td>
</tr>
<tr>
<td>ENGL 479</td>
<td>The Literature of:</td>
<td></td>
</tr>
<tr>
<td>EURS 565</td>
<td>The Literature of Human Rights</td>
<td></td>
</tr>
<tr>
<td>HIST 343</td>
<td>The Holocaust in History</td>
<td></td>
</tr>
<tr>
<td>HIST 369</td>
<td>Colonialism and Revolution in the Third World, Honors</td>
<td></td>
</tr>
<tr>
<td>PCS 555</td>
<td>Topics in Peace and Conflict Studies: _____</td>
<td></td>
</tr>
<tr>
<td>PCS 560</td>
<td>Directed Study in Peace and Conflict Studies</td>
<td></td>
</tr>
<tr>
<td>PCS 565</td>
<td>The Literature of Human Rights</td>
<td></td>
</tr>
<tr>
<td>PHIL 555</td>
<td>Justice and Economic Systems</td>
<td></td>
</tr>
<tr>
<td>POLS 650</td>
<td>Palestinians and Israelis</td>
<td></td>
</tr>
<tr>
<td>POLS 671</td>
<td>International Cooperation</td>
<td></td>
</tr>
<tr>
<td>POLS 673</td>
<td>International Organization</td>
<td></td>
</tr>
<tr>
<td>POLS 685</td>
<td>International Law: Laws of Armed Conflicts</td>
<td></td>
</tr>
<tr>
<td>PSYC 572</td>
<td>Psychology and International Conflict</td>
<td></td>
</tr>
</tbody>
</table>

### Senior Seminar in Peace and Conflict Studies

Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS 650</td>
<td>Senior Seminar in Peace and Conflict Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

### Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

- **Minor Hours**: Satisfied by 18 hours of minor courses.
- **Minor Hours in Residence**: Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.
- **Minor Junior/Senior (300+) Hours**: Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.
- **Minor Graduation GPA**: Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
Undergraduate Certificate in Persian Language and Cultures

The certificate in Persian Language and Cultures provides students an avenue to exemplify their investment in knowledge and skills of this critical language and its cultures—Farsi, Tajik, and Dari. Students can pair this certification with overlapping courses in majors such as Global & International Studies, African & African American Studies, or the Middle East Studies minor. The certificate is also a convenient way to demonstrate language and culture credentials for students in the professional schools, like engineering, journalism, or business. Please contact the undergraduate advisor for Global & International Studies for more information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Required language coursework: 6 hours in Persian language coursework in courses numbered PERS 220 or above. This includes any of the following:</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Completion of PERS 110, PERS 120, PERS 210 or the equivalent is required before starting on the Persian language coursework below.</td>
<td></td>
</tr>
<tr>
<td>PERS 220</td>
<td>Intermediate Iranian/Dari/Tajik Persian II</td>
<td></td>
</tr>
<tr>
<td>PERS 593</td>
<td>Directed Study in Persian Culture and Literature:</td>
<td></td>
</tr>
<tr>
<td>PERS 310</td>
<td>Advanced Iranian/Dari/Tajik Persian I</td>
<td></td>
</tr>
<tr>
<td>PERS 320</td>
<td>Advanced Iranian/Dari/Tajik Persian II</td>
<td></td>
</tr>
<tr>
<td>Culture Electives: Students must take any two of the following</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>HIST 328</td>
<td>The Modern Middle East</td>
<td></td>
</tr>
<tr>
<td>HIST 481</td>
<td>From Harem to the Streets: Gender in the Middle East, 1900-Present</td>
<td></td>
</tr>
<tr>
<td>HIST 570</td>
<td>The Middle East After World War II</td>
<td></td>
</tr>
<tr>
<td>GIST 335</td>
<td>Iran Through Literature and Film</td>
<td></td>
</tr>
<tr>
<td>GIST 535</td>
<td>Literature and Society in the Contemporary Middle East</td>
<td></td>
</tr>
<tr>
<td>GIST 624</td>
<td>Social Movements in the Middle East</td>
<td></td>
</tr>
<tr>
<td>GIST 633</td>
<td>Iran, Turkey, and the Kurds</td>
<td></td>
</tr>
<tr>
<td>GIST 667/ POLS 676</td>
<td>Islam and Politics</td>
<td></td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
<td></td>
</tr>
</tbody>
</table>

Undergraduate Certificate in South Asian Culture

This certificate option is currently unavailable to new students

South Asia is home to the peoples and cultures of an enormous proportion of the world’s population. An understanding of South Asian culture will open doors to exciting exchanges with the peoples in this region. KU offers regular instruction in the critical language of Hindi, and culture will open doors to exciting exchanges with the peoples in this proportion of the world’s population. An understanding of South Asian culture will open doors to exciting exchanges with the peoples in this proportion of the world’s population. An understanding of South Asian culture will open doors to exciting exchanges with the peoples in this proportion of the world’s population.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 credit hours - 9 of which must be at the 300 level or above.</td>
<td></td>
</tr>
<tr>
<td>Core Course</td>
<td>Hours</td>
<td></td>
</tr>
<tr>
<td>GIST 325</td>
<td>Peoples and Cultures of South Asia</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>DANC 440</td>
<td>Introduction to Classical East Indian Dance</td>
<td></td>
</tr>
<tr>
<td>GIST 502</td>
<td>Advanced Topics in South Asian Studies:</td>
<td></td>
</tr>
<tr>
<td>HIST 603</td>
<td>History of Tibet</td>
<td></td>
</tr>
<tr>
<td>HNDI 301</td>
<td>Topic in Hindi Culture, Language and Literature:</td>
<td></td>
</tr>
<tr>
<td>REL 106</td>
<td>Asian Religions</td>
<td></td>
</tr>
<tr>
<td>Language Courses: 3 credit hours of the following can count toward the 9 credit hours of electives requirement above.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HNDI 310</td>
<td>Advanced Hindi I</td>
<td></td>
</tr>
<tr>
<td>HNDI 320</td>
<td>Advanced Hindi II</td>
<td></td>
</tr>
</tbody>
</table>

Master of Arts in Global and International Studies

Master of Arts in Global and International Studies

The M.A. in GIST provides an analytically sophisticated understanding of the contemporary global arena and cultivates the skills and knowledge to operate in a world where traditional boundaries are disappearing. Through the 33-credit hour program, students develop a specialization in a world region and can pursue interests in global politics, society, and culture across a broad range of courses in the humanities and social sciences.

Students in Global and International Studies have access to courses by top-notch research faculty across a wide variety of relevant disciplines at KU’s main campus in Lawrence (http://www.ku.edu/). Besides access to quality instruction and content, our students have access to the amazing international resources that put KU on the top shelf for international education—a nationally-ranked Study Abroad Program, instruction in 40 foreign languages, and local, national, and international internship opportunities.

"Traditional" Master's Track

The self-tailoring and interdisciplinary field of Global and International Studies prepares graduate students with marketable skills (such as professional certification opportunities and research and writing skills) and the knowledge to deal with contemporary global issues. This is critical in our contemporary world in which both problems and opportunities increasingly transcend national boundaries.

KU's Master of Arts in Global and International Studies (https://global.ku.edu/global-ma/) is designed for those who seek a better understanding of international issues that shape public policy and the global economy and who want to have an impact in these areas.
**Interagency Studies Track**

The Interagency track ([https://global.ku.edu/applying-interagency-studies-program/](https://global.ku.edu/applying-interagency-studies-program/)) of the Master’s degree program in Global and International Studies is a one-year program designed exclusively for military personnel pursuing their Intermediate Level Education (ILE) program at the Command and General Staff College (CGSC) at Ft. Leavenworth.

The objective of the Interagency Studies Program (ISP), is to prepare military officers for working in interagency environments by expanding their abilities to conceptualize and address issues beyond their military training. The program offers coursework from multiple disciplines with an array of theoretical frameworks.

KU courses are held primarily at the KU Ft. Leavenworth campus, along with courses at the Command General Staff College and at the KU Lawrence campus. Classes are primarily offered in the evening and run the length of the academic year - three courses August-December, three courses January-April, and two courses May-June.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies ([p. 2408](#)) section of the online catalog.

Please consult the Departments & Programs ([p. 748](#)) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Eligibility criteria for admission to the M.A. program follow Graduate Studies’ admission policy ([http://policy.ku.edu/graduate-studies/admission-to-graduate-study/](http://policy.ku.edu/graduate-studies/admission-to-graduate-study/)). Non-native speakers of English must meet English proficiency requirements ([https://gradapply.ku.edu/english-requirements/](https://gradapply.ku.edu/english-requirements/)).

For the traditional and Interagency Studies M.A. programs, students are admitted in the fall only. Interagency Studies applications are due by [Aug 18](#). Applications for the "traditional" MA track are due [Dec 1](#) for priority consideration, and a final deadline of [March 1](#). Please see the [Graduate Studies](https://global.ku.edu/how-apply/) and [ISP](https://global.ku.edu/applying-interagency-studies-program/) pages for more information about the admission requirements and process, as well as for contact information for the admissions program coordinator.

**M.A. Degree Requirements**

The M.A. degree in Global and International Studies requires the completion of a minimum of 30 graduate credit hours. There are three options for concentration: Global & International Studies, Latin American and Caribbean Studies, or East Asian Studies.

**Global and International Studies Concentration**

All students complete 9 hours of core courses at the 700 level:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIST 701</td>
<td>Approaches to International Studies</td>
<td>3</td>
</tr>
<tr>
<td>GIST 702</td>
<td>Globalization</td>
<td>3</td>
</tr>
<tr>
<td>GIST 710</td>
<td>Research Design for International Area Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the 9 hours of specific requirements, students must then complete 18 credit hours of electives at 700 level or above. These electives form 2 coherent clusters of 9 credit hours each:

**Regional Specialization Cluster:**

This cluster will give students focused knowledge about a selected region of the world. Up to 3 language courses (9 hours) at or above the 500 level may also count toward this requirement. Specific courses must be selected in consultation with an advisor.

**Topic Specialization Cluster:**

This cluster will focus on a topic specialization approved by the student’s adviser. Students can choose current global and international themes, or they can select an existing graduate certificate program offered by another department. Certificate options or specific courses should be selected in consultation with an advisor.

For more on the regional and topical elective options, consult the GIST graduate student handbook ([http://global.ku.edu/courses-offered/](http://global.ku.edu/courses-offered/)) or contact a GIST graduate advisors.

For all students, the M.A. degree also requires evidence of current competence (equivalent to 2 years of successful college-level study) in a modern spoken and written language other than their native tongue; courses taken to complete this requirement generally do not count toward the degree. Students must meet all general requirements as well as program requirements.

**Language Requirements:**

By the completion of the M.A., students should demonstrate the equivalent of 5 academic semesters of a foreign language, or demonstrate the equivalent of four academic semesters in a foreign language and complete two semesters of an additional foreign language at KU.

**Thesis Option**

Students electing to write and defend a thesis must have their thesis project proposal approved by their thesis advisor prior to enrolling in GIST 898 Thesis and Research Project Writing. Students choosing the thesis option must complete GIST 898. If students have additional needs for thesis work beyond GIST 898, they are able to take additional thesis hours (GIST 899) to complete their research. For guidelines and policy regarding the thesis, please consult the GIST graduate student handbook ([http://global.ku.edu/thesis-option/](http://global.ku.edu/thesis-option/)).

**Non-thesis Options**

**Option #1 (Research Project and Oral Exam)** – Students selecting this option are required to take GIST 898 and complete a research project of more limited scope and scale than a thesis, and the project will be followed by an oral exam. For guidelines and policy regarding the research project option, please consult the GIST graduate student handbook ([http://global.ku.edu/non-thesis-option/](http://global.ku.edu/non-thesis-option/)).

**Option #2 (Exam)** – Students choosing this option must take an additional 3 credit hours, corresponding to one of their 2 coherent elective
clusters. In the final semester, the student must successfully complete a written examination on the core course content (GIST 701 and GIST 702) and the student’s regional and substantive areas of focus. This is followed by an oral exam. Students considering this option must consult the graduate director first. For guidelines and policy regarding the written and oral exam option, please consult the GIST graduate student handbook (http://global.ku.edu/non-thesis-option/).

**Interagency Degree Requirements**

The Interagency Studies Program (ISP) is a unique track within the GIST master’s degree for students in the Intermediate Level Education (ILE) program at the Command and General Staff College (CGSC) at Ft. Leavenworth. The curriculum combines coursework from KU and from the ILE program. Students who complete the ILE program at CGSC are approved for a reduced credit hour master’s degree at KU, allowing them to complete the Global & International Studies master’s with a minimum of 24 graduate credit hours.

Below are the KU courses that a student can typically expect to take.

### Code | Title | Hours
--- | --- | ---
GIST 624 | Social Movements in the Middle East | 3
GIST 678 | Chinese Foreign Policy | 3
GIST 702 | Globalization | 3
GIST 751 | Human Rights and U.S. National Security | 3
GIST 752 | International Conflict Prevention and Resolution | 1
GIST 783 | Theories of Conflict, Security and Peace | 3
GIST 810 | Graduate Writing Experience | 2
POLS 782 | Transnational Terrorism | 3
or HIST 810 | Colloquium in Nationalism Studies | 3
PUAD 854 | Innovation and Organizational Change | 3

**Total Hours** 24

### Final Examination

The program culminates with a final paper demonstrating the application of program knowledge to a military (preferably interagency) issue, which can be submitted to relevant journal outlets in military studies.

### Language Proficiency

M.A. candidates must demonstrate comprehensive proficiency in Spanish or Portuguese. This includes aural, speaking, reading, and writing ability. Completion of SPAN 424 and SPAN 428 or a higher-level course constitutes comprehensive proficiency in Spanish. Comprehensive proficiency in Portuguese requires completion of a 500-level or higher literature course.

The language requirements should be satisfied as early as possible. Students also must complete two semesters in a second language (SPAN 104 and SPAN 108; PORT 104 and PORT 108), or the equivalent (e.g. PORT 611). Quichua, Kaqchikel Maya, or Haitian Creole may be substituted as the language of reading proficiency with approval of the director.

### Contemporary East Asia Concentration

All students complete 12 hours of core courses at the 700 level or above:

### Code | Title | Hours
--- | --- | ---
GIST 701 | Approaches to International Studies | 3
CEAS 701 | Professionalization Seminar in East Asian Studies | 3
CEAS 710 | Research Design for International Area Studies | 3
CEAS 898 | Thesis and Research Project Writing | 3

### Electives

**World Region: 3 courses with contemporary East Asian Content** 9

**Topic Specialization: 3 courses must cluster in topic/issue** 9

Electives must conform to the following specifications and should be selected in consultation with an advisor.

At least four courses must contain CEAS approved East Asian content courses.

No more than three elective courses can be in a single discipline.

Two advanced East Asian language courses can be included (500 or higher).
Language Requirement

Proficiency in an East Asian language is not required for admission to this program, but proficiency at the second level (intermediate) is required for the degree. Credit earned in introductory and intermediate language courses will not count toward the 30 hours required. If such courses are taken after admission, they will add substantial time to the program. Students who plan to continue to move on to a Ph.D. program are strongly encouraged to pursue language at the third level.

Additional Curriculum Requirements

Along with completing required coursework and meeting the language requirement, students must fulfill the following requirements:

1. Prepare a publishable research paper (25-30 pages)
2. Successfully pass an oral defense of that paper to the satisfaction of an M.A. examination committee
3. Submit your paper to an academic journal(s) to be considered for publication

The purpose of the M.A. research paper requirement is to train students in writing, conceptualization, research, and presentation of the subjects in their area of specialization in social science.

Department of History

Studying history at the University of Kansas will expand your mind. Our course offerings introduce students to medieval witches and Samurai warriors, conspiracy cranks and Native American prophets, Chairman Mao and the Black Panthers. Students can take courses on the history of sexuality, or, if that isn’t exciting enough, courses on natural disasters, wars, and plagues. With 29 tenured and tenure-track faculty, the Department of History covers the globe.

But studying history is more than just an entertaining adventure. Training in historical research, analysis, and writing develops skills that are essential in our information economy, and this preparation is especially useful to students planning to pursue graduate training and careers in law, public policy, journalism, education, and a universe of other possibilities, as our recent undergraduate and graduate alumni throughout the world can attest.

The Department of History at KU offers an outstanding undergraduate program (https://history.ku.edu/undergraduate/) with approximately 250 History majors and minors. These students are taught by faculty who consistently win awards for their teaching as well as their research. Beyond the introductory level, class sizes are small, including two required seminars that are capped at fifteen students each, and the optional Senior Honors Thesis, which features direct one-on-one advising with a faculty mentor.

Our graduate program (https://history.ku.edu/degrees/) has consistently ranked in the top 25 among public research universities. With an average of 35 graduate students enrolled, we are primarily a doctoral program, granting Ph.D. degrees in geographical areas such as the United States, Europe, Asia, Africa, the Middle East, and Latin America, as well as in thematic fields such as military, environmental, and gender and sexuality. Recent Ph.D. recipients have gone on to tenure-track positions at research universities, liberal arts colleges, junior colleges, and a variety of careers in other sectors.

Finally, faculty in the Department of History are nationally and even internationally known for their research. The books and articles they have published just in the last two years are too numerous to list here, but you can scroll through the faculty page (https://history.ku.edu/faculty/) to gain a sense of their significance shaping our knowledge about the world. Their productivity plays an important role in helping KU maintain its position in the prestigious American Association of Universities.

Take some time to search through our website (https://history.ku.edu). You’ll find information about our programs, our courses, and our prolific faculty, and you can hear the voices of undergraduates and graduate students who have passed through the Department. Please feel free to contact (https://history.ku.edu/contact/) any of the administrative staff, faculty, and faculty officers with your questions.

Undergraduate Programs

The Department of History at the University of Kansas is particularly distinguished in undergraduate teaching and is a recipient of the Excellence in Undergraduate Advising Award from the College of Liberal Arts and Sciences. The Department ranks well above the University average in student evaluations, and many History faculty members have won individual awards for their teaching, such as the Kemper Prize and Distinguished Professor awards.

- Our Faculty (https://history.ku.edu/faculty/) are nationally and internationally recognized leaders in their field, and they bring this advanced knowledge into the classroom.
- Courses (http://catalog.ku.edu/liberal-arts-sciences/history/#courseinventory) in the department are usually small, and the larger courses always include Teaching Assistants, so students can receive individual attention and feedback on their work.
- Flexibility is a given in the department: students have only two required courses—a course on historical methods (HIST 301) and a senior research seminar (HIST 690 or HIST 690/HIST 691)—and a choice of concentrating on any of ten fields. The department and faculty also have strong connections to interdisciplinary work in Environmental Studies, African and African-American Studies, Indigenous Nations Studies, and other area studies programs.
- Resources for historical research at KU are rich. Watson and Anschutz libraries help make up a major research library collection, and the Spencer Library offers such resources as the Wilcox Collection on extremist politics, the University Archives.
- For more information, see the History Major Program Description (http://history.ku.edu/curriculum/).

Courses for Nonmajors

The department welcomes nonmajors in all of our courses and offers a variety of cross-listed classes. Nonmajors may enroll in History courses at any level.

Graduate Programs

The Department of History (http://history.ku.edu) at the University of Kansas is a dynamic place, with a proud tradition of training scholars from across the globe who have transformed the practice of history. The program offers major or minor concentrations in the areas of United States, African American, Modern European, British & Imperial, Russian/ East European, East Asian, Latin American, African, Medieval, Women and Gender, Military, and Environmental History. KU offers its graduate students great flexibility in their choice of fields, as defined both by traditional geographical and chronological parameters and thematic topics. Students also have the opportunity to take coursework outside...
the department in fields such as Public History, Museum Studies, Environmental Studies, and the History of Medicine.

Primarily a doctoral program, the Department currently enrolls approximately 80 graduate students from throughout the United States and the world, including Japan, China, Peru, and Russia. Our students make up a very diverse group, and we encourage applicants from traditional and non-traditional backgrounds.

Students who are interested in enrolling in graduate level coursework in the Department of History without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s admission (https://history.ku.edu/ma/) webpage for further details.

For statistics regarding our program, please see our Doctoral Program page (https://history.ku.edu/phd/), which demonstrates our success at funding and placing current and recent graduates.

Courses

HIST 101. Introduction to Western History: _____ . 3 Credits. HT H
An introduction to the study of history focusing on a topic in Western History. The course will expose the student to the major issues and methods of historical study through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. This course grants HIST Category I credit.

HIST 102. Introduction to History, Honors: _____ . 3 Credits. HT H
An introduction to the study of history. The course will expose the student to the major issues and methods of historical study. This will be done through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. Prerequisite: Membership in the College Honors Program or consent of department.

HIST 103. Environment and History. 3 Credits. H
Nature is our oldest home and newest challenge. This course surveys the environmental history of the earth from the extinction of the dinosaurs to the present with a focus on the changing ecological role of humans. It analyzes cases of ecological stability, compares cultural attitudes toward nature, and asks why this ancient relationship seems so troubled. (Same as EVRN 103.)

HIST 104. Introduction to African History. 3 Credits. NW H/W
An introduction to important historical developments in Africa. Topics include empires, kingdoms, the slave trade, European colonialism, liberation movements, national identities, and a return to independence. (Same as AAAS 105.)

HIST 105. Introduction to Ancient Near Eastern and Greek History. 3 Credits. NW H/W
A general survey of the political, social, and economic developments of Mesopotamia, Egypt, Asia Minor, and Greece from Paleolithic times to 323 B.C. (Same as CLSX 105.)

HIST 106. Introduction to Roman History. 3 Credits. H/W
A general survey of the political, social, and economic developments of ancient Rome from 753 B.C. to 475 A.D. (Same as CLSX 106.)

HIST 107. Introduction to the Ancient World. 3 Credits. H
This course covers the history of the ancient Near East, Greece and Rome with emphasis on the origins of agriculture, writing, cities, empires, and democracy. Students will be introduced to schemes of interpretation, critical readings, and analysis, primary sources, and evaluation of evidence.

HIST 108. Medieval History. 3 Credits. HT H/W
The history of Europe from the Barbarian Invasions to the beginning of the 16th century.

HIST 109. The Black Experience in the Americas. 3 Credits. HT H/W
An interdisciplinary study of the history of the African peoples of the New World, relating their cultures and institutions to the African background and to their peculiar New World experiences up to and including the nineteenth century. While the main emphasis is on the U.S.A., attention is also paid to the Caribbean and Latin America. Approaches include demography, economics, social and political developments, literature, and music. (Same as AAAS 106.)

HIST 110. Introduction to Non-Western History: _____. 1-3 Credits. H
An introduction to the study of history focusing on a topic in non-Western History. The course will expose the student to the major issues and methods of historical study through the study of a specific historical period or topical area. In the study of this period or topic, students will be introduced to schemes of interpretation, critical readings and analysis, primary sources, and evaluation of evidence. This course grants HIST Category II credit.

HIST 111. Introduction to African History, Honors. 3 Credits. NW H/W
An intensive version of AAAS 105/HIST 104. An introduction to important historical developments in Africa, mainly south of the Sahara. Topics include early history, empires, kingdoms and city-states, the slave trade, southern Africa, partition and colonialism, the independence era, military and civilian governments, and liberation movements. Approaches include literature, the visual arts, politics, economics, and geography. Open only to students in the University Honors Program or by consent of instructor. (Same as AAAS 115.)

HIST 112. Introduction to British History. 3 Credits. H
This course will introduce students to the concepts, issues, and methods of historical study, at the same time as it explores the main processes and events which shaped the history of Britain and its imperial dependencies. Students will be introduced to the nature and validity of different historical interpretations, and to the purpose and merit of historical writings.

HIST 114. Renaissance to Revolution: Europe 1500-1789. 3 Credits. HT H/W
An introduction to early modern European history, with emphasis on the cultural, political, economic, and cultural forces which have helped to shape the modern world. The renaissance, the rise of nation states, the Reformation, absolutism and constitutionalism, the Enlightenment, and the coming of the French Revolution.

HIST 115. French Revolution to the Present: Europe 1789-Present. 3 Credits. HT H/W
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: the French Revolution, the romantic movement, the revolutions of 1848, nationalism, imperialism, Communism, and two World Wars, the cold war, and its aftermath.

HIST 116. French Revolution to the Present: Europe 1789 to Present, Honors. 3 Credits. HT H
An introduction to recent European history, with emphasis on the social, political, economic, and cultural forces which have helped to create the Europe of today: The French Revolution, the romantic movement, the
revolutions of 1848, nationalism, imperialism, Communism, and two
World Wars, the cold war and its aftermath. Not open to students who
have taken HIST 115. This Honors course is a Humanities Historical
Studies Principal Course. Prerequisite: Membership in the College Honors
Program or consent of department.

HIST 117. Russia, An Introduction. 3 Credits. HT H/W
This course introduces students to the history of Russia from its
beginnings to the present. It explores Russia’s ethnic and religious
diversity, the relationship between the state and its peoples, the
geopolitics of its place between Europe and Asia, and the revolutionary
movements that shook Russia and shaped the world around it.

HIST 118. Premodern East Asia. 3 Credits. NW H/W
A survey of the premodern history of China, Japan, Korea, and other
cultures in East Asia. Students are introduced to the major currents of
East Asian history and historical methods used to study them. Not open to
students with credit in upper division East Asian history.

HIST 119. Modern East Asia. 3 Credits. NW H/W
A survey of the modern history of China, Japan, Korea, and other cultures
in East Asia. Students are introduced to the major currents of East Asian
history and historical methods used to study them. Not open to students
with credit in upper division East Asian history.

HIST 120. Colonial Latin America. 3 Credits. NW H/W
The principal focus is on the evolution and analysis of societies,
economies, and religions of native American peoples, the impact of
Spanish and Portuguese conquests and settlement, government, trade
and culture upon native civilizations, the influence of African population
and culture, and the creole nature of the resulting society in the colonial
period. Changes in the society and economy which presaged the
movements for independence are also discussed.

HIST 121. Modern Latin America. 3 Credits. HT W
A survey of Latin America since the 1800s. Students will examine the
emergence of national identities and the processes of modernization and
globalization in the region. The course also examines how race, social
structures, and politics evolved after independence in the region, giving
particular attention to the legacies of colonialism. Course readings and
lectures highlight unique national experiences and continuities across
the region. This course is offered at the 100 and 300 level with additional
assignments at the 300 level. Not open to students who have taken
HIST 315.

HIST 122. Colonial Latin America, Honors. 3 Credits. NW H/W
The principal focus is on the evolution and analysis of societies,
economies, and religions of native American peoples, the impact of
Spanish and Portuguese conquests and settlement, government, trade
and culture upon native civilizations, the influence of African population
and culture, and the creole nature of the resulting society in the colonial
period. Changes in the society and economy which presaged the
movements for independence are also discussed. Prerequisite:
Membership in the College Honors Program or permission of instructor.

HIST 123. Modern Latin America, Honors. 3 Credits. HT W
Similar in content to HIST 121. Students are introduced to historical
analysis within the context of the emergence of national identities and
the process of modernization in the region. The course compares social,
cultural, economic, and political changes across a variety of countries
since 1810, giving particular attention to the legacies of colonialism. It also
discusses key processes such as urbanization and industrialization and
examines social movements for reform and revolution in the 20th century.
In this way the course deals with interpretations of these processes
and movements and major issues of Latin American historiography.

Prerequisite: Membership in the University Honors Program or permission
of instructor.

HIST 124. Latin American Culture and Society. 3 Credits. SC S
An introduction to the interdisciplinary study of Latin America, as
manifest in the arts and literature, history, and in environmental, political,
economic, and social realities. Explores and critiques the principal themes
and methodologies of Latin American Studies, with an aim towards
synthesizing contributions from several different disciplines. Emphasizes
the unique insights and perspectives made possible by interdisciplinary
collaboration and provides students with a basic knowledge base for
understanding Latin America today. (Same as LAC 100.)

HIST 128. History of the United States Through the Civil War. 3
Credits. HT H
A historical survey of the United States from the peopling of the continent
through the Civil War. This survey is designed to reflect the diversity of
the American experience, to offer the student a chronological perspective
on the history of the United States, and to explore the main themes, issues,
ideas, and events which shaped that history.

HIST 129. History of the United States After the Civil War. 3
Credits. HT H
A historical survey of the American people from Reconstruction to the
present. This survey is designed to reflect the diversity of the American
experience, to offer the student a chronological perspective on the history
of the United States, and to explore the main themes, issues, ideas, and
events that shaped American history.

HIST 139. The Global Cold War. 3 Credits. H
This course provides an immersive introduction to the global Cold
War and its legacies. It explores how the contest between capitalism
and communism unfolded not only in the United States and the Soviet
Union, but also in Asia, Africa, Europe, Latin America, and the Middle
East. Through interactive lectures, discussions, and role-playing
games, students will learn to "think globally," gain an understanding
of imperialism, nationalism, and decolonization, and discover how the
Cold War shaped culture, economics, politics, the environment, and
the international system in ways that remain relevant today. (Same as
GIST 139.)

HIST 140. Global Environment I: The Discovery of Environmental
Change. 5 Credits. U LFE
This interdisciplinary course and laboratory sections survey the
foundations of environmental understanding and the process of
scientific discovery from perspectives that combine the principles and
methodologies of the humanities, physical, life and social sciences.
Key topics include the history of environmental systems and life on
earth, the discovery of biotic evolution, ecological change, and climate
change. Laboratory sections apply the principles and methodologies
of the humanities, physical, life and social sciences to earth systems and
the development of environmental understanding using historical and present-
day examples. (Same as EVRN 140 and GEOG 140.)

HIST 142. Global Environment II: The Ecology of Human
Civilization. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the
history of humanity’s relationship with the natural world over the long
term from perspectives that combine the principles and methodologies
of the humanities, physical, life and social sciences. Key topics include
the evolution of Homo sapiens and cultural systems; the development
of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the
ecology of colonialism and industrial civilization, and the emergence of
ideological and ethical perspectives on the relationship between nature
and culture. Laboratory sections apply the principles and methodologies
of the humanities, physical, life and social sciences to the humanity’s
engagement with the global environment using historical and present-day examples. (Same as EVRN 142 and GEOG 142)

HIST 144. Global Environment I: The Discovery of Environmental Change, Honors. 5 Credits. U LFE
This interdisciplinary course surveys the foundations of environmental understanding and the process of scientific discovery from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics include the history of environmental systems and life on earth, the discovery of biotic evolution, ecological change, and climate change. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to earth systems and the development of environmental understanding using historical and present-day examples. (Same as GEOG 144 and EVRN 144.) Open only to students admitted to the University Honors Program or by permission of instructor.

HIST 145. Global Environment II: The Ecology of Human Civilization, Honors. 5 Credits. U
This interdisciplinary course and its laboratory sections survey the history of humanity’s relationship with the natural world over the long term from perspectives that combine the principles and methodologies of the humanities, physical, life and social sciences. Key topics will include the evolution of Homo sapiens and cultural systems; the development of hunter, gatherer, fisher, agricultural, and pastoral lifeways; the ecology of colonialism and industrial civilization, and the emergence of ideological and ethical perspectives on the relationship between nature and culture. Laboratory sections apply the principles and methodologies of the humanities, physical, life and social sciences to the humanity’s engagement with the global environment using historical and present-day examples. (Same as EVRN 145 and GEOG 145.) Open only to students in the University Honors Program or by permission of instructor.

HIST 150. Introduction to Food History: Around the World in Eight Dishes. 3 Credits. H
Foods and drinks such as chocolate, coffee, curry, and olive oil have changed the world in ways that transcend national boundaries; this course follows their stories tracing routes of imperialism and globalization while attactive to the impact of these foods on indigenous peoples. Each week offers new foods and new discoveries drawing from cases globally to ask why people choose certain foods, what that says about their culture, and how foods and drinks have changed historically. Besides learning how food can be a window to history and gaining an introduction to the interdisciplinary methodology of food studies, this course will help you understand the consequences of what you eat in terms of your own body, the environment, and communities a world away.

HIST 160. Introduction to West African History. 3 Credits. W
This course treats West African history through the first part of the twentieth century. The student is provided with a perspective on the major historical patterns that gave rise to West Africa’s development as an integral part of world history. Special attention is paid to anthropological, geographical, and technological developments that influenced West African political and socioeconomic changes. (Same as AAAS 160.)

HIST 177. First Year Seminar: _____ 3 Credits. HT
A limited-enrollment seminar course for first-time freshmen, organized around current issues in history. May not contribute to major requirements in history. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

HIST 190. Warlords and Rebels in Asia. 3 Credits. NW H
Warlords tear apart society and try to rebuild it according to their own terms. Rebels challenge the status quo. This course provides an introduction to East Asian political, social, and cultural history through a thematic lens. The class offers students a diverse variety of perspectives on social and political change in East Asia and encourages them to reflect on such themes in Western contexts as well.

HIST 201. Writing the Past-Category I/Western Topics: _____ 3 Credits. H
Many of the words that human beings have written down in one form or another have been stories of events, people, and places from the past. History is a story of countless people—some famous, many anonymous—who have made up the human past. This course will introduce students to the basic skills of analytical, descriptive, and narrative writing and reading through the lens of history. Students will learn how to develop a voice of their own as writers and build a toolkit of skills that will help them effectively communicate in writing, in their course work and careers. This course will cover topics that will fulfill the Category I/Western requirement of the History major.

HIST 202. Writing the Past-Category II/Non-Western Topics: _____ 3 Credits. H
Many of the words that human beings have written down in one form or another have been stories of events, people, and places from the past. History is a story of countless people—some famous, many anonymous—who have made up the human past. This course will introduce students to the basic skills of analytical, descriptive, and narrative writing and reading through the lens of history. Students will learn how to develop a voice of their own as writers and build a toolkit of skills that will help them effectively communicate in writing, in their course work and careers. This course will cover topics that will fulfill the Category II/Non-Western requirement of the History major.

HIST 203. Speaking the Past-Category I/Western Topics: _____ 3 Credits. H
This seminar offers students the opportunity to learn about a specific theme or topic in history through the development of their verbal communication skills. A variety of scaffolded assignments will introduce students to the essential elements of interpersonal and public speaking, provide opportunities to practice their performances and receive constructive feedback, and hone their organizational and critical-thinking skills. In doing so, they will achieve a deeper understanding of an important aspect of the past. Specific historical topics will be determined by individual instructors. This course will cover topics that will fulfill the Category I/Western requirement of the History major.

HIST 204. Speaking the Past-Category II/Non-Western Topics: _____ 3 Credits. H
This seminar offers students the opportunity to learn about a specific theme or topic in history through the development of their verbal communication skills. A variety of scaffolded assignments will introduce students to the essential elements of interpersonal and public speaking, provide opportunities to practice their performances and receive constructive feedback, and hone their organizational and critical-thinking skills. In doing so, they will achieve a deeper understanding of an important aspect of the past. Specific historical topics will be determined by individual instructors. This course will cover topics that will fulfill the Category II/Non-Western requirement of the History major.

HIST 220. A Global History of Human Health. 3 Credits. H
This course surveys how human populations have experienced diseases including those induced by infectious microbes, environmental agents, and dietary causes from prehistoric hunter-gatherer societies to today’s global population. Particular emphasis is on major transitions and historical events that have had led to major epidemics. These transitions and events include but are not limited to the transition to agriculture, urbanization, imperial expansion, colonialism, industrialization, world wars, factory farming, and the transportation revolution. The development
of medicine, public policies, and global health organizations is a central theme as is the development of global health disparities. Students are challenged to think historically and apply a long-term perspective to understand today's global health problems.

HIST 229. United States in the 1960s. 3 Credits. H
In the Sixties, millions of Americans rejected socially-sanctioned established wisdom, long-standing cultural precepts and conventional political policies and practices. In this gateway course we will examine how and why they did so, why so many other Americans rejected their challenges to the status quo, and what difference these rebellions made in Americans' lives. By placing their struggles in historical context, we will think about how and why people make and resist social change and how historical circumstances restrain and enable people's individual and collective ability to act and to make their own futures. Through readings, lectures, discussion, and various assignments students will have opportunities to debate the great questions of that era and ponder the relevance of historical events and understandings to their own lives and to the life of the nation, as they sharpen their analytic abilities and their capacity to communicate those analyses effectively.

HIST 230. Sex, Gender, Film, and History. 3 Credits. H
In the second half of the 20th century, Americans struggled over sex and gender—and both their behaviors and beliefs changed dramatically, though not without controversy. In this class, we use mainstream, popular American films produced during this volatile era to analyze historical understandings of gender identity and appropriate sexual behaviors in post-WWII American society. This course is also an introduction to the study of history: students will work extensively with film and other primary documents, and will analyze different scholarly interpretations of the same set of events.

HIST 231. War and 20th Century U.S. Culture. 3 Credits. H
This course analyzes the "cultural construction" of war in 20th century America by focusing primarily on World War II and the Vietnam War. How have Americans attempted to come to terms with the wars they have fought? How have Americans' cultural understandings shaped the wars they have waged? How have Americans used various cultural forms (film, music, photography, etc.) to support a war effort or to protest against it? We pay special attention to the place of the military in American society, to notions of patriotism and citizenship, to constructions of gender, race, and sexuality, and to the roles of government, media, technology, and public opinion.

HIST 250. Study Abroad Topics in: ____. 1-5 Credits. H
This course is designed for the study of special topics in History at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

HIST 285. Headless Men: Conquest and Cultural Exchange Before the Age of Exploration. 3 Credits. HL H
In fourteen hundred and ninety-two, Columbus sailed the ocean blue. But what happened before Columbus' great journey? And, more to the point, why did he and his contemporaries feel entitled to simply claim whatever land they found? This course proposes to explore the medieval experiences of cultural and racial Otherness in order to better understand the roots of some of the assumptions about difference (interpersonal, intercultural, and international) that continue to play out in American society today. Taught in English. (Same as FREN 285.)

HIST 300. Modern Africa. 3 Credits. NW H/W
A survey of social, political, and economic developments during the colonial era and independence struggles. Themes may include resistance, liberation, nationalism, gender issues, agriculture, genocide, and human rights. (Same as AAAS 305.)

HIST 301. The Historian's Craft. 3 Credits. H
This course introduces students to the practice and methods of the study of history and serves as the gateway to the major. HIST 301 trains students to think like historians, equip them with skills in research, critical analysis, and oral and written presentation useful to any career but especially integral to careers in archival work, museum work, law, and research. Students learn (1) to think historically; (2) to understand how historians construct and write about the past through narratives, theory and analytical discussion; (3) to critically evaluate historical arguments and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course is required of all history majors and is a prerequisite for HIST 696 Seminar in: ____. Prerequisite: Completion of KU Core 2.1 and recommended completion of KU Core 2.2. Open only to declared History majors or by consent of instructor.

HIST 302. The Historian's Craft, Honors. 3 Credits. H
This course introduces students to the practice and methods of the study of history and serves as the gateway to the major. Students learn (1) to think historically; (2) to understand how historians construct and write about the past through narratives, theory and analytical discussion; (3) to critically evaluate historical arguments and the material used to substantiate those arguments, including an introduction to the process of peer review; (4) to develop writing and research skills including the interpretation of primary sources; and (5) to master professional standards of presenting their findings. This course, or HIST 301 - its non-honors equivalent, is required of all history majors and is a prerequisite for HIST 696 Seminar in: ____. Prerequisite: Open only to students admitted to the University Honors Program who are declared History majors, or by consent of instructor.

HIST 303. Sin Cities. 3 Credits. H
This course offers a comparative global introduction to the history of the modern city by looking at the ways in which certain metropolises developed an attractive underbelly of decadence at the same time as they sought to be centers of refined and orderly cosmopolitan life. The course examines topics such as popular culture, gambling, prostitution, crime, violence, nightlife, tourism, and corruption in the context of the increased social mobility that characterized the beginning of the industrial age and that has extended into the 21st century. Students investigate the changing relation between work and leisure, spectacle and consumerism, and urban space and the struggle for order.

HIST 304. 1642, 1688, 1776: Three British Revolutions. 3 Credits. H
Explains and analyzes the three revolutions in the English-speaking world which, more than any others, are held to have laid the foundations of modernity. Themes discussed include social, intellectual, and political developments, structures, and conflicts. 1642 and 1688 are treated in the setting of England's relations with Scotland and Ireland, and against the background of European wars of religion. 1776 is analyzed in a transatlantic context as a civil war within the wider British polity.

HIST 305. The Scientific Revolution. 3 Credits. H
Describes and analyzes the factors producing a Scientific Revolution in early-modern Europe. Focuses on fundamental changes in astronomy-cosmology, physics, and biology from Copernicus to Newton. Examines the emergence of experimental method as an essential part of Western science. Portrays the development of new forms of scientific organization and the cultural frameworks that bore and shaped them. Surveys the various interpretations of this period expressed by current historians of science.
HIST 307. Modern Africa, Honors. 3 Credits. NW H
An intensive version of HIST 300. A survey of social, political, and economic developments during the colonial era and independence struggles. Themes may include resistance, liberation, nationalism, gender issues, agriculture, genocide, and human rights. (Same as AAAS 307.) Prerequisite: Open only to students admitted to the University Honors Program, or by consent of the instructor.

HIST 308. Key Themes in Modern Global History. 3 Credits. H
A comparative historical analysis of major global developments from the late 15th century to the present. Some of the themes likely to be explored are empire-building, contact between cultures and colonial social relations; the attraction of cities, their role in a global economy and the shift to an urban world; and the impact of capitalism and industrialization on social organization including conflict between classes and changes in the nature of work. Students learn ways of interpreting primary historical documents and comparing historical investigations across time and space. (Same as GIST 308.)

HIST 312. American Culture, 1877 to the Present. 3 Credits. H
An examination of the major historical shifts, trends, and conflicts that have shaped the multicultural nature of life in the United States from 1877 to the present. In addition to tracing developments in literature, architecture, drama, music and the visual arts, this course investigates patterns and changes in the popular, domestic, and material culture of everyday life in America. (Same as AMS 312.)

HIST 314. Globalization: History and Theory. 3 Credits. H
Explores the rise of global capitalism in the 19th and 20th centuries, contemporary debates about 21st century globalization, and the role of globalization in our everyday lives. Questions considered include: Is globalization an incremental process that has been going on for centuries, or is it a dramatic new force reshaping the post-Cold War world? Is it a cultural and social process or an economic and political one? Or is it all of these things? Not open to students who have completed HIST 315. (Same as GIST 314.)

HIST 315. Modern Latin America. 3 Credits. H
A survey of Latin America since the 1800s. Students will examine the emergence of national identities and the processes of modernization and globalization in the region. The course also examines how race, social structures, and politics evolved after independence in the region, giving particular attention to the legacies of colonialism. Course readings and lectures highlight unique national experiences and continuities across the region. This course is offered at the 100 and 300 level with additional assignments at the 300 level. Not open to students who have taken HIST 121. (Same as LAC 320.)

HIST 316. Ministers and Magicians: Black Religions from Slavery to the Present. 3 Credits. H
This course examines the history and diversity of African American religious expression from slavery until the present, emphasizing both mainstream and alternative faiths. It covers the religious world views of enslaved Africans, and examines faiths inside and outside of Christianity. Topics may include: independent black churches, magical practices, the Holiness and Pentecostal movements, black Islam, religious freemasonry, and esoteric faiths. The class emphasizes the influence of gender, class, race, migration, and urbanization on black religion. (Same as AAAS 316 and AMS 316.)

HIST 317. African American Women: Colonial Era to the Present. 3 Credits. H
This interdisciplinary course covers the history of African American women, beginning in West and Central Africa, extending across the Middle Passage into the Americas, and stretching through enslavement and freedom into the 21st century. The readings cover their experiences through secondary and tertiary source materials, as well as autobiographies and letters, plays and music, and poems, novels, and speeches.

HIST 318. Indian Territory. 3 Credits. H
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaw, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HUM 345 and ISP 345.)

HIST 319. History, Women, and Diversity in the U.S.. 3 Credits. H
This survey course explores the history of being female in America through a focus on the ways differences in race, sexuality, ethnicity, class, and life cycle have shaped various aspects of women's lives. Themes to be explored could include, but are not limited to: social and political activism; intellectual developments; family; women's communities; work; sexuality; and culture. (Same as WGSS 319.)

HIST 320. From Goddesses to Witches: Women in Premodern Europe. 3 Credits. HT H
This course examines the social, cultural, and political contexts of women's spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshipping cultures, women's roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as WGSS 320.)

HIST 321. From Mystics to Feminists: Women's History in Europe 1600 to the Present. 3 Credits. HT H
This survey of women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as WGSS 321.)

HIST 322. LGBTQ U.S. History, 1600-1900. 3 Credits. H
This course will take students on the first part of an exciting journey through an alternative version of U.S. history, exploring the experiences and treatment of men who love men, women who love women, and people with unconventional sexual and gender identities, telling this story as it unfolded in the British colonies established in North America, through the revolutionary period, and in the United States over the course of the nineteenth and twentieth centuries, and into the early twenty-first century. The first part of this two course sequence begins in the colonial period and ends around 1900 as modern categories of sexuality and sexual orientation came into existence. We will examine the ways in which individuals who craved intimacy with members of the same sex understood and negotiated their desires in an often hostile world. And we will consider how Early America's remarkable diversity shaped this history of same-sex love and desire. (Same as WGSS 322.)

HIST 323. LGBTQ U.S. History, 1900-Present. 3 Credits. H
This course will take students on the second part of an exciting journey through an alternative version of U.S. history, exploring the experiences and treatment of men who love men, women who love women, and people with unconventional sexual and gender identities, telling this story as it unfolded in the British colonies established in North America, through the revolutionary period, and in the United States over the course of the
This course examines the history of empires in the Atlantic World. During this period, African, European, and Native American empires encountered each other vying for people and territory. These encounters vastly transformed the people and societies of this broad geographic region. Not only did these empires challenge each other, anti-imperial groups including pirates and African maroons actively undermined imperial systems. This course will examine themes of empire in the Atlantic, including conquest, enslavement and slave trades, indigenous and African resistance, and independence.

HIST 332. Sex in History. 3 Credits. HT H
This course offers a survey of the history of human sexuality in the Western world; the second half of the semester emphasizes the American experience. Topics for consideration may include: masturbation, pornography, sex work, homosexuality, bisexuality, "perversions" (paraphilias), sex and marriage, racialized sexualities, sexual violence, trans* identities and experiences, sexuality and national identities, and colonized sexualities. The course demonstrates the various ways in which sex, specifically the social and political meanings attributed to physical acts, changes over time and shapes human experiences and interactions far beyond the bedroom. (Same as AMS 323, HUM 332 and WGSS 311.)

HIST 333. Eurometro: Visions of the European Metropolis, 1849-1939. 3 Credits. H
This course investigates the interrelated symbols of the European metropolis during the "Age of Great Cities", from the filth of the sewers to the "filthiness" of prostitution. Students investigate gender and class in the metropolis by exploring a few stereotypes: the juvenile delinquent, the woman on the street, and the flaneur. The course format stresses discussion of common texts, including short readings of literature from the period and historical scholarship. Students also analyze contemporary photographs, art, architecture, and advertising.

HIST 334. The Great War: The History of World War I. 3 Credits. H
A historical survey of the causes, course, and consequences of the conflict, 1878-1919, stressing its socio-economic dimensions as well as its political ramifications and military aspects. Considerable use will be made of visual aids. No prerequisites.

HIST 335. History of Jewish Women. 3 Credits. H
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women's gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women's lives in both Jewish and non-Jewish society. (Same as JWSH 335, WGSS 335.)

HIST 336. Ethics, Ideas, and Nature. 3 Credits. H
This course examines the ethical frameworks developed for thinking about, using, and protecting the natural world. Examples of topics include indigenous approaches to nature, the history of ecological ideas, environmental movements, the role of the state in managing resources, utilitarianism and progressivism, environmental lawmaking, wilderness advocacy, nature and theology, the rights of nature, and environmental justice. Students are introduced to the theories of duty ethics, justice ethics, utilitarianism, and right ethics, and required to apply ethical decision making to contemporary and historical environmental issues. Multiple perspectives on the history of human interactions with nature demonstrate the importance of reflecting upon the value systems inherent in human-centered environmental ethics and nature-centered environmental ethics. (Same as EVRN 336.)

HIST 337. History, Ethics, Modernity. 3 Credits. H
This course will examine the question "How has human dignity been preserved or violated in the modern age?" Cast in a global framework, some of the probable themes are the history of human rights; the moral universe of genocide; the (in)dignity of industrial work; the shifting status of the poor and the colonized and their treatment by the state and society; the impact of changing technology on ethics in war, peace and the environment; and the violation of dignity as a factor in collective resistance.
HIST 338. African American Urban Community and Class in the Midwest. 3 Credits. H
This course provides historical perspective on African Americans and the politics of economic class within black urban spaces from the end of Reconstruction to the post-World War II era. It focuses on the development of an upwardly mobile urban black middle class, and impoverished black urban "underclass," since the 1960s. Students are encouraged to have taken one of three courses: AAAS 104, AAAS 106, or AAAS 306.

HIST 340. The History of the Second World War. 3 Credits. H
A survey of the origins, course, and consequences of the war, 1930-1945. Political, economic, military, and social aspects will be dealt with in the context of their global effects. Extensive use will be made of motion pictures and other media.

HIST 341. Hitler and Nazi Germany. 3 Credits. H/W
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as JWSH 341.)

HIST 343. The Holocaust in History. 3 Credits. H
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as JWSH 343.)

HIST 344. Modern Jewish History. 3 Credits. H
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as JWSH 344.)

HIST 345. Hard Times: The Depression Years in America, 1929-1941. 3 Credits. H
An analysis of the experiences of the American people during the Great Depression. Attention will also be given to the global dimensions of the crisis, socioeconomic dislocation, cultural and institutional change, and the impact of the Asian and European wars.

HIST 346. Law and Society in America. 3 Credits. H
Law and lawyers have powerfully shaped American values and institutions. This course explores law's impact on American society from the age of European colonization through present. Topics include liberty, public order, race and ethnicity, the family, property, speech, environment, and self-government. The course also examines the changing images of lawyers and the law over time. Course materials include not just statutes and court decisions, but literature, imagery, and popular culture materials.

HIST 347. Environmental History of North America. 3 Credits. H
A survey of changes in the landscape and in people's perceptions of the natural world from 1500 to present. Topics include agroecology, water and energy, the impact of capitalism, industrialism, urbanization, and such technologies as the automobile, and the origins of conservation. (Same as EVRN 347.)

HIST 348. History of the Peoples of Kansas. 3 Credits. H
A survey of culture and society in Kansas from prehistory to the present. Topics include Native American life, Euro-American resettlement, Bleeding Kansas and the Civil War, agricultural settlement, urbanization and industrialization, depression and recovery, and modern Kansas in transition. Emphasis in the course will be on social and economic conditions, the experience of ethnic and racial groups, inter-racial relations, and the role of women.

HIST 349. Antisemitism: A Long History. 3 Credits. H/W
This course surveys the genesis, evolution and persistence of antipathy towards Jews and Judaism from late antiquity through the twentieth century, exploring its connections to religious and secular ideologies and its changing nature over time, place, and culture. Using primary source documents, religious and secular art and literature, the mass media and popular expression, the course examines how antisemitism was articulated and implemented, how Jews and Judaism were perceived and represented, and how Jews and Judaism responded to antisemitism. (Same as JWSH 349.)

HIST 350. The Korean War, 1950-1953. 3 Credits. H
An examination of the origins, pattern of development, and legacy of this still unsettled conflict, which in many ways set the tone for the entire post-1945 era of the Cold War. Points of emphasis will include the motives and policies of the major participants (Koreans, Americans, Chinese, and Soviets), as well as the effects of the war on their domestic politics and foreign policy positions.

HIST 351. American Indian and White Relations to 1865. 3 Credits. H
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HUM 348, ISP 348.)

HIST 352. American Indians Since 1865. 3 Credits. H
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will gain multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HUM 350 and ISP 350.)

HIST 353. Indigenous Peoples of North America. 3 Credits. NW H/W
This course surveys the history of the first peoples to inhabit North America from prehistory to present. Commonly and collectively referred to as American Indians, indigenous peoples include a diverse array of nations, chiefdoms, confederacies, tribes, and bands, each of which has its own unique cultures, economies, and experiences in dealing with colonial and neocolonial powers. This class seeks to demonstrate this diversity while at the same time providing an understanding of the common struggle for political and cultural sovereignty that all indigenous nations face. Indigenous nations that have developed a relationship with the United States will receive primary focus, but comparative reference will be made to First Nations of Canada.
HIST 356. At the Movies: U.S. History on the Silver Screen. 3 Credits. H
The motion picture was invented right here in the United States more than a century ago, and Americans have been going to the movies ever since. Movies have expressed their dreams and nightmares, aspirations and fears, hopes and dreads. Through a wide-ranging study of Hollywood films from the 1920s to the present, including the industry that created them and the people who watched them, this course explores what Americans have seen and felt at the movies.

HIST 357. History of the American West. 3 Credits. H
This course examines major themes in the history of the American West from Columbus to the present. The course includes topics familiar to the American West such as the California Gold Rush and the Battle of Little Bighorn. More importantly, it also offers a way of understanding North American history that is different from that of most U.S. history courses: through the lens of imperial settlement. The course focuses on: 1) cultural encounters between settlers and indigenous peoples as well as among Anglo settlers, the Spanish-speaking populations of the Mexican borderlands, and Asian immigrants to the Pacific Coast; 2) the impact of hunting, logging, ranching, and mining on the environment and the influence of the arid Western environment on human societies; and 3) the cultural symbolism of the American West in literature and film as an enduring national icon and ideology that has shaped settlement and regional history.

HIST 358. The Vietnam War. 3 Credits. H
This course is a survey of the Vietnam War. It covers the early days of Cold War, 1945-54, and all phases of the Vietnam War: the advisory phase (1955-64); the Americanization phase (1965-68); the Vietnamization Phase (1969-73); and the final phase, the Vietnam Civil War, 1972-75. This course covers the causes, course, conduct, and consequences of the war and in so doing provides a political, military, and social history of the war.

HIST 359. The Black Experience in the U.S. Since Emancipation. 3 Credits. H
An interdisciplinary study of the history and culture of Black people in America from Reconstruction to the present. Topics covered include an analysis of Reconstruction, Black leaders, organizations and movements, the Harlem Renaissance, migration, and race relations. Demographic variables covered include socio-economic class, education, political persuasion, and influence by avant-garde culture changes. (Same as AAAS 306.)

HIST 361. Youth, Sex, and Romance in Post-WWII United States. 3 Credits. H
Most people don’t think of sex and romance as having a history. And youth seems just a natural stage of life. But the nature of “courtship,” the definitions of sex, and the meaning of “youth” have changed dramatically over time, and people struggle over those definitions right up to the current day. In this class we try to make historical sense of those struggles by focusing on a volatile and complicated period in U.S. history: the years from World War II through the recent past. (Same as WGS 361.)

HIST 362. The American Way of War Since World War II. 3 Credits. H
This course is a survey of American Military History from World War II to current military operations. It covers the Cold War, the Korean War, the Vietnam War, both Persian Gulf wars, the global war on terrorism, and the war in Afghanistan. The course examines the causes, course, conduct, and consequences of the wars and covers advances in technology and doctrine, civil-military relations, foreign policy, and inter-service rivalry, providing a political, military, and cultural history of the wars.

HIST 363. Perspectives on Science, Engineering and Mathematics. 3 Credits. H
This course places the historical creation of scientific and technological knowledge within a broader social, cultural, and political context. Students will learn that the STEM disciplines are not merely a static body of facts, theories, and techniques but involve diverse, evolving processes which are continually generated and reformulated. By examining the role of failure in knowledge creation, the religious motivations behind science, and the continued legacy of racist practices in medicine, the construction and ramifications of “Big Science,” and other topics, students will go beyond the “genius inventor” narrative to question the presumed neutrality and progressive inevitability of scientific and technological advancements. Through a mixture of online activities, readings, videos, and synchronous online discussions, we will also examine the formulation and codification of “expertise,” investigate the process of professionalization within the STEM fields, and interrogate how science and technology have supported systems of oppression throughout history. (Same as HUM 363.)

HIST 364. Angry White Male Studies. 3 Credits. H
This course charts the rise of the “angry white male” in America and Britain since the 1950s, exploring the deeper sources of this emotional state while examining recent manifestations of male anger. Employing interdisciplinary perspectives this course examines how both dominant and subordinate masculinities are represented and experienced in cultures undergoing periods of rapid change connected to modernity as well as to rights-based movements of women, people of color, homosexuals and trans individuals. (Same as AMS 365, HUM 365 and WGS 365.)

HIST 365. Invention of the Tropics. 3 Credits. H
This course surveys the history of the tropical environment and its diverse peoples from early European encounters until the current boom in extractivism and ecotourism. It focuses on portrayals of the tropics in historical travel accounts and films. Through these sources, we will seek to understand cross-cultural interactions, and the ways in which science, technology, and tourism have reconstructed these environments over time. Case studies are drawn from Latin America, Africa, Oceania, and/or Asia. (Same as EVRN 365.)

HIST 367. Magic and Superstition in European History. 3 Credits. H
This course traces the changing role and understanding of magic in European culture, religion, politics and science from the late Middle Ages through the early 20th century. Topics may include alchemy, miracles, magical healing, witchcraft, demons and demonic possession.

HIST 368. A History of Afro-Latin America. 3 Credits. H
This course examines the history of Africans and their descendants in Latin America. In this region, Africans could be found serving as militia commanders, laboring as skilled tradesmen, running their own businesses, working as household servants, and toiling on plantations. Students will study the varied experiences of these men and women across colonial and national boundaries. Topics include: acculturation/Creolization, manumission, family formation, social networks, economic roles, political mobilization, and interaction with indigenous peoples.

HIST 369. Colonialism and Revolution in the Third World, Honors. 3 Credits. NW H
This course will study the structure and dynamics of colonialism and neocolonialism in the third world beginning in the 19th Century and continuing to the 1980s. It will also examine responses to these systems, from small-scale resistance to nationalistic revolutions. Attention will be given to the relationship between ideology and collective behavior. Case studies will
be drawn from Africa, Asia, and Latin America. Prerequisite: Membership
in the University Honors Program or permission of instructor.

HIST 371. Tequila, Tango, Carnival, City. 3 Credits. H
This course explores the history of modern urban Latin America through
the lens of popular culture. Elements of culture that will be examined
include music, food, soccer, cinema, photography, and art of the 19th and
20th centuries. Some of the themes likely to be explored are collective
identity, exile, travel, cultural resistance to state violence, public rituals,
and the evolution of the city and its cultural spaces.

HIST 373. The Supreme Court and Religious Issues in the United
States. 3 Credits. H
Historical study of the interpretation of the religion clauses of the First
Amendment with special reference to the questions of establishment, the
free exercise of religion, freedom of religious belief, worship, and action,
and religion and the public schools. Not open to freshmen. (Same as
REL 373.)

HIST 374. The History of Modern American Conservatism. 3
Credits. H
In this course students will gain an in-depth knowledge of modern
American conservatism, primarily through the lens of political history.
We will focus on the development of the conservative political movement
from the 1930s through contemporary times. We will ponder several
interrelated questions: how did conservatives build a movement
capable of exercising political power; what do conservatives mean when
they discuss equality, liberty, and freedom; how have conservatives
conceptualized the role of the United States in the world; what role have
ideas played in the conservative movement; how have different factions
of conservatives fought for control of their movement while struggling to
maintain political unity; and how have conservatives governed? Finally,
we will contextualize modern American conservatism in the broader,
dynamic political culture of the United States.

HIST 376. Immigrants, Refugees, and Diasporas. 3 Credits. H
This course looks at people who choose to cross political borders,
are forced to flee beyond them, or constitute ethnic minorities living
outside a homeland. Examining these groups from a global historical
perspective, this course explores how ethical debates about the rights
of non-citizens and ethnic outsiders have evolved in the modern age.
Students learn about important issues that have affected the lives of
immigrants, refugees, and diasporas, including citizenship, mobility,
cultural representation, asylum policies, and the concept of human rights.
The course concludes with a look at contemporary manifestations of these
issues, from debates over the place of Muslims in Europe to discussions
about immigration policy in the United States. (Same as GIST 376.)

HIST 377. Everyday Communism in Eastern Europe. 3 Credits. H
This course investigates through film, literature, memoirs, photography,
arachitecture, and scholarship the experience of ordinary citizens under
Soviet-style communism in Eastern Europe. We study the ways people
supported, resisted, opposed, and merely got by under state socialism
from the late 1940s to the collapse of Communism in 1989.

HIST 378. Beyond the Iron Curtain: Soviet Perspectives on the Cold
War. 3 Credits. H
This course reimagines the Cold War through Soviet eyes, challenging
assumptions and offering less familiar perspectives on a global conflict.
Analyzing Soviet and American mass media, popular culture, declassified
documents, and personal stories, students investigate the following: Who
started the Cold War, and who won it? Was it a time of relative peace or
paranoia? How did the two sides view each other and did espionage help
them know each other better? How did people and culture sometimes
cross the iron curtain? What were the Soviets doing in places like Latin
America and the Middle East? And why were both sides so concerned
with Olympic athletes, ballet defectors, and cosmonauts?

HIST 379. Europe in Crisis: Empire, Extremism, and War,
1890-1945. 3 Credits. H
This course examines the sense of crisis that defined European life
in the first half of the twentieth century, an era defined by economic
spasms, cultural revolts, extreme political ideologies, and two massively
destructive world wars. We will examine the period between 1890 and
1945 as a violent, at times apocalyptic, clash between three competing
ideologies - communism, fascism, and liberal democracy - demonstrating
how extremism both fed upon and created a sense of crisis.

HIST 381. Enemies of Ancient Israel. 3 Credits. H
An exploration of the social world of the Bible through its antagonists
and their cultures. We will examine the so-called "Bad Guys of the Bible"
using the lenses of history, archaeology, geography, and religion to better
understand their cultures and how they are portrayed in the biblical text.
(Same as JWSH 387 and REL 387.)

HIST 382. Jerusalem Through the Ages. 3 Credits. H
As a prominent site in the religious and cultural histories of Judaism,
Christianity, and Islam, Jerusalem is uniquely situated as one of the
world's most sacred cities. For more than 3,000 years, this city has been
a focal point of religious and political activity. Through the critical reading
of historical and religious texts, and archaeological data, this course will
explore the historical development of Jerusalem as a sacred place in
Judaism, Christianity, and Islam. (Same as CLSX 382, JWSH 382 and
REL 382.)

HIST 387. Alexander the Great: Man and Myth. 3 Credits. HT H
This course explores the life, times, and legacy of Alexander the Great
(356-323 BCE). It covers the historical context of ancient Greece and
Macedon from which Alexander emerged; his engagement with ancient
Greek, Egyptian, and Persian cultures; his military campaigns; his aims
in creating an empire; and the immediate aftermath of his conquests.
In addition, the course considers the role of great men in history and
historiographical problems in reconstructing the past. It also explores how
the image of Alexander has been transmitted, interpreted, challenged,
and reshaped from antiquity to the present. Topics may include: the use
of the memory of Alexander by later Greeks and Romans; the medieval
Alexander tradition; responses to Alexander in Middle Eastern and Indian
thought and literature; the legacy of Alexanders conquests in the age of
empires; his transformation in Hollywood; and his contested place in the
modern political dispute between Greece and North Macedonia. (Same as
CLSX 322.)

HIST 388. Julius Caesar: Man and Myth. 3 Credits. HT H
This course explores the life, times, and legacy of Julius Caesar (c.
100-44 BCE). It covers Caesars early political career, his military
campaigns, and his rise to power through civil war, with special attention
paid to his aims, political reforms, and the institutions that enabled his
rise to power. In addition, it considers the role of great men in history and
historiographical problems in reconstructing the past. It also explores how
the image of Caesar has been transmitted, interpreted, challenged, and
reshaped from antiquity to the present. Topics may include: the impact of
Julius Caesar in Rome with the creation of an empire ruled by Caesars;
Medieval responses to Caesar as tyrant, king, and emperor; Caesar as a
paragon of populist tyranny from the Renaissance to the present;
the legacy of his literary output and the Romantic image of Caesar as a
genius; his impact on the modern age of empires; and re-imaginings of
Caesar in film, TV, and video games. (Same as CLSX 323.)

HIST 389. Topics in Western History:_______. 3 Credits. H
A study of a specialized theme or topic in Western History. Students will
examine major issues and methods of historical study through the study
of...
of a specific historical period or topical area. This course grants HIST Category I credit. May be repeated for credit when topic varies.

HIST 390. Topics in Non-Western History: ______. 3 Credits. H
A study of a specialized theme or topic in non-Western History. Students will examine major issues and methods of historical study through the study of a specific historical period or topical area. This course grants HIST Category II credit. May be repeated for credit when topic varies.

HIST 391. Topics in (Honors): ______. 3 Credits. H
A study of a specialized theme or topic in History. May be repeated for credit when topic varies. Open only to students admitted to the University Honors Program. Prerequisite: Permission of instructor.

HIST 392. Huns, Turks, and Mongols: The Nomad Factor in Asian History. 3 Credits. NW H/W
This course introduces the history of major nomadic powers in Eurasian Steppe and their impact in the world from the first Millennium BCE to around 1500 AD. The main topics include the culture of the Scythians, the Hun and Xiongnu confederacy, the Mongol conquest, and the Turkish empires in Central and West Asia. It investigates the natural and human forces that shape the identities of the nomads and their changing images in history.

HIST 393. The Silk Road. 3 Credits. H
A comprehensive introduction to the cultural influence and material exchange among major civilizations along the Silk Road. It covers the period of more than one thousand years between the 2nd and the 15th centuries CE, during which time forces wielded by the Persians, the Chinese, the Indians, the Tibetans and the Mongols shaped the geopolitical landscape of the vast region that spreads from the Caspian Sea to the Gobi Desert. Students explore the role of the Silk Road in the formation of the religious and ethnic identities of these civilizations, as well as their perceptions towards one another. Along with textual materials, the course uses extensive visual and musical materials to present interesting phenomena, such as Sogdian burial practice, Arab accounts of Tang China, Nestorian Christianity at the Mongol court, and Marco Polo's journey to the East. The course begins and concludes with discussion of the contemporary significance of the Silk Road as a historical category.

HIST 394. Made in China: Chinese Business History. 3 Credits. H
This course examines the development of business culture in China since 1900. Looking particularly at how it has transformed and adapted in response to China's own changing political environment as well as China's changing engagement with the West and Japan. We examine cases of western businesses in China and Chinese businesses in both China and the West. Topics include the rise of industrialism, the role of foreign investment, China's role in the global market place, the relationship between business and the state, state-run enterprises, factory life, entrepreneurialism, advertising, consumerism, and economic nationalism.

HIST 395. History of Sushi. 3 Credits. H
Sushi, now served at Midwestern supermarkets and university cafeterias, reveals the transformation of an ancient Japanese dish into a global phenomenon. This course takes familiar Japanese dishes like sushi and ramen as starting points to ask how food accretes or sheds national characteristics in an age of globalization. To learn the origin of sushi and ramen, the class traces the evolution of the diet in the context of the development of Japanese civilization. Using the methodology of food history, course assignments include short research papers on Japanese foodstuffs; analyses of primary sources from statistics to comic books to movies; and short essays drawing from participant observation of Japanese foods now available locally.

HIST 397. From Mao to Now: China's Red Revolution. 3 Credits. W
This course on China's Communist revolution considers the evolution of Maoism, or Chinese Communism, from its ideological origins through its implementation during and after the Chinese Communist revolution. It examines major Maoist movements such as Land Reform, the Great Leap Forward, the Cultural Revolution, and the cult of Mao. It further considers the globalization of Maoism by examining examples of other Maoist revolutions and revolutionaries in places like Cambodia, Peru, and Nepal.

HIST 398. Introduction to History of Japan: Anime to Zen. 3 Credits. NW H/W
This course provides a foundation for study of Japanese history. It combines lectures on the scope of Japanese history over the past 2,000 years with discussions of topics key to the development of Japanese civilization such as religion and literature. We analyze how different media, such as film, Japanese animation (anime), and art can be used as historical sources, and how these shape our understanding of Japan. Students hone their ability to analyze both thematic and historical questions through writing assignments and discussions.

HIST 399. The Samurai. 3 Credits. NW H/W
Japan's warrior class, the samurai, dominated politics and society for more than half of Japan's recorded history. This course traces the history of the samurai from their origins to the dissolution of their class in 1877, examining their military role, philosophy, and cultural contributions. It also considers continued references to the "spirit of the samurai" in the twentieth century.

HIST 400. Indigenous People of the Great Plains. 3 Credits. H
This course examines the emergence of horse-mounted indigenous societies in the Great Plains; the nature of the indigenous societies of the Great Plains in the nineteenth century; conflicts with the United States; the beginning of the reservation period; and indigenous people of the Great Plains in the modern era. Readings combine primary documents and novels with selections from anthropology, social history, and environmental history. (Same as ISP 400.)

HIST 401. Case Studies in: ______. 2-3 Credits. H
Examination of a limited aspect of a general subject; other aspects of the same subject may be offered other semesters.

HIST 402. War and Society in Greece and Rome. 3 Credits. H/W
This course explores the military history of the ancient world, with a focus on the connections between warfare and political, social, and cultural developments. Through extensive reading, analysis, and discussion of a wide variety of ancient sources (literary, epigraphic, archaeological) and contemporary scholarship, this class will survey both the major developments in warfare in Greece and Rome, while at the same time investigating the relationship of military institutions, technologies, tactics, and strategies to the key political and economic changes, social structures, and value systems of antiquity. Beyond exploring famous and influential campaigns and battles (Persian Wars; Peloponnesian War; rise of Macedonia; Punic Wars; Roman civil wars; barbarian invasions), topics will include: hoplite warfare and the emergence of Sparta and Athens; sea-power, democracy, and imperialism; citizen militia and professionalization in Rome; trauma, triumph, and memorialization; gender roles and ethnic identity. (Same as CLSX 402.)

HIST 404. Technology and the Modern World. 3 Credits. H
We live in a technological world. From the moment we wake up until the moment we fall asleep, our lives as modern human beings are defined by the existence of and our interactions with various technologies. Far from neutral, technologies embody the values, priorities, and power disparities of a society. As a result, their creation, use, and proliferation raise
profound ethical questions such as their environmental impact, equitable access, and potential unintended consequences or “spillover effects”. In this class, we will apply ethical codes to key case studies within the history of technology to understand how moral issues inherent within contemporary discussions of emerging technologies have developed and changed over time.

HIST 405. Women, Gender, and Sexuality in the North American West. 3 Credits. H
This course will provide students with an overview of how the history of women have profoundly shaped and given meaning to the development of the North American West (which includes present-day states and provinces in the U.S., Canada, and Mexico). The class will examine the lives of women who represent diverse backgrounds, lands, and time periods in this western region. In addition to women, lectures, readings, and discussion will focus on the themes of gender, masculinity, class, race, ethnicity, sexuality, labor, and environment. Broad in chronological scope that spans pre-contact into the twenty-first century, this course is not a comprehensive survey. Rather, the class will examine how women and groups of women across the region defended, survived, explored, cultivated, and imagined the West as a place that defined their homes, migrations, settlement patterns, as well as sites of captivity, displacement, war, and development. (Same as WGSS 305.)

HIST 407. History of Science in the United States. 3 Credits. H
Traces the evolution of a scientific tradition in American culture. Examines the growth of scientific ideas and institutions under European and indigenous influences. Studies the interactions of science with technological, theological, political, and socio-economic developments.

HIST 408. History of the Great Plains. 3 Credits. H
This course is an overview of the history of the North American Great Plains up to 1900. Today's plains region comprises ten American states and three Canadian provinces, but it also connects dozens of Indigenous nations that (historically and presently) overlapped through seasonal migrations, trade, resources, and sacred lands. The Great Plains is a unique geographical area that is united by several environmental traits: flatness, aridity, unusual elevations, and an abundance of grasslands. It is also a region of North America characterized by significant cultural diversity, contested spaces, and national myths of empire and settlement. Lectures, readings, and discussion will cover these topics chronologically while emphasizing major themes of ethnicity, race, gender, class, environment, politics, and economic development.

HIST 410. The American Revolution. 3 Credits. H
This course will focus on the meaning the American Revolution had for different groups of Americans. Particular emphasis will be on the relationship between ideology and experience, and the impact of the Revolution on such groups as women, slaves, Indians, African-Americans, the poor, merchants, and loyalists.

HIST 412. The Civil War in America, 1828-1877. 3 Credits. H
The United States from the rise of sectional conflict through the disintegration and reunification of the Union.

HIST 415. The Rise of Civilization. 3 Credits. S
A study of evolutionary processes leading to the birth of the early great urban civilizations of the Old World and the New World. Patterns of growth and similarities and differences in the rise of urban complexes and states in Mesopotamia, Egypt, the Indus Valley, and in Mexico/Guatemala and Peru.

HIST 441. Aviation in American Culture. 3 Credits. H
This course examines the complex relationship between powered flight and American society from the invention of the airplane to the rise of drone warfare. Through a mixture of scholarly works, personal accounts, and primary sources, we will investigate how use of and access to the airplane became a focal point for the construction and deconstruction of race, gender, and class distinctions and an important site in the struggle for equality and social justice. Using the airplane as a lens, we will recognize and challenge key assumptions within American technoculture such as technological messianism, technological neutrality, and the role of government in technological development. (Same as HUM 373.)

HIST 442. The Politics of Racial Injustice in the United States. 3 Credits.
In this course, students will examine, in detail, four historical eras in which the American people struggled over anti-Black racial injustice in the United States. While the role and efficacy of social change movements andgrass-roots activism in that struggle will be analyzed, the course will emphasize political, policy, and institutional responses and remedies to the problem of American racism. In particular, discussions, readings, and assignments will evaluate the successes and failures of specific legislative, judicial, administrative, and organizational interventions. How and why these responses developed and fared as they did-as well as the debates over their efficacy-will be the focal point of this course. (Same as AAAS 442.)

HIST 450. Study Abroad Topics in: ______. 1-5 Credits. H
This course is designed for the study of special topics in History at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

HIST 460. Topics in: ______. 1.5 Credits. H
An eight-week course devoted to a specific historical topic. May be repeated for credit as topics change.

HIST 461. The Asia-Pacific War, 1937-1945. 3 Credits. H
This course introduces students to the Asia-Pacific War, which began with the outbreak of fighting between Japan and China in July 1937 and ended with the unconditional surrender of the Japanese Empire to Allied forces in August 1945. The course revolves around three themes, which are explored through lecture, discussion, and extensive use of film and visual materials: the geopolitical and colonial origins of the conflict; the concept of total war and the political and social transformations it unleashed on all belligerent nations; and the ideologies on the home front justifying the mass slaughter of soldiers and civilians. There is also discussion about how people in Japan, the United States, China, Korea, and other countries remember the war in the postwar period.

HIST 475. Professional Skills in History. 3 Credits. H
This course will introduce students to the fundamentals of planning and organizing job search strategies. Students will identify their professional interests, research specific careers, and prepare applications to positions or internships based on the skills, experience, and knowledge acquired in their History courses. The final project assignment will consist of preparing a digital portfolio that will include a cover letter, c.v., or resume, lists of specific positions or internships they could apply for, and a video of a mock professional interview.

HIST 480. Travelers' Tales of the Middle East. 3 Credits. H
This reading-intense seminar examines the multiple visions of "the Orient" that appeared in the letters, memoirs, and novels of Western travelers to the Middle East in the nineteenth and twentieth centuries. We examine the rise of tourism and travel-writing within the Middle East and their links to European imperialism. Working closely with primary source documents, we question what these highly personal and often misinformed types of writing can tell us about the politics and culture of everyday life in the Middle East.

HIST 481. From Harem to the Streets: Gender in the Middle East, 1900-Present. 3 Credits. H
This reading-intensive seminar examines shifts in gender roles and expectations in the Middle East during the twentieth and twenty-first centuries. The course begins with the importance of harem within Middle Eastern society, and traces Middle Eastern women's increasingly public presence in national movements, feminist activism, and peace protests as well as the impact of Western standards of marriage, child-rearing, beauty, and sexuality on gender roles. The course uses primary and secondary sources to analyze how gender identity is informed by religion and culture and grounded in specific historical moments.

HIST 482. Israeli-Palestinian Conflict: An Introduction. 3 Credits. S

This course provides an introduction to the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. (Same as GIST 329 and JWSH 329.)

HIST 492. Readings in History. 1-4 Credits. H

Investigation of a subject selected by the student with the advice and direction of an instructor. Individual reports and conferences. Two (2) Readings in History courses may be applied to the major and no more than one (1) may be applied to the minor. Prerequisite: Ten hours of college history including at least two upper-class courses and a "B" average in history. Consent of instructor.

HIST 493. History Research Internship. 1-3 Credits. H

The course allows students to work with a faculty mentor and learn firsthand the tasks that historians undertake to research and present their findings. Potential student assignments include database entry and retrieval, translation, fact checking, and compiling sources. Graded on a satisfactory/unsatisfactory basis. Prerequisite: At least one 300-level history course; declared major in history; and permission of the instructor.

HIST 494. Service Learning in History. 1-3 Credits. H

This course is designed to give students the opportunity to apply historical knowledge and ideas gained through course work to real-life situations in volunteer service agencies and community centers. Open to History majors and others with significant History backgrounds. Permission of instructor is required.

HIST 500. History of the Book. 3 Credits. H

Brief history of writing materials and handwritten books; history of printed books from the 15th century as part of cultural history; technical progress and aesthetic change. Offered every second year. (Same as ENGL 520.)

HIST 501. Topics in Western History: ______. 3 Credits. H

A study of a specialized theme or topic in western History. Students will examine major issues and methods of historical research through the study of a specific historical period or topical area. This course grants HIST Category I credit. May be repeated for credit when topic varies. Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor.

HIST 502. The Age of Heroes: Early Greece. 3 Credits. H/W

This course explores the Greek Bronze and Dark Ages and in particular the relationship of the Iliad and the Odyssey to early Greek history. The course is organized around current methods, problems, and debates in the fields of Greek history, archaeology, and Classics. Topics include the rise and fall of the Minoan and Mycenaean worlds, the historicity of the Trojan War, and social, religious, and political institutions of the Dark Ages. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 502.) Prerequisite: Any CLSX or HIST course.

HIST 503. The Ancient History of the Near East. 3 Credits. H

History of the rise of civilizations in the ancient Near East from the earliest time to the Muslim conquest of the early seventh century, including the areas of Mesopotamia, Egypt, Syria, Palestine and Asia Minor. An archaeological approach is used in focusing attention on the cultural phenomena and achievements of the peoples of these areas, including the Babylonians, Assyrians, Persians, ancient Israelites, Greeks and Romans.

HIST 504. Rise of Athens and Sparta. 3 Credits. H/W

This course explores the history of Archaic and Classical Greece, focusing on the rise and fall of the rival states of Sparta and Athens. The course is organized around current methods, problems, and debates in the fields of Greek history and Classics. Topics include the emergence of the Greek polis; Greek colonization; developments in political, religious, and social institutions, including the Spartan constitution and the rise of Athenian democracy; the changing definitions of personal, cultural, and national identities; cultural, political, and economic tensions between rival Greek city-states and neighbouring cultures, especially Persia and Macedonia. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 504.) Prerequisite: Any CLSX or HIST course.

HIST 506. Roman Republic. 3 Credits. H

This course investigates the origins, development, and eventual crisis of the Roman Republic, from its foundation in the eighth century BC to Civil War in the first century BC. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include the contexts and causes for the rise of Rome, the growth, development, and eventual collapse of the Roman republican constitution; the impact of empire on Roman society, culture, religion, economy, and identity. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 506.) Prerequisite: Any CLSX or HIST course.

HIST 507. Early Roman Empire. 3 Credits. H

This course investigates the establishment and development of the Roman Empire, from the rise of Augustus to the peak of Roman power and prosperity in the second century AD. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include the creation of the imperial system; developments in the role of the emperor and the Roman government; continuity and transformation in society, culture, religion, economy, and identity with the shift from republic to empire; daily life across the empire and in the army. These topics will be studied through extensive analysis and discussion of literary, documentary, and archaeological sources, and close engagement with perspectives from works of contemporary scholarship. No knowledge of the ancient languages is required. (Same as CLSX 507.) Prerequisite: Any CLSX or HIST course.

HIST 508. Late Roman Empire (284-527). 3 Credits. H

This course investigates the history of the later Roman Empire, from the height of its power in the second century AD to the fall of the Western Roman Empire in the fifth century AD. The course is organized around current methods, problems, and debates in the fields of Roman history and Classics. Topics include continuity and change in Roman culture, identity, and institutions; the Christianization of the empire; contact and conflict between Romans and the "barbarians"; political decline and daily life across the empire. These topics will be studied through extensive
HIST 510. Topics in Non-Western History: _____  3 Credits.  H
A study of a specialized theme or topic in non-Western History. Students will examine major issues and methods of historical research through the study of a specific historical period or topical area. This course grants HIST Category II credit. May be repeated for credit when topic varies. Prerequisite: Successful completion of a history course numbered below 500, or permission of instructor.

HIST 511. Foodways: Native North America.  3 Credits.  H
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HUM 551 and ISP 551.) Prerequisite: Upper division course on indigenous/ American Indian history, or permission of the instructor.

HIST 512. Foodways: Latin America.  3 Credits.  H
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HUM 552, ISP 552, and LAC 552.) Prerequisite: Upper division course on Latin America or permission of the instructor.

HIST 514. The Civil Rights Movement.  3 Credits.  H
An examination of the Civil Rights Movement in American History. Emphasis is placed on the activities of major Civil Rights organizations, Civil Rights legislation and its impact on American life, and conflicts between integrationist and separatist forces in politics, economics, education, culture and race relations in the United States. (Same as AAAS 511.)

HIST 516. Capitalism and the Black Experience.  3 Credits.  H
This is an upper level course designed to analyze the experiences that define the African American relationship to the American economy. The course begins with the slave trade and ends in the present. It explores and explains how African American economic development intimately intertwined with the movement for freedom. Students will learn how African Americans addressed issues around slavery, housing, banking, capitalism/socialism, underground economy, and gentrification. This course is chronological in nature with thematic elements. Lectures will provide brief histories and conceptual framework for readings. This background will help students understand and explore how black identity, culture, and politics interact with economy. However, the bulk of the course will operate as a seminar. By the end of the course, students will be able to summarize African American past experiences with capitalism and its relevance to contemporary economic issues affecting African American people today. (Same as AMS 518.) Prerequisite: Any American Studies or History Courses on American History.

HIST 520. The Age of the Renaissance.  3 Credits.  H/W
A survey of economic, political, social, and cultural developments in Italy in the 14th and 15th centuries, with special attention to those elements in the life of the age which look forward to the modern world.

HIST 521. The Age of the Reformation.  3 Credits.  H/W
The Protestant revolt of the 16th century.

HIST 522. The Age of Religious Wars, 1540-1648.  3 Credits.  H/W
The Catholic or Counter-Reformation and the wars of religion, including the Thirty Years War.

HIST 524. The French Revolution.  3 Credits.  H/W
A study of the origins, development, and impact of the French Revolution, beginning with a description of France in the 18th century and ending with a look at France under Napoleon.

HIST 525. France and Its Empire: From Acadia to Zidane.  3 Credits.  H/W
A study of modern France through the lens of its overseas empire and the relations between French colonies and the metropolitan "Hexagon." This course studies the establishment of New France in the early modern period, the relationship between the French Revolution and colonies like Haiti, the French obsession with North Africa in the nineteenth century, the "Second Empire" at home and abroad, the French role in the Scramble for Africa and the global age of imperialism, the participation of colonial troops in the world wars, the post-World War II age of colonial wars and decolonization, and the contemporary role of imperial memory and immigrants to France from its former colonies. Prerequisite: Requires a prior history course or permission of the instructor.

HIST 527. Recent European History, 1870 to the Present.  3 Credits.  H/W
A study of the issues and themes that have shaped the contemporary European world, exploring European politics, economy, and society from the zenith of Europe's power and influence at the turn of the century through two world wars and into the contemporary era. This survey begins with the period of consolidation of a system of major national states in western Europe and ends with the search for alternatives to that system in the break-up of empires and movements for European unity in the post-World War II era. The course also considers the emergence of the states of central and eastern Europe and examines the impact of the Russian Revolution and the Soviet state on European affairs. Not open to those who have credit in either HIST 435 or HIST 436.

HIST 528. Economic History of Europe.  3 Credits.  S/W
An introductory study of European economic history from the Middle Ages to the 1980s. Investigates the sources of economic growth, and the interaction between economic forces and social institutions. Topics covered will include the rise of commerce, the agricultural and industrial revolutions, imperialism, the Great Depression, and European recovery after World War II. (Same as ECON 535.) Prerequisite: ECON 104 or ECON 105 or [(ECON 142 or ECON 143) and (ECON 144 or ECON 145)].

HIST 530. History of American Women--Colonial Times to 1870.  3 Credits.  H
A survey of women's history in the United States that will consider women's roles as housewives, mothers, consumers, workers, and citizens in preindustrial, commercial, and early industrial America. (Same as AMS 510 and WGSS 510.)

HIST 531. History of American Women--1870 to Present.  3 Credits.  H
A survey of women's history in the United States that will include radical and reform movements, the impact of war and depression,
professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and WGSS 511.)

HIST 541. British History, Tudors and Stuarts. 3 Credits. H
An introduction to the impact on the British Isles of the Reformation and Renaissance; the development of the Tudor state; Parliament; the Stuart monarchy; the Anglican counter-reformation; civil war; the Cromwellian experiment. Prerequisite: A prior history course, or permission of the instructor.

HIST 545. British History from Monarchy to Democracy. 3 Credits. H
A study of Britain's recovery from civil war; state formation and national identity; ideological conflict; the Revolution of 1688; religion and secularization; social stability and commercial expansion; reform; threats to the state, and the American revolution; Britain's survival of the French Revolution; the breakdown of the ancient regime in 1828-32. Prerequisite: A prior history course, or permission of the instructor.

HIST 548. Rise of Modern Britain. 3 Credits. H
A study of the rise of modern Britain from the 1832 Reform Act, a major step on the path from aristocratic government to mass democratic politics. It covers the politics and society of the Victorian era, the extension of British influence overseas, the origins and social impact of two world wars, the creation of the Welfare State, the loss of Empire, and Britain's entry into Europe.

HIST 561. Liberation in Southern Africa. 3 Credits. W
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and POLS 561.)

HIST 563. U.S. Environmental Thought in the 20th Century. 3 Credits. H
Explores both leading and dissident ideas that Americans have had about the natural world since 1900. Broad chronological periods are explored in some depth, including the Progressive Era, New Deal, Cold War, the Sixties, and the Reagan Eighties. The course uses articles and books, as well as visual and aural forms of communication. Commercial speech, as well as scholarly and literary works, are considered. (Same as EVRN 563.) Prerequisite: EVRN 148 or HIST 129, or permission of instructor.

HIST 564. Medieval Russia. 3 Credits. H
Political, economic, social, cultural, and religious developments of Russia from the beginnings of the Russian state in the 9th Century through the 17th Century.

HIST 565. Imperial Russia. 3 Credits. H/W
The history of Imperial Russia from Peter the Great's reinvention of the empire in the eighteenth century to its demise in the revolutions of 1917. Placing Russia in a global context, the course examines change and continuity in politics, society, economy, and culture and looks at Russia as a diverse empire between Europe and Asia. Readings include historical scholarship and some of the classics of Russian literature.

HIST 568. Rise and Fall of the Soviet Union. 3 Credits. H/W
An exploration of the Soviet Union's creation, evolution, collapse, and legacy in contemporary Russia and Eurasia. Drawings on historical scholarship, literature, music, and film, the course examines the major trends and developments in Soviet politics, ideology, society, economy, and culture. Special attention is paid to how the multiethnic Soviet state's rise and fall reflected broader changes in the world during the "Soviet century.

HIST 570. The Middle East After World War II. 3 Credits. NW H/W
An intensive study of developments and changes in the Middle East since World War II. Topics and themes will vary, but may include the long-lasting effects of European imperialism, Big Oil and the energy crisis, the Arab-Israeli conflict and peace process, American intervention in the Middle East, minority communities, and the revival of Islamic and popular protest movements.

HIST 571. Pre-Hispanic Mexico and Central America. 3 Credits. NW S/W
A survey of indigenous, Pre-Hispanic cultures of Mexico and Central America, including Olmecs, Teotihuacan, Mayas, Zapotecs, Toltecs, and Aztecs. This course teaches how to interpret art, architecture, artifacts, and culture change in the context of iconography and symbols, metaphysical beliefs and ritual practices, crafts and technologies, trade and exchange, social inequality and conflict resolution, and the relationships among these cultures and their environments. (Same as ANTH 506 and LAC 556.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, Indigenous Studies, History, or permission of instructor.

HIST 572. Ancient American Civilizations: The Central Andes. 3 Credits. W
An archaeological survey of the ancient peoples of Peru and neighboring countries in South America. The origins of complex societies on the coast and in the Andean highlands will be reviewed with special consideration of the role of "vertical" environments in the development of Andean social and economic systems. Cultures such as Chavin, Moche, Nazca, Huari, Tiahuanaco, Chimú, and the rise of the imperial Inca state will be examined through artifacts, architectural remains, and ethnographic documents. (Same as ANTH 508 and LAC 558.) Prerequisite: A course in Anthropology, Latin American Studies, Art History, Museum Studies, History, or Indigenous Studies, or permission of instructor.

HIST 574. Slavery in the New World. 3 Credits. H/W
Slavery, slave culture, and the slave trade in the U.S., Latin America, and the Caribbean will be examined comparatively. Attention will also be given to African cultures, the effects of the slave trade on Africa, and the effects of African cultures on institutions in the New World. (Same as AAAS 574.)

HIST 575. The Many Faces of Mexico. 3 Credits. H/W
From Aztecs, Incas, and Mayas, to Spaniards, Mestizos, and Indios to Zapotistas, Narcos, and Luchadores, Mexico has been a place of vast social and cultural diversity. This class examines the history of Mexico and its many facets from the pre-Columbian period through the present. Students examine such topics as conquest and colonialism, independence and revolution, race, politics, and religion. Prerequisite: An earlier course in history or permission of the instructor.

HIST 576. History of the Caribbean and Central America. 3 Credits. H/W
A comparative examination of Central America and the Caribbean. Emphasis is on understanding the complex social, cultural, and political development of this broad region from the pre-Columbian period until the modern era. Topics include: conquest, colonization, racial and ethnic diversity, economic development, political conflict, and globalization. Prerequisite: HIST 120 or HIST 121.

HIST 577. The Andean World. 3 Credits. H
The Andean environment is defined by its mountains, but includes all of the earth's major biomes: from tropical rainforest to the world's oldest and driest desert. These diverse landscapes have nurtured one of the most ancient and durable, yet diverse sets of Indigenous cultural lifeways. Most of the Andes was governed by a single power during the Inca and Spanish colonial eras, but the region is now divided between seven independent states with their own regional traditions. The Andean World has long been recognized as a laboratory for understanding the relations between nature and culture, and the tensions between tradition and revolutionary change. This course will examine the history of this region from a long-term perspective, from its indigenous roots to contemporary struggles over globalization and extractivism. (Same as EVRN 577, ISP 577 and LAC 577.) Prerequisite: Prior 300+ level course in related discipline (ANTH, EEB, EVRN, HIST, LAC, SPAN, etc.) or permission of instructor.

HIST 579. The History of Brazil. 3 Credits. H/W
The history of Brazil from European discovery to the present with emphasis on social and economic change. Topics discussed will include the Indian, African, and European backgrounds, slave society, the frontier in Brazilian development, cycles of economic growth and regionalism, the role of foreign capital, industrial development, labor, urban problems, the military in government, and human rights.

HIST 580. Economic History of Latin America. 3 Credits. H/W
A study of the changing economic conditions in Latin America from Colonial times through the Twentieth Century and the effect of these conditions on Latin American society. Emphasis will be on the major theoretical issues of development economics, patterns of growth, and suggested strategies for economic development. Analysis will center on changes in agriculture, industry, labor, finance, transportation and technology, urbanization, immigration, role of women, export and commerce, and foreign involvement.

HIST 581. The Japanese Empire. 3 Credits. H
Although the history of modern Japan was for a long time conventionally understood within the parameters of the nation-state, in fact modern Japanese identity coalesced around empire. This reading-intensive course explores the Japanese empire from its origins in the late nineteenth century to its collapse at the end of World War II in 1945, as well as the empires post-1945 legacies in Asia. Particular attention is paid to different forms of Japanese colonial domination practiced in Hokkaido, Okinawa, Taiwan, Korea, the South Seas Islands, Manchuria, occupied China, and Southeast Asia. We also study the ways in which the empire and colonial subjects, in turn, transformed Japanese state and society. Furthermore, we examine transnational themes the Japanese empire shared with other modern empires in areas such as colonial violence, gender, migration, settlements, war mobilization, and historical memories of the colonial experience. Prerequisite: Successful completion of an East Asian history or culture course numbered below 500; or a history course numbered below 500; or permission of the instructor.

HIST 583. Imperial China. 3 Credits. NW H/W
An intensive survey of China's traditional civilization and its history, with emphasis on the last centuries of imperial rule under the Sung, Yuan, Ming, and Ch'ing dynasties (to 1850). (Same as EALC 583.)

HIST 584. Modern China. 3 Credits. NW H/W
An intensive survey of China's history from the early 19th century to the present. Key topics include the decline of the traditional system, the rise of communism, the Maoist era, and the tensions of change and control in the 1980s and 1990s. (Same as EALC 584.)

HIST 585. Beer, Sake, Tea-Beverages in Japan History. 3 Credits. H
Sake and tea are synonymous with Japan today, but the history of beverages from water to whiskey illuminates key developments in Japanese civilization. This course makes a thematic survey of Japanese beverages introducing the place of drinks in global history before examining their distinct context in Japan. Topics include the ritual consumption of beverages as in the tea ceremony; the place of alcohol in Japanese culture; locales for consuming beverages such as bars, teahouses and coffee shops; and the Westernization of taste preferences as characterized by the introduction of beer and wine. By taking this course, students gain insight into ways that beverages contribute to Japanese culture and help shape personal and national identity. Prerequisite: Successful completion of an East Asian history or culture course number below 500 or permission of the instructor.

HIST 587. Age of Shoguns: Early Modern Japan. 3 Credits. NW H/W
Early modern Japan (16th to 19th century) examines the history, culture, and patterns of life during an era of rigid social control but artistic brilliance. After an historical overview of the period, students will explore topics including the social structure, travel, religion, thought, and the formation of traditional cultural forms such as Kabuki theater. (Same as EALC 587.) Prerequisite: An earlier course in history or east Asian languages and cultures, or permission of the instructor.

HIST 588. Japan, 1853-1945. 3 Credits. NW H/W
This course provides an intensive survey of Japanese history from the arrival of Commodore Perry through the Pacific War. Social, economic, and political themes will be emphasized. Among the topics covered will be the Meiji Restoration, industrialization, Japanese imperialism, Taisho democracy, and wartime mobilization. (Same as EALC 588.)

HIST 589. Japan Since 1945. 3 Credits. NW H/W
This course provides an overview of Japanese history from the end of World War II to the present day. Among the topics covered will be the Allied Occupation, postwar politics and social change, the economic "miracle," popular culture, women and the family, crime and punishment, the educational system, and Japan's place in the world. (Same as EALC 589.)

HIST 591. Food in History: West and East. 3 Credits. H/W
A survey of scholarship on food in the West and in East Asia, choosing works primarily by historians, but also by sociologists, geographers, and anthropologists. We consider how scholars have approached issues concerning food productions and consumption, what habits of eating reveal about daily life, and how and when food is embedded with historiography related to these topics, keeping in mind the famous maxim of the noted French gastronome Brillat-Savarin (d. 1826): "Tell me what you eat: I will tell you what you are.

HIST 596. Defining Japan: Marginalized Groups and the Construction of National Identity. 3 Credits. NW H/W
This course investigates the construction of national identity in modern Japan by examining the historical experiences of groups marginalized by mainstream society. We will explore the pressures of conformity, the pervasiveness of social ostracism and the surprising diversity in Japanese society. Among the groups discussed will be indigenous peoples (the Ainu, Okinawans), the Korean minority, the outcast class (burakumin), the sick and disabled, the Yakuza, and political activists.

HIST 598. Sexuality and Gender in African History. 3 Credits. W
An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African
HIST 601. Oral History. 3 Credits. H
This course explores the emergence of oral history as a methodology and focuses on the guidelines and ways to effectively use oral history in historical, journalistic, and social science research. The skills of collecting and sorting information gathered through eyewitness accounts, oral traditions, genealogies, investigative reporting procedures, and questionnaires are developed. The nature of the interview in relation to personal and public documents, ordinary conversation, and other related data sources will be considered in this course.

HIST 603. History of Tibet. 3 Credits. NW H
This course surveys the cultural and political history of Tibet from the eighth to the twentieth century. Through readings, lectures, and discussions, students gain familiarity with the dominant features of Tibetan civilization. Topics include the relationship between Tibet and the civilizations of India and China, Tibetan Buddhism, and the tensions between the struggle for Tibetan independence versus claims of Chinese sovereignty. The course also considers the Tibetan diaspora and the reception of knowledge about Tibetan civilization in the West.

HIST 604. Contemporary Greater China. 3 Credits. W
This course considers contemporary China, Taiwan, and Hong Kong in comparative perspective. It begins in the early twentieth century so as to set up a comparison between Nationalist, Communist and Colonial China. It focusses on the evolution from the 1940s to the present studying the political, economic and social systems of the three regions that constitute what we now call 'Greater China' and considers, in particular, important points of difference and similarity between them.

HIST 605. Medieval Japan. 3 Credits. NW H
Course examines the history of Japan from the end of the ancient period (c. 1200 AD) through the medieval era (approximately 1573). Issues covered include the formation and destruction of the Kamakura and Muromachi warrior governments, medieval religious life and culture. Writing assignments provide students with opportunities to gain familiarity with historical methods for analysis and to strengthen their written expression. Not open to students who have taken HIST/EALC 586.

HIST 610. American Colonial History. 3 Credits. H
Examines colonial American history from the age of Columbus to the mid-1760s. The course seeks to place colonial American history into the larger historical context, particularly the expansion of the British Empire in the early modern period. Emphasis in the course will be on migration, social and economic conditions, and inter-racial relations.

HIST 611. Early American Indian History. 3 Credits. H
This course will focus on the history of American Indians, especially those of the eastern woodlands, from precontact times to the 1830's. Particular emphasis will be on the response of Indians to demographic catastrophe, the development of trade between Indians and colonists, and Indian responses to European colonization in British America and New France. The role of Indians in the American Revolution and the changes caused by Removal will also be treated.

HIST 612. History of Federal Indian Law and Policy. 3 Credits. H
This course offers a comprehensive examination of federal legislation and court decisions in the United States that have affected American Indians. The history of law and policy will be traced from the colonial period, but the major emphasis will be on the struggle of American Indians to preserve sovereignty in the 19th and 20th centuries.

HIST 615. Rise of Modern America: Politics, Culture, and Society, 1900-1950. 3 Credits. H
The history of the United States in the First Half of the Twentieth Century.

HIST 616. Contemporary America, 1941-Present. 3 Credits. H
A history of the United States from its entry into World War II to the present. A study of such selected topics as women's history and feminism, race relations and the Afro-American civil rights movement, power, poverty, the military-industrial complex, McCarthyism, and presidential administrations.

HIST 617. America in the 1960's. 3 Credits. H
The people of the United States experienced significant social political, and cultural change during the 1960's. This course studies the history of these changes, focusing on the American people, the institutions that shaped their lives, and the social and political movements, for and against change, that surfaced during this decade. Specific topics include: the struggle for racial equality, the Kennedy, Johnson, and Nixon administrations; the Vietnam War, the antiwar movement, New Left, and counterculture; feminism's rebirth; the white backlash; and the resurgence of political and cultural conservatism. Course requirements include readings, discussion, and original historical research and writing.

HIST 618. History of the American West to 1900. 3 Credits. H
A survey of Western history with emphasis on such topics as Native Americans and Indian-white relations, environment and resource use, exploration and discovery, expansionism and Manifest Destiny, economic development, urban, rural, and alternative communities, ethnic and racial experience, women and violence. Consideration will also be given to topics such as fur trade, mining, the cattle business, and agriculture.

HIST 619. History of the American Indian. 3 Credits. NW H/W
A study of Indians in the United States from colonial times to the present. Consideration will be given to the political, social, and cultural history of selected Indian tribes and to Indian-white relations with particular attention to the Indian point of view. Other topics will include a comparative study of Indian policy of nations colonizing in America, cultural intermingling and cultural conflict, and current Indian problems. Slides, films, and guest speakers (including American Indians) will be used in the course.

HIST 621. The American West in the 20th Century. 3 Credits.
A study of the post-frontier era and the struggle to create a regional identity, drawn from legends of the heroic past, varieties of racial and ethnic experience, political culture, and the possibilities of the land.

HIST 625. The Body, Self and Society. 3 Credits. H
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HUM 575, WGSS 575.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

HIST 630. The United States and the World, 1890-2003. 3 Credits. H
An examination of the history of United States foreign relations over the course of the twentieth century. Treats America's emergence as a world power before World War I, imperialism and interventionism, involvement in World War I and World War II, internationalism, the Cold War and America's anti-communist crusade, third world nationalism, responses to a global economy, and the obligations of a military superpower in a chaotic world.

HIST 631. The Contemporary Afro-American Experience. 3 Credits. H
A history of Afro-America from the end of the Civil War to the present. Consideration will be given to such topics as America's capitulation to
HIST 649. History of Feminist Theory. 3 Credits. H
This discussion course will cover the development of feminist theories from the late Middle Ages to the 1970s. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as WGSS 549.) Prerequisite: Any previous course in WGSS or HIST or permission of instructor.

HIST 690. Honors Course in History. 3 Credits. H
This course is the first part of a two-part course that provides a group setting for writing the Senior Honors Thesis, which is a substantial work of historical research based above all on the analysis of primary sources. During this first semester students must produce a serious working draft of the thesis. Assignments and discussions will help students to prepare this draft, which will establish a solid foundation for the Honors Thesis. In addition, this course will provide a close experience of advanced, professional, historical work. Presentations, weekly comments on the work of others, and active participation in seminar discussions with constructive observations and questions will complete that professional experience. A History faculty advisor will provide essential guidance throughout the process of writing the thesis. Prerequisite: HIST 301 and permission of instructor.

HIST 691. Undergraduate History Honors Seminar. 3 Credits. H
Required for students in the History major honors program, normally in the second semester of their History honors projects. Another seminar experience may be substituted, with the approval of the Honors Coordinator. Prerequisite: Approval of the Honors Coordinator of the Department of History.

HIST 692. Independent Capstone. 3 Credits. H
This independent study is designated for students who did not, or are unable to, complete one of the department's other capstone offerings (HIST 696 or HIST 691). The course will introduce students to the theory and practice of historical inquiry and require a substantial research project. May not be repeated for credit. Prerequisite: Completion of 75 credit hours of undergraduate study, including HIST 301, and consent of the instructor.

HIST 696. Seminar in: _____ . 3 Credits. H
A seminar designed to introduce students to the theory and practice of historical inquiry. A research paper will be required. May not be repeated for credit. Prerequisite: Completion of 75 credit hours of undergraduate study and completion of HIST 301, and recommended completion of one 500 level history course, or consent of the instructor.

HIST 705. Globalization in History. 3 Credits.
A study of the increasing interaction among world societies since 1500 and an investigation of the long-term developments behind current world problems. Major topics include western expansion since 1500, the spread of state sovereignty, the formation of a world economy, and spread of international institutions. The current world problems investigated will vary, but may include issues such as environmental crises, human rights, migration, free trade and the spread of consumer culture, ethnicity and nationalism, and international intervention within states. (Same as GIST 705.)

HIST 720. The Nature of Museums. 3 Credits.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as MUSE 801.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 721. Introduction to Museum Public Education. 3 Credits.
Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, GEOL 784, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 722. Conservation Principles and Practices. 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be Remedied. Storage and care of objects will also be considered. (Same as AMS 714, BIOL 700, GEOL 780, and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 723. Introduction to Museum Exhibits. 3 Credits.
This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, BIOL 787, GEOL 781, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 725. Introduction to Collections Management and Utilization. 3 Credits.
This course examines the roles collections play in fulfilling a museum’s mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, BIOL 798, GEOL 785, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 727. Practical Archival Principles. 3 Credits.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as MUSE 707.)

HIST 728. Museum Management. 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

HIST 740. Topics in History for Educators: _____ . 1-3 Credits.
Reading and discussion of selected historical topics, designed specifically for K-12 educators. Pedagogical methods and resources for the study of history will be addressed. Prerequisite: Approval of the instructor.
HIST 747. East Asian History and Culture for Teachers. 2 Credits.
An advanced survey of the history, culture, and contemporary affairs of China, Japan, and Korea, specifically designed for K-12 educators who wish to incorporate East Asian topics into their classroom teaching. Pedagogical methods and resources for the study of East Asia will be emphasized. Topics covered will address relevant benchmarks in the state curricular standards in social studies, themes from the Advanced Placement world history examination, and the national standards in world history. Prerequisite: Approval of the instructor.

HIST 748. East Asian Historical Materials: ____. 3 Credits.
The aim of the course is to provide students with the linguistic tools needed for archival research in East Asian history by assisting them in gaining experience reading primary and secondary language materials in Japanese and/or Chinese including texts in classical forms of these languages. After studying the rules of classical grammar and the particulars of historical materials as needed, students will read primary documents in conjunction with secondary readings in Japanese and/or Chinese. Fundamental aspects of paleography may also be introduced in this course depending on student need. Prerequisite: Capability of reading Japanese or Chinese and permission of the instructor.

HIST 800. Readings in: _____. 1-8 Credits.
Prerequisite: Consent of instructor.

HIST 801. Colloquium in: _____. 1-6 Credits.
Reading and discussion of selected topics.

HIST 802. Seminar in: _____. 3 Credits.
Research Seminar on selected topics.

HIST 805. The Nature of History. 3 Credits.
The introductory course to graduate study, this colloquium introduces students to the practice and epistemology of history, familiarizing them with various methodological schools, theoretical touchstones, and historiographical subfields. Required of all incoming M.A. and Ph.D. students.

HIST 806. Studies in: _____. 3 Credits.
The core course for each thematic major field in the graduate program in History. The course, offered in a colloquium style format, will serve as an introduction to the principal standard literature in the field, and will consider the full range of methodologies or approaches appropriate to the field.

HIST 807. Professional Development Colloquium in Pedagogy. 3 Credits.
This course will help train future professional historians to teach. It will focus on a variety of pedagogical topics for future college history faculty, including: developing students’ critical and analytical thinking, teaching research skills; promoting student involvement/participation; determining course goals; use of multi-media technology. In addition to attending class meetings of History 807, students will attend as observers throughout the semester one 500/600-level course in an area relevant to their future teaching and complete the readings assigned to the class. They will produce a course portfolio for an undergraduate course, including: a syllabus designed by the student; a set of assignments that will be part of that course, such as examinations and papers; sample lesson plans; an annotated bibliography of materials relevant to the subject-matter of the course.

HIST 808. Colloquium in Comparative History: _____. 3 Credits.
A readings-oriented course which explores themes in two or more geographic and/or chronological fields of history. The benefits and disadvantages of comparative methodologies will be analyzed. Topics will vary each term but may include the examination of such subjects as the history of urbanization, labor, colonialism, immigration, the family, political thought, or industrialization. Prerequisite: Varies with area of subtopic.

HIST 810. Colloquium in Nationalism Studies. 3 Credits.
Exploration of the major contemporary scholarly theories of nationalism and other forms of group identification, supplemented with case studies.

HIST 811. Colloquium in Comparative Empires. 3 Credits.
This colloquium explores the evolution of empires across space and time by surveying the rather contentious scholarly literature on the subject, offering a methodological introduction to comparative and transnational history in the process.

HIST 834. Colloquium in the History of the British Empire. 3 Credits.
The course will deal selectively with themes in the political and cultural interaction of the peoples of the British Isles with peoples overseas, the expansion and contraction of empire, and the rationales for these processes.

HIST 847. Colloquium in Russian History. 3 Credits.
A group readings course that begins with Russia in the medieval period and continues through the end of the twentieth century. Topics may vary each term, but may include such subjects as political, social, religious, gender, or intellectual history. The course will focus around significant interpretive issues and the historiography that address them.

HIST 853. Colloquium in the Early Modern Atlantic World. 3 Credits.
This colloquium will focus on interactions between the so-called Old and New Worlds in the three centuries following Columbus’ voyages. The course will pay particular attention to the changes in the lives of Europeans, Africans, and the peoples of the Americas as a result of the emergence of transatlantic economies, empires, and cultural systems.

HIST 862. Indigenous Archives and Tribal Historic Preservation. 3 Credits.
In this methods class, students will gain foundational knowledge in the archival and preservation of Indigenous source materials: oral histories, printed materials, Tribal documents, letters/journals/diaries, artwork, and a host of other sources. Students will also utilize digital history technology to create online exhibits and an original research paper. Beyond the archives this course introduces students to the important work of Tribal Historical Preservation examining the laws, ethics, cultures, policies, histories, ethics, recovery/restoration, Indigenous GIS, consultation, management, and career paths in Tribal Historical Preservation. Finally, students will gain invaluable experiences by writing grants and developing final projects that can lead to real-world applications of their research.

HIST 878. Colloquium in Global Environmental History. 3 Credits.
This graduate colloquium examines the intersection between environmental history, world history, and global history as interdisciplinary fields of inquiry, as well as regional approaches to environmental history from around the globe.

HIST 879. Colloquium in North American Environmental History. 3 Credits.
Intensive survey of significant works in the field from colonial times to the present, with attention to bibliography, research methods and needs, and leading issues in interpretation.

HIST 881. Slavery in the Atlantic World. 3 Credits.
A graduate colloquium examining the historical roots, processes, experiences, and legacies of human slavery from local, regional, comparative, and global perspectives.

HIST 883. Ethnohistory of the Americas. 3 Credits.
A graduate colloquium that develops methodologies and examines historical case studies for the study of ethnicity, interethic relations, and cultural hybridity from a hemispheric perspective, not only for indigenous peoples, but also for African-, Asian-, European-, or Pacific-derived groups, as well as new ethnic groupings and identities that emerged from their interaction.

HIST 890. Colloquium in American History 1492-1800. 3 Credits. Study of the leading interpretations of major issues in the history of Colonial and Revolutionary America, including appropriate attention to new approaches and techniques in research. The first course in the sequence of colloquia in United States history.

HIST 891. Colloquium in 19th Century U.S. History. 3 Credits. Study of the leading interpretations of major issues in the history of the United States in the 19th century. The second course in the sequence of colloquia in United States history.

HIST 892. Colloquium in 20th Century U.S. History. 3 Credits. Study of the leading interpretations of major issues in the history of the United States in the 20th century. The third course in the sequence of colloquia in United States history.

HIST 893. Colloquium in Military, War, and Society. 3 Credits. Analysis of key historiographical conversations and major trends in US-focused Military, War, and Society scholarship, including their relation to the broader fields of military and US history.

HIST 895. Colloquium in the History of Gender. 3 Credits. This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and WGS 835.)

HIST 896. Colloquium in United States Women's History. 3 Credits. This colloquium will cover theoretical and topical readings on the history of women in the United States from the pre-contact period to the present. It is designed to familiarize students with the most important and current historiography in the field.

HIST 982. Colloquium in the History of the American West. 3 Credits. Study of issues and interpretations in the history of the American West from prehistory to the present, including attention to new approaches and techniques in research.

HIST 997. Dissertation Seminar. 1-12 Credits. In this course, students who have successfully completed their doctoral oral comprehensive exam will research, write, and workshop dissertation chapters, while engaging in other professionalization exercises and discussions. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Must pass oral comprehensive exam before enrolling.

HIST 998. Portfolio Preparation. 1-3 Credits. This course will guide students through the process of preparing and submitting their written portfolio and preparing for the oral defense. In this course, students will complete field readings and prepare the cover letter, professional essay, grant application, and sample syllabuses they are required to submit to their Advisory Committee in advance of the oral defense. Working closely with their Advisory Committee members, students in HIST 998 will generate these documents and workshop them with the course instructor and their fellow students. The instructor will mentor students through the process of scheduling their exams and preparing the final written document for submission. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be a second year Ph.D. student and obtain permission of the instructor.

HIST 999. Doctoral Dissertation. 1-12 Credits. An inquiry into the source material upon a specific subject. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Consent of instructor.

Bachelor of Arts and Bachelor of General Studies in History

Why study history?

History does not just narrate a sequence of past events. The practice of history examines change over time and tries to understand the forces that contributed to those changes. Historians are most interested in questions that begin by asking ‘why’ or ‘how.’ These questions demand complex answers about who we are, how we have come to where we are, and what forces have shaped humanity through time.

In a culture that places primary value only on living in the present, studying history can offer a rare foundation for critiquing or at least comprehending the current state of the world. Studying history helps you cut through the myths that cloud our understanding of ourselves and others and offers a depth of comprehension that few other disciplines can promise. The following are some key characteristics of the Department of History and major:

- **Welcoming:** Politics, sex, art, labor, literature, rebellion, war - the Department of History draws no boundaries between what you may and may not examine. In our teaching and research, faculty are committed to recovering and centering voices of people whose historical experiences have been marginalized through systemic racism, gender and sex prejudice, and class bias. In keep with that goal, we welcome all students and viewpoints in our classrooms.

- **Flexible:** Students must take only two required courses - a seminar on historical methods (HIST 301) and a senior research seminar (HIST 696) or honors thesis (HIST 690 & HIST 691). Because few courses have sequential prerequisites, History is easy to take as a minor or as a second major.

- **Personal:** Courses ([https://catalog.ku.edu/liberal-arts-sciences/history/#courseinventory](https://catalog.ku.edu/liberal-arts-sciences/history/#courseinventory)) in the department are usually small, and the larger courses always include trained Graduate Teaching Assistants to give individual attention and feedback. All our required seminars are capped at fifteen students, and each afford the opportunity to work one-on-one with a faculty member.

- **Prominent:** Faculty ([https://history.ku.edu/faculty/](https://history.ku.edu/faculty/)) in the department are nationally and internationally recognized leaders in their field, and they bring this advanced knowledge into the classroom.

- **Relevant:** The study of history at the collegiate level prepares students for global citizenship. Our courses develop skills in critical thinking, analysis of qualitative and quantitative sources, research methods and practices, persuasive writing, and articulate speaking – all of which transfer to any number of future careers and occupations. Equally important, the discipline of history instills a worldview that expands beyond ourselves and teaches us to form thoughtful evidence-based arguments, even in the face of uncertainty, bias, and incomplete information.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer
students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Declaring a Major

The Department of History has no admission prerequisites or requirements before declaring a major. You can become a History major by scheduling an appointment with our Advising Specialist (https://history.ku.edu/people/nicole-evans/) to fill out a Major Declaration Form. We urge you to meet with the Director of Undergraduate Studies (https://history.ku.edu/people/marie-brown/) and our Advising Specialist when you declare, so that we can get to know you and your interests, explain the major, and help you get the most out of it. There’s no set time for declaring your major, but you should try to contact the department early for advising, preferably before the end of your sophomore year.

History Program

The history major allows students to explore the richness and diversity of human experience in the past while building skills of analysis, interpretation, research, and communication. All history majors gain knowledge of significant historical transformations that have shaped the world. History majors learn to think critically, to conduct historical research, and to present the results of their research in clear and coherent writing.

First- and Second-Year Preparation

Prospective majors are encouraged to enroll in 1 or 2 introductory courses at the 100 or 300 level in the first 2 years. Many introductory history courses fulfill the College’s HT or NW principal course requirements, and prospective majors might choose one of them to explore their interests in history. Students who come to KU with AP or transfer credit should be aware that only 9 hours of history course work numbered 100-299 may be counted toward the major. Students interested in history as a major are encouraged to meet with a department advisor early in their careers at KU to discuss their academic goals and interests. Contact the undergraduate secretary to schedule an advising appointment.

Requirements for the B.A. or B.G.S. Major

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<tr>
<th>Code</th>
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<tr>
<td>HIST 101</td>
<td>Introduction to Western History: _____</td>
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<td>HIST 102</td>
<td>Environment to Revolution: Europe 1789 to Present</td>
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<td>HIST 103</td>
<td>Medieval History</td>
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<td>HIST 104</td>
<td>The Black Experience in the Americas</td>
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<td>HIST 105</td>
<td>Introduction to British History</td>
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<td>HIST 106</td>
<td>French Revolution to the Present: Europe 1789- Present</td>
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<td>HIST 107</td>
<td>History of the United States Through the Civil War</td>
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<td>HIST 108</td>
<td>History of the United States After the Civil War</td>
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<td>HIST 109</td>
<td>The Global Cold War</td>
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<td>HIST 110</td>
<td>Global Environment I: The Discovery of Environmental Change</td>
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<td>HIST 111</td>
<td>Global Environment II: The Ecology of Human Civilization</td>
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<td>HIST 112</td>
<td>Global Environment I: Discovery of Environmental Change, Honors</td>
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<td>HIST 113</td>
<td>Global Environment II: The Ecology of Human Civilization, Honors</td>
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<td>HIST 114</td>
<td>Introduction to Food History: Around the World in Eight Dishes</td>
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<td>HIST 115</td>
<td>First Year Seminar: _____</td>
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<td>HIST 116</td>
<td>Writing the Past-Category I/Western Topics: _____</td>
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<td>HIST 118</td>
<td>A Global History of Human Health</td>
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<td>HIST 119</td>
<td>United States in the 1960s</td>
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<td>HIST 120</td>
<td>Sex, Gender, Film, and History</td>
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<td>HIST 121</td>
<td>War and 20th Century U.S. Culture</td>
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<td>HIST 122</td>
<td>Study Abroad Topics in: _____</td>
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<td>Headless Men: Conquest and Cultural Exchange Before the Age of Exploration</td>
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<td>HIST 125</td>
<td>1642, 1688, 1776: Three British Revolutions</td>
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<td>HIST 312</td>
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<td>HIST 314</td>
<td>Globalization: History and Theory</td>
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<td>HIST 316</td>
<td>Ministers and Magicians: Black Religions from Slavery to the Present</td>
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<td>African American Women: Colonial Era to the Present</td>
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<td>HIST 318</td>
<td>Indian Territory</td>
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<td>HIST 319</td>
<td>History, Women, and Diversity in the U.S.</td>
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<td>HIST 320</td>
<td>From Goddesses to Witches: Women in Premodern Europe</td>
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<td>HIST 321</td>
<td>From Mystics to Feminists: Women's History in Europe 1600 to the Present</td>
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<td>HIST 322</td>
<td>LGBTQ U.S. History, 1600-1900</td>
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<td>LGBTQ U.S. History, 1900-Present</td>
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<td>HIST 324</td>
<td>History of Women and the Body</td>
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<td>HIST 325</td>
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<td>HIST 333</td>
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<td>History of Jewish Women</td>
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<td>HIST 336</td>
<td>Ethics, Ideas, and Nature</td>
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<td>HIST 337</td>
<td>History, Ethics, Modernity</td>
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<td>African American Urban Community and Class in the Midwest</td>
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<td>Recent European History, 1870 to the Present</td>
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History Category II: Non-western Orientation. Satisfied by courses in Africa and Middle East, East Asia, Latin America, Native America:

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<td>Environment and History</td>
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<td>Global Environment II: The Ecology of Human Civilization</td>
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<td>Introduction to History of Japan: Anime to Zen</td>
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Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major/Minor Hours & Major GPA
Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major. Of these 27 hours, at least 6 hours (two courses) must be taken at the 500-699 level (in addition to HIST 696).

Major Junior/Senior Graduation (300+) GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Graduation Plan
With careful planning and commitment to a full-time course load, you can graduate with a degree in History in four years. Consult with an Advising Specialist for help in creating your graduation plan.

Double Majors
Many history majors choose to pursue a second major. Fulfilling the requirements of 2 majors in a timely fashion requires careful choice of courses. Consult with an Advising Specialist for help in creating a graduation plan that fulfills all requirements.

A sample 4-year plan for the BA degree in History can be found here: History (p. 1527), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in History can be found here: History (p. 1528), or by using the left-side navigation.

Departmental Honors
The honors program in history allows exceptional undergraduates to work closely with faculty members on a year-long original research project. To graduate with honors, a student must complete the requirements for the major in history, including HIST 301 but excluding HIST 696 Seminar. Students must also hold a 3.5 GPA in History, which must be maintained throughout the year of enrollment.

Honor students enroll in a two-semester sequence: HIST 690, in which the student carries out direct research on the topic of their choice under the supervision of a faculty advisor; and HIST 691, which provides a group setting for writing and revision of an Honors Thesis. The rigors of these two courses provide an authentic experience of professional historical work. In exceptional circumstances, a student may complete HIST 696 and, by invitation, enroll in HIST 691 to develop the seminar paper into an honors thesis.

Each student who completes an Honors Thesis must defend it in an oral examination before a thesis committee of three faculty members. In most cases, the committee is composed of history faculty members. A student who wants the committee to include faculty members from outside the department should inform the thesis director by March 1. Upon completion, a copy of the thesis is deposited in the department and uploaded to KU Scholar Works. Petitions for exceptions to these regulations should be submitted to the Honors Coordinator.

BA in History
Below is a sample 4-year plan for students pursuing the BA in History. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
Below is a sample 4-year plan for students pursuing the BGS in History. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**BGS in History**

**Freshman**

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<td>5 2nd Semester Language (BA Second Language)</td>
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**Sophomore**

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<td>3 BA Laboratory/Field Experience (LFE)</td>
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**Junior**

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<th>Hours</th>
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<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
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**Senior**

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<tr>
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<td>3 HIST 696 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
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<td>3 HIST Elective 300+ (9 of 10)</td>
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<td>3 HIST Elective Level 500+ (8 of 10)</td>
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</table>

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. Must be a declared History major in order to enroll in HIST 301. See a departmental advisor to declare.
4. Majors must complete a minimum of 30 hours (10 courses) by completing 12 hours (4 courses) from Category I, 12 hours (4 courses) from Category II, and 6 hours (2 courses) from either category I or II. Only 9 hours (3 courses) at the 100-200 level can apply toward the major and at least 6 hours (2 courses) must be taken at the 500-699 level.
5. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Goal 3 Social Science  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

**Minimum Sophomore Hours**  
| 15 | 15 |

**Fall**  
| HIST 301 (Major 
Requirement)  
| 3 | 3 |

**Spring**  
| HIST Elective 100-300+ (3 of 
10)  
| 3 | 3 |

Goal 4.1 US Diversity  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

**Junior**  
| 15 | 15 |

**Fall**  
| HIST Elective 300+ (5 of 
10)  
| 3 | 3 |

**Spring**  
| HIST Elective 500+ (8 of 
10)  
| 3 | 3 |

Goal 4.2 Global Awareness  
| 3 Goal 5 Social Responsibility 
and Ethics  
| 3  

Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

**Senior**  
| 15 | 15 |

**Fall**  
| HIST Elective 300+ (9 of 
10)  
| 3 | 3 |

**Spring**  
| HIST 696 (Goal 6 Integration 
& Creativity, Major 
Requirement)  
| 3 | 3 |

HIST Elective 500+ (10 of 
10)  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

HIST 475 (Recommended 
for BGS Career Prep Course 
BGSC)  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3 Second Area of Study/ 
Elective/Degree/Junior- 
Senior Hours  
| 3  

**Total Hours 120**

---

1. Must be a declared History major in order to enroll in HIST 301. See a departmental advisor to declare.

2. Majors must complete a minimum of 30 hours (10 courses) by completing 12 hours (4 courses) from Category I, 12 hours (4 courses) from Category II, and 6 hours (2 courses) from either category I or II. Only 9 hours (3 courses) at the 100-200 level can apply toward the major and at least 6 hours (2 courses) must be taken at the 500-699 level.

3. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a second area of study. Individual degree mapping is done in partnership with your advisor.

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### Minor in History

#### Why study history?

History does not just narrate a sequence of past events. The practice of history examines change over time and tries to understand the forces that contributed to those changes. Historians are most interested in questions that begin by asking ‘why’ or ‘how.’ These questions demand complex answers about who we are, how we have come to where we are, and what forces have shaped humanity through time.

In a culture that places primary value only on living in the present, studying history can offer a rare foundation for critiquing or at least comprehending the current state of the world. Studying history helps you cut through the myths that cloud our understanding of ourselves and others and offers a depth of comprehension that few other disciplines can promise. The following are some key characteristics of the Department of History and major:

- **Welcoming:** Politics, sex, art, labor, literature, rebellion, war - the Department of History draws no boundaries between what you may and may not examine. In our teaching and research, faculty are committed to recovering and centering voices of people whose historical experiences have been marginalized through systemic racism, gender and sex prejudice, and class bias. In keep with that goal, we welcome all students and viewpoints in our classrooms.

- **Flexible:** Students must take only two required courses - a seminar on historical methods (HIST 301) and a senior research seminar (HIST 696) or honors thesis (HIST 690 & HIST 691). Because few courses have sequential prerequisites, History is easy to take as a minor or as a second major.

- **Personal:** Courses ([https://catalog.ku.edu/liberal-arts-sciences/history/#courseinventory](https://catalog.ku.edu/liberal-arts-sciences/history/#courseinventory)) in the department are usually small, and the larger courses always include trained Graduate Teaching Assistants to give individual attention and feedback. All our required seminars are capped at fifteen students, and each afford the opportunity to work one-on-one with a faculty member.
- **Prominent**: Faculty ([https://history.ku.edu/faculty/](https://history.ku.edu/faculty/)) in the department are nationally and internationally recognized leaders in their field, and they bring this advanced knowledge into the classroom.

- **Relevant**: The study of history at the collegiate level prepares students for global citizenship. Our courses develop skills in critical thinking, analysis of qualitative and quantitative sources, research methods and practices, persuasive writing, and articulate speaking – all of which transfer to any number of future careers and occupations. Equally important, the discipline of history instills a worldview that expands beyond ourselves and teaches us to form thoughtful evidence-based arguments, even in the face of uncertainty, bias, and incomplete information.

### Requirements for the Minor

#### History Minor Course Requirements

Minors must complete a minimum of 2 courses (6 hours) in both Category I and Category II below. The remaining 6 hours may be taken from either category.

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<tr>
<td>HIST 102</td>
<td>Introduction to History, Honors: _____</td>
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<tr>
<td>HIST 103</td>
<td>Environment and History</td>
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<td>HIST 105</td>
<td>Ancient Near Eastern and Greek History</td>
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<td>HIST 107</td>
<td>Introduction to the Ancient World</td>
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<td>Medieval History</td>
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<td>HIST 109</td>
<td>The Black Experience in the Americas</td>
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<tr>
<td>HIST 112</td>
<td>Introduction to British History</td>
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<td>Renaissance to Revolution: Europe 1500-1789</td>
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<td>French Revolution to the Present: Europe 1789-Present</td>
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<td>French Revolution to the Present: Europe 1789 to Present, Honors</td>
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<td>History of the United States After the Civil War</td>
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<td>Global Environment I: The Discovery of Environmental Change</td>
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<td>Global Environment II: The Ecology of Human Civilization</td>
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<td>Global Environment II: The Ecology of Human Civilization, Honors</td>
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<td>Introduction to Food History: Around the World in Eight Dishes</td>
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<td>Speaking the Past-Category I/Western Topics: _____</td>
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<td>Sex, Gender, Film, and History</td>
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<td>War and 20th Century U.S. Culture</td>
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<td>Study Abroad Topics in: Before the Age of Exploration</td>
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<td>Headless Men: Conquest and Cultural Exchange</td>
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<td>Sin Cities</td>
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<td>1642, 1688, 1776: Three British Revolutions</td>
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<td>Key Themes in Modern Global History</td>
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<td>American Culture, 1877 to the Present</td>
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<td>African American Women: Colonial Era to the Present</td>
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<td>From Goddesses to Witches: Women in Premodern Europe</td>
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<td>From Mystics to Feminists: Women's History in Europe 1600 to the Present</td>
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<td>Age of Empires-The Atlantic 1400-1800</td>
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<td>Ethics, Ideas, and Nature</td>
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<td>Law and Society in America</td>
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<td>The Korean War, 1950-1953</td>
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<td>At the Movies: U.S. History on the Silver Screen</td>
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<td>History of the American West</td>
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<td>Perspectives on Science, Engineering and Mathematics</td>
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<td>Invention of the Tropics</td>
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<td>Magic and Superstition in European History</td>
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<td>The Supreme Court and Religious Issues in the United States</td>
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<td>Immigrants, Refugees, and Diasporas</td>
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<td>Everyday Communism in Eastern Europe</td>
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<td>Europe in Crisis: Empire, Extremism, and War, 1890-1945</td>
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<td>Jerusalem Through the Ages</td>
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<td>Alexander the Great: Man and Myth</td>
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<td>HIST 388</td>
<td>Julius Caesar: Man and Myth</td>
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<td>Technology and the Modern World</td>
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<td>Women, Gender, and Sexuality in the North American West</td>
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<td>HIST 410</td>
<td>The American Revolution</td>
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<td>Aviation in American Culture</td>
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<td>Professional Skills in History</td>
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<td>Readings in History</td>
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<td>Service Learning in History</td>
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<td>Rise of Athens and Sparta</td>
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<td>Roman Republic</td>
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<td>HIST 507</td>
<td>Early Roman Empire</td>
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<td>Late Roman Empire (284-527)</td>
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<td>The Civil Rights Movement</td>
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<td>Capitalism and the Black Experience</td>
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<td>HIST 522</td>
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</table>

History Category II: Non-western Orientation

Satisfied by two courses (6 hours) from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 102</td>
<td>Introduction to History, Honors: _____</td>
</tr>
<tr>
<td>HIST 104</td>
<td>Introduction to African History</td>
</tr>
<tr>
<td>HIST 109</td>
<td>The Black Experience in the Americas</td>
</tr>
<tr>
<td>HIST 110</td>
<td>Introduction to Non-Western History: _____</td>
</tr>
<tr>
<td>HIST 111</td>
<td>Introduction to African History, Honors</td>
</tr>
<tr>
<td>HIST 117</td>
<td>Russia, An Introduction</td>
</tr>
<tr>
<td>HIST 118</td>
<td>Premodern East Asia</td>
</tr>
<tr>
<td>HIST 119</td>
<td>Modern East Asia</td>
</tr>
<tr>
<td>HIST 120</td>
<td>Colonial Latin America</td>
</tr>
<tr>
<td>HIST 121</td>
<td>Modern Latin America</td>
</tr>
<tr>
<td>HIST 122</td>
<td>Colonial Latin America, Honors</td>
</tr>
<tr>
<td>HIST 123</td>
<td>Modern Latin America, Honors</td>
</tr>
<tr>
<td>HIST 124</td>
<td>Latin American Culture and Society</td>
</tr>
<tr>
<td>HIST 139</td>
<td>The Global Cold War</td>
</tr>
<tr>
<td>HIST 140</td>
<td>Global Environment I: The Discovery of Environmental Change</td>
</tr>
<tr>
<td>HIST 142</td>
<td>Global Environment II: The Ecology of Human Civilization</td>
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<tr>
<td>HIST 144</td>
<td>Global Environment I: Discovery of Environmental Change, Honors</td>
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<tr>
<td>HIST 145</td>
<td>Global Environment II: The Ecology of Human Civilization, Honors</td>
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<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>HIST 150</td>
<td>Introduction to Food History: Around the World in Eight Dishes</td>
</tr>
<tr>
<td>HIST 160</td>
<td>Introduction to West African History</td>
</tr>
<tr>
<td>HIST 177</td>
<td>First Year Seminar: _____</td>
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<tr>
<td>HIST 190</td>
<td>Warlords and Rebels in Asia</td>
</tr>
<tr>
<td>HIST 202</td>
<td>Writing the Past-Category II/Non-Western Topics: _____</td>
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<tr>
<td>HIST 204</td>
<td>Speaking the Past-Category II/Non-Western Topics: _____</td>
</tr>
<tr>
<td>HIST 250</td>
<td>Study Abroad Topics in: _____</td>
</tr>
<tr>
<td>HIST 300</td>
<td>Modern Africa</td>
</tr>
<tr>
<td>HIST 303</td>
<td>Sin Cities</td>
</tr>
<tr>
<td>HIST 307</td>
<td>Modern Africa, Honors</td>
</tr>
<tr>
<td>HIST 308</td>
<td>Key Themes in Modern Global History</td>
</tr>
<tr>
<td>HIST 314</td>
<td>Globalization: History and Theory</td>
</tr>
<tr>
<td>HIST 318</td>
<td>Indian Territory</td>
</tr>
<tr>
<td>HIST 326</td>
<td>Native Americans Confront European Empires</td>
</tr>
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<td>HIST 327</td>
<td>The Premodern Middle East</td>
</tr>
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<td>HIST 328</td>
<td>The Modern Middle East</td>
</tr>
<tr>
<td>HIST 332</td>
<td>Sex in History</td>
</tr>
<tr>
<td>HIST 336</td>
<td>Ethics, Ideas, and Nature</td>
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<td>HIST 337</td>
<td>History, Ethics, Modernity</td>
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<tr>
<td>HIST 348</td>
<td>History of the Peoples of Kansas</td>
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<tr>
<td>HIST 351</td>
<td>American Indian and White Relations to 1865</td>
</tr>
<tr>
<td>HIST 352</td>
<td>American Indians Since 1865</td>
</tr>
<tr>
<td>HIST 353</td>
<td>Indigenous Peoples of North America</td>
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<td>HIST 365</td>
<td>Invention of the Tropics</td>
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<tr>
<td>HIST 368</td>
<td>A History of Afro-Latin America</td>
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<tr>
<td>HIST 369</td>
<td>Colonialism and Revolution in the Third World, Honors</td>
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<tr>
<td>HIST 371</td>
<td>Tequila, Tango, Carnival, City</td>
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<tr>
<td>HIST 376</td>
<td>Immigrants, Refugees, and Diasporas</td>
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<tr>
<td>HIST 378</td>
<td>Beyond the Iron Curtain: Soviet Perspectives on the Cold War</td>
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<tr>
<td>HIST 381</td>
<td>Enemies of Ancient Israel</td>
</tr>
<tr>
<td>HIST 382</td>
<td>Jerusalem Through the Ages</td>
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<tr>
<td>HIST 387</td>
<td>Alexander the Great: Man and Myth</td>
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<td>HIST 390</td>
<td>Topics in Non-Western History: _____</td>
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<tr>
<td>HIST 391</td>
<td>Topics in (Honors): _____</td>
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<tr>
<td>HIST 392</td>
<td>Huns, Turks, and Mongols: The Nomad Factor in Asian History</td>
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<tr>
<td>HIST 393</td>
<td>The Silk Road</td>
</tr>
<tr>
<td>HIST 394</td>
<td>Made in China: Chinese Business History</td>
</tr>
<tr>
<td>HIST 395</td>
<td>History of Sushi</td>
</tr>
<tr>
<td>HIST 397</td>
<td>From Mao to Now: China's Red Revolution</td>
</tr>
<tr>
<td>HIST 398</td>
<td>Introduction to History of Japan: Anime to Zen</td>
</tr>
<tr>
<td>HIST 399</td>
<td>The Samurai</td>
</tr>
<tr>
<td>HIST 400</td>
<td>Indigenous People of the Great Plains</td>
</tr>
<tr>
<td>HIST 401</td>
<td>Case Studies in: _____</td>
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<td>HIST 415</td>
<td>The Rise of Civilization</td>
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<tr>
<td>HIST 450</td>
<td>Study Abroad Topics in: _____</td>
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<tr>
<td>HIST 460</td>
<td>Topics in: _____</td>
</tr>
<tr>
<td>HIST 461</td>
<td>The Asia-Pacific War, 1937-1945</td>
</tr>
</tbody>
</table>

**History Electives**

Satisfied by 2 HIST courses (6 hours)

**History Minor Hours & GPA**

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 GPS in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Master of Arts in History**

Our terminal Master of Arts degree provides students with rigorous training in the skills of historical thinking, archival research, and the different modes of expression scholars use to communicate their findings to a wide audience. Completely integrated with our Ph.D. program, the M.A. in History at KU offers students the opportunity to develop subject expertise in fields of study, learn the conventions of professional scholarship in History, collaborate with other students, and receive one-on-one career advice and intellectual mentorship from our faculty.

Our M.A. program allows for full-time or part-time study, and has defined tracks in U.S. History and World History. Students also have the opportunity to take coursework outside the department in fields such as African and African-American Studies, Environmental Studies, Museum Studies, and Women, Gender & Sexuality Studies.

Students in our terminal M.A. program are self-funded, and are encouraged to inquire regarding current information for in-state/out-of-state/international tuition costs and university fees.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

In History at KU, we privilege high-quality graduate advising and mentorship at every stage of a student’s interaction with our department. As such, our application processes for the M.A. and M.A./Ph.D. are geared towards ensuring the best possible fit between faculty and graduate students. Graduate applicants who seek to study at the University of Kansas are **required** to correspond with at least one prospective faculty advisor well in advance of the application deadline. On the most basic level, these preliminary contacts with faculty give applicants a sense of whether or not the prospective advisor is currently taking new students. More than this, these conversations offer candidates for admission a better sense of how they might fit into the program at KU. Our admissions process is designed to educate prospective students about what studying at KU would really be like and about the resources the Department and University possess in their areas of interest, as well as offering an opportunity to get to know some of the people they’d be working with during their time here. Moreover, the early establishment of a relationship between prospective faculty and applicant permits students to refine their applications to better articulate the candidate’s fit with our program. The prospective faculty advisor will be able to more effectively advocate for the applicant’s candidacy based upon this correspondence.

Once candidates for admission have established correspondence with at least one prospective advisor, they must complete the online application through the KU Office of Graduate Admissions (https://gradapply.ku.edu/apply/) International or domestic applicants who are non-native speakers of English should carefully review Graduate Studies’ English Proficiency Requirements (https://gradapply.ku.edu/english-requirements/).

The application deadline is January 5 for all applicants. Please schedule the TOEFL exam with this deadline in mind—scores must be received by the application deadline.

- **Statement of Academic Objectives**, including a clear plan for graduate research in a specific field of study. This statement should be largely academic rather than biographical and should achieve the following objectives:
  - **Suggest a potential direction for your research at KU as concretely as possible**;
  - **Outline how you see an M.A. in History fitting into your broad career goals**; and
  - **Identify specific chronological, geographical, and thematic areas of interest**

- **Curriculum Vitae**

- **Writing Sample (maximum twenty-five pages, double-spaced)**
  - The Department is interested in reviewing the best-crafted, most persuasively argued writing sample that applicants are able to provide. Such papers are often derived from an upper-level undergraduate history class in which the student conducted independent research and employed both primary and secondary sources.

- **GRE Scores are no longer required**

- **Official Transcript** from each institution that has granted you a degree, or at which you are currently enrolled

- **Three letters of recommendation** – The letters can be directly uploaded online by those who write the recommendations, or they can be mailed to the University of Kansas, Department of History, ATTN: Graduate Academic Advisor, Wescoe 3650, 1445 Jayhawk Boulevard, Lawrence, KS 66045. A recommendation form for hard copy letters can be downloaded here (http://wwwgraduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/ApplicationProcess/KULetterOfRecForm.pdf).

Please note that documents, including a writing sample and transcripts, should be uploaded to the application. Applicants should not send hard copies of application materials to the Department of History. When you submit your online application, it is made available to the Department of History for review, yet it is the applicant’s responsibility to ensure the Office of Graduate Studies has received all materials by the deadline. The Department of History Graduate Office cannot process your application and move it forward for consideration by the Graduate Committee until all materials have been received. The Department of History reviews applications for completeness, and the Graduate Program Coordinator will contact you if your application is not complete.

**M.A. Degree Requirements**

The master’s program in history requires satisfactory completion of 30 credit hours of graduate courses including at least 6 hours in history research seminars and the passing of a comprehensive oral
examination. Students must complete a minimum of eighteen credit hours in courses numbered 700 or higher.

Soon after admission, the student should select a faculty member as his or her advisor. The advisor directs the student’s work and advises the student about selecting Option A or Option B.

Option A
3 fields of history
The fields are the equivalent of secondary fields drawn from 3 different major fields. With the consent of departmental advisors, when a student’s program warrants a substitution, she or he may substitute an allied field outside the department that provides vital support for the program (e.g., substituting international relations for U.S. diplomatic history). At least 9 hours of course work must be taken in each of the 3 fields. Students must take HIST 805.

9 hours of work in courses at the 800 level or higher (excepting HIST 800) and 6 hours of research seminar are required. Normally, at least 3 hours of seminar under each program should be taken with the student’s program advisor, who chairs the oral examining committee.

All master’s candidates must produce 2 professional-quality, article-length papers (approximately 30 pages) in the 2 required seminars. The final oral examination for the master’s degree includes questions concerning the papers as well as coverage of the student’s major and secondary fields.

Option B
A major field and 1 secondary field
At least 2 history faculty members must serve on the student’s M.A. committee for the major field. At least 18 hours of course work in the major field and 9 hours in the secondary field must be taken. Students must take HIST 805.

9 hours of work in courses at the 800 level or higher (excepting HIST 800) and 6 hours of research seminar are required. Normally, at least 3 hours of seminar under each program should be taken with the student’s program advisor, who chairs the oral examining committee.

All master’s candidates must produce 2 professional-quality, article-length papers (approximately 30 pages) in the 2 required seminars. The final oral examination for the master’s degree includes questions concerning the papers as well as coverage of the student’s major and secondary fields.

Accelerated Master of Arts in History

Note: Admission to the Accelerated M.A. program is open to current KU undergraduate students only. If you are a non-KU student interested in graduate study, consult information about our M.A. and Ph.D. programs, respectively.

Description
The Accelerated M.A. program in History enables qualified KU students to earn both a Bachelor’s degree and a Master’s degree in history in five years. Students apply to join the accelerated program by January 1 of their Junior year, and spend the following two years completing a mix of undergraduate and graduate coursework.

The program has two tracks, one leading to an M.A. in U.S. History and one leading to an M.A. in World History. The M.A. may be pursued as a terminal degree or as preparation to pursue doctoral studies at KU or elsewhere.

Careful course selection and steady progression through the undergraduate career is necessary to ensure all requirements for both degrees be completed within the five-year timeframe. All prospective students should discuss their interest in admission to the accelerated program with both the Director of Undergraduate Studies and the Director of Graduate Studies as early as possible but no later than Fall of the student’s Junior year.

Prospective students are eligible to apply to the graduate program in their Junior year. Applications are accepted on a rolling basis but should be submitted before the end of the applicant’s junior year. Applications must be received at least 4 weeks prior to start of the student’s second to last undergraduate semester.

The following program requirements must be met by this time:

• Major GPA of at least 3.5 and cumulative GPA of at least 3.00;
• On track to complete all requirements for a B.A. degree in History from KU with one additional year of study beyond the junior year.

Applicants must complete an Application for Graduate Study (https://gradapply.ku.edu/apply). The following information should be gathered in advance and uploaded with the application:

• Two letters of recommendation (preferably from professors in the major). You will be asked to enter the names and e-mail addresses for two recommenders while completing the online application. Your recommenders will automatically receive an e-mail requesting their letters when you submit the application. It is not necessary for your recommenders to send hard copies of their letters to the department if they submit their letters electronically. Should a recommender feel uncomfortable with the online submission process, please contact the department for more options.
• Résumé or curriculum vitae
• A one-page statement of educational and career objectives
• A writing sample, preferably from an history course, 5-10 pages of text not including the bibliography, endnotes, or images following endnotes.

Upon review of the Application for Admission, the History Department will notify the student of his or her eligibility to begin coursework in the program the following Fall semester. Final acceptance to the graduate program will be contingent upon the following:

• Successful completion of all requirements for the Bachelor’s degree;
• Grades of B+ or above in all History graduate-level coursework taken in the final year of undergraduate study.
• Submission of a Program of Study

Program of Study

• After acceptance to the program, M.A. students will submit an M.A. Program of Study Worksheet. Students are expected to identify three fields of study (geographical, thematic, and chronological) in consultation with their primary advisor. These fields must be approved by the primary advisor and Director of Graduate Study by April 15.

The Program of Study Worksheet also designates a Primary Advisor
and two other faculty advisors as the official members of the student’s M.A. Committee.

To express interest and request further information about the History Accelerated M.A. Program, click one of the links below to complete a short form.

Current KU Students inquiry form (https://www.applyweb.com/fixie/form/s/T2b1fa0/)

Future Jayhawks inquiry form (https://college-forms.app.ku.edu/forms/form/1)

The course requirements for this accelerated program are fulfilled by a combination of graduate-level courses taken for both undergraduate and graduate credit in Year 4, and graduate credit courses taken in Year 5. Numerous graduate-level courses are regularly offered that fulfill distribution requirements for both the Bachelor’s and M.A. degrees.

Requirements for the B.A. Major

History Major Core Knowledge and Skills

Majors must complete a course in the following area:

The Historian’s Craft. Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 301</td>
<td>The Historian’s Craft</td>
<td>3</td>
</tr>
<tr>
<td>HIST 302</td>
<td>The Historian’s Craft, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>

History Required Elective

Majors must complete 10 courses (30 hours) of electives. 4 courses (12 hours) must be in Category I and 4 courses (12 hours) must be in Category II, listed below. At least 9 of these 30 credit hours must be completed at the 500 level or above and will also count toward the master’s degree. No more than three courses (9 hours) may be taken in courses numbering 100-299. The student must be approved to begin coursework toward the master’s degree prior to enrolling in any 500 level or above courses that are to count for both undergraduate and graduate credit.

History Category I: Western Orientation. Satisfied by courses in Ancient, Medieval, Modern Western Europe, Russia/Eastern Europe, United States:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>HIST 101</td>
<td>Introduction to Western History: _____</td>
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</tr>
<tr>
<td>HIST 102</td>
<td>Introduction to History, Honors: _____</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>Environment and History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 105</td>
<td>Introduction to Ancient Near Eastern and Greek History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 106</td>
<td>Introduction to Roman History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 107</td>
<td>Introduction to the Ancient World</td>
<td>3</td>
</tr>
<tr>
<td>HIST 108</td>
<td>Medieval History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 109</td>
<td>The Black Experience in the Americas</td>
<td>3</td>
</tr>
<tr>
<td>HIST 112</td>
<td>Introduction to British History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 114</td>
<td>Renaissance to Revolution: Europe 1500-1789</td>
<td>3</td>
</tr>
<tr>
<td>HIST 115</td>
<td>French Revolution to the Present: Europe 1789-Present</td>
<td>3</td>
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<td>HIST 116</td>
<td>French Revolution to the Present: Europe 1789 to Present, Honors</td>
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<td>HIST 128</td>
<td>History of the United States Through the Civil War</td>
<td>3</td>
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<tr>
<td>HIST 129</td>
<td>History of the United States After the Civil War</td>
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<tr>
<td>HIST 140</td>
<td>Global Environment I: The Discovery of Environmental Change</td>
<td>5</td>
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<td>HIST 142</td>
<td>Global Environment II: The Ecology of Human Civilization</td>
<td>5</td>
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<td>HIST 144</td>
<td>Global Environment I: Discovery of Environmental Change, Honors</td>
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<tr>
<td>HIST 145</td>
<td>Global Environment II: The Ecology of Human Civilization, Honors</td>
<td>5</td>
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<td>HIST 177</td>
<td>First Year Seminar: _____</td>
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<td>HIST 201</td>
<td>Writing the Past-Category I/Western Topics: _____</td>
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</tr>
<tr>
<td>HIST 203</td>
<td>Speaking the Past-Category I/Western Topics: _____</td>
<td>3</td>
</tr>
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<td>HIST 220</td>
<td>A Global History of Human Health</td>
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<td>HIST 229</td>
<td>United States in the 1960s</td>
<td>3</td>
</tr>
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<td>HIST 230</td>
<td>Sex, Gender, Film, and History</td>
<td>3</td>
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<td>HIST 231</td>
<td>War and 20th Century U.S. Culture</td>
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<td>HIST 250</td>
<td>Study Abroad Topics in: _____</td>
<td>1-5</td>
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<tr>
<td>HIST 303</td>
<td>Sin Cities</td>
<td>3</td>
</tr>
<tr>
<td>HIST 304</td>
<td>1642, 1688, 1776: Three British Revolutions</td>
<td>3</td>
</tr>
<tr>
<td>HIST 305</td>
<td>The Scientific Revolution</td>
<td>3</td>
</tr>
<tr>
<td>HIST 308</td>
<td>Key Themes in Modern Global History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 312</td>
<td>American Culture, 1877 to the Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST 314</td>
<td>Globalization: History and Theory</td>
<td>3</td>
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<tr>
<td>HIST 316</td>
<td>Ministers and Magicians: Black Religions from Slavery to the Present</td>
<td>3</td>
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<tr>
<td>HIST 317</td>
<td>African American Women: Colonial Era to the Present</td>
<td>3</td>
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<td>HIST 318</td>
<td>Indian Territory</td>
<td>3</td>
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<tr>
<td>HIST 319</td>
<td>History, Women, and Diversity in the U.S.</td>
<td>3</td>
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<tr>
<td>HIST 320</td>
<td>From Goddesses to Witches: Women in Premodern Europe</td>
<td>3</td>
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<tr>
<td>HIST 321</td>
<td>From Mystics to Feminists: Women's History in Europe 1600 to the Present</td>
<td>3</td>
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<tr>
<td>HIST 324</td>
<td>History of Women and the Body</td>
<td>3</td>
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<tr>
<td>HIST 325</td>
<td>The Spanish Inquisition</td>
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<tr>
<td>HIST 331</td>
<td>Age of Empires-The Atlantic 1400-1800</td>
<td>3</td>
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<td>HIST 332</td>
<td>Sex in History</td>
<td>3</td>
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<tr>
<td>HIST 333</td>
<td>Eurometro: Visions of the European Metropolis, 1849-1939</td>
<td>3</td>
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<tr>
<td>HIST 334</td>
<td>The Great War: The History of World War I</td>
<td>3</td>
</tr>
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<td>HIST 335</td>
<td>History of Jewish Women</td>
<td>3</td>
</tr>
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<td>HIST 336</td>
<td>Ethics, Ideas, and Nature</td>
<td>3</td>
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<td>HIST 337</td>
<td>History, Ethics, Modernity</td>
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<td>HIST 338</td>
<td>African American Urban Community and Class in the Midwest</td>
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<td>HIST 340</td>
<td>The History of the Second World War</td>
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<tr>
<td>HIST 341</td>
<td>Hitler and Nazi Germany</td>
<td>3</td>
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<td>HIST 343</td>
<td>The Holocaust in History</td>
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<td>Modern Jewish History</td>
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<td>HIST 345</td>
<td>Hard Times: The Depression Years in America, 1929-1941</td>
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<td>HIST 347</td>
<td>Environmental History of North America</td>
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<td>HIST 348</td>
<td>History of the Peoples of Kansas</td>
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<td>HIST 350</td>
<td>The Korean War, 1950-1953</td>
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<td>At the Movies: U.S. History on the Silver Screen</td>
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<td>HIST 358</td>
<td>The Vietnam War</td>
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<td>The Black Experience in the U.S. Since Emancipation</td>
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<td>HIST 361</td>
<td>Youth, Sex, and Romance in Post-WWII United States</td>
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<td>HIST 362</td>
<td>The American Way of War Since World War II</td>
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<td>Invention of the Tropics</td>
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<td>Magic and Superstition in European History</td>
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<td>The Supreme Court and Religious Issues in the United States</td>
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<td>HIST 376</td>
<td>Immigrants, Refugees, and Diasporas</td>
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<td>Everyday Communism in Eastern Europe</td>
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<td>Beyond the Iron Curtain: Soviet Perspectives on the Cold War</td>
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<td>HIST 379</td>
<td>Europe in Crisis: Empire, Extremism, and War, 1890-1945</td>
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<td>HIST 389</td>
<td>Topics in Western History: ______</td>
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<td>Topics in (Honors): ______</td>
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<td>HIST 401</td>
<td>Case Studies in: ______</td>
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<td>HIST 402</td>
<td>War and Society in Greece and Rome</td>
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<td>HIST 404</td>
<td>Technology and the Modern World</td>
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<td>HIST 407</td>
<td>History of Science in the United States</td>
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<td>HIST 410</td>
<td>The American Revolution</td>
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<td>HIST 412</td>
<td>The Civil War in America, 1828-1877</td>
<td>3</td>
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<td>Study Abroad Topics in: ______</td>
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<td>HIST 460</td>
<td>Topics in: ______</td>
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<td>HIST 461</td>
<td>The Asia-Pacific War, 1937-1945</td>
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<td>Readings in History</td>
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<td>Service Learning in History</td>
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<td>HIST 500</td>
<td>History of the Book</td>
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<td>Topics in Western History: ______</td>
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<td>HIST 502</td>
<td>The Age of Heroes: Early Greece</td>
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<td>HIST 503</td>
<td>The Ancient History of the Near East</td>
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<td>HIST 506</td>
<td>Roman Republic</td>
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<td>HIST 507</td>
<td>Early Roman Empire</td>
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<tr>
<td>HIST 508</td>
<td>Late Roman Empire (284-527)</td>
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<td>HIST 510</td>
<td>Topics in Non-Western History: ______</td>
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<td>HIST 520</td>
<td>The Age of the Renaissance</td>
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<td>HIST 521</td>
<td>The Age of the Reformation</td>
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<td>HIST 522</td>
<td>The Age of Religious Wars, 1540-1648</td>
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<td>HIST 524</td>
<td>The French Revolution</td>
<td>3</td>
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<tr>
<td>HIST 525</td>
<td>France and Its Empire: From Acadia to Zidane</td>
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<tr>
<td>HIST 527</td>
<td>Recent European History, 1870 to the Present</td>
<td>3</td>
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<td>HIST 528</td>
<td>Economic History of Europe</td>
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<td>HIST 530</td>
<td>History of American Women--Colonial Times to 1870</td>
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<tr>
<td>HIST 531</td>
<td>History of American Women--1870 to Present</td>
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<td>HIST 541</td>
<td>British History, Tudors and Stuarts</td>
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<td>HIST 545</td>
<td>British History from Monarchy to Democracy</td>
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<tr>
<td>HIST 548</td>
<td>Rise of Modern Britain</td>
<td>3</td>
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<tr>
<td>HIST 563</td>
<td>U.S. Environmental Thought in the 20th Century</td>
<td>3</td>
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<tr>
<td>HIST 564</td>
<td>Medieval Russia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 565</td>
<td>Imperial Russia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 568</td>
<td>Rise and Fall of the Soviet Union</td>
<td>3</td>
</tr>
<tr>
<td>HIST 574</td>
<td>Slavery in the New World</td>
<td>3</td>
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<tr>
<td>HIST 591</td>
<td>Food in History: West and East</td>
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<tr>
<td>HIST 601</td>
<td>Oral History</td>
<td>3</td>
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<tr>
<td>HIST 610</td>
<td>American Colonial History</td>
<td>3</td>
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<tr>
<td>HIST 615</td>
<td>Rise of Modern America: Politics, Culture, and Society, 1900-1950</td>
<td>3</td>
</tr>
<tr>
<td>HIST 616</td>
<td>Contemporary America, 1941-Present</td>
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<tr>
<td>HIST 617</td>
<td>America in the 1960's</td>
<td>3</td>
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<tr>
<td>HIST 618</td>
<td>History of the American West to 1900</td>
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</tr>
<tr>
<td>HIST 621</td>
<td>The American West in the 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>HIST 625</td>
<td>The Body, Self and Society</td>
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<tr>
<td>HIST 630</td>
<td>The United States and the World, 1890-2003</td>
<td>3</td>
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<tr>
<td>HIST 631</td>
<td>The Contemporary Afro-American Experience</td>
<td>3</td>
</tr>
<tr>
<td>HIST 649</td>
<td>History of Feminist Theory</td>
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<tr>
<td>JOUR 618</td>
<td>First Amendment and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

History Category II: Non-western Orientation. Satisfied by courses in Africa and Middle East, East Asia, Latin America, Native America:

| Code   | Title                                                                 | Hours |
|--------|                                                                      |       |
| HIST 102 | Introduction to History, Honors: ______                             | 3     |
| HIST 103 | Environment and History                                            | 3     |
| HIST 104 | Introduction to African History                                     | 3     |
| HIST 109 | The Black Experience in the Americas                               | 3     |
| HIST 110 | Introduction to Non-Western History: ______                        | 1-3   |
| HIST 111 | Introduction to African History, Honors                             | 3     |
| HIST 117 | Russia, An Introduction                                            | 3     |
| HIST 118 | Premodern East Asia                                                | 3     |
| HIST 119 | Modern East Asia                                                   | 3     |
| HIST 120 | Colonial Latin America                                             | 3     |
| HIST 121 | Modern Latin America                                               | 3     |
| HIST 122 | Colonial Latin America, Honors                                     | 3     |
| HIST 123 | Modern Latin America, Honors                                       | 3     |
| HIST 124 | Latin American Culture and Society                                 | 3     |
| HIST 140 | Global Environment I: The Discovery of Environmental Change        | 5     |
| HIST 142 | Global Environment II: The Ecology of Human Civilization           | 5     |
| HIST 144 | Global Environment I: Discovery of Environmental Change, Honors    | 5     |
| HIST 145 | Global Environment II: The Ecology of Human Civilization, Honors   | 5     |
| HIST 160 | Introduction to West African History                               | 3     |
| HIST 177 | First Year Seminar: ______                                        | 3     |
| HIST 190 | Warlords and Rebels in Asia                                       | 3     |
| HIST 202 | Writing the Past-Category II/Non-Western Topics: ______            | 3     |
HIST 204 Speaking the Past-Category II/Non-Western Topics: 3
HIST 250 Study Abroad Topics in: 1-5
HIST 300 Modern Africa 3
HIST 303 Sin Cities 3
HIST 307 Modern Africa, Honors 3
HIST 308 Key Themes in Modern Global History 3
HIST 314 Globalization: History and Theory 3
HIST 318 Indian Territory 3
HIST 326 Native Americans Confront European Empires 3
HIST 327 The Premodern Middle East 3
HIST 328 The Modern Middle East 3
HIST 332 Sex in History 3
HIST 336 Ethics, Ideas, and Nature 3
HIST 337 History, Ethics, Modernity 3
HIST 348 History of the Peoples of Kansas 3
HIST 351 American Indian and White Relations to 1865 3
HIST 352 American Indians Since 1865 3
HIST 353 Indigenous Peoples of North America 3
HIST 365 Invention of the Tropics 3
HIST 368 A History of Afro-Latin America 3
HIST 369 Colonialism and Revolution in the Third World, Honors 3
HIST 371 Tequila, Tango, Carnival, City 3
HIST 376 Immigrants, Refugees, and Diasporas 3
HIST 378 Beyond the Iron Curtain: Soviet Perspectives on the Cold War 3
HIST 390 Topics in Non-Western History: 3
HIST 391 Topics in (Honors): 3
HIST 392 Huns, Turks, and Mongols: The Nomad Factor in Asian History 3
HIST 393 The Silk Road 3
HIST 394 Made in China: Chinese Business History 3
HIST 395 History of Sushi 3
HIST 397 From Mao to Now: China's Red Revolution 3
HIST 398 Introduction to History of Japan: Anime to Zen 3
HIST 399 The Samurai 3
HIST 400 Indigenous People of the Great Plains 3
HIST 401 Case Studies in: 2-3
HIST 450 Study Abroad Topics in: 1-5
HIST 460 Topics in: 1.5
HIST 461 The Asia-Pacific War, 1937-1945 3
HIST 480 Travelers' Tales of the Middle East 3
HIST 481 From Harem to the Streets: Gender in the Middle East, 1900-Present 3
HIST 492 Readings in History 1-4
HIST 493 Service Learning in History 1-3
HIST 503 The Ancient History of the Near East 3
HIST 510 Topics in Non-Western History: 3
HIST 511 Foodways: Native North America 3
HIST 512 Foodways: Latin America 3
HIST 561 Liberation in Southern Africa 3
HIST 564 Medieval Russia 3
HIST 565 Imperial Russia 3
HIST 566 Rise and Fall of the Soviet Union 3
HIST 570 The Middle East After World War II 3
HIST 574 Slavery in the New World 3
HIST 575 The Many Faces of Mexico 3
HIST 576 History of the Caribbean and Central America 3
HIST 579 The History of Brazil 3
HIST 580 Economic History of Latin America 3
HIST 581 The Japanese Empire 3
HIST 583 Imperial China 3
HIST 584 Modern China 3
HIST 585 Beer, Sake, Tea-Beverages in Japan History 3
HIST 587 Age of Shoguns: Early Modern Japan 3
HIST 588 Japan, 1853-1945 3
HIST 589 Japan Since 1945 3
HIST 591 Food in History: West and East 3
HIST 596 Defining Japan: Marginalized Groups and the Construction of National Identity 3
HIST 598 Sexuality and Gender in African History 3
HIST 601 Oral History 3
HIST 603 History of Tibet 3
HIST 604 Contemporary Greater China 3
HIST 605 Medieval Japan 3
HIST 611 Early American Indian History 3
HIST 612 History of Federal Indian Law and Policy 3
HIST 618 History of the American West to 1900 3
HIST 619 History of the American Indian 3

History Capstone Seminar

Majors must complete a capstone research experience in which they research and write an original thesis based on primary sources. Alternatively, majors with a GPA above 3.5 may choose to write a senior honors thesis. 3 of these credit hours will also count toward the master’s degree and must be completed during the Senior year.

Satisfied by one of the following:
HIST 696 Seminar in: 3

HIST 690 Honors Course in History and HIST 691 Undergraduate History Honors Seminar

History Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

Major Hours
Satisfied by 36 hours of major courses. No more than 2 HIST 492 (https://catalog.ku.edu/search/?P=HIST%20492) Readings in History courses may be applied to the major. Only courses taken in the Department of History or cross-listed in other units are accepted for credit toward the major.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major. Of these 27 hours, at least 6 hours (two courses) must be taken at the 500-699 level (in addition to HIST 696).

**Major Junior/Senior Graduation (300+) GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Proficiency in a foreign language is required for the M.A. degree if pursuing an MA with a focus outside the United States. Students in the accelerated program should complete at least the fourth semester of a relevant foreign language with a grade of B or better by the end of Year 4 or be prepared to demonstrate proficiency by passing the department’s language proficiency exam at the beginning of Year 5. Should the student not pass the proficiency exam, s/he will be expected either to enroll in the appropriate level of language study or establish a plan for passing the language exam at the start of the second semester of Year 5.

**Master’s Degree Requirements**
The master’s program in history requires satisfactory completion of 30 credit hours of graduate courses. In addition to the 12 credit hours of graduate coursework taken during the Senior year, students must complete an additional 18 credit hours of graduate coursework once fully admitted to the master’s program. These include:

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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<tr>
<td>HIST 802</td>
<td>Seminar in: ____</td>
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<tr>
<td>HIST 805</td>
<td>The Nature of History</td>
<td>3</td>
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</tbody>
</table>

**Electives (12)**
At least 12 hours of electives numbered 800 or above. Students may take up to 3 of these hours outside of the History department.

No more than 9 hours of Electives numbered 500-799. Students in the Accelerated Masters should plan to take 9 hours of 500+ electives before the end of their fourth year.

**MA Examination**
In the final semester of enrollment, terminal M.A. degree will sit for a ninety-minute oral examination that covers the student’s research fields and the papers prepared in the undergraduate capstone seminar (HIST 696 or 690/691) and the graduate research seminar (HIST 802), respectively.

The M.A. exam tests the student's mastery of the scholarly debates pertinent to their field and their facility with advanced methods of historical research and writing.

The examination will cover basic historiographical questions, and the student should offer evidence of knowledge of the field equivalent to the material contained within a survey textbook. Moreover, the exam is designed to permit the student to demonstrate competency in engaging in an academic conversation. The examining committee will also discuss the content and significance of the research papers and advise upon future directions in the student’s submission of these papers for publication.

A detailed presentation of departmental degree requirements and regulations is included in the department’s Graduate Student Handbook, available online at https://history.ku.edu/graduate-resources (https://history.ku.edu/graduate-resources/).

**Progression Requirements**
Given the accelerated nature of this program, each student’s progress will be closely monitored at various points during the program:

1. Upon approval to begin graduate coursework in the accelerated program, the student must meet with the DGS to plan the final year of undergraduate study.
2. In the final semester of undergraduate study, the department will review the student’s performance in graduate-level History courses taken in the final year. The student must earn a grade of B+ or better in each of these courses to be eligible for regular admission to the master’s degree.
3. Following completion and award of the undergraduate degree, the admitted student will again meet with the DGS to review the course plan for the final year of graduate study and update as needed. The student’s performance in the graduate-level courses taken as an undergraduate will be evaluated.
4. The student will not be permitted to enroll in courses for graduate credit toward the master’s degree until the baccalaureate degree has been conferred.

Students should complete all requirements for the Accelerated M.A. within 2 to 3 semesters of receiving the bachelor’s degree. If unforeseen circumstances prevent the timely completion of the master’s degree, the student must consult with their graduate advisor to develop an alternative plan for completion.

**Year 1**

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<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
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<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<tr>
<td>Goal 3 Social Science</td>
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**Year 2**

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<td>6</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>15-17</strong></td>
<td><strong>13-16</strong></td>
<td><strong>28-33</strong></td>
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</tbody>
</table>

15-17 13-16
Doctor of Philosophy in History

Earning a KU Ph.D. in History requires a mastery of research skills, including the ability to contextualize and interpret primary sources, knowledge of the languages relevant to one’s research, and the ability to develop an original historical argument that contributes to the historiography of one’s field. Moreover, a KU Ph.D. in History certifies that students can communicate complex ideas persuasively in writing and orally. It also attests to the readiness of a graduate of our program to teach history and advise undergraduates at the level of the university classroom and to train graduate students.

Our program privileges advanced training in History that prepares and encourages students to research and write “across and between” conventionally-defined historiographical fields. To develop such a research program, students read in geographic, chronological, and thematic fields. Fields may be geographic, chronological, and/or thematic to provide maximum flexibility. Ph.D. students designate one major and two minor fields in consultation with their primary advisor and advisory committee.

All students who are admitted into the Ph.D. program for full-time study, except those who have secured guaranteed external institutional funding, are provided with 5 years of funding in the form of a fellowship, teaching, or research position contingent on funding availability. International students whose native language is not English are eligible to hold a GTA appointment, provided they meet the University’s and the Department’s standards for written and spoken English. Applicants who indicate that they are seeking Department funding will be considered automatically for nomination for University-wide fellowships and grants for entering graduate students.

For statistics regarding our program, please see our Doctoral Program Profile (http://graduate.ku.edu/sites/graduate.ku.edu/files/docs/dpp/DPP_A_HIST_HIST.pdf), which demonstrates our success at funding and placing current and recent graduates.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

In History at KU, we privilege high-quality graduate advising and mentorship at every stage of a student’s interaction with our department. As such, our application processes for the M.A. and Ph.D. are geared towards ensuring the best possible fit between faculty and graduate students. Graduate applicants who seek to study at the University of Kansas are required to correspond with at least one prospective faculty advisor well in advance of the application deadline. On the most basic level, these preliminary contacts with faculty give applicants a sense of whether or not the prospective advisor is currently taking new students. More than this, these conversations offer candidates for admission a

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1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

4 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.
better sense of how they might fit into the program at KU. Our admissions process is designed to educate prospective students about what studying at KU would really be like and about the resources the Department and University possess in their areas of interest, as well as offering an opportunity to get to know some of the people they’d be working with during their time here. Moreover, the early establishment of a relationship between prospective faculty and applicant permits students to refine their applications to better articulate the candidate’s fit with our program. The prospective faculty advisor will be able to more effectively advocate for the applicant’s candidacy based upon this correspondence.

Once candidates for admission have established correspondence with at least one prospective advisor, they must complete the online application through the KU Office of Graduate Admissions (https://gradapply.ku.edu/apply/). International or domestic applicants who are non-native speakers of English should carefully review Graduate Studies’ English Proficiency Requirements (https://gradapply.ku.edu/english-requirements/).

The application deadline is January 5 for all applicants. Please schedule the TOEFL exam with this deadline in mind—scores must be received by the application deadline.

The application comprises the following:

- **Statement of Academic Objectives** (two pages, double-spaced), including a clear plan for graduate research in a specific field of study. This statement should be largely academic rather than biographical and should achieve the following objectives:
  - Suggest a potential direction for your research at KU as concretely as possible;
  - Outline how you see a PhD in History fitting into your broad career goals; and
  - Identify specific chronological, geographical, and thematic areas of interest

- **Curriculum Vitae**

- **Writing Sample** (maximum twenty-five pages, double-spaced). The Department is interested in reviewing the best-crafted, most persuasively argued writing sample that applicants are able to provide. Such papers are often derived from an upper-level undergraduate history class in which the student conducted independent research and employed both primary and secondary sources.

- **GRE Scores are not required**

- **Official Transcript** from each institution that has granted you a degree, or at which you are currently enrolled

- Three letters of recommendation – The letters can be directly uploaded online directly by those who write the recommendations, or they can be mailed to the University of Kansas, Department of History, ATTN: Graduate Academic Advisor, Wescoe 3650, 1445 Jayhawk Boulevard, Lawrence, KS 66045. A recommendation form for hard copy letters can be downloaded here (http://www.graduate.ku.edu/sites/graduate.drupal.ku.edu/files/docs/ApplicationProcess/KULetterOfRecForm.pdf).

Please note that documents, including a writing sample and transcripts, should be uploaded to the application. Applicants should not send hard copies of application materials to the Department of History.

When you submit your online application, it is made available to the Department of History for review, yet it is the applicant’s responsibility to ensure the Office of Graduate Studies has received all materials by the deadline. The Department of History Graduate Office cannot process your application and move it forward for consideration by the Graduate Committee until all materials have been received. The Department of History reviews applications for completeness, and the Graduate Program Coordinator will contact you if your application is not complete.

### Ph.D. Degree Requirements

Students normally must complete the M.A. degree before they are eligible to enter the Ph.D. program. Students who enter the M.A. program may either complete the degree or petition for direct admission to the Ph.D. program. This petition first must be endorsed by the student’s advisor and the field committee and then be approved by the department’s graduate committee.

### Course Requirements

1. A minimum of 33 hours of credit at the graduate level including the following:
   a. A minimum of three historiographical colloquia numbered HIST 801 and above
   b. Two HIST 802 Research Seminars
   c. HIST 805 The Nature of History
   d. HIST 998 Portfolio Preparation

2. At least 24 hours of the minimum credits must be taken as HIST courses.

3. At least 18 hours of the minimum credits must be taken at the 700 level or above.

### Research Skills and Responsible Scholarship

In order to fulfill the University research skills and responsible scholarship requirement, all graduate students in History must take HIST 805 and be certified by the department in a foreign language before taking the comprehensive oral exam.

**Note:** Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral research skills and responsible scholarship are listed in the Graduate Studies section of the online catalog and in the KU Policy Library (https://policy.ku.edu/graduate-studies/research-skills-responsible-scholarship/).

### Portfolio and Oral Comprehensive Exam

A written portfolio of the student’s work and an oral examination that will provide the candidate with an opportunity to demonstrate the knowledge they have acquired and respond to questions from the committee about their written portfolio. The student must pass their portfolio exam by the end of their fifth semester of study. Any exception to taking the portfolio exam as outlined above requires a petition to the History Graduate Committee.

### Dissertation Prospectus Defense

Students will defend their Dissertation Prospectus in an oral examination with their Advisory committee the semester following their passing of the Portfolio Exam. Students must successfully defend a dissertation prospectus by the end of their sixth semester. Any exception to this requires a petition to the History Graduate Committee.

### Doctoral Dissertation and Defense


The dissertation is a book-length piece of original scholarship that makes a significant contribution to historical knowledge. The candidate for the Ph.D. must defend this piece of scholarship in an oral examination.

For more information about the Ph.D. program in History, consult the History Graduate Handbook on the History Department webpage. (http://history.ku.edu)

Department of History of Art

Why study the history of art?

The study of the visual arts in their historical contexts enriches our understanding of human creativity and the human condition. It provides students with the cultural literacy and critical thinking, research, and communication skills that are relevant for a variety of careers, including in art museums, galleries, and collections, as well as schools, universities, publishers and archives. The study of art history can also provide the foundation for a career in other professions such as business, law, media, or government.

Undergraduate Programs

The curriculum introduces students to diverse forms of art and visual culture from prehistory to the present in Europe, the Americas, East Asia, Africa, and the Middle East, both within national traditions and transnationally. Students develop depth and breadth of knowledge as they probe the ways in which art and visual culture at once reflect and shape the societies in which they are produced. The study of art history fosters visual and cultural literacy and critical thinking, research, and communication skills that are valuable for a variety of careers.

Several introductory courses are offered every semester. These include 1- and 2-semester surveys in Western art (HA 100, HA 300, HA 150, and HA 151), HA 261 Introduction to Modern Art, HA 166 The Visual Arts of East Asia, HA 367 Art and Culture of Japan, HA 368 Art and Culture of China, and HA 330 Italian Renaissance Art.

Courses for Nonmajors

All courses are open to nonmajors if they have the necessary prerequisite, which in most cases is one of the introductory courses. An undergraduate advisor counsels nonmajors who need help selecting a course.

Graduate Programs

The Kress Foundation Department of Art History offers graduate art history courses in European, American, and East Asian art. Students may pursue graduate degrees in European and American Art/Global Modern and Contemporary Art or East Asian Art.

The M.A. provides students with a broad and deep knowledge of the visual arts, as well as study of the basic concepts, theories, and methods of the discipline. The M.A. may be pursued as a terminal degree or as preparation for doctoral studies at KU or to apply elsewhere.

The Combined M.A./Ph.D. is a streamlined degree track intended for students who want to pursue the Ph.D. in art history at KU, but who do not yet hold the M.A. degree in art history.

The Ph.D. is intended for students who hold the M.A. degree in art history.

Students who are interested in enrolling in graduate-level coursework in the Art History Department without formal admission to a graduate program at KU are encouraged to apply for non-degree seeking student status. See the department's admission webpage (http://arthistory.ku.edu/non-degree-overview-admission/) for further details.

Courses

HA 100. Introduction to Western Art History. 3 Credits. HT H
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 150, HA 151, HA 160, HA 161, or HA 300.

HA 105. Special Study: _____. 1-6 Credits. H
This course is designed for the study of special topics in art history at the introductory level, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies.

HA 150. History of Western Art: Ancient Through Medieval. 3 Credits. HT H
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 160.

HA 151. History of Western Art: Renaissance to Contemporary. 3 Credits. H
A survey of art in the West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 161.

HA 160. History of Western Art: Ancient Through Medieval, Honors. 3 Credits. HT H
A survey of the art of earlier periods in the West, from prehistoric times through the middle ages in Europe, with special emphasis on the relationship between artistic developments and cultural changes. Not open to students with credit in HA 150. Prerequisite: Membership in the University Honors Program or consent of instructor.

HA 161. History of Western Art: Renaissance to Contemporary, Honors. 3 Credits. H
A survey of the art in West from the Renaissance to the contemporary period in Europe and America, with special emphasis on the achievements of individual artists in relation to the cultural movements of their times. Not open to students with credit in HA 151. Prerequisite: Membership in the University Honors Program or consent of instructor.

HA 166. The Visual Arts of East Asia. 3 Credits. W
This course examines major forms of artistic expression in China, Korea, and Japan. Discussions introduce basic art concepts, the themes and purposes of art, and different art styles in East Asia from ancient times to the present. Students develop critical skills through analyzing, writing about, and talking about art and East Asian cultures. Students also learn about important museums in North America and Asia. No prior knowledge of art history or East Asia expected.

HA 177. First Year Seminar: _____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in History of Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HA 261. Introduction to Modern Art. 3 Credits. HT H
This course considers the efforts of artists to explore and represent their place in the modern world. The political, industrial, and scientific revolutions of the late 18th and 19th centuries in the West overturned the certainties of traditional authority and liberated artists to raise new questions. Innovations ranged from Impressionism's light-filled landscapes to Surrealism's dream imagery, Abstract Expressionism's paint-splattered canvases, and Pop Art's celebration of consumer culture. This course addresses these and other modern art movements, emphasizing developments in Europe and the United States through the late 20th century and concluding with international contemporary art in an age of globalization. Intended for non-majors.

HA 300. Introduction to Western Art History. 3 Credits. HT H
A chronological survey of Western art and architecture, including the ancient Near East, Europe from antiquity to the present, and North America from the colonial period to the present. The course emphasizes major historical and cultural developments, analyzes key art works and monuments, and introduces basic art historical principles and analytical methods. The course is offered at the 100 and 300 levels, with additional reading and writing assigned at the 300 level. Intended for non-majors. Does not count toward the 30 required hours in the major. Not open to students with credit in HA 100, HA 150, HA 160, or HA 161.

HA 305. Special Study: _____ 1-6 Credits. H
This course is designed for the study of special topics in art history, including courses taken in the study abroad program. May deal with individual artists, special themes, or other topics not generally covered in courses offered by the department. May be repeated for credit if content varies.

HA 311. The Art and Architecture of the British Isles. 3 Credits. H
Taught in the British Summer Institute in the Humanities Study Abroad program, this course offers an introductory survey of British art and architecture. Through classroom lectures, readings, and visits to museums, churches, and other historic sites, selected works of art and architecture are analyzed in terms of their formal qualities, iconography, and cultural context. Prerequisite: Approval for enrollment in the British Summer Institute in the Humanities Study Abroad program through the KU Office of Study Abroad.

HA 315. The Prehistory of Art. 3 Credits. S
A survey of prehistoric art focusing on the material record and interpretations of rock art (paintings, engravings on rock surfaces in rock-shelters, caves and in open air sites) and portable art created by prehistoric people. The emphasis is on the small-scale societies (hunter-gatherer and early food producers) around the world before the appearance of written records in respective geographic areas. Environmental, social and cultural contexts in which these art forms were created are discussed along with a review of past scholarship and current interpretive approaches to this old and enduring expression of human creativity. Course may be offered in lecture or online format. (Same as ANTH 315.)

HA 322. European Architecture 300-1300. 3 Credits. H
This course surveys the architecture of Western Europe from the 4th through the 14th centuries, concentrating on 750-1300. The medieval millennium was an era of constant conflict: military, diplomatic, intellectual, ideological, theological, and stylistic. Within a chronological framework, this course will examine selected works of architecture and urban design, paying special attention to the tension between architectural innovation and traditional practices. Its mission is to explore why and how these buildings and sites were produced, to understand how they communicate their patrons and makers' ideas, and to discover their audiences' responses to them. Students will consider the reinterpretation and transformation of the classical orders, the adaptation and transformation of several ancient building types, the establishment and development of architecture to serve newly emerging nation-states and religions, the evolution of vaulting, the changing conception of the wall, and the representational qualities of medieval architecture. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor.

HA 325. Aegean Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaeans, Minoans, and Cycladic islanders, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lecture with slides and discussion. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 525 or HA 525. No knowledge of Greek or Latin is required. (Same as CLSX 525.)

HA 326. Greek Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 526 or HA 526. No knowledge of Greek or Latin is required. (Same as CLSX 326.)

HA 327. Roman Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 527 or HA 527. No knowledge of Greek or Latin is required. (Same as CLSX 327.)

HA 330. Italian Renaissance Art. 3 Credits. H/W
A survey of the art and architecture of Italy from c. 1300 to 1550. Special emphasis is placed on regional styles and the private, political, and devotional contexts in which works of art and architecture functioned. Some of the artists whose works are considered are Giotto, Duccio, Donatello, Botticelli, Leonardo, and Michelangelo.

HA 331. Northern European Art from Van Eyck to Brueghel. 3 Credits. H
This course examines Bohemian, French, Netherlandish, and German art in the 14th-16th centuries in settings ranging from religious foundations to noble courts and cities. Participants in the course will consider painting, prints, sculpture, and manuscripts from the era of Jan van Eyck to that of Hieronymus Bosch and Pieter Brueghel the Elder. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor.

HA 335. Renaissance Architecture in Italy. 3 Credits. H
This course examines the history of Italian Renaissance architecture from its origins in the 15th century to its transformation in the 16th, featuring (but not limited to) the work of three of its most celebrated exponents: Filippo Brunelleschi, Michelangelo Buonarroti, and Andrea Palladio. Students will explore how and why 15th and 16th-century architects
and patrons appropriated and interpreted both ancient and medieval forms to create the architectural culture of the Renaissance. We will investigate the revival and transformation of the classical architectural language, the emerging notion of architectural authorship, the ability of architectural forms and materials to convey particular meanings to particular audiences, the deployment of architecture as an instrument of power, and the birth of architectural history and theory. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 535. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor.

HA 340. Special Study in Asian Art Before 1900: _______. 1-6 Credits. H

This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 342. Special Study in 18th/19th-Century European or American Art: _______. 1-6 Credits. H

This course is designed for the study of special topics in European or American art of the 18th and/or 19th centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 343. Special Study in 20th/21st-Century Art: _______. 1-6 Credits. H

This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels.

HA 344. Manga: Histories and Theories. 3 Credits. H

Manga (Japanese comics) have long been an extremely popular and influential medium in Japan and internationally. Manga offer engaging narratives and visual imagery revealing central concerns not only of Japanese culture, history, society and politics, but also of the global cultural industry. The medium has been studied through various disciplinary lenses ranging from art history to visual culture and media studies, literature, sociology, and anthropology. Through the examination of several manga artists and works from the late 19th century to the present as well as reading a broad range of scholarship, this course explores the major issues addressed and theoretical approaches used in the interdisciplinary study of manga. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 544. (Same as EALC 344.)

HA 347. Ceramics of East Asia. 3 Credits. NW H

This course explores the history of East Asian ceramics from the 10th to the late 20th century. Using critical approaches from art history, anthropology, sociology, literature, and materials science, students discuss the historiography and connoisseurship as well as the production, design, and consumption of ceramics such as Yaozhou celadon, Temmoku and Rakku tea bowls, stamped and slip-brushed Punch’ong ware, and Ming blue-and-white porcelain. This is a hybrid course, which means that most of the material and assignments of the course are online. However, students are required to participate in 6-7 field trips, including trips to the Spencer Museum of Art, the kilns located on campus, and a demonstration of the Japanese tea ceremony. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in HA 547.

HA 353. Modern and Contemporary African Art. 3 Credits. H

In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. Not open to students with credit in AAAS 569/HA 569. (Same as AAAS 353.)

HA 354. Japanese Prints. 3 Credits. NW H/W

This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. (Same as EALC 354.)

HA 361. Buddhist Art of Korea. 3 Credits. H

Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 561 or REL 511. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as EALC 360.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

HA 362. Ceramics of Korea. 3 Credits. H

A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 562. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as EALC 372.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

HA 363. Modern Korean Art and Culture. 3 Credits. H

This course is a thematic introduction to Korean art and culture with an emphasis on modern and contemporary Korea. Pre-modern works are contextualized with respect to contemporary issues. Students learn how to conduct a comprehensive analysis of an artwork by considering the political, historical and social conditions of its time within a broader East Asian cultural framework. (Same as EALC 373.) Prerequisite: An introductory course in art history at the college level, or consent of instructor.

HA 367. Art and Culture of Japan. 3 Credits. NW H/W

The history of Japanese art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships expressed through art, interactions with different countries, and the roots of modernism in Japanese art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art. (Same as EALC 367.)

HA 368. Art and Culture of China. 3 Credits. NW H/W

The history of Chinese art interpreted from visual, historical, social, religious, and political perspectives. Representative topics: archaeological discoveries, Buddhist images and architecture, gender relationships
expressed through art, interactions between different ethnic groups, and the roots of modernism in Chinese art. Art history goals: direct engagement with museum collections and enhanced ability to analyze, write about, and talk about art. (Same as EALC 378.)

HA 370. American Art. 3 Credits. H
A survey of American painting, sculpture, and architecture from colonial to recent times. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 371. Modern Sculpture. 3 Credits. H
Since the 1870s, modern sculptors have dramatically transformed their medium, pioneering new forms of figuration and abstraction, investigating new materials and processes, and developing installation and site-specific art. With a focus on Europe and the U.S. through the 1980s, expanding to global trends of recent decades, this course examines how this happened, considering the work of major artists from Rodin, Matisse, Picasso, and Brancusi to Donald Judd, Eva Hesse, Anish Kapoor, Jeff Koons, and David Hammons. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in HA 571. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 372. Baroque Art in Europe. 3 Credits. H
This course surveys significant 17th-century paintings, sculpture and architecture that were produced in Italy, Spain, France and the Southern and Northern Netherlands. Artists whose works are discussed include Caravaggio, Bernini, Velazquez, Rubens, Rembrandt and Vermeer. Artistic elements of individual works, major changes in patronage, and the religious, political, economic and cultural contexts in which the art was produced are examined. Assigned readings present a range of methodological perspectives.

HA 376. Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque. 3 Credits. H
This course surveys significant 17th-century paintings, prints and drawings produced in the Northern and Southern Netherlands (modern-day Netherlands and Belgium). Artists whose works will be discussed include Peter Paul Rubens, Rembrandt van Rijn, Johannes Vermeer, and other painters of scenes of daily life, landscapes, cityscapes, portraits and still-lifes. Artistic elements of individual works and their relationship to major changes in patronage and religious, political, economic and cultural contexts will be examined. Assigned readings will present a range of methodological perspectives. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 576. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 377. African Design. 3 Credits. H/W
This course examines the conceptualization of the "decorative" arts in Africa, including textiles, metals, ceramics, wall decoration, and jewelry, and investigates the relationship of this art in historical category to modernism. How did such a wide range of artistic practices come to be grouped together? Are terms such as "decorative art" and "craft" still operative, and how do they reflect ideas about race and gender? How have African artists approached "traditional" design? What social factors influenced artistic processes and what is the historical symbolism of medium? To address these questions, we will consider artists' writings, art schools and apprenticeships, gender dynamics, transnational artistic exchanges, the concept of the artist-artisan, and the meaning of material and process. Our discussions will span historical and contemporary contexts, and also will examine colonial systems of classification, gender norms and laws, practices of appropriation, and tourism. Not open to students with credit in AAAS 677/HA 677. (Same as AAAS 377.) Prerequisite: An Art History course 100 level or above, or consent of instructor.

HA 380. History of Photography. 3 Credits. H
An introduction to the history of photography. We will consider strategies used over its history to make photography an art, a witness to truth, a record of fact, a purveyor of falsehoods, a mass medium, a hawker of goods and ideologies, an agent of political change, a means of remembrance, and more. Not open to students with credit in HA 580. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 385. The Art of Buddhism. 3 Credits. H/W
A survey of Buddhist visual arts (architecture, sculpture, and painting) of India, China, Japan, and Korea. Through an examination of the history of Buddhist art interpreted from visual, historical, social, and political perspectives, the course enables students to analyze a wide range of Buddhist art forms within their regional contexts. Students will also consider how Buddhist-related material functions within museums and engage with local collections. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 585. (Same as EALC 385.)

HA 388. Modern and Contemporary Visual Arts of Japan. 3 Credits. H
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan's modernization and modernity. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 588. (Same as EALC 388.)

HA 389. Special Study in African Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 391. Special Study in Asian Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 392. Special Study in Ancient Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 393. Special Study in Medieval Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 394. Special Study in Renaissance Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels.

HA 395. Special Study in Baroque Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies.
HA 396. Special Study in American Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in American art. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels.

HA 397. Special Study in Modern Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500-levels.

HA 468. Art and Culture of China, Honors. 3 Credits. NW H/W
An introduction to the arts of China using fundamental principles and analytical methods of art history. Emphasis is placed on cultural contexts of art production, including history and religion. Honors version of HA 368, with more classroom discussion and opportunities for original research. Prerequisite: Membership in the University Honors Program or permission of the instructor. Not open to freshmen or students with credit in HA 268 or HA 368.

HA 488. Chinese Painting, Honors. 3 Credits. NW H/W
A survey of the development of painting in China, beginning with the earliest forms of figural and landscape depiction. Emphasis will be placed on the major painting traditions of the Song, Yuan, Ming, and Qing Dynasties. Prerequisite: An introductory course in art history or Eastern Civilizations and membership in the University Honors Program or consent of instructor.

HA 505. Special Study: ______. 1-6 Credits. H
This course is designed for the study of special topics in art history on a trial basis, open to both undergraduate and graduate students. Prerequisite: An introductory-level course in art history, appropriate to the specific special study topic; or consent of instructor.

HA 506. Early Medieval and Romanesque Art. 3 Credits. H
This course examines the art of Europe from the Early Christian era through the Romanesque period, up to 1200. Architecture, sculpture, manuscript illumination, metalwork and painting are explored in relation to their political, religious and social contexts. Graduate students can expect to complete additional reading and writing assignments. Prerequisite: HA 100 or HA 150, or permission of the instructor.

HA 507. Gothic Art. 3 Credits. H
This course examines the art of Europe during the Gothic period, from 1140-1500. Architecture, sculpture, manuscript illumination, metalwork, painting and furniture are explored in relation to their political, religious and social contexts. Graduate students can expect to complete additional reading and writing assignments. Prerequisite: HA 100 or HA 150, or permission of instructor.

HA 510. Medieval Manuscripts and Early Printed Books. 3 Credits. H
Students study the history of the book from 300 to 1500 A.D., concentrating on the role of visual imagery in books and the place of books in medieval and renaissance culture. In addition to discussing the relation between text and image, and studying the stylistic contexts for ancient, medieval, and Renaissance illumination and early woodcut illustration, participants in this course consider such additional topics as methods of book production, the development of cycles of illustration for religious and secular books, and the relationship between manuscripts and early printed books. Lectures and discussion are supplemented by visits to the fine collection of manuscripts, printed books, and facsimiles in the Kenneth Spencer Research Library. Prerequisite: An introductory course in Western art history at the college level, or consent of the instructor.

HA 511. From Court to City: Northern Art. 3 Credits. H
This course will examine painting, manuscripts, metalwork, tapestry, ivories, prints, and ephemeral arts-such as the material culture of feasts or the entry processions of rulers into cities-in order to gain insight into the place of the arts in late medieval and Renaissance culture in the fourteenth and fifteenth centuries. In addition to discussion of noble, clerical and civic patronage and of artistic style, participants in this course will consider such additional topics as artistic production and the development of art markets in cities. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor.

HA 512. Humanism and Reform: 16th Century Northern European Art. 3 Credits. H
This course explores the history of Northern European painting, manuscripts, printed books, sculpture, prints, and architecture paying particular attention to the artists and patrons that produced and consumed art, the function of artistic objects in settings ranging from church to palace, and the impact of humanism and the Reformation on the arts. Bosch, Brueghel, Cranach, Dürrer, and Holbein will be considered among other artists. Prerequisite: HA 100, HA 150, HA 151, or the equivalent, or consent of instructor.

HA 517. Directed Readings. 1-6 Credits. U
Supervised study and research into specialized areas of art history.

HA 525. Aegean Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the major cultures of the prehistoric Aegean (Greek) world from the Neolithic period to the end of the Bronze Age (ca. 3000-1100 B.C.E.), with special emphasis on the cultural and artistic achievements of the Mycenaean, Minoans, and Cycladic islands, including their contacts with the neighboring cultures of Anatolia (Hittites and Troy), the Levant, Egypt, and South Italy. Includes lectures with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 325 or HA 325. No knowledge of Greek or Latin is required. (Same as CLSX 525.)

HA 526. Greek Archaeology and Art. 3 Credits. H/W
An interdisciplinary survey of the material culture of the ancient Greek world from the Protogeometric period to the end of the Hellenistic age (ca. 1100 - 30 B.C.E.), with emphasis on the major sites, monuments, and changing forms of social and artistic expression (e.g., architecture, sculpture, vase painting). Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 326 or HA 326. No knowledge of Greek or Latin is required. (Same as CLSX 526.)

HA 527. Late Medieval Art in Italy. 3 Credits. H
This course examines the history of paintings, sculptures and buildings produced in Italy from c. 1250 to 1400. Important individual works, artists, and decorative complexes, such as Giotto's Scrovegni (Arena) Chapel, are analyzed in terms of their stylistic, geographical, social, historical, devotional, and literary contexts. Current theories and controversies pertinent to the history and study of 13th- and 14th-century Italian art are also addressed. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor.

HA 528. The Spatial Arts of Urban Italy. 3 Credits.
This course examines the central role played by the arts of urbanism, architecture, and monumental sculpture in shaping the distinctive civic cultures of Italy at the threshold of the Renaissance, 1200-1550. It will pay particular attention to the republics of Florence and Venice, but also consider papal Rome and Pienza, and a changing selection of Italy's magnificent court cities (including Milan, Padua, Parma, and Verona). Prerequisite: HA 100, HA 150, or the equivalent, and an upper-level (300-level or above) course in art history or Western European culture, or consent of instructor.

HA 529. Archaeology and Art of the Ancient Near East. 3 Credits. H

A cross-cultural survey of the material remains of the major civilizations of the ancient Near East, including Anatolia, Mesopotamia, the Levant, and Egypt from Neolithic period to the rise of the Roman empire (ca. 6000 B.C.E. - 30 B.C.E.). Includes lectures with slides and discussion. For advanced undergraduates with backgrounds in the humanities and for graduate students (especially in Classics and History of Art). No knowledge of Greek or Latin is required. (Same as CLSX 529.)

HA 533. Rococo to Realism: Painting in Europe c. 1750-1848. 3 Credits. H

This course considers European painting c. 1750 to 1848 within the context of dramatic political and industrial revolutions. Exploring the power of the visual to engage with broader circumstances and to effect change, we will examine the ways in which shifting constructions of gender, empire, colonialism, race, slavery, and class were addressed by such artists as Watteau, David, Vigée-Lebrun, Delacroix, Géricault, Goya, Turner, Constable, Ingres, Daumier, Bonheur, and Courbet. Graduate students will complete additional assignments. (Same as WGSS 533.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 534. Impressionism and Post-Impressionism: 1848-1900. 3 Credits. H

This course considers French painting 1848 to 1900, a period marked by unprecedented technological advancements, the restructuring of Paris, and the rise of consumer culture. As large sections of the city were leveled to make way for broad boulevards, cafés, and department stores, some artists strove to represent the ever-changing spectacle of urban life; others found their inspiration away from the city. Focusing on Manet, Degas, Caillebotte, Morisot, Cassatt, Monet, Renoir, Seurat, Gauguin, Van Gogh, and Cézanne, we will explore how artists engaged with shifting constructions of modernity, gender, fashion, public and private, empire, race, class, and consumer and leisure cultures. Graduate students will complete additional assignments. (Same as WGSS 534.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 535. Renaissance Architecture in Italy. 3 Credits.

This course examines the history of Italian Renaissance architecture from its origins in the 15th century to its transformation in the 16th, featuring (but not limited to) the work of three of its most celebrated exponents: Filippo Brunelleschi, Michelangelo Buonarroti, and Andrea Palladio. Students will explore how and why 15th and 16th-century architects and patrons appropriated and interpreted both ancient and medieval forms to create the architectural culture of the Renaissance. We will investigate the revival and transformation of the classical architectural language, the emerging notion of architectural authorship, the ability of architectural forms and materials to convey particular meanings to particular audiences, the deployment of architecture as an instrument of power, and the birth of architectural history and theory. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 335. Prerequisite: HA 100, HA 150, or the equivalent, or consent of instructor.

HA 536. Islamic Art and Architecture in Africa. 3 Credits. H

Study of Islamic art and architecture in various cultural and geographical settings, from the first mosques of North African and the Swahili coast to contemporary Islamized masquerades in West Africa. We consider art objects and architectural sites in terms of religious practice, trade and commerce, ritual and political power, and contemporary expression. (AAAS 536.) Prerequisite: AAAS 102, AAAS 103, HA 100, or HA 150; or permission of instructor.

HA 537. Roman Archaeology and Art. 3 Credits. H/W

An interdisciplinary survey of the material culture of ancient Rome from its origins to the late empire (8th c.B.C.E. - 4th c.C.E.). Emphasis on major sites, monuments, and changing forms of social and artistic expression, as well as on Etruscan and Greek influence on Rome and Rome's influence on its provinces. Includes lectures with slides and discussion; use of the Wilcox Museum of Classical Antiquities. For advanced undergraduates with backgrounds in the humanities, and for graduate students (especially in Classics and History of Art). This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in CLSX 327 or HA 327. No knowledge of Greek or Latin is required. (Same as CLSX 527.)

HA 538. Pompeii and Herculaneum. 3 Credits. H

An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HUM 538.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor.

HA 540. Special Study in Asian Art Before 1900: _____ 1-6 Credits. H

This course is designed for the study of special topics in Asian art before 1900, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in Asian art history, or consent of the instructor.

HA 543. Special Study in 20th/21st-Century Art: _____ 1-6 Credits. H

This course is designed for the study of special topics in art of the 20th and/or 21st centuries, including courses taken through study abroad. May be repeated for credit if content varies. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Same topic may not be taken at both the 300 and 500-levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.

HA 544. Manga: Histories and Theories. 3 Credits. H

Manga (Japanese comics) have long been an extremely popular and influential medium in Japan and internationally. Manga offer engaging narratives and visual imagery revealing central concerns not only of Japanese culture, history, society and politics, but also of the global cultural industry. The medium has been studied through various disciplinary lenses ranging from art history to visual culture and media studies, literature, sociology, and anthropology. Through the examination of several manga artists and works from the late 19th century to the present as well as reading a broad range of scholarship, this course explores the major issues addressed and theoretical approaches used in the interdisciplinary study of manga. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Not open to students with credit in HA 344. (Same as EALC 544.) Prerequisite: A
college level introduction to Asian art history or Asian studies, or consent of instructor.

HA 545. Early Chinese Art. 3 Credits. NW H
A survey of Chinese art from Neolithic times through the Han Dynasty (ca. 200 C.E.). Emphasis will be placed on recent archaeological excavations and also on the development of bronze vessels of the Shang and Zhou Dynasties. Prerequisite: A college level introduction to Asian art history, or consent of instructor.

HA 546. Chinese Sculpture. 3 Credits. H
A survey of Chinese sculpture from the Shang dynasty through the Song dynasty (1600 BCE-1279 CE), focused on sculptural programs in native funerary art and Buddhist temples and cave-shrines.

HA 547. Ceramics of East Asia. 3 Credits. NW H
This course explores the history of East Asian ceramics from the 10th to the late 20th century. Using critical approaches from art history, anthropology, sociology, literature, and materials science, students discuss the historiography and connoisseurship as well as the production, design, and consumption of ceramics such as Yaozhou celadon, Temmoku and Raku tea bowls, stamped and slip-brushed Punch’ong ware, and Ming blue-and-white porcelain. This is a hybrid course, which means that most of the material and assignments of the course are online. However, students are required to participate in 6-7 field trips, including trips to the Spencer Museum of Art, the kilns located on campus, and a demonstration of the Japanese tea ceremony. This course is offered at the 300 and 500 level with additional assignments at the 500 level. Not open to students with credit in HA 347. Prerequisite: A college level introduction to Asian art history or Asian studies, or consent of instructor.

HA 549. Chinese Painting. 3 Credits. H
An introductory survey of painting in China from the 7th through the 19th centuries. Prerequisite: One course in art history, or in East Asian languages & cultures; or consent of instructor.

HA 550. Capstone in Art History: ______. 3 Credits. H
An advanced course dedicated to the in-depth study of special topics in art history. Students conduct research on a question within the parameters of the course topic and produce a research product that integrates knowledge from within the discipline of art history or in combination with other disciplines to generate new ideas. May be repeated for credit if content varies. Prerequisite: Junior or senior standing and twelve hours of art history, or consent of the instructor.

HA 554. Japanese Prints. 3 Credits. NW H/W
This course explores the history of Japanese prints with special emphasis on ukiyo-e (pictures of the floating world) woodblock prints made during the Edo Period (early 17th to 19th century). The course is organized thematically as well as chronologically and examines woodblock prints by focusing on both design and socio-political history. The course is taught at the 300 and 500-levels with additional work required at the 500-level. Prerequisite: An introductory course in art history or consent of instructor.

HA 561. Buddhist Art of Korea. 3 Credits. H
Introduction to the history of Buddhist temple buildings, paintings, sculptures and illuminated hand-scrolls in Korea from the 4th through the 19th centuries, with special emphasis on their stylistic, geographical, social, devotional and literary contexts. Current theories and controversies pertinent to the history and study of Korean Buddhist art are also addressed. Not open to students who have taken HA 361. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. (Same as REL 511.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

HA 562. Ceramics of Korea. 3 Credits. H
A survey covering the history of Korean ceramics from prehistoric times through the early modern period, with special emphasis on their stylistic, geographical, social and political context. Topics include celadon-glazed, stamped and slip-decorated stoneware, Korean ceramics related to the Japanese tea ceremony and Mingei pottery. Not open to students who have taken HA 362. Work requirements will be greater for students enrolled at the 500 level than at the 300 level. Prerequisite: A college level introduction to Asian art history, or consent of instructor.

HA 564. European Art, 1900-1945. 3 Credits. H
A detailed survey of modern European art from the turn of the century through World War II. Movements to be considered may include post-impressionism, cubism, constructivism, dada, and surrealism. Graduate students may be expected to do additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 566. Art From 1945 to the 1980s: Modernism to Post-Modernism. 3 Credits. H
An international survey of modern and post-modern art from World War II to the 1980s. Topics may include abstract expressionism, pop art, minimalism, happenings and performance art, earth works, conceptual art, feminist art, photo-realism, the craft revival, and new media. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151 or the equivalent, or consent of instructor.

HA 567. Contemporary Art. 3 Credits. H
This course surveys the dynamic developments in art practice worldwide since the 1980s, highlighting innovations in painting, photography, sculpture, installation, performance, video, and digital art. The course explores contemporary artists' engagement with such themes as the body, identity, politics, spirituality, ecology, technology, time, and globalization. Artists to be considered may include Cindy Sherman, Jeff Koons, Damien Hirst, Kara Walker, Takashi Murakami, Yinka Shonibare, and Ai Weiwei. Graduate students will complete additional assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 569. Modern and Contemporary African Art. 3 Credits. H
In this course, we examine the development of artistic modernisms in Africa in historical context. We also study the content, production, patronage, and display of modern and contemporary African art. In doing so, we consider African artists' engagement with modernity, globalization, and contemporary issues, as well as interrogate influential myths and assumptions regarding African artists and the work they produce. Course themes include the workshop as a critical site, independence movements and the creation of national art forms, art as global commodity, and art in resistance, remembrance, and revolution. Not open to students with credit in AAAS 353/HA 353. (Same as AAAS 569.) Prerequisite: Junior/Senior standing and at least one course at the 100-level or above in AAAS or HA.

HA 570. American Art. 3 Credits. H
A survey of American painting, sculpture, and architecture from colonial to recent times. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 571. Modern Sculpture. 3 Credits. H
Since the 1870s, modern sculptors have dramatically transformed their medium, pioneering new forms of figuration and abstraction, investigating new materials and processes, and developing installation and site-specific art. With a focus on Europe and the U.S. through the 1980s, expanding to global trends of recent decades, this course examines how this happened, considering the work of major artists from Rodin, Matisse, Picasso, and Brancusi to Donald Judd, Eva Hesse, Anish Kapoor, Jeff Koons, and David Hammons. This course is offered at the 300 and 500 level with
additional assignments at the 500 level. Not open to students with credit in HA 371. Intended for graduate students. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 576. Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque. 3 Credits. H
This course surveys significant 17th-century paintings, prints and drawings produced in the Northern and Southern Netherlands (modern-day Netherlands and Belgium). Artists whose works will be discussed include Peter Paul Rubens, Rembrandt van Rijn, Johannes Vermeer, and other painters of scenes of daily life, landscapes, cityscapes, portraits and still-lifes. Artistic elements of individual works and their relationship to major changes in patronage and religious, political, economic and cultural contexts will be examined. Assigned readings will present a range of methodological perspectives. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 376. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 580. History of Photography. 3 Credits. H
An introduction to the history of photography. We will consider strategies used over its history to make photography an art, a witness to truth, a record of fact, a purveyor of falsehoods, a mass medium, a hawker of goods and ideologies, an agent of political change, a means of remembrance, and more. Intended for graduate students. Not open to students with credit in HA 380. Prerequisite: HA 100, HA 151, or the equivalent, and consent of instructor.

HA 582. American Art 1860-1900: Gilded Age. 3 Credits.
A survey of major artists and movements in painting, sculpture, and allied arts in the later 19th century. Consideration will be given to developments in landscape painting and images of the American West, the impact of impressionism and other European movements, and the decorative programs of the Gilded Age. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 583. American Art 1900-1945: Rise of Modernism. 3 Credits. H
A survey of major artists and movements in painting, sculpture, and allied arts, from the early urban realists to the emergent avant-garde at mid century. Consideration will be given to the cosmopolitan tendencies of the 1910s and the 1920s, to regionalist impulses of the 1930s, and the assimilation of European modernism. Attention will be paid both to formal developments and to cultural context. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

HA 585. The Art of Buddhism. 3 Credits. NW H/W
A survey of Buddhist visual arts (architecture, sculpture, and painting) of India, China, Japan, and Korea. Through an examination of the history of Buddhist art interpreted from visual, historical, social, and political perspectives, the course enables students to analyze a wide range of Buddhist art forms within their regional contexts. Students will also consider how Buddhist-related material functions within museums and engage with local collections. The course is taught at the 300 and 500 levels with additional work required at the 500-level. Not open to students with credit in HA 385. Prerequisite: Consent of instructor.

HA 586. Japanese Painting. 3 Credits. NW H/W
A survey covering the development of Japanese painting from the Kofun period to the early twentieth century. Topics include Buddhist and other religious paintings, narrative handscrolls, ink painting, decorative screens, ukiyo-e, and western-style paintings of the Meiji and Taisho periods. Graduate students may be expected to complete additional reading and writing assignments. Prerequisite: An introductory course in Asian art or consent of instructor.

HA 587. Japanese Sculpture. 3 Credits. NW H
A survey of Japanese sculpture from the Kofun period (300-700 C.E.) to the present day. Emphasis is placed on works of Buddhist sculpture from the 7th through the 13th centuries. Prerequisite: An introductory course in Asian art history or consent of instructor.

HA 588. Modern and Contemporary Visual Arts of Japan. 3 Credits. H
This course covers Japanese visual arts from the Meiji era (1868-1912) through the present day. The course is designed thematically as well as chronologically, and examines painting, sculpture and architecture focusing on both socio-political contexts and artistic concerns that emerged at certain times in recent Japanese history. The aim of this course is to provide first-hand knowledge of Japanese modern and contemporary visual arts as well as an in-depth consideration of some of the key issues attached to Japan’s modernization and modernity. The course is taught at the 300 and 500 levels with additional work required at the 500 level. Not open to students with credit in HA 388/EALC 388. Prerequisite: An introductory course in art history or consent of instructor.

HA 590. Special Study in African Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in African art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels. Prerequisite: An appropriate introductory-level course in African Studies, or consent of instructor.

HA 591. Special Study in Asian Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Asian art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels. Prerequisite: An appropriate introductory-level course in art history or Asian Studies, or consent of the instructor.

HA 592. Special Study in Ancient Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in ancient art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels. Prerequisite: An appropriate introductory-level course in Art History or Classics, or consent of the instructor.

HA 593. Special Study in Medieval Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in medieval art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels. Prerequisite: An appropriate introductory-level course in art history or consent of the instructor.

HA 594. Special Study in Renaissance Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Renaissance art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.

HA 595. Special Study in Baroque Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in Baroque art, including courses taken through study abroad. May be repeated for credit if content varies. Same topic may not be taken at both the 300 and 500 levels. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.

HA 597. Special Study in Modern Art: ______. 1-6 Credits. H
This course is designed for the study of special topics in modern art, including courses taken through study abroad. May be repeated for credit if content varies. Prerequisite: An appropriate introductory-level course in art history, or consent of the instructor.

HA 677. African Design. 3 Credits. NW H/W
This course examines the conceptualization of the "decorative" arts in Africa, including textiles, metals, ceramics, wall decoration, and jewelry, and investigates the relation of this art historical category to modernism. How did such a wide range of artistic practices come to be grouped together? Are terms such as "decorative art" and "craft" still operative, and how do they reflect ideas about race and gender? How have African artists approached "traditional" design? What social factors influenced artistic processes and what is the historical symbolism of medium? To address these questions, we will consider artists' writings, art schools and apprenticeships, gender dynamics, transnational artistic exchanges, the concept of the artist-artisan, and the meaning of material and process. Our discussions will span historical and contemporary contexts, and also will examine colonial systems of classification, gender norms and laws, practices of appropriation, and tourism. Not open to students with credit in AAAS 377/HA 377. (Same as AAAS 677.) Prerequisite: An Art History course 100 level or above, or consent of instructor.

HA 698. Honors Essay in Art History. 3 Credits. H
Required for departmental honors. A course of directed research and the preparation of a paper on an art history topic, supervised by a professor. Prerequisite: A grade-point average of 3.5 in art history and 3.25 in all courses, and consent of a major advisor and supervising professor.

HA 706. Seminar: ______. 3 Credits.
A concentrated study of a specific topic in art history. May be repeated for credit if content varies. Prerequisite: Consent of instructor.

HA 707. Directed Readings. 1-6 Credits.
Supervised study and research into specialized areas of art history.

HA 709. Art Histories: Theory and Methodology. 3 Credits.
This course examines the major methodologies and theories that have shaped and continue to shape the field of art history. Through critical reading of primary, secondary, and interpretive texts, the course will analyze closely the history and current state of the discipline. Prerequisite: Nine hours of History of Art or consent of instructor.

HA 720. Asian Art: Theory and Method. 3 Credits.
This course examines important methodologies and theories of the past and present employed in the field of Asian art history. Through critical reading of primary documents and secondary scholarship, students will gain historical perspective on and practical tools for research in the history of Asian art and visual culture. Prerequisite: Nine hours of History of Art or consent of instructor.

HA 760. Proseminar in Korean Art. 3 Credits.
Intensive study of a selected topic in the visual arts of Korea; topics may focus on a particular genre, theme, historical period or group of artists, for example Buddhist painting and sculpture, Choson period landscape and genre painting, ceramics and lacquerware or modern and contemporary art in North and South Korea. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor.

HA 788. Proseminar in Japanese Art. 3 Credits.
Critical analysis of readings on selected topics in Japanese art. May be repeated for credit up to a maximum of 12 hours. Prerequisite: Consent of instructor.

HA 789. Proseminar in Chinese Art. 3 Credits.
Critical analysis of readings on selected topics in Chinese art. May be repeated for credit up to a maximum of 12 credit hours. Prerequisite: Consent of instructor.

HA 898. Franklin Murphy Seminar in Art History: ______. 3 Credits.
This seminar is given each spring by the Murphy Lecturer of the year and includes two weeks of intensive study with a nationally known expert in a special field of art history. The other weeks of seminar meetings for the semester are conducted by the faculty member most closely specialized in this field. Prerequisite: Consent of supervising faculty member.

HA 899. Thesis. 1-6 Credits.
Thesis Hours. Graded on a satisfactory progress/limited progress/no progress basis.

HA 906. Seminar: ______. 3 Credits.
A concentrated study of a specific topic in art history. May be repeated for credit if content varies. Prerequisite: Consent of instructor.

HA 907. Directed Readings. 1-6 Credits.
Supervised study and research into specialized areas of art history. Prerequisite: Nine hours of art history and a reading knowledge of a pertinent foreign language.

HA 925. Seminar in Late Medieval Art: ______. 3 Credits.
A study of selected problems dealing with the art of the later Middle Ages. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 935. Seminar in Northern Renaissance Art: ______. 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 940. Seminar in 17th Century Art: ______. 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 955. Seminar in 19th Century Art: ______. 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 980. Seminar in Chinese Art: ______. 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 995. Seminar in Japanese Art: ______. 3 Credits.
A concentrated study of one or two artists, monuments or movements. Different topics are offered in different semesters. May be repeated for credit up to a maximum of 12 credit hours.

HA 999. Doctoral Dissertation. 1-12 Credits.
This course may be taken more than once, but not for more than twelve hours of credit in any one semester. Graded on a satisfactory progress/limited progress/no progress basis.
Bachelor of Arts and Bachelor of General Studies in History of Art

Why study the history of art?

The study of the visual arts in their historical contexts enriches our understanding of human creativity and the human condition. It provides students with the cultural literacy and critical thinking, research, and communication skills that are relevant for a variety of careers, including in art museums, galleries, and collections, as well as schools, universities, publishers, and archives. The study of art history can also provide the foundation for a career in other professions such as business, law, media, or government.

Undergraduate Admission

Admission to the College of Liberal Arts

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

History of Art Programs

Bachelor's degrees with majors in the history of art are offered in the College of Liberal Arts and Sciences (B.A. and B.G.S.) and in the School of the Arts (B.F.A.). See Bachelor of Fine Arts in History of Art (p. 1961) in the School of the Arts Department of Visual Art section of the catalog for B.F.A. requirements.

Requirements for the B.A. or B.G.S. Major

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<td>HA 150 or HA 160</td>
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<td>HA 151 or HA 161</td>
<td>History of Western Art: Renaissance to Contemporary</td>
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</tbody>
</table>

Bachelor of Fine Arts in History of Art

Breadth Courses: Six courses total; a course or topic may fulfill only one requirement, either for geographical or chronological breadth.

2. Breadth Courses, Geographical Regions: complete one course in three out of four geographical regions.

A. Americas, Africa, Middle East

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 353/569</td>
<td>Modern and Contemporary African Art</td>
</tr>
<tr>
<td>HA 370/570</td>
<td>American Art</td>
</tr>
<tr>
<td>HA 377/677</td>
<td>African Design</td>
</tr>
<tr>
<td>HA 390/590</td>
<td>Special Study in African Art: _____</td>
</tr>
<tr>
<td>HA 396</td>
<td>Special Study in American Art: _____</td>
</tr>
<tr>
<td>HA 529</td>
<td>Archaeology and Art of the Ancient Near East</td>
</tr>
<tr>
<td>HA 536</td>
<td>Islamic Art and Architecture in Africa</td>
</tr>
<tr>
<td>HA 582</td>
<td>American Art 1860-1900: Gilded Age</td>
</tr>
<tr>
<td>HA 583</td>
<td>American Art 1900-1945: Rise of Modernism</td>
</tr>
</tbody>
</table>

B. Europe

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HA 311</td>
<td>The Art and Architecture of the British Isles</td>
</tr>
<tr>
<td>HA 322</td>
<td>European Architecture 300-1300</td>
</tr>
<tr>
<td>HA 325/525</td>
<td>Aegean Archaeology and Art</td>
</tr>
<tr>
<td>HA 326/526</td>
<td>Greek Archaeology and Art</td>
</tr>
<tr>
<td>HA 327/537</td>
<td>Roman Archaeology and Art</td>
</tr>
<tr>
<td>HA 330</td>
<td>Italian Renaissance Art</td>
</tr>
<tr>
<td>HA 331</td>
<td>Northern European Art from Van Eyck to Brueghel</td>
</tr>
<tr>
<td>HA 335/535</td>
<td>Renaissance Architecture in Italy</td>
</tr>
<tr>
<td>HA 372</td>
<td>Baroque Art in Europe</td>
</tr>
<tr>
<td>HA 376/576</td>
<td>Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque</td>
</tr>
<tr>
<td>HA 393/593</td>
<td>Special Study in Medieval Art: _____</td>
</tr>
<tr>
<td>HA 394/594</td>
<td>Special Study in Renaissance Art: _____</td>
</tr>
<tr>
<td>HA 395/595</td>
<td>Special Study in Baroque Art: _____</td>
</tr>
<tr>
<td>HA 506</td>
<td>Early Medieval and Romanesque Art</td>
</tr>
<tr>
<td>HA 507</td>
<td>Gothic Art</td>
</tr>
<tr>
<td>HA 510</td>
<td>Medieval Manuscripts and Early Printed Books</td>
</tr>
<tr>
<td>HA 511</td>
<td>From Court to City: Northern Art</td>
</tr>
<tr>
<td>HA 512</td>
<td>Humanism and Reform: 16th Century Northern European Art</td>
</tr>
<tr>
<td>HA 527</td>
<td>Late Medieval Art in Italy</td>
</tr>
<tr>
<td>HA 528</td>
<td>The Spatial Arts of Urban Italy</td>
</tr>
<tr>
<td>HA 533</td>
<td>Rococo to Realism: Painting in Europe c. 1750-1848</td>
</tr>
<tr>
<td>HA 534</td>
<td>Impressionism and Post-Impressionism: 1848-1900</td>
</tr>
<tr>
<td>HA 538</td>
<td>Pompeii and Herculaneum</td>
</tr>
<tr>
<td>HA 564</td>
<td>European Art, 1900-1945</td>
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C. East Asia

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 340/540</td>
<td>Special Study in Asian Art Before 1900: _____</td>
</tr>
<tr>
<td>HA 344/544</td>
<td>Manga: Histories and Theories</td>
</tr>
<tr>
<td>HA 347/547</td>
<td>Ceramics of East Asia</td>
</tr>
<tr>
<td>HA 354/554</td>
<td>Japanese Prints</td>
</tr>
<tr>
<td>HA 361/561</td>
<td>Buddhist Art of Korea</td>
</tr>
<tr>
<td>HA 362/562</td>
<td>Ceramics of Korea</td>
</tr>
<tr>
<td>HA 363</td>
<td>Modern Korean Art and Culture</td>
</tr>
</tbody>
</table>
3. Breadth Courses, Chronological Periods: complete one course in three out of four chronological periods.

A. Pre-1400
- HA 322 European Architecture 300-1300
- HA 325/525 Aegean Archaeology and Art
- HA 326/526 Greek Archaeology and Art
- HA 327/537 Roman Archaeology and Art
- HA 361/561 Buddhist Art of Korea
- HA 392/592 Special Study in Ancient Art: ______
- HA 393/593 Special Study in Medieval Art: ______
- HA 506 Early Medieval and Romanesque Art
- HA 507 Gothic Art
- HA 510 Medieval Manuscripts and Early Printed Books
- HA 527 Late Medieval Art in Italy
- HA 529 Archaeology and Art of the Ancient Near East
- HA 538 Pompeii and Herculaneum
- HA 545 Early Chinese Art

B. 1400-1850
- HA 330 Italian Renaissance Art
- HA 331 Northern European Art from Van Eyck to Brueghel
- HA 335/535 Renaissance Architecture in Italy
- HA 347/547 Ceramics of East Asia
- HA 354/554 Japanese Prints
- HA 372 Baroque Art in Europe
- HA 376/576 Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque
- HA 394/594 Special Study in Renaissance Art: ______
- HA 395/595 Special Study in Baroque Art: ______
- HA 512 Humanism and Reform: 16th Century Northern European Art
- HA 533 Rococo to Realism: Painting in Europe c. 1750-1848

C. Post-1850
- HA 343/543 Special Study in 20th/21st-Century Art: ______
- HA 344/544 Manga: Histories and Theories

D. Cross-regional
- HA 367 Art and Culture of Japan
- HA 368 Art and Culture of China
- or HA 468 Art and Culture of China, Honors
- HA 545 Chinese Painting, Honors
- HA 546 Chinese Sculpture
- HA 549 Chinese Painting
- HA 584 Japanese Sculpture

D. Cross-period
- HA 371/571 Modern Sculpture
- HA 380/580 History of Photography
- HA 566 Art From 1945 to the 1980s: Modernism to Post-Modernism
- HA 567 Contemporary Art
- HA 582 American Art 1860-1900: Gilded Age
- HA 583 American Art 1900-1945: Rise of Modernism

4. Complete an art history course approved for Goal 6 in the KU Core. (The Goal 6 art history course may also fulfill one of the breadth requirements above, in which case an elective course should be taken for the final 3 required hours of art history.)

5. Art history elective (0-3 hours; see number 4 above).

Total Hours: 30

Note: HA 100/HA 300 is a 1-semester survey of Western art history intended for non-majors and does not count toward the 30 required hours in art history. A student who takes HA 100 or HA 300 and then decides to major in art history must then also take either HA 150 or HA 151 (or both). A student who already has credit in either HA 150 or HA 151, however, should not take HA 100 or HA 300.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in History of Art can be found here: History of Art (p. 1552), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in History of Art can be found here: History of Art (p. 1553), or by using the left-side navigation.

**Departmental Honors**

The department invites art history undergraduate majors to apply for graduation with departmental honors. They must meet the following criteria:

1. An overall grade-point average of at least 3.25 and an art history grade-point average of 3.5 at the time of declaring intention to seek honors.
2. In consultation with the departmental honors coordinator and with approval from a supervising professor, declared intention of seeking honors no later than the time of enrollment for the final undergraduate semester.
3. Enrollment in HA 698 Honors Essay and full participation in a concurrent art history graduate seminar (numbered 700 or above) for which the student must write a substantial, original research paper to be submitted to the supervising professor as an honors essay.
4. Approval of the honors essay by the supervising professor and 2 other faculty members who, as a committee, certify to the departmental honors coordinator that the student has successfully completed the requirements to earn honors.

**BA in History of Art**

Below is a sample 4-year plan for students pursuing the BA in History of Art. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 150 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
<td>HA 151 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 166 (Major Requirement)</td>
<td>3</td>
<td>HA 300+ Breadth Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>2nd Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 300+ Breadth Course (Major Requirement)</td>
<td>3</td>
<td>HA 300+ Breadth Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>HA 300+ Breadth Course (Major Requirement)</td>
<td>3</td>
<td>HA 300+ Breadth Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>2nd Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 300+ Breadth Course (Major Requirement)</td>
<td>3</td>
<td>HA Capstone, Goal 6 Integration &amp; Creativity, Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>HA Elective 300+, or Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>2nd Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>2nd Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>2nd Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

History of Art Breadth requires one course in 3 out of the 4 Geographical Regions and one course in 3 out of the 4 Chronological Periods for a total of 18 hours (6 courses). See Degree Requirements tab in the Catalog for course lists.

An Art History course approved for Goal 6 Integration & Creativity is required. The department recommends that students take the HA or Studio Art course to satisfy Goal 6 in either the fall or spring semester of their fourth year. HA 698 and HA 550 fulfill a Goal 6 requirement.

A course may double count for a Breadth requirement within the major and also for Goal 6 of the KU Core. If one course is taken to fulfill both requirements, then an additional Art History elective at the 300+ level is required.

For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary core, degree, major, second area of study and/or elective hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in History of Art

Below is a sample 4-year plan for students pursuing the BGS in History of Art. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website. (http://kucore.ku.edu/courses/)

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 150 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
<td>HA 151 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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**Total Hours 120**

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HA 166 (Major Requirement)</td>
<td>3</td>
<td>HA 300+ Breadth Course (Major Requirement)²</td>
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<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>HA 300+ Breadth Course (Major Requirement)²</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Goal 3 Natural Science</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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</table>

**Total Hours 15**

<table>
<thead>
<tr>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<td>HA 300+ Breadth Course (Major Requirement)²</td>
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<tr>
<td>HA 300+ Breadth Course (Major Requirement)²</td>
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<td>HA 300+ Breadth Course (Major Requirement)²</td>
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</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<td></td>
</tr>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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</table>

**Total Hours 15**

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 550 (HA Capstone, Goal 6 Integration &amp; Creativity, BGS Career Prep Course BGSC, Major Requirement)³</td>
<td>3</td>
<td>HA 300+ Breadth Course (Major Requirement)⁴</td>
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<td></td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td></td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td></td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 120**
Minor in History of Art

Why study the history of art?

The study of the visual arts in their historical contexts enriches our understanding of human creativity and the human condition. It provides students with the cultural literacy and critical thinking, research, and communication skills that are relevant for a variety of careers, including in art museums, galleries, and collections, as well as schools, universities, publishers, and archives. The study of art history can also provide the foundation for a career in other professions such as business, law, media, or government.

Requirements for the Minor

History of Art Minor Requirements

Students selecting this minor must complete a minimum of 6 History of Art courses. Satisfied by 18 hours of History of Art coursework. 12 of the 18 hours must be at the 300 level or above. With approval of the art history undergraduate advisor, 1 closely related course taught outside of the art history department (e.g., history of architecture or design) may count toward the minor.

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

Minor Hours

Satisfied by 18 hours of minor courses.

Minor Hours in Residence

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Master of Arts in History of Art

KU offers graduate art history courses in European, American, Global Modern, Contemporary, and East Asian art. Students may pursue graduate degrees in European and American/Global Modern and Contemporary Art or East Asian Art.

The M.A. provides students with a broad and deep knowledge of the visual arts, as well as study of the basic concepts, theories, and methods of the discipline. The M.A. may be pursued as a terminal degree or as preparation for doctoral studies at KU or to apply elsewhere.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A.

To be considered for admission, a student must hold a bachelor's degree. Please review the full Graduate Studies Admissions Policy. (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/) Non-native speakers of English must meet Graduate Studies' English proficiency requirements. (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/)

A full list of the required application materials can be found on the department's website.

M.A. Degree Requirements

The student must complete 30 hours of graduate credit, at least 21 of which must be in art history distributed according to department requirements (see department website). Students pursuing the degree in European and American Art/Global Modern and Contemporary Art must take at least 21 credit hours at the 700-900 level, 6 hours of which must be taken at the 800 level or higher. Students pursuing the degree in East Asian Art must take at least 15 credit hours at the 700 level or higher, 6 hours of which must be taken at the 800 level or higher (see department website for specifics). All course work must satisfy grade standards. The candidate must demonstrate proficiency in the reading of a foreign
language, normally a major European language, Chinese, Korean, or Japanese.

A general written examination (in European and American Art/Global Modern and Contemporary Art or East Asian Art) must be passed for the M.A. degree. M.A. and M.A./Ph.D. students who wish to be considered for admission to the Ph.D. program must complete and sign the Petition for Continuation in the Ph.D. Program form, which will be distributed at the M.A. exam. It is expected that such students will already have expressed this interest to a potential major field advisor and received that faculty member’s support.

The student must pass the M.A. exam in order for the petition to be considered by the graduate faculty. After receiving departmental approval for the petition and completing all M.A. degree requirements, the student will automatically be entered into the Ph.D. program and will be expected to maintain enrollment as per Graduate Studies guidelines. Students who do not submit the petition at the time of the M.A. exam will need to reapply for admission to the art history graduate program.

**Handbook for Graduate Students**

A detailed presentation of departmental degree requirements and regulations is included in the department’s Graduate Student Handbook, available online (https://arthistory.ku.edu/graduatetestudenthandbook/).

**Accelerated Master of Arts in Art History (East Asian)**

Only current KU undergraduate students are eligible to apply to the Accelerated M.A. program. If you are not a current undergraduate student at KU, please review the admission requirements for History of Art’s M.A., M.A./Ph.D., and Ph.D. programs.

The Accelerated M.A. program enables qualified KU students to earn both a bachelor’s degree and master’s degree in art history in 5 years. 12 hours of 500-level-or-above coursework in the major completed in Year 4 of study are eligible to count for both the bachelor’s and master’s degrees. The M.A. degree is completed in Year 5.

The M.A. provides students with a broad and deep knowledge of the visual arts, as well as study of the basic concepts, theories, and methods of the discipline. The M.A. may be pursued as a terminal degree or as preparation for doctoral studies at KU or to apply elsewhere.

Only current KU undergraduate students are eligible to apply to the Accelerated M.A. program. If you are not a current undergraduate student at KU, please review the admission requirements for History of Art’s M.A., M.A./Ph.D., and Ph.D. programs.

**Application Deadline**

Careful course selection and steady progression through the undergraduate career is necessary to ensure all requirements for both the B.A. and M.A. degree may be completed within the 5-year timeframe. All prospective students should discuss their interest in admission to the Accelerated M.A. program with both the Undergraduate Advisor and the Graduate Academic Advisor no later than the second semester of the student’s Junior year.

Prospective students are eligible to apply to the graduate program in the second semester of their Junior year. The following program requirements must be met by this time:

- Major GPA of at least 3.25 and cumulative GPA of at least 3.00;
- On track to complete all requirements for a B.A. or B.G.S. degree in History of Art from KU by the spring semester of the Senior year

**Required Application Materials**

- Two letters of recommendation (preferably from professors in the major). You will be asked to enter the names and e-mail addresses for two recommenders while completing the online application. Your recommenders will automatically receive an e-mail requesting their letters when you submit the application. It is not necessary for your recommenders to send hard copies of their letters to the department if they submit their letters electronically.
- Résumé or curriculum vitae
- A one-page statement of educational and career objectives
- A writing sample, preferably from an art history course, 5-10 pages of text not including the bibliography, endnotes, or images following endnotes.

Upon review of the Application for Admission, the History of Art Department will notify the student of their eligibility to begin graduate-level coursework. Final admission to the graduate program will be contingent upon the following:

- Successful completion of all requirements for the Bachelor’s degree;
- Grades of B+ or above in all History of Art graduate-level coursework taken during the student’s Senior year

Non-native speakers of English must meet Graduate Studies’ English proficiency requirements. (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/)

The course requirements for this accelerated program are fulfilled by a combination of graduate-level courses taken for both undergraduate and graduate credit in Year 4, and graduate credit courses taken in Year 5. Numerous graduate-level courses are regularly offered that fulfill distribution requirements for both the Bachelor’s and M.A. degrees.

The student must be approved to begin coursework toward the Accelerated Master’s prior to enrolling in any 500 level or above courses that are to count for both undergraduate and graduate credit.

**Requirements for the B.A. or B.G.S. Major**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td>9</td>
</tr>
<tr>
<td>or HA 160</td>
<td>History of Western Art : Ancient Through Medieval, Honors</td>
<td></td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td></td>
</tr>
<tr>
<td>or HA 161</td>
<td>History of Western Art: Renaissance to Contemporary, Honors</td>
<td></td>
</tr>
<tr>
<td>and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HA 166</td>
<td>The Visual Arts of East Asia</td>
<td></td>
</tr>
</tbody>
</table>
Breadth Courses: Six courses total; at least two courses must be completed at the 500 level or above and at least two courses must be completed at the 700 level or above. A course or topic may fulfill only one requirement, either for geographical or chronological breadth.

2. Breadth Courses (geographical regions): Complete one course in three out of four geographical regions.

A. Americas, Africa, Middle East
   - HA 353/569  Modern and Contemporary African Art
   - HA 370/570  American Art
   - HA 377/677  African Design
   - HA 390/590  Special Study in African Art: ______
   - HA 396  Special Study in American Art: ______
   - HA 529  Archaeology and Art of the Ancient Near East
   - HA 536  Islamic Art and Architecture in Africa
   - HA 582  American Art 1860-1900: Gilded Age
   - HA 583  American Art 1900-1945: Rise of Modernism
   - HA 706  Seminar: ______

B. Europe
   - HA 311  The Art and Architecture of the British Isles
   - HA 322  European Architecture 300-1300
   - HA 325/525  Aegean Archaeology and Art
   - HA 326/526  Greek Archaeology and Art
   - HA 327/537  Roman Archaeology and Art
   - HA 330  Italian Renaissance Art
   - HA 331  Northern European Art from Van Eyck to Brueghel
   - HA 335/535  Renaissance Architecture in Italy
   - HA 372  Baroque Art in Europe
   - HA 393/593  Special Study in Medieval Art: ______
   - HA 394/594  Special Study in Renaissance Art: ______
   - HA 395/595  Special Study in Baroque Art: ______
   - HA 506  Early Medieval and Romanesque Art
   - HA 507  Gothic Art
   - HA 510  Medieval Manuscripts and Early Printed Books
   - HA 511  From Court to City: Northern Art
   - HA 512  Humanism and Reform: 16th Century Northern European Art
   - HA 527  Late Medieval Art in Italy
   - HA 528  The Spatial Arts of Urban Italy
   - HA 533  Rococo to Realism: Painting in Europe c. 1750-1848
   - HA 534  Impressionism and Post-Impressionism: 1848-1900
   - HA 538  Pompeii and Herculaneum
   - HA 564  European Art, 1900-1945
   - HA 576  Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque
   - HA 706  Seminar: ______

C. East Asia
   - HA 340/540  Special Study in Asian Art Before 1900: ______
   - HA 344/544  Manga: Histories and Theories
   - HA 347/547  Ceramics of East Asia
   - HA 354/554  Japanese Prints
   - HA 361/561  Buddhist Art of Korea

D. Cross-regional
   - HA 362/562  Ceramics of Korea
   - HA 363  Modern Korean Art and Culture
   - HA 367  Art and Culture of Japan
   - HA 368  Art and Culture of China
   - HA 385/585  The Art of Buddhism
   - HA 388/588  Modern and Contemporary Visual Arts of Japan
   - HA 391/591  Special Study in Asian Art: ______
   - HA 488  Chinese Painting, Honors
   - HA 545  Early Chinese Art
   - HA 546  Chinese Sculpture
   - HA 549  Chinese Painting
   - HA 586  Japanese Sculpture
   - HA 587  Japanese Painting
   - HA 586  Japanese Sculpture
   - HA 760  Proseminar in Korean Art
   - HA 788  Proseminar in Japanese Art
   - HA 789  Proseminar in Chinese Art

3. Breadth Courses (chronological periods): Complete one course in three out of four chronological periods.

A. Pre-1400
   - HA 322  European Architecture 300-1300
   - HA 325/525  Aegean Archaeology and Art
   - HA 326/526  Greek Archaeology and Art
   - HA 327/537  Roman Archaeology and Art
   - HA 361/561  Buddhist Art of Korea
   - HA 392/592  Special Study in Ancient Art: ______
   - HA 393/593  Special Study in Medieval Art: ______
   - HA 394/594  Special Study in Renaissance Art: ______
   - HA 395/595  Special Study in Baroque Art: ______
   - HA 396/596  Special Study in Medieval Art: ______
   - HA 397/597  Special Study in Baroque Art: ______
   - HA 506  Early Medieval and Romanesque Art
   - HA 507  Gothic Art
   - HA 510  Medieval Manuscripts and Early Printed Books
   - HA 511  From Court to City: Northern Art
   - HA 512  Humanism and Reform: 16th Century Northern European Art
   - HA 527  Late Medieval Art in Italy
   - HA 528  The Spatial Arts of Urban Italy
   - HA 533  Rococo to Realism: Painting in Europe c. 1750-1848
   - HA 534  Impressionism and Post-Impressionism: 1848-1900
   - HA 538  Pompeii and Herculaneum
   - HA 564  European Art, 1900-1945
   - HA 576  Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque
   - HA 706  Seminar: ______

B. 1400-1850
   - HA 330  Italian Renaissance Art
   - HA 331  Northern European Art from Van Eyck to Brueghel
   - HA 335/535  Renaissance Architecture in Italy
   - HA 347/547  Ceramics of East Asia
   - HA 354/554  Japanese Prints
   - HA 372  Baroque Art in Europe
   - HA 391/591  Special Study in Baroque Art: ______
   - HA 392/592  Special Study in Ancient Art: ______
   - HA 393/593  Special Study in Medieval Art: ______
   - HA 394/594  Special Study in Renaissance Art: ______
   - HA 395/595  Special Study in Baroque Art: ______
   - HA 506  Early Medieval and Romanesque Art
   - HA 507  Gothic Art
   - HA 510  Medieval Manuscripts and Early Printed Books
   - HA 527  Late Medieval Art in Italy
   - HA 528  The Spatial Arts of Urban Italy
   - HA 529  Archaeology and Art of the Ancient Near East
   - HA 538  Pompeii and Herculaneum
   - HA 545  Early Chinese Art
   - HA 564  European Art, 1900-1945
   - HA 576  Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque
   - HA 706  Seminar: ______
to demonstrate proficiency by passing the department's language proficiency exam at the beginning of Year 5. Should the student not pass the proficiency exam, they will be expected either to enroll in the appropriate level of language study or establish a plan for passing the language exam at the start of the second semester of Year 5.

In addition to the 12 credit hours of graduate coursework taken during the senior year, students must complete an additional 18 credit hours of graduate coursework, for a total of 30 hours of graduate credit.

The full 30 hours must include:

- At least 5 graduate courses (15 credit hours) at the 500 level or above
- At least 3 graduate seminars (9 credit hours) at the 700 level or above
- At least 2 graduate seminars (6 credit hours) at the 800 level or above

These courses should represent a balanced distribution of graduate-level (500 level or above) courses in Chinese, Japanese, and Korean art history.

Written Comprehensive Examination
A general written examination in East Asian art must be passed for the M.A. degree.

A detailed presentation of departmental degree requirements and regulations is included in the department's Graduate Student Handbook, available online (https://arthistory.ku.edu/graduatestudenthandbook/).

Progression Requirements
Given the accelerated nature of this program, each student’s progress will be closely monitored at various points during the program:

1. Once approved to begin graduate coursework, the student must meet with the DGS to plan the final year of undergraduate study.

2. At the end of the final semester of undergraduate study (Year 4), the department will review the student’s performance in graduate-level HA courses taken in Year 4. The student must earn a grade of B+ or better in each of these courses to be eligible for regular admission to the master's degree.

3. Following completion and award of the undergraduate degree, the admitted student will again meet with the DGS to review the course plan for the fifth year of study and update as needed. The student’s performance in the graduate-level courses taken as an undergraduate will be evaluated.

4. For those students who do not meet the minimum GPA requirement of 3.0 in the first semester of Year 5, the department may, at its discretion, devise a plan of study to address the student’s deficiencies, or may dismiss the student from the program.

5. The student will not be permitted to enroll in additional courses for graduate credit toward the master's degree until the baccalaureate degree has been conferred.

Students should complete all requirements for the Accelerated Master's within one year of receiving the bachelor's degree. If unforeseen circumstances prevent the timely completion of the master’s degree, the student must consult with their graduate advisor to develop an alternative plan for completion.

Master's Degree Requirements

Proficiency in a foreign language is required for the M.A. degree. Students in the Accelerated Master's program should complete at least the fourth semester of a relevant foreign language (normally Chinese, Korean, or Japanese) with a grade of B or better by the end of Year 4 or be prepared
### Freshman

**Fall**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>Quantitative Reasoning (Goal 1.2 Quantitative Reasoning, BA Quantitative Reasoning (QR))</td>
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</tr>
<tr>
<td>First Semester Language in a relevant language - normally Chinese, Korean, or Japanese (BA 2nd Language)</td>
<td>5</td>
<td>2nd Semester Language in a relevant language - normally Chinese, Korean, or Japanese (BA 2nd Language)</td>
<td>5</td>
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<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>HA 150 (Goal 3 Humanities or Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
<td>HA 151 (Major Requirement)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 17

### Sophomore

**Fall**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>HA 166 (Major Requirement)</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>HA 300+ Breadth Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours:** 15

### Junior

**Fall**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness 300+ (If needed, or elective)</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>HA 300+/500+ Breadth Course (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HA 300+/500+ Breadth Course (Major Requirement)</td>
<td>3</td>
<td>HA 300+/500+ Breadth Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>HA 300+/500+ Breadth Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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</table>

**Total Hours:** 15

### Senior

**Fall**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HA 500+ Additional East Asian Course (BA Major Requirement/MA Requirement)</td>
<td>3</td>
<td>HA 550 (Goal 6 Integration &amp; Creativity)</td>
<td>2</td>
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<tr>
<td>HA 500+ East Asian Course (BA Major Requirement/MA Requirement)</td>
<td>3</td>
<td>HA 500+ Additional East Asian Course (BA Major Requirement/MA Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
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**Year 5**  
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 500+ Course</td>
<td>3</td>
<td>HA 500+ Course</td>
<td>3</td>
</tr>
<tr>
<td>700+ Graduate Seminar</td>
<td>3</td>
<td>800+ Graduate Seminar</td>
<td>3</td>
</tr>
<tr>
<td>700+ Graduate Seminar</td>
<td>3</td>
<td>800+ Graduate Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 138**

1. The Art after 1900 breadth course must be in an East Asian Topic.
2. This requirement can be fulfilled by taking a graduate-level seminar.
3. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
5. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

Please note:

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/minors.

### Accelerated Master of Arts in Art History (European and American/Global Modern and Contemporary)

Only current KU undergraduate students are eligible to apply to the Accelerated M.A. program. If you are not a current undergraduate...
The Accelerated M.A. program enables qualified KU students to earn both a bachelor's degree and master's degree in art history in 5 years. 12 hours of 500-level-or-above coursework in the major completed in Year 4 of study are eligible to count for both the bachelor's and master's degrees. The M.A. degree is completed in Year 5.

The M.A. provides students with a broad and deep knowledge of the visual arts, as well as study of the basic concepts, theories, and methods of the discipline. The M.A. may be pursued as a terminal degree or as preparation for doctoral studies at KU or to apply elsewhere.

Only current KU undergraduate students are eligible to apply to the Accelerated M.A. program. If you are not a current undergraduate student at KU, please review the admission requirements for History of Art’s M.A., M.A./Ph.D., and Ph.D. programs.

Application Deadline

Careful course selection and steady progression through the undergraduate career is necessary to ensure all requirements for both the B.A. and M.A. degree may be completed within the 5-year time-frame. All prospective students should discuss their interest in admission to the Accelerated M.A. program with both the Undergraduate Advisor and the Graduate Academic Advisor no later than the second semester of the student’s Junior year.

Prospective students are eligible to apply to the graduate program in the second semester of their Junior year. The following program requirements must be met by this time:

- Major GPA of at least 3.25 and cumulative GPA of at least 3.00;
- On track to complete all requirements for a B.A. or B.G.S. degree in History of Art from KU by the spring semester of the Senior year

Required Application Materials

- Two letters of recommendation (preferably from professors in the major). You will be asked to enter the names and e-mail addresses for two recommenders while completing the online application. Your recommenders will automatically receive an e-mail requesting their letters when you submit the application. It is not necessary for your recommenders to send hard copies of their letters to the department if they submit their letters electronically.
- Résumé or curriculum vitae
- A one-page statement of educational and career objectives
- A writing sample, preferably from an art history course, 5-10 pages of text not including the bibliography, endnotes, or images following endnotes.

Upon review of the Application for Admission, the History of Art Department will notify the student of their eligibility to begin graduate-level coursework. Final admission to the graduate program will be contingent upon the following:

- Successful completion of all requirements for the Bachelor’s degree;
- Grades of B+ or above in all History of Art graduate-level coursework taken during the student’s Senior year

Non-native speakers of English must meet Graduate Studies’ English proficiency requirements. ([https://policy.ku.edu/graduate-studies/english-proficiency-international-students/](https://policy.ku.edu/graduate-studies/english-proficiency-international-students/))

The course requirements for this accelerated program are fulfilled by a combination of graduate-level courses taken for both undergraduate and graduate credit in Year 4, and graduate credit courses taken in Year 5. Numerous graduate-level courses are regularly offered that fulfill distribution requirements for both the Bachelor’s and M.A. degrees.

The student must be approved to begin coursework toward the Accelerated Master’s prior to enrolling in any 500 level or above courses that are to count for both undergraduate and graduate credit.

Requirements for the B.A. or B.G.S. Major

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>1.</td>
<td>Foundation Courses</td>
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<tr>
<td>HA 150</td>
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<td>History of Western Art: Ancient Through Medieval, Honors</td>
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<tr>
<td>HA 151</td>
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<td></td>
</tr>
<tr>
<td>2.</td>
<td>Breadth Courses, Geographical Regions: complete one course in three out of four geographical regions.</td>
<td></td>
</tr>
<tr>
<td>A.</td>
<td>Americas, Africa, Middle East</td>
<td>9</td>
</tr>
<tr>
<td>HA 353/569</td>
<td>Modern and Contemporary African Art</td>
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<td>HA 370/570</td>
<td>American Art</td>
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<tr>
<td>HA 377/677</td>
<td>African Design</td>
<td></td>
</tr>
<tr>
<td>HA 390/590</td>
<td>Special Study in African Art: _____</td>
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</tr>
<tr>
<td>HA 396</td>
<td>Special Study in American Art: _____</td>
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<td>HA 529</td>
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<tr>
<td>HA 582</td>
<td>American Art 1860-1900: Gilded Age</td>
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</tr>
<tr>
<td>HA 583</td>
<td>American Art 1900-1945: Rise of Modernism</td>
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<td>HA 706</td>
<td>Seminar: _____</td>
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<td>HA 311</td>
<td>The Art and Architecture of the British Isles</td>
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<tr>
<td>HA 322</td>
<td>European Architecture 300-1300</td>
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<tr>
<td>HA 325/525</td>
<td>Aegean Archaeology and Art</td>
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<tr>
<td>HA 326/526</td>
<td>Greek Archaeology and Art</td>
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<tr>
<td>HA 327/537</td>
<td>Roman Archaeology and Art</td>
<td></td>
</tr>
<tr>
<td>HA 330</td>
<td>Italian Renaissance Art</td>
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<tr>
<td>HA 331</td>
<td>Northern European Art from Van Eyck to Brueghel</td>
<td></td>
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<tr>
<td>HA 335/535</td>
<td>Renaissance Architecture in Italy</td>
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<tr>
<td>HA 372</td>
<td>Baroque Art in Europe</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>HA 376/576</td>
<td>Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque</td>
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<tr>
<td>HA 393/593</td>
<td>Special Study in Medieval Art: _____</td>
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<tr>
<td>HA 394/594</td>
<td>Special Study in Renaissance Art: _____</td>
<td></td>
</tr>
<tr>
<td>HA 395/595</td>
<td>Special Study in Baroque Art: _____</td>
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<tr>
<td>HA 506</td>
<td>Early Medieval and Romanesque Art</td>
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</tr>
<tr>
<td>HA 507</td>
<td>Gothic Art</td>
<td></td>
</tr>
<tr>
<td>HA 510</td>
<td>Medieval Manuscripts and Early Printed Books</td>
<td></td>
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<tr>
<td>HA 511</td>
<td>From Court to City: Northern Art</td>
<td></td>
</tr>
<tr>
<td>HA 512</td>
<td>Humanism and Reform: 16th Century Northern European Art</td>
<td></td>
</tr>
<tr>
<td>HA 527</td>
<td>Late Medieval Art in Italy</td>
<td></td>
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<tr>
<td>HA 528</td>
<td>The Spatial Arts of Urban Italy</td>
<td></td>
</tr>
<tr>
<td>HA 533</td>
<td>Rococo to Realism: Painting in Europe c. 1750-1848</td>
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<tr>
<td>HA 534</td>
<td>Impressionism and Post-Impressionism: 1848-1900</td>
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<tr>
<td>HA 538</td>
<td>Pompeii and Herculaneum</td>
<td></td>
</tr>
<tr>
<td>HA 564</td>
<td>European Art, 1900-1945</td>
<td></td>
</tr>
<tr>
<td>HA 706</td>
<td>Seminar: _____</td>
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</tr>
</tbody>
</table>

**C. East Asia**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HA 340/540</td>
<td>Special Study in Asian Art Before 1900: _____</td>
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<tr>
<td>HA 344/544</td>
<td>Manga: Histories and Theories</td>
</tr>
<tr>
<td>HA 347/547</td>
<td>Ceramics of East Asia</td>
</tr>
<tr>
<td>HA 354/554</td>
<td>Japanese Prints</td>
</tr>
<tr>
<td>HA 361/561</td>
<td>Buddhist Art of Korea</td>
</tr>
<tr>
<td>HA 362/562</td>
<td>Ceramics of Korea</td>
</tr>
<tr>
<td>HA 363</td>
<td>Modern Korean Art and Culture</td>
</tr>
<tr>
<td>HA 367</td>
<td>Art and Culture of Japan</td>
</tr>
<tr>
<td>HA 368</td>
<td>Art and Culture of China</td>
</tr>
<tr>
<td>HA 385/585</td>
<td>The Art of Buddhism</td>
</tr>
<tr>
<td>HA 388/588</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
</tr>
<tr>
<td>HA 391/591</td>
<td>Special Study in Asian Art: _____</td>
</tr>
<tr>
<td>HA 488</td>
<td>Chinese Painting, Honors</td>
</tr>
<tr>
<td>HA 545</td>
<td>Early Chinese Art</td>
</tr>
<tr>
<td>HA 546</td>
<td>Chinese Sculpture</td>
</tr>
<tr>
<td>HA 549</td>
<td>Chinese Painting</td>
</tr>
<tr>
<td>HA 586</td>
<td>Japanese Painting</td>
</tr>
<tr>
<td>HA 587</td>
<td>Japanese Sculpture</td>
</tr>
<tr>
<td>HA 760</td>
<td>Proseminar in Korean Art</td>
</tr>
<tr>
<td>HA 788</td>
<td>Proseminar in Japanese Art</td>
</tr>
<tr>
<td>HA 789</td>
<td>Proseminar in Chinese Art</td>
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</tbody>
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**D. Cross-regional**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HA 371/571</td>
<td>Modern Sculpture</td>
</tr>
<tr>
<td>HA 380/580</td>
<td>History of Photography</td>
</tr>
<tr>
<td>HA 566</td>
<td>Art From 1945 to the 1980s: Modernism to Post-Modernism</td>
</tr>
<tr>
<td>HA 567</td>
<td>Contemporary Art</td>
</tr>
<tr>
<td>HA 706</td>
<td>Seminar: _____</td>
</tr>
</tbody>
</table>

**3. Breadth Courses, Chronological Periods: complete one course in three out of four chronological periods.**

**A. Pre-1400**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 322</td>
<td>European Architecture 300-1300</td>
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<tr>
<td>HA 325/525</td>
<td>Aegean Archaeology and Art</td>
</tr>
<tr>
<td>HA 326/526</td>
<td>Greek Archaeology and Art</td>
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<tr>
<td>HA 327/537</td>
<td>Roman Archaeology and Art</td>
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<tr>
<td>HA 361/561</td>
<td>Buddhist Art of Korea</td>
</tr>
<tr>
<td>HA 392/592</td>
<td>Special Study in Ancient Art: _____</td>
</tr>
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<td>HA 393/593</td>
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<td>HA 506</td>
<td>Early Medieval and Romanesque Art</td>
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<td>HA 507</td>
<td>Gothic Art</td>
</tr>
<tr>
<td>HA 510</td>
<td>Medieval Manuscripts and Early Printed Books</td>
</tr>
<tr>
<td>HA 527</td>
<td>Late Medieval Art in Italy</td>
</tr>
<tr>
<td>HA 529</td>
<td>Archaeology and Art of the Ancient Near East</td>
</tr>
<tr>
<td>HA 538</td>
<td>Pompeii and Herculaneum</td>
</tr>
<tr>
<td>HA 545</td>
<td>Early Chinese Art</td>
</tr>
<tr>
<td>HA 706</td>
<td>Seminar: _____</td>
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</tbody>
</table>

**B. 1400-1850**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HA 330</td>
<td>Italian Renaissance Art</td>
</tr>
<tr>
<td>HA 331</td>
<td>Northern European Art from Van Eyck to Brueghel</td>
</tr>
<tr>
<td>HA 335/535</td>
<td>Renaissance Architecture in Italy</td>
</tr>
<tr>
<td>HA 347/547</td>
<td>Ceramics of East Asia</td>
</tr>
<tr>
<td>HA 354/554</td>
<td>Japanese Prints</td>
</tr>
<tr>
<td>HA 372</td>
<td>Baroque Art in Europe</td>
</tr>
<tr>
<td>HA 376/576</td>
<td>Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque</td>
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<tr>
<td>HA 394/594</td>
<td>Special Study in Renaissance Art: _____</td>
</tr>
<tr>
<td>HA 395/595</td>
<td>Special Study in Baroque Art: _____</td>
</tr>
<tr>
<td>HA 512</td>
<td>Humanism and Reform: 16th Century Northern European Art</td>
</tr>
<tr>
<td>HA 533</td>
<td>Rococo to Realism: Painting in Europe c. 1750-1848</td>
</tr>
<tr>
<td>HA 706</td>
<td>Seminar: _____</td>
</tr>
</tbody>
</table>

**C. Post-1850**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HA 343/543</td>
<td>Special Study in 20th/21st-Century Art: _____</td>
</tr>
<tr>
<td>HA 344/544</td>
<td>Manga: Histories and Theories</td>
</tr>
<tr>
<td>HA 353/569</td>
<td>Modern and Contemporary African Art</td>
</tr>
<tr>
<td>HA 363</td>
<td>Modern Korean Art and Culture</td>
</tr>
<tr>
<td>HA 371/571</td>
<td>Modern Sculpture</td>
</tr>
<tr>
<td>HA 377/677</td>
<td>African Design</td>
</tr>
<tr>
<td>HA 380/580</td>
<td>History of Photography</td>
</tr>
<tr>
<td>HA 388/588</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
</tr>
<tr>
<td>HA 390/590</td>
<td>Special Study in African Art: _____</td>
</tr>
<tr>
<td>HA 534</td>
<td>Impressionism and Post-Impressionism: 1848-1900</td>
</tr>
<tr>
<td>HA 536</td>
<td>Islamic Art and Architecture in Africa</td>
</tr>
<tr>
<td>HA 564</td>
<td>European Art, 1900-1945</td>
</tr>
<tr>
<td>HA 566</td>
<td>Art From 1945 to the 1980s: Modernism to Post-Modernism</td>
</tr>
<tr>
<td>HA 567</td>
<td>Contemporary Art</td>
</tr>
<tr>
<td>HA 582</td>
<td>American Art 1860-1900: Gilded Age</td>
</tr>
<tr>
<td>HA 583</td>
<td>American Art 1900-1945: Rise of Modernism</td>
</tr>
<tr>
<td>HA 706</td>
<td>Seminar: _____</td>
</tr>
</tbody>
</table>

**D. Cross-period**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>HA 311</td>
<td>The Art and Architecture of the British Isles</td>
</tr>
</tbody>
</table>
In addition to the 12 credit hours of graduate coursework taken during the senior year, students must complete an additional 18 credit hours of graduate coursework, for a total of 30 hours of graduate credit.

The full 30 hours must include:

- At least 4 graduate courses (12 credit hours) at the 500 level or above
- At least 4 graduate seminars (12 credit hours) at the 700 level or above
- At least 2 graduate seminars (6 credit hours) at the 800 level or above

See the department website (https://arthistory.ku.edu/) for distribution requirements of graduate courses.

**Written Comprehensive Examination**

A general written examination in European and American/Global Modern and Contemporary art must be passed for the M.A. degree.

A detailed presentation of departmental degree requirements and regulations is included in the department’s Graduate Student Handbook, available online (https://arthistory.ku.edu/graduatestudenthandbook/).

**Progression Requirements**

Given the accelerated nature of this program, each student’s progress will be closely monitored at various points during the program:

1. Once approved to begin graduate coursework, the student must meet with the DGS to plan the final year of undergraduate study.

2. At the end of the final semester of undergraduate study (Year 4), the department will review the student’s performance in graduate-level HA courses taken in Year 4. The student must earn a grade of B+ or better in each of these courses to be eligible for regular admission to the master’s degree.

3. Following completion and award of the undergraduate degree, the admitted student will again meet with the DGS to review the course plan for the fifth year of study and update as needed. The student’s performance in the graduate-level courses taken as an undergraduate will be evaluated.

4. For those students who do not meet the minimum GPA requirement of 3.0 in the first semester of Year 5, the department may, at its discretion, devise a plan of study to address the student’s deficiencies, or may dismiss the student from the program.

5. The student will not be permitted to enroll in additional courses for graduate credit toward the master’s degree until the baccalaureate degree has been conferred.

Students should complete all requirements for the Accelerated Master’s within one year of receiving the bachelor’s degree. If unforeseen circumstances prevent the timely completion of the master’s degree, the student must consult with their graduate advisor to develop an alternative plan for completion.

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BAWriting)</td>
<td>3</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BAWriting)</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>3 Quantitative Reasoning (Goal 1.2 Quantitative Reasoning, BA Quantitative Reasoning (QR))</td>
</tr>
</tbody>
</table>

**Master’s Degree Requirements**

Proficiency in a foreign language is required for the M.A. degree. Students in the Accelerated Master’s program should complete at least the fourth semester of a relevant foreign language (normally French, German, Italian, or Spanish) with a grade of B or better by the end of Year 4 or be prepared to demonstrate proficiency by passing the department’s language proficiency exam at the beginning of Year 5. Should the student not pass the proficiency exam, they will be expected either to enroll in the appropriate level of language study or establish a plan for passing the language exam at the start of the second semester of Year 5.
Doctor of Philosophy in History of Art

KU offers graduate art history courses in European, American, Global Modern, Contemporary, and East Asian art. Students may pursue graduate degrees in European and American/Global Modern and Contemporary Art or East Asian Art.

The Ph.D. is intended for students who already hold an M.A. degree in art history.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.
Admission to the Ph.D.

Applicants for the Ph.D. are expected to hold an appropriate M.A. degree. To be considered for admission, a student must hold a bachelor's degree. Please review the full Graduate Studies Admissions Policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Non-native speakers of English must meet Graduate Studies’ English proficiency requirements. (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/)

A full list of the required application materials can be found on the department’s website (https://arthistory.ku.edu/admission-phd/).

Admission to the Ph.D. program for students who receive the M.A. degree from KU:

The M.A. or M.A./Ph.D. student who wishes to be considered for full admission to the Ph.D. program must complete and sign the Petition for Continuation in the Ph.D. Program form which will be distributed at the M.A. exam. The student must pass the M.A. exam in order for the petition to be considered by the graduate faculty. After receiving departmental approval for the petition and completing all requirements for the M.A. degree, the student will automatically be entered into the Ph.D. program and will be expected to maintain enrollment as per Graduate Studies guidelines.

Students who do not submit the petition at the time of the M.A. exam and who wish to remain in the department to pursue the Ph.D. will need to complete the full application for admission to the art history Ph.D. program.

Ph.D. Degree Requirements

Ph.D. aspirants shall, prior to admission to the Ph.D. comprehensive examination, demonstrate knowledge of at least one foreign language sufficient to meet the demands of their research and have successfully completed at least one 700 level or above History of Art seminar course in fulfillment of Graduate Studies’ Research Skills and Responsible Scholarship requirement. Ph.D. students may be required by their committee, prior to admission to the Ph.D. comprehensive exams, to demonstrate proficiency in two or more foreign languages, depending on the student's area of specialization and program of study.

Normally, Ph.D. students are expected to complete 18 to 21 post-M.A. hours and Combined M.A./Ph.D. students are expected to complete 12 to 15 post-M.A. graduate credit hours. The exact number of required post-M.A. courses will be determined in consultation with the student’s committee.

Students must take both written and comprehensive oral examinations at the end of their course work. Both written and oral examinations cover the major area and 2 minor areas specified in the student’s Doctoral Program of Study petition (see department’s Graduate Student Handbook). The oral examination normally follows the written examination by 1 week.

The dissertation proposal must be approved by the student’s primary advisor and the graduate faculty within three months of passing the comprehensive Ph.D. examinations. The student is strongly encouraged to work closely with the primary advisor immediately following the comprehensive examination to meet this deadline.

Upon acceptance of the dissertation in final draft form, the candidate must successfully pass the final oral examination (the dissertation defense) to complete the degree.

Research Skills & Responsible Scholarship Requirement

All graduate seminars include instruction in and discussion of appropriate research conduct and research misconduct; authorship, publication, plagiarism, copyright; peer review; and professional practices. For more information on the Research Skills and Responsible Scholarship requirement, please see the Graduate Studies section of the online catalog.

Handbook for Graduate Students

A detailed presentation of departmental degree requirements and regulations is included in the department’s Graduate Student Handbook, available online (https://arthistory.ku.edu/graduatestudenthandbook/).

University Honors Program

Honors Courses

Honors courses are open to qualified undergraduates in any school of the university.

University Honors Program

The goal of the University Honors Program is to challenge students to launch extraordinary lives. We do this by providing exceptional classes, advising, and enrichment opportunities to academically motivated undergraduates at the University of Kansas. From convocation to commencement, we strive to foster a transformational community of critical thinkers, a community that is diverse, highly qualified, engaged, and motivated to lead.

Overview

Honors classes are typically small, discussion-oriented, and taught by exceptional instructors. Many honors courses fulfill KU Core (or major) requirements, but they are likely to do so in more depth than their non-honors equivalents. While there is no required number of honors credit hours in which a student must enroll each semester, students must complete at least six (6) honors courses totaling at least eighteen (18) credit hours to graduate with University Honors.

During each student’s first year in the program, a semester-long seminar provides an introduction to an academic area of study in an informal setting that allows students to get to know one another and their instructor. The seminar explores critical questions in society and acquaints students with resources available at KU.

Whatever a student’s school or major, the University Honors Program encourages them to explore their interests through the broad curriculum choices KU has to offer, expanding their knowledge through a range of liberal arts and science courses. Additionally, honors students are required to engage in educational experiences beyond the classroom such as research, study abroad, internships, or community service.

Honors advising involves regular, personalized meetings with honors advisors, faculty fellows, and honors mentors. The program’s advising team facilitates early and frequent contact with academic advisors in the student’s areas of interest. Honors students benefit from priority
enrollment, which provides flexibility in planning one’s academic curriculum.

More information is available at honors.ku.edu (https://honors.ku.edu/).

Admission

Students from all backgrounds who are seeking academic challenge, personalized guidance, and an intellectual community during their time at KU are encouraged to apply to the University Honors Program. The program uses a holistic admissions process. For incoming first-year students, the program considers a student’s response to short answer questions and an essay prompt, as well as their academic record and involvement. For current KU students and incoming transfer students, applications are evaluated based on college GPA, involvement and activities, and an essay. Students interested in applying can learn more at honors.ku.edu/apply (http://honors.ku.edu/apply/).

Requirements for Completion

- Cumulative GPA of 3.25 or higher at graduation.
  - Students whose GPA drops below 3.25 prior to their final semester will be expected to raise their GPA in subsequent semesters.
  - Students whose GPA is consistently below 3.25 over two or more consecutive semesters may be discontinued from the Honors Program.
- One (1) first year honors seminar (HNRS 177, HNRS 190 or HNRS 195).
- At least six (6) honors courses totaling at least eighteen (18) credit hours. These can include:
  - Courses designated HNRS.
  - Honors courses offered by individual departments or programs.
  - Graduate-level courses numbered 700 and above.
  - Less commonly taught languages (maximum of two courses).
  - Courses completed under an Honors Course Contract (https://honors.ku.edu/course-contract/).
- Four (4) Enhanced Learning Experiences (ELEs). Each ELE may have course-based and/or experience-based paths for completion. Each of the student’s four ELEs must be from a different category, chosen from among the following:
  - Public Service.
  - Cultural Literacy & Social Justice.
  - Global Citizenship.
  - Aesthetic Engagement.
  - Professional Development & Social Entrepreneurship.
  - Leadership.
  - Research Skills & In-Depth Learning.
  - Interdisciplinarity & Breadth of Learning.

To receive credit for an ELE, students must post a written reflection in their KU Portal when the experience is completed. Though some experiences may overlap between two or more categories, no single activity can be counted toward more than one ELE requirement. A course taken toward the 18 hours of Honors credit can also be used to fulfill an ELE if the student completes an appropriate reflection.

For further questions regarding Honors Program requirements, please contact the University Honors Program at honors@ku.edu or 785-864-4225.

Nunemaker Center

Nunemaker Center is the home of the Honors Program, located on Daisy Hill across the street from Templin Hall. Honors students are encouraged to take advantage of the spaces available at Nunemaker, including several classrooms and study areas, a kitchen, comfortable lounges, and wireless Internet access. Honors advisors are regularly available to meet with students throughout the year, and the center is open most days and some evenings.

Courses

HNRS 177. First Year Seminar: _______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Honors. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HNRS 190. First Year Honors Seminar: _______. 1 Credits. U
This seminar serves as an introduction to the University Honors Program, to research opportunities and other academic resources available at the University of Kansas, and to specific disciplinary perspectives on an overarching theme. While closely examining the designated topic, students develop skills in research, reading, writing, and in-depth discussion. Required of all first-year Honors students; open only to first-year students in the University Honors Program.

HNRS 195. Transfer Honors Seminar: _______. 1 Credits. U
This seminar serves as an introduction to the Honors Program, and to the research opportunities and other academic resources available at the University of Kansas. This seminar fosters the transfer students’ oral and written communication and the critical assessment of their academic and pre-professional goals. The instructor of the student’s seminar also serves as the student’s honors mentor. Open only to transfer students in the University Honors Program.

HNRS 250. Citizen Philanthropy: An Introduction to the Nonprofit World. 3 Credits. U
This interdisciplinary course explores the historical and economic roots of citizen generosity and the role of the nonprofit/philanthropic sector. This service learning course combines volunteer experiences and public service internships with research and exploration of the missions and ethical orientations of nonprofit organizations. The course is designed to explore the social and ethical contexts of the nonprofit sector with opportunities to demonstrate social and civic responsibility.

HNRS 310. University Scholars Seminar. 3 Credits. U
An interdisciplinary survey to acquaint students with some of the main ideas, methods, and outstanding problems in various areas of scholarship. The organization of human knowledge inside and outside the university, as well as the implications of this organization for scholarship and society, are emphasized. Ideas and methods in various disciplines are contrasted and compared. Required of and open only to newly admitted students in the University Scholars Program.

HNRS 320. Global Scholars Seminar. 3 Credits. H
The Global Scholars Seminar is designed to foster academically talented and motivated undergraduate students’ interest in global studies. Through interdisciplinary coursework, mentorship and research experience in global studies, the seminar provides cohorts of students with opportunities to develop their intellectual capabilities and interests to the fullest and better prepares them for careers, further study, and leadership roles in today’s complex international arena. Required of and open only to newly admitted students in the Global Scholars Program.
HNRS 370. Personal Writing Seminar. 1 Credits. U
This seminar helps students develop their personal writing abilities. Students analyze language and rhetorical choices in the genre of the personal essay. Students demonstrate rhetorical flexibility within the genre, considering audience, purpose, and application of the material. This course is intended for candidates for national fellowships, regardless of University Honors Program membership. (Same as LA&S 370.) Prerequisite: Permission of the Office of Fellowships.

HNRS 380. Critical Thinking and Advocacy Seminar. 1 Credits. U
The focus of this class is on honing the two basic skills of critical thinking and advocacy. In this seminar, students develop a basic system for critical analysis that can be applied generally; test that critical analysis system in a series of practicums to develop the skills necessary to apply it; and develop a basic system for designing effective and ethical persuasive messages. (Same as LA&S 380.) Prerequisite: Permission of the Office of Fellowships.

HNRS 395. Edwards Campus Honors Seminar. 1 Credits.
This seminar serves as an introduction to the KU Edwards Campus Honors Program, and to the research opportunities and other academic resources available at the University of Kansas Edwards Campus. The seminar focuses on an overarching theme or current societal problem, and explores specific disciplinary perspectives of that theme. While closely examining the designated topic, students develop skills in research, reading, writing, and in-depth discussion. This seminar fosters the KU Edwards Campus students' oral and written communication and the critical assessment of their academic and pre-professional goals. Required of all KU Edwards Campus Honors students. Prerequisite: KU Edwards Campus Honors Student.

HNRS 410. Professional Responsibility, Honors: _____. 1-3 Credits.
This course focuses on the challenges facing practitioners in a specific professional field. Students will learn about the ethics, conduct, and other responsibilities associated with that profession, and will explore career choices within the field. Prerequisite: Membership in the University Honors Program, sophomore standing or above, and prior completion of an Honors Seminar (HNRS 190 or HNRS 195.) Concurrent enrollment with HNRS 195 is possible with special permission from the Honors Program.

HNRS 430. Honors Interdisciplinary Seminar. 3 Credits. U
An opportunity to synthesize topic across various subjects and disciplines. This course examines a problem or topic from the perspectives of several disciplines. Open to qualified sophomores, juniors, and seniors in the University Honors Program.

HNRS 492. Topics and Problems on: _____. 1-6 Credits. U
An interdisciplinary study of different topics. Designed especially for juniors and seniors.

HNRS 493. Topics and Problems on: _____. 1-6 Credits. U
An interdisciplinary study of different topics. Designed especially for juniors and seniors.

HNRS 495. Honors Directed Study. 1-3 Credits. U
Individual and supervised study of an interdisciplinary topic or topics. May be repeated for a total of up to 6 hours. Up to one 3-hour enrollment will count as one course toward completion of the University Honors Program. Prerequisite: Membership in the University Honors Program and consent of the instructor.

HNRS 496. Honors Internship. 1-3 Credits. U
Students participate in an internship in an organization related to their professional/career goals. An internship plan is developed by the student in conjunction with the student's academic adviser and an authorized agent of the internship site. Prerequisite: Instructor permission required.

HNRS 497. Honors Seminar Assistantship. 0 Credits.
Open to all Honors students selected to be Honors Seminar Assistants, regardless of major field. These students assist Seminar instructors in the teaching of an Honors seminar in various ways, including but not limited to: leading group discussions, engaging students in the learning process, developing classroom material, encouraging and guiding students to solve problems themselves and helping students prepare for their advising appointments. May be repeated. Prerequisite: HNRS 190 or HNRS 195 and membership in the University Honors Program.

HNRS 595. Edwards Campus Honors Capstone. 3 Credits.
This seminar serves as an interdisciplinary capstone experience for students KU Edwards Campus Honors Program, and as an introduction to the research opportunities and other academic resources available at the University of Kansas Edwards Campus. The seminar focuses on an overarching theme or current societal problem that students explore from the perspectives of several disciplines, incorporating experiential learning opportunities. While closely examining the designated topic, students develop skills in research, reading, writing, and in-depth discussion. This seminar fosters the KU Edwards Campus students' oral and written communication and the critical assessment of their academic and pre-professional goals. Required of all KU Edwards Campus Honors students.

### Indigenous Studies Program

#### Indigenous Studies Graduate Program

KU's Indigenous Studies Program serves students, Native American and Indigenous Nations and communities in Kansas, the Midwest, the U.S., and the world through our teaching, research, creative work, and service. At the core of these endeavors is our deep commitment to and engagement with the nations and communities we come from, learn from, and serve. Our aim is to contribute to the continuing projects of knowledge building, effective leadership, and infrastructure development.

KU Indigenous Studies offers an undergraduate minor, a master's program, and a graduate certificate program. Students who are interested in enrolling in graduate-level coursework in the Indigenous Studies Program without admission to a formal graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See our admission webpage for further details.

### Courses

#### ISP 101. Introduction to Indigenous Nations Studies. 3 Credits. NW
An introduction to the study of Indigenous peoples. It surveys the concepts, methods, and content relevant to Applied Indigenous Studies, using case studies drawn from diverse cultures. The course illustrates that the social, political, religious, and economic aspects of American Indian life are interconnected and that tribal histories cannot be understood without an awareness of these fields. Students are introduced to controversies over how to research, write, and interpret American Indians, and will address the foundations of Indigenous Studies, and that is Indigenous concepts of decolonization, empowerment and Nation-building. The course explores how the lives of Indigenous people have been affected by colonization, while exploring the varying definitions of "colonialism", "colonizer" and the "colonized."

#### ISP 204. Special Topics: _____. 1-6 Credits.
This course concentrates on selected problems in the interdisciplinary field of Indigenous Studies. Courses in this field utilize methods developed in various disciplines to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Some sections may be offered at Haskell Indian
ISP 304. Special Topics: ____. 3 Credits. H
This course concentrates on selected problems in the interdisciplinary field of Indigenous Studies. Courses in this field utilize methods developed in various disciplines to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs.

ISP 305. World Indigenous Literatures. 3 Credits. NW H
A survey of contemporary world indigenous literatures that includes those from North America, Australia, New Zealand, the South Pacific, the Arctic, and Latin America. Texts are in English (original or translation). Genres studied include the novel, poetry, and drama, supplemented by works from the oral tradition, the visual arts, and film. (Same as ENGL 305/GIST 305.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

ISP 345. Indian Territory. 3 Credits. H
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and HUM 345.)

ISP 348. American Indian and White Relations to 1865. 3 Credits. H
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, HWC 348.)

ISP 350. American Indians Since 1865. 3 Credits. H
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will gain multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and HUM 350.)

ISP 355. Indigenous Film and Media. 3 Credits. H
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum—including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered at the 300 and 700 level with additional assignments at the 700 level.

ISP 359. Indigenous Food and Health. 3 Credits. NW U
This course investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. The class traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems and offers traditional cultural strategies for health recovery.

ISP 495. Directed Readings. 1-3 Credits.
Work for advanced majors in fields or on topics not covered in course work. May be repeated for a total of up to six hours. May be counted as part of the total junior-senior credit hours required. Prerequisite: Consent of instructor.

ISP 504. Topics in Indigenous Studies: ____. 3 Credits. W
This course concentrates on selected problems in the interdisciplinary field of Indigenous Studies. Courses in this field utilize methods developed in various disciplines in order to examine issues related to the survival, self-sufficiency, mutual support, empowerment, and decolonization of Indigenous Peoples throughout the world. May be repeated for credit when the topic differs. Recommended for juniors or seniors, or for students who have completed ISP 101/GINS 101/INS 101.

ISP 524. Ethnobotany. 3 Credits. S
Course will involve lectures and discussion of Ethnobotany - the mutual relationship between plants and traditional people. Research from both the field of anthropology and botany will be incorporated in this course to study the cultural significance of plant materials. The course has 7 main areas of focus: 1) Methods in Ethnobotanical Study; 2) Traditional Botanical Knowledge - knowledge systems, ethnolinguistics; 3) Edible and Medicinal Plants of North America (focus on North American Indians); 4) Traditional Phytochemistry - how traditional people made use of chemical substances; 5) Understanding Traditional Plant Use and Management; 6) Applied Ethnobotany; 7) Ethnobotany in Sustainable Development (focus on medicinal plant exploration by pharmaceutical companies in Latin America). (Same as ANTH 582 and EVRN 542.) Prerequisite: EVRN 142, EVRN 145, EVRN 148, ANTH 150/151, ANTH 160/162/360 or permission of instructor.

ISP 551. Foodways: Native North America. 3 Credits. H
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and HWC 551.) Prerequisite: Upper division course on indigenous/ American Indian history, or permission of the instructor.

ISP 552. Foodways: Latin America. 3 Credits. H
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, HUM 552 and LAC 552.) Prerequisite: Upper division course on Latin American or permission of the instructor.

ISP 567. Native Feminisms. 3 Credits. SC H/W
This course examines the foundation of Native feminist scholarship and the history of Native feminist activism. The class will begin by considering whether feminist theory can support contemporary Native women Native Two-Spirit (LGBTQI+) in their struggles against settler colonialism and heteropatriarchy. While the course begins by examining the North American experience, the course will also cover a range of international indigenous contexts, with a focus on the Global South and the Indigenous Pacific. Topics explored include the history of settler-colonialism, cultural revitalization and gender roles, change and continuity under cycles of settler-colonialism, the connection between colonialism and sexual violence in Native communities, debates over citizenship and sovereignty, and contemporary Native gender roles and identities. During the conclusion of the course, students will learn to identity how Native feminism informs activism and practice. (Same as WGSS 567.) Prerequisite: Any previous course in WGSS or ISP, or by permission of instructor.

ISP 577. The Andean World. 3 Credits. H
The Andean environment is defined by its mountains, but includes all of the earth’s major biomes: from tropical rainforest to the world’s oldest and driest desert. These diverse landscapes have nurtured one of the most ancient and durable, yet diverse sets of Indigenous cultural lifeways. Most of the Andes was governed by a single power during the Inca and Spanish colonial eras, but the region is now divided between seven independent states with their own regional traditions. The Andean World has long been recognized as a laboratory for understanding the relations between nature and culture, and the tensions between tradition and revolutionary change. This course will examine the history of this region from a long-term perspective, from its indigenous roots to contemporary struggles over globalization and extractivism. (Same as EVRN 577, HIST 577 and LAC 577.) Prerequisite: Prior 300+ level course in related discipline (ANTH, EEB, EVRN, HIST, LAC, SPAN, etc.) or permission of instructor.

ISP 601. Indigenous Peoples of the World. 3 Credits. S
A survey of the varied responses of global Indigenous peoples as a result of the imposition of external economic and political systems. An overview of diverse, thematic issues such as land rights, economic development, resources and cultural patrimony, languages, knowledge systems, and women's rights from the perspectives of Indigenous societies around the world. Detailed studies of Indigenous peoples seeking recognition and protection under international law are used. (Same as GEOG 601 and GIST 601.) Prerequisite: Permission of instructor.

ISP 673. Environmental Justice. 3 Credits. NW U
An examination of the impact of environmental justice and security in Indigenous communities throughout the world with a focus on tactics and strategies that incorporate Indigenous perspectives in responses and mitigation schemes. A survey of mining, dumping, and storage of toxic and radioactive waste activities as related to Indigenous peoples. Case study analyses of economic, military and mining interests contrasted with perspectives emerging from cultural traditions and beliefs of Indigenous peoples and communities. (Same as EVRN 673.) Prerequisite: Permission of instructor.

ISP 755. Indigenous Film and Media. 3 Credits.
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum-including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered at the 300 and 700 level with additional assignments at the 700 level. Not available to students with credit in FMS 350 or ISP 355. (Same as FMS 750.)

ISP 800. Indigenous Issues in the United States. 3 Credits.
This course will focus on contemporary issues relating to Indigenous peoples and nations within the United States, with particular emphasis on such issues as sovereignty, indigeneity, colonialism and decolonization. The course will address varied disciplinary approaches to this range of issues and will consider how this discourse bears upon scholarly conversations regarding broader themes in other selected fields of study.

ISP 804. Special Topics: _____ 1-3 Credits.
Designed to fulfill program needs of the Indigenous Studies master's program, this course may meet with appropriate professional or graduate courses. Can be repeated for credit when topic differs.

ISP 806. Directed Readings. 1-3 Credits.
An individual readings course with a qualified instructor on a topic in Indigenous Studies.

ISP 807. Internship in Indigenous Studies. 1-6 Credits.
Internships provide students the opportunity to obtain training and perform professional duties for academic credit at pre-approved Indigenous-related agencies, organizations, and communities. Students are required to demonstrate a minimum of 60 contact hours for each one credit hour. To enroll, students must obtain the consent of their ISP faculty advisor or the Program's Director if a student is outside ISP. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Permission from instructor.

ISP 824. Federal Indian Law. 3 Credits.
Addresses the law and policy of the United States regarding Indian nations and their members. Issues include the origins and contours of federal plenary power over Indian affairs, the scope of inherent tribal sovereignty, the limits of state power in Indian country, civil and criminal jurisdiction, and gaming. (Same as LAW 914.)

ISP 830. Indigenous Food and Health. 3 Credits.
Investigates the historic diets of Indigenous peoples, including cultivation of crops, hunting and fishing methods, food preparation and seed preservation. Traces through history the colonial policies and ideologies that caused the cultures to alter their ways of eating, resulting in unprecedented modern health problems. Will offer traditional cultural strategies for health recovery.

ISP 871. Community Health and Development. 3 Credits.
This course extends knowledge and skills for addressing issues in community health and development (e.g., substance abuse, adolescent pregnancy, child and youth development, prevention of violence). Students learn core competencies such as analyzing community problems and goals, strategic planning, intervention, and evaluation, and then apply
Indigenous Studies Minor

Indigenous Studies Minor

The minor in Indigenous Studies provides undergraduate students with knowledge essential to understand a broad variety of cultural, historical, political, religious, and social issues affecting Indigenous peoples. Students gain disciplinary knowledge in preparation for graduate study or immediate employment in fields such as government and other public service, or the private sector. Courses offered across the university allow students to create an individualized program of study. Our affiliate faculty members have appointments in the humanities, social sciences, arts, and professional schools across the university. Courses taken at Haskell Indian Nations University through the exchange program can count toward the Indigenous Studies minor.

Requirements for the Minor

Indigenous Studies Minor Course Requirements

The Indigenous Studies minor requires 18 hours of Indigenous Studies courses, of which 12 must be in courses numbered 300 or above, with a 2.0 grade-point average.

One course taken at Haskell Indian Nations University is strongly recommended.

Any course using an ISP prefix will count toward these required hours. ISP 204 and ISP 304 courses can be taught either at KU's Lawrence campus or at Haskell Indian Nations University, through the Haskell-KU Exchange Program.

Courses must have 30% or more content focused on Indigenous peoples, and be approved by the ISP Executive Committee.

Code | Title | Hours
--- | --- | ---
ISP courses approved for the minor include:
ANTH 379 | Indigenous Traditions of Latin America | 3
or LAC 334 | Indigenous Traditions of Latin America | 3
or LAC 634 | Indigenous Traditions of Latin America | 3
ANTH 506 | Pre-Hispanic Mexico and Central America | 3
ANTH 508 | Ancient American Civilizations: The Central Andes | 3
ANTH 562 | Mexamerica | 3
or LAC 302 | Topics in Latin American Area Studies:_______ | 3
or LAC 602 | Topics in Latin American Studies:_______ | 3
FMS 410 | US Diversity in Visual Culture | 3
FMS 592 | Documentary Film and Video | 3
GEOG 370 | Introduction to Cultural Geography | 3
GEOG 570 | Geography of American Indians | 3
HIST 128 | History of the United States Through the Civil War | 3
HIST 331 | Age of Empires-The Atlantic 1400-1800 | 3
HIST 353 | Indigenous Peoples of North America | 3
HUM 335 | Introduction to Indigenous Studies | 3
ISP 305 | World Indigenous Literatures | 3
ISP 345 | Indian Territory | 3
HIST 318/ | American Indian and White Relations to 1865 | 3
HUM 345 | | 
ISP 348/ | American Indians Since 1865 | 3
HIST 351/ | | 
HUM 348 | | 
ISP 350/ | | 
HIST 352/ | | 
HUM 350 | | 
ISP 504 | Topics in Indigenous Studies:_______ | 3
ISP 530 | Indigenous Food and Health | 3
ISP 551/ | Foodways: Native North America | 3
HIST 511/ | | 
HUM 551 | | 
ISP 552/ | Foodways: Latin America | 3
HIST 512/ | | 
HUM 552/LAC 552 | | 
ISP/GEOG 601 | Indigenous Peoples of the World | 3
ISP/EVRN 673 | Environmental Justice | 3
LING 447 | North American Indian Languages | 3
POLS 684/ | International Law: The State and the Individual | 3
GIST 750/501 | | 
ANTH 507 | The Ancient Maya | 3
ANTH 561 | Indigenous Development in Latin America | 3
ENGL 305 | World Indigenous Literatures | 3
ISP 542 | Ethnobotany | 3
FMS 620 | International Women Filmmakers | 3
ISP/WGSS 567 | Native Feminisms | 3

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
Master of Arts in Indigenous Studies

Indigenous Studies Master of Arts Program

The ISP master's requires 30 credit hours to complete.

This degree enables you to become an innovative and capable scholar and leader who brings Indigenous perspectives to academic settings, government and other public service, and the private sector. ISP equips you with the knowledge and skills to conduct theoretical and applied research and to develop innovative solutions to issues facing Indigenous communities.

You'll take courses from across KU to create an individualized program of study. Our affiliate faculty members teach in the humanities, social sciences, arts and professional schools.

To graduate, you'll complete either a thesis or portfolio of your work.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Indigenous Studies Admission Requirements

The Indigenous Studies program accepts applications on a rolling basis, so apply to begin your studies either in the fall or spring semester.

Eligibility criteria for admission to the M.A. program follow Graduate Studies' admission policy. To be considered for admission to the program, a student must hold a bachelor's degree. Non-native speakers of English must meet Graduate Studies' English proficiency requirements (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

A full list of the required application materials can be found on the Indigenous (https://indigenous.ku.edu/how-apply/) Studies website.

If you are interested in pursuing a joint M.A./J.D. with the KU School of Law or the PSM + ISP graduate certificate, you will need to apply to both programs separately.

M.A. Degree Requirements

Students pursuing the M.A. in Indigenous Studies must successfully complete a minimum of 30 graduate credit hours: a 21-hour core curriculum plus 9 hours taken according to either Plan A or Plan B.

Core Curriculum

ISP 800 Indigenous Issues in the United States. A 3-hour graduate-level course taught by the director of the ISP with guest presentations by faculty who study indigenous peoples from various disciplinary perspectives.

18 hours of approved coursework with content relevant to the field of Indigenous studies approved by the student's graduate committee. Courses are offered by Indigenous Studies, as well as certain departments such as Anthropology, Environmental Studies, English, History, Political Science, Religion, and Geography. A list of approved courses can be found here (http://indigenous.ku.edu/courses/#tab3name).

Plan A: Non-Thesis Option

- 9 hours of electives. Electives should be selected in consultation with an advisor and complement your research, body of graduate work, and future career goals.
- An M.A. examination: an oral examination in which the candidate defends his or her portfolio, which will be composed of the student's entire body of work completed in courses counted for the degree.

Plan B: Thesis Option

- 6 hours of electives. Electives should be selected in consultation with an advisor and complement your research, body of graduate work, and future career goals.
- 3 hours of thesis on an approved subject with an oral defense.

Course Level Requirement

Students pursuing an M.A. in Indigenous Studies must take 50% or more of their coursework at the 700 level or above. ISP 800 and thesis hours (if applicable) count toward this requirement.

Joint Degree with KU Law

The University of Kansas offers a joint degree program in Law and Indigenous Studies. As part of this unique program, students may graduate with both the J.D. and an M.A. in Indigenous Studies in three to four years, making it an ideal choice for students interested in tribal law. Students must apply separately to the Law School and the Indigenous Studies graduate program.

The program "aspires to facilitate the protection and strengthening of Indigenous sovereignty, self-determination, and self-sufficiency" in Indigenous nations throughout the Americas.

The University of Kansas was the third institution of higher learning in the United States to offer a joint degree program relating to Indigenous peoples.

Graduate Certificate in Indigenous Studies

Indigenous Studies Graduate Certificate

The Indigenous Studies graduate certificate enhances the qualifications of students seeking careers in academic settings, government and other public service, and the private sector. You’ll gain knowledge essential to understand a broad range of historical, political, religious and social issues affecting Indigenous peoples. And, you’ll earn an additional
The Leadership Studies Minor (LSM) serves as the centerpiece of learning to do the work of leadership through a variety of programs. The ILS engages students across campus and from all disciplines in Jayhawks with the courage and leadership skills to ignite positive change.

In addition to the LSM, undergraduate students may elect to complete the Leadership Engagement Certificate, the Online Leadership Strategies and Applications certificate, or participate in Leadership Studies centered study abroad experiences.

Graduate students can apply to the online Graduate Certificate in Leadership Studies, the hybrid Graduate Certificate in Studies in Equity and Social Diversity in the US and the Masters in Leadership in Diversity and Inclusion. These innovative, interdisciplinary programs offer graduate students, community organizers, and working professionals the tools and skills to better understand complex challenges and navigate leadership opportunities within the context of diversity, equity, inclusion, and belonging in the United States.

The ILS engages students across campus and from all disciplines in learning to do the work of leadership through a variety of programs designed to complement any degree or career path, in residence and online. The Leadership Studies Minor (LSM) serves as the centerpiece of our undergraduate curriculum, offering students opportunities to work in a small-group environment, developing universal professional skills that are highly valued in today’s workforce. Through innovative coursework, students practice diagnosis, problem-solving, and ethical decision making while developing a self-awareness which enhances tolerance for ambiguity, empathy, perspective-taking, and active reflection while increasing understanding of diversity. The combination of theoretical and experiential coursework allows students to frame existing leadership experiences, explore new leadership opportunities, and engage their disciplinary content with greater confidence and efficacy.

In addition to the LSM, undergraduate students may elect to complete the Leadership Engagement Certificate, the Online Leadership Strategies and Applications certificate, or participate in Leadership Studies centered study abroad experiences.

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Institute for Leadership Studies

Institute for Leadership Studies

The Institute for Leadership Studies (ILS) supports the university’s mission of preparing students for a diverse and challenging world through innovative, interdisciplinary curricula at the undergraduate and graduate levels. Our programs inspire students to make a difference from where they are with what they have because we envision a world mobilized by Jayhawks with the courage and leadership skills to ignite positive change.

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Courses

LDST 200. Introduction to Leadership Studies and Applications. 3 Credits. SC S

This course combines an introduction to a theoretical, research-based approach to the study of leadership with hands-on application, analysis and experimentation with the process of leadership. Students will explore core leadership competencies and apply leadership tools and processes across a variety of groups and systems, addressing issues of concern within those communities. This course satisfies the LDST 201/LDST 202
requirement for the Leadership Studies Minor. This course is not available to students with credit in LDST 201/LDST 202. Prerequisite: Instructor permission.

LDST 201. Introduction to Leadership. 2 Credits. S
This course introduces students to the study of the leadership process. The course covers theories and research on core themes of leadership, focusing on how course materials relate to students' own leadership experiences. Concurrent enrollment in LDST 202 is recommended. Students considering the Leadership Studies Minor must complete LDST 202. This course is not available to students with credit in LDST 200. Not open to seniors.

LDST 202. Introduction to Leadership Applications. 1 Credits. S
This course focuses on the application of information learned in LDST 201. Activities and discussions emphasize application, analysis, and engagement with the process of leadership. Concurrent enrollment in LDST 201 is recommended. Students considering the Leadership Studies Minor must complete LDST 201 and LDST 202. This course is not available to students with credit in LDST 200. Not open to seniors. Prerequisite: Corequisite: LDST 201.

LDST 203. Introduction to Leadership, Honors. 3 Credits. S
This course combines an introduction to a theoretical, research-based approach to the study of leadership with hands-on application, analysis, and engagement with the process of leadership. Within a small group setting, students explore core leadership competencies and experiment with the process of leadership by engaging classmates and members of the university and local communities and addressing issues of concern within those communities. This course satisfies the LDST 201/LDST 202 requirement for the Leadership Studies Minor. This course is not available to students with credit in LDST 200 or LDST 201/LDST 202. Prerequisite: Admission to the University Honors Program, Instructor Permission.

LDST 260. Study Abroad Topics in Leadership Studies. 1-6 Credits. S
This course is designed to enhance international experience in topic areas related to Leadership Studies at the freshman/sophomore level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

LDST 290. Foundations of Leadership in Society. 3 Credits. S
This course will expose students to a variety of concepts, theories, and skills relevant to contemporary leadership thought. Students will be challenged to consider their personal conceptions and philosophy of leadership. Students will examine leadership within particular contexts such as creating change, ethical leadership, leadership and management, and historical leadership thought and leaders.

LDST 301. It’s On Us: Gender Based Violence Prevention. 0-1 Credits. S
This class is the first in a series of four addressing Gender Based Violence Prevention. This class examines the foundational concepts of Gender Based Violence Prevention at the individual level. Topics covered include but are not limited to: Consent, Drug and Alcohol Facilitated Rape, Gender Based Violence as Oppression, and Bystander Intervention. Students will participate in small and large group discussions, online reflection journals, and evidence based trainings. Completion of three credits of LDST 301-LDST 304 will fulfill KU Core Goal 3S. Prerequisite: LDST 302.

LDST 302. Breaking the Cycle: Gender Based Violence Prevention. 0-1 Credits. S
This class is the second in a series of four addressing Gender Based Violence Prevention. This class examines the intersection between Gender Based Violence and individual identities in relation to gender and sexual orientation on the relationship level. Topics cover include but are not limited to, introduction or Sexual Orientations, Gender Roles and Gender Construct, Sexual Health and Sex Positivity, and Healthy Relationships. Students will participate in small and large group discussions, online reflection journals, and evidence based trainings. At the end of the eight-week course student will be able to 1) Assess behaviors that put other at risk for violence, victimization, or perpetration (2) Assess behaviors that contribute to sexual health and sex positivity (3) Identify multiple ways that power and oppression are utilized through the social construct of gender and toxic masculinity (4) Identify multiple characteristics of healthy relationships and describe what is necessary for consent to be present in intimate partner relationships (5) Identify and apply strategies for safely intervening as an active bystander on the relationship level. Completion of three credits of LDST 301-LDST 304 will fulfill KU Core Goal 3S. Prerequisite: LDST 301.

LDST 303. Prevention is Possible: Gender Based Violence Prevention. 0-1 Credits. S
This class is the third in a series of four addressing Gender Based Violence Prevention. This class examines the critical role social justice plays in the prevention of Gender Based Violence on the community level. Topics cover include but are not limited to, Introduction to Social Justice, Cultural Humility, Systems of Oppressions, and Primary Prevention as Activism. Students will participate in small and large group discussions, online reflection journals, and evidence based trainings. At the end of the eight-week course student will be able to 1) Assess behaviors that put other at risk for violence, victimization, or perpetration (2) Identify and apply strategies for safely intervening as an active bystander on the relationship and community level (3) Identify multiple ways that power and oppression is impacted by individual identity (4) Contribute to gender based violence prevention on the community level. Completion of three credits of LDST 301-LDST 304 will fulfill KU Core Goal 3S. Prerequisite: LDST 302.

LDST 304. ACTivist: Gender Based Violence Prevention. 0-1 Credits. S
This is the final class in a series of four addressing Gender Based Violence Prevention. This class examines Gender Based Violence prevention through a Social Justice Frame Work and the Socioecological Model on the community and societal level. Topics cover include but are not limited to, Social Justice Frame Work, Socioecological Model, Evidence Based Primary Prevention, and Accountability. Students will participate in small and large group discussions, online reflection journals, and evidence based trainings. At the end of the eight-week course student will be able to 1) Assess behaviors that put other at risk for violence, victimization, or perpetration (2) Assess the intersection between the socioecological model and the social justice frames work (3) Identify and apply strategies for safely intervening as an active bystander on the community and societal level (4) Identify multiple ways that power and oppression is impacted by individual identity (5) Contribute to gender based violence prevention on the community or societal level. Completion of three credits of LDST 301-LDST 304 will fulfill KU Core Goal 3S. Prerequisite: LDST 302.

LDST 320. How to Plan (Almost) Anything: Event Development and Management. 3 Credits. S
This course is designed to provide an introduction to the principles of special event planning and management. Students will gain foundational concepts and professional skills through researching, planning, coordinating, marketing, management and evaluation of special events. This course will develop student skills necessary to lead and manage in an ethically, environmentally, economically, and socially sustainable way. By utilizing the adaptive leadership model, students will analyze core objectives of event planning, while experimenting with smart risks and disciplined assessment. Essential topics will include event planning and coordination, sponsorship, negotiations, marketing, communications, customer service, vendor management, volunteer management, crisis risk management, and event evaluation.

LDST 420. Communication, Leadership, and Conflict Management. 3 Credits. S
This course introduces students to theories of conflict management from a variety of academic perspectives and the role leadership plays in managing conflict across multiple contexts. Students will learn how to successfully assess and command situations and effectively resolve interpersonal, organizational, and systemic conflict while doing the work of leadership. (Same as COMS 415.)

LDST 431. Communication and Leadership. 3 Credits. S
This course provides an overview of the role of communication in leadership in a variety of contexts, including: interpersonal, small group, intercultural, organizational, and public sphere. It will include theoretical and experiential approaches to effective leadership communication. Prerequisite: LDST 200, LDST 201, or LDST 203.

LDST 460. Study Abroad Topics in Leadership Studies. 1-6 Credits. S
This course is designed to enhance international experience in topic areas related to Leadership studies at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

LDST 470. Independent Study in Leadership Studies. 1-6 Credits. S
This course engages students in an investigation of a special topic or project selected by the student with advice, approval, and supervision of a Leadership Studies instructor. Such study may take the form of special research, individual reports and/or conferences. Prerequisite: Permission of Instructor, LDST 201, LDST 202.

LDST 480. Internship in Leadership Studies. 1-6 Credits. S
Students complete leadership-centered fieldwork in an organization related to their career goals. Criteria for the organizations and work assignments suitable for internship credit are available through the Institute for Leadership Studies. An internship plan is developed with the field supervisor and internship faculty adviser. Reports and meetings are required. Prerequisite: Permission of Instructor.

LDST 490. Special Topics in Leadership Studies: ______. 3 Credits. S
This course is designed for the study of special topics in leadership studies. Course content addresses major topics and specialized issues in the field and topics change as needs and resources develop. May be repeated for credit if content differs. Prerequisite: Permission of Instructor.

LDST 500. Directed Readings in Leadership Studies. 1-6 Credits. S
This course is designed for directed readings in selected areas of Leadership Studies. Individual and supervised readings address major topics and specialized issues in the field. May be repeated for credit if content differs. Prerequisite: Permission of Instructor.

LDST 520. Leadership Ethics. 3 Credits. S
Through collaboration, discussion, case study, and course readings, Leadership Ethics familiarizes students with various theoretical perspectives of ethical decision making and the ethics-guided behavior essential for competent leadership. Upon completion, students will understand a variety of ethical perspectives for the prescription of action in a leadership context, apply a variety of ethical perspectives to the choice and evaluation of action in leadership work, and recognize the significance of considering multiple ethical perspectives in both leadership and broader contexts. Prerequisite: LDST 202.

LDST 532. Leadership Studies Practicum. 3 Credits. S
Students simultaneously complete a 1-hour seminar in equity-centered leadership and a 2-hour supervised, direct, community involvement project in which they apply leadership knowledge, tools, and skills to a real world environment. Written assignments, journal reflections, and group discussions are used to record and assess learning. Prerequisite: LDST 201 and admission to the Leadership Studies minor.

LDST 535. Seminar in Leadership Strategies and Applications. 3 Credits. S
This seminar serves as the capstone course for the Leadership Studies minor. It includes advanced readings on leadership theory and practice, as well as major written and applied projects in which students integrate and demonstrate what they have learned in the program. Prerequisite: LDST 201, or LDST 431, and admission to the Leadership Studies minor.

LDST 690. Special Topics in Leadership Studies: ______. 3 Credits. S
This course is designed for the study of special topics in Leadership Studies. Course content addresses major topics and specialized issues in the field and topics change as needs and resources develop. May be repeated for credit if content differs. Prerequisite: Permission of instructor.

LDST 695. Advanced Special Topics in Leadership Studies: ______. 3 Credits. S
This course is designed to take advantage of special competence by an individual faculty member in Leadership Studies. Course content addresses timely topics and relevant issues in the field and topics change as needs and resources develop. May be repeated for credit if content varies. Prerequisite: Permission of instructor.

LDST 700. Introduction to Graduate Studies. 3 Credits.
This course is designed to prepare students accepted into the Master of Arts in Leadership in Diversity and Inclusion program for further graduate studies through a series of workshops, experiential learning opportunities, lecture, discussion, research assignments, and peer collaboration. Upon completion, students will have a better understanding of the expectations of graduate education as well as campus resources, and networking opportunities designed to support degree work. Students will develop their academic skill set by focusing on scholarly writing, oral communication/ presentation, research and information literacy, critical thinking, and argumentation. Prerequisite: Permission of Instructor.

LDST 705. Professionalization Seminar in Leadership Studies. 3 Credits.
This course is designed to cultivate professional habits, perspectives, and identities for graduate students primarily in the humanities and social science fields, but is open to students from all fields. The course focuses on preparation for career paths outside of higher education and based in work around Leadership in Diversity and Inclusion in the United States. Prerequisite: Graduate standing.

LDST 710. History and Theory of Leadership Studies. 3 Credits.
Theoretical foundations in leadership, organizational decision making, and communication will enhance students’ development of expertise in assessing organizational and systems issues, and facilitating unit-, organization-, and system-wide improvements. Traditional approaches to leadership, organizing and communicating are contrasted with emerging approaches that promote sensitivity to diverse organizational cultures, systems, and populations. Through examination of theoretical perspectives, the student will develop an ability to integrate the contributions of different points of view and ways of thinking crucial to effectively assess, design and lead high performing organizations in a dynamic world. Contexts discussed will include for-profit, not-for-profit, healthcare, community, and military organizations. Prerequisite: Graduate standing.

LDST 720. Leadership Ethics. 3 Credits.
This course establishes a theoretical groundwork with readings and discussions that will familiarize students with five perspectives on ethical decision making and behavior as well as the essential competencies of leadership. For each of those perspectives, students will engage in reflections, collaborative case studies, and debates based on a case in point approach as well as a single-authored analysis of a selected leadership case. Prerequisite: Graduate Standing.

LDST 730. Managing the Work of Leadership. 3 Credits.
Through webinars and case in point pedagogy, this course prepares students to manage the day to day communicative and executive functions necessary for doing the work of leadership. Topics will include crisis management, stakeholder engagement, speech writing, fundraising, image management, and professionalization. Prerequisite: Graduate standing.

LDST 740. Leadership and Power. 3 Credits.
Leadership and power often are confused and this misunderstanding can lead to members of oppressed groups dismissing their own leadership potential. Through reading, reflective writing, and engaged discussion, this course will help students understand power and leadership as distinct concepts that occasionally intersect. Within their various systems, people continuously perceive, encounter, and work within different power dynamics. Thus students will learn about historical and culturally diverse understandings of power, the ethical responsibilities of power, the dangers of misuse of power, and doing the work of leadership with (and without) power. Prerequisite: Graduate standing.

LDST 760. Leadership and Communication. 3 Credits.
This course focuses on intra- and inter-personal communication, supporting students to: develop listening and empathy skills; make clear and specific requests; and express feelings and needs in a way that does not imply judgment, criticism, blame, or punishment. Learning this process involves working collaboratively through small group practice, pair shares, and teamwork to master the skills. A collaborative education approach is employed throughout the course, reinforcing learning, and providing students with confidence and competence to resolve conflict and handle challenging communication. Students critique one another’s work, present feedback and suggestions, and collectively develop aptitude for successful work environments and personal relationships. Prerequisite: Admission to a graduate program or graduate certificate or instructor permission.

LDST 770. Independent Study in Leadership Studies. 1-3 Credits.
This course engages students in a graduate-level investigation of a special topic or project selected by the student with advice, approval, and supervision of a Leadership Studies instructor. Such study may take the form of special research, individual reports and/or conferences. Prerequisite: Permission of instructor.

LDST 800. Directed Readings in Leadership Studies. 1-3 Credits.
This course is designed for graduate level directed readings in selected areas of Leadership Studies. Individual and supervised readings address major topics and specialized issues in the field. May be repeated for credit if the content differs. Prerequisite: Permission of instructor.

LDST 850. Leadership in Diversity and Inclusion Capstone. 1-3 Credits.
This course provides students an opportunity to integrate and synthesize the interdisciplinary knowledge they have gained in their graduate learning, combining self assessment and reflection with a guided project to create a final portfolio. Students will work closely with their faculty committee to design an experience that makes relevant connections across disciplines represented within the degree program and applies this knowledge to a new setting or complex problem. Prerequisite: Graduate standing. Instructor Consent.

Minor in Leadership Studies

Why study leadership studies?
In the Institute for Leadership Studies we believe that leadership is a process, not an outcome. Effective leadership starts with effective communication, and therefore students develop their learning around the adaptive leadership paradigm and develop core leadership competencies in order to mobilize others to tackle tough challenges and thrive.

Requirements for the Minor
Leadership Studies is an 18-credit hour interdisciplinary minor offered through the Institute for Leadership Studies. The minor requires completion of LDST 200, LDST 201 and LDST 202 or LDST 203 with an additional 15-credit hours as identified below. Due to limited space capacity, top candidates will be given preferential permission to enroll in the subsequent LDST courses in the minor. Therefore, students may apply for admission to the minor while taking LDST 200, LDST 202 or LDST 203 or upon completion of the course. Course work involves studying theory and research in leadership and applying it to the students’ leadership experiences.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>LDST 431</td>
<td>Communication and Leadership</td>
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<td>LDST 532</td>
<td>Leadership Studies Practicum</td>
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<tr>
<td>LDST 535</td>
<td>Seminar in Leadership Strategies and Applications</td>
<td>3</td>
</tr>
<tr>
<td>BBA 403</td>
<td>Ethical Decision Making in Business</td>
<td>3</td>
</tr>
<tr>
<td>COMS 450</td>
<td>Ethical Issues in Political Communication</td>
<td>3</td>
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</tbody>
</table>

Leadership Studies Course Requirements

The minor requires 18 hours as follows:

Introductory Coursework

Choose one of the following: 3 Hours

- LDST 201 & LDST 202 Introduction to Leadership and Introduction to Leadership Applications
- LDST 203 Introduction to Leadership, Honors
- LDST 200 Introduction to Leadership Studies and Applications

Communication and Leadership. Satisfied by:

- LDST 431 Communication and Leadership 3 Hours

Leadership Studies Practicum. Satisfied by:

- LDST 532 Leadership Studies Practicum 3 Hours

Seminar in Leadership Strategies and Applications. Satisfied by:

- LDST 535 Seminar in Leadership Strategies and Applications 3 Hours

1 course from each of the following categories:

- Ethics 3 Credits

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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>BBA 403</td>
<td>Ethical Decision Making in Business</td>
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<tr>
<td>COMS 450</td>
<td>Ethical Issues in Political Communication</td>
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<td>COURSE CODE</td>
<td>COURSE TITLE</td>
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<tr>
<td>EPSY 760</td>
<td>Ethics, Law, and Professional Issues in School Psychology</td>
</tr>
<tr>
<td>HUM 510</td>
<td>Science, Technology, and Society</td>
</tr>
<tr>
<td>JMC 608</td>
<td>Ethics and Professional Practice</td>
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<td>MGMT 405</td>
<td>Ethical Decision Making in Business</td>
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<td>NURS 334</td>
<td>Professional Development II: Image, Roles, and Ethics</td>
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<td>PCS 565</td>
<td>The Literature of Human Rights</td>
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<td>PHIL 160</td>
<td>Introduction to Ethics</td>
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<td>PHIL 360</td>
<td>Moral Issues in Business</td>
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<td>PHIL 368</td>
<td>Moral Issues in Sports</td>
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<td>PHIL 370</td>
<td>Moral Issues in Medicine</td>
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<td>PHIL 375</td>
<td>Moral Issues in Computer Technology</td>
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<td>PHIL 380</td>
<td>Environmental Ethics</td>
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<td>PHIL 670</td>
<td>Contemporary Ethical Theory</td>
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<td>PHIL 671</td>
<td>Feminist Theories in Ethics</td>
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<td>PHIL 672</td>
<td>History of Ethics</td>
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<tr>
<td>PHIL 676</td>
<td>Medical Ethics: Life and Death Issues</td>
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<td>PHIL 677</td>
<td>Medical Ethics: Professional Responsibilities</td>
</tr>
<tr>
<td>PHPR 620</td>
<td>Ethical, Legal, and Cultural Issues in Patient Care</td>
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<td>POLS 528</td>
<td>Environmental Justice and Public Policy</td>
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<td>POLS 645</td>
<td>Corruption, Crisis and Scandal</td>
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<td>POLS 674</td>
<td>Global Justice and Foreign Policy</td>
</tr>
<tr>
<td>PUAD 432</td>
<td>Conducting the People's Business Ethically</td>
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<tr>
<td>SOC 160</td>
<td>Social Problems and American Values</td>
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<tr>
<td>SOC 161</td>
<td>Social Problems and American Values, Honors</td>
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<tr>
<td>AAAS 306</td>
<td>The Black Experience in the U.S. Since Emancipation</td>
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<tr>
<td>AAAS 330/AMS 340</td>
<td>Black Leadership</td>
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<td>AAAS 388</td>
<td>The Black Woman</td>
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<tr>
<td>AAAS/SOC/AMS 437</td>
<td>Global Ethnic and Racial Relations</td>
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<td>AAAS 470</td>
<td>Language and Society in Africa</td>
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<tr>
<td>AAAS 511</td>
<td>The Civil Rights Movement</td>
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<tr>
<td>ABS 437</td>
<td>Independent Living and People with Disabilities</td>
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<tr>
<td>AMS 110</td>
<td>American Identities</td>
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<td>AMS 260</td>
<td>America's Latinos/Latinas</td>
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<tr>
<td>COMS 246</td>
<td>Introduction to Intercultural Communication</td>
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<tr>
<td>COMS 440</td>
<td>Communication and Gender</td>
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<tr>
<td>COMS 447</td>
<td>Intercultural Communication: The Afro-American</td>
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<td>COMS 547</td>
<td>Communication and Culture</td>
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<tr>
<td>C&amp;T 235</td>
<td>Cultural Diversity, Equity, and Inclusion in K-12 Schools</td>
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<tr>
<td>ENGL 323</td>
<td>Twentieth Century Literature and Culture</td>
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<tr>
<td>ENGL 337</td>
<td>Introduction to U.S. Latino/a Literature</td>
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<tr>
<td>ENGL 338</td>
<td>Introduction to African-American Literature</td>
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<tr>
<td>ENGL 340</td>
<td>Topics in U.S. Ethnic Literature: _____</td>
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<td>ENGL 572</td>
<td>Women and Literature: _____</td>
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<tr>
<td>ENGL 574</td>
<td>African American Literature: _____</td>
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<td>FMS 410</td>
<td>US Diversity in Visual Culture</td>
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<td>GEOG 150</td>
<td>Environment, Culture and Society</td>
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<td>HIST 312</td>
<td>American Culture, 1877 to the Present</td>
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<tr>
<td>HIST 319</td>
<td>History, Women, and Diversity in the U.S.</td>
</tr>
<tr>
<td>HIST 324</td>
<td>History of Women and the Body</td>
</tr>
<tr>
<td>HIST 348</td>
<td>History of the Peoples of Kansas</td>
</tr>
<tr>
<td>HIST 400</td>
<td>Indigenous People of the Great Plains</td>
</tr>
<tr>
<td>HIST 531</td>
<td>History of American Women--1870 to Present</td>
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<td>HIST 619</td>
<td>History of the American Indian</td>
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<td>HIST 631</td>
<td>The Contemporary Afro-American Experience</td>
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<td>IBUS 462</td>
<td>Comparative and Cross-Cultural Management</td>
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<td>JOUR 534</td>
<td>Diversity in Media</td>
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<td>LDST 290</td>
<td>Foundations of Leadership in Society</td>
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<td>LING 320</td>
<td>Language in Culture and Society</td>
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<td>LING 321</td>
<td>Language in Culture and Society, Honors</td>
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<td>LING 345</td>
<td>Language and Gender</td>
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<td>MKTG 440</td>
<td>Global Marketing</td>
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<tr>
<td>POLS 512</td>
<td>Latino Politics in the U.S.</td>
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<td>POLS 562</td>
<td>Women and Politics</td>
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<td>PSYC 465</td>
<td>Stereotyping and Prejudice Across Cultures</td>
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<td>PSYC 468</td>
<td>Psychology of Women</td>
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<td>PSYC 545</td>
<td>Culture and Psychology</td>
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<td>PUAD 402</td>
<td>Diversity and Social Equity in Public Administration</td>
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<td>SOC 321</td>
<td>Wealth, Power, and Inequality</td>
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<td>SOC 326</td>
<td>Health, Gender, and Society</td>
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<td>SOC 343</td>
<td>American Racial and Ethnic Relations</td>
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<td>SOC 352</td>
<td>Sociology of Sex Roles</td>
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<td>SOC 436</td>
<td>Ethnicity in the United States: _____</td>
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<td>SOC 450</td>
<td>Gender and Society</td>
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<td>SOC 454</td>
<td>Women and Work</td>
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<td>SW 555</td>
<td>Diversity, Equity and Inclusion in Social Work Practice</td>
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<td>THR 327</td>
<td>African-American Theatre and Drama</td>
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<td>WGSS 102</td>
<td>Introduction to Women, Gender, and Sexuality Studies, Honors</td>
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<tr>
<td>WGSS 101</td>
<td>Introduction to Women, Gender, and Sexuality Studies</td>
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<td>WGSS 327</td>
<td>Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies</td>
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<tr>
<td>WGSS 330</td>
<td>Women in Contemporary African Literature</td>
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<tr>
<td>WGSS 389</td>
<td>The Anthropology of Gender: Female, Male, and Beyond</td>
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<tr>
<td>WGSS 511</td>
<td>History of American Women: 1870 to Present</td>
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</tbody>
</table>

**Minor Hours & GPA**

While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Online catalog for information regarding program-specific admissions Please consult the Graduate Admission. These may be found in the Policies and procedures of Graduate Studies govern the process of admitted as either a degree-seeking or non-degree seeking student. An applicant seeking to pursue graduate study in the College may be admission to graduate studies in leadership with a focus on ethical decision making and understanding of the dynamics of power in doing the work of leadership. The primary objectives are to offer graduate students and working professionals tools and techniques to better understand and navigate leadership opportunities within professional and community environments, and to respond efficiently and effectively to the demands of a changing social, cultural, and political landscape while doing the work of leadership.

**Undergraduate Certificate in Leadership Strategies and Applications**

The Leadership Strategies and Applications Certificate introduces the principles of effective and ethical leadership through the Adaptive Leadership paradigm. Students will explore leadership tools and processes, a variety of perspectives of ethical decision making and behavior, strategies for effective interpersonal communication and conflict management, and online communication theories and practices.

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<thead>
<tr>
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<tr>
<td>LDST 201</td>
<td>Introduction to Leadership</td>
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<tr>
<td>&amp; LDST 202 or LDST 200</td>
<td>Introduction to Leadership Applications</td>
<td>3</td>
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<tr>
<td>COMS 310</td>
<td>Advanced Organizational and Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>LDST 420</td>
<td>Communication, Leadership, and Conflict Management</td>
<td>3</td>
</tr>
<tr>
<td>LDST 520</td>
<td>Leadership Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

**GRADUATE CERTIFICATE IN LEADERSHIP STUDIES**

The purpose of the Graduate Certificate in Leadership Studies is to build foundational knowledge of the history, theory, and practice of leadership with a focus on ethical decision making and understanding of the dynamics of power in doing the work of leadership. The primary objectives are to offer graduate students and working professionals tools and techniques to better understand and navigate leadership opportunities within professional and community environments, and to respond efficiently and effectively to the demands of a changing social, cultural, and political landscape while doing the work of leadership.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

Any applicant seeking to pursue a graduate certificate in Leadership Studies must submit an application at https://gradapply.ku.edu/apply (https://gradapply.ku.edu/apply). Applications are accepted on a rolling basis. Please see the Admission to Graduate Study (/policy.ku.edu/graduate-studies/admission-to-graduate-study/) policy for information on admission requirements.

**New Applicants**

Applicants who are not already enrolled in a KU graduate program should include the following materials in their application to the certificate program:

- a statement of purpose outlining their interest in the Leadership Studies graduate certificate
- Copy of official transcripts (http://graduate.ku.edu/transcripts/) from all colleges and universities attended

Non-native speakers of English must meet English proficiency requirements (http://graduate.ku.edu/english-proficiency-requirements/).

**Current KU Graduate Students**

Applicants already in a KU graduate program must be in good standing with their home department to be eligible for admission the certificate program. Current KU graduate students should include the following materials in their online application:

- a statement of purpose outlining their interest in the Leadership Studies graduate certificate
- a letter of support from their faculty advisor or the Director of Graduate Studies in their home academic unit

**Contact**

Visit the Institute for Leadership Studies website (https://ils.ku.edu/admission-graduate-certificate/) for more detailed information about the application process.

Completion of 12 credit hours across 4 online courses:

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<tr>
<td>LDST 710</td>
<td>History and Theory of Leadership Studies</td>
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<td>LDST 720</td>
<td>Leadership Ethics</td>
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<td>LDST 730</td>
<td>Managing the Work of Leadership</td>
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<td>LDST 740</td>
<td>Leadership and Power</td>
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**Total Hours** 12

**Interdisciplinary Studies in Liberal Arts and Sciences**

**Cross-Departmental Degree Programs**

The College of Liberal Arts and Sciences offers graduate degrees that cross multiple departments and units. For information on these, see:
• Center for East Asian Studies (http://ceas.ku.edu/);
• Center for Global and International Studies (http://global.ku.edu/);
• Indigenous Studies Program (https://indigenous.ku.edu/);
• Center for Latin American & Caribbean Studies (https://clacs.ku.edu/);
• Museum Studies Program (https://museumstudies.ku.edu/); and
• Center for Russian, East European, and Eurasian Studies (https://crees.ku.edu/).

Cross-departmental studies that have no defined degree program may be authorized upon petition. See Interdisciplinary Studies in the Graduate Studies section of the online catalog for more information.

Graduate students in degree programs may add a graduate certificate in the following areas:

• African Studies
• American Studies
• Applied Behavior Analysis
• Applied Math
• Chemical Biology
• City and County Management
• Community Health and Development
• East Asian Cultures
• Environmental Assessment
• Environmental Justice
• Environmental Studies
• Geographic Information Systems
• Global and International Studies
• Health Psychology
• Indigenous Studies
• Latin American and Caribbean Studies
• Medieval and Early Modern Studies
• Museum Studies
• Peace and Conflict Studies
• Performance Management
• Professional Workplace Communication
• Religious Studies
• Russian, East European, and Eurasian Studies
• Science Management
• Second Language Studies
• Women, Gender and Sexuality Studies

Information on these Graduate Certificate Programs may be found in this catalog in the College of Liberal Arts and Sciences’ Overview section.

Jewish Studies Program

The Program in Jewish Studies offers an undergraduate major (BA in Jewish Studies) and minor, Departmental Honors (both by research paper and by service learning), and courses in Jewish Studies, Hebrew, and Yiddish; and an Undergraduate Certificate in Holocaust Studies. We also co-sponsor courses in many other units, especially Religious Studies, History, Global and International Studies, and Political Studies. Among our several focus areas are Jewish history and culture, Judaism, Holocaust Studies, Israel Studies, Jewish languages and narratives, and applied service in Jewish organizations.

Jewish culture and religion have flourished in a rich variety of forms and in remarkably disparate places on the globe for thousands of years. Jewish contributions have deeply affected the art, languages and literature, law, philosophy, and political thought, and the sciences of all nations. The global impact of Jewish culture thus warrants its study as an important component of the liberal arts curriculum at KU. The Jewish Studies Program at KU is the only such program in the state of Kansas. Its mission, therefore, is to celebrate the Jewish experience and promote the understanding of its cultural importance with courses and academic programs that focus on the history, diversity, culture, languages, thought, and practices of the Jewish people and their religion.

As a Jewish Studies major you will gain skills in critical thinking and cultural awareness that lead to successes in a wide array of career fields, including education, law, journalism, healthcare, and social justice advocacy. Requirements for the Jewish Studies major include 2 courses in Jewish history and/or culture; 2 courses in Judaism; 3 electives; demonstration of proficiency at the intermediate level of Hebrew or Yiddish (usually satisfied by taking 2 courses at the 200-level); and JWSH 601, a capstone course.

Courses

HEBR 110. Elementary Modern Hebrew I. 5 Credits. U F1
A beginning course in modern Hebrew. Essentials of grammar, syntax and conversational practice; elementary reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam.

HEBR 120. Elementary Modern Hebrew II. 5 Credits. U F2
A continuation of HEBR 110. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 110.

HEBR 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Hebrew. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HEBR 200. Elementary Studies in Modern Hebrew. 3 Credits. H
This course is designed to help prepare students for the intermediate level of Modern Hebrew. Not open to native speakers of Hebrew. Does not count toward the JWSH minor or major. Prerequisite: HEBR 110 or equivalent. Consent of instructor.

HEBR 210. Intermediate Modern Hebrew I. 3 Credits. U F3
Further development of language skills: listening comprehension, oral efficiency, intermediate grammar and syntax, reading and writing. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 120.

HEBR 220. Intermediate Modern Hebrew II. 3 Credits. U F4
A continuation of HEBR 210. Note: Students with other previous experience in Hebrew must take a placement exam. Prerequisite: HEBR 210.

HEBR 340. Advanced Modern Hebrew I. 3 Credits. U FP
Advanced study of Modern Hebrew. This course is designed to strengthen linguistic skills, enrich vocabulary, and further the study of grammar and syntax. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or permission of the instructor.

HEBR 350. Advanced Modern Hebrew II. 3 Credits. U FP

Continued advanced study of modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 340 or permission of the instructor.

**HEBR 395. Study Abroad Topics in Hebrew:** 3-6 Credits. H This course is designed for the study abroad of special topics in Hebrew at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

**HEBR 410. Studies in Modern Hebrew Literature.** 3 Credits. H FP
An introduction to Hebrew literature from the nineteenth century to the present day. The course emphasizes the development of basic interpretive skills and the understanding of basic literary movements, genres, and concepts. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent.

**HEBR 420. Studies in Modern Hebrew.** 3 Credits. U FP
This course is designed to help students achieve fluency in speaking, listening, and writing Modern Hebrew. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent.

**HEBR 490. Independent Study.** 3 Credits. U
Intensive reading or research under faculty supervision. Not open to native speakers of Hebrew. Prerequisite: HEBR 220 or equivalent.

**Courses**

**JWSH 107. Jews, Christians, Muslims.** 3 Credits. HR H
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken JWSH 109. (Same as REL 107.)

**JWSH 109. Jews, Christians, Muslims, Honors.** 3 Credits. HR H
A basic introduction to the major religious traditions in the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken JWSH 107 or REL 107.

**JWSH 120. Exploring the Jewish Experience.** 1 Credit. H
This course introduces students to basic aspects of Jewish studies, including Jewish history, Judaism and theology, philosophy and science, and culture. Not open to students who have completed JWSH 400 or JWSH 610.

**JWSH 124. Understanding the Bible.** 3 Credits. HR H
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as REL 124.)

**JWSH 125. Understanding the Bible, Honors.** 3 Credits. HR H
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as REL 125.)

**JWSH 177. First Year Seminar:** 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Jewish Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**JWSH 300. Topics in Jewish Studies:** 3 Credits. H
Examination of special topics in Jewish Studies. May be repeated if topic varies.

**JWSH 305. Language, Gender, and Sexuality.** 3 Credits. S
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as ANTH 325, GIST 303, SLAV 305 and WGSS 325.)

**JWSH 311. Narratives of Jewish Life.** 3 Credits. HL H
The course focuses on the narratives through which Jews made sense of their lives under the impact of the forces of modernity, beginning in the "old world," and moving through the 19th century and into the 20th. The goal is to analyze how the imagination of Jewish writers was captured by the changes in social structures such as new educational, residential and occupational opportunities, leading to increased interactions with the gentile society. Students read and discuss literary works based in the shtetl in revolutionary Russia, and in America. We will also look at memoirs and letters written by ordinary Jews. All assigned texts will be in English.

**JWSH 315. The Spanish Inquisition.** 3 Credits. H
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and SPAN 302.)

**JWSH 316. Jews and Slavs in Eastern Europe.** 3 Credits. H
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups have shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. "Jews and Slavs" examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups. Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as SLAV 318.)

**JWSH 320. The Bible Then and Now.** 3 Credits.
An introduction and survey of the history and interpretation of the Jewish and Christian bibles from their first formation to the present day. Students will explore the way the text, interpretation and format of the Bible have adjusted over time to accommodate religious, political, social and technological changes. Class will occasionally meet in the university's rare book collection to study rare bibles. (Same as REL 320.)

**JWSH 323. The Jewish World of Jesus.** 3 Credits. H
An introduction to the figure of Jesus in his ancient Jewish context. What was Jewish life like in Jesus's time? What did the early Jesus movement share with other forms of Judaism, and how did it differ? Evidence from the New Testament, the Dead Sea Scrolls, and other textual and archaeological sources will be used to explore the first-century Jewish...
society of which both Jesus and the first Christians were a part. (Same as REL 323.)

**JWSH 325. Introduction to Judaism. 3 Credits. H**
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as REL 325.)

**JWSH 326. The Talmud: Its Origins, Nature, and Evolution. 3 Credits. H**
This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries. (Same as REL 326.) Prerequisite: REL 104, REL 107, or REL 124 or REL 125, or permission of the instructor.

**JWSH 327. Jewish Secular Culture. 3 Credits. HL H**
By examining the modern concept of Yiddishkeit (Jewishness), this course explores Jewish secularism as a set of modern intellectual, literary, and cultural practices that redefined the relationship between the secular and religious in literature, music, theatre, art, humor, and foodways. This interdisciplinary course draws on theoretical approaches from history, cultural studies, religious studies, folklore, and linguistics to examine the different secularizing cultural practices of the Jews in Central and Eastern Europe, as well as in North America.

**JWSH 329. Israeli-Palestinian Conflict: An Introduction. 3 Credits. S**
This course provides an introduction to the Israeli-Palestinian conflict including its history from the Ottoman period to the present day, the social and political effects on Israeli and Palestinian life and citizenship, official and unofficial narratives, and international responses. (Same as GIST 329 and HIST 482.)

**JWSH 330. Mystical Tradition in Judaism. 3 Credits. H**
Mystical experiences and supernatural encounters in Jewish texts and tradition: Dybbuks and demons, angels and Elijah; from ecstatic enlightenment to succumbing to satan - Jewish texts and tradition are riddled with the arcane, the occult and the mystical. This course will mine the sources for a deep exploration of these aspects of Judaism that are most often obscured by “normative” teachings and practices, yet remain deeply embedded in the customs and beliefs of Jews around the world. (Same as REL 329.)

**JWSH 335. History of Jewish Women. 3 Credits. H**
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women’s gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women’s lives in both Jewish and non-Jewish society. (Same as HIST 335, WGSS 335.)

**JWSH 336. Jewish American Literature and Culture. 3 Credits. H**
An examination of Jewish American literature and culture from the 17th century to the present. Materials may include a broad range of literary genres as well as folklore, music, film, and visual art. (Same as ENGL 336.) Prerequisite: Prior completion of the KU Core Written Communication requirement. Recommended: Prior completion of one 200-level English course.

**JWSH 338. Languages of the Jews. 3 Credits. H**
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as LING 338.)

**JWSH 339. Languages of the Jews, Honors. 3 Credits. H**
Honors version of JWSH 338 or LING 338, Languages of the Jews. Prerequisite: Membership in the University Honors Program or consent of instructor. (Same as LING 339.)

**JWSH 341. Hitler and Nazi Germany. 3 Credits. H/W**
An examination of the rise of Hitler and Nazism, beginning with the breakdown of 19th century culture in the First World War and continuing through the failure of democracy under the Weimar Republic. The course will also discuss the impact of Nazism on Germany and how Nazism led to the Second World War and the Holocaust. (Same as HIST 341.)

**JWSH 342. Medieval to Early Modern Jewish History. 3 Credits. H**
This course surveys the political, economic, social, and cultural experience of Jews in the medieval and early modern periods, from the sixth through the seventeenth centuries. It examines Jewish life in the Mediterranean diaspora, the Iberian Peninsula, and Christian Europe and considers the impact of Jewish communities on the non-Jewish host societies in which they settled.

**JWSH 343. The Holocaust in History. 3 Credits. H**
The systematic murder of the Jews of Europe by the Nazis during World War II is one of the most important events of modern history. This course studies the Holocaust by asking about its place in history. It compares other attempted genocides with the Holocaust and examines why most historians argue that it is unique. Other topics covered include the reasons the Holocaust occurred in Europe when it did, the changing role of anti-Semitism, and the effects of the Holocaust on civilization. The course also discusses why some people have sought to deny the Holocaust. The course concludes by discussing the questions people have raised about the Holocaust and such issues as support for democracy, the belief in progress, the role of science, and the search for human values which are common to all societies. (Same as HIST 343.)

**JWSH 344. Modern Jewish History. 3 Credits. H**
This course explores the complex of interactions between Jews, Judaism, and modernity by examining the challenges to Jewish life and thought, community and culture, self-understanding and survival, from the early modern period to the present day. Through the lenses of religious, cultural, intellectual, and political expression, the course examines the social, economic, and demographic changes in Jewish communities in Western, Central and Eastern Europe, the United States, and Israel along with the impact of antisemitism and the Holocaust. (Same as HIST 344.)

**JWSH 345. Theatre and Genocide. 3 Credits. H**
This seminar focuses on theatre art production under extreme situations. Do artists have a moral obligation to bear witness to genocide and war? Lectures, historical and theoretical readings, play texts, dance performance, and films provide students with a context within which to explore such issues as: the function of the performing arts under duress; the artist’s role under and in response to atrocity; and how art aids us to explore the human condition. Class discussion, readings, and individual projects. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in JWSH 645 or THR 645. (Same as THR 345.)

**JWSH 346. The Jewish Experience in America. 3 Credits. H**
This course surveys the history of American Jewry from the 17th to the 20th centuries through overlapping perspectives of economics, politics, ethnicity, culture, and gender. The first part of the course examines the three waves of Jewish immigration - Sephardic (“Spanish-Portuguese”),
West-Ashkenazic ("German"), and East Ashkenazic ("Russian") - that took place between the 1600s and World War I: their specific European roots and American circumstances; the different ways in which each group adapted to, interacted with, shaped and was shaped by American life, constructed ideas of community and identity, and influenced those who came later. The second part of the course explores the genesis of an integrated and distinctive modern American "Jewishness" that emerged after World War I and reached its zenith in the 1960s. Informed by interwar and postwar social, economic and demographic transformation and critical domestic and international political developments, this process involved the reconstruction of Jewish identity and community based on the conscious blending of Jewish values, traditions, rituals, and institutions with American notions of personal happiness and success, family, domesticity and upward mobility and the conscious broadening of Jewish concepts of philanthropy and activism based on expanded notions of American Jewry's social and political mission in the United States and the world.

JWSH 347. Jewish Ethics. 3 Credits. HR H
In this course we will explore the variety of ways that Judaism and Jewish people have approached ethics, both theoretically and practically. Our investigation will consider the evolution of approaches across time, and variations among different communities, as well as examining how the religious tradition has, at times, differed from actual practice among Jewish people. We will look at theological, philosophical, and sociological elements that inform Jewish ethics, as well as delving into specific issues in Jewish ethics, including autonomy vs. communal norms; business and labor practices; saving a life vs. taking a life; the treatment of animals; marriage and family matters; medical ethics; universalism vs. particularism, and more.

JWSH 349. Antisemitism: A Long History. 3 Credits. H/W
This course surveys the genesis, evolution and persistence of anti-Jewishness from late antiquity through the twentieth century, exploring its connections to religious and secular ideologies and its changing nature over time, place, and culture. Using primary source documents, religious and secular art and literature, the mass media and popular expression, the course examines how antisemitism was articulated and implemented, how Jews and Judaism were perceived and represented, and how Jews and Judaism responded to antisemitism. (Same as HIST 349.)

JWSH 350. Contemporary Jewish Identities. 3 Credits. SC H
This course explores the variety of ways in which American Jews create Jewish identities as individuals and groups. It traces the emergence of the various current divisions within Judaism: Reform Judaism (which by definition, implies Orthodoxy), then Conservative Judaism, and then the later development of Reconstructionist Judaism. The course also explores other contemporary options for being Jewish: cultural Jews, secular Jews, unaffiliated Jews, religious Jews, and gay or lesbian or transgendered Jews.

JWSH 361. Jewish Film. 3 Credits. HL H
An examination of the cultural history of the Jews through films that explore Jewish themes, including but not limited to: issues of tradition and modernity, religion and secularism, immigration, gender, Zionism, anti-Semitism, and the Holocaust. Films studied may be in English and in foreign languages (with English subtitles) like Yiddish, Hebrew, and Russian.

JWSH 371. Archaeology of Ancient Israel. 3 Credits. H
Archaeology and art, sites and monuments of ancient Israel from the Neolithic period to Late Roman. Special topics will include the peoples of the region, nomadism and urbanization, the kingdoms of Israel, Second Temple Period, Qumran, Roman Jerusalem, and the creation and development of the synagogue. (Same as CLSX 371.)

JWSH 382. Jerusalem Through the Ages. 3 Credits. H
As a prominent site in the religious and cultural histories of Judaism, Christianity, and Islam, Jerusalem is uniquely situated as one of the world's most sacred cities. For more than 3,000 years, this city has been a focal point of religious and political activity. Through the critical reading of historical and religious texts, and archaeological data, this course will explore the historical development of Jerusalem as a sacred place in Judaism, Christianity, and Islam. (Same as CLSX 382, HIST 382 and REL 382.)

JWSH 387. Enemies of Ancient Israel. 3 Credits. H
An exploration of the social world of the Bible through its antagonists and their cultures. We will examine the so-called "Bad Guys of the Bible" using the lenses of history, archaeology, geography, and religion to better understand their cultures and how they are portrayed in the biblical text. (Same as HIST 381 and REL 387.)

JWSH 395. Study Abroad Topics in Jewish Studies: ____. 3-6 Credits. H
This course is designed for the study of special topics in Jewish Studies at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

JWSH 400. Foundations of Jewish Studies. 3 Credits. H
This course introduces students to basic aspects of Jewish studies, including Jewish history, Judaism and theology, philosophy and science, ethnicities and narratives, languages, customs and the arts. Special attention will be given to various career options available to students of Jewish studies. Not open to students who have completed JWSH 120 or JWSH 610.

JWSH 410. Israel: From Idea to State. 3 Credits. S
The course focuses on understanding Israel as a Nation-State of the Jewish people and its challenges regarding the balance between being a Jewish and a Democratic state. In the first part, the course surveys Jewish history in the 19th century, the birth of Zionism, and statehood's progress through the British Mandate. In the second part, students learn about Israel's major contemporary issues by discussing political, ethnic, national, economic, gender, and religious divides and their relation to the pre-statehood period.

JWSH 412. Mandatory Palestine: 1920-1948. 3 Credits. S
A review of the thirty-year history of the British Mandate over Palestine, with a focus on the successful nation building by the Jewish people and the demise of the Palestinian project in 1948.

JWSH 414. Israel/Palestine: The War of 1948. 3 Credits. S
The war of 1948 shaped the history of the modern Middle East more than any other single event. Issues that will be discussed include the participating parties, the efforts of the international community, the establishment of Israel, the division of Palestine, and the continuing problem of Palestinian refugees.

JWSH 416. Israel in the First Decade. 3 Credits. S
The course focuses on the formative period of the State of Israel from sociological, economic, religious, and cultural perspectives.

JWSH 420. Politics and Government in Israel. 3 Credits. S
The course is an introduction to the Israeli system of government and its complexities, from a comparative perspective. The course aims to deal with the processes and critical issues that characterize the Israeli political system, as well as dilemmas and conflicts that are part of it since the early days of statehood until today.

JWSH 422. Topics in Israeli Society: ____. 3 Credits. U
This course explores the social interconnections and interactions of the various cultures, religions, and ethnic identities in Israel.

**JWSH 426. Polls and Public Opinion in Israel. 3 Credits. S**

An examination of public opinion in Israel, polls, and their effect on election results, policy making, and politics -- from a comparative perspective. We will discuss the validity of public opinion polls as a measurement tool, its advantages and disadvantages, and its success and failure at predicting election results.

**JWSH 434. Arab-Palestinian Society, Culture and Politics. 3 Credits. S**

This course introduces students to the study of Arab-Palestinians in Israel, by exploring the construction of Palestinian identity, their social and political structures, their culture, relations with Israeli Jews and the status of integration vs segregation within Israel.

**JWSH 440. International Relations of the Middle-East. 3 Credits. S**

An overview of the politics and governmental systems of Middle Eastern nations, including the historic, religious, ideological, economic and cultural forces that shape government policies and social movements.

**JWSH 445. Local Self-Governments in Israel. 3 Credits. S**

An introduction to the fundamentals of local governments in Israel and their relationships, political, legal, and economic, to the central government.

**JWSH 490. Directed Study in Jewish Studies. 3 Credits. H**

Intensive reading or research under faculty supervision. Prerequisite: Consent of instructor.

**JWSH 491. Directed Study in Jewish Studies, Honors. 3 Credits. H**

Honors version of JWSH 490. Intensive reading or research under faculty supervision. Prerequisite: Membership in the University Honors Program or consent of instructor.

**JWSH 525. Jews and Christians. 3 Credits. H/W**

This course examines the ways Jews and Christians have interacted with and characterized one another at various points in their histories. Special emphasis is placed on the gradual separation of the two religious traditions in the 1st-4th centuries. (Same as REL 525.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor.

**JWSH 562. Judaism and Political Theology. 3 Credits. H**

A consideration of the relationship between religion and politics in Judaism, and of the relevance of Judaism to broader discussions about religion and politics. Topics will include sovereignty, secularization, pluralism, democracy, and revolution. (Same as REL 572.) Prerequisite: At least one course in Jewish Studies or Religious Studies, or permission of instructor.

**JWSH 590. Research Methods. 3 Credits. U**

This seminar will introduce students to appropriate approaches and methods, especially in the Humanities and Social Sciences, for conducting research in Jewish Studies and/or in Israel Studies. Examples will draw on many disciplines, especially in the humanities and social sciences. Students will prepare a research proposal and investigative methodology. Prerequisite: Any JWSH course 300 or above or permission of the instructor.

**JWSH 600. Advanced Topics in Jewish Studies: ______. 3 Credits. H**

Examination of advanced topics in Jewish Studies. May be repeated if topic varies. Prerequisite: Consent of instructor.

**JWSH 601. Senior Seminar in Jewish Studies. 3 Credits. H**

Investigation of topics related to Jewish studies from an interdisciplinary perspective: Jewish culture, history, and religion. The course focuses on research methods and intensive writing. Prerequisite: Open only to Jewish studies majors. Suggested for students with senior standing.

**JWSH 610. Foundations of Jewish Studies. 3 Credits. H**

This course introduces students to basic aspects of Jewish studies, including Jewish history, Judaism and theology, philosophy and science, ethnicities and narratives, languages, customs and the arts. Special attention will be given to various career options available to students of Jewish Studies. Not open to students who have completed JWSH 120 or JWSH 400. Prerequisite: Graduate status.

**JWSH 645. Theatre and Genocide. 3 Credits.**

This seminar focuses on theatre art production under extreme situations. Do artists have a moral obligation to bear witness to genocide and war? Lectures, historical and theoretical readings, play texts, dance performance, and films provide students with a context within which to explore such issues as: the function of the performing arts under duress; the artist's role under and in response to atrocity; and how art aids us to explore the human condition. Class discussion, readings, and individual projects. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to student with credit in JWSH 345 or THR 345. (Same as THR 645.) Prerequisite: Graduate standing or consent of instructor.

**JWSH 650. Service Learning in Jewish Studies. 3 Credits. S**

This course, to be taken in the junior or senior year, is designed to give students the opportunity to apply the knowledge, concepts, and ideas gained in courses in Jewish studies to real-life situations in appropriate agencies and organizations. Open to students in the Jewish Studies program. Prerequisite: Permission of instructor.

**JWSH 681. Regimes in the Middle-East and North Africa. 3 Credits. S**

Using governmental case-studies in North Africa and the Middle East, this course will examine basic definitions and behaviors of liberal democracies, dictatorial regimes, and hybrid regimes, the transitions between them, and the strategies they (and their leaders) use to stay in power. Prerequisite: JWSH 440 or permission of instructor.

**JWSH 695. Study Abroad Advanced Topics: ______. 3 Credits. U**

Advanced study abroad topics in Jewish and Israel studies. Prerequisite: Any JWSH course 300 or above or permission of the instructor.

**JWSH 700. Topics in Jewish Studies: ______. 3 Credits.**

A study of one or more selected topics in Jewish studies. Topics can be on Jewish religion, history, culture, languages, or Israel studies. Repeatable for credit if topic varies. Prerequisite: Any JWSH course 300 and above, or equivalent by permission of instructor.

**JWSH 729. Research in the Israeli-Palestinian Conflict. 3 Credits.**

This course guides students in conducting research on any aspect of the Israeli-Palestinian conflict, such as its history from the Ottoman period to the present day, the social and political effects on Israelis and Palestinians, various narratives, and international responses. Prerequisite: JWSH 329 or JWSH 410 or JWSH 414 or JWSH 412 or JWSH 434 or permission of the instructor.

**Courses**

**YDSH 177. First Year Seminar: ______. 3 Credits. U**

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Yiddish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics
are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**YDSH 300. Studies in Yiddish: _____**. 3 Credits. H
Examination of special topics in Yiddish. May be repeated if topic varies.

**YDSH 410. Studies in Modern Yiddish Literature.** 3 Credits. H
An introduction to Yiddish literature from the nineteenth century to the present day. The course emphasizes the development of basic interpretive skills and the understanding of basic literary movements, genres, and concepts. Prerequisite: Instructor permission.

**YDSH 490. Independent Study.** 1-3 Credits. U
Intensive reading or research under faculty supervision.

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**Bachelor of Arts in Jewish Studies**

The Program in Jewish Studies offers an undergraduate major (BA in Jewish Studies) and minor, Departmental Honors (both by research paper and by service learning), and courses in Jewish Studies, Hebrew, and Yiddish; we also co-sponsor courses in many other units, especially Religious Studies and History, Global and International Studies, and Political Science. Among our several focus areas are Jewish history and culture, Judaism, Holocaust studies, Israel Studies, Jewish languages and narratives, and applied service in Jewish organizations.

Students who choose to complete the BA in Jewish Studies often find employment working in Jewish education, non-profit organizations, outreach, and other areas where knowledge of Jewish languages, history, and culture is an asset. The Jewish Studies BA is easy to combine with other majors and/or minors within the College of Liberal Arts and Sciences.

Jewish culture and religion have flourished in a rich variety of forms and in remarkably disparate places on the globe for thousands of years. Jewish contributions have deeply affected the art, languages and literature, law, philosophy, and political thought, and the sciences of all nations. The global impact of Jewish culture thus warrants its study as an important component of the liberal arts curriculum at KU. The Jewish Studies Program at KU is the only such program in the state of Kansas. Its mission, therefore, is to celebrate the Jewish experience and promote the understanding of its cultural importance with courses and academic programs that focus on the history, diversity, culture, languages, thought, and practices of the Jewish people and their religion.

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**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Requirements for the B.A. Major**

Students take 30 credit hours structured according to the following plan:

1. **2 Courses in Jewish History and/or Culture**
   - 2 religion courses relevant to Judaism;
   - 1 capstone seminar course (JWSH 601), writing intensive; and
   - 3 elective courses, allowing the student to explore Jewish Studies in greater breadth and depth.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWSH</td>
<td>Studies in Jewish History and/or Culture: ____</td>
<td>6</td>
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<tr>
<td>YDSH 410</td>
<td>Studies in Modern Yiddish Literature</td>
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</tr>
<tr>
<td>HEBR</td>
<td>Studies in Modern Hebrew Literature</td>
<td></td>
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<tr>
<td>JWSH</td>
<td>Narratives of Jewish Life</td>
<td></td>
</tr>
<tr>
<td>JWSH 315/ HIST 325/ SPAN 302</td>
<td>The Spanish Inquisition</td>
<td></td>
</tr>
<tr>
<td>JWSH 318</td>
<td>Jews and Slavs in Eastern Europe</td>
<td></td>
</tr>
<tr>
<td>JWSH 327</td>
<td>Jewish Secular Culture</td>
<td></td>
</tr>
<tr>
<td>JWSH 329</td>
<td>Israeli-Palestinian Conflict: An Introduction</td>
<td></td>
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<td>JWSH 335</td>
<td>History of Jewish Women</td>
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</tr>
<tr>
<td>JWSH 336</td>
<td>Jewish American Literature and Culture</td>
<td></td>
</tr>
<tr>
<td>JWSH 338</td>
<td>Languages of the Jews</td>
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<tr>
<td>JWSH 339</td>
<td>Languages of the Jews, Honors</td>
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<td>JWSH 341</td>
<td>Hitler and Nazi Germany</td>
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<td>JWSH 342</td>
<td>Medieval to Early Modern Jewish History</td>
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<td>JWSH/HIST 343</td>
<td>The Holocaust in History</td>
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<td>JWSH 344</td>
<td>Modern Jewish History</td>
<td></td>
</tr>
<tr>
<td>JWSH 346</td>
<td>The Jewish Experience in America</td>
<td></td>
</tr>
<tr>
<td>JWSH 350</td>
<td>Contemporary Jewish Identities</td>
<td></td>
</tr>
<tr>
<td>JWSH 361</td>
<td>Jewish Film</td>
<td></td>
</tr>
<tr>
<td>JWSH 371</td>
<td>Archaeology of Ancient Israel</td>
<td></td>
</tr>
<tr>
<td>JWSH 382</td>
<td>Jerusalem Through the Ages</td>
<td></td>
</tr>
<tr>
<td>JWSH 410</td>
<td>Israel: From Idea to State</td>
<td></td>
</tr>
<tr>
<td>JWSH 412</td>
<td>Mandatory Palestine: 1920-1948</td>
<td></td>
</tr>
<tr>
<td>JWSH 414</td>
<td>Israel/Palestine: The War of 1948</td>
<td></td>
</tr>
<tr>
<td>JWSH 416</td>
<td>Israel in the First Decade</td>
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</tr>
<tr>
<td>JWSH 420</td>
<td>Politics and Government in Israel</td>
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<tr>
<td>JWSH 422</td>
<td>Topics in Israeli Society: _____</td>
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<td>JWSH 426</td>
<td>Polls and Public Opinion in Israel</td>
<td></td>
</tr>
<tr>
<td>JWSH 434</td>
<td>Arab-Palestinian Society, Culture and Politics</td>
<td></td>
</tr>
<tr>
<td>JWSH 440</td>
<td>International Relations of the Middle-East</td>
<td></td>
</tr>
</tbody>
</table>
Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
- Satisfied by 30 hours of major courses.

**Major Hours in Residence**
- Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
- Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
- Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BA in Jewish Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/). (http://kucore.ku.edu/courses/)

### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td>HEBR 110</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>HEBR 120</td>
<td>5</td>
<td>5</td>
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</tr>
<tr>
<td>ENGL 101</td>
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<td>3</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
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<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
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#### Sophomore

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<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEBR 210</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HEBR 220</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Jewish Studies Religion Course (Major Requirement)</td>
<td>3</td>
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<tr>
<td>Goal 3 Humanities</td>
<td>3</td>
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<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
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#### Junior

<table>
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<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jewish Studies Culture or History Course (Major Requirement)</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Jewish Studies Major Elective Course (Major Requirement)</td>
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<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>3</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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</table>

#### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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**Language (2 courses)**
- 6 prerequisite: successful completion of introductory Hebrew or Yiddish
- 2 further courses in Languages (Hebrew and/or Yiddish) at or above the 200-level

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEBR 210</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>HEBR 220</td>
<td>5</td>
<td>5</td>
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</tr>
<tr>
<td>HEBR 340</td>
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<td>5</td>
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<tr>
<td>HEBR 350</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>HEBR 395</td>
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</tr>
<tr>
<td>HEBR 420</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>HEBR 490</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>YDSH 300</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>YDSH 490</td>
<td>5</td>
<td>5</td>
<td></td>
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</table>

**1 Capstone Seminar Course**
- 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWSH 601</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**
- 9

Other JWSH courses not chosen to satisfy the above requirements.
HEBR and YDSH courses at 300+ level qualify as electives for up to 6 credit hours total. HEBR/YDSH courses at 200 level must be approved manually.
### Minor in Jewish Studies

The minor in Jewish Studies provides undergraduate students with an opportunity to gain basic knowledge in Jewish Studies, with required coursework in areas of Judaism as well as Jewish History and Culture. Students will also take Jewish Studies electives in their areas of interest. The Jewish Studies minor is a great complement to a variety of majors, due to its interdisciplinary nature and flexibility.

#### Requirements for the Minor

**Jewish Studies Minor Course Requirements**

Student selecting this minor must complete a course in each of the following areas:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWSH 601 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours 120</td>
<td></td>
</tr>
</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visiting this website ([http://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/](http://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/)) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. See the Degree Requirements tab for a list of courses that fulfill this major requirement.
4. Please note: the HEBR and YDSH Intermediate I and II courses listed on this four-year plan will fulfill both the BA Second Language requirement and the Language requirement in major. A complete list of courses that can count toward the Language requirement for the major is listed on the Degree Requirements tab. Not all the courses listed will fulfill the BA Second Language requirement. Students who use courses from the course list to fulfill the major Language requirement that do not also fulfill the BA Second Language requirement need to be sure that they either complete course work or obtain a letter of proficiency to satisfy the BA Second Language requirement.
5. This major requires 3 courses of Jewish Studies major electives, which can be chosen from all the course lists provided under the Degree Requirements tab.
6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

#### Departmental Honors

For departmental honors in Jewish Studies, students must meet the following criteria:

1. Candidates will have a grade-point average in Jewish Studies of 3.5 both at the time of declaring their intention to seek honors and by graduation.

2. In consultation with the JS honors coordinator and with approval from a supervising professor, candidates will declare their intention to seek honors no later than the time of enrollment for the final undergraduate semester.

3. Candidates will fill out a declaration form ([available here](http://college.ku.edu/sites/clas.drupal.ku.edu/files/docs/SAS/Forms/dept_honors_intent_form.pdf)) and submit a copy of that form to College Advising and Student Services (109 Strong Hall).

4. Candidates intending to conduct research and write a substantial, original research paper (honors essay) will enroll in JWSH 490 Directed Study in Jewish Studies or in JWSH 491 Directed Study in Jewish Studies Honors (if they are in the University Honors Program) for one or two semesters. Candidates intending to engage in service learning at a community organization will enroll in JWSH 650 and, at the end of service, will submit an essay that describes the service and reflects on the student’s experience. A grade of B or higher must be earned in this/these courses.

5. A committee of three members of the University faculty (the supervising professor and two others, one of whom must be a member of the Jewish Studies faculty) will approve the honors essay or service learning project and will certify to the JS honors coordinator that the candidate has successfully completed the requirements to earn honors. The JS honors coordinator will write to notify College Advising and Student Services that the JS Honors Program has been successfully completed.

6. If the candidate is earning a double major and is attempting to earn departmental honors in two different departments, one research project may be used to satisfy the requirements of both departments if the candidate obtains approval from both. Both departments must be represented on the student’s committee.

#### Minor in Jewish Studies

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### Senior Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>JWSH 601 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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15 15
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Jewish Studies</td>
<td>Jewish Culture or History. Satisfied by one course from the following:</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 410</td>
<td>Studies in Modern Hebrew Literature</td>
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<tr>
<td>YDSH 410</td>
<td>Studies in Modern Yiddish Literature</td>
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<tr>
<td>JWSH 311</td>
<td>Narratives of Jewish Life</td>
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<tr>
<td>JWSH 315</td>
<td>The Spanish Inquisition</td>
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<tr>
<td>JWSH 318</td>
<td>Jews and Slavs in Eastern Europe</td>
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<td>JWSH 327</td>
<td>Jewish Secular Culture</td>
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<td>Languages of the Jews</td>
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<td>JWSH 341</td>
<td>Hitler and Nazi Germany</td>
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<td>JWSH 344</td>
<td>Modern Jewish History</td>
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<td>JWSH 346</td>
<td>The Jewish Experience in America</td>
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<td>Contemporary Jewish Identities</td>
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<td>Jewish Film</td>
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<td>Archaeology of Ancient Israel</td>
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<td>JWSH 382</td>
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<td>JWSH 410</td>
<td>Israel: From Idea to State</td>
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<tr>
<td>JWSH 412</td>
<td>Mandatory Palestine: 1920-1948</td>
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<td>JWSH 414</td>
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<tr>
<td>JWSH 416</td>
<td>Israel in the First Decade</td>
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<tr>
<td>JWSH 420</td>
<td>Politics and Government in Israel</td>
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<td>Topics in Israeli Society: __________</td>
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<td>JWSH 426</td>
<td>Polls and Public Opinion in Israel</td>
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<td>JWSH 434</td>
<td>Arab-Palestinian Society, Culture and Politics</td>
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<td>JWSH 440</td>
<td>International Relations of the Middle-East</td>
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<td>JWSH 445</td>
<td>Local Self-Governments in Israel</td>
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<td>JWSH 590</td>
<td>Research Methods</td>
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<td>JWSH 681</td>
<td>Regimes in the Middle-East and North Africa</td>
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<td>JWSH 695</td>
<td>Study Abroad Advanced Topics: __________</td>
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<td>Jewish Religion. Satisfied by one course, for example one of the following:</td>
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<tr>
<td>JWSH 107</td>
<td>Jews, Christians, Muslims</td>
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<tr>
<td>JWSH 109</td>
<td>Jews, Christians, Muslims, Honors</td>
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<td>JWSH 124</td>
<td>Understanding the Bible</td>
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<td>JWSH 125</td>
<td>Understanding the Bible, Honors</td>
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<tr>
<td>JWSH 325</td>
<td>Introduction to Judaism</td>
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<tr>
<td>JWSH 525</td>
<td>Jews and Christians</td>
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<tr>
<td>JWSH 562</td>
<td>Judaism and Political Theology</td>
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<tr>
<td>Electives. Satisfied by:</td>
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<td>12</td>
</tr>
<tr>
<td>Any other JWSH course or appropriate cross-listed or cross-referenced courses in other units. (see below)</td>
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<td></td>
</tr>
<tr>
<td>6 credit hours in Yiddish (YDSH) and/or in Hebrew (HEBR) at the 200-level or above may count among these 12 credit hours.</td>
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<td></td>
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</tbody>
</table>

More HEBR or YDSH courses may be approved for the minor by the Jewish Studies advisor.

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of 2.0 KU GPA in all courses in the minor. GPA calculations include all courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Courses Offered in the Jewish Studies Program**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>JWSH 124</td>
<td>Understanding the Bible</td>
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<td>JWSH 125</td>
<td>Understanding the Bible, Honors</td>
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<td>JWSH 177</td>
<td>First Year Seminar: _____</td>
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<tr>
<td>JWSH 300</td>
<td>Topics in Jewish Studies: ______</td>
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<td>JWSH 311</td>
<td>Narratives of Jewish Life</td>
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<td>JWSH 318</td>
<td>Jews and Slavs in Eastern Europe</td>
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<tr>
<td>JWSH 325</td>
<td>Introduction to Judaism</td>
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<td>JWSH 327</td>
<td>Jewish Secular Culture</td>
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<td>JWSH 338</td>
<td>Languages of the Jews</td>
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<td>JWSH 339</td>
<td>Languages of the Jews, Honors</td>
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<td>JWSH 343</td>
<td>The Holocaust in History</td>
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<td>JWSH 350</td>
<td>Contemporary Jewish Identities</td>
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<td>JWSH 361</td>
<td>Jewish Film</td>
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<td>JWSH 395</td>
<td>Study Abroad Advanced Topics: ______</td>
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<td>JWSH 490</td>
<td>Directed Study in Jewish Studies</td>
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<td>JWSH 491</td>
<td>Directed Study in Jewish Studies, Honors</td>
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<td>JWSH 525</td>
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<td>JWSH 600</td>
<td>Advanced Topics in Jewish Studies: _____</td>
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<td>JWSH 650</td>
<td>Service Learning in Jewish Studies</td>
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<td>HEBR 110</td>
<td>Elementary Modern Hebrew I</td>
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<td>HEBR 210</td>
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<td>HEBR 410</td>
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<td>HEBR 420</td>
<td>Studies in Modern Hebrew</td>
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<td>HEBR 490</td>
<td>Independent Study</td>
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The Holocaust was a watershed event, not just for the 20th century but also in human history. It was not an accident; it occurred because individuals, organizations, and governments legalized discrimination, fostered prejudice and hatred, and ultimately committed mass murder. This certificate will provide basic information about the Holocaust, its context, and similar genocides. This course of study not only provides academic background, but aims to equip students with the necessary knowledge to combat efforts to deny historical truths and to honor the memory of survivors and their cultural legacies; to combat prejudice, hate, intolerance, and discrimination; to develop recognition and respect for cultural diversity; and to stimulate reflection on the fragility of democratic institutions and the roles and responsibilities of citizens to protect the human rights of all people.

Requirements

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<th>Code</th>
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<tr>
<td>JWSH 343</td>
<td>The Holocaust in History</td>
<td>3</td>
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<tr>
<td>JWSH 341</td>
<td>Hitler and Nazi Germany</td>
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<tr>
<td>JWSH 344</td>
<td>Modern Jewish History</td>
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<tr>
<td>JWSH 329</td>
<td>Israeli-Palestinian Conflict: An Introduction</td>
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<tr>
<td>JWSH 335</td>
<td>History of Jewish Women</td>
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<tr>
<td>JWSH 371</td>
<td>Archaeology of Ancient Israel</td>
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<td>JWSH 382</td>
<td>Jerusalem Through the Ages</td>
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<td>JWSH 315</td>
<td>The Spanish Inquisition</td>
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<td>JWSH 342</td>
<td>Medieval to Early Modern Jewish History</td>
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<tr>
<td>JWSH 387</td>
<td>Enemies of Ancient Israel</td>
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<td>ANTH 465</td>
<td>Genocide and Ethnocide</td>
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<tr>
<td>ANTH 570</td>
<td>Anthropology of Violence</td>
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The B.G.S. Liberal Arts and Sciences degree option is:

- Not an “Easy Out” degree option. Academic standards are the same for all degrees granted by the College of Liberal Arts and Sciences.
- Not a quick option for a bachelor's degree. (A minimum of 120 hours is required, including degree specific coursework.)
- Not an option in which students may pursue majors or minors in the College.
Courses

HUM 110. Introduction to Humanities. 3 Credits. HL H
An introduction to the humanities as a division of learning and to interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education, perspectives and methods in the humanities, the humanities and human diversity, and interdisciplinary approaches to understanding and interpreting texts.

HUM 111. Introduction to Humanities, Honors. 3 Credits. HL H
An introduction to the humanities as a division of learning and to interdisciplinary study in the humanities. Topics include the history and role of the humanities in a liberal education; perspectives and methods in the humanities; the humanities and human diversity; and interdisciplinary approaches to understanding and interpreting texts. Prerequisite: Membership in the University Honors Program.

HUM 112. Exploring The Human Condition: ____. 3 Credits. H
This is a special topics course that provides an interdisciplinary exploration of human experience through the study of specific themes, periods or genres. Through reading and discussion of primary sources and scholarly texts, students will examine issues central to the human condition, be introduced to the methods that disciplines in the humanities use to analyze them, and learn the skills of close reading, critical analysis, and the interpretation of evidence. Assignments require students to analyze source material, synthesize information, solve problems and construct arguments to support conclusions.

HUM 114. Western Civilization I Honors. 3 Credits. H
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice. Prerequisite: Membership in the University Honors Program or permission of the department.

HUM 115. Western Civilization II Honors. 3 Credits. H
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period. Prerequisite: Membership in the University Honors Program or permission of department.

HUM 125. Introduction to Medical Humanities. 3 Credits. H
An interdisciplinary introduction to the field of medical humanities, which considers the relationship between medicine and humanistic thought. Students analyze the role of medicine in a variety of genres, while considering the growing importance of narrative and artistic expression in the medical profession. Topics may include: the objectification of the body, ageism, art and self-expression as medical care, and the impact of race, class, and culture on definitions of "illness", "health", and "beauty".

HUM 133. Technology and the Individual. 3 Credits. H
This course focuses on the complex relationship among technological change, increasing social complexity, and the individual from the Paleolithic Era to the so-called Computer Revolution, with a particular emphasis on Europe and the United States. Through the study of foundational texts in the history of technology and dystopian fiction, students will analyze a range of technologies from stone tools to smartphones to better understand the social, cultural, and economic forces that underlie technological change and how to critically evaluate assumptions about the nature of that change.

HUM 140. Introduction to World Literature. 3 Credits. H
This course provides an introduction to the field of world literature as an approach to critical reading and writing about literary works in a global context. Topics may include: what constitutes literature; challenges to reading works across time or within different cultural traditions; reading works in translation; history of writing technologies and canon formation; literature and market forces; and the literature of global encounters and exchanges. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice.

HUM 175. Kansas Environment and Culture. 3 Credits. H
An introduction to the inhabitants of Kansas and their experiences of the unique landscapes found within the state. Through the use of sources such as letters, autobiographies, novels, art, architecture and film, this course explores how Kansas environments have shaped and been shaped by the humans that occupy them, and why Kansas has had a powerful hold on the American imagination.

HUM 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Humanities. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

HUM 204. Western Civilization I. 3 Credits. H
A program of study using readings and writing to explore and understand the record of Western Civilization from the ancient world through the early modern period. This is a writing intensive and writing instructive course designed to expand critical thinking and global awareness through the medium of composition practice.

HUM 205. Western Civilization II. 3 Credits. H
A program of study emphasizing the reading and discussion of some of the influential writings and ideas that have shaped the intellectual and cultural heritage of the Western world. Western Civilization II includes readings from the modern period.

HUM 206. Contemporary Western Civilization. 3 Credits. HL H
A sequel to the two Western Civilization courses which offers the opportunity to examine influential works of literature, philosophy, history, and political thought written since the end of World War II. In keeping with the decline of colonialism and the growth of global and multicultural civilization since 1945, the readings of the course are selected from both Western and non-Western writers.

HUM 300. Studies In: ____. 3 Credits. H
An interdisciplinary course, focusing on different topics and drawing on diverse media, cultures, and historical periods. Humanities-based, this course, depending on its topic, may include the arts, the social sciences, and the natural sciences. May be repeated for credit with different topics.

HUM 304. World Literature I. 3 Credits. HL H
The study of great books in English translation from antiquity through the fifteenth century from two or more national literatures.

HUM 308. World Literature II. 3 Credits. HL H
The study of great books in English translation from the sixteenth, seventeenth, eighteenth, and early nineteenth centuries from two or more national literatures.

HUM 312. World Literature III. 3 Credits. HL H
The study of great books in English translation in the modern period (late nineteenth and twentieth centuries) from two or more national literatures.

HUM 320. Being Human in the Workplace. 3 Credits. H
A study of what it means to be human and humane in the workplace. Topics include the concepts of work, the worker, and the workplace; workers’ rights; issues of discrimination; business ethics; privacy and confidentiality; bullying; whistle blowing; workplace environment.

HUM 332. Sex in History. 3 Credits. HT H
This course offers a survey of the history of human sexuality in the Western world; the second half of the semester emphasizes the American experience. Topics for consideration may include: masturbation, pornography, sex work, homosexuality, bisexuality, "perversions" (paraphilias), sex and marriage, racialized sexualities, sexual violence, trans* identities and experiences, sexuality and national identities, and colonized sexualities. The course demonstrates the various ways in which sex, specifically the social and political meanings attributed to physical acts, changes over time and shapes human experiences and interactions far beyond the bedroom. (Same as AMS 323, HIST 332 and WGSS 311.)

HUM 335. Introduction to Indigenous Studies. 3 Credits. NW H
This course is an introduction to the study of modern and historic indigenous peoples. It surveys the concepts, methods and content relevant to Indigenous Studies, using case studies drawn from the diverse indigenous cultures. Special attention is paid to the various ways in which standard academic disciplines -- history, anthropology, literature, law, political science, among others -- contribute to the study of Indigenous cultures and current issues. The course illustrates that the social, political, religious, and economic aspects of indigenous life are interconnected and tribal histories and cultures cannot be understood without an awareness of these fields.

HUM 340. Understanding the European Migrant Crisis. 3 Credits. H
This course offers students the opportunity to explore the social, political and ethical consequences of transnational migration in a European context. As the foundation of a winter-break study abroad experience in the Humanities Program, the course surveys the history and geography of human mobility across the EU with a focus on concepts such as "fortress Europe," and "shelter Europe," and the borderization of the Mediterranean basin. The main component of the course consists of experiential learning activities. Students engage in site visits, interact with activists and immigrants, and participate in migrant relief projects to better understand the dynamics of immigration policies as well as efforts to foster multiculturalism and integration within the area in question. (The program will take place in select European cities and location may vary by semester.) Prerequisite: Open only to students in the Humanities winter break study abroad program.

HUM 345. Indian Territory. 3 Credits. H
This course examines the cultural, social, economic, environmental, and political background of Indian territory in what is now the state of Oklahoma. It surveys the diverse geographical regions, tribal cultures, the impact of the Indian Removal Act, assimilation, acculturation, westward expansion, the Civil War, boarding schools, the Dawes Act, the Curtis Act, and land runs on Territory residents. The course also treats post-Civil War violence, outlaws, and the role of tribal courts along with controversies over removals, Land Run celebrations, allotment scandals, and Osage oil murders. (Same as HIST 318 and ISP 345.)

HUM 348. American Indian and White Relations to 1865. 3 Credits. H
This course provides an intensive survey of the Indians of North America from Prehistory to 1865, and focuses on ancient indigenous cultures, early European-Indian relations and the impact of European culture upon the indigenous peoples of North America. (Same as HIST 351, ISP 348.)

HUM 350. American Indians Since 1865. 3 Credits. H
This course examines American Indian/White relations from reconstruction to the present. It surveys the impact of westward expansion and cultural changes brought about by the Civil War, forced education, intermarriage, the Dawes Act, the New Deal, the World Wars, termination, relocation and stereotypical literature and movies. The class also addresses the Red Power and AIM movements, as well as indigenous efforts to decolonize and to recover and retain indigenous knowledge. After learning about the past from both Native and non-Native source materials, students will gain multiple perspectives about historical events and gain understandings of diverse world views, values, and responses to adversity. (Same as HIST 352 and ISP 350.)

HUM 363. Perspectives on Science, Engineering and Mathematics. 3 Credits. H
This course places the historical creation of scientific and technological knowledge within a broader social, cultural, and political context. Students will learn that the STEM disciplines are not merely a static body of facts, theories, and techniques but involve diverse, evolving processes which are continually generated and reformulated. By examining the role of failure in knowledge creation, the religious motivations behind space exploration, the continued legacy of racist practices in medicine, the construction and ramifications of "Big Science," and other topics, students will go beyond the "genius inventor" narrative to question the presumed neutrality and progressive inevitability of scientific and technological advancements. Through a mixture of online activities, readings, videos, and synchronous online discussions, we will also examine the formulation and codification of "expertise," investigate the process of professionalization within the STEM fields, and interrogate how science and technology have supported systems of oppression throughout history. (Same as HIST 363.)

HUM 364. Pregnancy in Modern Literature. 3 Credits. HL
An examination of pregnancy, childbirth and reproductive control as depicted in literature from various national traditions in the twentieth and twenty-first centuries. This course draws together voices from literature, history, and feminist theory to deepen students’ understanding of the ways nationality, class, race, ability, and gender affect the aesthetics surrounding reproduction. Special attention is given to the relationship between society and the pregnant/postpartum individual. Other topics may include: eugenics, contraception, male pregnancy, and speculative reproduction. (Same as WGSS 364.)

HUM 365. Angry White Male Studies. 3 Credits. H
This course charts the rise of the "angry white male" in America and Britain since the 1950s, exploring the deeper sources of this emotional state while evaluating recent manifestations of male anger. Employing interdisciplinary perspectives this course examines how both dominant and subordinate masculinities are represented and experienced in cultures undergoing periods of rapid change connected to modernity as well as to rights-based movements of women, people of color, homosexuals and trans individuals. (Same as AMS 365, HIST 364 and WGSS 365.)

HUM 366. Fat, Food and the Body in Global Perspective. 3 Credits. H
An examination of fat and food as they relate to human embodiment in a variety of world locations. Bringing into a dialogue a number of disciplinary voices, including anthropology, fat studies, feminist theory, food studies, history, medicine, and psychology, the course applies theories of culture and embodiment to select global case studies as a means of approaching the pleasures, anxieties, health implications, and symbolic functions of ingesting food and drink. Topics may include the cultural and gender politics of fatness and thinness; anorexia and feederism; food, sex, and animality; vegetarianism, food scares and food purity movements; neoliberalism and the consuming body; and the material and symbolic aspects of fats and oils. (Same as WGSS 366.)

HUM 373. Aviation in American Culture. 3 Credits. H
This course examines the complex relationship between powered flight and American society from the invention of the airplane to the rise of
drone warfare. Through a mixture of scholarly works, personal accounts, and primary sources, we will investigate how use of and access to the airplane became a focal point for the construction and deconstruction of race, gender, and class distinctions and an important site in the struggle for equality and social justice. Using the airplane as a lens, we will recognize and challenge key assumptions within American technoculture such as technological messianism, technological neutrality, and the role of government in technological development. (Same as PCS 375.)

HUM 375. The Refugee Experience: Stories of Statelessness and Citizenship. 3 Credits.
This course draws on materials from multiple disciplines in the humanities including literature, history, philosophy, and cultural studies, to examine how belonging or not belonging to a state shapes the human experience. Literary texts, theoretical reflections, and historical studies on the subject of mass migration in Europe in the middle of the 20th-century will prepare for discussions of contemporary statelessness as well as responses to the refugee condition in a global context. (Same as HUM 411.)

HUM 390. Modern Themes, Ancient Models: ____. 3 Credits. H
The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as PCS 375.)

HUM 401. Modern Themes, Ancient Models: ____. 3 Credits. H
The study of the evolution of a cultural or literary tradition from the Graeco-Roman world into modern times. The theme of the course will normally vary from semester to semester; topics such as these may be examined: the analysis of a literary genre (e.g. drama, satire, lyric), the transformation of the ancient mythical heritage, the reception of ancient astronomy. Students should consult the Schedule of Classes for the theme of the course in a given semester. With departmental permission, may be repeated for credit as topic varies. (Same as PCS 375.)

HUM 402. Senior Seminar in Humanities. 3 Credits. H
A seminar to result in the student's integration of knowledge within the Humanities major. Students undertake a project that reflects and utilizes the interdisciplinary perspectives of the humanities. Options for the final project include a portfolio, web page, or significant writing project. Not open to freshmen and sophomores; recommended in the senior year. Prerequisite: Completion of at least 9 hours of upper division courses in the major.

HUM 430. European Civilization in World Context: ____. 3 Credits. HL H
An introduction to the literature of encounters between European and non-European civilizations, drawing on both Western and non-Western sources. The course may include European interactions with areas such as the Mediterranean Basin, Sub-saharan Africa, South and East Asia, and the Americas. World areas and historical periods chosen for study will vary from semester to semester according to the interest and field of the instructor. Not open to freshmen. (Same as EALC 430.) Prerequisite: HUM 114 or HUM 204 and HUM 115 or HUM 205.

HUM 477. Gender and Religion. 3 Credits. H
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as REL 477 and WGSS 477.) Prerequisite: An introductory course in Humanities, Religious Studies or Women, Gender & Sexuality Studies.

HUM 494. Humanities Directed Study: ____. 1-3 Credits. H
Investigation of a subject in fields or on topics not covered in regularly scheduled courses. May be repeated for a total of 6 hours. Does not replace or satisfy specific course requirements for the HWC major. May be counted as part of the total junior-senior credit hours required.

HUM 500. Studies in: ____. 3 Credits. H
A study of significant themes, topics, or problems in the humanities. May also relate an issue in the humanities to the social sciences or natural sciences. May be repeated for credit when the topic varies.

HUM 505. Europe Today. 3 Credits. H
An exploration of major social, political and economic developments post World War II including the rise of the European Union, the integration of Eastern and Western Europe, the growing role of Islam, attitudes towards the United States, and Europe's role in the world economy. Topics may vary based on current events. (Same as EURS 504.) Prerequisite: Junior or senior standing or consent of instructor.

HUM 508. Special Topics in World Literature: ____. 3 Credits. H
An examination of selected theoretical texts and literary works relevant to the emerging field of "world literature studies" that seeks to account for the ways that global relationships structure literary production, circulation, and reception. Topics and texts vary. May be taken more than once if content differs sufficiently.

HUM 510. Science, Technology, and Society. 2-3 Credits. H
The objective of this course is to provide members of the university community with information that enables them to judge the humanistic, moral, and ethical implications of scientific and technological developments. Formal presentations by guest lecturers, followed by question-and-answer periods, will alternate with panel discussions, symposia, etc., prepared by faculty members drawn from the various departments, schools, and organizational units of K.U.

HUM 524. Chinese Thought. 3 Credits. NW H/W
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and PHIL 506.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy.

HUM 538. Pompeii and Herculaneum. 3 Credits. H
An interdisciplinary treatment of the art and archaeology of the ancient Roman cities of Pompeii and Herculaneum in Italy. Emphasis on the structures and decorations of major public spaces and houses and on aspects of cultural, social, political, commercial and religious life from the period of the second century B.C.E. to 79 C.E., when Pompeii and Herculaneum were buried by the eruption of Mt. Vesuvius. Slide lectures and discussion. (Same as CLSX 538, HA 538) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, History of Art, or permission of the instructor.

HUM 545. Methodologies in Digital Humanities, Honors. 3 Credits. H
This course addresses research possibilities and ongoing debates in the field of Digital Humanities. Students will examine how digital technologies and methodologies can enhance or suggest new modes of Humanities research. The course focuses on core topics in the field, including text analysis, data visualization, digital mapping, archiving and (digital) cultural research. Students will examine the benefits and limitation of different digital methods. Course assignments will consist of blog posts and mini projects conducted throughout the semester. At the end of the semester, students will develop a proposal for a project that brings digital methodologies to bear on a research inquiry related to the student's discipline. No prior experience in digital work or technical skills required. Prerequisite: Instructor permission.

HUM 551. Foodways: Native North America. 3 Credits. H
This course surveys the traditional foodways of the indigenous peoples of North America. We survey hunting, gathering and fishing methods, meal preparation, medicinal plants and the cultivation of crops according to tribal seasons. Because modern indigenous peoples are suffering from unprecedented health problems, such as diabetes, obesity, high blood pressure and related maladies, the course traces through history the reasons why tribal peoples have become unhealthy and why some have lost the traditional knowledge necessary to plant, cultivate and save seeds. The course also addresses the destruction of flora and fauna from environmental degradation. (Same as HIST 511 and ISP 551.)
Prerequisite: Upper division course on indigenous/ American Indian history, or permission of the instructor.

HUM 552. Foodways: Latin America. 3 Credits. **H**
This course explores traditional foods, ways of eating, and cultural significance of food among peoples of Latin America. The course surveys the vast array of flora in Central and South America and the Caribbean, and focuses on issues of environmental protection, bioethics, food security, and the growth of farming and ranching. The class studies the impact that foods such as maize, potatoes and cacao have had globally, and includes African, Asian, and European influences on Latin cuisine, as well as health problems associated with dietary changes. (Same as HIST 512, ISP 552, and LAC 552.) Prerequisite: Upper division course on Latin America or permission of the instructor.

HUM 570. Men and Masculinities. 3 Credits. **H**
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as WGSS 570.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

HUM 575. The Body, Self and Society. 3 Credits. **H**
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, WGSS 575.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

HUM 701. Practicum in Teaching Humanities and Western Civilization. 1 Credits.
Discussion of matters relating to teaching in Humanities and Western Civilization courses. Sections may vary according to course topics. Required of all GTAs in the first year of teaching in the Program or for the first semester of a new teaching assignment. Does not count towards completion of coursework for the M.A. or Ph.D. in any field or department. Open only to GTAs employed by the Humanities Program. Graded on a satisfactory/unsatisfactory basis.

HUM 770. Research in Men and Masculinities. 3 Credits.
An intensive examination of the history and theory of masculinities in the Western World since the sixteenth century. Students will become acquainted with some of the key theories of men and masculinities, examine in depth the interplay between manhood and modernity, and develop research projects on a topic negotiated with the instructor. May be repeated if content varies sufficiently. (Same as WGSS 770.)

HUM 775. Advanced Study in the Body and Senses. 3 Credits.
An intensive examination of the role of the human body in the creation of personal and social identities in the West since the sixteenth century. Emphasis is on understanding how contemporary theories of embodiment are applied to concrete historical or contemporary problems. May be repeated if course content varies sufficiently. (Same as WGSS 775.)

Courses

**LA&S 108. Personal Numeracy. 3 Credits. NM**
This course will provide the tools to help you understand and make decisions using data. You will learn the basics of human decision making and why relying on numerical data is an important component of good decisions. The class will also help you understand the basics of probability and statistics. This will include fundamental statistical concepts used in everyday decision-making as well as training to perform statistical tests. The class will conclude with applications of numeracy to make sound personal financial decisions regarding spending and borrowing and saving and investing. Throughout the course, you will learn to use Excel to perform calculations, analyze data and spending habits and develop a personal budget.

**LA&S 110. Cherokee Language I. 5 Credits. U F1**
Emphasizes the vocabulary of and fundamentals of reading and writing the Cherokee language. Students will have an opportunity to learn the language, beliefs, and religious practices of the Cherokee. Taught at Haskell Indian Nations University.

**LA&S 120. Cherokee Language II. 5 Credits. U F2**
Continuation of Cherokee Language I. Includes an intermediate level of vocabulary skill with increased emphasis on reading and writing. Taught at Haskell Indian Nations University. Prerequisite: LA&S 110.

**LA&S 150. Academic Success Seminar. 1 Credits. U**
This course provides students with the skills and resources necessary to improve their approach to their academic career. It is designed to help enhance students’ time management and study skills as well as facilitate a connection with student success resources. Students and instructors work together in an interactive learning environment to create an academic foundation for success. Additional topics covered include: test preparation and anxiety; reading comprehension; procrastination; and memory and concentration. Recommended for students with less than a 2.5 GPA.

**LA&S 172. Exploring Health Professions. 3 Credits. U**
Students will have the opportunity to explore health care career pathways broadly and will look more thoroughly at specific pathways of interest through experiential learning activities. Class-time will include discovering the knowledge, skills, and attributes typically seen in health care professionals and the requirements for gaining admission to the various professional degree programs. The course will also discuss important ethical issues in health care and the future direction of the field. This course is designed for KU students who are interested in pursuing a health care career. This includes but is not limited to: medicine, pharmacy, physician assistant, physical therapy, and occupational therapy.

**LA&S 177. First Year Seminar: _____, 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in liberal arts and sciences. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**LA&S 200. Topics at HINU: _____, 1-6 Credits. U**
Special topics at the undergraduate level. Taught at Haskell Indian Nations University. Special permission from the Provost's Office required.

**LA&S 202. History of North American Indian Tribes. 3 Credits. W**
Introductory survey of the origin, evolution, and distribution of Indians throughout North America, location of tribes in historic times, their relationships to one another, and their responses to white penetration of the continent. Emphasis on American Indian leadership and major contributions of American Indian people to American society. Taught at Haskell Indian Nations University.

**LA&S 204. Contemporary Issues of the American Indian. 3 Credits. H**
An overview of current and historical issues which have resulted in policies and regulations affecting American Indians and Alaska Natives. The issues include: education, treaties, sovereignty and self-determination, religions, natural resources, legislation, jurisdiction, reservation and/or urban status, federal trust relationship, tribal economics and enterprises, American Indian policy, federal recognition, and
current issues both regional and local. Taught at Haskell Indian Nations University.

**LA&S 206. Indian Law and Legislation. 3 Credits. S**
An introduction and general overview of federal Indian law and processes and its relationship to tribal governments. Focus will be on sovereignty and its relationship to the internal and domestic laws of the United States government, tribal governments, and the international community. Taught at Haskell Indian Nations University.

**LA&S 210. Tribal Resources and Economic Development. 3 Credits. S**
Inventory and identify the resources currently available to tribal governments to include natural and human resources and those financial resources available to tribal governments from federal, state, and private resources. Included will be an economic analysis on how to best optimize available resources while recognizing the economic concept of constrained maximization. Taught at Haskell Indian Nations University.

**LA&S 230. Cherokee Language III. 5 Credits. U F3**
Continuation of Cherokee language II. Taught at Haskell Indian Nations University. Prerequisite: LA&S 120.

**LA&S 240. Cherokee Language IV. 5 Credits. U F4**
This course is a continuation of LA&S 230, Cherokee Language III, and includes the study of grammar, with particular attention to speaking fluency and continued practice in reading and writing. Taught at Haskell Indian Nations University. Prerequisite: LA&S 230.

**LA&S 250. Western Civilization I. 3 Credits. H**
The beliefs and values of Western civilization from the eighth century BC to the close of the eighteenth century are compared with the ideas central to American Indian cultural traditions. Fulfills the Western Civilization I requirement for CLAS. Taught at Haskell Indian Nations University.

**LA&S 252. Western Civilization II. 3 Credits. H**
The beliefs and values of Western Civilization since the close of the eighteenth century are compared with the ideas central to American Indian cultural traditions. Fulfills the Western Civilization II requirement for CLAS. Taught at Haskell Indian Nations University.

**LA&S 260. Interpersonal Management. 3 Credits. U**
This course is designed to provide students with an understanding of their personal strengths and skills that can be applied in a variety of organizational settings and in society. The course includes skills needed to be successful as a member of both professional and citizen communities, including ethical views, project management, financial management, technology, and information literacy.

**LA&S 262. Workplace Success Skills. 3 Credits. U**
This course is designed to provide students with the skills and content they need to be successful professionals in a variety of organizational settings. The course includes professional communication skills along with an understanding of organizational culture and context.

**LA&S 290. Approaches to Teaching Science and Mathematics I. 1 Credits. U**
Science and Mathematics students explore teaching as a career by teaching lessons in elementary classrooms in order to obtain first hand experience planning and implementing inquiry-based curriculum. This course is open to any student who has completed or is concurrently enrolled in a science or mathematics course at KU.

**LA&S 291. Approaches to Teaching Science and Mathematics II. 1 Credits. U**
Science and Mathematics students continue to explore secondary teaching as a possible career choice by teaching several lessons in a middle school classroom. The students build upon and practice lesson design skills that were developed in LA&S 290, in which they taught in elementary classrooms. Prerequisite: LA&S 290.

**LA&S 292. Topics and Problems on: ____. 1-6 Credits. U**
An interdisciplinary study of different topics. Designed especially for freshmen and sophomores.

**LA&S 295. Introduction to Secondary Stem Teaching. 2 Credits. U**
The UKanTeach program invites all students who have 45 hours toward their degree and have an interest in teaching secondary mathematics and/or science to take this two-hour UKanTeach course. Students learn quickly whether they are suited to the profession of teaching while also acquiring important communication skills. Through coursework and classroom experiences, students teach four hands-on inquiry-based science/mathematics lessons in local elementary and middle school classrooms. Upon successful completion of this course, student are eligible for acceptance to the UKanTeach program as they complete their bachelor's degree. This course is only offered in the summer semester. Prerequisites: Minimum of 45 hours toward a BA or a BS degree.

**LA&S 325. Career Transitions. 3 Credits. U**
This career development course studies the theories of career development and decision making focusing significantly on self-assessment and occupational research to help students make informed career decisions by better understanding themselves and the world of work in relationship to career transitions. In addition, students will learn valuable networking, personal branding, and job search tips. Prerequisite: This course is designed for students in the Military Transition Program and currently enrolled veterans. Instructor consent is required to enroll.

**LA&S 370. Personal Writing Seminar. 1 Credits. U**
This seminar helps students develop their personal writing abilities. Students analyze language and rhetorical choices in the genre of the personal essay. Students demonstrate rhetorical flexibility within the genre, considering audience, purpose, and application of the material. This course is intended for candidates for national fellowships, regardless of University Honors Program membership. (Same as HNRS 370.) Prerequisite: Permission of the Office of Fellowships.

**LA&S 372. Preparing for Programs in the Health Professions. 3 Credits. U**
Students will participate in experiential learning activities to confirm their interest in the health care professions and prepare documents for their application. Class-time will include exploring crucial health care topics such as ethical standards, the future of medicine, and social determinants of health. Additionally, students will prepare application materials, research professional programs, create a personal statement, participate in mock interviews, and decide where to apply. This course is designed for KU students who are planning to apply in the current or subsequent academic year to a health professional program including (but not limited to) medicine, pharmacy, physician assistant, physical therapy, and occupational therapy.

**LA&S 380. Critical Thinking and Advocacy Seminar. 1 Credits. U**
The focus of this class is on honing the two basic skills of critical thinking and advocacy. In this seminar, students develop a basic system for critical analysis that can be applied generally; test that critical analysis system in a series of practicums to develop the skills necessary to apply it; and develop a basic system for designing effective and ethical persuasive messages. (Same as HNRS 380.) Prerequisite: Permission of the Office of Fellowships.

**LA&S 400. Teaching and Tutoring Writing. 3 Credits. U**
Students explore theories and strategies of teaching and tutoring writing across academic disciplines. They learn more about themselves as
writers as they build a repertoire of writing techniques useful in their studies, in the workplace, and in their personal lives. By observing and consulting in the writing center, they understand how reflection leads to responsive, ethical, and engaged practice. (Same as ENGL 400.) Prerequisite: ENGL 102 or equivalent.

LA&S 414. Ethnobiology. 5 Credits. N
Integrates Native American traditional knowledge of ecology and biology with modern, western science. One purpose of the course is to preserve the unique knowledge and varied cultural traditions relating to the life sciences that are possessed by indigenous people. Taught at Haskell Indian Nations University. Prerequisite: BIOL 100 or BIOL 150.

LA&S 450. Topics at Haskell Indian Nations University: ______. 1-6 Credits.
Special topics at the junior/senior undergraduate level. Taught at Haskell Indian Nations University. Special permission from the Provost's office required.

LA&S 470. Job Search Skills for Liberal Arts and Sciences Majors. 1 Credits. U
This course is designed to introduce students to the fundamentals of planning and organizing job search strategies. Emphasis is placed on practical application of employment search tools for post-graduation employment or graduate school admission, stressing the value of the arts and sciences degree in the labor market. Prerequisite: Students must be sophomore standing or above.

LA&S 475. Professional Career Management. 3 Credits. U
When envisioning the future, many students consider immediate post-graduation needs but may fail to consider future professional career management, life and career transitions, and career progression. This advanced career development course studies the theories of career development, organizational and industrial psychology, and human resources. Students learn theories from these areas and understand how to apply them to their own professional career, future career transitions, and lifelong career progression. Prerequisite: Students must be sophomore standing or above.

LA&S 480. Preparing for International Careers. 1-3 Credits. U
This course, delivered through an 8-week seminar and week-long study abroad experience, teaches the fundamentals of executing an international job search. The course is open only to participants admitted to the Preparing for International Careers study abroad program. Students must complete a study abroad application and be approved before enrolling in the course.

LA&S 485. Global Career Management. 3 Credits. U
This global career development course studies the theories of cross-cultural communication and analyzes the global economy to help students apply these concepts to their own lifelong career management. Furthermore, the course builds upon the international experiences students are having at KU and also allows any student to gain lifelong knowledge and skills to be successful in a global job search or career transition, by assisting them to articulate their skills and value through a cross-cultural perspective to potential employers. Prerequisite: Students must be sophomore standing or above.

LA&S 490. Internship Exploration. 1-5 Credits. U
This course provides credit for supervised practical experiences in an occupational area of interest. In addition to the work-related activity, students complete reading and writing assignments, participate in an online discussion and create a final portfolio of internship accomplishments. Hours of credit recorded (1-5) are based on number of hours at internship site and agreement of instructor. Credit hours will be assigned a letter grade. Repeatable for up to 5 credit hours, provided the internship experiences are different. Prerequisite: Consent of Instructor.

LA&S 492. Topics and Problems on: ______. 1-6 Credits. U
An interdisciplinary study of different topics. Topics include Sanskrit. Designed especially for Juniors and Seniors.

LA&S 494. Senior Seminar in Liberal Arts and Sciences. 3 Credits. H
This course is a seminar to result in the student's integration of knowledge within the liberal arts and sciences. Through lecture and discussion, students explore a series of issues or themes that integrate several disciplines in the humanities, arts, social sciences, and mathematics and natural sciences. A final project (options include a portfolio, web page, paper, presentation) demonstrates the students' knowledge of the concepts, theories, and methods of several disciplines, and their ability to integrate that knowledge across disciplines. Not open to freshmen and sophomores; recommended in the senior year. Prerequisite: Completion of at least 30 junior/senior hours.

LA&S 701. Introduction to Graduate Professional Development. 1 Credits.
This course is designed to introduce early career graduate students to self-assessment and career exploration tools and best practices in developing a professional network and strong mentoring relationships. Emphasis is placed on practical application of career exploration, networking, and managing mentor relationships in order to identify and successfully pursue a variety of career pathways within and beyond the academy. Graded on a satisfactory/unsatisfactory basis.

LA&S 702. Introduction to Career Preparation for Graduate Students. 1 Credits.
This course is designed for 2nd year master's students and mid-career PhD students who are soon to complete or have just completed their comprehensive exams. The course will present various career preparation tools and techniques for careers both within and beyond the academy, and other best practices aimed at supporting students in the completion of their research and creative projects. Topics covered include but are not limited to: individual development plans, project management, building a professional network, informational interviews, CV and resume development, and identifying and applying for funding opportunities. Graded on a satisfactory/unsatisfactory basis. Prerequisite: LA&S 701 or permission by the instructor.

LA&S 703. Fundamentals in Career Planning for PhD Students. 1 Credits.
This course is designed to introduce late-career PhD students to the fundamentals of effective planning and organizing job search and application strategies for a variety of career paths. Emphasis will be placed on career paths beyond the professoriate including the private, non-profit, and public/government sectors. Topics covered include but are not limited to: external opportunities and fellowships for PhDs (ex. Presidential Management Fellowship, ACLS Public Fellows, AAAS Science & Technology Fellowships) in non-academic careers, advanced resume and cover letter development, interview and negotiation skills, and tailoring application materials to specific job postings. Graded on a satisfactory/unsatisfactory basis. Prerequisite: LA&S 702 or instructor permission.

LA&S 720. Introduction to Language Teaching Research. 3 Credits.
An introductory study of topics in language teaching research with the focus on higher education contexts. Intended for graduate students in any area of specialization related to foreign language teaching and learning. Prerequisite: Consent of instructor.
LA&S 792. Topics in: ______. 1-3 Credits.
An interdisciplinary study of a variety of topics from the Liberal Arts and Sciences. Usually intended for graduate students, but may also be taken by qualified upper level undergraduates. May be repeated for credit when topic differs.

Bachelor of General Studies in Liberal Arts and Sciences

Why pursue the B.G.S. Liberal Arts and Sciences degree option?

If, as a student, your personal goals are best served by:

- A more broad-based, liberal arts and sciences curriculum with balanced contributions from natural sciences and mathematics, social sciences, and the humanities (requiring exploration in 15 different disciplines in the College).
- The broadest preparation for admission into a professional program.
- An avenue for adding a bachelor’s degree to an already existing technical degree or licensure certificate.
- A degree option with maximum flexibility.
- An online KU degree option.
- A degree that provides students the opportunity to build the skills and knowledge employers indicate are required for success in our changing economy and world community — skills that are limited in current college graduates.

The B.G.S. Liberal Arts and Sciences degree option is:

- Not an “Easy Out” degree option. Academic standards are the same for all degrees granted by the College of Liberal Arts and Sciences.
- Not a quick option for a bachelor’s degree. (A minimum of 120 hours is required, including degree specific coursework.)
- Not an option in which students may pursue majors or minors in the College.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements to Select B.G.S. Liberal Arts and Sciences Degree Option

CLAS Bachelor of General Studies (BGS) General Education Requirements

General Education provides opportunities for the development of core skills, critical inquiry, integrated knowledge, an appreciation of diversity, contemporary issues, and social responsibility.

B.G.S. Liberal Arts and Sciences Degree Option Requirements

The Bachelor of General Studies degree has two distinct options and requires, in addition to completion of the KU Core*, either:

- **Option A.** Completion of the requirements of a single BGS major AND a secondary field of academic study (a second degree offered by CLAS or other school, a second CLAS major or co-major, a minor offered by CLAS or another school, or two certificates offered by CLAS or another school);

- completion of an approved career preparation course (minimum 3 credit hours total). A list of currently approved courses can be found here. (https://collegeadvising.ku.edu/bgs-career-preparation/)

OR

- **Option B.** Completion of the B.G.S. in Liberal Arts and Sciences, which is also offered as an online degree completion program. This degree program requires:
  - Liberal Arts and Sciences Breadth Requirement. Satisfied by the completion of a course (with a minimum of 2 credit hours) in 15 unique departments/programs within the College or School of the Arts (as determined by course prefix). Courses fulfilling this requirement may also contribute to the KU Core and other requirements.
  - World Language and Culture.
    - 2 courses (each with 3 credit hours or more) in a single world language, or proof of two-semester proficiency in a language other than English, OR
    - Completion of 3 courses (each with 3 credit hours or more) designated as KU Core Goal 4.2 (AE42), world culture (W), or non-Western culture (NW); or language areas, beyond the KU Core. This may include a variety of areas, languages, and cultures.
  - Additional Natural Sciences and Mathematics. Satisfied by the completion of two additional courses from the natural sciences (requirement code N) and/or mathematics (MATH prefix courses) beyond the KU Core.

NOTE: Option B, the BGS in Liberal Arts and Sciences is not an option in which students may pursue a major or minor.
Minimum hour and grade-point average standards (all CLAS degrees)

- 120 credit hours
- 45 junior/senior credit hours (numbered 300 or above, 30 of which must be taken in residence at KU)
- 2.0 minimum KU cumulative grade-point average

Below is a sample 4-year plan for students pursuing the BGS in Liberal Arts and Sciences. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

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<tr>
<th>Fall</th>
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<td>Goal 2.1 Written</td>
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<tr>
<td>Communication (1 of 2)</td>
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<td>Communication (2 of 2)</td>
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<td>Goal 1.2 Quantitative</td>
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<td>Goal 2.2 Communication</td>
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<td>Reasoning</td>
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<td>Goal 3 Humanities</td>
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<td>World Language or Culture</td>
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**Sophomore**

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<td>Goal 3 Natural Science</td>
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<td>Goal 4.1 US Diversity</td>
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<td>Goal 4.2 Global Awareness</td>
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<td>Culture or Elective</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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**Junior**

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<tbody>
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<td>Additional Natural Science and Math Beyond the KU Core</td>
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<td>Goal 5 Social Responsibility and Ethics</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>BGS Career Course (BGSC)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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**Senior**

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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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**Total Hours 120-124**

1. Satisfied by 2 courses (each with 3 credit hours or more) in a single world language, or proof of two-semester proficiency in a language other than English OR satisfied by completion of 3 courses (each with 3 credit hours or more) in world, non-Western culture (AE42, W, or NW designated courses), or language areas beyond the KU Core. This may include a variety of areas, languages, and cultures.

2. Additional Natural Sciences and Mathematics satisfied by the completion of two additional courses from the natural sciences (requirement code N) and/or mathematics (MATH prefix courses) beyond the KU Core.

3. LA&S 494 is not required for this degree to fulfill Goal 6, but is recommended as it is tailored specifically to students completing this degree program.

4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

**Please note:**

Additional requirement: Liberal Arts & Sciences Breadth Requirement. This is satisfied by the completion of a course (with a minimum of 2 credit hours) in 15 unique departments/programs within the College or School of the Arts (as determined by course prefix). Courses fulfilling this requirement may also contribute to the KU Core and other requirements.

The Liberal Arts and Sciences BGS degree is not an option in which students may pursue a major or minor, however, undergraduate certificates may be pursued/completed.
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal.

**Graduation with Honors**

Undergraduates may earn honors upon graduation in 3 ways. The student may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program (http://www.honors.ku.edu/). It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma. However, students completing Option B - the BGS in Liberal Arts and Sciences are not eligible to pursue departmental honors, as this degree option does not include a major.

**Graduation with Distinction or Highest Distinction**

The top 10 percent of each year’s graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction. To be eligible, students must have completed at least 60 credit hours, graded A through F, in residence at KU. See Required Work in Residence below.

### Undergraduate Certificate in Advanced Professional Skills

The Advanced Professional Skills Certificate is a credit-bearing certificate that enhances employability skills focused on current workforce demands. This certificate is designed for students who want to further develop in-demand employability skills, as well as students who are underemployed or unemployed and looking to enhance their skills. The Advanced Professional Skills Certificate is also available to workforce partners wanting to strengthen individual employee skills.

The Advanced Professional Skills Certificate requires the completion of 12 credit hours which is comprised of 6 credit hours of In-Demand Skill Development courses and 6 credit hours of the Career Management courses below or other departmentally approved electives, which can be found at: https://edwardscampus.ku.edu/advanced-professional-skills-program-details (https://edwardscampus.ku.edu/advanced-professional-skills-program-details/).

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<td>Preparing for International Careers</td>
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<tr>
<td>LA&amp;S 490</td>
<td>Internship Exploration</td>
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<td></td>
<td>or BIOL 490 Internship and Practical Applications</td>
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<td>or BTEC 599 Biotechnology Internship</td>
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<td>or ENGL 490 Internship</td>
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<td>or HSES 580 Internship in: ___</td>
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<td></td>
<td>or LWS 691 Internship in Law &amp; Society</td>
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<td></td>
<td>or PSYC 483 Undergraduate Internship in Psychology</td>
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<td></td>
<td>or PUAD 69 Internship in Public Service</td>
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### Master of Arts in Leadership in Diversity and Inclusion

The MA in Leadership in Diversity and Inclusion offers graduate students and working professionals tools and techniques to better understand and navigate leadership opportunities within the context of social diversity and equity in the United States.

As an interdisciplinary program, the focus of the MA in Leadership in Diversity and Inclusion is to:

1. Build foundational knowledge of the history, theory, and practice of leadership with an emphasis on ethical decision making and understanding of the dynamics of power in doing the work of leadership
2. Increase understanding of the meaning of social diversity and equity in the United States
3. Apply this knowledge to real world situations such as workplace bias and fairness, teaching environments, youth sports and recreation activities, work with community nonprofit agencies, etc.

Academic objectives for the program combine those of the constituent graduate certificates, supplemented by an introduction to the culture of graduate education, offering graduate students and working professionals:

1. Knowledge, tools, and strategies to enter into, understand, navigate through, and succeed in the culture of higher education
2. Tools and techniques to better understand and navigate leadership opportunities within professional and community environments
3. Knowledge and strategies to respond efficiently and effectively to the demands of a changing social, cultural, and political landscape while doing the work of leadership
4. Resources necessary to supplement their degrees and professional positions with a stronger understanding and historical background of core domains relevant to social differences and their meanings

### Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to
Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Application Deadlines
The MA program in Leadership in Diversity and Inclusion accepts applications for the fall, spring, and summer terms. Applications and all required supplemental materials must be submitted by the deadlines listed on the program's website (http://diversityleadership.ku.edu/admission-ma/) to be considered for admission.

Application Materials
Applicants should upload the supporting application documents listed below to the online application (https://gradapply.ku.edu/apply/).

- Copy of official transcripts (https://graduate.ku.edu/transcripts/) from all colleges or universities attended
- Statement of purpose (no longer than two pages, single spaced)
- Research-based writing sample (at least five pages, double spaced)
- Three letters of recommendation

Non-native speakers of English must meet English proficiency requirements (http://graduate.ku.edu/english-proficiency-requirements/).

Contact
Visit the MA in Leadership in Diversity and Inclusion website (https://diversityleadership.ku.edu) for more information about the program and admissions requirements.

Students must complete a minimum of 30 graduate-level credit hours in approved courses with Leadership and Diversity and Inclusion content. Coursework is a combination of face-to-face and online classes.

Core Seminar (3)
LDST 705 Professionalization Seminar in Leadership Studies (3)

Equity and Social Diversity (12)
Four courses (3 credit hours each) totaling 12 graduate credit hours. Courses are categorized into three pathways:

1. U.S. Race and Ethnicity
2. Women, Gender, and Sexuality
3. U.S. Social Differentials

Students must develop a concentration in one pathway by taking at least 6 credit hours of coursework in any one of the three pathways. Courses must be selected in consultation with a faculty advisor.

At least 1 course (3 credit hours) must be taken in a pathway other than the concentration.

A current list of approved courses for each pathway is available on the program website. The Diversity and Inclusion course list continues to grow and is updated regularly.

Leadership Studies (12)
4 courses (3 credit hours each, all completed online) totaling 12 graduate credit hours:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>LDST 710</td>
<td>History and Theory of Leadership Studies</td>
<td>3</td>
</tr>
<tr>
<td>LDST 720</td>
<td>Leadership Ethics</td>
<td>3</td>
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<tr>
<td>LDST 730</td>
<td>Managing the Work of Leadership</td>
<td>3</td>
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<tr>
<td>LDST 740</td>
<td>Leadership and Power</td>
<td>3</td>
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</table>

Capstone (3)
LDST 850 Leadership in Diversity and Inclusion Capstone

This course is required of all admitted students in the final semester of their degree program and provides students with the opportunity to integrate and synthesize the interdisciplinary knowledge they have gained.

Final Exam
All MA students must pass a final oral exam and defense of their capstone project. Students are required to be physically present for the exam unless permission for distance examination has been granted.

Supplemental Coursework
LDST 700: Introduction to Graduate Studies in Leadership in Diversity and Inclusion

This course is required for all provisionally admitted students and is offered as an optional course to all admitted students.

Graduate Certificate in Second Language Studies

The Graduate Certificate program in Second Language Studies (SLS) provides an opportunity at KU for graduate students of foreign language, literature, and culture and theoretical linguistics, to add a concentration in applied linguistics and language teaching.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admissions
Current graduate students in any Languages, Literatures, and Cultures department, Linguistics, or School of Education are eligible to apply. Others interested in the certificate should contact Graduate Program Coordinator, Aley Pennington (aleypennington@ku.edu), or Academic Director for the SLS certificate, Nina Vyatkina (vyatkina@ku.edu), to determine eligibility. For more information on admission to a graduate certificate program, see the policy on Graduate Certificate Programs - Eligibility and Admission Criteria (http://policy.ku.edu/graduate-studies/grad-certification-program-admission/).
Current KU Students:

A student must be in good standing with their graduate degree program in order to participate in the certificate program. The application process entails completing the online application, payment of the $30 application fee, and submitting materials required for the Second Language Studies (SLS) Certificate:

- A C.V. or Resume.
- A personal statement declaring your interest in Second Language Studies and its relationship to your graduate course of study and/or career objectives.
- One letter of recommendation from your graduate degree program.
- A KU Advising report in lieu of an official transcript.

Please see the Online Application (http://graduate.ku.edu/ku-graduate-application/) for more information.

Non-KU students or KU Alumni:

Non-KU students or KU Alumni must have a previously completed advanced degree in an applicable field. The application process entails completing the online application, submitting materials required for the Second Language Studies (SLS) Certificate:

- A C.V. or Resume.
- A personal statement declaring your interest in Second Language Studies and its relationship to your graduate course of study and/or career objectives.
- Two letters of recommendation from persons familiar with your academic work or potential for graduate study.
- Official transcripts from any institutions where coursework related to study in your second language was completed.

The certificate will be awarded to MA or Ph.D. students who successfully complete 4 graduate-level courses across disciplines (12 credits total):

1. LING 715 Second Language Acquisition I
2. LA&S 720 Introduction to Language Teaching Research or another approved* related graduate-level course offered by Linguistics, CLAS languages, literatures, and cultures departments, or by the School of Education.
3. A graduate-level course in Linguistics, or another approved* related graduate-level course offered by Linguistics, CLAS languages, literatures, and cultures departments, or by the School of Education.
4. Elective course in Second Language Studies. This could be fulfilled by a Teaching Methods course required of GTAs teaching in language departments (FREN 704, SLAV 824, SPAN 801) and by other approved related graduate-level courses, including those offered by the School of Education.

A student who has prior coursework deemed equivalent to any of the required courses may replace these with approved electives.

*Graduate-level course equivalents will be approved by the Linguistics Academic Administrator for the Second Language Studies certificate program for Linguistics students and by the Academic Director for the Second Language Studies certificate program for all other students.

Graduate Certificate in Studies in Equity and Social Diversity in the U.S.

The focus of the graduate certificate in Studies in Equity and Social Diversity in the U.S. is to (1) increase understanding of the meaning of social diversity and equity (DE) in the United States and (2) consider the application of this knowledge to real world situations such as workplace bias and fairness, teaching environments, youth sports and recreation activities, work with and for community nonprofit agencies, and more. Through interdisciplinary coursework, the main objective is to offer graduate students and working professionals the necessary tools to supplement their degrees and professional positions with a stronger understanding and historical background of core domains relevant to social differences and their meanings. These domains include but are not limited to intersectional identities of race, ethnicity, gender identities, gender expressions, sexual orientation, socioeconomic status, age, disabilities, religion, regional background, veteran status, citizenship status and nationality. Select courses will be offered with multiple partners across the College of Liberal Arts and Sciences and School of Education.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Any applicant seeking to pursue a graduate certificate in Studies in Equity and Social Diversity in the U.S. must submit the application for graduate study (https://gradapply.ku.edu/apply/). Applications are accepted on a rolling basis.

New Applicants

Applicants who are not already enrolled in a KU graduate program must have completed a bachelor’s degree. Applicants should include the following materials in their application to the certificate program.

- A statement of purpose outlining their interest in the Studies in Equity and Social Diversity in the U.S. graduate certificate
- Copy of official transcripts (http://graduate.ku.edu/transcripts/) from all colleges and universities attended

Non-native speakers of English must meet English proficiency requirements (http://graduate.ku.edu/english-proficiency-requirements/).

Current KU Graduate Students

Applicants already in a KU graduate program must be in good standing with their home department to be eligible for admission the certificate program. Current KU graduate students should include the following materials in their online application:

- A C.V. or Resume.
- A personal statement declaring their interest in Second Language Studies and its relationship to their graduate course of study and/or career objectives.
- Two letters of recommendation from persons familiar with their academic work or potential for graduate study.
- Official transcripts from any institutions where coursework related to study in their second language was completed.

Please see the Online Application (http://graduate.ku.edu/ku-graduate-application/) for more information.
• A statement of purpose outlining their interest in the Studies in Equity and Social Diversity in the U.S. graduate certificate
• A letter of support from their faculty advisor or the Director of Graduate Studies in their home academic unit

Contact
Visit the Institute for Leadership Studies website (https://ils.ku.edu/admission-graduate-certificate/) for more detailed information about the application process.

Graduate certificate coursework focuses on the experiences of U.S. racial/ethnic minorities (e.g., African American/Black, Native American/Alaskan Native, Native Hawaiian/Other Pacific Islander, Latinx) and on U.S. marginalized populations (e.g., gender, gender expression, sexuality, disabilities). Students must take a total of 12 graduate credit hours of coursework. Courses for this certificate are categorized into three pathways.

Pathway 1: US Race and Ethnicity
Pathway 2: Women, Gender and Sexuality
Pathway 3: US Social Differences

Students must develop a plan of study in consultation with and approved by a faculty advisor. This plan of study must include a concentration consisting of at least 6 credit hours of coursework in one of the three pathways. At least one course (3 credit hours) must be taken in a pathway other than the concentration. At least two courses (6 credit hours) must be taken at the 700 level or above.

A current list of approved courses for each pathway can be found here (https://wgss.ku.edu/sites/wgss.ku.edu/files/docs/EQSCDUS%20Certificate%20Courses%20SP19.pdf).

Department of Linguistics

Why study linguistics?

Because language is a window into the mind. Linguistics provides an understanding of the human capacity to acquire, perceive, and produce language and of language’s role in contemporary society.

The Linguistics Department at KU offers a full range of degrees: B.A. (http://linguistics.ku.edu/overview/), M.A. (http://linguistics.ku.edu/overview-2/) and Ph.D. (http://linguistics.ku.edu/overview-1/) The first linguistics courses at KU were offered in 1957. In 1968, Linguistics became a department and was authorized to offer a Ph.D. degree. Today, the unique strength of the Linguistics department is the systematic pairing of theoretical and experimental investigations of linguistic knowledge. Its nucleus of full-time faculty members in Linguistics (http://linguistics.ku.edu/faculty-1/), plus several actively involved faculty members in other departments, serves a student body of about 35 graduate students, 80 undergraduate majors, and many non-majors taking introductory and intermediate courses each semester.

Areas of special strength in the graduate program include Phonetics, Phonology, Syntax, First and Second Language Acquisition, Psycholinguistics, and Neurolinguistics, Semantics, and the study of Indigenous Languages. The department also cooperates with other departments, such as Speech-Language-Hearing (http://splh.ku.edu/), Child Language (http://cldp.ku.edu/), Indigenous Nations Studies (http://indigenous.ku.edu/), Anthropology (http://anthropology.ku.edu/), Education and Human Sciences (http://soe.ku.edu/), and Psychology (http://psyk.ku.edu/).

Research Facilities

The Department of Linguistics houses 7 research and teaching laboratories.

The Developmental Psycholinguistics Laboratory is equipped to investigate how preschool-age children acquire and use the knowledge of meaning in their first language. The lab uses various psycholinguistic tasks, such as linguistic comprehension tasks and the visual-world eye tracking paradigm, to assess children’s representation and real-time processing of meaning. The lab houses an eye tracking system with a remote camera designed specifically for children to participate in the visual-world eye tracking paradigm.

The Field Linguistics Laboratory provides an environment for on-site elicitation work with speakers as well as the processing, analysis, and archiving of field data. The laboratory is equipped with computer workstations and an assortment of audio/video recording devices suitable for a range of fieldwork projects including one-to-one interviews, audio recording and transcription, and data analysis.

The Neurolinguistics and Language Processing Laboratory is fully equipped for multi-method, cross-linguistic research on the implementation of language in the brain. The laboratory includes a 70-channel Neuroscan Synamps2 EEG system for visual and auditory ERP (event-related potentials) studies, and two dedicated testing rooms for psycholinguistic experiments including lexical decision, priming, and self-paced reading. Brain imaging studies, including MEG and fMRI, are conducted at the Hoglund Brain Imaging Center at the University of Kansas Medical Center in Kansas City.

The Phonetics and Psycholinguistics Laboratory provides an integrated environment for the experimental study of speech and language, including production, perception, and acquisition. Primary research areas in the lab are acoustic and auditory phonetics as well as spoken and written word recognition, all across a variety of languages. Software includes MultiSpeech and Praat for speech analysis and Paradigm, Superlab, and Matlab for collecting responses from up to six subjects simultaneously. Digital noise-free recordings are made in our anechoic chamber.

The Second Language Acquisition Laboratory is equipped with 5 computer workstations and 2 dedicated testing rooms. Computers are equipped with software (Paradigm) for running psycholinguistic experiments (including interpretation tasks, reaction time, self-paced reading, and speeded grammaticality judgment) and for conducting statistical analyses. Primary research areas in the lab are the acquisition and processing of syntax and semantics by adult second language learners, all across a variety of languages. Our research focuses on the linguistic and cognitive factors that impact acquisition at varying stages of development.

The Second Language Processing & Eye-Tracking Laboratory has 2 testing rooms equipped with computer stations for investigating second language speech and sentence processing as well as a head-mounted eye tracker. The research methods employed in the lab include speech perception and word recognition, cross-modal priming and masked priming, self-paced reading and sentence comprehension, and eye tracking in the visual world paradigm and in reading.
Undergraduate Programs

The department offers a broad range of courses that provide a basic understanding of human language and communication. Linguistics courses examine features of language that underlie the human capacity to express concepts and communicate ideas. The courses address the connections between language, brain, culture, mind, and history. The major gives students a basic understanding of the human capacity to acquire, perceive, and produce language and of language’s role in contemporary society.

Linguistics is a superb preparation for careers that require expertise in the use of language as a means of communication, e.g., business, communications, personnel administration, teaching, health care, and social service. Many majors pursue graduate study in education, law, psychology, computer science, speech and hearing sciences, and languages.

Graduate Programs

M.A. Overview (https://linguistics.ku.edu/overview-2/)

Our M.A. program in Linguistics requires the student to develop a solid understanding of the core areas of the discipline in addition to an in-depth specialty in one of the many areas available through the research interests of the faculty. Areas of special strength in the graduate program include phonetics, phonology, syntax, psycholinguistics, neurolinguistics, first language acquisition, second language acquisition, semantics, and the study of indigenous languages.

The student will work with their academic advisor to devise a course of study that best suits the student’s research interests.

The M.A. program usually takes two years. Students in the M.A. program complete a written Research Proposal and an Oral Examination of the Research Proposal, typically in their fourth semester of study. Students are required to take an Advanced II-level course to develop their understanding of research in their area of interest.

Ph.D. Overview (https://linguistics.ku.edu/overview-1/)

Our Ph.D. program in Linguistics requires the student to develop a solid understanding of the core areas of the discipline in addition to an in-depth specialty in one of the many areas available through the research interests of the faculty. Areas of special strength in the graduate program include phonetics, phonology, syntax, psycholinguistics, neurolinguistics, first language acquisition, second language acquisition, semantics, and the study of indigenous languages.

The student will work with their academic advisor to devise a course of study that best suits the student’s research interests.

The Ph.D. program usually takes five years which includes completing an M.A. degree en route to the Ph.D. All Ph.D. students receive a five-year funding package.

Non-Degree Seeking (https://linguistics.ku.edu/overview-4/)

Students who are interested in enrolling in graduate level coursework in the Department of Linguistics without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s admission webpage (https://linguistics.ku.edu/admission/#tab2name) for further details.

Courses

LING 106. Introductory Linguistics. 3 Credits. SC S
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure and semantic structure of languages. The course will include a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and will introduce students to techniques of linguistic analysis in a variety of languages including English. (Same as ANTH 106).

LING 107. Introductory Linguistics, Honors. 3 Credits. SC S
Introduction to the fundamentals of linguistics, with emphasis on the description of the sound system, grammatical structure, and semantic structure of languages. The course includes a survey of language in culture and society, language change, computational linguistics and psycholinguistics, and introduces students to techniques of linguistic analysis in a variety of languages including English. Open only to students admitted to the University Honors Program or by consent of instructor. (Same as ANTH 107.)

LING 110. Language and Mind. 3 Credits. SI S
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language.

LING 111. Language and Mind, Honors. 3 Credits. SI S
A study of the relation between language and the human mind, focusing on language as a fundamental aspect of human cognition. Topics include what is innate and what is learned during first and second language acquisition, how we process language, and whether there are areas of the brain specialized for language. Open only to students admitted to the University Honors Program, or by consent of instructor.

LING 120. The Physics of Speech. 4 Credits. N
An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as SPLH 220.) Prerequisite: MATH 101 or 104 or equivalent.

LING 177. First Year Seminar: _____ . 3 Credits. SC
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in linguistics. May not contribute to major requirements in linguistics. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

LING 180. Study Abroad Topics in Linguistics: _____. 1-3 Credits. U
This course is designed for the study of special topics in Linguistics. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

LING 250. Introduction to Translation and Translation Theory. 3 Credits. H
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as AAAS 250, GERM 240, SLAV 250 and SPAN 202.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

LING 305. Phonetics I. 3 Credits. S
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world's sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A hands on laboratory project is part of the course. Prerequisite: An introductory course in Linguistics.

LING 308. Linguistic Analysis. 3 Credits. H
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural types. Prerequisite: LING 106.

LING 312. Phonology I. 3 Credits. S
This course focuses on crucial phonological concepts such as contrast, alternation, neutralization, distinctive features, and the syllable. It also provides students with basic skills for phonological analysis, including the selection of underlying representations, rule notation, rule ordering, identifying phonological universals, and how to make an informed decision when multiple analyses are viable. In addition, it discusses the external motivations for phonological grammar and relates phonology to other disciplines in linguistics such as language acquisition and psycholinguistics. Not open to students who have taken LING 712. Prerequisite: LING 305.

LING 320. Language in Culture and Society. 3 Credits. SC S
Language is an integral part of culture and an essential means by which people carry out their social interactions with the members of their society. The course explores the role of language in everyday life of peoples in various parts of the world and the nature of the relationship between language and culture. Topics include world-view as reflected in language, formal vs. informal language, word taboo, and ethnography of speaking. (Same as ANTH 320.)

LING 321. Language in Culture and Society, Honors. 3 Credits. SC S
An honors section of LING 320 for students with superior academic records. Not open to students who have had ANTH 320 or LING 320. (Same as ANTH 321.) Prerequisite: Membership in the University Honors Program or consent of instructor.

LING 325. Syntax I. 3 Credits. H
An introduction to generative syntax with special attention to theory and method. The course covers such topics as phrase structure, the lexicon, transformations and derivation. Prerequisite: LING 106.

LING 338. Languages of the Jews. 3 Credits. H
From the beginning, Jewish history and culture is closely tied to language, from Hebrew and Aramaic to the languages of diaspora such as Yiddish and Ladino. Focusing on issues of language in society, this course will survey the languages spoken by the Jews throughout their long history in diverse communities around the world. We will learn about Hebrew as a spoken and a sacred language, examine how Jewish languages are born and die, and discuss the resurrection of Modern Hebrew in the state of Israel. All readings are in English. No prior knowledge of languages or linguistics is required. (Same as JWSH 338.)

LING 339. Languages of the Jews, Honors. 3 Credits. H
Honors version of LING 338 or JWSH 338, Languages of the Jews. (Same as JWSH 339.) Prerequisite: Membership in the University Honors Program or consent of instructor.

LING 343. Bilingualism. 3 Credits. S
This course is an introduction to bilingualism in the U.S. and in the world. It explores the linguistic, sociolinguistic, and psycholinguistic aspects of bilingualism. We will consider how bilingualism impacts language itself, considering the new varieties that emerge as languages come into contact. We will also consider bilingualism at the societal level, considering how language policies and notions of 'prestige' impact language communities and whether they are able to preserve their languages. Finally, we will consider bilingualism at the individual level, considering how using two or more languages on a daily basis impacts language acquisition and language processing. We will also consider whether using more than one language affords certain cognitive advantages. We will discuss these topics to better understand research in this area and think critically about what relevance this research has in real world settings such as homes, classrooms, corporations, and clinical settings. The final project will ask you to make a proposal/argument related to bilingualism based on primary research in this area. The main goal will be to consider how research findings can be used to inform a real-world problem and how to best communicate those findings to the general public.

LING 345. Language and Gender. 3 Credits. S
This course explores the relationship between language use and gender. The course will specifically focus on how gender affects the ways we use spoken language as well as how we interpret the speech of others. Topics to be discussed will include the function of language in social relationships and language variation in different social contexts.

LING 370. Introduction to the Languages of Africa. 3 Credits. NW H/W
A survey of the indigenous languages of Africa from a linguistic perspective, covering the main language families and their geographic distribution, and focusing on the features and structure of the more widely spoken and representative languages in each family (e.g., Fula, Hausa, Maninka, Swahili, Yoruba). (Same as AAAS 370.)

LING 380. Study Abroad Topics in Linguistics: _____ 1-6 Credits. S
This course is designed for the study of special topics in Linguistics at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad.

LING 415. Second Language Acquisition I. 3 Credits. H
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language that a learner acquires, and to the process of acquisition. Prerequisite: An introductory course in linguistics.

LING 418. Introduction to Cognitive Science. 3 Credits. S
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an interdisciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology,
anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as PHIL 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor.

LING 420. Capstone: Research in Language Science. 3 Credits. S

This course, an on-site practicum in Linguistics, provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, dependent and independent variables, data collection, descriptive and inferential statistics. Instruction builds discipline-specific knowledge and skills for career preparation. Students apply their knowledge of linguistics to formulate a research hypothesis and design an experiment to evaluate this hypothesis. Prerequisite: LING 305, LING 312, LING 325, and either LING 415, LING 425, LING 435, or LING 438.

LING 421. Capstone: Typology-Unity and Diversity of Human Language. 3 Credits. S

This course, an on-site practicum in Linguistics, explores the similarities and differences among the worlds' languages. Students apply their knowledge of phonetics, phonology, morphology, and syntax in describing and analyzing phenomena from a number of languages. The typological perspective that students develop is applied to topics such as word order, morphological typology, case, lexical categories, and valency. In addition to lecture instruction, students get hands on practice in collecting, transcribing, and analyzing data from different languages through face to face elicitation with native speakers. Instruction builds discipline-specific knowledge and skills for career preparation. Prerequisite: LING 305, LING 312, and LING 325.

LING 425. First Language Acquisition I. 3 Credits. S

An introductory course in the acquisition of child language. The course will cover relevant historical studies of child language but will focus primarily on recent psycholinguistic approaches toward the description of the process by which a child acquires his native language. Phonological, syntactic, semantic, cognitive, pragmatic, sociolinguistic, and anthropological aspects of the acquisition process are covered. Prerequisite: An introductory course in linguistics.

LING 430. Linguistics in Anthropology. 3 Credits. S

The study of language as a symbolic system. Exploration into the interrelatedness of linguistic systems, of nonlinguistic communicative systems, and of other cultural systems. (Same as ANTH 430.)

LING 435. Psycholinguistics I. 3 Credits. S LFE

A detailed examination of issues in the processing of language. The course provides a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes are examined. (Same as PSYC 435.) Prerequisite: An introductory course in linguistics or permission of instructor.

LING 438. Neurolinguistics I. 3 Credits. S

The course explores how language is represented and processed in the human brain. This includes a critical survey of the foundations and the current research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course also includes a component providing laboratory experience with brain imaging research on language. Prerequisite: An introductory course in Linguistics.

LING 440. Linguistic Data Processing. 3 Credits. H

This course introduces the tools and techniques necessary to analyze fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. The course also covers field recording and data analysis technology, along with methods of phonetic transcription, grammatical annotation and analysis of language context. Practice of techniques is provided via short studies of at least one language. Prerequisite: LING 305 or permission of instructor.

LING 447. North American Indian Languages. 3 Credits. S

This course introduces students to the indigenous languages of North America. Students critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics. Not open to students enrolled in 747.

LING 470. Language and Society in Africa. 3 Credits. NW H/W

Examines issues and problems associated with language use in sub-Saharan Africa from a sociological perspective. Topics covered include an overview of the types of languages spoken on the continent: indigenous languages, colonial languages, pidgins and creoles, and Arabic as a religious language; problems associated with the politics of literacy and language planning; writing and standardization of indigenous languages; and the cultural and ideological dilemmas of language choice. (Same as AAAS 470.) Prerequisite: AAAS 103, AAAS 305, or LING 106; or consent of instructor.

LING 490. Independent Study. 1-3 Credits. U

A special research project or directed readings in an area of linguistics not covered in other courses. No more than 3 hours of LING 490 may be applied toward the requirements for the major. Prerequisite: Consent of instructor.

LING 491. Topics in Linguistics: _______. 1-3 Credits. H

The content, prerequisites, and credits of this course will vary. May be repeated.

LING 492. Topics in Linguistics: _______. 1-3 Credits. S

The content, prerequisites, and credits of this course will vary. May be repeated. (Distribution credit given for two or three hours only.) Prerequisite: Consent of instructor.

LING 496. Honors Essay in Linguistics. 1-3 Credits. H

Individual directed research and preparation of an essay on a linguistic topic. Prerequisite: A grade-point average of 3.5 in linguistics and 3.25 in all courses, and consent of the major adviser.

LING 507. Phonetics II. 3 Credits. S

This course is a continuation of Phonetics I (LING 305/705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects are required. Prerequisite: LING 305.

LING 514. Phonology II. 3 Credits. S

This course discusses the problems in rule-based phonology that led to the development of Optimality Theory. Discussions of Optimality Theory include its basis architecture, the nature of markedness constraints, the role of phonetics in the theory, correspondence between different levels of representation, and how variants of the theory can model free and lexical variation. A selection of the following topics will also be included depending on class interest: interface between phonology and morphology, syntax, and the lexicon, reduplication, loanword phonology,
biases in phonological learning, stress, and tone. The course has a particular focus on theory-building, with discussions on how to lay out the predictions of a theoretical proposal, and how phonological predictions can be tested using experimental methods. Not open to students who have taken LING 714. Prerequisite: LING 312 or instructor consent.

LING 516. Second Language Acquisition II. 3 Credits. S
This advanced course provides in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues are discussed. Prerequisite: LING 415 and LING 325; or permission of instructor.

LING 526. Syntax II. 3 Credits. S
An advanced course covering one or more current theories of syntax. The course provides in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory; lexicon and argument structure; binding, control, locality conditions; constraints on representation and derivation; and the relation between syntax and the semantic module. Prerequisite: LING 325.

LING 527. Morphology. 3 Credits. S
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morpho-phonology, and morpho-syntax. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho-syntax concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: LING 312 and LING 325, or permission of instructor.

LING 531. Semantics. 3 Credits. S
This course explores how meaning works in the grammar of natural languages. Students actively learn and apply formal structures to meaning in relation to truth, logic, and morphosyntax. The course emphasizes the role of context in semantic and pragmatic interpretation, including using context-based elicitation techniques to collect semantic data. Other topics include the nature of events and argument structure, tense and aspect, reference and binding, quantification and scope, and the semantic motivation behind syntactic structures. This course is offered at the 500 and 700 level, with additional assignments at the 700 level. Not open to students with credit in LING 731. Prerequisite: LING 525 or instructor permission.

LING 537. Psycholinguistics II. 3 Credits. S
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. Prerequisite: LING 435 or consent of instructor.

LING 539. First Language Acquisition II. 3 Credits.
A second semester course in child language that explores the acquisition of morphology, syntax, and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. Prerequisite: LING 425 or consent of instructor.

LING 541. Field Methods in Linguistic Description. 3 Credits. H
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. Prerequisite: LING 305, LING 312, and LING 325 or permission of instructor.

LING 542. Neurolinguistics II. 3 Credits. S
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing as a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 438 or permission of the instructor.

LING 543. Language and Culture in Arabic-Speaking Communities. 3 Credits. W
The course examines the links between language structure, patterns of use, language choice, and language attitudes in the diglossic and bi-lingual Arabic-speaking communities. It also explores language as a reflector and creator of Arab culture (e.g. linguistic encoding of politeness, the Quranic text as the spoken and written word, the role of tropes in Arabic rhetoric). The topics for discussion range from the micro-level language choice to the macro-level issues of national language policies and planning within the domain of government and education across the Arab world. (Same as AAAS 543)

LING 570. The Structure of Japanese. 3 Credits. H
A detailed study of the phonological and grammatical structure of Japanese and the use of the language in social/cultural contexts. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 570.)

LING 572. The Structure of Chinese. 3 Credits. H
A detailed study of the phonological and grammatical structure of Chinese and the interactions between language and culture. Depending on student interests, a unit on the pedagogy of teaching Chinese as a foreign language may also be included. Primarily for students who want a linguistic knowledge of the language rather than a practical command of it. (Same as EALC 572.)

LING 575. The Structure of: _____. 3 Credits. S
A detailed study of a language, including its phonological, morphological, syntactic and semantic characteristics. The course provides students with a linguistic knowledge of the language rather than a practical command of it. Prerequisite: A course in linguistics.

LING 700. Introduction to Linguistic Science. 3 Credits.
An introduction to the theory and techniques of linguistic science for majors and others intending to do advanced work in linguistics and linguistic anthropology. Emphasis on the sound system, grammatical structure, and semantic structure of languages. Lectures and laboratory sessions. Not open to students who have taken ANTH/LING 106 or ANTH/LING 107. Prerequisite: Graduate standing.

LING 705. Phonetics I. 3 Credits.
This course provides a basic introduction to the study of human speech sounds. Topics to be covered include anatomy and physiology of the speech production apparatus, transcription and production of the world’s sounds, basic acoustics, computerized methods for speech analysis, acoustic characteristics of speech sounds, stress, and intonation. A ‘hands on’ laboratory project is part of the course. Prerequisite: Graduate standing or consent of instructor.

LING 706. Current Linguistic Anthropology. 3 Credits.
The fundamental issues, methods, and theories in contemporary linguistic anthropology. (Same as ANTH 706.) Prerequisite: Graduate standing or consent of the instructor.

LING 707. Phonetics II. 3 Credits. LFE
This course is a continuation of Phonetics I (LING 705) and provides a more detailed survey of acoustic and auditory phonetics. Topics to be covered include vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, prosody, the phonetics of second language acquisition, and the production and perception of cues to gender, talker, region, and socio-economic status. In addition, a number of laboratory projects will be required. Prerequisite: LING 705.

LING 708. Linguistic Analysis. 3 Credits.
Practice in applying the techniques of phonological, grammatical, and syntactic analysis learned in introductory linguistics to data taken from a variety of languages of different structural type. (Same as ANTH 736.) Prerequisite: An introductory course in linguistics. Not open to students who have taken LING 308.

LING 709. First Language Acquisition I. 3 Credits.
Introduction to the study of language acquisition: the significant findings, the basic methodological procedures, and some of the more recent theoretical accounts. Not open to students who have taken LING 425. (Same as CLDP 709.) Prerequisite: Graduate standing or consent of instructor.

LING 712. Phonology I. 3 Credits.
This course focuses on crucial phonological concepts such as contrast, alternation, neutralization, distinctive features, and the syllable. It also provides students with basic skills for phonological analysis, including the selection of underlying representations, rule notation, rule ordering, identifying phonological universals, and how to make an informed decision when multiple analyses are viable. In addition, it discusses the external motivations for phonological grammar and relates phonology to other disciplines in linguistics such as language acquisition and psycholinguistics. Not open to students who have taken LING 312. Prerequisite: LING 705.

LING 714. Phonology II. 3 Credits.
This course discusses the problems in rule-based phonology that led to the development of Optimality Theory. Discussions of Optimality Theory include its basic architecture, the nature of markedness constraints, the role of phonetics in the theory, correspondence between different levels of representation, and how variants of the theory can model free and lexical variation. A selection of the following topics will also be included depending on class interest: interface between phonology and other components of the grammar (e.g., morphology, syntax, and the lexicon), reduplication, loanword phonology, biases in phonological learning, stress, and tone. The course has a particular focus on theory-building, with discussions on how to lay out the predictions of a theoretical proposal and how phonological predictions can be tested using experimental methods. Not open to students who have taken LING 514. Prerequisite: LING 712.

LING 715. Second Language Acquisition I. 3 Credits.
Introduction to the study of second language acquisition: The application of theoretical linguistics to the description of the language a learner acquires, and to the process of acquisition. Prerequisite: Graduate standing or consent of instructor.

LING 716. Second Language Acquisition II. 3 Credits.
This advanced course will provide in-depth reading and discussion of several current topics including second language acquisition within a generative framework, processing approaches to second language acquisition, and the role of input and learnability principles in second language acquisition. Both theoretical and methodological issues will be discussed. Prerequisite: LING 715; LING 725, which may be taken concurrently, or permission of instructor.

LING 720. Research Methods in Linguistics. 3 Credits.
This course provides a foundation for designing, conducting, and critically evaluating quantitative and qualitative research in the language sciences. Topics include formulating a research hypothesis, participant selection, ethical considerations, the scientific method, validity, reliability, data collection, dependent and independent variables, descriptive and inferential statistics. This course will serve students who are interested in the basics of research design and statistics for the study of language. Prerequisite: Graduate standing or consent of instructor.

LING 722. Linguistic Typology. 3 Credits.
Different languages use different linguistic mechanisms to encode meanings. This course surveys grammatical concepts and categories found in the world’s languages including tense, aspect, mood, voice, person, and number as well as case relations such as nominative, accusative, ergative, and absolutive. Basic word order typology and discourse functions such as topic, focus, and cohesion are introduced. Examples will be drawn from a wide variety of languages to illustrate how the same concept may be encoded differently, i.e., morphologically, syntactically, or lexically, in different languages. Prerequisite: Graduate standing or consent of instructor.

LING 725. Syntax I. 3 Credits.
The basics of theoretical syntax, examining the principles of universal grammar. Topics include phrase structure, relations among syntactic constituents, and the nature of syntactic rules and lexical categories. Prerequisite: Graduate standing or consent of instructor.

LING 726. Syntax II. 3 Credits.
An advanced course covering one or more current theories of syntax. The course will provide in-depth reading and discussion on the major areas of syntactic theory including universal grammar, phrase structure theory, lexical projections of argument structure, binding, control, locality condition, constraints on representation, and the relation between syntax and the semantic module. Prerequisite: LING 725.

LING 727. Morphology. 3 Credits.
An exploration of several topics in word structure and formation. Covers three broad areas: traditional morphology, morpho-phonology, and morpho-syntax. Traditional morphology includes a survey of several kinds of word formation processes, the internal structure of words, morpheme types, inflection, paradigms, derivation, and compounding. Morpho-phonology deals with phonological constraints on morphological processes and prosodic morphology. Morpho syntax concentrates on the syntactic properties of morphological phenomena and interaction of syntactic processes and morphology. The course has a strong emphasis on cross-linguistic comparative morphology. Prerequisite: LING 712, LING 725, or permission of instructor.

LING 730. Linguistics in Anthropology. 3 Credits.
The study of language as it concerns anthropology. Language systems in relation to culture, language taxonomy, semantics, linguistic analysis as an ethnographic tool. (Same as ANTH 730.)

LING 731. Semantics. 3 Credits.
This course explores how meaning works in the grammar of natural languages. Students actively learn and apply formal structures to meaning in relation to truth, logic, and morphosyntax. The course emphasizes the role of context in semantic and pragmatic interpretation, including using context-based elicitation techniques to collect semantic data. Other topics include the nature of events and argument structure, tense and aspect, reference and binding, quantification and scope, and the semantic
motivation behind syntactic structures. This course is offered at the 500 and 700 level, with additional assignments at the 700 level. Not open to students with credit in LING 531. Prerequisite: LING 725 or instructor permission.

LING 732. Discourse Analysis. 3 Credits.
This course focuses on linguistic frameworks for the analysis of discourse. Discourse is a linguistic system larger than the sentence (utterance), which connects and contextualizes speech and written text. This course focuses on current issues and theoretical frameworks in the analysis of discourse. Using oral and written data, students will examine how contexts influence and shape linguistic form. Topics covered include transcription systems, the structure and organization of different genres of language, and the performance of social actions, including stance-taking, framing, and the construction of identity. Students will also have an opportunity to perform discourse analytic research on the data of their choice. (Same as ANTH 732.) Prerequisite: ANTH 706 or permission of the instructor.

LING 735. Psycholinguistics I. 3 Credits. LFE
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes will be examined. (Same as PSYC 735.)

LING 737. Psycholinguistics II. 3 Credits.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. (Same as PSYC 737.) Prerequisite: PSYC 735/LING 735 or consent of instructor.

LING 738. Neurolinguistics I. 3 Credits.
We will explore how language is represented and processed in the human brain. This will include a critical survey of the foundations and the newest state-of-the-art research in the cognitive neuroscience of language, focusing on the techniques of functional brain imaging (fMRI, PET, EEG, MEG, and related methods), and research on aphasia and other language disorders. This course will also include a laboratory component providing hands-on experience with brain imaging research on language. Prerequisite: Graduate standing or consent of instructor.

LING 739. First Language Acquisition II. 3 Credits.
A second semester course in child language which explores the acquisition of morphology, syntax and the ways in which morphology and syntax interact in linguistic theory and language development. Topics covered in the course include agreement, case, null subjects, question formation, pronoun binding, quantification, and control. (Same as CLDP 739.) Prerequisite: LING 709 or permission of the instructor.

LING 740. Linguistic Data Processing. 3 Credits.
The tools and techniques necessary to analyze linguistic fieldwork data, including research design, recording and elicitation techniques, computational data processing and analysis, and field ethics. Techniques of research, field recording, and data analysis technology. Methods of phonetic transcription, grammatical annotation, and analysis of language context. Practice of techniques via short studies of at least one language. (Same as ANTH 740.) Prerequisite: LING 700 or permission of instructor.

LING 741. Field Methods in Linguistic Description. 3 Credits.
The elicitation and analysis of phonological, grammatical, and discourse data from a language consultant. In-depth research on one language. Techniques of research design, methods of phonetic transcription, grammatical annotation, and analysis of language context. (Same as ANTH 741.) Prerequisite: LING 705 or permission of instructor.

LING 742. Neurolinguistics II. 3 Credits.
An in-depth discussion of the representation and processing of language from a cognitive neuroscience perspective. This course involves critical discussion of selected topics of current research interest in neurolinguistics. The course also includes a significant hands-on component, in which students receive training in research on the cognitive neuroscience of language by developing and implementing a new EEG study on an aspect of language, as well by completing a series of mini-labs introducing neuroimaging methods and analyses. Prerequisite: LING 738 or permission of the instructor.

LING 747. North American Indian Languages. 3 Credits.
This course introduces student to the indigenous languages of North America. Students will critically examine the structures and status of these languages, which have greatly expanded our knowledge of human language and linguistic theory. Topics include the history and future of North American languages and indigenous speech communities, the history of the field of Americanist linguistics, as well as important linguistic questions raised by phenomena from American languages in phonology, morphology, syntax, semantics, and historical linguistics. Prerequisite: An introductory course in linguistics.

LING 748. Language Contact. 3 Credits.
Theories and case studies of languages in contact. Areal and genetic linguistics, genesis of pidgins and creoles, multilingualism. Social, political, economic, and geographic factors in language change. (Same as ANTH 748.) Prerequisite: A course in Linguistics.

LING 749. Linguistics and Ethnolinguistics of China and Central Asia: ____. 3 Credits.
Selected topics in Linguistics and Linguistic Anthropology, focusing on dominant and/or minority languages of China, Central Asia, or a particular region of Central and Eastern Eurasia. Topics may include any subfield of linguistics, including language contact, typology, dialectology, and sociolinguistics. Topic for semester to be announced. Prerequisite: A course in Linguistics.

LING 782. Research Methods in Child Language. 3 Credits.
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as CLDP 782 and PSYC 782.)

LING 794. Proseminar. 3 Credits.
Introduction to the field of linguistics. Topics include research literature and research methods, thesis and grant writing, and ethics in linguistic research. Required for all first-year graduate students in linguistics. Graded on a satisfactory/unsatisfactory basis.

LING 799. Proseminar in Child Language. 2 Credits.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, CLDP 799, PSYC 799 and SPLH 799.)

LING 807. Seminar in Phonetics. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of phonetics. Prerequisite: LING 705 or consent of instructor.

LING 810. Seminar in Ethnolinguistics: _____. 2-3 Credits.
An advanced study of the relations between language and culture. Subject will vary each semester. Students may repeat the course more than once.

LING 814. Seminar in Phonology. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in the study of phonology. Prerequisite: LING 712 or consent of instructor.
Critical examination of recent theoretical issues and empirical findings in
the study of first language acquisition. (Same as CLDP 822.) Prerequisite:
LING 709 or consent of instructor.

LING 826. Seminar in Syntax. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in
the study of syntax. Prerequisite: LING 725 or consent of instructor.

LING 831. Seminar in Semantics. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in
the study of semantics. Prerequisite: LING 731 or consent of instructor.

LING 837. Seminar in Psycholinguistics. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in
the study of psycholinguistics. Prerequisite: LING 735 or consent of
instructor.

LING 842. Seminar in Neurolinguistics. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in
the study of neurolinguistics. Prerequisite: LING 738 or consent of
instructor.

LING 850. Topics in Research in Experimental Linguistics: _____.
1-9 Credits.
This course is primarily for students actively engaged in experimental
linguistic research. The course provides students with the opportunity
to focus on their current research projects and involves critical analysis,
presentation, and discussion of research design, methods, statistical
analysis, and data interpretation. May be repeated. Prerequisite:
Permission of instructor.

LING 851. Research in Language Acquisition and Processing. 1-9
Credits.
This course is primarily intended for students actively engaged in
linguistic research on language acquisition, language processing,
and neurolinguistics. Students in this course present and discuss
study design, methods, data analysis and interpretation of results for
their research projects. Professional development topics such as CV
development, applications for fellowships, grants and jobs, and the
dissemination of research findings are also discussed. May be repeated.
Prerequisite: Permission of instructor.

LING 852. Research in Field and Formal Linguistics. 1-9 Credits.
This course is intended for students who are conducting field work on
syntax or morphology, typically of an understudied language. The course
is structured around a set of topics (variable by semester) which each
student will investigate in a particular language. The focus of the course
is on data collection and analysis and students will present and discuss
the results of their research projects. May be repeated. Prerequisite:
Permission of instructor.

LING 860. Seminar in Second Language Acquisition. 3 Credits.
Critical examination of recent theoretical issues and empirical findings in
the study of second language acquisition. Prerequisite: LING 715 or
permission of instructor.

LING 899. Master's Research Project. 1-3 Credits.
A course for students working on their M.A. Research Project. Normally to
be taken during the semester in which the student is submitting the M.A.
Research Project. Students must enroll for at least one credit hour. Up to
three credits will count toward the minimum number of credits required for
the M.A. degree in linguistics.

LING 910. Linguistic Seminar: _____.
1-3 Credits.
The content and prerequisites of this course will vary. May be repeated.

LING 980. Linguistics Field Work. 3-6 Credits.
Independent field work with an informant on a language not normally
offered at the University of Kansas, or on a non-standard dialect of one
of the more accessible languages. Student must show evidence (file slips
for grammatical and phonological analysis, dictionary slips, etc.) of having
done the required amount of work without necessarily being able to turn
in a completed analysis. Normally for three credits; six credits would be
available under certain circumstances such as intensive summer work on
location away from the university. Graded on a satisfactory/unsatisfactory
basis. Prerequisite: LING 712 and LING 725.

LING 997. Ph.D. Examinations. 1-12 Credits.
A course for students writing answers to the preliminary Ph.D.
examination and/or preparing to take the Oral Comprehensive
Examination. Normally to be taken during the semester in which the
student is submitting answers to the written preliminary examination. May
be taken for a maximum of two semesters or twelve credits, whichever
comes first. Does not count toward the minimum number of credits
required for a graduate degree in linguistics. Graded on a satisfactory/
unsatisfactory basis.

LING 998. Independent Study. 1-12 Credits.
A special research project or directed readings in an area of linguistics not
covered in other courses. Prerequisite: Written consent of instructor.

LING 999. Doctoral Dissertation. 1-12 Credits.

Bachelor of Arts and Bachelor of General Studies in Linguistics

Why study Linguistics

Because language is the window into the mind. Linguistics provides an
understanding of the human capacity to acquire, perceive, and produce
language and of language's role in contemporary society.

B.A./B.G.S. Overview

The department offers a broad range of courses that provide a basic
understanding of human language and communication. Linguistics
courses examine features of language that underlie the human capacity
to express concepts and communicate ideas. The courses address
the connections between language, brain, culture, mind, and history.
The major gives students a basic understanding of the human capacity
to acquire, perceive, and produce language and of language's role in
contemporary society.

Linguistics is a superb preparation for careers that require expertise
in the use of language as a means of communication, e.g., business,
communications, personnel administration, teaching, health care, and
social service. Many majors pursue graduate study in education, law,
psychology, computer science, speech and hearing sciences, and
languages.

You can also combine your degree in Linguistics with a Global Awareness
Certification through the (http://gap.ku.edu/) Global Awareness Program
(GAP (http://gap.ku.edu/)) (https://gap.ku.edu). KU’s Global Awareness
Program (GAP) is an undergraduate certificate program in which you
can expand your cultural knowledge and navigate multiple perspectives.
GAP tracks your progress on the three components: Academic
(http://gap.ku.edu/Academic), On-Campus Activities with a global
focus (http://gap.ku.edu/co-curricular-activities/), and/or International
Experience (http://gap.ku.edu/international-experience/) (Two-out-of-
three components needed to earn the certificate.) Completion of the GAP
certificate appears on a student's official transcript. Please speak with the
Director of Undergraduate Studies, Dr. Fiorentino (fiorentino@ku.edu), if
you are interested in pursuing Global Awareness Program certification as part of your Linguistics degree.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. or B.G.S. Major

BA or BGS majors must complete the following requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>or LING 107</td>
<td>Introductory Linguistics, Honors</td>
<td></td>
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<tr>
<td>LING 110</td>
<td>Language and Mind</td>
<td>3</td>
</tr>
<tr>
<td>or LING 111</td>
<td>Language and Mind, Honors</td>
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<tr>
<td>LING 305</td>
<td>Phonetics I</td>
<td>3</td>
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<tr>
<td>LING 312</td>
<td>Phonology I</td>
<td>3</td>
</tr>
<tr>
<td>LING 325</td>
<td>Syntax I</td>
<td>3</td>
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<tr>
<td>Acquisition (3 Credit Hours)</td>
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<td>3</td>
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<tr>
<td>LING 415</td>
<td>Second Language Acquisition I</td>
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<tr>
<td>LING 425</td>
<td>First Language Acquisition I</td>
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<tr>
<td>Processing (3 Credit Hours)</td>
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<tr>
<td>LING 435</td>
<td>Psycholinguistics I</td>
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<td>LING 438</td>
<td>Neurolinguistics I</td>
<td></td>
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<tr>
<td>Diversity (3 Credit Hours)</td>
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<td>3</td>
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</tbody>
</table>

Major must complete one of the following courses (or a different LING course approved by Linguistics advisor):

- LING 308 Linguistic Analysis
- LING 320 Language in Culture and Society
- or LING 321 Language in Culture and Society, Honors
- LING 343 Bilingualism
- LING 370 Introduction to the Languages of Africa
- LING 447 North American Indian Languages
- LING 570 The Structure of Japanese
- LING 572 The Structure of Chinese
- LING 575 The Structure of: ____

Advanced Course (3 Credit Hours) 3

Major must complete one of the following courses (or LING Seminar with permission of instructor and approval by Linguistics advisor):

- LING 507 Phonetics II
- LING 514 Phonology II
- LING 516 Second Language Acquisition II
- LING 526 Syntax II
- LING 527 Morphology
- LING 531 Semantics
- LING 533 Psycholinguistics II
- LING 539 First Language Acquisition II
- LING 541 Field Methods in Linguistic Description
- LING 542 Neurolinguistics II

Capstone Experience (3 Credit Hours) 3

Majors must complete one capstone course:

- LING 420 Capstone: Research in Language Science
- or LING 421 Capstone: Typology-Unity and Diversity of Human Language

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and GPA minimum standards:

Major Hours
Satisfied by 30 hours of major courses, or 33 hours required if completing departmental honors course LING 496.

Major Hours in Residence
Satisfied by a minimum of 24 junior/senior (300+) hours of KU resident credit in the major.

Major Junior/Senior Hours
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in Linguistics can be found here: Linguistics (p. 1606), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Linguistics can be found here: Linguistics (p. 1607), or by using the left-side navigation.
Departmental Honors

The honors program allows exceptional undergraduate students to work closely with faculty members on a research project. To graduate with honors in linguistics, a student must complete all requirements for the linguistics major and LING 496 Honors Essay in Linguistics (usually taken in the fall semester of the senior year). The student must have a grade-point average of at least 3.5 in Linguistics courses. Consult the departmental honors coordinator or the director of undergraduate studies for information. Prospective honors candidates are encouraged to select a thesis topic and thesis director at the end of the junior year.

BA in Linguistics

Below is a sample 4-year plan for students pursuing the BA in Linguistics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td>3 LING 110 or 111 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>LING 106 or 107 (Goal 1.1 First Year Seminar or Critical Thinking, Major Requirement)</td>
<td>3</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 106 or 107</td>
<td></td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Literacy)</td>
<td>3</td>
<td>2nd Semester Language (BA/LING Foreign Language)</td>
<td>5</td>
</tr>
<tr>
<td>1st Semester Language (BA/LING Foreign Language)</td>
<td>5</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 305 (Fall only course), Major Requirement</td>
<td>3</td>
<td>3 LING 312 (Spring only course), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>LING Acquisition &amp; Processing or Analysis &amp; Description (Major Requirement)</td>
<td>3</td>
<td>3 LING Acquisition &amp; Processing or Analysis &amp; Description (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA/LING Foreign Language)</td>
<td>3</td>
<td>3 4th Semester Language, or 1st Semester of Another Language, unless req for mjr (BA/LING Foreign Language)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Sciences</td>
<td></td>
<td>3 Goal 3 Arts and Humanities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
<td>1 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 325 (Fall only course), Major Requirement</td>
<td>3</td>
<td>3 LING Advanced Course (Major Requirement)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>LING Acquisition, Processing, or Diversity Course (Major Requirement)</td>
<td>3</td>
<td>3 Goal 4.2 Global Awareness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LING Advanced Course (Major Requirement)</td>
<td>4</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td></td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 420 (Fall only course): Goal 6 Integration &amp; Creativity, Major Requirement</td>
<td>3</td>
<td>3 LING 421 (Spring only course; Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours 120</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. One course is required from a list of courses that satisfy the Acquisition & Processing requirement and the Analysis & Description requirement in the major. For a list of courses approved for each area, please review the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/linguistics/ba-bgs/#requirementstext) tab.
4. One course is required from a list of advanced courses. For a list of approved advanced courses, please review the degree requirements (https://catalog.ku.edu/liberal-arts-sciences/linguistics/ba-bgs/#requirementstext) tab.
5. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
Either LING 420 (Fall only course) or LING 421 (Spring only course) is required.

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

## BGS in Linguistics

Below is a sample 4-year plan for students pursuing the BGS in Linguistics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 106 or 107 (Goal 1.1, Major Requirement)</td>
<td>3</td>
<td>LING 110 or 111 (Goal 1.1, Social Science, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>LING 177 (First Year Seminar)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours 15</strong></td>
<td></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 305 (Fall only course; Major Requirement)</td>
<td>3</td>
<td>LING 312 (Spring only course; Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>LING Acquisition, Processing, or Diversity (Major Requirement)³</td>
<td>3</td>
<td>LING Acquisition, Processing, Diversity (Major Requirement)³</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Sciences</td>
<td>3</td>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours¹</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours 15</strong></td>
<td></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Total Hours 120

1 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

One course is required from a list of courses that satisfy the Acquisition requirement, Processing requirement, and Diversity requirement in the major. For a list of courses approved for each area, please review the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/linguistics/ba-bgs/#requirementstext) tab.

2 One course is required from a list of advanced courses. For a list of approved advanced courses, please review the degree requirements (https://catalog.ku.edu/liberal-arts-sciences/linguistics/ba-bgs/#requirementstext) tab.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Minor in Linguistics

Why study linguistics?

Because language is a window into the mind. Linguistics provides an understanding of the human capacity to acquire, perceive, and produce language and of language’s role in contemporary society.

Minor Overview

The department offers a broad range of courses that provide a basic understanding of human language and communication. Linguistics courses examine features of language that underlie the human capacity to express concepts and communicate ideas. The courses address the connections between language, brain, culture, mind, and history. The minor gives students a basic understanding of the human capacity to acquire, perceive, and produce language and of language’s role in contemporary society.

Linguistics is a superb preparation for careers that require expertise in the use of language as a means of communication, e.g., business, communications, personnel administration, teaching, health care, and social service. Many majors pursue graduate study in education, law, psychology, computer science, speech and hearing sciences, and languages.

You can also combine your degree in Linguistics with a Global Awareness Certification through the Global Awareness Program (GAP) (http://gap.ku.edu/). KU’s Global Awareness Program (GAP) is an undergraduate certificate program in which you can expand your cultural knowledge and navigate multiple perspectives. GAP tracks your progress on the three components: Academic (http://gap.ku.edu/Academic/), On-Campus Activities with a global focus (http://gap.ku.edu/co-curricular-activities/), and/or International Experience (http://gap.ku.edu/international-experience/) (Two-out-of-three components needed to earn the certificate.) Completion of the GAP certificate appears on a student’s official transcript. Please speak with the Director of Undergraduate Studies, Dr. Fiorentino (fiorentino@ku.edu), if you are interested in pursuing Global Awareness Program certification as part of your Linguistics degree.

Requirements for the Minor

Students can graduate with one of the two Linguistics tracks - either the General Linguistics Track or the Second Language Acquisition Track.

General Linguistics Track:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 106</td>
<td>Introductory Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>or LING 107</td>
<td>Introductory Linguistics, Honors</td>
<td></td>
</tr>
<tr>
<td>LING 110</td>
<td>Language and Mind</td>
<td>3</td>
</tr>
<tr>
<td>or LING 111</td>
<td>Language and Mind, Honors</td>
<td></td>
</tr>
<tr>
<td>LING 305</td>
<td>Phonetics I</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective: One 3-hour junior/senior level (300+) Linguistics course chosen by the student in consultation with their Linguistics advisor

Total Hours: 18

Second Language Acquisition Track:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 110</td>
<td>Language and Mind</td>
<td>3</td>
</tr>
<tr>
<td>or LING 111</td>
<td>Language and Mind, Honors</td>
<td></td>
</tr>
<tr>
<td>LING 305</td>
<td>Phonetics I</td>
<td>3</td>
</tr>
<tr>
<td>LING 325</td>
<td>Syntax I</td>
<td>3</td>
</tr>
<tr>
<td>LING 343</td>
<td>Bilingualism</td>
<td>3</td>
</tr>
<tr>
<td>LING 415</td>
<td>Second Language Acquisition I</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective: Any 3-hour Linguistics course (including LING106 or LING107), or a 3-hour course from the Advanced Language Structure list below, chosen by the student in consultation with their Linguistics advisor

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAAS 470</td>
<td>Language and Society in Africa</td>
<td>3</td>
</tr>
<tr>
<td>or EALC 570</td>
<td>The Structure of Japanese</td>
<td></td>
</tr>
<tr>
<td>or EALC 572</td>
<td>The Structure of Chinese</td>
<td></td>
</tr>
<tr>
<td>or FREN 310</td>
<td>French Phonetics</td>
<td></td>
</tr>
<tr>
<td>or FREN 441</td>
<td>The Story of French</td>
<td></td>
</tr>
<tr>
<td>or FREN 443</td>
<td>French Inside Out</td>
<td></td>
</tr>
<tr>
<td>or SLAV 522</td>
<td>The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings</td>
<td></td>
</tr>
<tr>
<td>or SPAN 429</td>
<td>Spanish Phonetics</td>
<td></td>
</tr>
<tr>
<td>or SPAN 520</td>
<td>Structure of Spanish</td>
<td></td>
</tr>
<tr>
<td>or SPAN 570</td>
<td>Studies in Hispanic Linguistics:</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 18

Minor Hours & GPA

While completing all required courses, minors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 12 hours of junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
Master of Arts in Linguistics

Why study linguistics?

Because language is a window into the mind. Linguistics provides an understanding of the human capacity to acquire, perceive, and produce language and of language’s role in contemporary society.

M.A. Overview (https://linguistics.ku.edu/overview-2/)

Our M.A. program in Linguistics requires the student to develop a solid understanding of the core areas of the discipline in addition to an in-depth specialty in one of the many areas available through the research interests of the faculty. Areas of special strength in the graduate program include phonetics, phonology, syntax, psycholinguistics, neurolinguistics, first language acquisition, second language acquisition, semantics, and the study of indigenous languages.

The student will work with their academic advisor to devise a course of study that best suits the student’s research interests.

The M.A. program usually takes two years. Students in the M.A. program complete a written Research Proposal and an Oral Examination of the Research Proposal, typically in their fourth semester of study. Students are required to take an Advanced II-level course to develop their understanding of research in their area of interest.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants must submit a curriculum vitae, a statement of purpose, an official copy of transcript from baccalaureate granting institution and transcripts from institutions attended post-baccalaureate, 3 letters of recommendation, Graduate Record Examination scores, and a writing sample (optional). Non-native speakers of English must meet English proficiency requirements as described on the Graduate Admissions website (https://gradapply.ku.edu/english-requirements/).

Submit your graduate application online (https://gradapply.ku.edu/apply). For further information regarding the application process, including department-specific deadlines and required supplemental documentation, please visit the Admissions (https://linguistics.ku.edu/admission/?tab2name) page of the department website, or contact the department's Graduate Program Coordinator, Corinna Johnson, cjohns@ku.edu.

M.A. Degree Requirements

The M.A. is structured as a 2 year program.

Degree Requirements

The following are minimum requirements.

Course Work

33 credit hours of graduate work including

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 794</td>
<td>Proseminar</td>
<td>3</td>
</tr>
<tr>
<td>LING 705</td>
<td>Phonetics I</td>
<td>3</td>
</tr>
<tr>
<td>LING 712</td>
<td>Phonology I</td>
<td>3</td>
</tr>
<tr>
<td>LING 725</td>
<td>Syntax I</td>
<td>3</td>
</tr>
<tr>
<td>LING 709</td>
<td>First Language Acquisition I</td>
<td>3</td>
</tr>
<tr>
<td>or LING 715</td>
<td>Second Language Acquisition I</td>
<td></td>
</tr>
<tr>
<td>LING 735</td>
<td>Psycholinguistics I</td>
<td>3</td>
</tr>
<tr>
<td>or LING 738</td>
<td>Neurolinguistics I</td>
<td></td>
</tr>
<tr>
<td>Research Methods Course (Select 1 course - 3 credit hours)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LING 720</td>
<td>Research Methods in Linguistics</td>
<td></td>
</tr>
<tr>
<td>LING 741</td>
<td>Field Methods in Linguistic Description</td>
<td></td>
</tr>
<tr>
<td>LING 782</td>
<td>Research Methods in Child Language</td>
<td></td>
</tr>
<tr>
<td>ELECTIVES (2 courses - 6 credit hours) to be determined by the student and the student's advisor. Electives are NOT to include LING 850, LING 851, LING 852, or LING 998.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced II-Level Course or Linguistics Seminar (1 course - 3 credit hours) Refer to Advanced II-Level Course and Linguistics Seminar Course listing.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Advanced II-Level Courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 707</td>
<td>Phonetics II</td>
</tr>
<tr>
<td>LING 714</td>
<td>Phonology II</td>
</tr>
<tr>
<td>LING 716</td>
<td>Second Language Acquisition II</td>
</tr>
<tr>
<td>LING 726</td>
<td>Syntax II</td>
</tr>
<tr>
<td>LING 727</td>
<td>Morphology</td>
</tr>
<tr>
<td>LING 731</td>
<td>Semantics</td>
</tr>
<tr>
<td>LING 737</td>
<td>Psycholinguistics II</td>
</tr>
<tr>
<td>LING 739</td>
<td>First Language Acquisition II</td>
</tr>
<tr>
<td>LING 742</td>
<td>Neurolinguistics II</td>
</tr>
</tbody>
</table>

Linguistics Seminar Courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 807</td>
<td>Seminar in Phonetics</td>
</tr>
<tr>
<td>LING 814</td>
<td>Seminar in Phonology</td>
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<tr>
<td>LING 822</td>
<td>Seminar in First Language Acquisition</td>
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<tr>
<td>LING 826</td>
<td>Seminar in Syntax</td>
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<tr>
<td>LING 831</td>
<td>Seminar in Semantics</td>
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<tr>
<td>LING 837</td>
<td>Seminar in Psycholinguistics</td>
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<tr>
<td>LING 842</td>
<td>Seminar in Neurolinguistics</td>
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<tr>
<td>LING 860</td>
<td>Seminar in Second Language Acquisition</td>
</tr>
<tr>
<td>or LING 910</td>
<td>Linguistic Seminar: _______</td>
</tr>
</tbody>
</table>

Research Seminar Course (1 course - 3 credit hours) to be determined by the student and the student's advisor. Student will complete a written research proposal, oral presentation, and Oral Examination.
Doctor of Philosophy in Linguistics

Why study linguistics?

Because language is a window into the mind. Linguistics provides an understanding of the human capacity to acquire, perceive, and produce language and of language’s role in contemporary society.

Ph.D. Overview (https://linguistics.ku.edu/overview-1/)

Our Ph.D. program in Linguistics requires the student to develop a solid understanding of the core areas of the discipline in addition to an in-depth specialty in one of the many areas available through the research interests of the faculty. Areas of special strength in the graduate program include phonetics, phonology, syntax, psycholinguistics, neurolinguistics, first language acquisition, second language acquisition, semantics, and the study of indigenous languages.

The student will work with their academic advisor to devise a course of study that best suits the student’s research interests.

The Ph.D. program usually takes five years which includes completing an M.A. degree en route to the Ph.D. All Ph.D. students receive a five-year funding package.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Applicants must submit a curriculum vitae, a statement of purpose, an official copy of transcript from baccalaureate granting institution and transcripts from institutions attended post-baccalaureate, 3 letters of recommendation, Graduate Record Examination scores, and a writing sample (optional). Non-native speakers of English must meet English proficiency requirements as described on the Graduate Admissions website (https://gradapply.ku.edu/english-requirements/).

Submit your graduate application online (https://gradapply.ku.edu/apply/). For further information regarding the application process, including department-specific deadlines and required supplemental documentation, please visit the Admissions (https://linguistics.ku.edu/admission/#tab2name) page of the department website, or contact the department’s Graduate Program Coordinator, Corinna Johnson, cljohns@ku.edu.

Ph.D. Degree Requirements

The Ph.D. is structured as a five year program. Students will earn an M.A. en route to the Ph.D.

Research Skills

The university requires that every doctoral student have training in research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. One of the following courses with a grade of B or above fulfills the requirements for research skills:

1. A graduate-level (500 or above) course in statistics
2. A graduate-level (500 or above) course in a computer programming language
3. LING 720 Research Methods in Linguistics
4. LING 741 Field Methods in Linguistic Description
5. LING 782 Research Methods in Child Language

Responsible Scholarship

The university requires that every doctoral student have training in responsible scholarship pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. LING 794 Proseminar fulfills the requirements for responsible scholarship.

Minimum Course Requirements

57 credit hours consisting of 33 credit hours at the M.A. level and 24 hours at the Ph.D. level.

### M.A. Level Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 794</td>
<td>Proseminar</td>
<td>3</td>
</tr>
<tr>
<td>LING 705</td>
<td>Phonetics I</td>
<td>3</td>
</tr>
<tr>
<td>LING 712</td>
<td>Phonology I</td>
<td>3</td>
</tr>
<tr>
<td>LING 725</td>
<td>Syntax I</td>
<td>3</td>
</tr>
<tr>
<td>Select 1 course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>LING 709</td>
<td>First Language Acquisition I (or)</td>
<td></td>
</tr>
<tr>
<td>LING 715</td>
<td>Second Language Acquisition I</td>
<td></td>
</tr>
<tr>
<td>Select 1 course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>LING 735</td>
<td>Psycholinguistics I</td>
<td></td>
</tr>
<tr>
<td>LING 738</td>
<td>Neurolinguistics I</td>
<td></td>
</tr>
<tr>
<td>Select 1 of the following research methods courses:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LING 720</td>
<td>Research Methods in Linguistics (or)</td>
<td></td>
</tr>
<tr>
<td>LING 741</td>
<td>Field Methods in Linguistic Description (or)</td>
<td></td>
</tr>
<tr>
<td>LING 782</td>
<td>Research Methods in Child Language</td>
<td></td>
</tr>
</tbody>
</table>
ELECTIVES (2 courses - 6 credit hours) to be determined by the student and the student’s advisor. One elective course (3 credit hours) must be taken from the Advanced II-Level course list or Linguistics Seminar course list. Electives are NOT to include LING 850, LING 851, LING 852, or LING 998. Research Seminar course (1 course - 3 credit hours) to be determined by the student and the student’s advisor. The course will include completion of a written research proposal and oral presentations.

LING 850  Topics in Research in Experimental Linguistics: _____
LING 851  Research in Language Acquisition and Processing
LING 852  Research in Field and Formal Linguistics
M.A. Research Project course (1 course - 3 credit hours) 3
LING 899  Master’s Research Project

**Advanced II-Level Courses:**

LING 707  Phonetics II
LING 714  Phonology II
LING 716  Second Language Acquisition II
LING 726  Syntax II
LING 727  Morphology
LING 731  Semantics
LING 737  Psycholinguistics II
LING 739  First Language Acquisition II
LING 742  Neurolinguistics II
LING 747  Neurolinguistics
LING 807  Seminar in Phonetics
LING 814  Seminar in Phonology
LING 822  Seminar in First Language Acquisition
LING 826  Seminar in Syntax
LING 831  Seminar in Semantics
LING 832  Seminar in Semantics
LING 837  Seminar in Psycholinguistics
LING 842  Seminar in Neurolinguistics
LING 850  Topics in Research in Experimental Linguistics: _____
LING 851  Research in Language Acquisition and Processing
LING 852  Research in Field and Formal Linguistics

**Research Presentation Requirement**

Students must give 1 research presentation each semester beginning in their second year of the program. For students who are just beginning their independent research projects, this presentation may involve the discussion of published research relevant to the student’s research interests. This requirement may be satisfied through a presentation in one of the empirical research seminars (LING 850, LING 851, LING 852), a presentation at a local, regional, or international conference, a presentation in the Linguistics colloquy series, or a presentation at any other relevant forum as determined by the faculty adviser. Students must include the titles and dates of these presentations in their annual report each year.

**M.A. Research Project for PhD Students**

The Master’s research project should consist of a detailed research proposal and include pilot results and/or preliminary analyses. Students in the Ph.D. program should be able to continue working on the project with the aim of submitting it as a qualifying paper for the Ph.D. program.

An M.A. candidate in residence who has begun work on a research project must enroll for at least 1 credit hour of LING 899 Master’s Research Project each semester (summer session excluded) until the thesis is completed.

The research project must be defended successfully in an oral examination. The oral exam is scheduled when all 3 committee members have indicated in writing their approval or disapproval of the research project for defense and at least 2 (including the chair) have approved scheduling the exam. The oral examination will typically last 1-2 hours.

Following the oral examination, the student's performance will be evaluated by the project committee and reported by a Progress-to-Degree form to Graduate Studies as the outcome of the Master’s oral examination. The committee will evaluate the M.A. research project with the following grades: 0-fail, 1-pass but cannot continue to the Ph.D. program, 2-pass and can continue to the Ph.D. program.

**Qualifying Papers**

The student needs to write 2 qualifying papers – a major paper in the area of specialization and a minor paper in a different area. Both papers should represent original work and both papers must have different advisers. The major paper may be an expanded version of the M.A. research project and should be of publishable quality. The minimum lengths of the major and minor papers are 25 pages and 15 pages, respectively.
The major and minor papers are developed in close consultation with an Advisory Committee (3 faculty members) and the 2 papers should be supervised by different faculty members. The adequacy of the papers is evaluated on the quality of the literature review, theoretical contribution, and research integration as well as the basis of their logical coherence and organization. The student does not need to orally defend the qualifying papers.

**Dissertation Proposal and the Oral Comprehensive Exam**

When the major and minor qualifying papers have been approved by the Advisory Committee, the student may form a Ph.D. committee (4 Department of Linguistics Graduate Faculty members, 1 Graduate Studies Representative member), which helps the student work on the dissertation, starting from the dissertation proposal. The proposal should clearly identify the research questions that the dissertation will address, include a comprehensive literature review, lay out the methodology for the research, discuss preliminary data and results, if any, and present a timetable for the dissertation research. The minimum length for the dissertation proposal is 10 pages.

The Oral Comprehensive Exam is the official exam required by Graduate Studies and consists of an oral defense of the dissertation proposal and the answering of any other questions related to the fields of study of the dissertation research. It must be completed the spring semester of the 4th year (at the latest). The oral examination will typically last 2 to 3 hours.

**Dissertation and Dissertation Defense**

The dissertation is developed in consultation with the Ph.D. committee. The dissertation must be orally defended in front of the Ph.D. committee. The student will be asked first to summarize his/her dissertation and evidence, and then will be questioned by the committee. The dissertation defense will typically last 1 to 2 hours.

**University Requirements**

Throughout the course of doctoral study, the student must fulfill all relevant College and University policies (http://coga.ku.edu/graduate-policies/), such as those concerning doctoral residency, time constraints, continuous post-comprehensive enrollment, human subjects review, electronic filing, and graduation.

**Department of Mathematics**

**Why study mathematics?**

Because mathematics is a framework upon which humanity builds an understanding of the world.

The mission of the Department of Mathematics is to create and teach mathematics, and to develop in all students the capacity to understand, discover, enjoy, and use mathematics.

This is a wide-ranging enterprise that involves:

- Enabling students to experience the value and power of mathematical reasoning;
- Providing for the specific mathematical needs of users of mathematics, e.g., in engineering, computer science, economics, physics, finance, education and other physical and social sciences;
- Providing statewide leadership in the mathematics education of all Kansans from K-12 through graduate school;
- Developing interdisciplinary research with other units which make extensive use of mathematics;
- Fostering a climate conducive to active faculty research and interaction with other departments.

The Mathematics Department offers two undergraduate degrees, a B.A. in Mathematics and a B.S. in Mathematics, as well as an Undergraduate Certificate in Actuarial Science. The B.A. has fewer mathematics course requirements and more general education requirements. The B.S. requires more mathematics courses, an applied mathematics concentration, and fewer general education courses. Students who wish to teach mathematics in high school should pursue a B.A. or B.S. in mathematics while participating in the UKanTeach program. The mathematics department offers two graduate degrees, an M.A. and a Ph.D., as well as a Certificate in Applied Mathematics.

**Undergraduate Programs**

**Placement**

Students who have not completed a college-level mathematics course should consult the Placement Table (see below) for Initial Enrollment in Mathematics. For information about the Early and Continuous Enrollment in Math requirement, see the CLAS Degree Requirements page (p. 752).

Students may also take the ALEKS Placement, Preparation and Learning Math assessment (http://math.ku.edu/what-aleks/) to determine their proper initial placement in mathematics courses. Students with college credit in mathematics should enroll according to the credit shown on their transcripts and the stated prerequisites for the courses.

**Courses for Nonmajors**

Students interested in mathematics as part of a background in the liberal arts should enroll in MATH 115, MATH 125, MATH 105, or MATH 365, and other courses according to their interests. Students preparing to use mathematics as a tool in another field should look at the requirements and recommendations of their schools or departments.

MATH 2 is considered a developmental course by all KU schools and is not counted in the minimum number of hours required for graduation.

**Placement Table for Initial Enrollment in Mathematics**

KU encourages all entering students to complete 4 years of mathematics in high school, including Algebra I and II, Geometry, Trigonometry, and Analytic Geometry, along the lines of the Kansas Board of Regents recommendations (https://admissions.ku.edu/freshman-requirements-deadlines/college-prep-curriculum/).

<table>
<thead>
<tr>
<th>Your test score</th>
<th>Eligible to enroll in these mathematics courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT: 28-36 or SAT: 660-800 or ALEKS: 76-100</td>
<td>MATH 002, MATH 101, MATH 103, MATH 104, MATH 105, MATH 115, MATH 125 or MATH 365</td>
</tr>
<tr>
<td>ACT: 26-27 or SAT: 610-650 or ALEKS: 61-75</td>
<td>MATH 002, MATH 101, MATH 103, MATH 104, MATH 105, MATH 115, or MATH 365</td>
</tr>
<tr>
<td>ACT: 22-25 or SAT: 540-600 or ALEKS: 46-60</td>
<td>MATH 002, MATH 101, or MATH 104</td>
</tr>
</tbody>
</table>
ACT: 16-21 or SAT: 460-530 or ALEKS: 30-45

MATH 002

ACT: 0-15 or SAT: 0-450 or ALEKS: 0-29

KU does not offer a mathematics course below MATH 002. Although students with these scores are not prepared, they will be permitted to enroll in MATH 002. Before enrolling in MATH 002, these students are encouraged to prepare by self-study or by completing a beginning algebra course in high school or community college.

After their initial enrollment in mathematics, students must remain continuously enrolled until they have completed MATH 101 or MATH 104.

Preparation for Graduate Study

Students who plan to attend graduate school in the mathematical sciences should speak to an advisor about the best preparation, depending on their goals. Students planning to enter a general mathematics graduate program are encouraged to take MATH 765, MATH 766, MATH 790, and MATH 791. Some graduate degrees require a reading knowledge of French, German, or Russian.

Preparation for Graduate Study

Students who plan to attend graduate school in the mathematical sciences should speak to an advisor about the best preparation, depending on their goals. Students planning to enter a general mathematics graduate program are encouraged to take MATH 765, MATH 766, MATH 790, and MATH 791.

Graduate Programs

The department offers a graduate program leading to both the M.A. and Ph.D. degrees. A broad range of programs is possible in algebra, analysis, combinatorics, control theory, dynamical systems, geometry, numerical analysis, partial differential equations, probability and statistics.

The Department of Mathematics has a long tradition of excellence. The first Ph.D. granted at KU was in mathematics in the year 1895. Since then, the graduate program has been a central part of the department’s research and teaching mission and an important component of its long-term planning. The department’s commitment to graduate education has boosted its recent growth in size and enhanced its reputation. Prospective students are encouraged to read additional information (https://math.ku.edu/admission-graduate-program/) online.

Students who are interested in enrolling in graduate level coursework in the Department of Mathematics without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s admission (https://mathematics.ku.edu/admission-graduate-program/) webpage for further details.

Courses

MATH 2. Intermediate Mathematics. 3 Credits. U

Mathematics (primarily algebra) preparatory to MATH 101. Topics include: solving linear equations, inequalities, and system; solving quadratic, radical, and rational equations; and introduction to imaginary numbers. Qualification: Two years of high school college preparatory mathematics, algebra and geometry, and a score of 16 or more on ACT mathematics; or a qualifying score on the mathematics placement test. MATH 002 is the lowest level mathematics course offered at the University of Kansas, and does not count towards the 120 credit hours required for graduation. Students not prepared for MATH 101 will be permitted to enroll in MATH 002. However, before enrolling in MATH 002, such students are encouraged to prepare by self-study or by completing a beginning algebra course in high school, community college, or correspondence study.

MATH 101. College Algebra: Mn. 3 Credits. U

Coordinate systems, functions and their graphs; linear, quadratic, general polynomial, rational, exponential, and logarithmic functions; equations and inequalities; and linear and non-linear systems. Data Driven sections are intended for non-STEM majors and cover college algebra content with increased emphasis on context and interpretation of data, and decreased emphasis on symbolic manipulation. Enrollment in Enhanced sections will benefit students by providing additional instructional time and integrated review of some prerequisite material. Students in Enhanced sections must enroll in MATH 197 as a co-requisite. Not open to students with credit in MATH 104. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test. Students with slightly lower ACT scores may be admitted to Enhanced sections based on high school GPA.

MATH 103. Trigonometry. 2 Credits. U

The circular functions and their applications. Not open to students with credit in MATH 104. May not be used to fulfill the College mathematics requirement. Prerequisite: MATH 101, or two years of high school algebra and a score of 26 or higher on enhanced ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 104. Precalculus Mathematics. 5 Credits. U

An introduction to the elementary functions (polynomial, rational, exponential, logarithmic, and trigonometric) and their properties. Open for only two hours credit for students with credit in MATH 101. Not open to students with credit in MATH 103. Prerequisite: MATH 002, or two years of high school algebra and a score of 22 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 105. Introductory Quantitative Reasoning. 3 Credits. N

This diverse course introduces students to foundational quantitative reasoning skills that will assist them throughout their college-level work and beyond. Topics may include logic and problem solving, personal finance, elementary statistics and data analysis, voting theory and fair division problems, basic linear programming, and network theory. Students taking this class will gain an appreciation for how mathematical thinking can be used in everyday decision making. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 109. Mathematics for Elementary School Teachers I. 3 Credits. U

This course is designed to give the prospective elementary school teacher an overview of several components of the elementary school mathematics curriculum, including number systems, estimation, inequalities and order, sequences and patterns, sets, and relations and functions. The class meets each week for three one-hour instruction sessions and one two-hour laboratory session. This course may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 101 or equivalent placement.

MATH 110. Mathematics for Elementary School Teachers II. 3 Credits. U

Continuation of MATH 109, including geometry (including transformations) and elementary probability and statistics. Class meets each week for three one-hour instruction sessions and one two-hour laboratory session.
This course does not serve as a prerequisite for any mathematics course. It may not be used to satisfy the College mathematics requirement. Prerequisite: MATH 109.

**MATH 115. Calculus I. 3 Credits. N**

Elementary differential and integral calculus, with applications in management and the biological sciences. Not open to students with credit in MATH 125 or MATH 145. Prerequisite: MATH 101 or MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

**MATH 116. Calculus II. 3 Credits. NM N**

Continuation of MATH 115 including exponential, logarithmic, and trigonometric functions, techniques of integration, and the calculus of functions of several variables. Not open to students with credit in MATH 127 or MATH 147. Prerequisite: MATH 115 plus a course in trigonometry, or MATH 125 or MATH 145. MATH 103 may be taken concurrently.

**MATH 125. Calculus I. 4 Credits. N**

Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116 or MATH 145. Prerequisite: MATH 103 or MATH 104, with a grade of C- or higher; or 3 years of college preparatory mathematics including trigonometry, with a score of 28 or higher on the ACT Mathematics exam.

**MATH 126. Calculus II. 4 Credits. N**

Techniques of integration, including integration by parts. Applications of integration, including volume, arc length, work and average value. Infinite sequences and series and Taylor series. Polar coordinates, vectors and the geometry of space. Open for only 2 hours of credit to students with credit in MATH 116. Not open for credit to students with credit in MATH 116 or MATH 145. Prerequisite: MATH 116, MATH 125, or MATH 145, with a grade of C- or higher.

**MATH 127. Calculus III. 4 Credits. N**

Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Not open for credit to students with credit in MATH 147. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher.

**MATH 145. Calculus I, Honors. 4 Credits. NM N**

Limits, continuity and derivatives of algebraic, trigonometric, exponential and logarithmic functions. Curve sketching, optimization and other applications of the derivative. Antiderivatives, Riemann sums, the definite integral, and the fundamental theorem of calculus. Open for only 1 hour credit to students with credit in MATH 115. Not open for credit to students with credit in MATH 116 or MATH 125. Prerequisite: An ACT Math score of 34 or higher, or membership in the University Honors Program and an ACT Math score of 32 or higher.

**MATH 146. Calculus II, Honors. 4 Credits. N**

Techniques of integration, including integration by parts. Applications of integration, including volume, arc length, work and average value. Infinite sequences and series and Taylor series. Polar coordinates, vectors and the geometry of space. Open for only 2 hours credit to students with credit in MATH 116. Not open for credit to students with credit in MATH 126. Prerequisite: MATH 125, or MATH 145, with a grade of C- or higher; and invitation of the Department of Mathematics.

**MATH 147. Calculus III, Honors. 4 Credits. N**

Multivariable functions, partial derivatives and their applications, multiple integrals and their applications. Vector-valued functions, line and surface integrals, Green, Gauss and Stokes Theorems. Not open for credit to students with credit in MATH 127. Prerequisite: MATH 126 or MATH 146, with a grade of C- or higher; and invitation of the Department of Mathematics.

**MATH 177. First Year Seminar: _____ 3 Credits. NM**

A limited-enrollment, seminar course for first-time freshmen, organized around current issues in math. May not contribute to major requirements in math. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**MATH 197. Mathematical Workshops: _____ 1-3 Credits. U**

Offered to provide opportunities for deeper understanding of freshman-sophomore mathematics through interactive learning. Topics will vary. May be repeated for additional credit. Prerequisite: Variable.

**MATH 209. Functions and Modeling. 3 Credits. N**

Study of the use of functions in mathematical modeling, with topics drawn from algebra, analytic geometry, statistics, trigonometry, and calculus. These topics include function properties and patterns, complex numbers, parametric and polar equations, vectors and various growth models. The course also includes inquiry methods, collaborative problem solving, the use of multiple representations and data analysis techniques, and the justification and presentation of results. Central to the course are investigative labs employing various technologies and software. The course is designed to help prepare students for secondary school mathematics teaching. (Same as PHSX 209.) Prerequisite: MATH 126 or MATH 146.

**MATH 220. Applied Differential Equations. 3 Credits. N**

Linear ordinary differential equations, Laplace transforms, systems of equations, and applications. Not open to those who have taken MATH 320. Prerequisite: MATH 126 or MATH 146 with grade of C- or higher; previous or concurrent enrollment in MATH 290 or MATH 291 recommended.

**MATH 221. Applied Differential Equations, Honors. 3 Credits. N**

Linear Ordinary Differential Equations, Laplace Transforms, Systems of Equations, Enrichment Applications. Prerequisite: MATH 126 or MATH 146 with grade of C- or higher, and invitation from the Department of Mathematics; previous or concurrent enrollment in MATH 290 or MATH 291 recommended. Not open to students with credit in MATH 320.

**MATH 290. Elementary Linear Algebra. 2 Credits. N**

Systems of linear equations, matrices, vector spaces, linear transformations, and applications. Not open to those who have taken MATH 590. Prerequisite: MATH 126 or MATH 146 with grade of C- or higher.

**MATH 291. Elementary Linear Algebra, Honors. 2 Credits. N**

Systems of Linear Equations, Matrices, Vector Spaces, Linear Transformations, Enrichment Applications. Prerequisite: MATH 126 or MATH 146 with a grade of C- or higher, and invitation from the Department of Mathematics. Not open to students who have taken MATH 590.

**MATH 296. Special Topics: _____ 1-3 Credits. N**

Designed for the study of special topics in mathematics at the freshman/sophomore level. May be repeated for additional credit; does not count toward the major or minor in mathematics. Prerequisite: Variable.

**MATH 320. Elementary Differential Equations. 3 Credits. N**

Linear ordinary differential equations, series solutions. Laplace transforms. Systems of equations. Not open to those who have taken
MATH 220. Prerequisite: MATH 127 or MATH 147 with a grade of C- or higher, and MATH 290 or MATH 291.

MATH 365. Elementary Statistics. 3 Credits. N
Elementary descriptive statistics of a sample of measurements; probability; the binomial, Poisson, and normal distributions, populations and sampling from populations; simple problems of statistical inference. May not be counted for junior-senior credit toward a major in mathematics. Not open to students with credit in DSCI 202, BIOL 570, MATH 465, MATH 526, or MATH 628. Prerequisite: MATH 101, MATH 104, or two years of high school algebra and a score of 26 or higher on ACT mathematics, or a qualifying score on the mathematics placement test.

MATH 409. Topics in Geometry for Secondary and Middle School Teachers. 2 Credits. N
Study of selected topics from Euclidean, non-Euclidean, and transformation geometry chosen to give breadth to the mathematical background of secondary and middle school teachers. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 126 or MATH 146. Students enrolled in MATH 409 must concurrently enroll in MATH 410.

MATH 410. Topics in History of Mathematics for Secondary and Middle School Teachers. 1 Credits. N
Study of selected topics from mathematical history chosen to provide students with knowledge of major historical developments in mathematics including individual contributions and contributions from different cultures. These topics will include a historical development of Euclidean and non-Euclidean geometry. May not be counted for junior-senior credit towards a major in mathematics. Prerequisite: MATH 126 or MATH 146. Students enrolled in MATH 410 must concurrently enroll in MATH 409.

MATH 450. Discrete Mathematics. 3 Credits. N
Basic topics in discrete mathematics including sets, logic, relations and functions, graphs and combinatorics. Advanced topics chosen from partially ordered sets and lattices, Boolean algebras, automata, game theory, coding theory, cryptography, optimization and enumeration. Prerequisite: MATH 290.

MATH 500. Intermediate Analysis. 3 Credits. N
A careful formulation of convergence and limits of sequences and functions; continuity and properties of continuous functions; differentiation; the Riemann integral; mean-value theorems and the fundamental theorem of calculus. Not open to students with credit in MATH 765. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

MATH 510. Introduction to the Theory of Computing. 3 Credits. N
Finite state automata and regular expressions. Context-free grammars and pushdown automata. Turing machines. Models of computable functions and undecidable problems. The course emphasis is on the theory of computability, especially on showing limits of computation. (Same as EECS 510.) Prerequisite: EECS 210 and upper-level EECS eligibility.

MATH 526. Applied Mathematical Statistics I. 3 Credits. NM N
A first course in statistics for students with the techniques of calculus at their disposal. The following topics are studied with illustrations and problems drawn from various fields of applications: basic notions of probability and probability distributions; classical estimation and testing procedures for one and two sample problems; chi-square test. Not open to those with credit in MATH 628. Prerequisite: MATH 127 or MATH 147 or MATH 116 (MATH 127 or MATH 147 recommended.)

MATH 530. Mathematical Models. 3 Credits. N
An introduction to mathematical models useful in a large variety of scientific and technical endeavors. Topics include: model construction, Markov chain models, models for linear optimization, graphs as models, and game theory. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

MATH 540. Elementary Number Theory. 3 Credits. N
Divisibility, primes and their distribution, the Euclidean algorithm, perfect numbers, Fermat's theorem, Diophantine equations, applications to cryptography. Prerequisite: MATH 127 or MATH 147.

MATH 542. Vector Analysis. 2 Credits. N
Vector algebra; vector and scalar fields; line and surface integrals; theorems of Gauss, Green, and Stokes. Curvilinear coordinates. Applications. Introduction to tensor analysis. Not open to those with credit in MATH 143. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

MATH 558. Introductory Modern Algebra. 3 Credits. N
Development of the number systems. Polynomials. Introduction to abstract number systems such as groups and fields. Not open to students with credit in MATH 791. Prerequisite: MATH 290 or MATH 291.

MATH 559. Modern Geometries. 3 Credits. N
Selected topics in Euclidean geometry. Synthetic and analytic projective geometry; duality, Desargues' theorem, perspectives, conics. Non-Euclidean and metric projective geometries. Prerequisite: MATH 127 or MATH 147.

MATH 581. Numerical Methods. 3 Credits. N
An introduction to numerical methods and their application to engineering and science problems. Applied treatment of elementary algorithms selected from the subject areas: finding roots of a single nonlinear equation, numerical differentiation and integration, numerical solution of ordinary differential equations. Emphasis on implementing numerical algorithms using the computer. Not open to students with credit in MATH 781 or MATH 782. Prerequisite: MATH 220 and MATH 290, or MATH 320.

MATH 582. Computational Data Science. 3 Credits. N
This course provides an introduction to topics in data science and machine learning with an emphasis on computation and applications. Programming for the course uses the student's choice of Matlab, Python, or R. Topics covered include dimension reduction, regression techniques, density estimation, machine learning, data assimilation, and clustering and classification techniques. Prerequisite: MATH 290 or equivalent.

MATH 590. Linear Algebra. 3 Credits. N
Vector spaces, linear transformations, and matrices. Canonical forms, Determinants. Hermitian, unitary and normal transformations. Not open to those with credit in MATH 791. Prerequisite: MATH 290 or MATH 291.

MATH 591. Applied Numerical Linear Algebra. 3 Credits. N
An introduction to numerical linear algebra. Possible topics include: applied canonical forms, matrix factorizations, perturbation theory, systems of linear equations, linear least squares, singular value decomposition, algebraic eigenvalue problems, matrix functions, and the use of computational software. Not open to students with credit in MATH 782. Prerequisite: MATH 290 or MATH 291. EECS 138 or equivalent recommended.

MATH 596. Special Topics: 1-3 Credits. N
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Variable.

MATH 597. Special Topics, Honors: 1-3 Credits. N
A study of a specialized topic in mathematics. May be repeated for credit when the topic varies. Prerequisite: A previous Honors course in
Mathematics or permission of instructor. Other prerequisites depending on topic possible.

**MATH 601. Algebraic Topics in Computing**: 3 Credits. N
Topics motivated by applications in computer science, studied from a mathematical perspective, and based on methods from linear and abstract algebra. Examples of topics include error-correcting codes, cryptography, and computer algebra. May be repeated with different topics for additional credit. Prerequisite: MATH 290 or MATH 291.

**MATH 605. Applied Regression Analysis**: 3 Credits. N
This course provides an introduction to regression analysis and statistical learning with an emphasis on mathematical understanding and its software implementation. Programming uses Python, R, or Julia. Covered topics include the following. Linear regression: parameter estimation, confidence ellipsoids and prediction intervals, hypothesis tests. Classification: logistic regression, linear discriminant analysis. Basis expansion: polynomial regression, regression splines. Resampling methods: cross-validation, bootstrap. Shrinkage methods. Model selection: information criteria, forward and backward selection, lasso. Decision trees and random forests: bagging, boosting. Prerequisite: MATH 290 or MATH 291, and MATH 526 or MATH 628.

**MATH 608. Statistical Data Science**: 3 Credits. N
This course provides an introduction to main statistical concepts in data science with an emphasis on mathematical understanding and its software implementation. Programming uses Python or Julia. Covered statistical models include linear regression and linear classification for high-dimensional problems; support vector machines and flexible discriminants; Bayesian learning and the EM algorithm; Monte Carlo methods; probabilistic graphical models; unsupervised learning. Prerequisite: A calculus-based statistics course (MATH 628 or MATH 526) and a linear algebra course (MATH 290 or MATH 291). Recommended: EECS 138 or equivalent experience.

**MATH 611. Time Series Analysis**: 3 Credits. N
This course provides an introduction to time series analysis with an emphasis on mathematical understanding and its software implementation. Programming uses Python or Julia. Covered topics include the following. Modeling time series, trend, seasonality and residual process. Autocovariance function, multivariate time series, moving average and autoregression. Stationary processes, linear processes, linear filtering. Confidence intervals for the mean and the autocorrelation, hypothesis tests for a time series model. ARMA models, partial autocorrelation function, parameter estimation methods, forecasting, model selection. Stationary processes in the frequency domain, spectral density, periodogram, smoothing, spectral window. Nonstationary time series, ARIMA models. State-space representation, Kalman recursions. Recurrent neural networks as time allows. Prerequisite: MATH 290 or MATH 291, and MATH 526 or MATH 628.

**MATH 624. Discrete Probability**: 3 Credits. N
Theory and applications of discrete probability models. Elementary combinatorial analysis, random walks, urn models, occupancy problems, and the binomial and Poisson distributions. Prerequisite: MATH 127 or MATH 147, and MATH 290 or MATH 291.

**MATH 627. Probability**: 3 Credits. N
Introduction to mathematical probability; combinatorial analysis; the binomial, Poisson, and normal distributions; limit theorems; laws of large numbers. Prerequisite: MATH 127 or MATH 147 and MATH 290 or MATH 291.

**MATH 628. Mathematical Theory of Statistics**: 3 Credits. N
An introduction to sampling theory and statistical inference; special distributions; and other topics. Prerequisite: MATH 267.

**MATH 630. Actuarial Mathematics**: 3 Credits. N
This course is an introduction to some of the notions and computations in actuarial mathematics. Many computations are associated with compound interest with applications to bank accounts, mortgages, pensions, bonds, and annuities. Life contingencies are considered for annuities and insurance. Some introduction to option pricing is given, particularly the Black-Scholes formula. This course provides the background material needed for some of the initial examinations given by the societies for actuaries, including the Financial Mathematics Exam. Prerequisite: MATH 526 or MATH 627 or a comparable course in probability.

**MATH 646. Complex Variable and Applications**: 3 Credits. N
Analytic functions of a complex variable, infinite series in the complex plane, theory of residues, conformal mapping and applications. Prerequisite: MATH 127 or MATH 147.

**MATH 647. Applied Partial Differential Equations**: 3 Credits. N
Boundary value problems; topics on partial differentiation; theory of characteristic curves; partial differential equations of mathematical physics. Prerequisite: MATH 127 or MATH 147 and MATH 220 or MATH 221 or MATH 320.

**MATH 648. Calculus of Variations and Integral Equations**: 3 Credits. N
Topics in the calculus of variations, integral equations, and applications. Prerequisite: MATH 127 or MATH 147 and MATH 220 or MATH 221 or MATH 320.

**MATH 650. Nonlinear Dynamical Systems**: 3 Credits. N
This course provides an introduction to nonlinear ordinary differential equations and dynamical systems theory with an emphasis on applications. Topics covered include the existence and uniqueness of solutions to initial value problems, as well as the qualitative behavior of solutions, including existence of equilibria, periodic and connecting orbits and their stability. Additional topics include an introduction to bifurcation theory and chaos. Prerequisite: MATH 127 or MATH 147, and MATH 220 or MATH 221 or MATH 320, and MATH 290 or MATH 291.

**MATH 660. Geometry I**: 3 Credits. N
An introduction to modern geometry. Differential geometry of curves and surfaces, the topological classification of closed surfaces, dynamical systems, and knots and their polynomials. Other topics as time permits. Prerequisite: MATH 127 or MATH 147 and MATH 290 or MATH 291.

**MATH 661. Geometry II**: 3 Credits. N
Continuation of Math 660. Prerequisite: MATH 660 or permission of instructor.

**MATH 696. Special Topics**: 1-3 Credits. N
Arranged as needed to present appropriate material to groups of students. May be repeated for additional credit. Prerequisite: Variable.

**MATH 699. Directed Reading**: 1-3 Credits. N
Directed reading on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment.

**MATH 724. Combinatorial Mathematics**: 3 Credits. N
An introduction to enumerative combinatorics. Topics include basic counting principles, induction and recursion, graph theory, partitions and compositions, generating functions, inclusion/exclusion, and Polya-Redfield theory. Prerequisite: MATH 290 or MATH 291 and a MATH course numbered 450 or higher.

**MATH 725. Graph Theory**: 3 Credits.
Graphs; trees; connectivity; Menger's theorem; eulerian and hamiltonian graphs; planarity; coloring of graphs; factorization of graphs; matching theory; alternating chain methods; introduction to matroids with
applications to graph theory. Prerequisite: MATH 290 and a math course numbered 450 or higher.

MATH 727. Probability Theory. 3 Credits.
A mathematical introduction to premeasure-theoretic probability. Topics include probability spaces, conditional probabilities and independent events, random variables and probability distributions, special discrete and continuous distributions with emphasis on parametric families used in applications, the distribution problem for functions of random variables, sequences of independent random variables, laws of large numbers, and the central limit theorem. Prerequisite: MATH 290, or equivalent.

MATH 728. Statistical Theory. 3 Credits.
Theory of point estimation and hypothesis testing with applications. Confidence region methodologies and relations to estimation and testing. Prerequisite: MATH 727 or equivalent.

MATH 750. Stochastic Adaptive Control. 3 Credits.
Stochastic adaptive control methods. Stochastic processes such as Markov chains and Brownian motion, stochastic integral, differential rule, stochastic differential equations, martingales and estimation techniques. Identification and control of discrete and continuous time linear stochastic systems. Specific applications and simulation results of stochastic adaptive control theory. Prerequisite: MATH 627 and some knowledge of control.

MATH 765. Mathematical Analysis I. 3 Credits.
MATH 765 and MATH 766 are theoretical courses on the fundamental concepts of analysis and the methods of proof. These two courses include the concept of a real number; limits, continuity, and uniform convergence; derivatives and integrals of functions of one and of several real variables. Prerequisite: MATH 290, or equivalent.

MATH 766. Mathematical Analysis II. 3 Credits.
A continuation of MATH 765. Prerequisite: MATH 765.

MATH 781. Numerical Analysis I. 3 Credits.
Finite and divided differences. Interpolation, numerical differentiation, and integration. Gaussian quadrature. Numerical integration of ordinary differential equations. Curve fitting. (Same as EECS 781.) Prerequisite: MATH 320 and knowledge of a programming language.

MATH 782. Numerical Analysis II. 3 Credits.

MATH 783. Applied Numerical Methods for Partial Differential Equations. 3 Credits.
Finite difference methods applied to particular initial-value problems (both parabolic and hyperbolic), to illustrate the concepts of convergence and stability and to provide a background for treating more complicated problems arising in engineering and physics. Finite difference methods for elliptic boundary-value problems, with a discussion of convergence and methods for solving the resulting algebraic system. Variational methods for elliptic problems. Prerequisite: MATH 647 or equivalent.

MATH 790. Linear Algebra II. 3 Credits.
A theoretical course on the fundamental concepts and theorems of linear algebra. Topics covered are: vector space, basis, dimension, subspace, norm, inner product, Banach space, Hilbert space, orthonormal basis, positive definite matrix, minimal polynomial, diagonalization and other canonical forms, Cayley-Hamilton, spectral radius, dual space, quotient space. Prerequisite: MATH 590.

MATH 791. Modern Algebra. 3 Credits.
This course includes the following topics: multiplicative properties of the integers and introductions to group theory, ring theory and field theory. Prerequisite: MATH 290, or equivalent.

MATH 796. Special Topics: ______. 1-3 Credits.
Arranged as needed to present appropriate material for groups of students. May be repeated for credit. Prerequisite: Variable.

MATH 799. Directed Readings. 1-3 Credits.
Directed readings on a topic chosen by the student with the advice of an instructor. May be repeated for additional credit. Consent of the department required for enrollment.

MATH 800. Complex Analysis I. 3 Credits.
Cauchy's theorem and contour integration; the argument principle; maximum modulus principle; Schwarz symmetry principle; analytic continuation; monodromy theorem; applications to the gamma function and Riemann's zeta function; entire and meromorphic functions; conformal mapping; Riemann mapping theorem; univalent functions. Prerequisite: MATH 766 or concurrently with MATH 766.

MATH 802. Set Theory. 3 Credits.
Axiomatic set theory; transfinite induction; regularity and choice; ordinal and cardinal arithmetic; miscellaneous additional topics (e.g., extra axioms such as GCH or MA; infinite combinatorics; large cardinals).
Prerequisite: MATH 765 or MATH 791, or concurrent enrollment in MATH 765 or MATH 791, or equivalent evidence of mathematical maturity.

MATH 810. Real Analysis and Measure Theory I. 3 Credits.

MATH 811. Real Analysis and Measure Theory II. 3 Credits.
Continuation of MATH 810. Prerequisite: MATH 810.

MATH 820. Introduction to Topology. 3 Credits.
General topology. Set theory; topological spaces; connected sets; continuous functions; generalized convergence; product and quotient spaces; embedding in cubes; metric spaces and metrization; compact spaces; function spaces. Prerequisite: MATH 765.

MATH 821. Algebraic Topology I. 3 Credits.
The fundamental group and covering spaces (including classification); compact surfaces; homology theory, computations (including homotopy invariance) and applications (including Brouwer fixed point theorem); introduction to cohomology theory. Prerequisite: MATH 790 and MATH 791 and MATH 820, or permission of instructor.

MATH 824. Algebraic Combinatorics. 3 Credits.
An introduction to the fundamental structures and methods of modern algebraic combinatorics. Topics include partially ordered sets and lattices, matroids, simplicial complexes, polytopes, hyperplane arrangements, partitions and tableaux, and symmetric functions. Prerequisite: MATH 724 and MATH 791, or permission of the instructor.

MATH 830. Abstract Algebra. 3 Credits.
This is an introductory course covering the basics of module theory over commutative rings. Topics include quotient modules and module homomorphisms; direct sums and free modules; tensor products of modules and exact sequences; projective, injective, and flat modules; direct and inverse limits of modules; the theory of modules over principal ideal domains, and normal forms; graded rings and modules. Prerequisite: MATH 790 and MATH 791.

MATH 831. Abstract Algebra II. 3 Credits.
This course covers foundational topics in commutative algebra not covered in MATH 830. Potential topics include integral extensions, lying over and going-up; normal rings and going-down; Noether normalization, and dimension theory for finitely generated algebras over a field; chain conditions, and Noetherian and Artinian rings and modules; local rings and Nakayama’s Lemma; rings of formal power series; completion and flatness; primary decomposition and associated primes; affine algebraic varieties and Hilbert’s Nullstellensatz; the prime spectrum of a ring and the Zariski topology. Prerequisite: MATH 830.

MATH 840. Differentiable Manifolds. 3 Credits.
Multilinear algebra of finite dimensional vector spaces over fields; differentiable structures and tangent and tensor bundles; differentiable mappings and differentials; exterior differential forms; curves and surfaces as differentiable manifolds; affine connections and covariant differentiation; Riemannian manifolds. Prerequisite: MATH 765 and MATH 790.

MATH 850. Differential Equations and Dynamical Systems. 3 Credits.
Discrete and differentiable dynamical systems with an emphasis on the qualitative theory. Topics to be covered include review of linear systems, existence and uniqueness theorems, flows and discrete dynamical systems, linearization (Hartman-Grobman theorem), stable and unstable manifolds, Poincare sections, normal forms, Hamiltonian systems, and an introduction to bifurcation theory and chaos. Prerequisite: MATH 320 and MATH 766, or permission of instructor.

MATH 851. Topics in Dynamical Systems: _____ . 3 Credits.
Topics to be covered include complex dynamical systems, perturbation theory, nonlinear analysis of time series, chaotic dynamical systems, and numerical methods as dynamical systems. Topics may vary. Course may be repeated if topic varies. Prerequisite: MATH 850 or permission of instructor.

MATH 865. Stochastic Processes I. 3 Credits.
Markov chains; Markov processes; diffusion processes; stationary processes. Emphasis is placed on applications: random walks; branching theory; Brownian motion; Poisson process; birth and death processes. Prerequisite: MATH 627 and MATH 765.

MATH 866. Stochastic Processes II. 3 Credits.
This is a second course in stochastic processes, focused on stochastic calculus with respect to a large class of semi-martingales and its applications to topics selected from classical analysis (linear PDE), finance, engineering, and statistics. The course will start with basic properties of martingales and random walks and then develop into the core program on Itô’s stochastic calculus and stochastic differential equations. These techniques provide useful and important tools and models in many pure and applied areas. Prerequisite: MATH 727 and MATH 865.

MATH 874. Statistical Decision Theory. 3 Credits.
Game theory, admissible decision functions and complete class theorems; Bayes and minimax solutions; sufficiency; invariance; multiple decision problems; sequential decision problems. Prerequisite: MATH 628 and MATH 766.

MATH 881. Topics in Advanced Numerical Linear Algebra: _____ . 3 Credits.
Advanced topics in numerical linear algebra including pseudo-spectra, rounding error analysis and perturbation theory, numerical methods for problems with special structure, and numerical methods for large scale problems. Topics may vary. Course may be repeated if topic varies. Prerequisite: MATH 781, MATH 782, MATH 790, or permission of the instructor.

MATH 882. Topics in Advanced Numerical Differential Equations: _____ . 3 Credits.
Advanced course in the numerical solution of ordinary and partial differential equations including modern numerical methods and the associated analysis. Topics may vary. Course may be repeated if topic varies. Prerequisite: MATH 781, MATH 782, MATH 783, or permission of the instructor.

MATH 890. Fourier Analysis. 3 Credits.
Introduction to modern techniques in Fourier Analysis in the Euclidean setting with emphasis in the study of functions spaces and operators acting on them. Topics may vary from year to year and include, among others, distribution theory, Sobolev spaces, estimates for fractional integrals and fractional derivatives, wavelets, and some elements of Calderón-Zygmund theory. Applications in other areas of mathematics, in particular partial differential equations and signal analysis, will be presented based on the instructor’s and the students’ interests. Prerequisite: MATH 810 and MATH 800, or instructor’s permission.

MATH 896. Master’s Research Component. 1-6 Credits.

MATH 899. Master’s Thesis. 1-10 Credits.

MATH 910. Algebraic Curves. 3 Credits.
Algebraic sets, varieties, plane curves, morphisms and rational maps, resolution of singularities, Reimann-Roch theorem. Prerequisite: MATH 790 and MATH 791.

MATH 920. Lie Groups and Lie Algebras. 3 Credits.
General properties of Lie groups, closed subgroups, one-parameter subgroups, homogeneous spaces, Lie bracket, Lie algebras, exponential map, structure of semi-simple Lie algebras, invariant forms, Maurer-Cartan equation, covering groups, spinor groups. Prerequisite: MATH 766 and MATH 790 and MATH 791.

MATH 940. Advanced Probability. 3 Credits.
Probability measures, random variables, distribution functions, characteristic functions, types of convergence, central limit theorem. Laws of large numbers and other limit theorems. Conditional probability, Markov processes, and other topics in the theory of stochastic processes. Prerequisite: MATH 810.

MATH 950. Partial Differential Equations. 3 Credits.
Introduction; equations of mathematical physics; classification of linear equations and systems. Existence and uniqueness problems for elliptic, parabolic, and hyperbolic equations. Eigenvalue problems for elliptic operators; numerical methods. Prerequisite: MATH 766.

MATH 951. Topics in Advanced Partial Differential Equations II: _____ . 3 Credits.
The course uses functional analytic techniques to further develop various aspects of the modern framework of linear and nonlinear partial differential equations. Sobolev spaces, distributions and operator theory are used in the treatment of linear second-order elliptic, parabolic, and hyperbolic equations. In particular we discuss the kind of potential, diffusion and wave equations that arise in inhomogeneous media, with an emphasis on the solvability of equations with different initial/boundary conditions. Then, we will survey the theory of semigroup of operators, which is one of the main tools in the study of the long-time behavior of solutions to nonlinear PDE. The theories and applications encountered in this course will create a strong foundation for studying nonlinear equations and nonlinear science in general. Topics may vary. Course may be repeated if topic varies. Prerequisite: MATH 950 or permission of the instructor.

MATH 960. Functional Analysis. 3 Credits.

MATH 961. Topics in Functional Analysis: ______. 3 Credits.
Continuation of MATH 960. Topics may vary. Course may be repeated if topic varies.

MATH 990. Seminar: ______. 1-10 Credits.

MATH 993. Readings in Mathematics. 1-10 Credits.

MATH 996. Special Topics: ______. 3 Credits.
Advanced courses on special topics; given as need arises. Prerequisite: Variable.

MATH 999. Doctoral Dissertation. 1-10 Credits.

Bachelor of Arts in Mathematics

Why study mathematics?

Because mathematics is a framework upon which humanity builds an understanding of the world.

The degree of Bachelor of Arts in Mathematics offers in depth training in mathematics. A B.A. degree in mathematics at KU allows you to focus on the mathematics that is most relevant and interesting to you. A total of 120 hours is required to graduate with a B.A. in the College of Liberal Arts and Sciences. The requirements for all students earning a B.A. in the College include the KU Core Curriculum (http://kucore.ku.edu), a laboratory or field experience, and proficiency in a language other than English.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Mathematics Programs

Separate programs lead to the B.A. in mathematics and the B.S. in mathematics. The B.A. has fewer mathematics course requirements and more general education requirements. The B.S. requires more mathematics courses, an applied mathematics concentration, and fewer general education courses. Students wishing to attend graduate school in mathematics or to pursue a career that makes substantial use of mathematics (as an actuary, for example) should get a B.S. in mathematics. Many students majoring in mathematics are interested in a liberal arts degree; such students may want to consider the B.A. in mathematics. Students who wish to teach mathematics in high school should pursue a B.A. or B.S. in mathematics while participating in the UKanTeach program (http://ukanteach.ku.edu/).

Requirements for the B.A. Major

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td></td>
<td><strong>Mathematics Core Knowledge and Skills</strong></td>
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<tr>
<td>Majors must complete courses as specified in each of the following areas:</td>
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<tr>
<td>Calculus I. Satisfied by one of the following:</td>
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<tr>
<td>MATH 125</td>
<td>Calculus I</td>
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<td>or MATH 145</td>
<td>Calculus I, Honors</td>
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<td>Calculus II. Satisfied by one of the following:</td>
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<tr>
<td>MATH 126</td>
<td>Calculus II</td>
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<td>or MATH 146</td>
<td>Calculus II, Honors</td>
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<td>Calculus III. Satisfied by one of the following:</td>
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<tr>
<td>MATH 127</td>
<td>Calculus III</td>
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<td>or MATH 147</td>
<td>Calculus III, Honors</td>
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<td>Elementary Linear Algebra. Satisfied by one of the following:</td>
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<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
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<tr>
<td>or MATH 291</td>
<td>Elementary Linear Algebra, Honors</td>
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<td>Analysis. Satisfied by one of the following:</td>
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<tr>
<td>MATH 500</td>
<td>Intermediate Analysis</td>
<td>3</td>
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<tr>
<td>or MATH 765</td>
<td>Mathematical Analysis I</td>
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<td>Linear Algebra. Satisfied by one of the following:</td>
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<tr>
<td>MATH 590</td>
<td>Linear Algebra</td>
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<tr>
<td>or MATH 790</td>
<td>Linear Algebra II</td>
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<td>Math Sequence Requirement</td>
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<td>Majors must choose one of the following 2-course sequences.</td>
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<td>Courses selected above may contribute to the minimum of 6 hours.</td>
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Variations and Integral Equations. Satisfied by:

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<tr>
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<tbody>
<tr>
<td>MATH 648</td>
<td>Calculus of Variations and Integral Equations</td>
</tr>
<tr>
<td>&amp; MATH 650</td>
<td>and Nonlinear Dynamical Systems</td>
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Geometry. Satisfied by:

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<tbody>
<tr>
<td>MATH 660</td>
<td>Geometry I</td>
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<tr>
<td>&amp; MATH 661</td>
<td>and Geometry II</td>
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Probability Theory. Satisfied by:

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<tbody>
<tr>
<td>MATH 727</td>
<td>Probability Theory</td>
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<tr>
<td>&amp; MATH 728</td>
<td>and Statistical Theory</td>
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Analysis. Satisfied by:

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<tr>
<td>MATH 765</td>
<td>Mathematical Analysis I</td>
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<tr>
<td>&amp; MATH 766</td>
<td>and Mathematical Analysis II</td>
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Numerical Analysis. Satisfied by:

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<th>Description</th>
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<tbody>
<tr>
<td>MATH 781</td>
<td>Numerical Analysis I</td>
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<tr>
<td>&amp; MATH 782</td>
<td>and Numerical Analysis II</td>
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Linear & Modern Algebra. Satisfied by:

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<tbody>
<tr>
<td>MATH 790</td>
<td>Linear Algebra II</td>
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<tr>
<td>&amp; MATH 791</td>
<td>and Modern Algebra</td>
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Analysis & Complex Variables. Satisfied by:

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<th>Course</th>
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<tbody>
<tr>
<td>MATH 500</td>
<td>Intermediate Analysis</td>
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<tr>
<td>&amp; MATH 646</td>
<td>and Complex Variable and Applications</td>
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Statistics & Regression Analysis. Satisfied by:

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<tbody>
<tr>
<td>MATH 526</td>
<td>Mathematical Statistics I</td>
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<tr>
<td>&amp; MATH 605</td>
<td>and Applied Regression Analysis</td>
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Statistics & Time Series Analysis. Satisfied by:

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</tr>
</thead>
<tbody>
<tr>
<td>MATH 526</td>
<td>Mathematical Statistics I</td>
</tr>
<tr>
<td>&amp; MATH 611</td>
<td>and Time Series Analysis</td>
</tr>
</tbody>
</table>

Regression Analysis & Statistical Data Science. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 605</td>
<td>Regression Analysis</td>
</tr>
<tr>
<td>&amp; MATH 608</td>
<td>and Statistical Data Science</td>
</tr>
</tbody>
</table>

Statistical Data Science & Time Series Analysis. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 608</td>
<td>Statistical Data Science</td>
</tr>
<tr>
<td>&amp; MATH 611</td>
<td>and Time Series Analysis</td>
</tr>
</tbody>
</table>

Number Theory & Introductory Modern Algebra. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 540</td>
<td>Elementary Number Theory</td>
</tr>
<tr>
<td>&amp; MATH 558</td>
<td>and Introductory Modern Algebra</td>
</tr>
</tbody>
</table>

Modern Algebra & Coding Theory. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 558</td>
<td>Introductory Modern Algebra</td>
</tr>
<tr>
<td>&amp; MATH 601</td>
<td>and Algebraic Topics in Computing: _____</td>
</tr>
</tbody>
</table>

Numerical Methods & Linear Algebra. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 581</td>
<td>Numerical Methods</td>
</tr>
<tr>
<td>&amp; MATH 591</td>
<td>and Applied Numerical Linear Algebra</td>
</tr>
</tbody>
</table>

Linear Algebra. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MATH 590</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>&amp; MATH 790</td>
<td>and Linear Algebra II</td>
</tr>
</tbody>
</table>

Complex Variables & Partial Differential Equations. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MATH 646</td>
<td>Complex Variable and Applications</td>
</tr>
<tr>
<td>&amp; MATH 647</td>
<td>and Applied Partial Differential Equations</td>
</tr>
</tbody>
</table>

Partial Differential Equations & Calculus of Variations. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 647</td>
<td>Applied Partial Differential Equations</td>
</tr>
<tr>
<td>&amp; MATH 648</td>
<td>and Calculus of Variations and Integral Equations</td>
</tr>
</tbody>
</table>

Combinatorics & Graph Theory. Satisfied by:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MATH 724</td>
<td>Combinatorial Mathematics</td>
</tr>
<tr>
<td>&amp; MATH 725</td>
<td>and Graph Theory</td>
</tr>
</tbody>
</table>

Math Breadth

Majors must complete a minimum of 5 mathematics courses numbered 300 and above (each at least 3 credits), excluding MATH 365, MATH 409 and MATH 410, but including the upper division courses used to satisfy the core and sequence requirements. The goals are to gain exposure to a variety of concepts and methods in mathematics, develop abstract and critical thinking, and acquire knowledge to prepare for a career using mathematics, further study of mathematics, or interdisciplinary work involving mathematics.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 29 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BA in Mathematics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 prior to freshman year, fall semester.

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>(Goal 2.1 Written Communication/BA Writing I)¹</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>MATH 125 or 145 (Goal 1.2 Quantitative Literacy)</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

**Total:** 15 15
### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 127 or 147 (Major Requirement)</td>
<td>4</td>
<td>MATH 590 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290 or 291 (Major Requirement)</td>
<td>2</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 Goal 3 Social Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3 Goal 4.2 Global Awareness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

| Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3     |

| Total Hours | 16 | 15 |

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 500 (Major Requirement)</td>
<td>3</td>
<td>Math Sequence Course 1 of 2</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Humanities</td>
<td>3 Mathematics Breadth</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Hours | 15 | 15 |

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Sequence Course 2 of 2 (Goal 6 Integration &amp; Creativity)</td>
<td>3</td>
<td>Mathematics Breadth</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Breadth</td>
<td>3 Mathematics Breadth</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Breadth</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Second Area of Study/ Elective/Degree/Junior-Senior Hours | 2     |

| Total Hours | 15 | 14 |

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1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Majors must complete a 2-course sequence (http://catalog.ku.edu/liberal-arts-sciences/math/ba/#requirementstext). Courses selected to fulfill other major requirements, may also contribute to the minimum of 6 hours for the sequence. Additional options to satisfy Goal 6 includes MATH 699 or an approved core goal 6 elective.

3. Completion of four upper division mathematics courses that form two sequences in mathematics and statistics can fulfill KU Core Goal 6.

4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Departmental Honors

For undergraduate departmental honors, the student must satisfy the College requirements for honors, attain a grade-point average of 3.5 in all mathematics courses numbered 500 and above. The student must also complete two out of the following four sequences: MATH 727 and MATH 728; MATH 765 and MATH 766; MATH 781 and MATH 782; and MATH 790 and MATH 791, with a grade no lower than B- in each of these courses. The student must make a satisfactory oral presentation to the department, preferably on a topic related to his or her mathematics course work. Preparation should include enrollment in MATH 699 Directed Reading (for 1 or more credit hours) with a faculty mentor.

### Bachelor of Science in Mathematics

#### Why study mathematics?

Because mathematics is a framework upon which humanity builds an understanding of the world.

The degree of Bachelor of Science in Mathematics offers more extensive training in mathematics and its applications than is possible in the B.A. curriculum. The requirements for the B.S. in Mathematics allow a great deal of flexibility in choice of courses and concentrations. Students should plan their programs carefully to meet individual interests and goals, and carefully check the prerequisites for all courses in their programs.

Many students have strong interests in particular areas of mathematics. The Department has created three informal tracks within the B.S. program: a statistics track, an applied mathematics track, and a track in pure mathematics. These tracks are advisory only. Students without strong interests in one of these areas are encouraged to put together a broad program within the B.S. Degree.
Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Mathematics Programs

Separate programs lead to the B.A. in mathematics and the B.S. in mathematics. The B.A. has fewer mathematics course requirements and more general education requirements. The B.S. requires more mathematics courses, an applied mathematics concentration, and fewer general education courses. Students wishing to attend graduate school in mathematics or to pursue a career that makes substantial use of mathematics (as an actuary, for example) should get a B.S. in mathematics. Many students majoring in mathematics are interested in a liberal arts degree; such students may want to consider the B.A. in mathematics. Students who wish to teach mathematics in high school should pursue a B.A. or B.S. in mathematics while participating in the UKanTeach program (http://ukanteach.ku.edu/).

Requirements for the B.S. Degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 145</td>
<td>Calculus I, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 146</td>
<td>Calculus II, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 147</td>
<td>Calculus III, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 291</td>
<td>Elementary Linear Algebra, Honors</td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td></td>
</tr>
<tr>
<td>MATH 221</td>
<td>Applied Differential Equations, Honors</td>
<td></td>
</tr>
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Core Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 590</td>
<td>Linear Algebra</td>
<td>3</td>
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### List A Sequences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 627</td>
<td>Probability</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 628</td>
<td>and Mathematical Theory of Statistics</td>
<td></td>
</tr>
<tr>
<td>MATH 660</td>
<td>Geometry I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 661</td>
<td>and Geometry II</td>
<td></td>
</tr>
<tr>
<td>MATH 727</td>
<td>Probability Theory</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 728</td>
<td>and Statistical Theory</td>
<td></td>
</tr>
<tr>
<td>MATH 765</td>
<td>Mathematical Analysis I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 766</td>
<td>and Mathematical Analysis II</td>
<td></td>
</tr>
<tr>
<td>MATH 781</td>
<td>Numerical Analysis I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 782</td>
<td>and Numerical Analysis II</td>
<td></td>
</tr>
<tr>
<td>MATH 790</td>
<td>Linear Algebra II</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 791</td>
<td>and Modern Algebra</td>
<td></td>
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</tbody>
</table>

### List B Sequences

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>MATH 500</td>
<td>Intermediate Analysis</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 546</td>
<td>and Complex Variable and Applications</td>
<td></td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 560</td>
<td>and Applied Regression Analysis</td>
<td></td>
</tr>
<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 611</td>
<td>and Time Series Analysis</td>
<td></td>
</tr>
<tr>
<td>MATH 540</td>
<td>Elementary Number Theory</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 558</td>
<td>and Introductory Modern Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 558</td>
<td>Introductory Modern Algebra</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 601</td>
<td>and Algebraic Topics in Computing: ______</td>
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<tr>
<td>MATH 540</td>
<td>Elementary Number Theory</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 791</td>
<td>and Modern Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 581</td>
<td>Numerical Methods</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 591</td>
<td>and Applied Numerical Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 581</td>
<td>Numerical Methods</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 582</td>
<td>and Computational Data Science</td>
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</tr>
<tr>
<td>MATH 590</td>
<td>Linear Algebra</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 591</td>
<td>and Applied Numerical Linear Algebra</td>
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</tr>
<tr>
<td>MATH 590</td>
<td>Linear Algebra</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 790</td>
<td>and Linear Algebra II</td>
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</tr>
<tr>
<td>MATH 601</td>
<td>Algebraic Topics in Computing: ______</td>
<td>6</td>
</tr>
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<td>&amp; MATH 791</td>
<td>and Modern Algebra</td>
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</tr>
<tr>
<td>MATH 605</td>
<td>Applied Regression Analysis</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 608</td>
<td>and Statistical Data Science</td>
<td></td>
</tr>
<tr>
<td>MATH 605</td>
<td>Applied Regression Analysis</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 611</td>
<td>and Time Series Analysis</td>
<td></td>
</tr>
<tr>
<td>MATH 646</td>
<td>Complex Variable and Applications</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 647</td>
<td>and Applied Partial Differential Equations</td>
<td></td>
</tr>
<tr>
<td>MATH 646</td>
<td>Complex Variable and Applications</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 765</td>
<td>and Mathematical Analysis I</td>
<td></td>
</tr>
<tr>
<td>MATH 647</td>
<td>Applied Partial Differential Equations</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 648</td>
<td>and Calculus of Variations and Integral Equations</td>
<td></td>
</tr>
<tr>
<td>MATH 647</td>
<td>Applied Partial Differential Equations</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 650</td>
<td>and Nonlinear Dynamical Systems</td>
<td></td>
</tr>
<tr>
<td>MATH 648</td>
<td>Calculus of Variations and Integral Equations</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 650</td>
<td>and Nonlinear Dynamical Systems</td>
<td></td>
</tr>
<tr>
<td>MATH 724</td>
<td>Combinatorial Mathematics</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 725</td>
<td>and Graph Theory</td>
<td></td>
</tr>
<tr>
<td>MATH 582</td>
<td>Computational Data Science</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 608</td>
<td>and Statistical Data Science</td>
<td></td>
</tr>
<tr>
<td>MATH 582</td>
<td>Computational Data Science</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 591</td>
<td>and Applied Numerical Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 608</td>
<td>Statistical Data Science</td>
<td>6</td>
</tr>
<tr>
<td>&amp; MATH 611</td>
<td>and Time Series Analysis</td>
<td></td>
</tr>
</tbody>
</table>

### List C Applied Concentration Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 605</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 611</td>
<td>Time Series Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 624</td>
<td>Discrete Probability</td>
<td>3</td>
</tr>
<tr>
<td>ECON 817</td>
<td>Econometrics I</td>
<td>3</td>
</tr>
<tr>
<td>ECON 818</td>
<td>Econometrics II</td>
<td>3</td>
</tr>
<tr>
<td>ECON 526</td>
<td>Introduction to Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 590</td>
<td>Game Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 620</td>
<td>Elements of Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 669</td>
<td>The Economics of Financial Markets</td>
<td>3</td>
</tr>
<tr>
<td>ECON 700</td>
<td>Survey of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 701</td>
<td>Survey of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 715</td>
<td>Elementary Econometrics</td>
<td>3</td>
</tr>
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<td>ECON 716</td>
<td>Econometric Forecasting</td>
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<tr>
<td>ECON 790</td>
<td>Game Theory and Applications</td>
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<tr>
<td>FIN 310</td>
<td>Finance</td>
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<td>FIN 311</td>
<td>Finance, Honors</td>
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<td>FIN 410</td>
<td>Investment Theory and Applications</td>
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<tr>
<td>FIN 415</td>
<td>Corporate Finance</td>
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<tr>
<td>FIN 420</td>
<td>International Finance</td>
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<td>FIN 425</td>
<td>Futures and Options</td>
<td>3</td>
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<tr>
<td>MATH 630</td>
<td>Actuarial Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SCM 310</td>
<td>Management Science and Operations Management</td>
<td>3</td>
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<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
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<tr>
<td>BIOL 412</td>
<td>Evolutionary Biology</td>
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<tr>
<td>BINF 701</td>
<td>Computational Biology I</td>
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<tr>
<td>BINF 702</td>
<td>Computational Biology II</td>
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<tr>
<td>BIOL 743</td>
<td>Population Genetics</td>
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<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
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<tr>
<td>PHSX 511</td>
<td>Introductory Quantum Mechanics</td>
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<tr>
<td>PHSX 518</td>
<td>Mathematical Physics</td>
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<tr>
<td>PHSX 521</td>
<td>Mechanics I</td>
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<tr>
<td>PHSX 531</td>
<td>Electricity and Magnetism</td>
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<tr>
<td>ASTR 591</td>
<td>Stellar Astronomy</td>
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<tr>
<td>ASTR 592</td>
<td>Galactic and Extragalactic Astronomy</td>
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<tr>
<td>PHSX 615</td>
<td>Numerical and Computational Methods in Physics</td>
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<tr>
<td>or EPHX 615</td>
<td>Numerical and Computational Methods in Physics</td>
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<tr>
<td>PHSX 621</td>
<td>Mechanics II</td>
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</tr>
<tr>
<td>PHSX 631</td>
<td>Electromagnetic Theory</td>
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### Bachelor of Science in Mathematics

<table>
<thead>
<tr>
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<tr>
<td>PHSX 671</td>
<td>Thermal Physics</td>
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<td>PHSX 691</td>
<td>Astrophysics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 711</td>
<td>Quantum Mechanics I</td>
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<tr>
<td>PHSX 741</td>
<td>Nuclear Physics I</td>
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<tr>
<td><strong>Chemistry</strong></td>
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<tr>
<td>CHEM 400</td>
<td>Analytical Chemistry</td>
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<tr>
<td>CHEM 510</td>
<td>Biological Physical Chemistry</td>
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<tr>
<td>or CHEM 520</td>
<td>Biological Physical Chemistry</td>
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<tr>
<td>CHEM 530</td>
<td>Physical Chemistry I</td>
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<tr>
<td>CHEM 535</td>
<td>Physical Chemistry II</td>
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<tr>
<td><strong>Atmospheric Science</strong></td>
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<tr>
<td>ATMO 630</td>
<td>Synoptic Meteorology</td>
<td>3</td>
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<tr>
<td>ATMO 640</td>
<td>Dynamic Meteorology</td>
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<tr>
<td>ATMO 642</td>
<td>Remote Sensing</td>
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<tr>
<td>ATMO 650</td>
<td>Advanced Synoptic Meteorology</td>
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</tr>
<tr>
<td>ATMO 660</td>
<td>Advanced Dynamic Meteorology</td>
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<tr>
<td>ATMO 680</td>
<td>Physical Meteorology</td>
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<tr>
<td><strong>Aerospace Engineering</strong></td>
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<tr>
<td>AE 345</td>
<td>Fluid Mechanics</td>
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<tr>
<td>AE 445</td>
<td>Aircraft Aerodynamics and Performance</td>
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<tr>
<td>AE 507</td>
<td>Aerospace Structures I</td>
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<tr>
<td>AE 545</td>
<td>Fundamentals of Aerodynamics</td>
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<td>AE 550</td>
<td>Dynamics of Flight I</td>
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<tr>
<td>AE 551</td>
<td>Dynamics of Flight II</td>
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<tr>
<td>AE 552</td>
<td>Honors Dynamics of Flight II</td>
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<tr>
<td><strong>Chemical and Petroleum Engineering</strong></td>
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<tr>
<td>C&amp;PE 211</td>
<td>Material and Energy Balances</td>
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<tr>
<td>C&amp;PE 511</td>
<td>Momentum Transfer</td>
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<tr>
<td>C&amp;PE 521</td>
<td>Heat Transfer</td>
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<tr>
<td>C&amp;PE 778</td>
<td>Applied Optimization Methods</td>
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<td><strong>Civil Engineering</strong></td>
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<tr>
<td>CE 201</td>
<td>Statics</td>
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<td>CE 330</td>
<td>Fluid Mechanics</td>
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<td>CE 461</td>
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<td>CE 704</td>
<td>Dynamics and Vibrations</td>
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<tr>
<td>CE 461</td>
<td>Structural Analysis</td>
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</tr>
<tr>
<td>CE 704</td>
<td>Dynamics and Vibrations</td>
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<tr>
<td><strong>Electrical Engineering and Computer Science</strong></td>
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<tr>
<td>EECS 212</td>
<td>Circuits II</td>
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<td>EECS 220</td>
<td>Electromagnetics I</td>
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<tr>
<td>EECS 360</td>
<td>Signal and System Analysis</td>
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<tr>
<td>EECS 420</td>
<td>Electromagnetics II</td>
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<tr>
<td>EECS 444</td>
<td>Control Systems</td>
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<tr>
<td>EECS 510</td>
<td>Introduction to the Theory of Computing</td>
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<tr>
<td>EECS 560</td>
<td>Data Structures</td>
<td>4</td>
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<tr>
<td>EECS 562</td>
<td>Introduction to Communication Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECS 638</td>
<td>Fundamentals of Expert Systems</td>
<td>3</td>
</tr>
<tr>
<td>EECS 644</td>
<td>Introduction to Digital Signal Processing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 649</td>
<td>Introduction to Artificial Intelligence</td>
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</tr>
<tr>
<td>EECS 660</td>
<td>Fundamentals of Computer Algorithms</td>
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<tr>
<td>EECS 662</td>
<td>Programming Languages</td>
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<td>EECS 672</td>
<td>Introduction to Computer Graphics</td>
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<td>EECS 718</td>
<td>Graph Algorithms</td>
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<tr>
<td>EECS 730</td>
<td>Introduction to Bioinformatics</td>
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<tr>
<td>EECS 744</td>
<td>Communications and Radar Digital Signal Processing</td>
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### Mechanical Engineering

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hours</th>
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<tr>
<td>ME 211</td>
<td>Statics and Introduction to Mechanics</td>
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<tr>
<td>ME 311</td>
<td>Mechanics of Materials</td>
<td>3</td>
</tr>
<tr>
<td>ME 320</td>
<td>Dynamics</td>
<td>3</td>
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<tr>
<td>ME 508</td>
<td>Numerical Analysis of Mechanical Engineering Problems</td>
<td>3</td>
</tr>
<tr>
<td>ME 510</td>
<td>Fluid Mechanics</td>
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</tr>
<tr>
<td>ME 612</td>
<td>Heat Transfer</td>
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<td>ME 682</td>
<td>System Dynamics and Control Systems</td>
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### Curriculum & Instruction

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<tbody>
<tr>
<td>C&amp;T 360</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
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<tr>
<td>C&amp;T 366</td>
<td>Classroom Interactions in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>C&amp;T 460</td>
<td>Project Based Instruction in Mathematics and Science</td>
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### Philosophy

<table>
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<tr>
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<tr>
<td>PHIL 610</td>
<td>Metalogic</td>
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<tr>
<td>PHIL 611</td>
<td>Topics in Symbolic Logic: _____</td>
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<tr>
<td>PHIL 630</td>
<td>Philosophy of Mathematics</td>
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### Notes:

A student using at least 2 statistics courses for the applied concentration must complete MATH 627 and MATH 628 (or MATH 727 and MATH 728) as a List A sequence. (MATH 627, MATH 628, MATH 727, and MATH 728 do not count for the applied concentration.) A student using at least 2 curriculum & instruction courses for the applied concentration must complete PHSX 211 as one of the natural science courses and must complete at least 1 of the geometry courses MATH 559, MATH 660, or MATH 661.

Courses used to satisfy the core requirements can also be used to complete List A and List B sequences. However, no course can be used for 2 List A or B sequences, and courses used for the Applied Concentration requirement cannot also be counted toward the 24 credit hours of advanced mathematics courses for the B.S. degree.

Some courses satisfying the sequence requirements are taught infrequently. More advanced courses can be substituted for lower level courses in many cases. Consult the mathematics department for expected course offerings and substitutions.

Below is a sample 4-year plan for students pursuing the BS in Mathematics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 104 prior to the freshman year, fall semester.

### Freshman

#### Fall

- **Goal 1.1 Critical Thinking**
  - ENGL 102 (Goal 2.1 Written Communication, BS Writing 2) | 3 Hours

#### Spring

- **Goal 3 Natural Science**
  - 3 Hours

- **Goal 2.2 Oral Communication**
  - 3 Hours
| BA Laboratory/Field Experience (LFE) | 1 EECS 138, 168, or 169 (BS Requirement) | 3 | Senior Hours | 1 EECS 138, 168, or 169 (BS Requirement) | 3 |
| ENGL 101 (Goal 2.1 Written Communication, BS Writing 1) | 3 MATH 126 (Major Requirement) | 4 | Sophomore | 4 Second Area of Study/Elective/Degree/Junior-Senior Hours | 6 |
| MATH 125 (Goal 1.2 Quantitative Literacy, Major Requirement) | 4 Second Area of Study/Elective/Degree/Junior-Senior Hours | 6 |
|  |  |  |  |  |  |
| Senior Hours | 15 | 15 |

**Total Hours 120**

1. Students are required to select one 2-course sequence from List A and a second 2-course sequence from either List A or List B. The second course sequence completes the core goal 6 requirement. Refer to Degree Requirements tab for lists of courses and the department's website for course frequency: [https://mathematics.ku.edu/frequency-courses](https://mathematics.ku.edu/frequency-courses). Completion of four upper division mathematics courses that form two sequences in mathematics and statistics can fulfill KU Core Goal 6.

2. Select up to 2 additional 3-credit-hour courses to complete a total of 24 credit hours of mathematics courses numbered MATH 450 and above if needed. Students are required to complete a total of 24 credit hours of mathematics courses numbered MATH 450 and above. 12 of the 24 hours are completed through the Math Core Requirements: MATH 590, MATH 526 (or MATH 628 or MATH 728), MATH 500 and MATH 558.

3. The Applied Concentration consists of 3 courses, totaling at least 8 credit hours, that make significant use of mathematics. At least 2 courses must be in the same area. Courses from List C have been approved for this requirement. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

4. Most courses that count for the Applied Concentration have one or more pre-requisites that may or may not apply to other degree requirements.

5. Students using MATH 627-MATH 628 as their List A sequence need not take MATH 526; MATH 526 is required for those not taking MATH 628 or MATH 728.

6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

**Please note:**

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Departmental Honors**

For undergraduate departmental honors, the student must satisfy the College requirements for honors. attain a grade-point average of 3.5 in all mathematics courses numbered 500 and above. The student must also complete two out of the following four sequences: MATH 727 and MATH 728; MATH 765 and MATH 766; MATH 781 and MATH 782; and MATH 790 and MATH 791, with a grade no lower than B- in each of these courses. The student must make a satisfactory oral presentation to the department, preferably on a topic related to his or her mathematics
course work. Preparation should include enrollment in MATH 699 Directed Reading (for 1 or more credit hours) with a faculty mentor.

Students interested in graduating with departmental honors are strongly urged to inform the Associate Chair or the Chair of the departmental Honors Committee of their intention as soon as possible. Ideally, this should happen by the end of the sophomore year to ensure sufficient time to complete all the requirements.

Minor in Mathematics

Why study mathematics?

Because mathematics is a framework upon which humanity builds an understanding of the world.

Students getting a bachelor's degree (B.S., B.A., or B.G.S.) in the College of Liberal Arts and Sciences, with a major in another field, may earn a minor in mathematics. Students getting degrees in most of the other Schools of the university (including the School of Business and the School of Engineering) may also earn the mathematics minor. The requirements are the same for all students.

The minimum course requirements for the minor are completion of 18 credit hours of mathematics department courses, including MATH 127 or MATH 147, and at least 12 credit hours of courses numbered 300 and above, excluding MATH 365. The grade point average for all mathematics courses must be at least 2.0. MATH 290, while not required for the minor, is a prerequisite to most upper division mathematics courses.

A math minor allows you to focus on the mathematics that is most relevant and interesting to you. For more information or guidance on courses, make an appointment with a math department advisor.

Requirements for the Minor

The student must earn a grade point average of 2.0 in all mathematics courses attempted.

- Lower-Division Preparation: Calculus including MATH 127 or 147.
- Upper-Division Courses: 12 credit hours of courses numbered 300 and above (excluding MATH 365).

Note: Most upper-division mathematics courses have MATH 290 as a prerequisite.

Minimum Minor Requirements  18 hours

Undergraduate Certificate in Actuarial Science

Actuarial Science is the study of risk. Actuaries are employed by insurance companies, financial institutions and other businesses to plan for financial stability and manage risk. This 12 credit undergraduate certificate will prepare students majoring in different programs to enter the actuarial field. The program requires four upper division courses from an approved list. Included are courses that prepare students for two actuarial exams and other courses that satisfy the Validation by Educational Experience requirements of the Society of Actuaries.

Students who are interested in pursuing this Undergraduate Certificate should email collegeadvising@ku.edu (collegeadvising@ku.edu? subject=Undergraduate%20Certificate) to request the certificate be added to their academic record. Note students must declare their intent to earn the certificate prior to enrolling in the final course.

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>MATH 627</td>
<td>Probability</td>
<td>3</td>
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<tr>
<td>or MATH 727</td>
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<td>MATH 630</td>
<td>Actuarial Mathematics</td>
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Choose two courses from this list:  6

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<th>Code</th>
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<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
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<tr>
<td>MATH 628</td>
<td>Mathematical Theory of Statistics</td>
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<td>MATH 728</td>
<td>Statistical Theory</td>
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<tr>
<td>MATH 611</td>
<td>Time Series Analysis</td>
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<td>ECON 526</td>
<td>Introduction to Econometrics</td>
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<td>ECON 715</td>
<td>Elementary Econometrics</td>
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<td>FIN 310</td>
<td>Finance</td>
</tr>
<tr>
<td>or FIN 311</td>
<td>Finance, Honors</td>
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</table>

Master of Arts in Mathematics

Why study mathematics?

Because mathematics is a framework upon which humanity builds an understanding of the world.

Mission of the Graduate Program:

The mission of the Graduate Program of the Department of Mathematics is to prepare students for leadership roles in meeting the mathematical needs of our society and to produce professional mathematicians for positions in universities, colleges, industry, governmental agencies, and research centers.

Master of Arts in Mathematics:

The Mathematics Department offers the degree of Master of Arts (M.A.) in Mathematics. The M.A. entails study of advanced mathematics, typically culminating in a substantial thesis or final project demonstrating expertise in a particular area of mathematics. It is intended for students who plan to pursue a Ph.D. subsequently, as well as those who intend to work outside academia. A broad range of specialties is possible; research interests of department faculty include algebra, analysis, combinatorics, control theory, dynamical systems, geometry, numerical analysis, partial differential equations, probability, and statistics. The program offers three options for the M.A. degree, as detailed in the section Degree Requirements. College-wide requirements for graduate students may be found in the Graduate School Catalog (http://catalog.ku.edu/liberal-arts-sciences/#graduatetext).

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to
Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission to the M.A. in Mathematics**

The minimum prerequisites for admission are:

- an undergraduate degree from an accredited institution with a program of study in mathematics;
- a record of achievement that shows strong promise of success in graduate school, including a 3.0 cumulative grade-point average in undergraduate studies and a 3.0 grade-point average in mathematics (department requirement);
- course work in abstract algebra, linear algebra, and advanced calculus or introduction to analysis (comparable to KU courses MATH 500, MATH 558, and MATH 590).

It is beneficial to have preparation in probability/statistics (comparable to MATH 627/MATH 628) and/or numerical analysis (comparable to MATH 581). Although not required, it is also helpful to have taken introductory courses in complex analysis (comparable to MATH 646), partial differential equations (comparable to MATH 647), and/or topology.

The department requires the general Graduate Record Examination (GRE) for all incoming students. **This requirement has been suspended for Spring 2022 and Fall 2022 admission.** International students whose native language is not English also must fulfill English language requirements specified by university policies.

Applicants must submit a graduate application online (https://gradapply.ku.edu/apply/), including the following required materials:

- Transcript from each college or university the applicant has attended (an official transcript must be sent upon acceptance and completion of degree).
- Applicant’s résumé/curriculum vitae.
- A list of the textbooks used in mathematics courses beyond calculus.
- A statement of purpose indicating the applicant’s mathematical preferences and interests.
- 3 letters of reference.
- International applicants must fulfill the University’s requirements for English proficiency (https://gradapply.ku.edu/english-requirements/).

Incomplete applications will not be considered. Meeting the minimum admission requirements does not guarantee admission. The Department of Mathematics evaluates candidates and makes recommendations to the Office of Graduate Studies regarding admission. The number of students admitted to the program changes from year to year, and admissions are competitive based on all application materials. The Department ordinarily does not award GTA positions to students accepted to the M.A. program. Further information about applications and admissions is available from the Department of Mathematics (https://math.ku.edu/admission-graduate-program/).

Contact the department:

Kate Pleskac
Graduate Program Coordinator
Department of Mathematics
433 Snow Hall
kate.pleskac@ku.edu

The M.A. program is flexible and accommodates the different interests and backgrounds of students. Some of the courses required for the M.A. are common to the Ph.D. tracks, and we encourage students interested in an M.A. to take advanced Ph.D. classes among their selective course work. Many Ph.D. students earn an M.A. on the way to the doctoral degree. They have the option to do so after completing the qualifying examinations. A candidate for the M.A. must fulfill general requirements. At least 30 hours of appropriate graduate credit must be earned with at least a B average, and a research component must be included in the candidate’s program. Usually the research component is fulfilled by writing a thesis or by completing appropriate seminars, independent research, or advanced graduate courses. In addition, a candidate must complete one of these options:

**Option 1**

Pass the departmental Ph.D. written qualifying examinations and complete 30 hours of courses at the 700 level or higher, of which 12 hours are at the 800 level or higher.

**Option 2**

Complete the following courses and pass an oral examination:

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<th>Code</th>
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<tr>
<td>MATH 800</td>
<td>Complex Analysis I</td>
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<td>MATH 810</td>
<td>Real Analysis and Measure Theory I</td>
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<tr>
<td>MATH 820</td>
<td>Introduction to Topology</td>
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<tr>
<td>MATH 830</td>
<td>Abstract Algebra</td>
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<td>MATH 831</td>
<td>Abstract Algebra II</td>
<td>3</td>
</tr>
<tr>
<td>Select and at least 9 of the remaining 15 hours from courses numbered 700 or above</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

The additional 9 hours may include the credit (a minimum of 2 hours and a maximum of 6 hours) used to fulfill a research component (e.g., enrollment in MATH 896, MATH 899, MATH 990, MATH 993, or advanced courses). An M.A. candidate must demonstrate an ability to communicate mathematics both orally and in written form. An M.A. candidate not selecting the thesis option (MATH 899) is expected to write a technical report as part of his or her research component. A candidate must give a short (30 to 60 minutes) presentation of her or his research in the first part of the oral examination.

**Option 3**

Complete 36 credit hours of courses numbered 600 or above:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 727</td>
<td>Probability Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 765</td>
<td>Mathematical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 781</td>
<td>Numerical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 790</td>
<td>Linear Algebra II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 791</td>
<td>Modern Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete a research component and pass an oral examination. At least 24 of the 36 hours must be in courses numbered 700 or above. Course equivalents to MATH 727, MATH 765, MATH 781, MATH 790, or MATH 791 may be substituted if approved by the graduate studies committee. An M.A. candidate may, with prior approval of the chair of the graduate studies committee, substitute up to 9 hours of courses taught in other departments. Also, the 36 hours may include the credit (a minimum of 2 hours and a maximum of 6 hours) used to fulfill a research
component (e.g., enrollment in MATH 896, MATH 899, MATH 990, MATH 993, or advanced courses). An M.A. candidate must demonstrate an ability to communicate mathematics both orally and in written form. In particular, an M.A. candidate not selecting the thesis option (MATH 899) is expected to write a technical report as part of his or her research component. Also, a candidate must give a short (30 to 60 minutes) presentation of her or his research in the first part of the oral examination. A proposed program of study must be submitted to the chair of the graduate studies committee at the earliest feasible time, preferably during the second semester of enrollment. The degree is awarded only on the basis of an approved program, which can, however, be revised.

**Doctor of Philosophy in Mathematics**

**Why study mathematics?**

Because mathematics is a framework upon which humanity builds an understanding of the world.

**Mission of the Graduate Program:**

The mission of the Graduate Program of the Department of Mathematics is to prepare students for leadership roles in meeting the mathematical needs of our society and to produce professional mathematicians for positions in universities, colleges, industry, governmental agencies, and research centers.

**Doctor of Philosophy in Mathematics:**

The Mathematics Department offers the degree of Doctor of Philosophy (Ph.D.) in Mathematics. The Ph.D. program provides broad and deep expertise in mathematics, culminating in a dissertation that includes significant original work. It is intended for students with a strong mathematical background who plan a career in research in academia or industry. A broad range of specialties is possible; research interests of department faculty include algebra, analysis, combinatorics, control theory, dynamical systems, geometry, numerical analysis, partial differential equations, probability, and statistics. There are two tracks: Pure Mathematics and Applied Mathematics. The requirements for each track are listed in the section Degree Requirements. College-wide requirements for graduate students may be found in the Graduate School Catalog (http://catalog.ku.edu/liberal-arts-sciences/#graduatetext).

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission to the Ph.D. in Mathematics**

The minimum prerequisites for admission are:

- an undergraduate degree from an accredited institution with a program of study in mathematics;
- a record of achievement that shows strong promise of success in graduate school, including a 3.0 cumulative grade-point average in undergraduate studies and a 3.0 grade-point average in mathematics (department requirement);
- course work in abstract algebra, linear algebra, and advanced calculus or introduction to analysis (comparable to KU courses MATH 500, MATH 558, and MATH 590).

It is beneficial to have preparation in probability/statistics (comparable to MATH 627/MATH 628) and/or numerical analysis (comparable to MATH 581). Although not required, it is also helpful to have taken introductory courses in complex analysis (comparable to MATH 646), partial differential equations (comparable to MATH 647), and/or topology.

The department requires the general Graduate Record Examination (GRE) for all incoming students. **This requirement has been suspended for Spring 2022 and Fall 2022 admission.** International students whose native language is not English also must fulfill English language requirements specified by university policies.

Applicants must submit a graduate application online (https://gradapply.ku.edu/apply/), including the following required materials:

- Transcript from each college or university the applicant has attended (an official transcript must be sent upon acceptance and completion of degree).
- Applicant’s résumé/curriculum vitae.
- A list of the textbooks used in mathematics courses beyond calculus.
- A statement of purpose indicating the applicant’s mathematical preferences and interests.
- 3 letters of reference.
- International applicants must fulfill the University’s requirements for English proficiency (https://gradapply.ku.edu/english-requirements/).

Incomplete applications will not be considered. The minimum admission requirements do not guarantee admission. The Department of Mathematics evaluates candidates and makes recommendations to the Office of Graduate Studies regarding admission. The number of students admitted to the program changes from year to year, and admissions are competitive based on all application materials.

There are no additional application forms for financial support. Students are considered for support based on merit. Most Ph.D. students accepted by the program receive an offer of financial support in the form of a Graduate Teaching Assistantship. The number of GTAs available is limited. Further information about applications and admissions is available from the Department of Mathematics (https://math.ku.edu/admission-graduate-program/).

Contact the department:

**Kate Pleskac**
Graduate Program Coordinator
Department of Mathematics
433 Snow Hall
kate.pleskac@ku.edu
Ph.D. Degree Requirements

The department requires the student to meet the following requirements before being admitted to the comprehensive examination.

1. Pass 2 written qualifying examinations: one exam in either algebra or analysis and a second exam in either numerical analysis or probability/statistics. Both qualifying examinations must be completed by the beginning of the student’s fifth semester.

2. Complete the required qualifying exam coursework: MATH 727 (Probability), MATH 765 (Analysis I), MATH 781 (Numerical Analysis), MATH 791 (Abstract Algebra I). Passing a qualifying exam exempts a student from the corresponding coursework. This coursework must be completed before the preliminary examination.

3. Pass a preliminary examination in an area close to the focus of the eventual doctoral dissertation. The preliminary examination must be completed by the beginning of the student’s eighth semester.

4. Satisfy the Research Skills and Responsible Scholarship requirement.
   a. The Research Skills requirement may be met by demonstrating a working knowledge of a programming language such as C++ or Python; by completing an introductory programming language course approved by the Graduate Committee; or completing an approved computing project demonstrating competence in either a programming language or the use of specialized software that supports the student’s research.
   b. The Responsible Scholarship requirement must be met by completing the departmental training in responsible scholarship for mathematicians. The training is offered every spring semester.

5. Pass a set of requirements for a track in either Pure Mathematics or Applied Mathematics, as outlined below.

Note: Contact your department or program for more information about the qualifying exam coursework requirement, the research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the Graduate Studies section of the online catalog and in the KU Policy Library.

Pure Mathematics

This track requires:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 800</td>
<td>Complex Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 810</td>
<td>Real Analysis and Measure Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 830</td>
<td>Abstract Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 820</td>
<td>Introduction to Topology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH 821</td>
<td>Algebraic Topology I</td>
<td></td>
</tr>
</tbody>
</table>

Select an approved course in geometry, e.g.:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 840</td>
<td>Differentiable Manifolds</td>
<td>3</td>
</tr>
<tr>
<td>MATH 910</td>
<td>Algebraic Curves</td>
<td></td>
</tr>
<tr>
<td>MATH 920</td>
<td>Lie Groups and Lie Algebras</td>
<td></td>
</tr>
</tbody>
</table>

Applied Mathematics

This track requires:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 800</td>
<td>Complex Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 810</td>
<td>Real Analysis and Measure Theory I</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title and Topics in Advanced Numerical Linear Algebra:</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 881</td>
<td>____</td>
<td>6</td>
</tr>
</tbody>
</table>
| MATH 882 | and Topics in Advanced Numerical Differential Equations: | |}

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 865</td>
<td>Stochastic Processes I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 866</td>
<td>and Stochastic Processes II</td>
<td></td>
</tr>
<tr>
<td>MATH 850</td>
<td>Differential Equations and Dynamical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MATH 851</td>
<td>and Topics in Dynamical Systems: ____</td>
<td></td>
</tr>
</tbody>
</table>

Examination Preparation

Normally the work required to prepare a student for the oral comprehensive examination (and to do research) includes 1 or more semesters of advanced courses, directed readings, and seminars. In the oral comprehensive examination, a student must show proficiency in the chosen area of mathematics. Precise areas of responsibility on this examination are discussed in detail with the advisory committee (the student’s advisor and two other members of the department’s Graduate Faculty).

The student must complete 4 additional courses at the 800 level or above before the final examination. Mathematics courses numbered 896, 899, 990, 993 and 999 may not be used to satisfy this requirement.

Graduate Certificate in Applied Mathematics

The Graduate Certificate in Applied Mathematics is designed to enhance training in various aspects of applied mathematics. It is intended for students who are currently pursuing a graduate degree in a discipline outside of the Mathematics Department, or for students who wish to pursue the certificate as a stand-alone program.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Graduate Certificate in Applied Mathematics

Applicants must submit a graduate application online. (https://gradapply.ku.edu/apply/) The prerequisites for admission are:
• Current enrollment in a KU graduate program outside the Department of Mathematics, or as a non-degree-seeking student
• Completion of two MATH graduate courses from those listed in the Certificate Requirements, with a minimum 3.0 GPA. These courses can then count towards the 12 credits required for the certificate.

The Department of Mathematics evaluates candidates and makes recommendations to the Office of Graduate Studies regarding admission. The Department ordinarily does not award GTA positions to students accepted to the Graduate Certificate program. Further information about applications and admissions is available from the Department of Mathematics. (https://math.ku.edu/admission-graduate-program/)

Contact the department:

**Kate Pleskac**  
Graduate Program Coordinator  
Department of Mathematics  
433 Snow Hall  
kate.pleskac@ku.edu

The certificate requires the completion of four courses from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 601</td>
<td>Algebraic Topics in Computing: ______</td>
<td>3</td>
</tr>
<tr>
<td>MATH 605</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 611</td>
<td>Time Series Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 630</td>
<td>Actuarial Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 647</td>
<td>Applied Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 648</td>
<td>Calculus of Variations and Integral Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 650</td>
<td>Nonlinear Dynamical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MATH 724</td>
<td>Combinatorial Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 725</td>
<td>Graph Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 727</td>
<td>Probability Theory</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 627</td>
<td>Probability</td>
<td>3</td>
</tr>
<tr>
<td>MATH 728</td>
<td>Statistical Theory</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 628</td>
<td>Mathematical Theory of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 750</td>
<td>Stochastic Adaptive Control</td>
<td>3</td>
</tr>
<tr>
<td>MATH 765</td>
<td>Mathematical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 766</td>
<td>Mathematical Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 781</td>
<td>Numerical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 782</td>
<td>Numerical Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 783</td>
<td>Applied Numerical Methods for Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 850</td>
<td>Differential Equations and Dynamical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MATH 851</td>
<td>Topics in Dynamical Systems: ______</td>
<td>3</td>
</tr>
<tr>
<td>MATH 865</td>
<td>Stochastic Processes I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 866</td>
<td>Stochastic Processes II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 874</td>
<td>Statistical Decision Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 881</td>
<td>Topics in Advanced Numerical Linear Algebra: ______</td>
<td>3</td>
</tr>
<tr>
<td>MATH 882</td>
<td>Topics in Advanced Numerical Differential Equations: ______</td>
<td>3</td>
</tr>
<tr>
<td>MATH 950</td>
<td>Partial Differential Equations</td>
<td>3</td>
</tr>
</tbody>
</table>

MATH 951  
Topics in Advanced Partial Differential Equations II: 3

Other courses (600 level or above) may be substituted with the approval of the Director of Graduate Studies. At least two courses must be at the 700 level or above. Courses should be selected in consultation with an advisor.

**Department of Molecular Biosciences**

**Molecular Biosciences Graduate Programs**

We are an interdisciplinary group of faculty who perform cutting edge research across a wide range of areas (https://molecularbiosciences.ku.edu/research-areas/), including biochemistry, biophysics, structural biology, bioinformatics, genetics, genomics, immunology, microbiology, virology, neurobiology, molecular, cellular and developmental biology. We work closely with postdoctoral fellows, graduate students, and undergraduates to investigate fundamental biological and biomedical problems on all levels from molecules to cells to organisms. The Department of Molecular Biosciences at the University of Kansas is an excellent environment for research and education.

The department offers Doctor of Philosophy and Master of Arts graduate degrees in Biochemistry and Biophysics (http://molecularbiosciences.ku.edu/biochemistry-graduate-program/), in Molecular, Cellular, and Developmental Biology (MCDB (http://molecularbiosciences.ku.edu/mcdb-graduate-program/)), and in Microbiology (http://molecularbiosciences.ku.edu/microbiology-0/). General information about the department, our faculty and students, and alumni of our graduate programs can be found on our website (http://molecularbiosciences.ku.edu/). Detailed information about admission (https://molecularbiosciences.ku.edu/graduate-admissions/) to our graduate program, curricula (https://molecularbiosciences.ku.edu/program-description/), and financial support (http://molecularbiosciences.ku.edu/stipend/) is also available.

Students who are interested in enrolling in graduate level coursework in the Department of Molecular Bioscience without formal admission to a graduate program at KU can apply for graduate, non-degree seeking student status. See the department's admission (https://molecularbiosciences.ku.edu/graduate-admissions/) page for further information.

**Biochemistry and Biophysics**

The biochemistry group is a dynamic community of scholars and distinguished investigators engaged in research at the forefront of areas including enzymology, structural biology, protein chemistry, proteomics, metabolic biology, and computational biology. Biochemistry researchers have access to numerous excellent core facilities and state-of-the-art equipment, and research activities are strongly supported by public and private funding sources. In addition, biochemistry researchers have close ties with biochemists, chemists and chemical engineers in several other departments at KU as well as at the KU Medical Center. The biochemistry degree track offers a challenging, stimulating and nurturing environment for PhD students. Biochemistry faculty are committed to providing exceptional scientific training through mentoring in the laboratory, classwork and teaching opportunities. Graduate-level classwork covers
advanced biochemical systems and methods, physical biochemistry, and molecular modeling.

MCDB
Graduate study in MCDB is supported by a strong interdisciplinary and collaborative group of researchers composed of noted professors and the students, postdoctoral associates, and research staff who work with them in their labs. MCDB researchers seek to address a range of fundamental biomedical questions at the molecular and cellular level. Research areas include modern cell biology, genetics, genomics, developmental biology, cancer biology and neurobiology. Researchers utilize this collaborative environment to leverage the intellectual expertise and tools from multiple labs to study problems at the cutting edge of science using novel, synthetic approaches and a wide variety of model organisms. MCDB researchers have access to numerous excellent core facilities and state-of-the-art equipment, and research activities are strongly supported by public and private funding sources. In addition, MCDB researchers have close ties with researchers in several other departments at KU as well as at the KU Medical Center. MCDB PhD graduates have a high rate of success in securing post-degree positions in academic and industrial research, teaching, law, and other careers. The MCDB degree track offers a challenging, stimulating and rigorous environment that nurtures success for PhD students. The MCDB faculty is committed to providing dynamic and modern scientific training through mentoring in the laboratory, classwork and teaching opportunities. A flexible series of graduate-level course are offered, covering advanced cell biology, genetics, developmental biology, and neurobiology, that aids the student in the development of their research program and dissertation work.

Microbiology
The microbiology group is a dynamic community of scholars and distinguished investigators engaged in research at the forefront of areas including immunology, bacterial pathogenesis and genetics, virology, and fungal secondary metabolites. Microbiology researchers have access to numerous stellar core facilities and state-of-the-art equipment. Microbiology research activities are strongly supported by public and private funding sources, and microbiology researchers have close ties with microbiologists in several other departments at KU as well as at the KU Medical Center. The microbiology degree track offers a challenging, stimulating and rigorous environment that nurtures success for PhD students. The MCDB faculty is committed to providing dynamic and modern scientific training through mentoring in the laboratory, classwork and teaching opportunities. A flexible series of graduate-level course are offered, covering advanced cell biology, genetics, developmental biology, and neurobiology, that aids the student in the development of their research program and dissertation work.

Biology Undergraduate Programs
Various B.A. and B.S. undergraduate degree programs in biology are listed at the Biology Undergraduate Programs (http://catalog.ku.edu/liberal-arts-sciences/biology/) page.

Courses
BIOL 100. Principles of Biology. 3 Credits. NB N
Intended for non-science majors. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. An honors section, BIOL 101, is offered for students with superior academic records. BIOL 100 and BIOL 102 (or BIOL 101, honors) satisfy the College natural science with laboratory requirement. Concurrent enrollment in BIOL 102 is recommended.

BIOL 101. Principles of Biology, Honors. 3 Credits. NB N
Intended for non-science majors with superior academic records. The basic concepts of biology at the cellular, organismal, and population levels of organization and their applications to humans and modern society. Concurrent enrollment in BIOL 102 is recommended. BIOL 101 and BIOL 102 satisfy the College natural science with laboratory requirement. Prerequisite: Membership in the College Honors Program or consent of instructor.

BIOL 102. Principles of Biology Laboratory. 1 Credits. U LFE
Intended for non-science majors. Exercises are designed to give the student hands-on experience with selected topics from the associated lecture course (BIOL 100). Prerequisite: Concurrent enrollment in BIOL 100 is recommended.

BIOL 105. Biology Orientation Seminar. 1 Credits. N
Introduces interested students to information about majoring in the biological sciences at the University of Kansas. Students learn about degree requirements, academic advising, research opportunities, and career options, as well as how to align academic and professional goals. Graded on a satisfactory/unsatisfactory basis.

BIOL 116. Introduction to Evolutionary Biology. 3 Credits. N LFE
An account of evolutionary thinking from classical to contemporary time. The emphasis is on mainstream developments (Darwinism, Mendelism, the Modern Synthesis, Cultural Ecology), but certain social issues will be examined (social Darwinism, creationism).

BIOL 120. Insects in Your World. 3 Credits. NB N
Students will learn about the global impact of insects on human concerns, both positive (pollination and decomposition) and negative (competition with humans for food, fiber, and shelter, and disease transmission) while developing an appreciation for the ways in which scientists work with real problems involving insects. The course will cover the overwhelming abundance and diversity of insects, and their life history, ecology, behavior, and physiology. This course is intended for both nonbiology and biology majors. Format: two lectures and one discussion section per week.

BIOL 150. Principles of Molecular and Cellular Biology. 3 Credits. NB N LFE
A course for biology majors and students planning to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture per week. An honors section (BIOL 151) is offered for students with superior academic records. Prerequisite: Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170; or consent of instructor.

BIOL 151. Principles of Molecular and Cellular Biology, Honors. 3 Credits. NB N LFE
A course for students with superior academic records who are biology majors or who plan to take additional courses in biology. This course covers basic biochemistry, cell structure and function, molecular biology, genetics, physiology, and development of plants and animals. Three hours of lecture per week. Prerequisite: Membership in the University Honors Program and concurrent or prior enrollment in CHEM 130, CHEM 190 and CHEM 191, CHEM 150, or CHEM 170; or consent of instructor.

BIOL 152. Principles of Organismal Biology. 3 Credits. NB N LFE
A course for biology majors and students who plan to take additional courses in biology. This course covers basic elements of plant and animal morphology and physiology, principles of evolution, organismal diversity and phylogeny, population biology, population genetics, ecology, and behavior. Three hours of lecture per week. An honors section (BIOL 153) is offered for students with superior academic records. Prerequisite:
Concurrent or prior enrollment in CHEM 130; CHEM 190 and CHEM 191; CHEM 150; or CHEM 170; or consent of instructor.

**BIOL 153. Principles of Organismal Biology, Honors. 3 Credits. NB N**

This introductory course for non-majors focuses on the significance of the history of life and the fossil record for our understanding of evolution. Key events in the history of life are considered, including the origins of life, the eukaryotic cell, and humans, and also various mass extinctions. The focus is on general scientific and evolutionary principles and mechanisms that can be extracted from the study of the fossil record. It also uses the lessons of the fossil record to consider the prospects for our own species.

**BIOL 240. Fundamentals of Human Anatomy. 3 Credits. N**

Introduction to the gross anatomy of the human body. Covers the spatial arrangement and appearance of structures throughout the body, including visual identification of these structures. Musculoskeletal relationships, and the anatomy of major organ systems, are emphasized. Not intended for biology majors. Prerequisite: BIOL 100, or equivalent.

**BIOL 241. Human Anatomy Observation Laboratory. 2 Credits. U LFE**

One of the two laboratories in gross anatomy designed to complement BIOL 240. Emphasizes the three-dimensional appearance and spatial relationships of anatomical structures through supervised observations of pre-dissected human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy observation laboratory. Prerequisite: Concurrent or prior enrollment in BIOL 240 is required.

**BIOL 246. Principles of Human Physiology. 3 Credits. N**

An introduction to the physiological and biochemical processes and general physiological principles necessary to sustain life. Organ and organ system processes are emphasized. Intended for students majoring in allied health or sports related curricula who require a course in human physiology. Not intended for biology majors. Prerequisite: BIOL 100 or equivalent.

**BIOL 350. Principles of Genetics. 4 Credits. N**

Why are related individuals more similar than unrelated individuals and what is the basis for heritable traits? From Mendel's discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cytogenetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Not open to students with credit in BSCI 350. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195 and CHEM 196, with a grade of C- or higher in BIOL 150 or BIOL 151 with a grade of C- or higher in BIOL 152 or BIOL 153 with a grade of C- or higher; or consent of instructor.

**BIOL 360. Principles of Genetics, Honors. 4 Credits. N**

The science of genetics aims to explain why individuals differ from one another and how these differences are inherited. Honors Genetics covers all core topics in fundamental genetics: Mendelian inheritance, meiosis and recombination, mutation, molecular genetics, population genetics, quantitative genetics and genomics. Special attention given to the practice of genetics and the complex relationship between genotype, phenotype and environment. A broader goal of Honors Genetics is to provide students a framework for understanding recent advances in medical genetics and the modern era of personal genomics. Not open to students with credit in BSCI 350. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195 and CHEM 196, with a grade of C- or higher and BIOL 150
or BIOL 151 with a grade of C- or higher and BIOL 152 or BIOL 153 with a grade of C- or higher and membership in the University Honors Program; or consent of the instructor.

BIOL 400. Fundamentals of Microbiology. 3 Credits. NB N
Fundamental principles of microbiology with emphasis on physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics, pathogenesis and immunity, industrially important microorganisms. Not open to students with credit in BSCI 400. Prerequisite: BIOL 150 or BIOL 151 with a grade of C- or higher and two semesters of college chemistry with a grade of C- or higher, or consent of the instructor.

BIOL 401. Fundamentals of Microbiology, Honors. 4 Credits. N
Honors section of BIOL 400 and BIOL 612, by application and invitation. Not open to students with credit in BSCI 400. Prerequisite: BIOL 150 or BIOL 151, two semesters of college chemistry, and membership in the University Honors Program, or consent of the instructor.

BIOL 402. Fundamentals of Microbiology Laboratory. 2 Credits. U LFE
Laboratory exercises designed to complement BIOL 400 or BIOL 700. Not open to students with credit in BSCI 401. Prerequisite: BIOL 400 or BIOL 612, or BIOL 400 or BIOL 612 concurrently.

BIOL 405. Laboratory in Genetics. 3 Credits. U LFE
A laboratory course that provides hands-on experience with classical genetics and modern molecular genetics. Experiments involve Mendelian genetics (dominance/recessivity, complementation, segregation, independent assortment) in eukaryotic organisms; recombinant DNA; basic bacterial genetics; polymerase chain reaction; DNA sequencing; computational genetics; and genome editing. Not open to students with credit in BSCI 351. Prerequisite: Concurrent or prior enrollment in BIOL 350.

BIOL 412. Evolutionary Biology. 4 Credits. N
Introduction to the patterns and processes of organic evolution. Considered are the history of evolutionary thought, molecular evolution, genetics and microevolution, selection and adaptation, and speciation and macroevolution. Emphasis will be placed on how scientists study and document change over time in natural populations, methods for testing hypotheses about events in evolutionary history, and how discovering evolutionary mechanisms at one level of organization can help to explicate general processes in the natural world. Prerequisite: BIOL 152 and BIOL 350, or consent of the instructor.

BIOL 413. History and Diversity of Organisms. 3 Credits. N LFE
An integrated lecture and laboratory course presenting an overview of the variety and ancestry of life on earth. Using representatives from prokaryotes, protists, plants, fungi, and animals, principles of phylogenetic reconstruction are illustrated and evolutionary trends in the life history features, functional morphology, and structural complexity of extant and extinct organisms are presented. Two hours of lecture and three hours of laboratory per week. Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

BIOL 414. Principles of Ecology. 3 Credits. N
Study of the principles underlying species population density changes, community structure and dynamics, biogeochemical cycles, and energy flow and nutrient cycling in ecosystems. (Same as EVRN 414.) Prerequisite: BIOL 152 or BIOL 153, or consent of the instructor.

BIOL 415. Field and Laboratory Methods in Ecology. 2 Credits. N
This course complements BIOL 414 with field trips and laboratory exercises that illustrate the basic concepts of ecology. Topics covered include methodologies for quantitative sampling of terrestrial and aquatic systems, design of field studies, computer simulation and digital data analysis techniques, and scientific writing. Prerequisite: Concurrent or prior enrollment in BIOL 414. A statistics course is recommended.

BIOL 416. Cell Structure and Function. 3 Credits. N
Lecture survey of molecular cell biology with emphasis on experimental approaches to understanding cell function; topics include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Not open to students with credit in BSCI 416. Prerequisite: BIOL 150 or BIOL 151; BIOL 350 or BIOL 360; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; and CHEM 135, or CHEM 175, or CHEM 195 and CHEM 196; or consent of the instructor.

BIOL 417. Biology of Development. 3 Credits. N
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating development, including classic embryology and modern molecular genetics. Not open to students with credit in BSCI 417. Prerequisite: BIOL 350 or BIOL 360 and BIOL 416 or consent of the instructor.

BIOL 418. Laboratory in: ______. 1-3 Credits. U LFE
A varied program of laboratory and fieldwork designed to introduce students to investigative approaches in the study of the basic concepts of biological science. Students may enroll in more than one section. Prerequisite: BIOL 100, BIOL 101, BIOL 150, BIOL 151, or exemption. Each section may have additional prerequisites to be determined by instructor.

BIOL 419. Topics in: ______. 1-3 Credits. N LFE
Courses on special topics in biology, given as need arises. May be lectures, discussions, readings, laboratory, or fieldwork. Students may select sections according to their special needs.

BIOL 420. Seminar: ______. 1-3 Credits. N
The preparation and presentation of oral reports on selected topics from the recent research literature. Students may choose one interest group each semester, but may enroll in a given interest group only once. Enrollment in each interest group limited to twenty students. Prerequisite: Course work varying with the topic of the seminar, or consent of instructor.

BIOL 423. Non-laboratory Independent Study. 1-9 Credits. N
Original study in discussion or preparation of review papers on selected topics of current interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor.

BIOL 424. Independent Study. 1-9 Credits. N
Original study in laboratory or field in selected topics of current research interest. May be undertaken only with the consent of the major advisor and of the faculty member who will guide the research. Prerequisite: Consent of instructor.

BIOL 425. Teaching Apprenticeship in Biology. 1-9 Credits. N
Involvement as teaching assistant for a course in Biology. Credit hours shall not exceed the credits offered for the course being taught. May be undertaken only with the consent of the Director of Undergraduate Biology and of the faculty member who will teach the course. Prerequisite: Consent of instructor and Director of Undergraduate Biology.

BIOL 426. Laboratory in Cell Biology. 3 Credits. U LFE
Laboratory exercises will examine the function, organization, and composition of eukaryotic cells. Prerequisite: BIOL 150 or BIOL 151; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; concurrent or
prior enrollment in BIOL 416 or BIOL 536; or consent of the instructor. BIOL 350 or BIOL 360 is highly recommended.

**BIOL 428. Introduction to Systematics. 3 Credits. N**
Basic elements of systematic theory and practice; phylogenetic reconstruction using morphological and molecular data; interpretation of phylogenetic hypotheses; principles of nomenclature and classification; evolutionary processes and patterns of species diversity; discussion of the aims and needs of taxonomy; species and speciation; construction of keys; significance of biological collections. Prerequisite: BIOL 152 or BIOL 153. Not intended for students with advanced systems background.

**BIOL 430. Laboratory in Molecular Biology. 3 Credits. U LFE**
Practical experience in recombinant DNA technology and molecular cloning. Prerequisite: BIOL 416 or a course in biochemistry or microbiology.

**BIOL 435. Introduction to Neurobiology. 3 Credits. N**
Basic principles of neurobiology. The focus will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Not open to students with credit in BSCI 435. Prerequisite: BIOL 350 or BIOL 360 and BIOL 416 or consent of the instructor.

**BIOL 442. Human Anatomy Dissection Laboratory. 3 Credits. U**
Laboratory in gross anatomy designed to build on content from BIOL 240 and BIOL 241. Provides an opportunity to develop a comprehensive three-dimensional understanding of anatomical structures and spatial relationships while gaining substantial disecting experience. Students perform supervised dissection of human cadavers. Limited to students enrolled in, or seeking admission to, programs that require a human anatomy laboratory. Prerequisite: BIOL 240 and BIOL 241, and consent of the instructor.

**BIOL 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N LFE**
This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, PSYC 449, and SPLH 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

**BIOL 451. Ecosystems Stewardship. 3 Credits.**
This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 451 and GEOG 451.)

**BIOL 454. Brain Diseases and Neurological Disorders. 3 Credits. N**
Major brain diseases and neurological disorders such as stroke, Alzheimer’s Disease, Parkinson’s Disease, Huntington’s Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., are discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Prerequisite: BIOL 416 or BIOL 435 or BIOL 546, or consent of instructor.

**BIOL 477. Ecology and Global Change. 3 Credits. N**
Humans influence both natural and managed ecosystems. This course studies the effects of climate change, land-use change, and reductions in biodiversity on ecosystems. Emphasis is placed on how biological and physical processes may be perturbed by human influences. Topics include the greenhouse effect, species extinctions, human disease expansion, and the effects of global change on agricultural productivity. A combination of lectures and discussion address issues from a scientific basis and link these ecological issues to our everyday lives and society as a whole. Prerequisite: BIOL 152, BIOL 153, or equivalent, or permission of instructor.

**BIOL 480. Medical Parasitology. 3 Credits. N**
Introductory lecture course focused on parasites (protozoans and metazoa) causing disease in humans, including zoonotic diseases (diseases or infections that are naturally transmissible to humans from non-human vertebrates). Provides basic knowledge about the morphology, epidemiology, evolution, and ecology of parasites infecting humans globally (e.g., malaria, amoebas, hookworms, tapeworms). Emphasis is placed on life-cycles, course of infection, modes of reproduction, diagnosis, and pathology of human parasites; relevant parasites of veterinary importance are also discussed. Prerequisite: BIOL 152 or BIOL 153, or permission of instructor.

**BIOL 481. Medical Parasitology Laboratory. 1 Credits. U LFE**
Laboratory course in the study of parasites causing disease in humans, including zoonotic diseases (diseases or infections that are naturally transmissible to humans from non-human vertebrates), emphasizing their morphology and identification. One three-hour laboratory each week. Prerequisite: Concurrent or prior enrollment in BIOL 480.

**BIOL 490. Internship and Practical Applications. 1-6 Credits. N**
This course provides credit for supervised practical experiences in an occupational area of interest. In addition to the work-related activity, students will be expected to complete reading and writing assignments, participate in on-line discussions, and create a final summary of internship accomplishments. Hours of credit earned (1-6) are based on number of hours at internship site and agreement of instructor. Repeatable for up to 6 credit hours, provided the internship experiences are different. Prerequisite: Consent of Instructor.

**BIOL 499. Introduction to Honors Research. 2 Credits. N**
Intended for sophomores planning to enroll in the Biology Honors Program. Students interested in pursuing Biology Honors discuss with Biology faculty members the rationale, methods, and interpretations of research being carried out in individual faculty labs to learn how scientific research is conducted. Prerequisite: At least 17 credit hours of college level natural sciences coursework or consent of instructor.

**BIOL 500. Biology of Insects. 3 Credits. N**
Lectures and demonstrations providing an introduction to the study of insects, including general classification, structure, phylogeny, identification, development, physiology, behavior, ecology, and relations
to human affairs. Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

BIOL 501. Physiological Adaptations of Plants to Extreme Environments. 3 Credits. N
Exploration of physiological adaptations of plants to bright sunlight & deep shade, drought & flooding, excess heat & subfreezing, excess elements and too few elements. Examples of adaptations include: red leaves, blue leaves, succulence, root "knees", moving leaves, frozen leaves, heavy metal plants, carnivorous plants, parasitic plants, epiphytes. Prerequisite: BIOL 150 or BIOL 152 or consent of instructor.

BIOL 502. Laboratory in Insect Biology and Diversity. 2 Credits. U LFE
Laboratory and field studies of insects, emphasizing their diversity, classification, ecological relationships, morphology, and behavior. Course provides practical application of principles covered in BIOL 500. Prerequisite: Concurrent or prior enrollment in BIOL 500 or the equivalent.

BIOL 503. Immunology. 3 Credits. N
Lectures on the nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; ontogeny and cellular basis of immune responsiveness; hypersensitivity; specific immunologic tolerance. Not open to students with credit in BSCI 503. Prerequisite: BIOL 400 or BIOL 401, or consent of instructor.

BIOL 504. Immunology Laboratory. 2 Credits. U LFE
Laboratory designed to complement BIOL 503. Prerequisite: BIOL 503, or BIOL 503 concurrently.

BIOL 506. Bacterial Infectious Diseases. 3 Credits. N
Explores bacterial infectious diseases from the perspective of how disease is established and the mechanisms that underlie disease, as well as how to treat and prevent infectious disease. Not open to freshmen or sophomores. Not open to students with credit in BSCI 506. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.

BIOL 507. Bacterial Infectious Diseases Laboratory. 2 Credits. U LFE
Laboratory to complement BIOL 506. Cultivation of pathogenic microorganisms, diagnostic procedures, and experiments to demonstrate various aspects of microbial pathogenicity and host responses. Prerequisite: BIOL 402 and BIOL 506 (or concurrent enrollment) or consent of instructor.

BIOL 509. Biology of Spiders. 3 Credits. N
An introduction to the evolution, anatomy, physiology, behavior, and ecology of spiders and other arachnids. Special topics include the action of spider venoms; the composition and uses of silk; courtship and mating; predation; social behavior; and the role of spiders in natural and agricultural ecosystems. Concurrent enrollment in BIOL 511 is encouraged. Prerequisite: BIOL 152 , BIOL 153 or permission of instructor.

BIOL 511. Biology of Spiders Laboratory. 1 Credits. U LFE
Topics will include comparative biology of arachnid orders (spiders, scorpions, harvestmen, mites, and others), external and internal anatomy of spiders, identification of common spider families and genera, and spider behavior. Students will be required to make a small collection (collect, preserve, and identify specimens). Prerequisite: BIOL 509; concurrent enrollment is preferred.

BIOL 512. General Virology. 3 Credits. N
Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host cell-viral interactions; mode of replication of DNA and RNA viruses, tumor viruses. Not open to students with credit in BSCI 512. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.

BIOL 513. Virology Laboratory. 2 Credits. U LFE
Experiments involving cultivation, quantitation, and identification of animal viruses, continuous cell culture and primary chicken embryo culture techniques. Molecular biology techniques are used to demonstrate the steps in virus replication. The value of viruses as tools to understand normal cellular processes is emphasized in experiments which demonstrate the relative simplicity of viruses and the relative complexity of eukaryotic cells. Demonstrations include transformation of cells by tumor viruses and electron microscopy of virus particles. Prerequisite: BIOL 402 and BIOL 512, or consent of instructor.

BIOL 518. Microbial Genetics. 3 Credits. N
Bacteria and viruses as models of genetic systems. Mutagenesis and repair. Transformation, transductions, and recombination. Molecular biology of gene expression. Prerequisite: BIOL 400 or BIOL 401 with a grade of C- or higher or consent of instructor.

BIOL 519. Microbial Genetics Laboratory. 2 Credits. U LFE
A laboratory course on the genetic analysis of bacteria. Includes mutagenesis, cloning, agarose and polyacrylamide gel electrophoresis, PCR, regulation of gene expression, and computational analysis of DNA sequences and protein structures. Prerequisite: BIOL 350 or BIOL 360.

BIOL 520. Marine Biology. 3 Credits. N
This introductory course covers biological, physical, and chemical ocean sciences, with an emphasis on ecological aspects. In addition to this Lawrence campus course, students may enroll for a supplementary 1 credit field trip class to a Caribbean coral reef island offered in December or January. Prerequisite: BIOL 414 or permission of the instructor.

BIOL 524. Mammalian Paleontology. 3 Credits.
Evolution of mammals, and anatomical modifications involved in the process as ascertained from the fossil record. Lectures and laboratory. (Same as GEOL 524.) Prerequisite: One of the following: BIOL 225, BIOL 412, BIOL 413, GEOL 304, GEOL 521, or consent of the instructor.

BIOL 527. Primate Evolution and the Fossil Record. 3 Credits. N
This course exposes students to fundamental concepts of paleontology and evolutionary biology using the mammalian order Primates as a high-profile case study. Primates are interesting partly because humans are primates. Hence, scientific understanding of human origins and human evolution must be grounded in knowledge of our nearest relatives. This course places human origins within the broader framework of how primates have evolved over the course of the Cenozoic Era, often in response to radical changes in the Earth's physical environment. Prerequisite: BIOL 412 or BIOL 413, or consent of the instructor.

BIOL 530. Biodiversity Discovery and Assessment. 2 Credits. N
An integrated lecture and laboratory course designed to provide an overview of modern methods in biodiversity exploration and discovery. Lectures cover the theory and practice of planning fieldwork in remote locations, documenting species and their natural history, how museum collections are made, calculating and comparing species richness estimates, and the process of describing and naming new species. The laboratory component provides students experience in documenting species and their natural history, processing and curating samples of natural history specimens, and the statistical analysis of biodiversity data. (Same as EVRN 530.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor.

BIOL 531. Tropical Fieldwork in Biodiversity Discovery. 1 Credits. U
An introduction to modern field methods of assessing biodiversity. Fieldwork employs insects and various field methods to estimate and compare species diversity between different habitats and field sites. Taught at different sites in tropical South America over Spring Break. Contact Undergraduate Biology, or the Office of Study Abroad. (Same as EVRN 531.) Prerequisite: BIOL 152, 153, or equivalent, or permission of instructor. Concurrent or prior enrollment of BIOL 530 is strongly encouraged.

BIOL 533. Biology of Fungi. 4 Credits. N LFE
A study of the major groups of fungi from slime molds to mushrooms. Emphasis on their activities in natural substrates, isolation techniques, parasitic and mutualistic relationships with other organisms, uses in research, industrial applications, production of mycotoxins and poisons, and physiological, genetic and reproductive behavior. Lectures, laboratory, and field trips. Prerequisite: BIOL 100, BIOL 101, BIOL 150, or BIOL 151 and BIOL 152 or BIOL 153.

BIOL 536. Cell Structure and Function (Honors). 3 Credits. N
BIOL 536 is the honors version of BIOL 416. Completion of this class will satisfy the BIOL 416 requirement. Open to students in the Honors program or by permission of instructor. Not open to students with credit in BSCI 416. Prerequisite: BIOL 350 or BIOL 360 or consent of instructor.

BIOL 540. General Invertebrate Zoology. 4 Credits. N LFE
Phylogeny, physiology, and embryology; evolutionary processes; characteristics of major ecological groupings. Laboratory will consider major taxonomic categories with emphasis on functional morphology and its evolutionary modifications. Prerequisite: BIOL 152 or BIOL 153.

BIOL 541. Biology of Freshwater Invertebrates. 3 Credits. N
A lecture and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in rivers, lakes, and wetlands. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Prerequisite: BIOL 152 or BIOL 153; recommended BIOL 414 and/or BIOL 540.

BIOL 544. Comparative Animal Physiology. 3 Credits. N
An intermediate physiology course with lectures and discussions of the structures, functions, mechanisms, and interactions of vertebrate and invertebrate organ systems with a focus on the different ways in which animals adapt to their environments. Topics include digestion and nutrition, metabolism, gas exchange, circulation, excretion, neurophysiology, endocrinology, and muscle physiology. Prerequisite: BIOL 152 or BIOL 153, and CHEM 330, or consent of instructor. A college physics course is recommended but not required.

BIOL 545. Evolution of Development. 4 Credits. N
An advanced course designed to expose students to evolutionary change in the developmental patterning of plant and animal form. This course includes a lecture component and a laboratory component to integrate multiple biological disciplines including comparative morphology, molecular evolution, developmental genetics and experimental development, to explore biodiversity at a mechanistic level. Lectures are designed to give students background on topics ranging from homology assessment to empirical examples of how changes in gene expression or function may have shaped morphological diversity. The laboratory complements these topics through observations of normal development in a diversity of plant and animal model organisms, and through conducting independent research experiments. Prerequisite: BIOL 350 or equivalent.

BIOL 546. Mammalian Physiology. 3 Credits. N
An intermediate course in the structures, functions, mechanisms, and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Not open to students with credit in BSCI 546. Prerequisite: BIOL 150; BIOL 152 or BIOL 240; and CHEM 330 or consent of instructor.

BIOL 547. Mammalian Physiology Laboratory. 2 Credits. U LFE
Laboratory experiments in representative areas of mammalian physiology designed to complement BIOL 546. Not open to students with credit in BIOL 247. Prerequisite: Corequisite: BIOL 546 or BIOL 646.

BIOL 548. Human Osteology. 4 Credits. N LFE
This course examines the structure and function of the human skeleton from an evolutionary and biomedical perspective. Students will learn to identify bones comprising the human skeleton and how osteological information aids in reconstructing sex, age, race, stature, and health status. Major transformations of the human skeleton from hominoid precursors, and some of the biomedical consequences of these transformations, will be addressed. (Same as ANTH 648.) Prerequisite: An introductory course in physical anthropology, biology, or permission of instructor.

BIOL 555. General Plant Physiology. 3 Credits. N
The principal physiological processes of higher plants including photosynthesis, respiration, water relations, mineral nutrition, and factors associated with morphogenesis. Prerequisite: Consent of instructor.

BIOL 560. Histology. 3 Credits. N
Study of detailed microscopic anatomy of cells, tissues, and organs of mammals. Examples are drawn from normal and abnormal tissue, histochemistry, and electron microscopy. Lecture and demonstrations. A course in anatomy and physiology is highly recommended. Prerequisite: BIOL 152 or BIOL 153.

BIOL 570. Introduction to Biostatistics. 4 Credits. N LFE
Statistical concepts related to biological problems. Topics include the scientific method, data representation, descriptive statistics, elementary probability distributions, estimation and hypothesis testing, emphasizing the analysis of variation. Prerequisite: College algebra and ten hours of natural science.

BIOL 582. Principles of Biogeography. 3 Credits. N
An introduction to the study of the distribution of life on earth. Covers geographical patterns of species diversity and the processes that give rise to those patterns: speciation, extinction, dispersal, vicariance, continental drift, ecological interactions, and phylogeny. Topics are presented within the framework of evolutionary history and include discussion of the biology of species on islands, terrestrial biomes, altitudinal zonation of species, latitudinal species gradients, historical factors governing species distributions, macromolecular trends in the fossil record, and application of modern molecular techniques for testing biogeographical hypotheses. Prerequisite: BIOL 152 or 153 and past or concurrent enrollment in BIOL 412, 413, 414, or 550; or permission of Instructor.

BIOL 583. Herpetology. 3 Credits. N
A study of amphibians and reptiles. This lecture course will explore the taxonomic diversity of amphibians and reptiles, and current areas of active research in herpetology. Topics will be considered within a phylogenetic framework, and include discussion on systematics, biogeography, tetrapod origins, skeletal systems, growth, circulatory system, locomotion, thermal and water regulation, hibernation, ecology, sexual behavior, parental care, and mimicry.

BIOL 592. Ichthyology. 4 Credits. N LFE
A study of fishes. Lecture topics include the structure and adaptations of fishes to the aquatic environment and a survey of major fish groups with emphasis on their evolution and biogeography. Laboratory topics include a survey of fish diversity using specimens and the use of keys to identify fishes, with emphasis on the Kansas fish fauna. The course is offered
at the 500 and 700 levels, with additional assignments at the 700 level. Prerequisite: BIOL 152 and/or BIOL 413.

BIOL 593. Ornithology. 3 Credits. N LFE
A lecture and laboratory course on the biology, evolution, and diversity of birds. Prerequisite: BIOL 412 (or BIOL 413), or permission of instructor.

BIOL 594. Forest Ecosystems. 3 Credits.
Students learn basic concepts of forest productivity, forest water relations, forest hydrology, nutrient cycling, through soils and vegetation, nutrient uptake, carbon cycling, decomposition, linkages to aquatic ecosystems, and agents of disturbance to these cycles. The class spends a significant part of the semester exploring forest soil profiles and the challenges they present to different forest ecosystems. We discuss the function of forested ecosystems in a global context and identify and understand smaller-scale processes that drive forest function. Prerequisite: CHEM 135, or CHEM 175, or CHEM 195 and CHEM 196; and BIOL 414.

BIOL 595. Human Genetics. 3 Credits. N
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: BIOL 350 or BIOL 360.

BIOL 598. Research Methods. 3 Credits. N LFE
An introduction to the foundational concepts that underpin scientific inquiry and problem solving. Coursework is built around three student-designed inquiries, and topics considered within that context include experimental variables, basic principles of statistics, safety and ethics of investigation, professional communication techniques, and appropriate literature review. Enrollment priority will be given to students currently admitted to the UKanTeach program.

BIOL 599. Senior Seminar: ______. 1 Credits. N
A synthesis and discussion of current trends in a discipline or disciplines related to one of the degrees offered in the biological sciences. Emphasis is placed on providing seniors with an appreciation of the discipline’s state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences. Topics depend on the associated degree program. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences.

BIOL 600. Introductory Biochemistry, Lectures. 3 Credits. N
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Not open to students with credit in BSCI 600. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry.

BIOL 601. Principles of Biochemistry Laboratory. 2 Credits.
Theory and methods in the development of protein separation and purification, enzyme structure/function, and enzyme kinetics derived from primary literature searches and readings. Prerequisite: Corequisite: BIOL 600; or consent of instructor.

BIOL 602. Plant Ecology. 3 Credits. N
Introduction to basic concepts, focused at community and species level. Architectural ecomorphology of plants and their physiological responses to physical factors: solar radiation, climate, and soils. Plant succession as an interaction among species differing in ecomorphology and life style. Classification and ordination of plant communities: practice and theory. Other topics include: species diversity and lognormal distribution as to abundance classes; species/area relations and theory of island biogeography; allelochemic defenses; genealogy; paleoecology. Prerequisite: BIOL 414 or consent of instructor.

BIOL 603. Systematic Botany. 3 Credits. N LFE
A lecture/laboratory course providing hands-on experience with plant identification, a history of plant classification, the principles of nomenclature and character analysis, the basics of systematics theory, and a phylogenetically-oriented introduction to vascular plant diversity. Prerequisite: BIOL 413 or equivalent.

BIOL 612. Fundamentals of Microbiology. 3 Credits. NB N
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BIOL 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Not open to students with credit in BSCI 612. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor.

BIOL 622. Paleontology. 3 Credits. N
A study of the major human diseases transmitted by arthropods with emphasis on the biology and ecology of vectors, vector feeding mechanisms as related to disease transmission, epidemiology of arthropod-borne diseases, and the impact of arthropod-borne diseases on humans. Prerequisite: BIOL 152 or BIOL 153 and a course in microbiology or consent of instructor.

BIOL 623. Paleontology Laboratory. 1 Credits. U LFE
Laboratory course in the study of fossils with emphasis on the practice of paleontology and the morphology of ancient organisms. (Same as GEOL 523.)

BIOL 625. Behavioral Ecology and Sociobiology. 3 Credits. N
The role of natural selection in animal behavior, and the influence of behavior on population biology and social dynamics of animal species. Topics include: game theory and optimization as applied to animal behavior; altruism, cooperation and competition; kin recognition and interactions; group formation and dynamics, dominance, aggression, and territoriality; feeding strategies; reproductive behavior including mate choice, parental care, and mating systems. Prerequisite: BIOL 100, BIOL 101, BIOL 152, BIOL 153, GEOL 105, or GEOL 304.

BIOL 630. Conservation and Wildlife Biology. 3 Credits. N
Examination of the concepts and processes involved in conservation of plant and animal populations and communities. Topics to be covered include conservation of endangered species, problems with invasions of exotic species and habitat fragmentation, wildlife management, and design of nature reserves. Prerequisite: BIOL 414, BIOL 412 strongly recommended.

BIOL 636. Biochemistry I. 4 Credits. N
First semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the physical structure of macromolecules and membranes, enzyme structure/function, and enzyme kinetics. Prerequisite: CHEM 335 or consent of instructor.

BIOL 637. Introductory Biochemistry Laboratory. 2 Credits. U LFE
The laboratory portion of BIOL 600 or 636. Experiments have been selected to introduce the student to cell constituents and biochemical
reactions. One four-hour laboratory and one-hour lecture each week. Prerequisite: BIOL 600 or BIOL 636, or concurrent enrollment.

**BIOL 638. Biochemistry II. 4 Credits. N**

Second semester of a two-semester lecture course in introductory biochemistry. Emphasis upon the metabolism of carbohydrates, lipids, amino acids, proteins, and nucleic acids. Prerequisite: CHEM 335 with a grade of C or higher and BIOL 636 with a grade of C or higher, or consent of instructor.

**BIOL 639. Advanced Biochemistry Laboratory. 3 Credits. U LFE**

The laboratory portion of BIOL 638. One four-hour laboratory and a one-hour lecture each week. Experiments have been selected to familiarize students with experimental biochemical techniques using state-of-the-art methodology. Prerequisite: BIOL 637 and BIOL 638 (BIOL 638 may be taken concurrently).

**BIOL 640. The Biology and Evolution of Fossil Plants. 3 Credits. N**

A lecture course in which fossil plants, protists and fungi are examined throughout geologic time. Emphasis will be directed at paleoecology, biogeography and the stratigraphic distribution and composition of ancient floras. Prerequisite: BIOL 413, or permission of instructor.

**BIOL 641. Laboratory in Paleobotany. 1 Credits. U LFE**

An examination of selected fossil plants throughout geological time and the techniques used to study them; laboratory will include identification and the use of plant fossils in biostratigraphy. Prerequisite: BIOL 413 or permission of instructor.

**BIOL 642. Biochemistry III: Machines on Genes. 4 Credits. N**

This one-semester lecture course for biochemistry majors is designed to complement the topics covered in BIOL 636 and BIOL 638. Emphasis will be placed on the various molecular machines involved in the transmission and utilization of genetic information, providing a biochemical perspective of replication, transcription, and translation. Prerequisite: BIOL 636 and BIOL 638 with a grade of C or higher.

**BIOL 648. Systematics and Macroevolution. 3 Credits. N**

An introduction to the theory of macroevolution and the fundamental principles of systematics. Intended for students planning to pursue advanced studies in organismal biology, evolution, and/or systematics. Topics in macroevolution will include hierarchy theory, species concepts, speciation and species selection. Methods of phylogenetic estimation will be discussed and include parsimony, Maximum likelihood and Bayesian inference. Evolutionary studies utilizing phylogenies including tests of homology, studies of character evolution, and biogeography will be discussed. An overview of classification and nomenclature will also be provided. Prerequisite: BIOL 412 or equivalent.

**BIOL 650. Advanced Neurobiology. 3 Credits. N**

The course builds an in depth knowledge about basic mechanisms of synaptic communication among nerve cells and their targets, and the structure and function of nervous systems. Topics include nervous system development and synapse formation, structure and function of neurons, physiological and molecular basis of synaptic communication between neurons, mechanisms of synaptic plasticity involved in learning and memory, sensory systems (vision, auditory, vestibular, motor reflexes and pain), processing of neural information at cellular and system levels, synapse regeneration and diseases of the nervous system. Prerequisite: BIOL 435 (Introduction to Neurobiology), or consent of instructor.

**BIOL 652. Comparative Animal Behavior. 3 Credits. N**

A comparative analysis of behavior as an adaptive mechanism; emphasis on ontogenetic and evolutionary aspects of behavior. Prerequisite: BIOL 152 or BIOL 153; and BIOL 412. Alternatively, BIOL 412 may be taken as a corequisite.

**BIOL 654. Comparative Animal Behavior, Laboratory. 1 Credits. U LFE**

Laboratory and field phase of BIOL 652. Students may elect sections according to their special interests. Prerequisite: Prior or concurrent enrollment in BIOL 652.

**BIOL 655. Behavioral Genetics. 3 Credits. N**

A survey of behavioral genetics in animals and humans. Emphasis is on how the methods and theories of quantitative, population and molecular genetics can be applied to individual and group differences in animals. Behaviors covered may include circadian rhythms, foraging, courtship, learning and memory, anxiety, social structures and human behaviors. Prerequisite: BIOL 350 or consent of instructor.

**BIOL 660. Summer Field Ecology. 3 Credits. N**

An introduction to research methods for environmental science. Similar to EVRN 460, formatted for summer term. The course includes fieldwork in diverse ecosystems (lakes, streams, forests, prairies). Assignments and group work emphasize analysis and interpretation of field data. (Same as EVRN 660.) Prerequisite: Junior, Senior, or graduate standing, completion of the natural sciences requirement of the KU Core (GE3N).

**BIOL 661. Ecology of Rivers and Lakes. 3 Credits. N**

Study of the ecology and structure of creeks, rivers, ponds, lakes, and wetlands as well as some of the major human impacts. Prerequisite: One year of biology or permission of the instructor. BIOL 414 recommended.

**BIOL 667. Chemical Communication in Sex, Feeding, and Fighting. 3 Credits. N**

The course focuses on the role of chemical information molecules in the interrelationships among organisms, with particular attention to interactions (a) within and between animal species, (b) within and between plant species, (c) between animals and plants, (d) between predators and prey, and (e) between parasites and hosts. Prerequisite: BIOL 100 or BIOL 101 or BIOL 152 or BIOL 153 or consent of instructor.

**BIOL 668. Evolutionary Ecology. 3 Credits. N**

Emphasis will be on the themes that interface ecology and evolutionary studies. Topics will include selection theory; reproductive, foraging, and sex allocation problems; coevolution; patterns or morphological and behavioral adaptations; competition, predation, and population regulation. Special attention will be given to the philosophy and practice of resolving unanswered questions in evolutionary ecology. Prerequisite: BIOL 412 or permission of instructor.

**BIOL 672. Gene Expression. 3 Credits. N**

The molecular biology of gene expression in eukaryotes: A study of the structure of genes and the molecular mechanisms used by cells to control and regulate gene expression. Emphasis on enzymatic mechanisms related to transcription, translation, post-transcriptional and post-translational modifications, and epigenetics. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in BIOL 772. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor. A course in biochemistry is recommended.

**BIOL 680. Genomics. 3 Credits. N**

Genomics is the study of the structure, function and evolution of the genome. High-throughput technologies have given us the ability to easily and quickly sequence genomes, and measure genomewide patterns of gene expression. These tools, and the vast amounts of genome-scale data they provide, have transformed biology and medicine. This course will cover the key technological and computational methods by which genomic DNA is sequenced, genomes are assembled, and how RNA and epigenetic patterns are measured. Subsequently, we will emphasize how
these genomics tools and techniques have deepened our understanding of biology, covering questions from diverse fields to illustrate the impact of genomics on evolutionary biology, molecular and developmental genetics, human medical genetics and personalized, precision medicine. Prerequisite: BIOL 350 or BIOL 360, or consent of instructor.

**BIOL 688. The Molecular Biology of Cancer. 3 Credits.**

The basic concepts of molecular biology are examined and used to probe the process by which a normal cell becomes a cancer cell. The course investigates DNA damage and repair, chemical carcinogenesis, gene cloning and manipulation, the control of gene expression in eukaryotes, tumor viruses, the roles of oncogenes and tumor suppressor genes in carcinogenesis, and cancer therapy. Prerequisite: BIOL 350 and BIOL 416; or BIOL 536; or consent of instructor.

**BIOL 699. Biology Honors Research Colloquium. 1 Credits.**

Students pursuing Honors in Biology will meet weekly to discuss, both formally and informally, their honors research. Background information and experimental approaches of the research will be examined and critiqued. Prerequisite: Enrollment in Biology Honors program and consent of instructor.

**BIOL 700. Conservation Principles and Practices. 3 Credits.**

This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects will also be considered. (Same as AMS 714, GEOL 780, HIST 722 and MUSE 706.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 701. Topics in: _____ 1-3 Credits.**

Advanced courses on special topics in biology, given as need arises. Lectures, discussions, readings, laboratory, or field work. Students may select sections according to their special interests.

**BIOL 702. Laboratory Practice: Radiation Safety Procedures. 0.75 Credits.**

An introduction to the basic properties of radioisotopes, and the fundamental safety practices needed for the safe use of low levels of radioactive materials. Risks associated with radiation exposures and applicable state and federal regulations are discussed. (Normally the content of the first ten hours of BIOL 703.) Prerequisite: Senior standing in one of the sciences.

**BIOL 703. Radioisotopes and Radiation Safety in Research. 1.25 Credits.**

An introduction to the properties of radioactive materials, radiations, and their interaction with matter, methods of radiation detection and measurement, protective measures, applicable state and federal regulations, design and implementation of safety management systems in the research laboratory, design of tracer experiments, and the risks associated with radiation exposure. Prerequisite: BIOL 702 or concurrent enrollment in BIOL 702, algebra and two semesters of either physics or chemistry.

**BIOL 706. Natural Sciences Curation and Collections Management. 3 Credits.**

This course explores collections in the KU Museum of Natural History through the eyes of their curators and collection managers. It addresses aspects of collecting, cataloging, preserving, storing, managing, and digitally archiving different types of natural science collections. The course format consists of lectures, readings, workshops, and guided tours of the museum's paleontological, biological (flora and fauna) and archaeological division collections, as well as the Spencer Museum of Art's ethnographic collections. Student projects will involve one of the museum's collections with the opportunity for hands-on experience. (Same as MUSE 710.)

**BIOL 712. Evolutionary Biology - Graduate. 3 Credits.**

A thorough survey of evolutionary biology. Topics include: the history of evolutionary thought, genetics and the nature of variation, adaptation, speciation, coevolution, macroevolution, the comparative method, and the history of life. Prerequisite: BIOL 350 or equivalent or consent of instructor.

**BIOL 714. Graduate Ecology. 3 Credits.**

A thorough survey of the discipline of ecology. Topics include elements in physiological, population, community and ecosystem ecology. Overarching themes are 1) pattern and process, 2) ecology and evolution, 3) hierarchical nature of ecology, 4) variation in space and time, and 5) human dimensions of ecology. Prerequisite: Graduate standing or consent of instructor.

**BIOL 720. Scientific Illustration. 3 Credits.**

Lectures, demonstrations, and studio participation. Instruction in the preparation of illustrations for scientific publications, theses, and oral and poster presentations. Emphasis on basic drafting and layout skills, and pen and ink and tone renderings intended for publication. Attention given to preparation of photographs for publication and oral presentations. Instruction provided in use of specialized optical equipment for drawing. Prerequisite: Upper division or graduate standing and permission of instructor.

**BIOL 735. Scientific Communication. 3 Credits.**

Principles of English communication skills for the professional scientist. The course begins by exploring the role of narrative in all forms of scientific communication; it then applies the use of narrative tools to scientific writing, message honing and speaking. The course covers written and verbal communication of primary research. Students must have an independent research project on which to focus their communication assignments. (Same as EVRN 735.)

**BIOL 741. Biology of Freshwater Invertebrates. 3 Credits.**

A lecture and laboratory course examining the classification, biological characteristics, and ecology of invertebrates in rivers, lakes, and wetlands. Major groups of benthic and planktonic invertebrates will be studied, including aquatic insects, crustaceans, molluscs, and others. Graduate students will be expected to submit either an original collection of freshwater invertebrates or write a research essay on a topic mutually agreed upon with the professor. Not open to students who have taken BIOL 541. Prerequisite: Graduate standing; recommended: undergraduate invertebrate biology class.

**BIOL 743. Population Genetics. 3 Credits.**

Description and discussion of genetic variation in natural populations. The effects and interaction of selection, migration, mutation, mating systems, and finite population size on the maintenance of genetic variation. Discussion of the interface with evolution and population ecology. Prerequisite: BIOL 350 and BIOL 412 or equivalent.

**BIOL 750. Advanced Biochemistry. 3 Credits.**

The structures and dynamics of proteins and nucleic acids will be developed in terms of well-understood examples which will also be used to discuss the function of major classes of proteins. The application of structural and dynamical principles to biological membranes and their function will also be discussed. Prerequisite: BIOL 807 and BIOL 808, a general biochemistry course, or permission of instructor.

**BIOL 752. Cell Biology. 3 Credits.**
A lecture course emphasizing biochemical, developmental, and molecular aspects of cell structure and function. Prerequisite: BIOL 807 and BIOL 808, or BIOL 416 or BIOL 536, or permission of instructor.

**BIOL 754. Brain Diseases and Neurological Disorders. 3 Credits.** Major brain diseases and neurological disorders such as stroke, Alzheimer's Disease, Parkinson's Disease, Huntington's Disease, Multiple Sclerosis, Epilepsy, Schizophrenia, etc., will be discussed in terms of the etiology, molecular, and cellular basis of potential therapeutic interventions. Graduate students are required to present original research paper assigned by the instructor to the class in addition to the other assignments for all the students enrolled. Prerequisite: BIOL 150, or consent of instructor.

**BIOL 755. Mechanisms of Development. 3 Credits.** Molecular aspects of differential gene function, signal transduction, and cell polarity in the regulation of morphogenesis. Prerequisite: BIOL 807 and BIOL 808 for graduate students; BIOL 417 or equivalent for undergraduate students; or permission of instructor.

**BIOL 757. Carcinogenesis and Cancer Biology. 3 Credits.** This course surveys the field of cancer research. The major goal is to introduce the breadth of cancer research while, at the same time, providing sufficient depth to allow the student to recognize problems in cancer and to design experiments which study cancer biology. Toward that end, the student should (at the conclusion of the course) be able to: define cancer, identify and discuss its causes; identify and discuss the genetic basis for cancer development and progression; discuss the theoretical basis for cancer therapy design and efficacy testing; discuss the biochemical, molecular and cellular events involved in the natural history of major human neoplasms. Prerequisite: Permission of instructor.

**BIOL 759. Ecosystems Stewardship. 3 Credits.** This course sits at the crossroads between the discipline of ecology and the practice of stewardship, specifically the Indigenous Knowledge that is born from these landscapes over millennia in a place. Students will interact with research that establishes scientific foundations as a method to engage environmental problems in the anthropocene. The concept of stewardship is a core tenet of this course, students will engage with many approaches of stewardship, centering primarily on humans as a part of, not apart from, the environment. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 751 and GEOG 759.)

**BIOL 772. Gene Expression. 4 Credits.** The molecular biology of gene expression in eukaryotes: A study of the structure of genes and the molecular mechanisms used by cells to control and regulate gene expression. Emphasis on enzymatic mechanisms related to transcription, translation, post-transcriptional and post-translational modifications, and epigenetics. This course is offered at the 600 and 700 level with additional assignments at the 700 level. Not open to students with credit in EVRN 451 or EVRN 751, GEOG 451 or GEOG 759, BIOL 451 or BIOL 759. (Same as EVRN 751 and GEOG 759.)

**BIOL 782. Principles of Biogeography. 3 Credits.** A synthesis of historical and ecological biogeography of plants and animals, treating vicariance, dispersal, and community patterns; lectures, readings, discussions. A course in systematics and a course in ecology are recommended.

**BIOL 784. Introduction to Museum Public Education. 3 Credits.** Consideration of the goals of an institution's public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, GEOL 784, HIST 721, and MUSE 705.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 785. Museum Management. 3 Credits.** Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, GEOL 783, HIST 728, and MUSE 701.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 786. Fundamentals of Tropical Biology. 1-8 Credits.** The tropical environment and biota; ecologic relations, communities and evolution in the tropics. Primarily a field course, taught in Costa Rica; two sessions per year, February-March, July-August.

**BIOL 787. Introduction to Museum Exhibits. 3 Credits.** This course will consider the role of exhibits as an integrated part of museum collection management, research, and public service. Lecture and discussion will focus on issues involved in planning and producing museum exhibits. Laboratory exercises will provide first hand experience with basic preparation techniques. Emphasis will be placed on the management of an exhibit program in both large and small museums in the major disciplines. (Same as AMS 700, GEOL 781, HIST 723, and MUSE 703.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 794. Mammalogy. 3 Credits.** A study of mammals, with emphasis on systematics, biogeography, and natural history. Lectures, laboratory, and field study. Prerequisite: BIOL 100 or BIOL 413.

**BIOL 798. Introduction to Collections Management and Utilization. 3 Credits.** This course examines the roles collections play in fulfilling a museum's mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, GEOL 785, HIST 725, and MUSE 704.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**BIOL 801. Topics in: ______. 1-3 Credits.** Advanced courses on special topics in biology, given as need arises. Lectures, discussing readings, laboratory or field work. Students may select sections according to their special interests.

**BIOL 805. Scientific Integrity in Ecology and Evolutionary Biology. 1 Credit.** This course covers the responsible conduct of research to help students initiate research projects ethically. Topics covered include expectations of federal granting agencies and the university, best practices for data management and publishing, and professional development as a graduate student. Prerequisite: Admission to the graduate program in Ecology and Evolutionary Biology, or consent of instructor.

**BIOL 807. Graduate Molecular Biosciences. 3 Credits.** An introduction to the advanced study of biochemistry, microbiology, genetics, cell and developmental biology, and neurobiology for all Molecular Biosciences graduate students. Topics can include macromolecular structure, metabolism, kinetics and thermodynamics, bioinformatics, prokaryotic and eukaryotic genetic mechanisms, cell structure and function, signal transduction, basic and pathogenic
bacteriology, immunology, virology, membrane potentials, synaptic transmission, and sensory neurophysiology. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor.

**BIOL 809. Graduate Molecular Biosciences for Medicinal Chemists. 4 Credits.**
An introduction to the advanced study of biochemistry, microbiology, and neurobiology for graduate students in Medicinal Chemistry. Prerequisite: Admission to the graduate program in Medicinal Chemistry and consent of instructor.

**BIOL 811. Advanced Molecular and Cellular Immunology. 2 Credits.**
Covers recent advances in immunochemistry and immunobiology. Topics include structure and function of antibodies, hybridoma systems, idiotypes, induction and regulation of the immune response through cell interactions and cytokine action, and the role of immune activity in disease states such as hypersensitivity, autoimmunity, and cancer. Prerequisite: BIOL 807 and BIOL 808, or an introductory course in immunology, or consent of instructor.

**BIOL 812. Mechanisms of Host-Parasite Relationships. 2 Credits.**
Emphasis is on virulence factors of microorganisms and the host response to infection. Topics will include pathogenesis of intracellular and extracellular parasites, bacterial adhesins, and toxins, and the role of innate and acquired immunity in host resistance and the response to infection. Prerequisite: BIOL 807 and BIOL 808, or a course in biochemistry, or consent of instructor.

**BIOL 814. Advanced Molecular Virology. 2 Credits.**
The course concentrates on evaluation of current literature concerning all aspects of molecular biology, biochemical characterization, and pathogenic mechanisms involved in host-virus interactions. Students will be expected to present articles and participate in discussions. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics and a course in virology, or consent of instructor.

**BIOL 815. Advanced Molecular Genetics. 2 Credits.**
A literature-based course that covers recent advances in microbial molecular genetics. Topics include transcription, translation, mutagenesis and repair, genetic exchange mechanisms, and regulation of gene expression. Prerequisite: BIOL 807 and BIOL 808, or a course in microbial genetics, or consent of instructor.

**BIOL 816. Careers in the Biomedical Sciences. 1 Credits.**
Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as CHEM 816, MDCM 816 and PHCH 816.) Prerequisite: Permission of instructor.

**BIOL 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.**
This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion. (Same as CHEM 817/MDCM 817/PHCH 817.) Prerequisite: Graduate student.

**BIOL 841. Biometry I. 5 Credits.**
The application of statistical methods to data from various fields of biological research. Special emphasis is placed on practical computational procedures. Prerequisite: College algebra.

**BIOL 848. Phylogenetic Methods. 4 Credits.**
A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods. Computer lab will familiarize students with software that implements the analyses discussed in lecture. Intended for graduate students specializing in systematics. Prerequisite: BIOL 845 and BIOL 841 or consent of instructor.

**BIOL 860. Principles and Practice of Chemical Biology. 3 Credits.**
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as CHEM 860, MDCM 860 and PHCH 860.) Prerequisite: Permission of instructor.

**BIOL 895. Human Genetics. 3 Credits.**
A lecture course providing balanced coverage of Mendelian and molecular genetics of humans; includes discussions and presentations on current issues in human and medical genetics. Prerequisite: A course in genetics.

**BIOL 899. Master's Thesis. 1-10 Credits.**
Research which is to be incorporated into an M.A. thesis. Not more than ten hours may be earned. Graded on a satisfactory progress/limited progress/no progress basis.

**BIOL 901. Graduate Seminar in Biochemistry and Biophysics. 1 Credits.**
Advanced course examining current research topics in biochemistry and biophysics. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings of research reports, and oral presentations. Prerequisite: Enrollment in graduate school, and departmental admission.

**BIOL 905. Advanced Molecular Genetics. 1-3 Credits.**
A survey of methods for inferring phylogenetic trees from character data and using phylogenies to address evolutionary questions. Lectures will present the relevant theory and algorithmic description of methods. Computer lab will familiarize students with software that implements the analyses discussed in lecture. Intended for graduate students specializing in systematics. Prerequisite: BIOL 845 and BIOL 841 or consent of instructor.

**BIOL 918. Modern Biochemical and Biophysical Methods. 4 Credits.**
This course emphasizes the use of techniques for solving problems of structure and function of biological macromolecules. Students will complete several modules that consist of lectures relating to theory and practical aspects of each methodological approach, and apply these techniques to solving a specific problem. Students will submit a paper describing the resulting data and conclusions. Prerequisite: BIOL 807, BIOL 817, or permission of instructor.

**BIOL 925. Research Grant Proposal Preparation. 3 Credits.**
This course introduces the basics of preparing a successful scientific grant application. Topics to be covered include how to develop a novel, fundable project, scientific writing and grantmanship, and what criteria reviewers consider in evaluating grants. The course will be a mix of instruction and class discussion. Prerequisite: Admission to the graduate program in Molecular Biosciences, or consent of instructor.

**BIOL 943. Multivariate Data Analysis. 3 Credits.**
Matrix formulation of multivariate models and data. Specific methods covered include Principal Components Analysis, Factor Analysis, Multiple Group Discriminant Analysis and Canonical Analysis, and Canonical Correlation Analysis. Prerequisite: Knowledge of elementary matrix algebra.
**Policies and procedures of Graduate Studies** govern the process of being admitted as either a degree-seeking or non-degree seeking student. An applicant seeking to pursue graduate study in the College may be admitted by completing the online application form at [catalog.ku.edu/liberal-arts-sciences/biology/](http://catalog.ku.edu/liberal-arts-sciences/biology/). Note that the various B.A. and B.S. undergraduate degree programs in biology are listed at the [microbiology-0/](http://microbiology-0/) and [bacteriology-0/](http://bacteriology-0/) pages. More information about the department, our faculty, and students, and alumni of our graduate programs can be found on [the Department of Molecular Biosciences website](http://molecularbiosciences.ku.edu/), including biochemistry, biophysics, structural biology, bioinformatics, cancer biology, genetics, genomics, immunology, microbiology, virology, neurobiology, molecular, cellular and developmental biology. Our researchers investigate fundamental biological and biomedical problems on all levels, from molecules to cells to organisms. Our research labs collaborate to solve complex questions using a range of approaches, and make use of the world-class core facilities at KU. The Department of Molecular Biosciences at the University of Kansas is an excellent environment for research and graduate training in biology.

The department offers Master of Science degrees in Biochemistry and Biophysics ([http://molecularbiosciences.ku.edu/biochemistry-graduate-program/](http://molecularbiosciences.ku.edu/biochemistry-graduate-program/)), in Molecular, Cellular, and Developmental Biology ([http://molecularbiosciences.ku.edu/mcdb-graduate-program/](http://molecularbiosciences.ku.edu/mcdb-graduate-program/)), and in Microbiology ([http://molecularbiosciences.ku.edu/microbiology-0/](http://molecularbiosciences.ku.edu/microbiology-0/)). General information about the department, our faculty and students, and alumni of our graduate programs can be found on our website ([http://molecularbiosciences.ku.edu/](http://molecularbiosciences.ku.edu/)). Detailed information about admission ([https://molecularbiosciences.ku.edu/graduate-admissions/](https://molecularbiosciences.ku.edu/graduate-admissions/)) to our graduate program and financial support ([http://molecularbiosciences.ku.edu/stipend/](http://molecularbiosciences.ku.edu/stipend/)) is also available.

Note that the various B.A. and B.S. undergraduate degree programs in biology are listed at the Biology Undergraduate Programs ([http://catalog.ku.edu/liberal-arts-sciences/biology/](http://catalog.ku.edu/liberal-arts-sciences/biology/)) page.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies section (p. 2408) of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

The Department of Molecular Biosciences ([http://molecularbiosciences.ku.edu/](http://molecularbiosciences.ku.edu/)) recognizes the importance of investing in the careers of future biomedical scientists. We welcome graduate students into our vibrant scientific community, where they have the opportunity to become outstanding researchers and prepare for an exciting future in science.

All students seeking a graduate degree must submit a formal application to the Molecular Biosciences graduate program. Full information on the application process, and a link to apply online can be found on our website ([https://molecularbiosciences.ku.edu/graduate-admissions/](https://molecularbiosciences.ku.edu/graduate-admissions/)). Application materials for the Molecular Biosciences graduate program include:

1. An application form
2. 1 official copy of all academic transcripts (international students must also provide a translated copy);
3. A Curriculum Vitae or résumé (1 to 2 pages);
4. 3 letters of recommendation from qualified individuals using the Graduate Letter of Recommendation form;
5. A Statement of Research Interests and Goals. A strong statement will include: (a) A description of previous research experiences, if applicable, discussing how these have prepared you for graduate school both professionally and personally, (b) A discussion of your broad research interests, and (c) A description of your future career goals, discussing how a PhD from our department will help further these goals. (1-2 pages)
6. Application Fee
7. Non-native speakers of English must meet the English proficiency requirements for employment as a GTA/GRA: minimum TOEFL (iBT) SPEAKING score of 22, AND all other parts scores at least 20; or IELTS SPEAKING score of 8, with no other part score below 5.5. Scores must be less than 2 years old from the time of initial enrollment.

More information can be found here: [https://gradapply.ku.edu/english-requirements/](https://gradapply.ku.edu/english-requirements/)

GRE scores are not required for your application. You may submit your official GRE scores if you feel it will help the admissions committee better understand your academic capabilities. But electing not to submit scores will not impact your chance of admission.

Complete applications received by December 1st are reviewed by the Molecular Biosciences graduate admissions committee. Admission into our program is competitive, and we receive a large number of applications each year. Students will be informed of admission decisions early in the new year, admissions decisions are finalized by April 15, and newly admitted students matriculate in August.

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**Master of Science in Biochemistry and Biophysics**

**Molecular Biosciences Masters Programs**

Molecular Biosciences is an interdisciplinary group of faculty, postdoctoral fellows and graduate students who perform cutting edge research across a wide range of areas ([https://molecularbiosciences.ku.edu/research-areas/](https://molecularbiosciences.ku.edu/research-areas/)), including biochemistry, biophysics, structural biology, bioinformatics, cancer biology, genetics, genomics, immunology, microbiology, virology, neurobiology, molecular, cellular and developmental biology. Our researchers investigate fundamental biological and biomedical problems on all levels, from molecules to cells to organisms. Our research labs collaborate to solve complex questions using a range of approaches, and make use of the world-class core facilities at KU. The Department of Molecular Biosciences at the University of Kansas is an excellent environment for research and graduate training in biology.

The department offers Master of Science degrees in Biochemistry and Biophysics ([http://molecularbiosciences.ku.edu/biochemistry-graduate-program/](http://molecularbiosciences.ku.edu/biochemistry-graduate-program/)), in Molecular, Cellular, and Developmental Biology ([http://molecularbiosciences.ku.edu/mcdb-graduate-program/](http://molecularbiosciences.ku.edu/mcdb-graduate-program/)), and in Microbiology ([http://molecularbiosciences.ku.edu/microbiology-0/](http://molecularbiosciences.ku.edu/microbiology-0/)). General information about the department, our faculty and students, and alumni of our graduate programs can be found on our website ([http://molecularbiosciences.ku.edu/](http://molecularbiosciences.ku.edu/)). Detailed information about admission ([https://molecularbiosciences.ku.edu/graduate-admissions/](https://molecularbiosciences.ku.edu/graduate-admissions/)) to our graduate program and financial support ([http://molecularbiosciences.ku.edu/stipend/](http://molecularbiosciences.ku.edu/stipend/)) is also available.

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The Department of Molecular Biosciences ([http://molecularbiosciences.ku.edu/](http://molecularbiosciences.ku.edu/)) recognizes the importance of investing in the careers of future biomedical scientists. We welcome graduate students into our vibrant scientific community, where they have the opportunity to become outstanding researchers and prepare for an exciting future in science.

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Lawrence, KS 66045

M.A. Degree Requirements:  
Biochemistry and Biophysics  
General Requirements for All M.S. Students
Refer to each discipline for specific course requirements. General requirements include

1. A minimum of 30 hours of graduate credit;
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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 750</td>
<td>Advanced Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 772</td>
<td>Gene Expression</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives to satisfy the 30-hour requirement. Electives are determined in consultation with the graduate advisor and graduate committee.

Master of Science in Microbiology

Molecular Biosciences Masters Programs

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Microbiology
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<th>Code</th>
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<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select at least three graduate courses from the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>BIOL 811 Advanced Molecular and Cellular Immunology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 812 Mechanisms of Host-Parasite Relationships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 814 Advanced Molecular Virology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 815 Advanced Molecular Genetics</td>
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Plus electives to satisfy the 30-hour course requirement. No more than 6 of these hours can be below the 700 level. Electives are determined in consultation with the graduate advisor and graduate committee.

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**Molecular, Cellular, and Developmental Biology**

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<td>BIOL 752</td>
<td>Cell Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 755</td>
<td>Mechanisms of Development</td>
<td>3</td>
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**Ph.D. Degree Requirements**

**Biochemistry and Biophysics**

**General requirements for all Molecular Biosciences Ph.D. Students**

Students should be familiar with departmental expectations associated with their degree. We recommend contacting the Graduate Program Coordinator who can provide additional detail on departmental policies, recommendations, and requirements.

1. Complete a common first-year curriculum (see below). This includes BIOL 817 which satisfies both the responsible scholarship and the research skills requirements.
2. Establish a graduate advisory committee during Fall of the second year of graduate study at the latest. This committee must meet a minimum of once each year.
3. From the start of the second year of graduate study, enroll in either BIOL 701 Cellular and Molecular Proteins or BIOL 905 Advanced Molecular Genetics, every semester.
4. To assist with development and writing of the orals research proposal, enroll in BIOL 925 Research Grant Proposal Preparation during the second year of graduate study.
5. Prepare an orals research proposal. Steps include: (a) have a graduate advisory committee meeting to discuss the specific aims of the orals proposal during the semester BIOL 925 is taken, (b) following approval of the aims, write the full proposal, (c) submit a full draft of the proposal to your readers (your major advisor, the Chair of your orals committee, and one other committee member) the semester following enrollment in BIOL 925, and (d) submit the final version of the proposal to your entire committee prior to the comprehensive orals examination.
6. Schedule the comprehensive orals examination between May 1 and June 30 of the second year of graduate study.
7. Complete at least two semesters of teaching as a GTA (Graduate Teaching Assistant) during the program.
8. Write a dissertation based on original research, provide the document to your graduate advisory committee for evaluation, and describe your research in a public oral presentation.

9. Complete the degree within seven years. (Exceptions to this requirement require a recommendation from the Director of Graduate Studies.)

**First-year curriculum for Molecular Biosciences PhD Students**

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>BIOL 701</td>
<td>Topics in: _____ (Molecular Sciences Seminar.)</td>
<td>1-3</td>
</tr>
<tr>
<td>BIOL 807</td>
<td>Graduate Molecular Biosciences</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 817</td>
<td>Rigor, Reproducibility and Responsible Conduct in Research</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 985</td>
<td>Advanced Study (fall and spring semester)</td>
<td>1-10</td>
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**Specific Ph.D. Requirements: Biochemistry and Biophysics**

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<td>3</td>
</tr>
<tr>
<td>BIOL 901</td>
<td>Graduate Seminar in Biochemistry and Biophysics (one semester)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 918</td>
<td>Modern Biochemical and Biophysical Methods</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 952</td>
<td>Introduction to Molecular Modeling</td>
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The department is committed to enhancing diversity (https://molecularbiosciences.ku.edu/dei-statement/) in the life sciences, encourage participation from individuals with diverse life experiences, and strive to foster an inclusive research and training environment for all our faculty, students, and staff.

All supporting documentation should be uploaded online when you apply. If this is not possible, please send documentation to:

**John Connolly**  
Graduate Program Coordinator  
The University of Kansas  
Department of Molecular Biosciences  
Haworth Hall  
1200 Sunnyside Ave., Room 2034  
Lawrence, KS 66045

**Microbiology**

**General Requirements for all Molecular Biosciences Ph.D. Students**

Students should be familiar with departmental expectations associated with their degree. We recommend contacting the Graduate Program Coordinator who can provide additional detail on departmental policies, recommendations, and requirements.

1. Complete a common first-year curriculum (see below). This includes BIOL 817, which satisfies both the responsible scholarship and the research skills requirements.
2. Establish a graduate advisory committee during Fall of the second year of graduate study at the latest. This committee must meet a minimum of once a year.
3. From the start of the second year of graduate study, enroll in either BIO 701 Cellular and Molecular Proteins or BIO 905 Advanced Molecular Genetics, every semester.
4. To assist with development and writing of the orals research proposal, enroll in BIO 925 Research Grant Proposal Preparation during the second year of graduate study.
5. Prepare an orals research proposal. Steps include: (a) have a graduate advisory committee meeting to discuss the specific aims of the oral proposal during the semester BIO 925 is taken, (b) following approval of the aims, write the full proposal, (c) submit a full draft of the proposal to your readers (your major advisor, the Chair of your orals committee, and one other committee member) the semester following enrollment in BIO 925, and (d) submit the final version of the proposal to your entire committee prior to the comprehensive orals examination.
6. Schedule the comprehensive orals examination between May 1 and June 30 of the second year of graduate study.
7. Complete at least two semesters of teaching as a GTA (Graduate Teaching Assistant) during the program.
8. Write a dissertation based on original research, provide the document to your graduate advisory committee for evaluation, and describe your research in a public oral presentation.
9. Complete the degree within seven years. (Exceptions to this requirement require a recommendation from the Director of Graduate Studies.)

First-year curriculum for all Molecular Biosciences PhD Students

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 701</td>
<td>Topics in: Molecular Biosciences Seminar. Enroll in both Fall and Spring Semester of the first year.)</td>
<td>1-3</td>
</tr>
<tr>
<td>BIOL 807</td>
<td>Graduate Molecular Biosciences</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 817</td>
<td>Rigor, Reproducibility and Responsible Conduct in Research</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 985</td>
<td>Advanced Study (fall and spring semester)</td>
<td>1-10</td>
</tr>
</tbody>
</table>

Specific Ph.D. Requirements: Microbiology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 811</td>
<td>Advanced Molecular and Cellular Immunology</td>
<td></td>
</tr>
<tr>
<td>BIOL 812</td>
<td>Mechanisms of Host-Parasite Relationships</td>
<td></td>
</tr>
<tr>
<td>BIOL 814</td>
<td>Advanced Molecular Virology</td>
<td></td>
</tr>
<tr>
<td>BIOL 815</td>
<td>Advanced Molecular Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 999</td>
<td>Doctoral Dissertation</td>
<td></td>
</tr>
</tbody>
</table>

Note that the graduate advisory committee may recommend that additional courses be taken.

Doctor of Philosophy in Molecular, Cellular, and Developmental Biology

Molecular Biosciences Doctoral Programs

Molecular Biosciences is an interdisciplinary group of faculty, postdoctoral fellows and graduate students who perform cutting edge research across a wide range of areas, including biochemistry, biophysics, structural biology, bioinformatics, cancer biology, genetics, genomics, immunology, microbiology, virology, neurobiology, molecular, cellular and developmental biology. Our researchers investigate fundamental biological and biomedical problems on all levels, from molecules to cells to organisms. Our research labs collaborate to solve complex questions using a range of approaches, and make use of the world-class core facilities at KU. The Department of Molecular Biosciences at the University of Kansas is an excellent environment for research and graduate training in biology.

The department offers Doctor of Philosophy degrees in Biochemistry and Biophysics, in Molecular, Cellular, and Developmental Biology (MCDB), and in Microbiology. General information about the department, our faculty and students, and alumni of our graduate programs can be found on our website (https://molecularbiosciences.ku.edu/). Detailed information about admission (https://molecularbiosciences.ku.edu/graduate-admissions/) and financial support (https://molecularbiosciences.ku.edu/stipend/) is also available.

Note that the various B.A. and B.S. undergraduate degree programs in biology are listed at the Biology Undergraduate Programs (http://catalog.ku.edu/liberal-arts-sciences/biology/) page.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The Department of Molecular Biosciences (http://molecularbiosciences.ku.edu/) recognizes the importance of investing in the careers of future biomedical scientists. We welcome graduate students into our vibrant scientific community, where they have the opportunity to become outstanding researchers and prepare for an exciting future in science.

All students seeking a graduate degree must submit a formal application to the Molecular Biosciences graduate program. Full information on the application process, and a link to apply online can be found on our website (https://molecularbiosciences.ku.edu/graduate-admissions/). Application materials for the Molecular Biosciences graduate program include:

1. An application form
2. 1 official copy of all academic transcripts (international students must also provide a translated copy);
3. A Curriculum Vitae or résumé (1 to 2 pages);
4. 3 letters of recommendation from qualified individuals using the Graduate Letter of Recommendation form;
5. A Statement of Research Interests and Goals. A strong statement will include: (a) A description of previous research experiences, if applicable, discussing how these have prepared you for graduate school both professionally and personally, (b) A discussion of your broad research interests, and (c) A description of your future career goals, discussing how a PhD from our department will help further these goals. (1-2 pages)
6. Application Fee
7. Non-native speakers of English must meet the English proficiency requirements for employment as a GTA/GRA: minimum TOEFL (iBT) SPEAKING score of 22, AND all other parts scores at least 20; or IELTS SPEAKING score of 8, with no other part score below 5.5. Scores must be less than 2 years old from the time of initial enrollment.
More information can be found here: https://gradapply.ku.edu/english-requirements

GRE scores are not required for your application. You may submit your official GRE scores if you feel it will help the admissions committee better understand your academic capabilities. But electing not to submit scores will not impact your chance of admission.

Complete applications received by December 1st are reviewed by the Molecular Biosciences graduate admissions committee. Admission into our program is competitive, and we receive a large number of applications each year. Students will be informed of admission decisions early in the new year; admissions decisions are finalized by April 15, and newly admitted students matriculate in August.

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John Connolly
Graduate Program Coordinator
The University of Kansas
Department of Molecular Biosciences
Haworth Hall
1200 Sunnyside Ave., Room 2034
Lawrence, KS 66045

Molecular, Cellular, and Developmental Biology

General Requirements for all Molecular Biosciences Ph.D. Students

Students should be familiar with departmental expectations associated with their degree. We recommend contacting the Graduate Program Coordinator who can provide additional detail on departmental policies, recommendations, and requirements.

1. Complete a common first-year curriculum (see below). This includes BIOL 817, which satisfies both the responsible scholarship and the research skills requirements.
2. Establish a graduate advisory committee during Fall of the second year of graduate study at the latest. This committee must meet a minimum of once each year.
3. From the start of the second year of graduate study, enroll in either BIOL 701 Cellular and Molecular Proteins or BIOL 905 Advanced Molecular Genetics, every semester.
4. To assist with development and writing of the orals research proposal, enroll in BIOL 925 Research Grant Proposal Preparation during the second year of graduate study.
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6. Schedule the comprehensive orals examination between May 1 and June 30 of the second year of graduate study.
7. Complete at least two semesters of teaching as a GTA (Graduate Teaching Assistant) during the program.
8. Write a dissertation based on original research, provide the document to your graduate advisory committee for evaluation, and describe your research in a public oral presentation.
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First-year curriculum for all Molecular Biosciences PhD Students

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</tr>
<tr>
<td>BIOL 985</td>
<td>Advanced Study (fall and spring semester)</td>
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</table>

Specific Ph.D. Requirements: Molecular, Cellular, and Developmental Biology

In addition to the required courses listed above, all MCDB PhD students are required to take a minimum of three (3) graduate-level courses (numbered 600 and above) that are collectively worth a minimum of nine (9) credits. All such classes must be completed by the end of the second year of graduate study. A number of acceptable classes are offered each year, and the specific classes each student takes will be decided upon in consultation with their research mentor and/or graduate advisory committee. Please see the graduate handbook for an up-to-date list of possible courses.

Graduate Certificate in Chemical Biology

Graduate Certificate in Chemical Biology

Through scientific progress our understanding of cellular systems has grown leading to a more nuanced appreciation of both these systems and associated disease processes. This knowledge has led to the formulation of a myriad new questions regarding the interactions of macromolecules within cells and the regulation of these interactions. The Certificate Program in Chemical Biology (http://chembio.ku.edu/) focuses on developing molecular tools necessary to probe these systems and explore new questions. In order to employ these tools, students require wide access to technologies, databases, scientific training environments and resources that facilitate learning at the interface of biology and chemistry. Multidisciplinary curricula that unite students around common goals empower students to acquire a working knowledge of disciplines outside their area of expertise. The resulting interdisciplinary experience paves the road to collaborative science driving broad advances in
understanding human health. The program has participation of students and mentors from the College of Liberal Arts and Sciences (http://clas.ku.edu/) (primarily Chemistry (http://chem.ku.edu/) and Molecular Biosciences (http://molecularbiosciences.ku.edu/)), the School of Pharmacy (http://pharmacy.ku.edu/) (principally in Medicinal Chemistry (http://medchem.ku.edu/) and Pharmaceutical Chemistry (http://pharmchem.ku.edu/)) and the School of Engineering (https://engr.ku.edu/) (Bioengineering (https://bioengr.ku.edu/)).

About the Program
At the heart of the Certificate Program in Chemical Biology is an integrated academic curriculum that provides participating students with a working knowledge of the key concepts and methods of the interdisciplinary field of Chemical Biology. Students with strong chemical or biological backgrounds will reap the benefits of collaborative exposure to modern techniques and theories in disciplines across the chemical biology interface. Students are required to:

- Follow a defined course sequence designed to provide a working knowledge across the chemical biology interface. The curriculum includes a flagship course defining the principles and practice of chemical biology. A fundamental part of the curriculum is the seminar course entitled "Careers in the Biomedical Sciences," which highlights opportunities for doctoral graduates inside and outside academia and industry. The training also emphasizes the completion of rigorous, reproducible, transparent and ethical research.
- Organize and participate in the annual Biomedical Sciences Symposium. This symposium includes oral presentations by the students on their research and a lecture by an internationally recognized keynote speaker in a research area at the chemistry/biology interface. The students also lead an afternoon interdisciplinary poster session that is open to all students.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

The Certificate Program is open to all graduate students at KU. The training platform will provide students with an integrated educational training program that hones their skills and provides a broad wealth of information for career development. This program extends beyond the standard knowledge and capabilities developed in the independent departmental doctoral programs. Candidates in this program develop a working knowledge of both advanced chemistry and advanced biochemistry/biology, which supplements the more specialized environment within the laboratory of their research mentor. Underrepresented minority students and students with disabilities are encouraged to apply. Any necessary accommodations for students with disabilities are made with the assistance of the office of Student Access Services (http://access.ku.edu/).

Please see the Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/) policy for information on admission requirements. Applications may be submitted to the office of Graduate Admissions (https://gradapply.ku.edu/apply/).

Certificate Requirements
Course requirements: Students must complete 5 courses for a total of 14-17 graduate credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 807</td>
<td>Graduate Molecular Biosciences</td>
<td>3-6</td>
</tr>
<tr>
<td>CHEM 720</td>
<td>Fundamentals and Methods of Analytical Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 760</td>
<td>Introduction to Chemistry in Biology</td>
<td></td>
</tr>
<tr>
<td>MDCM 710</td>
<td>Chemistry of Drug Action I</td>
<td></td>
</tr>
<tr>
<td>PHCH 862</td>
<td>Physical Chemistry of Solutions, Solids and Surfaces</td>
<td></td>
</tr>
<tr>
<td>BIOL/CHEM/ MDCM/PCHCH 860</td>
<td>Principles and Practice of Chemical Biology</td>
<td>1 hour, seminar; taken 2 semesters:</td>
</tr>
<tr>
<td>BIOL/CHEM/ MDCM/PCHCH 816</td>
<td>Careers in the Biomedical Sciences</td>
<td></td>
</tr>
<tr>
<td>One elective in chemical biology:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Course must be outside the student’s home department and support dissertation research or career development. The elective course should be approved by the program directors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethics and Safety Training:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BIOL/CHEM/ MDCM/PCHCH 817</td>
<td>Rigor, Reproducibility and Responsible Conduct in Research</td>
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Total Hours 14-17

Museum Studies Program

Museum Studies Graduate Program

These are exciting and challenging times for museums -- longstanding premises are being questioned, and many established practices are being reconsidered. Museum professionals today work in an environment far different than that of even a few years ago. Emerging technologies now allow museums to bring their collections and their programs to audiences well beyond the confines of museum buildings. With this expanded reach, museums are preparing for dramatic changes in the age, ethnicity, education, and economic status of their audiences. Exhibitions and public programs are evolving; more than ever, educators, curators, and designers are seeking ways to engage visitors in complex issues of broad concern. Behind the scenes, collection stewardship is being reevaluated in response to practical, political, and ethical concerns. Additionally, unprecedented scholarly attention is being directed toward the ways in which museums have acquired their collections, represented their subjects, and engaged with the public. In the midst of this transformation, long-standing assumptions about museums' public value have been called into question, requiring museum leaders to craft new collaborations and community partnerships in order to survive.

To advance and thrive in this dynamic environment, twenty-first century museum professionals will need knowledge informed by practice,
imagination tempered by rigor, and leadership stimulated by collaboration. This is what we can offer at the University of Kansas. Students take advantage of the superb facilities at KU, including the Dole Institute of Politics, Biodiversity Institute & Natural History Museum, Spencer Museum of Art, Spencer Research Library, and Wilcox Classical Museum, as well as nearby historical agencies, specialized libraries, and museums.

Our flexible, interdisciplinary M.A. degree gives you the foundations of the field plus hands-on skills and experience in your specific area of museum work. Our unique dual master’s program with African & African-American Studies allows you to earn two master's degrees in three years, and we also offer a 15-credit graduate certificate program. See our website (http://museumstudies.ku.edu/) for further details about our degree offerings.

Courses

**MUSE 177. First Year Seminar:** _____. 3 Credits.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Museum Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**MUSE 301. Museums and Society: Past, Present, Future.** 3 Credits.
An introduction to museums and the field of museum studies. Using short lectures, discussion, laboratory exercises, field trips, and guest speakers, students will explore the history, role, and function of museums including types, dimensions, creation and management of collections, exhibition development, administration, and visitor experiences. Includes instruction and practice in writing for a variety of museum contexts and audiences. Designed for students interested in museums and curious about museum careers.

**MUSE 400. Directed Readings in Museum Studies.** 1-3 Credits.
Directed reading in an area of Museum Studies for which there is no course in the Museum Studies program, or in cooperating departments and in which a member of the faculty has expertise. Prerequisite: Consent of instructor.

**MUSE 480. Special Topics in Museum Studies:** _____. 1-3 Credits.
Courses on special topics in museum studies, given as need arises. Lectures, discussions of readings, and guest speakers. Topic for semester to be announced. Instructor permission usually required. Prerequisite: Varies by section and instructor.

**MUSE 580. Special Topics in Museum Studies:** _____. 1-3 Credits.
Courses on special topics in museum studies, given as need arises. Lectures, discussions of readings, and guest speakers. Topic for semester to be announced. Instructor permission may be required. Prerequisite: Successful completion of a History, Art History, Anthropology or Museum Studies course numbered below 500, or permission of instructor.

**MUSE 699. Anthropology in Museums.** 3 Credits.
The course reviews the history of archeological, ethnographic, physical anthropological and other types of collections. It also considers current issues facing anthropologists, such as: contested rights to collections and the stories that accompany them; representation and interpretation of cultures; art and artifact; conceptualization, design and building of exhibitions; and anthropological research and education in the museum. (Same as ANTH 699.) Prerequisite: ANTH 150 or ANTH 108 or consent of instructor.

**MUSE 701. Museum Management.** 3 Credits.
Lecture, discussion, and laboratory exercises on the nature of museums as organizations; accounting, budget cycles, personnel management, and related topics will be presented using, as appropriate, case studies and a simulated museum organization model. (Same as AMS 731, BIOL 785, GEOL 783, and HIST 728.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**MUSE 703. Introduction to Museum Exhibits.** 3 Credits.
Presentation of principles and practices of exhibit management, design, and production. Topics will include developing a master plan for museum exhibits; concept development; design, installation, and maintenance of exhibits; design theory; design process; label writing and editing; selection of materials architectural requirements and building codes; cost estimating; publicity; security; and exhibit evaluation. Consideration will be given to exhibition problems in public and private museums in the areas of anthropology, art, history, natural history, and technology. (Same as AMS 700, BIOL 787, GEOL 781, and HIST 723.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**MUSE 704. Introduction to Collections Management and Utilization.** 3 Credits.
This course examines the roles collections play in fulfilling a museum’s mission; the obligations ownership/preservation of collections materials create for a museum; and the policies, practices, and professional standards that museums are required to put in place. The course will cover utilization of collections for research, education, and public engagement; address how that utilization informs the need for and structure of collections policies, and introduce the basic practices of professional collections management. (Same as ANTH 798, AMS 730, ANTH 798, BIOL 798, GEOL 785, and HIST 725.) Prerequisite: Museum Studies student, Indigenous Studies student, or consent of instructor.

**MUSE 705. Introduction to Museum Public Education.** 3 Credits.
Consideration of the goals of an institution’s public education services, developing programs, identifying potential audiences, developing audiences, and funding. Workshops and demonstrations are designed for students to gain practical experience working with various programs and developing model programs. (Same as AMS 797, BIOL 784, GEOL 784, and HIST 721.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**MUSE 706. Conservation Principles and Practices.** 3 Credits.
This course will acquaint the future museum professional with problems in conserving all types of collections. Philosophical and ethical approaches will be discussed, as well as the changing practices regarding conservation techniques. Emphasis will be placed on detection and identification of causes of deterioration in objects made of organic and inorganic materials, and how these problems can be remedied. Storage and care of objects also be considered. (Same as AMS 714, BIOL 700, GEOL 780, and HIST 722.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**MUSE 707. Practical Archival Principles.** 3 Credits.
Study of the principles and practices applicable to the preservation, care, and administration of archives and manuscripts. Practical experience will be an integral part of this course. (Same as HIST 727.)

**MUSE 710. Natural Sciences Curation and Collections Management.** 3 Credits.
This course explores collections in the KU Museum of Natural History through the eyes of their curators and collection managers. It addresses aspects of collecting, cataloguing, preserving, storing, managing, and digitally archiving different types of natural science collections. The course format consists of lectures, readings, workshops, and guided tours of the
museum's paleontological, biological (flora and fauna) and archaeological division collections, as well as the Spencer Museum of Art's ethnographic collections. Student projects will involve one of the museum's collections with the opportunity for hands-on experience. (Same as BIOL 706.)

**MUSE 780. Special Topics: _____**. 1-3 Credits.
Advanced courses on special topics in museum studies, given as need arises. Lectures, discussions, readings, and guest speakers. Topic for semester to be announced. Prerequisite: Graduate standing in Museum Studies Program or permission of instructor.

**MUSE 790. Advanced Study.** 1-3 Credits.
Individual research in a specialized topic not ordinarily treated in a Museum Studies core course for which there is a member of the graduate faculty competent and willing to direct a research project. Prerequisite: Consent of instructor.

**MUSE 792. Directed Readings.** 1-3 Credits.
Directed reading in an area of Museum Studies in which there is no particular course in the Museum Studies program or in cooperating departments but in which there is a member of the graduate faculty competent and willing to direct a program study. Prerequisite: Consent of instructor.

**MUSE 799. Museum Internship.** 1-6 Credits.
Provides directed, practical experience in research, collection, care, and management, public education, and exhibits with emphasis to suit the particular requirements of each student. Graded on a satisfactory/unsatisfactory basis. (Same as AMS 799, ANTH 799, and GEOL 723.)

**MUSE 801. The Nature of Museums.** 3 Credits.
The purpose of this course is to provide an overview of the kinds of museums, their various missions, and their characteristics and potentials as research, education, and public service institutions responsible for collections of natural and cultural objects. (Same as HIST 720.) Prerequisite: Museum Studies student, Indigenous Nations Studies student, or consent of instructor.

**MUSE 802. Culture of Museums.** 3 Credits.
Culture of Museums is the second of a 2-semester course sequence, and highlights classic texts and current directions in museum studies. It is organized around the core conceptual domains of museums - Materiality, Representation, and Engagement. The course establishes the framework for understanding changes on the horizon for museums, and enables students to be familiar with classic texts in the field. Museums of art, history, natural history, are included, as well as museums large and small. Each week the class will read assigned articles or chapters and will be prepared to discuss and analyze the assignment. In addition, each week there will be several monographs assigned that elaborate and inform the topic. One student will take responsibility for each work and will lead discussion concerning the material. The student will familiarize themselves with the work, and should meet with the instructor before class to structure their presentation. In class, the student will lead discussion and emphasize key elements in the work.

**MUSE 803. Seminar in Current Museum Topics.** 3 Credits.
This course has two core objectives: (1) to consider current issues in and around museums that will have a bearing on the field's future, and (2) to be a springboard for museum studies students to formulate and make substantial headway on their required final projects. Therefore, in addition to each week's readings assigned by the instructor, each student will have several opportunities to select the readings for the rest of the class. The student-assigned readings will be relevant to each student's research, and will (1) help students acquire a more nuanced and critical grasp of works that are key to their research by getting feedback from the rest of the class; and (2) build the class's general awareness of important scholarship in the field.

**Master of Arts in Museum Studies**

**Museum Studies M.A. Program**
The 36-hour Museum Studies M.A. curriculum provides a comprehensive overview of the discipline, opportunities for mastering core components of museum practice, avenues for exploring the interdisciplinary nature of museums, grounding in current issues facing them, and possibilities for research to develop new and innovative approaches in the field. Students also complete 500 total museum experience hours while in the program.

Our graduates work as collection managers, educators, exhibit designers, curators, archivists, directors and more at museums and historical agencies across the country and around the world.

**Admission to Graduate Studies**
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission to the Museum Studies M.A. Program**

Students are admitted to the M.A. program only in the fall semester, and the application deadline is February 1. Only in exceptional circumstances will we consider applications submitted after the deadline.

Eligibility criteria for admission to the M.A. program follow Graduate Studies’ admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission, a student must hold a bachelor's degree. Non-native speakers of English must meet Graduate Studies’ English proficiency requirements for admission (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

A full list of the required application materials can be found on the Museum Studies website (http://museumstudies.ku.edu/how-apply/).

**M.A. Degree Requirements**
The M.A. degree in museum studies requires 36 credit hours at the graduate level. Students in the Museum Studies program will complete the following:

1. The Museum Studies Core - 9 credit hours
2. Museum Professional Areas - 9 credit hours
3. Museum Conceptual Domains - 6 credit hours
4. Electives - 9 credit hours
5. Museum Experience (Internship) - 3 credit hours
6. Final Product & Examination

1. Museum Studies Core (9 credit hours)
The Museum Studies Core ensures that all Museum Studies students gain a comprehensive understanding of the theories, history, techniques, and problems common to museums, historical agencies and related institutions. The Capstone course, taken in a student’s third semester of study, provides an avenue for students to conduct research or other creative activities that advance the discipline of museum studies.

Courses taken must be at the 500 level or above. The following lists program requirements based on the general relevance of the course of students, and their advisors, to ensure that individual courses meet one of which must be a Museum Studies (MUSE) course. Many courses in other departments could fulfill requirements; it is the responsibility of students, and their advisors, to ensure that individual courses meet program requirements based on the general relevance of the course and assurance that the student’s work in the class will be applicable to museum studies by meeting with instructors and examining syllabi. Courses taken must be at the 500 level or above. The following lists include examples of courses that may fulfill the professional areas requirement.

### 2. Museum Professional Areas (9 credit hours)

Students will develop expertise in one of the principal specialties of museum work by completing at least two courses in that area, at least one of which must be a Museum Studies (MUSE) course. Many courses in other departments could fulfill requirements; it is the responsibility of students, and their advisors, to ensure that individual courses meet program requirements based on the general relevance of the course and assurance that the student’s work in the class will be applicable to museum studies by meeting with instructors and examining syllabi. Courses taken must be at the 500 level or above. The following lists include examples of courses that may fulfill the professional areas requirement.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 801</td>
<td>The Nature of Museums</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 802</td>
<td>Culture of Museums</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 803</td>
<td>Seminar in Current Museum Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

### 3. Courses focusing on Museum Conceptual Domains (6 credit hours)

The conceptual domains of museum work address in depth the conceptual and theoretical foundations of museums. Courses that emphasize conceptual domains will place museological subjects in broader historical and intellectual frameworks. Students may take courses which may be offered in one or several disciplines. Courses will be selected based on the general relevance of the course, and assurance that the student’s work in the class will be applicable to museum studies. Please see Museum Studies website for examples of possible courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 701</td>
<td>Museum Management</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 705</td>
<td>Introduction to Museum Public Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Examples of Courses in Other Departments and Programs:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 823</td>
<td>Seminar in: _____</td>
<td>1-3</td>
</tr>
<tr>
<td>PUAD 828</td>
<td>Nonprofit Management and Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

### INTERPRETATION

Interpretation includes developing skills in exhibition design and installation, graphics, and marketing, public programs, as well as innovative approaches to new and emerging technologies.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 703</td>
<td>Introduction to Museum Exhibits</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 705</td>
<td>Introduction to Museum Public Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Examples of Courses in Other Departments and Programs:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS 712</td>
<td>Design Strategies and Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 720</td>
<td>Scientific Illustration</td>
<td>3</td>
</tr>
<tr>
<td>THR 618</td>
<td>Scenography and the Musical Theatre</td>
<td>3</td>
</tr>
</tbody>
</table>

### COLLECTIONS

Courses provide opportunities to develop expertise in the practices and policies associated with the management and care of the range of materials in museum collections.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 704</td>
<td>Introduction to Collections Management and Utilization</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 706</td>
<td>Conservation Principles and Practices</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 707</td>
<td>Practical Archival Principles</td>
<td>3</td>
</tr>
</tbody>
</table>

Examples of Courses in Other Departments and Programs:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 520</td>
<td>Archaeological Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 582</td>
<td>Ethnobotany</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 648</td>
<td>Human Osteology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 603</td>
<td>Systematic Botany</td>
<td>3</td>
</tr>
<tr>
<td>TD 504</td>
<td>History of Textiles, Lecture</td>
<td>3</td>
</tr>
</tbody>
</table>

### COMMUNITY CONNECTIONS

Courses enable students to develop skills in public programming, curriculum planning, visitor studies, audience development, and volunteer management.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 705</td>
<td>Introduction to Museum Public Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Examples of Courses in Other Departments and Programs:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSC 719</td>
<td>Experimental Field Work in Community Settings</td>
<td>1-5</td>
</tr>
<tr>
<td>C&amp;T 808</td>
<td>Qualitative Research: Curriculum Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>COMS 855</td>
<td>Qualitative Research Methods in Communication Studies</td>
<td>3</td>
</tr>
<tr>
<td>COMS 855</td>
<td>Qualitative Research Methods in Communication Studies</td>
<td>3</td>
</tr>
<tr>
<td>HIST 601</td>
<td>Oral History</td>
<td>3</td>
</tr>
</tbody>
</table>

### 4. Electives and Other Museum Studies Courses (9 credit hours)

Students are expected to deepen their knowledge of the field by taking courses in a subject area pertinent to their area of specialization. Courses will be selected with the approval of the student’s committee chair, as well as the course instructor.

### 5. Museum Experience (3 credit hours)

While enrolled in the Museum Studies program, students are required to gain at least 500 hours of museum experience, of which at least 250 hours must be in an approved, professionally supervised internship.

### 6. Final Product and Examination

Each student will be responsible for a final product, developed through research or other creative activity, that contributes to museum studies and demonstrates the student’s ability to engage conceptually and professionally with the discipline of museum studies.

### Course Level Requirement

Students pursuing an M.A. in Museum Studies must take 50% or more of their coursework at the 700 level or above. Core courses count toward this requirement.

### Dual Degree: MA in Museum Studies and African and African-American Studies

Museum Studies and African and African-American Studies offer dual master’s degrees with coordinated curricula so students are able to complete 2 M.A. degrees in 3 years. 15 graduate credit hours are applied to both programs, allowing students to complete a 33-credit-hour AAAS degree and a 36-credit-hour Museum Studies degree with just 54 graduate credits.

Please see Museum Studies website for examples of possible courses.
This program of study is designed to enhance and diversify opportunities for graduate students who are motivated to enter the cultural heritage field as specialists in African and African-American Studies. This 3-year dual program allows students to expand their contacts with faculty, enhance their professional networks, and deepen their knowledge of both fields of study.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Students seeking admission to the dual degree will complete just one application but must meet the admission requirements for both programs.

**Museum Studies M.A. - Admission Requirements** ([http://museumstudies.ku.edu/how-apply/](http://museumstudies.ku.edu/how-apply/))


Students who have begun coursework in either Museum Studies or African & African-American Studies can apply to be a dual degree student prior to completing all coursework requirements for the first degree. In consultation with each department’s Director of Graduate Studies, they may be able to receive credit for coursework already completed. However, the student may be required to take more than the required 54 credit hours of coursework to obtain both degrees if the application for admission to the second degree program is submitted after the student has completed courses that will not count toward the second program’s requirements.

Please see the Admission to Graduate Study ([https://policy.ku.edu/graduate-studies/admission-to-graduate-study/](https://policy.ku.edu/graduate-studies/admission-to-graduate-study/)) policy for additional information on admission requirements.

Students completing the dual degree take all of the required courses in each of the respective programs, as well as fulfilling each program’s requirements to gain a breadth of knowledge. Coordination in advising between the two programs enables students to take courses that satisfy the degree needs for both programs. To earn both degrees, students complete 54 graduate credit hours, 15 of which are applied to both programs. Because the required courses are offered regularly, students are able to complete the required courses in the first four semesters of the program, using the final two semesters to complete the remaining credit hour requirements. The programs’ curricular requirements follow; further details on program expectations are available in the respective Graduate Student Handbooks.

### Museum Studies Requirements for Dual M.A.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Museum Studies Core</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>The Museum Studies Core ensures that all Museum Studies students gain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a comprehensive understanding of the theories, history, techniques,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and problems common to museums, historical agencies and related</td>
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<tr>
<td></td>
<td>institutions. MUSE 803, taken in the student’s third semester of study,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>is a research course that enables students to conduct research or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>other creative activities that advance the discipline of museum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>studies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MUSE 801  The Nature of Museums</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MUSE 802  Culture of Museums</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MUSE 803  Seminar in Current Museum Topics</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Museum Professional Areas</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Students will develop expertise in the principal specialties of</td>
<td></td>
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<tr>
<td></td>
<td>museum work by completing at least three professional area courses</td>
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<tr>
<td></td>
<td>(9 credit hours), at least one of which must be a Museum Studies</td>
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<tr>
<td></td>
<td>(MUSE) course. Many courses in other departments may fulfill</td>
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<tr>
<td></td>
<td>requirements; it is the responsibility of students, and their</td>
<td></td>
</tr>
<tr>
<td></td>
<td>advisors, to ensure that individual courses meet program requirements</td>
<td></td>
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<tr>
<td></td>
<td>based on the general relevance of the course and assurance that the</td>
<td></td>
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<tr>
<td></td>
<td>student's work in the class will be applicable to museum studies by</td>
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<tr>
<td></td>
<td>meeting with instructors and examining syllabi. Courses taken must</td>
<td></td>
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<tr>
<td></td>
<td>be at the 500 level or above. A list of available professional area</td>
<td></td>
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<tr>
<td></td>
<td>courses can be found on the Museum Studies website.</td>
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</tr>
<tr>
<td></td>
<td>MUSE 799  Museum Internship</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Museum Experience</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>While enrolled in the Museum Studies M.A. Program, students are</td>
<td></td>
</tr>
<tr>
<td></td>
<td>required to gain at least 500 hours of museum experience, of which</td>
<td></td>
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<tr>
<td></td>
<td>at least 250 hours must be in an approved, professionally supervised</td>
<td></td>
</tr>
<tr>
<td></td>
<td>internship. Students enroll in 3 credit hours of MUSE 799: Museum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internship to meet this requirement.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MUSE 799  Museum Internship</td>
<td></td>
</tr>
</tbody>
</table>

### African & African-American Studies Requirements for Dual M.A.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AAAS 801  Introduction to Africana Studies: African-American</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAAS 802  Introduction to Africana Studies: African</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAAS 803  Research Methods in Africana Studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAAS 804  Seminar in Africana Studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students are expected to choose 2 courses in their area of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>specialization. Courses must be numbered 500 level or above and have</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a AAAS course number.</td>
<td></td>
</tr>
</tbody>
</table>

### Shared Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Dual Degree Electives</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Any graduate-level MUSE or AAAS course may count as an elective.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Out-of-field courses must be approved by the Directors of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graduate Study for both programs.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Final Project or Thesis</td>
<td></td>
</tr>
</tbody>
</table>
Students completing the dual degree program are required to defend either a final project or thesis in their final semester. The student should consult with their African & African-American Studies and Museum Studies faculty advisors to identify a project or thesis topic that effectively incorporates both areas of study. Faculty advisors from both programs will oversee and evaluate the project or thesis. Students who choose to complete a thesis must enroll in 3 credit hours of AAAS 899 in their final semester in lieu of an elective course. Students who choose to complete a final project will take 15 credit hours of dual degree electives as described above. Each student will successfully defend their final project or thesis as their final master's examination. The final exam committee, chosen by the student, must have at least four members: at least two from the Museum Studies area and at least two from the African & African-American Studies area.

If a student decides to complete only the MUSE M.A. or AAAS M.A. and withdraw from the other program, they must complete all requirements for the stand-alone degree.

Course Level Requirement

Students pursuing a Dual M.A. in Museum Studies and African & African-American Studies must take 50% or more of their coursework at the 700 level or above. Core courses and thesis hours (if applicable) count toward this requirement.

Graduate Certificate in Museum Studies

Graduate Certificate in Museum Studies

The course of study leading to the Graduate Certificate in Museum Studies comprises 15 credit hours at the graduate level. It is designed to provide students with a solid grounding in the histories, concepts, and practices of the discipline of museum studies. The certificate program enables students to integrate knowledge of museum studies into their own academic disciplines or professional training.

The certificate represents an additional credential for students from a variety of academic fields to prepare for doctoral study, as well as for employment in museums and related fields such as historic preservation, cultural resource preservation, archives, and government agencies.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Graduate Certificate in Museum Studies

Eligibility criteria for admission to the certificate program follow Graduate Studies' admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission to the program, an applicant must hold a bachelor's degree. Non-native speakers of English must meet Graduate Studies' English proficiency requirements for admission (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

Application requirements differ for current KU students versus non-KU students, so please visit the Museum Studies website (https://museumstudies.ku.edu/how-apply/) for a full list of the required application materials.

The Museum Studies Graduate Certificate will require 15 hours of course work including a 3 credit (minimum) research practicum or internship. The remaining 9 hours will be selected from courses in which there is a demonstrable component that has relevance to museum studies.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 801</td>
<td>The Nature of Museums</td>
<td>6</td>
</tr>
<tr>
<td>MUSE 802</td>
<td>Culture of Museums</td>
<td></td>
</tr>
<tr>
<td>Choose 1 course in a museum professional area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSE 701</td>
<td>Museum Management</td>
<td>3</td>
</tr>
<tr>
<td>MUSE 703</td>
<td>Introduction to Museum Exhibits</td>
<td></td>
</tr>
<tr>
<td>MUSE 704</td>
<td>Introduction to Collections Management and Utilization</td>
<td></td>
</tr>
<tr>
<td>MUSE 705</td>
<td>Introduction to Museum Public Education</td>
<td></td>
</tr>
<tr>
<td>MUSE 706</td>
<td>Conservation Principles and Practices</td>
<td></td>
</tr>
<tr>
<td>MUSE 707</td>
<td>Practical Archival Principles</td>
<td></td>
</tr>
<tr>
<td>Choose 1 course in a museum conceptual domain</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Research, Practicum or Internship</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

1 To satisfy the requirement of 1 course in a museum conceptual domain, students must have approval of their advisor.

Department of Philosophy

Why study philosophy?

In philosophy we ask big, important questions. While asking such questions is easy, answering them is difficult. Because these questions are often abstract and vague, it is necessary to use precise reasoning and analysis to clarify what exactly it is we are asking. Only then can we attempt to develop answers. For example:

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation Principles and Practices</td>
<td></td>
</tr>
<tr>
<td>Practical Archival Principles</td>
<td></td>
</tr>
<tr>
<td>Research, Practicum or Internship</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>15</td>
</tr>
</tbody>
</table>
• What is the morally right thing to do?
• What is the nature of the mind?
• When can we know something, rather than merely believing it?
• Do the sciences exhaust what can be known about the natural world?
• What is justice?
• What assumptions do we make when we try to answer questions like these?
• Plus many, many others...

In studying philosophy, you will learn what others have thought about life’s big questions. You will also learn to challenge those views, and to develop your own thoughts in a precise, logical manner. Philosophy will help you develop critical thinking skills, enabling you to analyze the underlying logic and assumptions in arguments about a variety of topics. This is a skill that generalizes to virtually every area of life.

Undergraduate Programs

The department offers a range of courses in philosophy, both in the main systematic divisions of the subject and in its major historical periods. Philosophy courses are often suitable not only for majors but also for students whose main interests lie in other areas. Many philosophy courses satisfy requirements in other degree programs in the College and professional schools.

Argument and Reason Requirement

PHIL 148 and PHIL 310 each meet the College argument and reason requirement for the B.A. and B.G.S. degrees.

Interdisciplinary Course Work

The department offers courses in applied ethics, ethics, feminism, logic, and the philosophy of science to fit the needs and interests of nonmajors. Many of these may be taken without prerequisites. The nonmajor may wish to supplement work in other fields or schools with a series of related courses in philosophy. Some suggested programs to be supplemented with this type of interdisciplinary course work are business, prelaw, premedicine, and engineering; classics, art history, and literature; and natural sciences and mathematics. Lists of philosophy courses relating to these areas are available. Consult the director of undergraduate studies.

Graduate Programs

The department offers graduate programs in philosophy leading to M.A. and Ph.D. degrees. With the School of Law, the department also offers a joint program in law and philosophy leading to a J.D./M.A. Our faculty (http://philosophy.ku.edu/faculty/) is dynamic, professionally active, and committed to excellence in scholarship and teaching. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation.

Departmental Funding

The department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year (9 months) and come with a competitive salary, a 100% tuition waiver, and qualify the student for University-subsidized group health insurance. Appointments are guaranteed, based on funding availability and performance, for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training, close mentoring, and the opportunity to teach courses in a variety of fields within philosophy, providing them with a strong base of teaching experience upon entering the job market.

Additional Funding

There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for KU graduate students.

Graduate Non-Degree Seeking Status

Students who are interested in enrolling in graduate-level coursework in the Department of Philosophy without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s webpage (https://philosophy.ku.edu/nds-overview/) for further details.

Courses

PHIL 140. Introduction to Philosophy. 3 Credits. HR H
An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge.

PHIL 141. Introduction to Philosophy Honors. 3 Credits. HR H
An introductory examination, based primarily on writings of major philosophers, of such central philosophical problems as religious belief, the mind and its place in nature, freedom and determinism, morality, and the nature and kinds of human knowledge. Prerequisite: Open only to students in the University Honors Program or by consent of department.

PHIL 148. Reason and Argument. 3 Credits. H
An introduction to the theory and practice of logical analysis. Special emphasis is placed upon the logical appraisal of everyday arguments.

PHIL 150. Philosophical Communication. 3 Credits. S
This course provides an introduction to philosophy, with a focus on the traditional philosophical practice of oral communication and argument. Through exploration of perennial philosophical questions (e.g., Are there different ways of knowing? What makes for a good life? Could computers have minds? Are we obligated to obey the law? What makes you the same person over time?), students develop their ability to participate in various forms of philosophical communication. In this course, students have the opportunity to teach course material to peers, engage in class debates over philosophical issues, and craft short presentations exploring a facet of the course topic.

PHIL 160. Introduction to Ethics. 3 Credits. HR H
An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice.

PHIL 161. Introduction to Ethics Honors. 3 Credits. HR H
An introductory study of the nature of morality and of philosophical bases for the assessment of actions, agents, and institutions. Special emphasis will be placed upon the views of such important philosophers as Aristotle, Hume, Kant, and Mill. Some attention will be paid to applications of moral theory to practice. Prerequisite: Open only to students in the University Honors Program or by consent of department.

PHIL 170. The Meaning of Life. 3 Credits. H
This course introduces central questions about the meaning of life. The question itself may be taken in a number of ways: Why is there a
universe that contains life? What is the nature or purpose of human being and persons? What is the point of our existence? Is it possible to lead a meaningful life? This course examines these and other questions relating to meaning in life, such as our place in the physical universe, the possibility and significance of God’s existence, the nature of human persons (including the relation between, and nature of, body, mind, and consciousness), what death tells us about the nature of life and whether it is appropriate to fear death, the nature of ‘the good life’ (including the import for ‘the good life’ of knowledge, success, pleasure, health, friendship, love, in both our physical and mental life, etc.), the nature of value and its relation to meaning in life, and our obligations to other beings.

PHIL 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Philosophy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

PHIL 180. Introduction to Social and Political Philosophy. 3 Credits. HR
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty.

PHIL 181. Introduction to Social and Political Philosophy, Honors. 3 Credits. HR
An introductory study, based primarily on classic philosophical texts, of such central issues as the justification of governmental authority, the social sources of power, the nature of a just distribution of social resources, competing conceptions of human nature, and the proper limits of governmental interference with individual liberty. Prerequisite: Open only to students in the University Honors Program or by consent of department.

PHIL 200. Study Abroad Topics in Philosophy: ______. 1-6 Credits. H
This course is designed for the study of special topics in Philosophy. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

PHIL 210. Playing the Odds: Reasoning, Chance, and Probability. 3 Credits. H
Many of the things we need to think through involve uncertainty. There may be a chance that it will rain, that a flight will get canceled, that a car accident will occur, or that a team will win. Should you buy a $10 parking pass if you know there’s a 5% chance you will get a $100 fine if you don’t buy one? This course will teach you how to think through uncertainty and probability, using philosophical and mathematical techniques, logic, and critical thinking. This course presupposes knowledge of pre-algebra and basic high school algebra.

PHIL 305. The Meaning of Death. 3 Credits. HR
A number of puzzles and paradoxes surround the nature and (dis)value of death. These include: is death a bad thing? If so, when is it a bad thing? Is it rational to fear death? If so, is it rational to regret that we were not born earlier? What is death? Can a person’s death have a valuable meaning? Readings for this course will be taken from Epicurus, Derek Parfit, Fred Feldman, and many others.

PHIL 306. God, Buddhism, and the Good Life. 3 Credits. HR
This course introduces students to rigorous philosophic debates about some gripping existential questions surrounding the value of religion with God, a religion without God (focusing on Buddhism), and atheism. We will explore arguments for opposing answers regarding topics such as: whether atheism threatens the value of life; differences in how the self is viewed in Western and Eastern religions; and differences in how morality is grounded in these different traditions. We will examine the compatibility of atheism with Buddhism, and of Buddhism with belief in God. (Same as REL 306.) Prerequisite: A 100-level Philosophy course or permission of instructor.

PHIL 310. Introduction to Symbolic Logic. 3 Credits. H
An introduction to the theory and practice of elementary symbolic logic. Special emphasis will be placed upon the logical analysis of mathematical proof and upon a proof of the consistency of elementary logic.

PHIL 320. Philosophical Issues in the Life Sciences. 3 Credits. HR
A philosophical analysis of theoretical and ethical issues that arise in the practice of the life sciences. Discusses the conceptual foundation of the life sciences—evolutionary theory and genetics. Critically explores the use of statistical and non-human-animal models. Examines ethical issues including problems that arise in human and other animal experimentation, obligations to the environment, proper use of patents, and conflicts in professional duties.

PHIL 323. Philosophy of Psychology. 3 Credits. HR
The philosophy of psychology is a relatively new field of inquiry in philosophy and so the question of what the philosophy of psychology is remains an open question. In this course, we will understand the philosophy of psychology in two ways. First, it is the study of the nature of psychology and the various capacities and mechanisms that make cognition possible. We will consider whether there is a unique psychological level of explanation or whether psychology ultimately reduces to the brain. We will also explore various philosophical puzzles raised by consideration of psychological abilities like memory, attention, and emotion. Second, philosophy of psychology is a subfield of philosophy of science, where we examine a particular science—here, experimental psychology—as a way to explore broader questions about what science is, how science explains phenomena, and how values intersect with its investigations. All of this makes it an exciting time to study the philosophy of psychology—as students in this course, student’s interests will play a role in selecting topics and shaping the direction of our inquiry. (Same as PSYC 323.)

PHIL 325. Philosophy of Computation, AI, and Robots. 3 Credits. HR
Computers are everywhere, and they seem to be getting increasingly intelligent. However, it is surprisingly difficult to say what exactly a computer is, and what it means for one to be intelligent. In this course, we will examine arguments about the nature of computation, including how computation is used in science, whether computers and robots could really have minds (or could only just simulate having a mind), and whether the brain might literally be a computer. Prerequisite: An introductory course in philosophy or permission of instructor.

PHIL 330. Belief and the Social. 3 Credits. HR
This is a course in social epistemology. It explores how social phenomena within communities and between individuals bear on issues of belief, justification, and knowledge. Topics may include philosophical examinations of lies, BS (in the technical sense of Frankfurt and others), conspiracy theories, propaganda, disagreement, testimony, expertise, trust, group belief, and epistemic injustice.

PHIL 335. Philosophy of Social Groups and Identities. 3 Credits. H
This course is on social groups, which include teams and clubs as well as gender and racial groups. Topics to be covered might include whether
a group exists, in addition to its members, and if so what kind of thing it is; whether group membership in various cases is a matter of members sharing a group identity rather than having certain biological features in common or occupying a common social position; and what it is for someone to have a certain group identity in the first place. Additional topics to be covered might include whether there are different kinds of groups; whether a group can do things, and be responsible for doing things, that none of its members does individually; and whether there are ways in which we should, or shouldn't, talk about a group and its members. Groups and identities to be discussed might include those relating to gender, race, sexual orientation, and disability.

PHIL 340. Women Philosophers. 3 Credits. HR
This course will examine and evaluate the work of some of the women philosophers in the history of philosophy. The course will focus on a variety of philosophical issues, including social and political issues, such as women's equality and education and political rule; metaphysical issues, such as mind-body dualism, vitalism, and the existence of God; and issues concerning the relationship between philosophy, science, and religion.

PHIL 350. Philosophical Issues in Religion. 3 Credits. H
This course will consider, from a philosophical perspective, some of the problems in religion which arise in the development of “Natural Theology” broadly conceived. (Same as REL 380.)

PHIL 355. Moral Issues in Political Governance. 3 Credits. HR
This course offers a survey of competing ethical frameworks and applies them to issues in governmental policy and political activity. Topics may include the duties and virtues of citizenship, conflict of interest, public health policy, immigration, corruption, the value of patriotism, and conflicts between private and public morality. This course leaves aside debates about what sort of political framework to adopt and focuses on moral issues that matter from most any political perspective.

PHIL 360. Moral Issues in Business. 3 Credits. H
After a brief survey of techniques of moral argument and analysis, particular moral issues related to business will be discussed. These will include such topics as advertising, conflict of interest, personal and corporate responsibility, codes of conduct, private property, strikes, just wage, and the tension between moral ideals and business pressures.

PHIL 368. Moral Issues in Sports. 3 Credits. H
This course is a philosophical investigation of the nature and value of sports. Provides students with an overview of ethical theory and considers principled answers to questions about the values of sports and about how those values can be sustained or demeaned. Students debate a variety of live controversies in sports today such as drugs, cheating, sexism, racism, the role of sports in educational institutions, Title IX, commercialization, and violence.

PHIL 369. Moral Issues in Warfare. 3 Credits. H
This course is a philosophical investigation of the nature and ethical dimensions of warfare and the use of force. It provides students with an overview of ethical theory and considers answers to questions about the principles of just war theory, the values served by these principles, and about how those values can be sustained or demeaned. Students debate a variety of live controversies in warfare today such as just causes for war, when threats ought to be deemed imminent, collateral damage and the nature of non-civilians on the battlefield, and terrorism.

PHIL 370. Moral Issues in Medicine. 3 Credits. H
After a brief survey of techniques of moral argument and analysis, particular moral issues related to medicine will be discussed. The justification and limits of some rules of professional conduct that deal with such matters as confidentiality, truth-telling, and protection of medical research subjects will be considered. Issues relating to death and dying in medicine such as abortion, euthanasia, and the refusal of life-saving medical therapy also will be discussed.

PHIL 375. Moral Issues in Computer Technology. 3 Credits. H
After surveying the nature of ethics and morality and learning some standard techniques of moral argumentation, we shall examine such topics as: property and ownership rights in computer programs and software; privacy in computer entry and records; responsibility for computer use and failure; the “big brother” syndrome made possible by extensive personal data banks; censorship and the world-wide web; computer illiteracy and social displacement; and ethical limits to computer research.

PHIL 380. Environmental Ethics. 3 Credits. H
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the environment will be discussed. These will include such topics (one of which may be dealt with in depth) as animal rights, rights of future generations, wilderness preservation, population control, endangered species, and economics and public policy. Prerequisite: EVRN 148 or consent of instructor.

PHIL 381. Feminism and Philosophy. 3 Credits. H
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion, and justifications for preferential treatment of women. (Same as WGG 381.)

PHIL 382. Philosophy in Literature and Film. 3 Credits. H
A survey of topics of philosophical interest as they appear in literature, film, and the writings of philosophers. We will consider what these arts can contribute to the practice of philosophy and how philosophy might guide our engagement with literature and film.

PHIL 384. Ancient Philosophy. 3 Credits. HR H
A survey of the thought of the principal philosophers of ancient Greece, with emphasis on the pre-Socratics, Plato, and Aristotle.

PHIL 386. Modern Philosophy from Descartes to Kant. 3 Credits. HR H
A survey of the writings of such principal philosophers of the modern period as Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume, and Kant.

PHIL 388. Analytic Philosophy: Frege to Quine. 3 Credits. H
An introduction to the principal figures in the philosophical tradition that forms the background to contemporary investigations in analytic philosophy of language. Particular attention will be paid to Frege, Russell, Wittgenstein, and Quine. Prerequisite: PHIL 310 or equivalent, or PHIL 310 may be taken concurrently.

PHIL 418. Introduction to Cognitive Science. 3 Credits. S
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PSYC 418, and SPLH 418.) Prerequisite: Consent of instructor.

PHIL 499. Senior Essay. 3 Credits. H
This course is required, in addition to regular major requirements, of those students wishing to work for departmental honors in Philosophy. Students wishing to enroll should first speak with the departmental adviser for majors. Prerequisite: Open to senior majors in Philosophy by consent of instructor.
PHIL 500. Studies in Philosophy: _____. 1-6 Credits. H
(Topic, instructor, and specific prerequisite to be announced in Schedule of Classes.) A study of particular philosophical problems or thinkers not covered by other courses. The course may be offered concurrently by different instructors under different subtitles, and may, with the consent of the chair, be taken more than once if content varies.

PHIL 504. Philosophy of Sex and Love. 3 Credits. H
A discussion of philosophical issues such as the relation between love, autonomy, and friendship; heterosexual and homosexual relationships; marriage and adultery; rape and sexual harassment; prostitution; and pornography.

PHIL 506. Chinese Thought. 3 Credits. NW H/W
A survey of the principal modes of Chinese thought from their origins through the imperial period. Not open to students with credit in EALC 132. (Same as EALC 642 and HUM 524.) Prerequisite: Eastern civilization course or a course in Asian history or a distribution course in philosophy.

PHIL 508. Early Greek Philosophy. 3 Credits. H/W
A study of the doctrines of Greek philosophy before Plato. Emphasis on the Pre-Socratic philosophers, with some attention paid to the Sophists and the Hippocratic corpus. (Same as GRK 508.) Prerequisite: PHIL 384, or GRK 301, or GRK 302, or GRK 303, or GRK 310, or GRK 312, or permission of instructor.

PHIL 551. Philosophy of Economics. 3 Credits. HR
This course surveys the central concepts, issues and debates surrounding the philosophy of economics. The course is divided into three parts. The first is focused on the nature of economic science, whether it can be separated from value judgments, along with the foundational and methodological issues that arise in economics. The second part of the course provides a survey of several central topics in the philosophy of economics including rational choice theory, game theory, social choice theory, behavioral and neuroeconomics. The third part concerns welfare economics (broadly understood), including the aims of welfare economics, the nature of well-being, the possibility of interpersonal utility comparisons, and the aims of economic institutional design. At the end of this course, students should have knowledge and understanding of central methodological and substantive debates regarding the nature of economic theories. This course should also enhance students' ability to think critically and analytically about the nature of economic theories and the key concepts in the philosophy of economics, write clearly and cogently about philosophical issues that arise in economic, incorporate the ideas, theories and techniques that arise in both philosophy and economics to understand social and economic issues. (Same as ECON 551.) Prerequisite: An introductory course in philosophy or economics, or permission of instructor.

PHIL 555. Justice and Economic Systems. 3 Credits. H
An examination of important representative theories of the justness of an economic system, with particular attention paid to such institutions as private property, a market economy, means and relationships of production, and principles of distribution to individuals. The theorists under consideration include Locke, Adam Smith, Marx and Engels, contemporary utilitarians, Rawls, and Nozick. Prerequisite: A course in ethics or an introductory course in economics or in business.

PHIL 557. Kant. 3 Credits. H
A survey of the major works of Immanuel Kant, with attention to his critical method and its application to issues in theoretical philosophy, practical philosophy, aesthetics, or the philosophy of history. Prerequisite: PHIL 386.

PHIL 558. Seventeenth Century Philosophy. 3 Credits. H
The development of philosophy in the 17th century. Special attention will be paid to such major figures as Descartes, Malebranche, Spinoza, Leibniz, Elisabeth of Bohemia, Cavendish, Conway, Astell, Hobbes, and Locke. Prerequisite: PHIL 386 or consent of instructor.

PHIL 559. Eighteenth Century Philosophy. 3 Credits. H
The development of philosophy in the 18th century. Special attention will be paid to such major figures as Hutcheson, Butler, Berkeley, Mandeville, Hume, Smith, Kant, Rousseau, Bentham, Wolstonecraft and Shepherd. Prerequisite: PHIL 386 or consent of instructor.

PHIL 560. Nineteenth Century Philosophy. 3 Credits. H
The development of philosophy in the 19th century. Special attention will be paid to such major figures as Hegel, Kierkegaard, Marx, Nietzsche, and Mill. Prerequisite: PHIL 386 or permission of instructor.

PHIL 562. Kierkegaard. 3 Credits. H
A study of the thought of Soren Kierkegaard through examination of some of his major writings. Some attention is given to his influence on the development of existentialist philosophies. Prerequisite: PHIL 384 or PHIL 386.

PHIL 570. Nietzsche. 3 Credits. H
A study of Nietzsche's major writings and ideas, with some attention to his philosophical influence. Prerequisite: PHIL 384 or PHIL 386 or permission of instructor.

PHIL 582. Existentialism. 3 Credits. H/W
A study of the main themes and leading philosophers of the existentialist movement. Prerequisite: Two courses in philosophy.

PHIL 590. Phenomenology. 3 Credits. H
A study of the main themes and leading philosophers of the phenomenological movement. Prerequisite: PHIL 386.

PHIL 592. Contemporary Continental Philosophy. 3 Credits. H
A study of selected topics in 20th century European philosophy, such as hermeneutics, critical theory, and poststructuralism. Figures to be studied could include Heidegger, Gadamer, Adorno, Habermas, and Foucault. Prerequisite: PHIL 386.

PHIL 600. Readings in Philosophy: _____. 1-6 Credits. H
Individual reading on topics not covered in course work. Prerequisite: Consent of instructor.

PHIL 605. The Philosophy of Plato. 3 Credits. H
A survey of the major works of Plato, with attention both to Plato's distinctive arguments and positions in the major areas of philosophy and to the distinctive literary form in which Plato presents his thinking. Prerequisite: PHIL 384.

PHIL 607. The Philosophy of Aristotle. 3 Credits. H
A survey of the major works of Aristotle, with the aim of understanding Aristotle's distinctive formulations of central philosophical questions, the arguments he presents for his answers to those questions, and the systematic interconnections between his positions in the different areas of philosophy. Prerequisite: PHIL 384.

PHIL 608. Hellenistic Philosophy. 3 Credits. H
Survey of Stoicism, Epicureanism, and Scepticism from their beginnings through the second century AD. Prerequisite: PHIL 384 and another course in philosophy.

PHIL 610. Metalogic. 3 Credits. H
Propositional calculus, predicate calculus, consistency, decidability of formal systems, the paradoxes and number concept will be covered. Prerequisite: PHIL 310 or EECS 210 or MATH 450 or consent of instructor.
This course is a workshop in any of a variety of topics in symbolic logic of special importance to contemporary analytic philosophy, such as modal logic, tense logic, axiomatic set theory, Goedel's theorems, model theory, etc. May be repeated for credit as topics vary. Prerequisite: PHIL 310.

PHIL 612. Modal and Non-classical Logics. 3 Credits. H
This course provides an investigation of logics beyond first-order predicate logic, including modal logic, non-classical logic, and second-order logic. Prerequisite: PHIL 310 or EECS 210 or MATH 450 or consent of instructor.

PHIL 620. Philosophy of Natural Science. 3 Credits. H
An examination of conceptual and foundational issues in the natural sciences. Topics may include the methodology of science (the nature and status of laws, the precise way in which experiment contributes to theory) and puzzles concerning the content of science (the status of space and time, the problematic nature of quantum mechanics). Prerequisite: PHIL 310 or PHIL 610, or permission of instructor.

PHIL 622. Philosophy of Social Science. 3 Credits. H
A critical examination of the methods, concepts, and practices of the social sciences. Topics to be considered may include: theories of explanation, methodological individualism vs. holism, objectivity, the role of rationality, myth and the unconscious in the explanation of behavior, and the value neutrality of science. Prerequisite: One previous course in philosophy, or permission of instructor.

PHIL 630. Philosophy of Mathematics. 3 Credits. H
An examination of varying conceptions of the role and status of mathematical arguments. Topics may include realism/anti-realism, the consequences of Goedel's Incompleteness Theorems, the role of mathematics in the sciences, and an examination of such historical thinkers as Plato, Frege, Russell, Wittgenstein, Goedel, and Hilbert. Prerequisite: PHIL 310 or PHIL 610, or permission of instructor.

PHIL 638. Philosophy of Language. 3 Credits. H
An examination of the nature of language using the methods of analytic philosophy. Topics may include meaning, truth, reference, language and thought, and the nature of linguistic rules. Prerequisite: PHIL 388 or permission of instructor.

PHIL 648. Theory of Knowledge. 3 Credits. H
An examination of the nature of knowledge. Topics may include the concept of knowledge, knowledge of the external world, induction, theories of justification, and scientific knowledge. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor.

PHIL 650. Metaphysics. 3 Credits. H
An examination of some of the central issues in metaphysics. Topics may include causation, the mind-body problem, free will and determinism, modality, natural kinds, the nature of properties, and personal identity. Prerequisite: PHIL 384 and PHIL 386, PHIL 388 (which may be taken concurrently), or permission of instructor.

PHIL 654. Philosophy of Mind. 3 Credits. H
An examination of the nature of mind using the methods of analytic philosophy. Topics may include consciousness, perception, propositional attitudes, thought and language, action and intention, mind and body, the prospects for scientific psychology, and personal identity. Prerequisite: PHIL 388 or permission of instructor.

PHIL 662. Aesthetics. 3 Credits. H
A study of some of the central themes and problems in aesthetics, such as the beautiful and the sublime in nature and the arts. Prerequisite: Two courses in philosophy or graduate standing.

PHIL 666. Rational Choice Theory. 3 Credits. H
This course is an introduction to the philosophical issues surrounding individual decision theory, game theory, and social choice theory. This includes issues of scientific theory selection, the nature of preference, the uses of games to model social interaction, and the ethical and political implications of Arrow's impossibility theorem. Formal techniques of modeling and proof, akin to those used in logic and mathematics, will be used in much of the course. Prerequisite: Two courses in economics, a philosophy course numbered 500 or above, or consent of instructor.

PHIL 668. Political Philosophy. 3 Credits. H
A systematic analysis of the concepts of politics, with reference to representative political theories. Prerequisite: A course in philosophy and a course in political science.

PHIL 670. Contemporary Ethical Theory. 3 Credits. H
An examination of some major moral philosophers and some important issues in ethical theory since the beginning of the twentieth century. Topics covered typically include intuitionism, emotivism, utilitarianism, virtue ethics, and the relationship between morality and rationality. Prerequisite: PHIL 160 or PHIL 161 or two courses in philosophy.

PHIL 671. Feminist Theories in Ethics. 3 Credits. H
This course addresses the role (if any) that gender plays in constructing ethical theories. Topics include the impact of culture, affect, and the body on our understanding of gender differences and the importance of these differences for ethics. Prerequisite: PHIL 160 or PHIL 161, or two previous philosophy courses.

PHIL 672. History of Ethics. 3 Credits. H
An interpretive and critical examination of central texts in the history of moral philosophy, which may include works by Aristotle, Hume, Kant, and J.S. Mill. Prerequisite: PHIL 160 or PHIL 161 or two previous philosophy courses.

PHIL 674. Philosophy of Law. 3 Credits. H
An examination of the concept of law and of legal reasoning. In addition, the course may consider such topics as natural law, legal excuses, the relations between law and morality, civil disobedience, civil liberties, the concept of property. Prerequisite: Two courses in philosophy or one course in philosophy and one course in law or consent of instructor.

PHIL 676. Medical Ethics: Life and Death Issues. 3 Credits. H
After a brief survey of techniques of moral argument and analysis especially as they pertain to the moral impermissibility of murder, particular moral and conceptual issues relating to death and dying in medical contexts will be addressed. Topics such as abortion, infanticide, suicide, euthanasia, the definition of death, and the right to refuse life-saving medical therapy will be included. Prerequisite: Two courses in biology or consent of instructor.

PHIL 677. Medical Ethics: Professional Responsibilities. 3 Credits. H
After a brief survey of techniques of moral argument and analysis, particular moral issues related to the obligations of health care professionals and the rights of patients will be discussed. These will include such matters as confidentiality, truth-telling, informed consent, the ethics of research on human subjects, psychosurgery, the rights of the mentally ill, and the rights of the mentally retarded. Prerequisite: Two courses in biology or consent of instructor.

PHIL 800. Tutorial. 3 Credits.
Intensive supervised training in and application of the techniques of research. Required of every graduate student seeking an advanced degree in the first or second semester of enrollment. Passing this tutorial constitutes partial fulfillment of the Ph.D. RSRS requirements. Consent
of instructor required for repeating the course. Prerequisite: Graduate standing.

PHIL 805. Plato. 3 Credits.  
Prerequisite: PHIL 508 or PHIL 605 or PHIL 607 or PHIL 608 or permission of instructor.

PHIL 807. Aristotle. 3 Credits.  
Prerequisite: PHIL 508 or PHIL 605 or PHIL 607 or PHIL 608 or permission of instructor.

PHIL 820. Topics in the History of Philosophy: _____. 3 Credits. 
This course may be offered by different instructors under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: 500-600 level course as specified or permission of instructor.

PHIL 824. Hume. 3 Credits.  
Prerequisite: PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor.

PHIL 828. Kant. 3 Credits.  
Prerequisite: PHIL 648 or PHIL 650 or PHIL 654 or permission of instructor.

PHIL 831. Hegel. 3 Credits.  
Prerequisite: PHIL 560 or 500-600 level course as specified or permission of instructor.

PHIL 833. Nietzsche. 3 Credits.  
A study of the philosophy of Friedrich Nietzsche. Prerequisite: PHIL 560 or PHIL 570 or permission of instructor.

PHIL 835. Frege. 3 Credits.  
Gottlob Frege was the founder of the analytic movement in philosophy, having done seminal work in logic, the philosophy of language, and the philosophy of mathematics. This course will focus on his primary texts as well as his influence on present-day studies. Prerequisite: PHIL 630 or PHIL 638 or permission of instructor.

PHIL 848. Wittgenstein. 3 Credits.  
Prerequisite: PHIL 638 or PHIL 650 or PHIL 654 or permission of instructor.

PHIL 850. Topics in Recent Philosophy: _____. 3 Credits.  
This course may be offered by different instructors under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in Schedule of Classes. Prerequisite: 500-600 level as specified or permission of instructor.

PHIL 860. Topics in Philosophy of Science: _____. 3 Credits.  
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 620 or PHIL 622 or PHIL 648 or PHIL 650 or permission of instructor.

PHIL 868. Topics in Philosophy of Language: _____. 3 Credits.  
This course may be offered under different subtitles and may be taken more than once if the subject matter varies sufficiently. Prerequisite: PHIL 638 or permission of instructor.

PHIL 870. Topics in Metaphysics: _____. 3 Credits.  
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 650 or permission of instructor.

PHIL 872. Topics in Theory of Knowledge: _____. 3 Credits.  
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 648 or permission of instructor.

PHIL 877. Topics in Philosophy of Mind: _____. 3 Credits.  
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 654 or permission of instructor.

PHIL 880. Topics in Ethics: _____. 3 Credits.  
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 555 or PHIL 666 or PHIL 668 or PHIL 674 or permission of instructor.

PHIL 884. Topics in Social and Political Philosophy: _____. 3 Credits.  
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 670 or PHIL 672 or permission of instructor.

PHIL 885. Topics in Law and Philosophy. 3 Credits.  
Explores various topics at the intersection of law and philosophy. Content varies but may include: What is freedom and what role should government play in a free society? What is equality and what is the best way to achieve it? What is the relationship between law and social justice? What is the source and value of human rights? Should social and economic rights be legally guaranteed? How should government redress historical injustices such as slavery, apartheid, and the Holocaust? Students must complete a substantial seminar paper.

PHIL 886. Topics in Applied Ethics: _____. 3 Credits.  
This course may be offered under different subtitles, such as professional ethics or some issue in business ethics (e.g., corporate responsibility) or in medical ethics (e.g., the definition of death); it may be taken more than once if the subject matter varies sufficiently. Topic, instructor, and specific prerequisite to be announced in Schedule of Classes. Prerequisite: PHIL 670 or PHIL 672 or 500-600 level course as specified or permission of instructor.

PHIL 888. Topics in the Philosophy of the Social Sciences: _____. 3 Credits.  
This course may be offered under different subtitles, such as philosophy of a particular social science (e.g., economics, psychology) or a particular issue in the social sciences (e.g., ideology, reductionism), and may be taken more than once if the subject matter varies sufficiently. Topic and instructor and specific prerequisite to be announced in the Schedule of Classes. Prerequisite: PHIL 622 or permission of instructor.

PHIL 890. Topics in Continental Philosophy: _____. 3 Credits.  
This course may be offered under different subtitles, and may be taken more than once if the subject matter varies sufficiently. Topics, instructor, and specific prerequisites to be announced in the Schedule of Classes.

PHIL 899. Master's Thesis. 1-6 Credits.  
Six hours of credit will be awarded upon completion of the master's thesis, but no more than six hours of credit may be obtained in this course altogether. Graded on a satisfactory progress/limited progress/no progress basis.

PHIL 900. Research in Philosophy: _____. 1-3 Credits.  
Intensive research in philosophy. This course may be taken through individual arrangement, or in connection with small research seminars
which are offered occasionally. Students may only enroll for three hours in any given semester. May be repeated if content varies significantly. 

Prerequisite: Twelve hours of graduate work.

**PHIL 901. Ph.D. Tutorial. 3 Credits.**

Independent research on any topic that a graduate student and a faculty member shall agree on. It shall result in a tightly focused 20-30 page paper. The student's written work will be repeatedly evaluated over the semester by the director, and the final product must be defended in an oral examination conducted by a three-member faculty committee (including the director). Prerequisite: Students must be admitted to the Ph.D. program and have successfully completed the Ph.D. core courses requirement.

**PHIL 999. Dissertation. 1-12 Credits.**

This course may be taken more than once, but not for more than twelve hours of credit in any one semester. Graded on a satisfactory progress/limited progress/no progress basis.

---

**Bachelor of Arts and Bachelor of General Studies in Philosophy**

**Why study philosophy?**

In philosophy we ask big, important questions. While asking such questions is easy, answering them is difficult. Because these questions are often abstract and vague, it is necessary to use precise reasoning and analysis to clarify what exactly it is we are asking. Only then can we attempt to develop answers.

In studying philosophy, you will learn what others have thought about life's big questions. You will also learn to challenge those views, and to develop your own thoughts in a precise, logical manner. Philosophy will help you develop critical thinking skills, enabling you to analyze the underlying logic and assumptions in arguments about a variety of topics. This is a skill that generalizes to virtually every area of life.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements.

See individual department/program sections for departmental admission requirements.

**First- and Second-Year Preparation**

Although majors are not required to take courses in philosophy in their first 2 years, the department recommends that they do so. Prospective majors are encouraged to begin with one of the 100-level courses. These courses provide introductions to broad areas of philosophy, and students may apply one 100-level course toward the major requirements. PHIL 310, PHIL 384, and PHIL 386 are required prerequisites for upper-division work and should be taken early. Prospective majors should consult the director of undergraduate studies early to plan course work.

**Requirements for the B.A. or B.G.S. Major**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 300</td>
<td>Philosophy Major Knowledge and Skills (3)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Majors must complete a course in one of the following areas:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>History of Philosophy. Satisfied by either one of the following areas</td>
<td></td>
</tr>
<tr>
<td>PHIL 384</td>
<td>Ancient Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 386</td>
<td>Modern Philosophy from Descartes to Kant</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Philosophy Major Required Electives (24)</td>
<td></td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Introduction to Symbolic Logic</td>
<td>3</td>
</tr>
<tr>
<td>or PHIL 610</td>
<td>Metalogic</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Value Theory. Satisfied by completing one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>PHIL 555</td>
<td>Justice and Economic Systems</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 662</td>
<td>Aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 666</td>
<td>Rational Choice Theory</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 668</td>
<td>Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 670</td>
<td>Contemporary Ethical Theory</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 671</td>
<td>Feminist Theories in Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 672</td>
<td>History of Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 676</td>
<td>Medical Ethics: Life and Death Issues</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 677</td>
<td>Medical Ethics: Professional Responsibilities</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Theoretical Philosophy. Satisfied by completing one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>PHIL 620</td>
<td>Philosophy of Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 622</td>
<td>Philosophy of Social Science</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 630</td>
<td>Philosophy of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 638</td>
<td>Philosophy of Language</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 648</td>
<td>Theory of Knowledge</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 650</td>
<td>Metaphysics</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 654</td>
<td>Philosophy of Mind</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>History. Satisfied by completing one of the following courses:</td>
<td></td>
</tr>
<tr>
<td>PHIL 508</td>
<td>Early Greek Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 557</td>
<td>Kant</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 558</td>
<td>Seventeenth Century Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 559</td>
<td>Eighteenth Century Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 560</td>
<td>Nineteenth Century Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 562</td>
<td>Kierkegaard</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 570</td>
<td>Nietzsche</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 582</td>
<td>Existentialism</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 590</td>
<td>Phenomenology</td>
<td>3</td>
</tr>
</tbody>
</table>
PHIL 592  Contemporary Continental Philosophy  3
PHIL 605  The Philosophy of Plato  3
PHIL 607  The Philosophy of Aristotle  3
PHIL 608  Hellenistic Philosophy  3
**Additional Electives  12**

Satisfied by completing 12 additional hours of PHIL courses, not more than 3 credit hours can be below 300 and at least 3 credit hours must be at the 500-level or above.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and GPA minimum standards:

**Major Hours**
Satisfied by 27 hours of major courses, or 33 hours required if completing departmental honors course PHIL 499.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (500+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (500+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in Philosophy can be found here: Philosophy (p. 1664), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Philosophy can be found here: Philosophy (p. 1665), or by using the left-side navigation.

**Departmental Honors**

To graduate with departmental honors, undergraduates must take 6 hours in philosophy in addition to the 27 hours required for the B.A. or B.G.S., for a total of 33 hours. The 6 additional hours include

• An additional course numbered 500 or above for a total of at least 15 hours at that level, and

• PHIL 499 Senior Essay.

A committee of 3 faculty members reads the finished essay, gives the candidate an oral examination over the essay, and determines whether it warrants honors. This committee must consist of the instructor in PHIL 499, the departmental honors coordinator, and a third member of the philosophy faculty.

Honors are not awarded to anyone who receives a grade lower than B in PHIL 499, whose final grade-point average in philosophy is lower than 3.5. To be eligible for departmental honors, students must file a declaration of intent with the departmental honors coordinator no later than enrollment for the final undergraduate semester.

The most important element in departmental honors is the honors essay. Once a student has determined the area in which he or she wishes to work, he or she should arrange to write the essay under the guidance of a faculty member with appropriate expertise. Ideally, this work should be completed during a single semester. However, students often find it difficult to complete the essay in one semester. Therefore, we recommend that the essay be begun in the semester before the one in which the student intends to graduate (typically, in the fall semester of the senior year).

The honors essay should be intermediate between a master’s thesis and a term paper. It should normally be at least 20 pages (6,000 words) long. It should go beyond mere exposition, whether by criticism or by comparison of different works. Interpretations of rare or difficult texts may occasionally be accepted.

**BA in Philosophy**

Below is a sample 4-year plan for students pursuing the BA in Philosophy. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing)</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing)</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>PHIL 160, 161, or 180 (Goal 5 Social Responsibility &amp; Ethics)</td>
</tr>
<tr>
<td>PHIL 140, 141, 148, 160, 161, or 170 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>Goal 1.2 Quantitative Literacy</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>Goal 2.2 Communication</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>2nd Semester Language (BA Second Language)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>PHIL 384 or 386 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>PHIL Electroive (2 of 4), Major Requirement</td>
</tr>
<tr>
<td>PHIL 310 or 610</td>
<td>Goal 3 Natural Science</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 BA Laboratory/Field Experience (LFE)</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td></td>
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</table>
4th Semester Language, or 1st semester of Another Language (BA Second Language)2

<table>
<thead>
<tr>
<th>15</th>
<th>16</th>
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</thead>
<tbody>
<tr>
<td>PHIL 500+ Value Theory Area, Major Requirement</td>
<td>3 PHIL 620-654 Theoretical Area, Major Requirement</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3 Goal 4.1 US Diversity</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
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</table>

<table>
<thead>
<tr>
<th>15</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 500+ History Area, Major Requirement</td>
<td>3 PHIL Elective 300+ (3 of 4), Major Requirement</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3 PHIL Elective 500+ (4 of 4), Major Requirement</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Goal 6 Integration &amp; Creativity (recommend an approved PHIL course)5</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 120

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

3 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

4 One PHIL course below the 300-level may count toward the major under required PHIL elective hours (12 PHIL electives needed).

5 PHIL 638, PHIL 648, PHIL 650, and PHIL 654 options for Theoretical area requirement count toward KU Core Goal 6.

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in Philosophy

Below is a sample 4-year plan for students pursuing the BGS in Philosophy. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3 PHIL 160, 161, or 180 (Goal 5 Social Responsibility &amp; Ethics)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3 Goal 2.1 Written Communication (Second Course, 2 Crs Required)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 140, 141, 148, 160, 161, or 170 (Goal 1.2 Quantitative Literacy, PHIL Elective (1 of 4), Major Requirement)1</td>
<td>3 Goal 2.2 Communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 384 or 386 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3 PHIL Elective 300+ (2 of 4), Major Requirement</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3 Goal 3 Natural Science</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours3</td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 310 or 610 (Major Requirement)</td>
<td>3 PHIL 620-654 Theoretical Area (Major Requirement)2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 500+ Value Theory Area (Major Requirement)</td>
<td>3 Goal 4.1 U.S. Diversity</td>
<td></td>
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</tr>
</tbody>
</table>

Please note:
Minor in Philosophy

Why study philosophy?

In philosophy we ask big, important questions. While asking such questions is easy, answering them is difficult. Because these questions are often abstract and vague, it is necessary to use precise reasoning and analysis to clarify what exactly it is we are asking. Only then can we attempt to develop answers.

Requirements for the Minor

Students selecting this option must complete at least 6 courses (18 hours) of philosophy elective courses

PHIL 384 and especially PHIL 386 are strongly recommended.

Minor Hours and Minor GPA

While completing all required courses (above), minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 junior/senior courses (300+) hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Undergraduate Certificate in Logic and Formal Reasoning

The certificate in Logic and Formal Reasoning provides students with the opportunity to engage in a series of courses unified around the idea that logic and formal reasoning is a general skill, useful in a wide variety of academic contexts and applications. This certificate can be completed entirely within philosophy or with a more interdisciplinary course plan. Students who complete the certificate will be well-versed in formal methods of reasoning.

The rationale is that requirement 1 is an introductory course, requirement 2 is a necessary symbolic logic course, and requirement 3 comprises two advanced courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Introductory Course - choose one of the following (or another by permission):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EECS 210</td>
<td>Discrete Structures</td>
<td></td>
</tr>
<tr>
<td>MATH 450</td>
<td>Discrete Mathematics</td>
<td></td>
</tr>
<tr>
<td>PHIL 148</td>
<td>Reason and Argument</td>
<td></td>
</tr>
<tr>
<td>Symbolic Logic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Introduction to Symbolic Logic</td>
<td></td>
</tr>
<tr>
<td>Advanced Course - choose two of the following courses (or others by permission):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 500</td>
<td>Intermediate Analysis</td>
<td></td>
</tr>
</tbody>
</table>
The department offers thesis and non-thesis M.A. options. Both require:

- A philosophy.ku.edu/phd-admissions/application, please visit the graduate page of the required supplemental documentation to be submitted with the online application.
- For additional information, including relevant deadlines and a list of Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

For Fall admission, applications must be received by December 1st. For Spring admission, the priority deadline is October 1st. Final deadline is December 1st.

Students must apply to start the accelerated MA in the semester immediately following their graduation (Spring/Summer graduates apply to begin the next Fall; Fall graduates apply to begin in the Spring).

For Fall admission, priority deadline is February 1st. Final deadline is May 1st.

For additional information, including relevant deadlines and a list of required supplemental documentation to be submitted with the online application, please visit the graduate page of the Philosophy (https://philosophy.ku.edu/staff/) section of the online catalog.

M.A. Degree Requirements

The department offers thesis and non-thesis M.A. options. Both require:

1. **30 credit hours of graduate work in philosophy** with a grade of B- or higher, with a GPA of at least 3.0 over all courses in philosophy. At least 15 of these hours must be in courses numbered 800 or above and, for the thesis option, may include up to 6 hours of PHIL 899 Master’s Thesis.

2. Students must complete two courses at the 500 level or above (or the equivalent) in each of these areas: history of philosophy, metaphysics and epistemology (broadly construed), and value theory. Courses taken during the undergraduate career may be counted toward these area requirements, but will not count toward the overall 30-hour graduate credit requirement unless a petition to this effect is explicitly approved by the graduate faculty.

3. PHIL 800 must be taken in the first year of study.

4. A final examination:
   a. For the thesis option, the student will complete an oral defense of the thesis in accordance with Graduate Studies policy. The oral examination is held during the semester of the student’s final enrollment in course work and when the advisor approves the thesis for defense. Any philosophical issue that is relevant to the thesis may be explored in the oral exam to ensure the thesis reflects a breadth of philosophical knowledge.
   b. For the non-thesis option, the student must pass an oral examination covering the material of the M.A. program. The non-thesis option final exam can be satisfied by Ph.D. students who successfully complete PHIL 901 with a grade of B or higher.

Accelerated Master of Arts in Philosophy

The Accelerated M.A. provides KU undergraduates who have majored in Philosophy an opportunity to complete the M.A. in Philosophy within a year of completing their bachelor’s degree. Talented students who are planning to continue their studies at the doctoral level or to continue to law school will receive a competitive advantage by acquiring a master’s degree in half the time traditionally required for a terminal M.A.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A. in Philosophy

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog.

Apply to the graduate program via the Office of Graduate Studies online application system (https://gradapply.ku.edu/).

For Fall admission, applications must be received by January 5th to be considered for funding support. The deadline for Fall admission is May 1st.

For additional information, including relevant deadlines and a list of required supplemental documentation to be submitted with the online application, please visit the graduate page of the Philosophy (http://philosophy.ku.edu/phd-admissions/) website, or contact the department Graduate Program (https://philosophy.ku.edu/staff/) Coordinator.

## M.A. Degree Requirements

1. **30 credit hours of graduate work in philosophy** with a grade of B- or higher, with a GPA of at least 3.0 over all courses in philosophy. At least 15 of these hours must be in courses numbered 800 or above and, for the thesis option, may include up to 6 hours of PHIL 899 Master’s Thesis.

2. Students must complete two courses at the 500 level or above (or the equivalent) in each of these areas: history of philosophy, metaphysics and epistemology (broadly construed), and value theory. Courses taken during the undergraduate career may be counted toward these area requirements, but will not count toward the overall 30-hour graduate credit requirement unless a petition to this effect is explicitly approved by the graduate faculty.

3. PHIL 800 must be taken in the first year of study.

4. A final examination:
   a. For the thesis option, the student will complete an oral defense of the thesis in accordance with Graduate Studies policy. The oral examination is held during the semester of the student’s final enrollment in course work and when the advisor approves the thesis for defense. Any philosophical issue that is relevant to the thesis may be explored in the oral exam to ensure the thesis reflects a breadth of philosophical knowledge.
   b. For the non-thesis option, the student must pass an oral examination covering the material of the M.A. program. The non-thesis option final exam can be satisfied by Ph.D. students who successfully complete PHIL 901 with a grade of B or higher.
philosophy.ku.edu/phd-admissions/) website, or contact the department Graduate Program Coordinator (https://philosophy.ku.edu/staff/).

Degree Requirements

Students must complete all of the following requirements for the Accelerated M.A. within one calendar year post-bachelor’s:

1. 24 credit hours of graduate coursework (500-level or above) in philosophy post-bachelor’s with a grade of B or higher. At least 15 of these hours must be in courses numbered 800 or above. Students must complete two courses at the 500-level or above (or the equivalent) in each of these areas: history of philosophy, metaphysics and epistemology (broadly construed), and value theory. Courses taken during the undergraduate career may be counted toward these area requirements, but such work does not count toward the overall 24-hour graduate credit requirement unless the student took this course work for graduate credit and it has department approval.

2. PHIL 800 Tutorial with a grade of B or higher

3. An M.A. exam consisting in the oral defense of a seminar paper of the student’s choosing

Time Limits and Other Restrictions

Students must maintain a minimum GPA of 3.5 in the first semester of graduate study in order to maintain eligibility for the program. They will be subject to a formal mid-year review to ensure satisfactory progress towards completion of the degree.

A student who receives a bachelor’s degree in Spring or Summer begins the M.A. portion of the degree that Fall. The student must then complete all requirements for the Accelerated M.A. by the first day of classes the following Fall.

If a student does not complete the Accelerated M.A. requirements within one year post-bachelor’s, the student may petition the department for admission to the standard 30-hour M.A. track. In extraordinary circumstances, for example, serious illness, students may petition the department to remain in the 24-hour track.

Juris Doctor and Master of Arts in Philosophy

Joint J.D.-M.A. Degree Program

The joint degree program leading to the J.D. and the M.A. in philosophy develops a student’s understanding and appreciation of the converging disciplines of law and philosophy. The program combines into 3 years and 1 summer session the normal 3-year J.D. program offered by the School of Law and the 2-year M.A. offered by the Department of Philosophy in the College of Liberal Arts and Sciences. Students complete 81 credit hours in law and 21 credit hours in philosophy.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Joint Program

The program is open to those who have earned baccalaureate degrees from accredited colleges or universities and whose undergraduate academic records indicate that they have the capacity to complete the program. Applicants must meet the admission requirements and prerequisites of the School of Law and the Department of Philosophy. The only exception to this is that the Law School Admission Test (LSAT) is the only required entrance examination for such applicants (GRE is not required for either program). Students must apply and be admitted to each school separately. Generally, students apply to the School of Law first, and if admitted, subsequently apply for admission to the M.A. in Philosophy. No student may enter the combined program after completing more than 30 credit hours in the School of Law or 12 hours in the Department of Philosophy.

For information about applying to the Law School, see the school website (http://www.law.ku.edu/admissions/). For information about applying to the M.A. program in Philosophy, please visit the graduate program page (http://philosophy.ku.edu/majd-admissions/) of the Philosophy department website, or contact the Graduate Program Coordinator, Aley Pennington, aleypennington@ku.edu.

Typical Enrollment Pattern for J.D./M.A. Program

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law courses</td>
<td>29</td>
</tr>
<tr>
<td>Philosophy courses</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law courses</td>
<td>22</td>
</tr>
<tr>
<td>Philosophy courses</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Hours Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law courses</td>
<td>22 Law courses</td>
<td>5</td>
</tr>
<tr>
<td>Philosophy courses</td>
<td>9 Philosophy courses</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

**Total Hours 99**

Joint J.D./M.A. Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law courses required of all J.D. candidates</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Law courses required for joint degree candidates</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Philosophy courses required for joint degree candidates</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Additional law courses</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Additional philosophy courses</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Total minimum credit hours required 102**
It is essential for the student to consult the director of graduate studies in philosophy and a representative of the School of Law about specific courses required or recommended for this program.

For additional information, see the School of Law (p. 720) and the Guidelines and Information for Graduate Students available from the Department of Philosophy (http://philosophy.ku.edu/).

Doctor of Philosophy in Philosophy

The Ph.D. degree requires 39 hours of graduate coursework, which begins with a first-year proseminar and ends with an independent research seminar that culminates in the writing and oral defense of a qualifying paper. Ph.D. candidates must also satisfy a set of course requirements in distinct areas of philosophy and the University’s Research Skills and Responsible Scholarship requirement. Students write and defend a dissertation prospectus to complete the oral comprehensive examination and advance to candidacy, after which they are expected to write and successfully defend a dissertation.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Ph.D. in Philosophy

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog.

Apply to the graduate program via the Office of Graduate Studies online application system (https://gradapply.ku.edu/).

For Fall admission, applications must be received by January 5th to be considered for funding support. The deadline for Fall admission is May 1st.

For additional information, including relevant deadlines and a list of required supplemental documentation to be submitted with the online application, please visit the graduate page of the Philosophy (http://philosophy.ku.edu/phd-admissions/) website, or contact the department Graduate Program Coordinator (https://philosophy.ku.edu/staff/).

Ph.D. Degree Requirements

1. Complete at least 39 credit hours of graduate work in philosophy (https://catalog.ku.edu/liberal-arts-sciences/philosophy/#courseinventory). Students must earn grades in each course of at least B– and an overall grade-point average of at least B in all graduate philosophy courses. At least 24 hours must be at the 800 level or above (including PHIL 800 and PHIL 901). Beyond the 39-hour requirement, additional hours in PHIL 999 Dissertation are required as appropriate in accordance with the rules of the Office of Graduate Studies and the Department.

2. Complete PHIL 800 in the first year of enrollment.


4. Distribution Requirement: Students must complete seven courses that fulfill the following distribution requirements:
   a. Value Theory – 2 courses
   b. Metaphysics & Epistemology - 2 courses
   c. History of Philosophy – 3 courses
      i. Ancient Philosophy - 1 course
      ii. Modern Philosophy - 1 course
      iii. 19th and 20th Century Philosophy - 1 course

5. PHIL 901: Taken at the end of course requirements. Independent research seminar that results in the writing and successful oral defense of a qualifying paper. Students should enroll in PHIL 901 no later than the sixth semester.

   The University requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. For Philosophy doctoral students, this requirement is met by the following:
   a. PHIL 800
   b. PHIL 901
   c. Demonstrated competence in an approved foreign language, OR completion of a faculty-approved course in a discipline related to the student’s research interests.

7. Pass the comprehensive oral examination for Ph.D. candidacy. In the philosophy department, this is done by passing a prospectus for the dissertation. This examination must be taken after all of the above requirements have been completed, or in the semester in which the requirements will be completed.

8. After satisfaction of the above requirements, the student enrolls in PHIL 999 Dissertation with their Dissertation Director.

9. Write and successfully defend a dissertation, following both Graduate School (https://policy.ku.edu/graduate-studies/doctoral-dissertation/) and Department Guidelines (http://philosophy.ku.edu/phd-graduate-handbook/).

Department of Physics and Astronomy

Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department’s research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the
Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billionths of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate studies in STEM, many find employment in the private sector in diverse careers ranging from financial analysts to physicians. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

Undergraduate Programs

We welcome all students curious about the universe around them. This includes not only students planning on graduate study in STEM, but also students from other disciplines where a background in foundational physical science and critical thinking can be useful – example teaching and medicine – and anyone seeking to include astronomy and physics as part of their general education. The department offers BS degrees in astronomy, physics, and engineering physics and BA degrees in astronomy and physics. Degrees in astronomy and physics are granted through the College of Liberal Arts and Sciences whereas engineering physics degrees are granted through the School of Engineering. The primary degree offered is a BS in Physics. In addition to this standard BS in Physics, there are also interdisciplinary and pre-medicine versions (specializations) of the BS in Physics degree. The interdisciplinary track allows students to take elective courses in other STEM disciplines and the pre-medicine emphasis is for students interested in health professions. We also offer minors in astronomy and physics and a certificate in astrophysics of origins. We involve our undergraduate majors in cutting-edge research practically from the day they join the department; research is a requirement of both the BS Astronomy and BS Physics degrees. The breadth of our research program affords our students exposure to a number of different fields and we are justifiably proud of our undergraduate researchers who routinely publish papers, attend conferences, and/or conduct research abroad (in locales such as Antarctica, Chile, and CERN).

Courses for Nonmajors

ASTR 191 is a survey of contemporary astronomy, taught at a level using basic mathematics; ASTR 391 offers an introduction to physical astronomy at a calculus-based level. PHSX 111 provides a general introduction to important physics topics and is taught at a level using basic algebra. The department offers two introductory physics sequences that include laboratory work. PHSX 114 and PHSX 115 cover the major fields of physics without calculus. PHSX 211 and PHSX 212, with labs PHSX 216 and PHSX 236, provide a calculus-based foundation in physics for students in physical science, engineering, and mathematics. PHSX 313 and the laboratory course, PHSX 316, provide an introduction to modern physics for majors in physics and some engineering and physical science programs.

Students in biological sciences, health sciences, physical sciences, mathematics, engineering, and prospective elementary and secondary teachers should see appropriate sections of this catalog and major advisors for guidance about required physics course work. Chemistry majors should note that PHSX 211 and PHSX 212 are prerequisites to advanced work in chemistry.

For programs in engineering physics (p. 519), see the School of Engineering section of the online catalog.

Graduate Programs

The department offers two primary graduate programs: (i) an M.S. degree in Physics and (ii) a Ph.D. degree in Physics. The M.S. in Physics has the possibility of having a concentration in Computational Physics and Astronomy. This option requires a thesis, as does one of the M.S.-Physics options. The department does not offer a graduate-level degree in Astronomy, although students have obtained M.S. degrees in Physics by doing astronomy projects. In addition, the department has added flexibility in its course offerings to allow a student to obtain a Ph.D. in Physics while working on an astronomy or astrophysics multidisciplinary plan of study.

The department is proud to be an APS Bridge Program (https://physics.ku.edu/graduate-program/bridge-program/) partner. Information about admission, requirements, and graduate programs is also on the Department of Physics & Astronomy web page (https://physics.ku.edu/graduate-program/). Please note that the General and Subject GRE are not required for admissions to the Physics and Astronomy graduate program.

Courses

ASTR 150. Seminar in Physics, Astronomy and Engineering Physics. 0.5 Credits. N
This course is intended for all students in physics, astronomy and engineering physics. Course content includes topics of current interest in all fields of physics and astronomy and an introduction to professional ethics and frameworks for ethical decision making. Topics covered include but are not limited to nanotechnology, cosmology, nuclear and high energy physics, galactic evolution, condensed matter physics, space physics, biophysics and plasma physics. Course will include hands on demonstrations, group in-class activities and general advising information. (Same as PHSX 150.)

ASTR 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Astronomy. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ASTR 190. Astronomy and Civilization. 3 Credits. N
A survey course that describes the interplay between the science of astronomy and cultural beliefs. It uses, among others, examples of how religious and philosophical tenets have enhanced or conflicted with scientific principles. Not for astronomy majors.

ASTR 191. Contemporary Astronomy. 3 Credits. NP N
The structure and evolution of the universe, from nearby planets to distant quasars, are examined. Topics include recent discoveries concerning planets, stars, pulsars and black holes as well as their evolution, the structure of the universe today and how it will be in the future. The emphasis is descriptive rather than mathematical. (Same as PHSX 191.) Prerequisite: Eligibility for MATH 101.

ASTR 196. Contemporary Astronomy Laboratory. 1 Credits. NP N LFE
An introduction to astronomical observations and modern data analysis methods. Students will carry out independent investigations as well as standard exercises. This is an online course, delivered through Blackboard. (Same as PHSX 196.) Prerequisite: Corequisite: ASTR 191.

ASTR 293. Astronomy Bizarre. 3 Credits. N
An exploration of physical phenomena found in astrophysical extremes. Topics may include the following: the most violent explosions in the Universe (supernovae and gamma ray bursts); the biggest collisions in nature (galaxy interactions); the densest and most bizarre forms of matter (white dwarfs, neutron stars); the strongest magnetic fields (magnetars, pulsars); the amazing range of exo-planetary properties; and the mysteries of black holes. Prerequisite: Eligibility for MATH 101.

ASTR 390. Undergraduate Problems. 1-3 Credits. N
Undergraduate observational or theoretical problems in astronomy. Maximum credit, six hours. Prerequisite: Permission of department.

ASTR 391. Physical Astronomy, Honors. 3 Credits. NP N
An honors, calculus-based introduction to astronomy and astrophysics, required for astronomy majors. Components of the Universe - from planetary systems, stellar systems, large scale structure and cosmology - are examined to illuminate the physics principles which govern their evolution. Prerequisite: MATH 125, and either permission of instructor, or participation in the University Honors Program.

ASTR 394. The Quest for Extraterrestrial Life. 3 Credits. NP N
An introduction to the search for planets around other stars and for life in the universe beyond the earth. A discussion of the astronomical conditions under which life might form and the biological conditions of life formation and evolution. Methods of searching for extraterrestrial life. Prerequisite: An introductory course in astronomy, biology, or geology.

ASTR 400. Topics in Astronomy: _______. 1-3 Credits. N
A course on special topics in astronomy. Course may be repeated for different topics. Each section may have additional prerequisites to be determined by the instructor.

ASTR 501. Honors Research. 1-4 Credits. N
This course is for students seeking Departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required four hours of total enrollment, a written and oral report of the research is required. (Same as EPHX 501 and PHSX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

ASTR 503. Undergraduate Research. 1-4 Credits. N
This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as EPHX 503 and PHSX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

ASTR 591. Stellar Astronomy. 3 Credits. N
Fundamentals of stellar astronomy including astronomical optics and techniques, coordinate and time systems, stellar spectroscopy, properties of normal, binary and variable stars. Prerequisite: PHSX 212 and PHSX 236 or PHSX 214. An introductory astronomy course is desirable.

ASTR 592. Galactic and Extragalactic Astronomy. 3 Credits. N
A study of stellar groups, the interstellar medium, galactic structure and dynamics, galaxies, and cosmology. Prerequisite: ASTR 591 or consent of instructor.

ASTR 596. Observational Astrophysics. 3 Credits. NP N
Students acquire practical experience with astronomical equipment and data reduction techniques used in research and educational contexts. ASTR 596, combined with an independent research experience, provides a pathway for students to demonstrate creativity and integration of background knowledge. Prerequisite: Corequisite: ASTR 591.

ASTR 691. Astrophysics I. 3 Credits. N
An introduction to radiation processes, thermal processes, and radiative transfer in stellar atmospheres and the interstellar medium. (Same as EPHX 691 and PHSX 691.) Prerequisite: PHSX 313 or consent of instructor.

ASTR 692. Astrophysics II. 3 Credits. N
The formation and evolution of stars, nucleosynthesis of the elements, and the physical processes of high energy physics. Prerequisite: ASTR 691 or consent of instructor.

ASTR 791. Seminar in Astrophysics. 1-3 Credits.
Seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor.

ASTR 792. Topics in Advanced Astrophysics. 3 Credits.
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrobioyphysics, and the interstellar and intergalactic media (ISM/IGM.) This course may be repeated for credit if topical content differs. (Same as PHSX 792.) Prerequisite: ASTR 692 or permission of instructor.

ASTR 795. Space Plasma Physics. 3 Credits.
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the surface of the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind and the magnetosphere. (Same as PHSX 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631.

ASTR 815. Computational Methods in Physical Sciences. 3 Credits.
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document computer programs to solve physical problems. (Same as PHSX 815 and CHEM 914.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above.

Courses

PHSX 111. Introductory Physics. 3 Credits. NP N
A one-semester survey of classical and modern physics, designed primarily for liberal arts students. Typical subjects include the laws of motion, gravity, electricity and magnetism, sound, light, quantum mechanics, atomic and subatomic physics. Subjects are treated mainly conceptually with some use of basic data. Prerequisite: Eligibility for MATH 104.

PHSX 114. College Physics I. 1-4 Credits. NP N LFE
Principles and applications of mechanics, fluids, heat, thermodynamics, and sound waves. Three class hours and one laboratory per week. This course emphasizes the development of quantitative concepts and problem solving skills for students needing a broad background in physics as part of their preparation in other major programs, and for those who wish to meet the laboratory science requirement of the College. Students who enroll in this course are expected to have had 3.5 years of college-prep math, including trigonometry. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 211 or PHSX 216 or PHSX 212 or PHSX 236. Prerequisite: MATH 104 or a score of 25 or higher on ACT mathematics.
PHSX 115. College Physics II. 1-4 Credits. N LFE
A continuation of PHSX 114. Principles and applications of electricity, magnetism, light, atomic physics, and nuclear physics. Three class hours and one laboratory period per week. In special circumstances, permission to enroll in less than four hours may be obtained from the department. Not open to students with credit in PHSX 212 or PHSX 236. Prerequisite: PHSX 114.

PHSX 116. Introductory Physics Laboratory. 1 Credits. U LFE
A laboratory exploring classical and modern physics, designed primarily for liberal arts students. Experiments in motion, force, momentum, energy, wave mechanics, electricity and magnetism, sound, light, atomic and subatomic physics are designed to teach physics concepts and basic laboratory techniques. One two-hour lab period per week. Counts as a laboratory science when preceded or accompanied by PHSX 111. Prerequisite: Eligibility for MATH 104. Corequisite: PHSX 111.

PHSX 150. Seminar in Physics, Astronomy and Engineering Physics. 0.5 Credits. N
This course is intended for all students in physics, astronomy and engineering physics. Course content includes topics of current interest in all fields of physics and astronomy and an introduction to professional ethics and frameworks for ethical decision making. Topics covered include but are not limited to nanotechnology, cosmology, nuclear and high energy physics, galactic evolution, condensed matter physics, space physics, biophysics and plasma physics. Course will include hands on demonstrations, group in-class activities and general advising information. (Same as ASTR 150.)

PHSX 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Physics. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

PHSX 191. Contemporary Astronomy. 3 Credits. NP N
The structure and evolution of the universe, from nearby planets to distant quasars, are examined. Topics include recent discoveries concerning planets, stars, pulsars and black holes as well as their evolution, the structure of the universe today and how it will be in the future. The emphasis is descriptive rather than mathematical. (Same as ASTR 191.) Prerequisite: Eligibility for MATH 101.

PHSX 196. Contemporary Astronomy Laboratory. 1 Credits. NP N LFE
An introduction to astronomical observations and modern data analysis methods. Students will carry out independent investigations as well as standard exercises. This is an online course, delivered through Blackboard. (Same as ASTR 196.) Prerequisite: Corequisite: ASTR 191.

PHSX 201. Calculus Supplement to College Physics I. 1 Credits. N
A calculus-based course in classical mechanics and thermodynamics for students who have had an algebra-based course in classical mechanics and thermodynamics. This course, combined with PHSX 114, covers the content of PHSX 211 or PHSX 210. Prerequisite: PHSX 114 and MATH 116 or MATH 125. Corequisite: MATH 126; and permission of the department.

PHSX 202. Calculus Supplement to College Physics II. 1 Credits. N
A calculus-based course in electricity and magnetism for students who have had an algebra-based course in electricity and magnetism. This course, combined with PHSX 115, covers the content of PHSX 212. Prerequisite: PHSX 115 and permission of the department. Corequisite: MATH 126.

PHSX 209. Functions and Modeling. 3 Credits. N
Study of the use of functions in mathematical modeling, with topics drawn from algebra, analytic geometry, statistics, trigonometry, and calculus. These topics include function properties and patterns, complex numbers, parametric and polar equations, vectors and various growth models. The course also includes inquiry methods, collaborative problem solving, the use of multiple representations and data analysis techniques, and the justification and presentation of results. Central to the course are investigative labs employing various technologies and software. The course is designed to help prepare students for secondary school mathematics teaching. (Same as MATH 209.) Prerequisite: MATH 126 or MATH 146.

PHSX 210. General Physics I for Engineers. 3 Credits. N
Introduction to classical mechanics and thermodynamics designed for students in the School of Engineering who have completed MATH 125 or MATH 145 with a grade of C or better. Students not admitted to the School of Engineering must receive permission from instructor. PHSX 210 and PHSX 211 cannot both be taken for credit. Prerequisite: MATH 125 or MATH 145 with a grade of C or better; co-requisite MATH 126 or MATH 146; courses in high school physics and/or chemistry are recommended.

PHSX 211. General Physics I. 4 Credits. NP N LFE
Introduction to classical mechanics and thermodynamics. Designed for students in engineering and physical science majors. Prerequisite: MATH 116 or MATH 125 or MATH 145. Corequisite MATH 126 or MATH 146; courses in high school physics and/or chemistry are recommended.

PHSX 212. General Physics II. 3 Credits. N LFE
Study of electricity, magnetism, waves, and optics. Prerequisite: PHSX 201, PHSX 210, PHSX 211 or PHSX 213; MATH 126 or MATH 146. Co-enrollment in MATH 127 or MATH 147 is strongly encouraged.

PHSX 213. General Physics I Honors. 1-5 Credits. NP N LFE
An honors section of PHSX 211 and PHSX 216. Credit for fewer than five hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in Astronomy, Physics, or Engineering Physics. Courses in high school physics and chemistry are required. Prerequisite: MATH 125 or MATH 145; co-requisite MATH 126 or MATH 146; and permission of instructor.

PHSX 214. General Physics II Honors. 1-4 Credits. N LFE
An honors section of PHSX 212 and PHSX 236. Credit for fewer than four hours requires permission of the department. Recommended for students with a strong math background who are either in the University Honors Program or intending to major in Astronomy, Physics, or Engineering Physics. Prerequisite: PHSX 216 together with either PHSX 211 or PHSX 210; or PHSX 213, and permission of instructor. Corequisite: MATH 127 or MATH 147.

PHSX 216. General Physics I Laboratory. 1 Credits. N LFE
Experiments in classical mechanics and thermodynamics. The course includes practice in the ethics of recording and presentation of data. Counts as a laboratory science when accompanied by PHSX 211. Prerequisite: Corequisite: PHSX 210 or PHSX 211.

PHSX 236. General Physics II Laboratory. 1 Credits. N LFE
Experiments in electricity and magnetism, waves and sound. Students will practice data reduction and error analysis in ways that are consistent with professional ethics. Prerequisite: Corequisite: PHSX 212.

**PHSX 313. General Physics III. 3 Credits. N**

This course is an introduction to modern physics. The topics covered in this course include special relativity, optics, and introductions to quantum mechanics and its applications. Prerequisite: PHSX 212 and PHSX 236, or PHSX 214, or PHSX 202, or EECS 220, or EECS 221. Corequisite: MATH 320 or MATH 220 or MATH 221.

**PHSX 315. Introduction to Computation for Physics and Astronomy. 3 Credits. N**

This course introduces the use of computational techniques as applied to solving problems in physics and astronomy. It serves as a gateway to the use of such methods in upper level classes and research. Highlighted techniques will include the use of numerical methods for the solution of differential equations encountered in physics and astronomy, the use of random numbers for simulation and modeling, data analysis using computers, and data visualization. Problems will be drawn from a wide variety of physical applications including mechanics, electromagnetism, thermodynamics, and stellar dynamics. Students will develop their own computer programs to investigate, illustrate, and report their results. Prerequisite: EECS 138 or EECS 168 or EECS 169, or permission of the instructor. Corequisite: PHSX 212 or PHSX 214.

**PHSX 316. Intermediate Physics Laboratory I. 1 Credits. U LFE**

Experiments in optics and modern physics. Development of experimental skills, data reduction, error analysis, and technical writing. One lab meeting per week and one lecture per week on topics including error analysis and experimental design, and the development of professional ethics in regard to citation and data presentation. Prerequisite: Corequisite: PHSX 313.

**PHSX 395. Physics Education Theory and Practice. 3 Credits. N**

This course focuses on how people teach, learn, and understand key concepts in physics, including an introduction to physics education research. Topics include student conceptions, assessments, impacts of student identity, metacognition, and nature of science. Current issues and tensions in science and math education will be discussed, especially as it relates to physics instruction. This course also provides students firsthand experience in planning and implementing a phenomena-based curriculum through teaching lessons in elementary or middle school classrooms. Prerequisite: Corequisite: PHSX 313.

**PHSX 400. Topics in Physics and Astronomy: _____. 1-3 Credits. N**

A course on special topics in physics and astronomy, given as the need arises. Course may be repeated for different topics. Each section may have prerequisites to be determined by the instructor.

**PHSX 420. Science and Policy. 3 Credits. N**

An introduction to the relationship between science and public policy. The mutual interactions between public policy and scientific practice are explored within an ethical framework with examples that include energy and sustainability issues. An experiential course where students will be asked to develop and implement ethical solutions and engage meaningfully on a practicum project for local, regional, national, or international partners who are working on policy decisions which have technology implications. Honors credit is available for this course. Prerequisite: Eligibility for MATH 101.

**PHSX 500. Special Problems. 1-5 Credits. N**

Work in some area of physics beyond the topics or material covered in other courses. For some problems, continued enrollment in consecutive semesters may be appropriate. Prerequisite: One junior-senior course in science in an area related to the problem and consent of instructor.

**PHSX 501. Honors Research. 1-4 Credits. N**

This course is for students seeking Departmental Honors in Astronomy, Engineering Physics, or Physics to fulfill the undergraduate research requirement. At the completion of the required four hours of total enrollment, a written and oral report of the research is required. (Same as ASTR 501 and EPHX 501.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

**PHSX 503. Undergraduate Research. 1-4 Credits. N**

This course is for students seeking to fulfill the undergraduate research requirement. Students are expected to participate in some area of ongoing research in the department, chosen with the help of their advisor. At the end of the term, students will present their results in a seminar to other students and faculty. (Same as ASTR 503 and EPHX 503.) Prerequisite: Junior/Senior standing in Astronomy, Engineering Physics, or Physics, or permission of instructor.

**PHSX 518. Mathematical Physics. 3 Credits. N**

Applications of modern mathematical methods to problems in mechanics and modern physics. Techniques include application of partial differential equations and complex variables to classical field problems in continuous mechanics, unstable and chaotic systems, electromagnetics, hydrodynamics, and heat flow. Applications of elementary transformation theory and group theory, probability and statistics, and nonlinear analysis to selected problems in modern physics as well as to graphical representation of experimental data. (Same as EPHX 518.) Prerequisite: PHSX 313; MATH 220 or MATH 221 or MATH 320; or permission of instructor.

**PHSX 521. Mechanics I. 3 Credits. N**

Newton's laws of motion. Motion of a particle in one, two, and three dimensions. Motion of a system of particles. Moving coordinate systems. (Same as EPHX 521.) Prerequisite: PHSX 213 or PHSX 211 and PHSX 216; MATH 127 or MATH 147; MATH 290 or MATH 291; and MATH 220, MATH 221 or MATH 320.

**PHSX 531. Electricity and Magnetism. 3 Credits. N**

This course will explore the properties of electric and magnetic fields, including electrostatics, Gauss' Law, boundary value methods, electric fields in matter, electromagnetic induction, magnetic fields in matter, the properties of electric and magnetic dipoles, and of dielectric and magnetic materials. (Same as EPHX 531.) Prerequisite: PHSX 214, or PHSX 212 and PHSX 236, or PHSX 202; PHSX 521 or EPHX 521 or special permission; MATH 127 or MATH 147; MATH 290 or MATH 291; and MATH 220, MATH 221, or MATH 320.

**PHSX 536. Electronic Circuit Measurement and Design. 4 Credits. N LFE**

A laboratory course that explores the theory and experimental techniques of analog and digital electronic circuit design and measurement. Topics include transient response, transmission lines, transistors, operational amplifiers, and digital logic. (Same as EPHX 536.) Prerequisite: PHSX 214 or PHSX 212 and PHSX 236; MATH 127 or MATH 147; and MATH 290 or MATH 291. PHSX 313 and 316 recommended.

**PHSX 594. Cosmology and Culture. 3 Credits. N**

A survey of modern physical cosmology, its recent historical roots, and creation myths from many world cultures. An examination of the effects of these stories on their parent cultures.

**PHSX 598. Research Methods. 3 Credits. N LFE**

An introduction for pre-service teachers to the tools used by scientists to solve scientific problems. Topics include design of experiments and interpretation of their results, use of statistics, mathematical modeling,
laboratory safety, ethical treatment of human subjects, writing scientific papers, giving oral presentations, and obtaining data from the scientific literature. Open only to students in the UCanTeach program. (Same as CHEM 598.) Prerequisite: At least one course at the 100 level or above in CHEM, MATH, or PHSX.

PHSX 600. Special Topics in Physics and Astrophysics: _____.
3 Credits. N
Different topics will be covered as needed. This course will address topics in physics and astrophysics not covered in regularly offered courses. May be repeated if topic differs. (Same as EPHX 600.) Prerequisite: Permission of instructor.

4 Credits. N LFE
A laboratory course emphasizing the application of physical principles to the design of systems for research, monitoring, or control. Topics include the use of microcomputers as controllers, interfacing microcomputers with measurement devices, and use of approximations and/or computer simulation to optimize design parameters, linear control systems, and noise. (Same as EPHX 601.) Prerequisite: Twelve hours of junior-senior credit in physics or engineering, including one laboratory course.

PHSX 611. Introductory Quantum Mechanics.
3 Credits. N
An introduction to quantum mechanics, emphasizing a physical overview. Topics include the formalism of nonrelativistic quantum mechanics with emphasis on linear algebra, the 3-dimensional Schrodinger equation with applications to the hydrogen atom; harmonic oscillator; and time-independent perturbation theory. (Same as EPHX 511.) Prerequisite: PHSX 313, PHSX 511 or EPHX 521, and MATH 290 or MATH 291.

3 Credits. N
An introduction to the use of numerical methods in the solution of problems in physics for which simplifications allowing closed-form solutions are not applicable. Examples are drawn from mechanics, electricity, magnetism, thermodynamics, and optics. (Same as EPHX 615.) Prerequisite: PHSX 313, MATH 320 or equivalent, and EECS 138 or equivalent.

PHSX 616. Physical Measurements.
4 Credits. N LFE
A laboratory course emphasizing experimental techniques and data analysis, as well as scientific writing and presentation skills. Experiments will explore a range of classical and modern physics topics. Students will also practice ethical decision making using case studies appropriate for the discipline. (Same as EPHX 616.) Prerequisite: PHSX 313, PHSX 316 or EPHX 316, and PHSX 521 or EPHX 521. (PHSX 521 or EPHX 521 may be taken concurrently.)

PHSX 621. Mechanics II.
3 Credits. N
Continuation of PHSX 521. Lagrange's equations and generalized coordinates. Mechanics of continuous media. Tensor algebra and rotation of a rigid body. Special relativity and relativistic dynamics. (Same as EPHX 621.) Prerequisite: EPHX 521 or PHSX 521.

3 Credits. N
Maxwell's equations, wave propagation, optics and waveguides, radiation, relativistic transformations of fields and sources, use of covariance and invariance in relativity. Normally a continuation of PHSX 531. (Same as EPHX 631.) Prerequisite: EPHX 531 or PHSX 531.

PHSX 641. Introduction to Nuclear Physics.
3 Credits. N
Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. (Same as EPHX 641.) Prerequisite: PHSX 313 and PHSX 511.
application. Intended for early career graduate students and advanced undergraduate students.

**PHSX 711. Quantum Mechanics I. 3 Credits.**

**PHSX 717. Graduate Seminar. 1 Credits.**
First year graduate students meet to survey research opportunities in the department and develop skills in giving oral presentations in physics and related areas. Students will also learn about topics in responsible scholarship that may include: the origin of ideas and the allocation of credit, the treatment of data, scientific misconduct, intellectual property and entrepreneurship, the researcher in society, collaborative research, mentor/trainee responsibilities, and safe practices.

**PHSX 718. Mathematical Methods in Physical Sciences. 3 Credits.**
Review of complex variable theory; introduction to the partial differential equations of physical systems; Fourier analysis; special functions of mathematical physics; and chemistry. (Same as CHEM 718.) Prerequisite: Two semesters of junior-senior mathematics.

**PHSX 719. Physics and Astronomy Graduate Problem Solving. 1 Credits.**
This course teaches students skills in solving graduate level physics and astronomy problems. Graded on a satisfactory/unsatisfactory basis.

**PHSX 721. Chaotic Dynamics. 3 Credits.**
Topics covered may include the following: dynamical systems, attractors, sensitive dependence on initial conditions, chaos, one-dimensional maps, strange attractors and fractal dimensions, fat fractals, the horseshoe map, symbolic dynamics, linear stability of periodic orbits, stable and unstable manifolds, Lyapunov exponents, topological entropy, quasiperiodicity, strange nonchaotic attractors, nonattracting chaotic sets, fractal basin boundaries, renormalization group analysis, intermittency, crisis and chaotic transients. Prerequisite: Mechanics (PHSX 521, or its equivalent), ordinary differential equations (MATH 320, or its equivalent), and some computer programming knowledge.

**PHSX 727. Advanced Geophysics: ______. 1-3 Credits.**
Topics to vary with demand and include heat flow, wave propagation, synthetic seismograms, groundwater exploration, geothermal exploration, electrical methods in exploration, rock mechanics-geotechnophysics, rock magnetism, geomagnetism, paleomagnetism, geophysical inverse theory, and others upon sufficient demand. May be repeated for different topics. (Same as GEOL 771.) Prerequisite: GEOL 572 or consent of instructor.

**PHSX 731. Molecular Biophysics. 3 Credits.**
Methods and concepts in contemporary molecular biophysics are discussed. Particular emphasis is placed on the thermodynamics of macromolecular interactions and quantitative methods of data analysis. Basic enzymology and biophysical spectroscopy will also be reviewed. Prerequisite: PHSX 212, MATH 125, and either CHEM 135 or CHEM 175.

**PHSX 741. Nuclear Physics I. 3 Credits.**
Experimental methods in nuclear physics, elementary concepts and simple considerations about nuclear forces, alpha and beta decay, gamma radiation, nuclear structure, and reaction systematics. Prerequisite: PHSX 511.

**PHSX 761. Elementary Particles I. 3 Credits.**
Particle accelerators and detectors; quarks and leptons; invariance principles and conservation laws; strong, electromagnetic, and weak interactions of elementary particles; unification of electroweak and other interactions. Prerequisite: Corequisite: PHSX 711.

**PHSX 781. Solid State Physics I. 3 Credits.**
Classification of solids, structure and symmetry of crystals; lattice vibrations and thermal properties of solids; electric and magnetic properties; electron theory of metals and semiconductors; electronic and atomic transport processes; theory of ionic crystals. Prerequisite: PHSX 511 (or CHEM 648) and PHSX 671 (or CHEM 646).

**PHSX 791. Seminar in Astrophysics, Cosmology, and Space Physics. 1-3 Credits.**
Seminar designed to cover current topics in the physics of the Universe beyond the solar system. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course. Open to undergraduates with twelve hours of physics/astronomy courses numbered 500 or above, or consent of instructor.

**PHSX 792. Topics in Advanced Astrophysics. 3 Credits.**
This course will address one or more of the following advanced topics in astrophysics: high energy astrophysics, nuclear astrophysics, galactic and extragalactic astrophysics, space physics, cosmology, astrobiophysics, and the interstellar and intergalactic media (ISM/IGM). This course may be repeated for credit if topical content differs. (Same as ASTR 792.) Prerequisite: ASTR 692 or permission of instructor.

**PHSX 793. Physical Cosmology. 3 Credits.**
Discussion of how fundamental laws of physics govern the evolution of the universe as a whole along with its structure. Survey of cosmogenic clues in the observable universe, including observed structures, cosmic background radiation and evidence for dark matter. Development of the universe, including theories of initial conditions; cosmological phase transitions; generation of possible relics and dark matter; symmetry breaking; baryon asymmetry; nucleosynthesis; recombination, gravitational instability and the formation of structure; current experimental techniques. Prerequisite: PHSX 718. Recommended: PHSX 693.

**PHSX 795. Space Plasma Physics. 3 Credits.**
The physics of fully ionized gases in magnetic fields and their application to interplanetary processes, planetary radiation belts, and the sun. The motion of charged particles in magnetic fields, magnetohydrodynamic waves, the solar wind, the ionosphere, and the magnetosphere. (Same as ASTR 795.) Prerequisite: PHSX 621. Corequisite: PHSX 631.

**PHSX 800. Graduate Problems. 1-5 Credits.**
Advanced laboratory problems, special research problems, or library reading problems. Repeated enrollments are permitted.

**PHSX 801. Advanced Topics. 1-3 Credits.**
Lectures on advanced material not covered by regular courses. The topics are not limited but generally address recent experimental or theoretical developments in subjects such as superconductivity, nuclear physics, elementary particle physics, quantum field theory, gauge and unified theories, nonlinear or chaotic systems, space plasma physics, and astrophysics and cosmology. Repeated enrollments are permitted.

**PHSX 811. Quantum Mechanics II. 3 Credits.**
This advanced course in quantum mechanics covers scattering theory, time dependent perturbation theory, density-matrix formalism, entanglement, and relativistic quantum mechanics, e.g. Klein-Gordon and Dirac equations. Additional advanced topics may be covered at the discretion of the instructor. Prerequisite: PHSX 711.

**PHSX 815. Computational Methods in Physical Sciences. 3 Credits.**
Advanced computer applications in physical science. General discussion and illustration of problem organization and solution by numerical and other methods with examples from physics, astronomy, and other physical sciences. Students will design, write, validate, and document computer programs to solve physical problems. (Same as ASTR 815 and CHEM 914.) Prerequisite: Six hours of computer science courses numbered 300 or above, and six hours of physics and/or astronomy courses numbered 300 or above.

PHSX 821. Classical Mechanics. 3 Credits.
Vector and tensor notation; review of Newtonian mechanics; Lagrangian mechanics; linear vector spaces and matrix theory with applications to the theory of small oscillations; rigid bodies; Hamiltonian formalism. Special relativity. Prerequisite: Twelve hours of junior-senior courses in physics.

PHSX 831. Electrodynamics I. 3 Credits.
Electrostatics and magnetostatics; Maxwell's equations; plane waves; waveguides. Prerequisite: PHSX 718 and PHSX 821.

PHSX 841. Nuclear Physics II. 3 Credits.
Nuclear forces and the two-body problem; nuclear models; phenomenological treatment of nuclear reactions and decay processes. Prerequisite: PHSX 741 and PHSX 811.

PHSX 855. Advanced Optics. 3 Credits.
Advanced topics in optics that may include: Laser principles and techniques, light propagation in dielectrics, absorption and luminescence, interaction of light with free electrons and phonons, nonlinear optics, photonic devices, and optical spectroscopy.

PHSX 861. Elementary Particles II. 3 Credits.
Theoretical analysis of the standard model of strong and electroweak interactions. Applications to decay and scattering processes with comparison to experiments. Selected topics in non-perturbative physics. Examples of tests to probe beyond the standard model. Prerequisite: PHSX 761. Corequisite: PHSX 911.

PHSX 871. Statistical Physics I. 3 Credits.
Review of and advanced topics in thermodynamics; the Maxwell relations; the third law; phase transitions. Kinetic theory: the Boltzmann equation; transport phenomena. Statistical mechanics: ideal Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein gases; ensemble theory; derivation of the laws of thermodynamics. Prerequisite: PHSX 711 and PHSX 821. PHSX 671 is recommended.

PHSX 881. Solid State Physics II. 3 Credits.
More advanced topics in solid state physics that may include: diamagnetism, paramagnetism, ferromagnetism, and antiferromagnetism; electron and nuclear spin magnetic resonance; dielectric properties and ferroelectricity; photoconductivity and luminescence. Prerequisite: PHSX 631 and PHSX 711 (or CHEM 750).

PHSX 895. Plasma Physics. 3 Credits.
Magnetohydrodynamics, including discussion of shocks, waves, and stability theory; statistical mechanical foundations; kinetic theory; microinstability; non-linear phenomena. Prerequisite: PHSX 795.

PHSX 899. Master's Research/Thesis. 1-10 Credits.
Research work (either experimental or theoretical) in physics for students working toward the master's degree. Repeated enrollments are permitted. Graded on a satisfactory progress/limited progress/no progress basis.

PHSX 911. Quantum Mechanics III. 3 Credits.

PHSX 912. Quantum Field Theory. 3 Credits.

PHSX 915. Relativity. 3 Credits.
Reviews of special relativity, manifolds, tensors, and geometry. General coordinate covariance and general relativity. Applications to classical theory of gravitation: weak field tests, isotropic, homogeneous cosmology, Schwarzschild solution. Selected advanced topics. Prerequisite: A total of 10 hours of junior/senior work in physics and mathematics, including at least concurrent enrollment in MATH 646.

PHSX 917. Seminar in Theoretical Physics. 1-3 Credits.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary.

PHSX 931. Electrodynamics II. 3 Credits.
Inhomogeneous Maxwell's equations and multipole radiation fields; special theory of relativity; radiation from accelerated charges; scattering and dispersion. Prerequisite: PHSX 831.

PHSX 947. Seminar in Nuclear Physics. 1-3 Credits.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary.

PHSX 957. Seminar in Physics Education Research. 1-3 Credits.
Seminar designed to cover current topics in physics education research. Content will vary. Graduate students engaged in or preparing for research may repeat enrollments in this course.

PHSX 967. Seminar in Particle Physics. 1-3 Credits.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary.

PHSX 971. Advanced Statistical Mechanics. 3 Credits.
Advanced equilibrium statistical mechanics and introduction to nonequilibrium statistical mechanics. Topics include: the theory of liquids, critical phenomena, linear response theory and time correlation functions, Langevin dynamics, and molecular hydrodynamics. (Same as CHEM 950.) Prerequisite: PHSX 871 or CHEM 917.

PHSX 987. Seminar in Solid State Physics. 1-3 Credits.
Graduate students engaged in or preparing for research may repeat enrollments in this course. The content will vary.

PHSX 999. Ph.D. Dissertation Research. 1-12 Credits.
Research work (either experimental or theoretical) in physics for students working toward the Ph.D. degree. Repeated enrollments are permitted. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts in Astronomy

Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department's research and education missions range from the size of the smallest atom to the size of the universe. Our goal is to understand the physical universe. The questions addressed by our department's research and education missions range from the size of the smallest atom to the size of the universe.
Undergraduate programs in astronomy

Astronomy degrees are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

Courses for Nonmajors

ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, biology, or geology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

Undergraduate Admission

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Advising

Students considering a major in astronomy should confer early with a departmental representative about the selection of courses. The B.A. degree is appropriate for students who want a general education in astronomy as part of a broadly structured liberal education. The B.S. is a more specialized program with a substantial emphasis on physics content as well as astronomy. It provides preparation for a professional career or graduate work in astronomy, astrophysics, or related fields. A total of 120 credit hours is required for graduation.

First- and Second-Year Preparation

All major programs in physics and astronomy share requirements in basic physics and mathematics including PHSX 150, a seminar course for majors. Completion of MATH 125 and MATH 126 in the first year allows students to start calculus-based physics foundation courses (PHSX 211 and PHSX 216 or PHSX 213, followed by PHSX 212 and PHSX 236 or PHSX 214) by the second semester. Majors are encouraged to take PHSX 213 and PHSX 214, the honors versions of PHSX 211 and PHSX 212. Students should take these courses and ASTR 391 in their first two years. B.S. astronomy majors normally complete additional course work in mathematics (M [http://catalog.ku.edu/search/?P=MATH +127]ATH 127, MATH 290, and MATH 320), as well as PHSX 313 and PHSX 316, in the second year.

Requirements for the B.A. Major in Astronomy

All students pursuing the Bachelor of Arts in Astronomy must complete the KU Core requirements and the College BA specific requirements, listed in the KU Core and College sections of the catalog.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td>Additional general science requirements</td>
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<tr>
<td>Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.</td>
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<tr>
<td>MATH 125</td>
<td>Calculus I</td>
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<tr>
<td>or MATH 145</td>
<td>Calculus I, Honors</td>
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<td></td>
<td>Calculus II</td>
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<tr>
<td>or MATH 146</td>
<td>Calculus II, Honors</td>
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<tr>
<td></td>
<td>Seminar in Physics, Astronomy and Engineering Physics</td>
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<tr>
<td>PHSX 150</td>
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<tr>
<td></td>
<td>General Physics I</td>
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<td></td>
<td>&amp; PHSX 216 and General Physics I Laboratory</td>
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<td>PHSX 213</td>
<td>General Physics I Honors</td>
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<td></td>
<td>General Physics II</td>
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<td></td>
<td>&amp; PHSX 236 and General Physics II Laboratory</td>
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<td>PHSX 214</td>
<td>General Physics II Honors</td>
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<td></td>
<td>Foundations of Chemistry I</td>
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<td></td>
<td>or CHEM 150 Chemistry for Engineers</td>
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<td>or CHEM 170 Chemistry for the Chemical Sciences I</td>
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<td></td>
<td>or CHEM 190 Foundations of Chemistry I, Honors</td>
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<td></td>
<td>&amp; CHEM 191 and Foundations of Chemistry I Laboratory, Honors</td>
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<td></td>
<td>Astronomy Major Requirements</td>
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<tr>
<td>Majors must complete each of the following courses:</td>
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<tr>
<td>ASTR 391</td>
<td>Physical Astronomy, Honors</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Arts in Astronomy

**ASTR 591** Stellar Astronomy 3
**ASTR 596** Observational Astrophysics 3
**ASTR 592** Galactic and Extragalactic Astronomy 3

Additional astronomy, astrophysics, or physics courses required for major

In addition to the above specifically required courses, Astronomy BA candidates must complete at least 4 additional credits in physics or astronomy at the 300+ level. Students may enroll in ASTR 390 for undergraduate programs for 1 or more credit hours and in ASTR 503 (ASTR 501 honors) for research credit. ASTR 394 is highly recommended. Other recommended courses include ASTR 691 and 692, PHSX 594, GEOL 572, PHSX 313/316 and other PHSX courses 500 and above; most of these course have pre-requisites that may require additional preparation in mathematics and/or physics.

**Major Hours & Major GPA**

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 25.5 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 16 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of 16 hours from junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Major Junior/Senior Graduation GPA (https://degreeprogress.ku.edu/node/2/).

Below is a sample 4-year plan for students pursuing the BA in Astronomy. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have completed MATH 104, or equivalent prior to the freshman year, fall semester.

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)(^1)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 130 or 190 (Goal 3 Natural Science, BA Lab, Major Pre-requisite)(^2)</td>
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<td>MATH 126 (Major Pre-requisite)</td>
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<tr>
<td>MATH 125 (Major Pre-requisite)</td>
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<td>PHSX 211 &amp; MATH 216 (Major Requirement), or</td>
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</tr>
<tr>
<td>PHSX 150 (Major Requirement)</td>
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<td>PHSX 213</td>
<td>5</td>
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<td></td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours(^5)</td>
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**Sophomore**

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>ASTR 391 (Major Requirement SPRING ONLY)</td>
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</tbody>
</table>

PHSX 212 & PHSX 236 (Major Requirement), or PHSX 214 2nd Semester Language (BA Second Language) 5

1st Semester Language (BA Second Language) 5 Second Area of Study/ Elective/Degree/Junior-Senior Hours\(^5\) 3

Second Area of Study/ Elective/Degree/Junior-Senior Hours\(^5\) 3

**Junior**

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<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ASTR 591 (Major Requirement)(^4)</td>
<td>3</td>
<td>ASTR 592 (Major Requirement)(^4)</td>
<td>3</td>
</tr>
<tr>
<td>ASTR Elective (Major Requirement)(^3,4)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)(^6)</td>
<td>3</td>
</tr>
</tbody>
</table>

3rd Semester Language (BA Second Language) 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours\(^5\) 3

Second Area of Study/ Elective/Degree/Junior-Senior Hours\(^5\) 3

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 596 (Major Requirement)(^4)</td>
<td>3</td>
<td>PHSX 503 (Major Requirement, Goal 6 Integration &amp; Creativity)(^4)</td>
<td>3</td>
</tr>
<tr>
<td>ASTR Elective (Major Requirement)(^3,4)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 120.5**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. CHEM 130 requires MATH 115 eligibility for enrollment.
Majors are required to complete a minimum of 5 hours of 300+ level electives in Physics or Astronomy.

Course Timing is interchangeable between Junior and Senior years and is dependent on course offering/availability. ASTR 591 is taught in fall semesters of odd-numbered years and ASTR 592 is taught in spring semesters of even-numbered years.

Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Departmental Honors in Physics and Astronomy**

Qualified students earning either a B.A. or a B.S. degree in the College of Liberal Arts and Sciences with a major in astronomy or physics may graduate with Honors in Physics & Astronomy by fulfilling the following requirements: (1) By the end of the candidate’s final semester, achieve a GPA of 3.5 in the major, in all courses taken in residence and elsewhere; and (2) Complete at least 24 semester hours of astronomy and physics courses numbered 500 or above, including undergraduate research represented by two hours of credit in ASTR 503, PHSX 501 or PHSX 503.

A grade of B or better must be earned in one of the following: ASTR 503, PHSX 501 or PHSX 503. All of our department’s honors requirements include student research, for which results shall be presented in either: (1) a written research summary, read by 3 faculty members in physics and astronomy or related fields or authorship on a peer-reviewed manuscript; or (2) a research-based oral presentation at an appropriate venue (e.g., Undergraduate Research symposium, a presentation in an advanced department seminar class, a discipline specific meeting); or (3) presentation of a poster at an appropriate venue. Students planning to graduate with honors in physics and astronomy must file a Declaration of Intent Form with the Departmental Honors Coordinator, preferably during their junior year but no later than enrollment for the final undergraduate semester.

**Bachelor of Science in Astronomy**

Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department’s research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billionths of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate studies in STEM, many find employment in the private sector in diverse situations ranging from financial analysts to physicians. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

**Undergraduate programs in astronomy**

Astronomy degrees are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

**Courses for Nonmajors**

ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, biology, or geology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Advising**

Students considering a major in astronomy should confer early with a departmental representative about the selection of courses. The B.A. degree is appropriate for students who want a general education in astronomy as part of a broadly structured liberal education. The B.S. is a more specialized program with a substantial emphasis on physics content.
as well as astronomy. It provides preparation for a professional career or graduate work in astronomy, astrophysics, or related fields. A total of 120 credit hours is required for graduation.

**First- and Second-Year Preparation**

All major programs in physics and astronomy share requirements in basic physics and mathematics including PHSX 150, a seminar course for majors. Completion of MATH 125 and MATH 126 in the first year allows students to start calculus-based physics foundation courses (PHSX 211 and PHSX 216 or PHSX 213, followed by PHSX 212 and PHSX 236 or PHSX 214) by the second semester. Majors are encouraged to take PHSX 213 and PHSX 214, the honors versions of PHSX 211/PHSX 216 and PHSX 212/PHSX 236. Students should take these courses and ASTR 391 in their first two years. B.S. astronomy majors normally complete additional course work in mathematics (MATH 127, MATH 290, and MATH 320), as well as PHSX 313 and PHSX 316, in the second year.

**Requirements for the B.S. Degree in Astronomy**

All students pursuing the Bachelor of Science in Astronomy must complete the KU Core requirements in addition to the degree and major requirements. For details regarding the KU Core requirements, please see the KU Core section of the catalog.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>General science requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major. Computing and Programming. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E ECS 138 Introduction to Computing: ______ 3-4</td>
<td></td>
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<tr>
<td></td>
<td>or EECS 168 Programming I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or EECS 169 Programming I: Honors</td>
<td></td>
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<tr>
<td></td>
<td>Calculus I. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 125 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or MATH 145 Calculus I: Honors</td>
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<tr>
<td></td>
<td>Calculus II. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 126 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or MATH 146 Calculus II: Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seminar in Physics, Astronomy, &amp; Engineering Physics. Satisfied by the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 150 Seminar in Physics, Astronomy and Engineering Physics</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>General Physics I. Satisfied by one of the following:</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>PHSX 211 General Physics I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 216 General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 213 General Physics I: Honors</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>General Physics II. Satisfied by one of the following:</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHSX 212 General Physics II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 236 General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 214 General Physics II: Honors</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Foundations of Chemistry I. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 130 General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>or CHEM 150 Chemistry for Engineers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or CHEM 170 Chemistry for the Chemical Sciences I</td>
<td></td>
</tr>
</tbody>
</table>

**Advanced Mathematics Core Knowledge and Skills**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Vector Calculus. Satisfied by the following:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 127 Calculus III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>or MATH 147 Calculus III: Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary Linear Algebra. Satisfied by the following:</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MATH 290 Elementary Linear Algebra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or MATH 291 Elementary Linear Algebra: Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary Differential Equations. Satisfied by the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 320 Elementary Differential Equations: Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or MATH 220 Applied Differential Equations: Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or MATH 221 Applied Differential Equations: Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Math Elective. Satisfied by one of the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHSX 518 Mathematical Physics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 718 Mathematical Methods in Physical Sciences</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 526 Applied Mathematical Statistics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 530 Mathematical Models</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 558 Introductory Modern Algebra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 581 Numerical Methods</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 590 Linear Algebra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 628 Mathematical Theory of Statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 646 Complex Variable and Applications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 647 Applied Partial Differential Equations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 648 Calculus of Variations and Integral Equations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 660 Geometry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 661 Geometry II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>any 700-level MATH lecture course.</td>
<td></td>
</tr>
</tbody>
</table>

**Astronomy Requirements for Major**

Majors must complete the following seven courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>ASTR 391 Physical Astronomy, Honors</td>
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<tr>
<td></td>
<td>ASTR 591 Stellar Astronomy</td>
<td>3</td>
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<tr>
<td></td>
<td>ASTR 592 Galactic and Extragalactic Astronomy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ASTR 596 Observational Astrophysics</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ASTR 691 Astrophysics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ASTR 692 Astrophysics II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ASTR 503 Undergraduate Research</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Physics Core Knowledge and Skills**

Majors must complete courses as indicated in the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Physics III. Satisfied by the following:</strong></td>
<td></td>
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<tr>
<td></td>
<td>PHSX 313 General Physics III</td>
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<tr>
<td></td>
<td>Intermediate Physics Lab. Satisfied by the following:</td>
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</tr>
<tr>
<td></td>
<td>PHSX 316 Intermediate Physics Laboratory I</td>
<td>1</td>
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<tr>
<td></td>
<td>Introductory Quantum Mechanics. Satisfied by the following:</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHSX 511 Introductory Quantum Mechanics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical Measurements or Electronic Circuit Measurement and Design. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 516 Physical Measurements</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHSX 536 Electronic Circuit Measurement and Design</td>
<td>4</td>
</tr>
<tr>
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<td>Mechanics I. Satisfied by the following:</td>
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<tr>
<td></td>
<td>PHSX 521 Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electricity and Magnetism. Satisfied by the following:</td>
<td></td>
</tr>
</tbody>
</table>
**PHSX 531**  
Electricity and Magnetism  
3

**PHSX 671**  
Thermal Physics  
3

**Thermal Physics.** Satisfied by the following:

**PHSX 671**  
Thermal Physics  
3

**Physics Elective.** Satisfied by any PHSX lecture or laboratory course numbered 500 or higher (PHSX 693 recommended) (with the exception of PHSX 594), including:

- **ASTR 792**  
Topics in Advanced Astrophysics  
- **ASTR 795**  
Space Plasma Physics  
- **PHSX 693**  
Gravitation and Cosmology (recommended)

### Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**  
Satisfied by 30 hours of major courses.

**Major Hours in Residence**  
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**  
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**  
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BS in Astronomy. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have completed MATH 104, or its equivalent, prior to the freshman year, fall semester.

### Freshman

**Fall**  
4 ASTR 391 (Major Requirement SPRING ONLY)  
3

MATH 125 (Goal 1.2 Quantitative Literacy, Major Requirement)  
4

PHSX 150 (Major Requirement)  
0.5

CHEM 130 or 170 (Goal 3 Natural Science, Major Requirement)  
5

Goal 2.1 Written Communication (1 of 2)  
3

Goal 3 Social Science  
3

**Hours**  
15.5

### Sophomore

**Fall**  
3 ASTR 592 (Major Requirement)  
3

ASTR 591 (Major Requirement)  
3

**Hours**  
15-16

### Junior

**Fall**  
4 ASTR 692 (Major Requirement)  
3

ASTR 596 (Goal 6 Integration & Creativity, Major Requirement)  
3

ASTR 592 (Major Requirement)  
3

PHSX 521 (Major Requirement)  
3

PHSX Math Elective 300+ (Major Requirement)  
3

Goal 2.2 Communication  
3

**Hours**  
16

### Senior

**Fall**  
3 ASTR 692 (Major Requirement)  
3

PHSX 313 (Goal 3 Natural Science, Major Requirement)  
3

PHSX 127 (Pre-requisite for Major Requirement)  
4

PHSX 290 (Major Requirement)  
2

Goal 2.1 Written Communication (2 of 2)  
3

PHSX 611 (Major Requirement)  
4

PHSX Math Elective 300+ (Major Requirement)  
3

Goal 2.2 Communication  
3

**Hours**  
16

### Total Hours 120.5-121.5

1. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.
2. Offered odd-numbered years.
3. Offered even-numbered years.
4. PHSX 150, PHSX 521, ASTR 591, ASTR 596, ASTR 691, PHSX 531, and PHSX 671 are Fall only courses. PHSX 611, ASTR 592, and ASTR 692 are Spring only courses.
5. Majors are encouraged to take PHSX 213.
6. Majors are encouraged to take PHSX 214.
Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

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Bachelor of Arts in Physics

Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department’s research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billionths of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate studies in STEM, many find employment in the private sector in diverse careers ranging from financial analysts to physicians. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

Undergraduate programs in physics and astronomy

We welcome all students curious about the universe around them. This includes not only students planning on graduate study in STEM, but also students from other disciplines where a background in foundational scientific knowledge can be useful – examples include teaching and medicine – and anyone seeking to include astronomy and physics as part of their general education. The department offers BA degrees in astronomy and physics and BS degrees in astronomy, physics, and engineering physics. Degrees in astronomy and physics are granted through the College of Liberal Arts and Sciences whereas engineering physics degrees are granted through the School of Engineering. The primary degree offered is a BS in Physics. In addition to this standard BS in Physics, there are also interdisciplinary and pre-medicine versions (specializations) of the BS in Physics degree. The interdisciplinary track allows students to take elective courses in other STEM disciplines and the pre-medicine emphasis is for students interested in health professions. We also offer minors in astronomy and physics and a certificate in astrophysics of origins. We involve our undergraduate majors in cutting-edge research practically from the day they join the department; research is a requirement of both the BS Astronomy and BS Physics degrees. The breadth of our research program affords our students exposure to a number of different fields and we are justifiably proud of our undergraduate researchers who routinely publish papers, attend conferences, and/or conduct research abroad (in locales such as Antarctica, Chile, and CERN).

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

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Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.
Requirements for the B.A. Major in Physics

All students pursuing the Bachelor of Arts in Physics must complete the KU Core requirements and the College BA specific requirements, listed in the KU Core and College sections of the catalog.

Bachelor of Arts in Physics Major Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Foundational Physics and Mathematics</strong></td>
<td></td>
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<tr>
<td></td>
<td>Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. All honors equivalents are also acceptable to fulfill PHSX major requirements.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seminar in Physics, Astronomy, &amp; Engineering Physics. Satisfied by:</td>
<td>0.5</td>
</tr>
<tr>
<td>PHSX 150</td>
<td>Seminar in Physics, Astronomy and Engineering Physics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Physics I. Satisfied by one of the following:</td>
<td>0</td>
</tr>
<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 213</td>
<td>General Physics I Honors</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>General Physics II. Satisfied by one of the following:</td>
<td>0</td>
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<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
<td>4</td>
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<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td>PHSX 214</td>
<td>General Physics II Honors</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Calculus I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 145</td>
<td>Calculus I, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calculus II. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 146</td>
<td>Calculus II, Honors</td>
<td></td>
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<tr>
<td></td>
<td><strong>Advanced Math Requirement</strong></td>
<td>0</td>
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<tr>
<td>MATH 127</td>
<td>Calculus III</td>
<td>4</td>
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<tr>
<td>or MATH 147</td>
<td>Calculus III, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary Linear Algebra. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 291</td>
<td>Elementary Linear Algebra, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Differential Equations. Satisfied by one of the following:</strong></td>
<td>3</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td></td>
</tr>
<tr>
<td>or MATH 222</td>
<td>Applied Differential Equations, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 320</td>
<td>Elementary Differential Equations (recommended)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Advance Physics Major Requirements</strong></td>
<td></td>
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<tr>
<td></td>
<td>Majors must complete a course in each of the following areas:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Physics III. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PHSX 313</td>
<td>General Physics III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Intermediate Physics Lab. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PHSX 316</td>
<td>Intermediate Physics Laboratory I</td>
<td>1</td>
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<td></td>
<td>Introductory Quantum Mechanics. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PHSX 511</td>
<td>Introductory Quantum Mechanics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mechanics I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PHSX 521</td>
<td>Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electricity and Magnetism. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PHSX 531</td>
<td>Electricity and Magnetism</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced Physics Lab. Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td>PHSX 536</td>
<td>Electronic Circuit Measurement and Design</td>
<td>4</td>
</tr>
<tr>
<td>or PHSX 516</td>
<td>Physical Measurements</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Physics Required Elective</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by any lecture or laboratory course numbered 500 or higher.</td>
<td>3</td>
</tr>
</tbody>
</table>

Physics Major Hours & Major GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Concentration in Computational Physics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Physics Prerequisite or Co-requisite Knowledge</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. These hours do not contribute to the minimum number of hours required for the major.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Programming I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>or EECS 169</td>
<td>Programming I: Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Programming II. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>EECS 268</td>
<td>Programming II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Elementary Linear Algebra. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>MATH 290</td>
<td>Elementary Linear Algebra</td>
<td>2</td>
</tr>
<tr>
<td>or MATH 291</td>
<td>Elementary Linear Algebra, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary or Applied Differential Equations. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>MATH 220</td>
<td>Applied Differential Equations</td>
<td></td>
</tr>
<tr>
<td>or MATH 222</td>
<td>Applied Differential Equations, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 320</td>
<td>Elementary Differential Equations (recommended)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foundations of Chemistry I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 150</td>
<td>Chemistry for Engineers</td>
<td></td>
</tr>
<tr>
<td>or CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td></td>
</tr>
<tr>
<td>or CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 191</td>
<td>and Foundations of Chemistry I Laboratory, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Principles of Biology. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Symbolic Logic. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PHIL 310</td>
<td>Introduction to Symbolic Logic</td>
<td>3</td>
</tr>
</tbody>
</table>
This degree plan assumes students will have the equivalent of KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/) prior to freshman year, fall semester.

**Physics Core Knowledge and Skills**

Majors must complete a course in each of the following areas:

- Seminar in Physics, Astronomy, and Engineering Physics. Satisfied by:
  - PHSX 150 Seminar in Physics, Astronomy and Engineering Physics
- General Physics I. Satisfied by one of the following:
  - PHSX 211 General Physics I
  - & PHSX 216 General Physics I Laboratory
- General Physics II. Satisfied by one of the following:
  - PHSX 212 General Physics II
  - & PHSX 236 General Physics II Laboratory
  - PHSX 214 General Physics II Honors
- General Physics III and Intermediate Physics Laboratory. Satisfied by:
  - PHSX 313 General Physics III
  - & PHSX 316 and Intermediate Physics Laboratory I

**Mechanics I. Satisfied by:**
- PHSX 521 Mechanics I

**Electricity and Magnetism. Satisfied by:**
- PHSX 531 Electricity and Magnetism

**Advanced Physics Lab. Satisfied by one of the following:**
- PHSX 536 Electronic Circuit Measurement and Design
  - or PHSX 516 Physical Measurements

**Special Problems. Satisfied by:**
- PHSX 500 Special Problems

**Numerical and Computational Methods in Physics. Satisfied by:**
- PHSX 615 Numerical and Computational Methods in Physics

Below is a sample 4-year plan for students pursuing the BA in Physics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to freshman year, fall semester.

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Literacy, Major Pre-requisite)</td>
<td>4</td>
<td>MATH 126 (BA Quantitative Reasoning (QR), Major Pre-requisite)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 130 (Goal 3 Natural Science, BA Laboratory/Field Experience (LFE))</td>
<td>5</td>
<td>PHSX 211 &amp; PHSX 216 (Goal 1.1 Critical Thinking, Major Requirement), or</td>
<td>5</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>PHSX 213</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 521</td>
<td>3</td>
<td>PHSX 536 or Elective/KU Core</td>
<td>4</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>PHSX 611</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>4th Semester Language (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>2nd Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 531 (Major Requirement)</td>
<td>3</td>
<td>PHSX Lecture or Lab Elective 500+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 616 or 536 (or Elective/KU Core)</td>
<td>4</td>
<td>Goal 6 Integration &amp; Creativity (PHSX 503 recommended)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>1</td>
</tr>
</tbody>
</table>

### Total Hours 120.5

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2 Prerequisite for MATH 125: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics; or a qualifying score on the mathematics placement test.

3 MATH 320 or MATH 220 (or MATH 221) is a pre-requisite for PHSX 313.

4 Either PHSX 536 or PHSX 616 is required for the major, not both. A 500+ level Physics laboratory or lecture elective is required for the major.

5 It is recommended that students fulfill Goal 6 with a course from within their major. PHSX 503: Undergraduate Research is not required by the major, but is an encouraged course to fulfill Goal 6 and to fulfill research experience.

6 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

7 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note: All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/ Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Departmental Honors in Physics and Astronomy

Qualified students earning either a B.A. or a B.S. degree in the College of Liberal Arts and Sciences with a major in astronomy or physics may graduate with Honors in Physics & Astronomy by fulfilling the following requirements: (1) By the end of the candidate’s final semester, achieve a minimum GPA of 3.5 in the major, in all courses taken in residence and elsewhere; and (2) Complete at least 24 semester hours of astronomy and physics courses numbered 500 or above, including undergraduate research represented by two hours of credit in ASTR 503, PHSX 501 or PHSX 503. A grade of B or better must be earned in one of the following: ASTR 503, PHSX 501 or PHSX 503. All of our department’s honors requirements include student research, for which results shall be presented in either: (1) a written research summary, read by 3 faculty members in physics and astronomy or related fields or authorship on a peer-reviewed manuscript; or (2) a research-based oral presentation at an appropriate venue (e.g., Undergraduate Research symposium, a presentation in an advanced department seminar class, a discipline specific meeting); or (3) presentation of a poster at an appropriate venue. Students planning to graduate with honors must file a Declaration of Intent Form with the Departmental Honors Coordinator, preferably during their junior year but no later than enrollment for the final undergraduate semester.

### BA in Physics with concentration in Computational Physics

Below is a sample 4-year plan for students pursuing the BA in Physics with a concentration in Computational Physics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to freshman year, fall semester.

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Literacy, Major Pre-requisite)</td>
<td>4</td>
<td>MATH 126 (BA Quantitative Reasoning (QR), Major Pre-requisite)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 130 (Goal 3 Natural Science, BA Laboratory/Field Experience (LFE), Major Pre-requisite)</td>
<td>5</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
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</tr>
<tr>
<td>PHSX 150</td>
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<td>17.5</td>
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#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 320 or 220 (Major Pre-requisite)</td>
<td>3</td>
<td>ECON 142 (Goal 3 Social Science, Major Pre-requisite)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 213 or 211 and 216 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>5</td>
<td>PHIL 310 (Goal 3 Arts and Humanities, Major Pre-requisite)</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>MATH 290 or 291 (Major Pre-requisite)</td>
<td>2</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>PHSX 214 or 212 and 236 (Major Requirement)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14</td>
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</table>

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 313 &amp; PHSX 316 (Major Requirement)</td>
<td>4</td>
<td>EECS 268 (Major Pre-requisite)</td>
<td>4</td>
</tr>
<tr>
<td>EECS 168 (Major Pre-requisite)</td>
<td>4</td>
<td>PHSX 521 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>
# Bachelor of Science in Physics

**Why study physics and astronomy?**

Our goal is to understand the physical universe. The questions addressed by our department’s research and education missions range from the size of the atom to the size of the universe, from the potential energy in a solar cell to the gravity of a black hole. Our research covers a broad range of topics, from fundamental questions in cosmology to applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billions of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate studies in STEM, many find employment in the private sector in diverse careers ranging from financial analysts to physicians. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

## Undergraduate program in physics and astronomy

We welcome all students curious about the universe around them. This includes not only students planning on graduate study in STEM, but also students from other disciplines where a background in foundational physical science and critical thinking can be useful – examples include teaching and medicine – and anyone seeking to include astronomy and physics as part of their general education. The department offers BA degrees in astronomy and physics and BS degrees in astronomy, physics, and engineering physics. Degrees in astronomy and physics are granted through the College of Liberal Arts and Sciences whereas engineering physics degrees are granted through the School of Engineering. The primary degree offered is a BS in Physics. In addition to this standard BS in Physics, there are also interdisciplinary and pre-medicine versions (specializations) of the BS in Physics degree. The interdisciplinary track allows students to take elective courses in other STEM disciplines and the pre-medicine emphasis is for students interested in health professions. We also offer minors in astronomy and physics and a certificate in astrophysics of origins. We involve our undergraduate majors in cutting-edge research practically from the day they join the department; research is a requirement of both the BS Astronomy and BS Physics degrees. The breadth of our research program affords our students exposure to a number of different fields and we are justifiably proud of our undergraduate researchers who routinely publish papers, attend conferences, and/or conduct research abroad (in locales such as Antarctica, Chile, and CERN).

## Undergraduate Admission

### Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

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<table>
<thead>
<tr>
<th>Second Area of Study/ Elective/Degree/Junior-Senior Hours</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Senior</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
</tr>
<tr>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td>PHSX 531 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 536 or 616</td>
<td>4</td>
</tr>
<tr>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours 120.5</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Prerequisite for MATH 125: MATH 104; or MATH 103; or three years of college preparatory mathematics including trigonometry and a score of 28 or higher on ACT mathematics; or a qualifying score on the mathematics placement test.

3. MATH 320 or MATH 220 (or MATH 221) is a pre-requisite for PHSX 313.

4. Either PHSX 536 or PHSX 616 is required for the major, not both.

5. Hour requirements (incl. 45 hr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Requirements for the B.S. Degree in Physics**

Physics Bachelor of Science (B.S.) General Education Requirements

All students pursuing the Bachelor of Science in Physics must complete the KU Core requirements in addition to the degree and major requirements. For details regarding the KU Core requirements, please see the KU Core section of the catalog.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Foundational Physics and Mathematics</strong></td>
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<tr>
<td></td>
<td>Majors must complete courses as specified in each of the following areas. Majors are advised to take honors courses when eligible. All honors equivalents are also acceptable to fulfill PHSX major requirements. These hours do not contribute to the minimum number of hours required for the major.</td>
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</tr>
<tr>
<td></td>
<td>Calculus I. Satisfied by:</td>
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<tr>
<td>MATH 125</td>
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<tr>
<td>or MATH 145</td>
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<tr>
<td>MATH 126</td>
<td>Calculus II</td>
<td>4</td>
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<tr>
<td>or MATH 146</td>
<td>Calculus II, Honors</td>
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<tr>
<td>Seminar in Physics, Astronomy, &amp; Engineering Physics. Satisfied by:</td>
<td></td>
<td></td>
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<tr>
<td>PHSX 150</td>
<td>Seminar in Physics, Astronomy and Engineering Physics</td>
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<tr>
<td>General Physics I. Satisfied by:</td>
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<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
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<tr>
<td>&amp; PHSX 216</td>
<td>and General Physics I Laboratory</td>
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<tr>
<td>or PHSX 211:General Physics I Honors</td>
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<td>General Physics II. Satisfied by:</td>
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<tr>
<td>PHSX 212</td>
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<tr>
<td>&amp; PHSX 236</td>
<td>and General Physics II Laboratory</td>
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<tr>
<td>or PHSX 212:General Physics II Honors</td>
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<tr>
<td><strong>General Science Requirements</strong></td>
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<tr>
<td>Foundations of Chemistry I. Satisfied by:</td>
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<td></td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
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<tr>
<td>or CHEM 150</td>
<td>Chemistry for Engineers</td>
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<tr>
<td>or CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
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<tr>
<td>or CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
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<tr>
<td>&amp; CHEM 191</td>
<td>and Foundations of Chemistry I Laboratory, Honors</td>
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<tr>
<td><strong>Advanced Mathematics</strong></td>
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<tr>
<td>MATH 127</td>
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<td>Course Code</td>
<td>Course Name</td>
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<tr>
<td>MATH 628</td>
<td>Mathematical Theory of Statistics</td>
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<tr>
<td>MATH 646</td>
<td>Complex Variable and Applications</td>
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<tr>
<td>MATH 647</td>
<td>Applied Partial Differential Equations</td>
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<tr>
<td>MATH 648</td>
<td>Calculus of Variations and Integral Equations</td>
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<tr>
<td>MATH 660</td>
<td>Geometry I</td>
<td></td>
</tr>
<tr>
<td>MATH 661</td>
<td>Geometry II</td>
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</tr>
<tr>
<td></td>
<td>any 700-level MATH lecture course</td>
<td></td>
</tr>
</tbody>
</table>

**BS in Physics with Interdisciplinary Specialization 25-30**

Computing and Programming. Satisfied by:
- E ECS 138 Introduction to Computing: _____
- or E ECS 16 Programming I
- or E ECS 16 Programming I: Honors

Advanced Physics Labs. Satisfied by one of the following:
- PHSX 516 Physical Measurements
- PHSX 536 Electronic Circuit Measurement and Design

Advanced Physics. Satisfied by two of the following:
- PHSX 621 Mechanics II
- PHSX 631 Electromagnetic Theory
- PHSX 711 Quantum Mechanics I
- PHSX 516 Physical Measurements
- PHSX 536 Electronic Circuit Measurement and Design

Physics Elective. Satisfied by any PHSX lecture or laboratory course numbered 500 or higher and not part of the other specific requirements for the major.

Math Elective. Satisfied by one of the following:
- PHSX 518 Mathematical Physics
- PHSX 718 Mathematical Methods in Physical Sciences
- MATH 526 Applied Mathematical Statistics I
- MATH 530 Mathematical Models
- MATH 558 Introductory Modern Algebra
- MATH 581 Numerical Methods
- MATH 590 Linear Algebra
- MATH 628 Mathematical Theory of Statistics
- MATH 646 Complex Variable and Applications
- MATH 647 Applied Partial Differential Equations
- MATH 648 Calculus of Variations and Integral Equations
- MATH 660 Geometry I
- MATH 661 Geometry II

any 700-level MATH lecture course

Allied Science Fields. Satisfied by the completion of 2 advanced courses in 1 allied science field chosen from the following:

Biology. Satisfied by two of the following:
- BIOL 400 Fundamentals of Microbiology
- BIOL 412 Evolutionary Biology
- BIOL 416 Cell Structure and Function
- BIOL 595 Human Genetics
- BIOL 600 Introductory Biochemistry, Lectures
- BIOL 636 Biochemistry I
- BIOL 638 Biochemistry II
- BIOL 546 Mammalian Physiology

Chemistry. Satisfied by two of the following:
- CHEM 598 Research Methods (UKanTeach students only)
- CHEM 330 Organic Chemistry I

**BS in Physics with Pre-Medicine Specialization 65**

Advanced Physics Labs. Satisfied by one of the following:
- PHSX 516 Physical Measurements
- PHSX 536 Electronic Circuit Measurement and Design

Introductory Biology. Satisfied by the following:
- BIOL 150 Principles of Molecular and Cellular Biology
- BIOL 152 Principles of Organismal Biology
- BIOL 154 Introductory Biology Lab for STEM Majors
- BIOL 240 Fundamentals of Human Anatomy
- or BIOL 546 Mammalian Physiology

Genetics. Satisfied by the following:
- BIOL 350 Principles of Genetics

Advanced Biology. Satisfied by:
- BIOL 400 Fundamentals of Microbiology
- BIOL 503 Immunology

Biochemistry. Satisfied by the following:
- BIOL 600 Introductory Biochemistry, Lectures

General Chemistry II. Satisfied by:
- CHEM 135 General Chemistry II
- or CHEM 17:Chemistry for the Chemical Sciences II
- or CHEM 19:Foundations of Chemistry II, Honors
- & CHEM 19 and Foundations of Chemistry II Laboratory, Honors

Organic Chemistry. Satisfied by:
- CHEM 330 Organic Chemistry I
- CHEM 331 Organic Chemistry I Laboratory
- CHEM 335 Organic Chemistry II
- CHEM 336 Organic Chemistry II Laboratory

Physical Chemistry. Satisfied by:
- CHEM 520 Biological Physical Chemistry with Laboratory
- or CHEM 53:Physical Chemistry I
- & CHEM 53 and Physical Chemistry Laboratory

Additional Requirements

Soc 104 Elements of Sociology Also satisfies KU Core Goal 4.1
- or SOC 105 Elements of Sociology, Honors
- PSYC 104 General Psychology Also satisfies KU Core Goal 3.5
- or PSYC 105 General Psychology, Honors
### Physics Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Departmental Honors in Physics and Astronomy

Qualified students earning either a B.A. or a B.S. degree in the College of Liberal Arts and Sciences with a major in astronomy or physics may graduate with Honors in Physics & Astronomy by fulfilling the following requirements: (1) By the end of the candidate's final semester, achieve a minimum GPA of 3.5 in the major, in all courses taken in residence and elsewhere; and (2) Complete at least 24 semester hours of astronomy and physics courses numbered 500 or above, including undergraduate research represented by two hours of credit in ASTR 503, PHSX 501 or PHSX 503. A grade of B or better must be earned in one of the following: ASTR 503, PHSX 501 or PHSX 503. All of our department's honors requirements include student research, for which results shall be presented in either: (1) a written research summary, read by 3 faculty members in physics and astronomy or related fields or authorship on a peer-reviewed manuscript; or (2) a research-based oral presentation at an appropriate venue (e.g., Undergraduate Research symposium, a presentation in an advanced department seminar class, a discipline specific meeting); or (3) presentation of a poster at an appropriate venue. Students planning to graduate with honors in physics and astronomy must file a Declaration of Intent Form with the Departmental Honors Coordinator, preferably during their junior year but no later than enrollment for the final undergraduate semester.

### BS in Physics with specialization in Interdisciplinary Physics

Below is a sample 4-year plan for students pursuing the BS in Physics with Interdisciplinary specialization. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

| SPAN 104 | Elementary Spanish I  
| or SPAN 111 | Intensive Elementary Spanish |

1. This course will not count as one of the two Advanced Physics Courses if it has already counted toward the one required Advanced Physics Lab.

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Literacy, Major Requirement)</td>
<td>4</td>
<td>MATH 126 (Major Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>PHSX 150 (Major Requirement)</td>
<td>0.5</td>
<td>PHSX 213 or 211 and 216 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 130, 150, 170, or 190 and 191 (Goal 3 Natural Science, Major Requirement)</td>
<td>5</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

| 15.5 | 15 |

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 214 or 212 and 236 (Major Requirement)</td>
<td>4</td>
<td>MATH 320 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 290 (Major Requirement)</td>
<td>2</td>
<td>Chemistry, Biology, or Geology Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 127 (Major Requirement)</td>
<td>4</td>
<td>PHSX 313 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 138 or 168 (Major Requirement)</td>
<td>3</td>
<td>PHSX 316 (Major Requirement)</td>
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<tr>
<td>Goal 3 Arts and Humanities</td>
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<td>PHSX 315</td>
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</table>

| 16 | 14 |

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>PHSX 521 (Major Requirement)</td>
<td>3</td>
<td>PHSX 536 or 621 (Major Requirement)</td>
<td>4</td>
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<tr>
<td>Math Elective (Major Requirement)</td>
<td>3</td>
<td>PHSX 611 (Major Requirement)</td>
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</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
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<td>Goal 4.2 Global Awareness</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
</tbody>
</table>

| 15 | 16 |

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PHSX 531 (Major Requirement)</td>
<td>3</td>
<td>PHSX 631, 621, or 536 (Major Requirement)</td>
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<tr>
<td>PHSX 616 or 711 (Major Requirement)</td>
<td>4</td>
<td>Goal 6 Integration &amp; Creativity (PHSX 503 or 501 recommended)</td>
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</tr>
<tr>
<td>PHSX 671 (Major Requirement)</td>
<td>3</td>
<td>Interdisciplinary Science Elective (Major Requirement)</td>
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</tbody>
</table>
BS in Physics with specialization in Pre-Medicine

The BS in Physics, Pre-Medicine specialization, provides coursework and training necessary for students interested in pursuing a career in medicine, medical physics, or biophysics. The requirements of this degree program are designed to meet the admission requirements of regional medical schools.

This degree plan assumes students will be ready to jump into pre-med curriculum.

Below is a sample 4-year plan for students pursuing the BS in Physics with Pre-Medicine specialization. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 150</td>
<td>0.5 PHSX 213 or 211 and 216 (Goal 1.1 Critical Thinking, Major Requirement)</td>
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<tr>
<td>MATH 125 (Goal 1.2 Quantitative Reasoning)</td>
<td>4 CHEM 135</td>
<td>5</td>
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<tr>
<td>CHEM 130 (Goal 3 Natural Science)</td>
<td>5 MATH 126</td>
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<tr>
<td>BIOL 150</td>
<td>3 BIOL 152</td>
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<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<td>MATH 127</td>
<td>4 CHEM 335</td>
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<td>CHEM 331</td>
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<td>PHSX 313</td>
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<tr>
<th>Junior</th>
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<td>1 BIOL 600</td>
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<td>PHSX 521</td>
<td>3 BIOL 546 or 240</td>
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<td>BIOL 240 or 546</td>
<td>3 PHSX 501 or 503</td>
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<td>BIOL 400</td>
<td>3 PHSX 611</td>
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<td>SPAN 104</td>
<td>5 Remaining KU Core/Second Area of Study/Elective/Degree/Junior-Senior Hours²</td>
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<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PHSX 503¹</td>
<td>1 PHSX 616</td>
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<tr>
<td>PHSX 531</td>
<td>3 BIOL, MATH, or PHSX Elective (above 400 level)</td>
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<td>PHSX 671</td>
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<td>BIOL 503</td>
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<td>CHEM 520</td>
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</table>

Total Hours 120.5

1. It is recommended that students fulfill Goal 6 with a course from within their major. PHSX 503 Undergraduate Research counts toward KU Core Goal 6 if taken for at least 3 credit hours.

2. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BS in Physics with specialization in Standard Physics

Below is a sample 4-year plan for students pursuing the BS in Physics. This degree provides coursework and training necessary for students interested in pursuing graduate study in physics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125 (Goal 1.2 Quantitative Reasoning, Major Requirement)</td>
<td>4 MATH 126</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHSX 150 (Major Requirement)</td>
<td>0.5 PHSX 213 or 211 and 216 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 130, 150, 170, or 190 and 191 (Goal 3 Natural Science, Major Requirement)</td>
<td>5 Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3 Goal 3 Arts and Humanities</td>
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<tr>
<td>Goal 2.2 Communication</td>
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<tr>
<td><strong>15.5</strong></td>
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#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 214 or 212 and 236 (Goal 3 Natural Science, Major Requirement)</td>
<td>4 MATH 320 (Major Requirement)</td>
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<td>4 PHSX 313 (Major Requirement)</td>
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<td>EECS 138 or 168 (Major Requirement)</td>
<td>3 PHSX 316 (Major Requirement)</td>
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<tr>
<td>Goal 3 Social Science</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td><strong>16</strong></td>
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#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 521 (Major Requirement)</td>
<td>3 PHSX 611 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PHSX 536</td>
<td>4 PHSX 616</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Math Elective (Major Requirement)</td>
<td>3 PHSX 621 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>14</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Goal 4.1 US Diversity | 3 Goal 4.2 Global Awareness | 3 |
| Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours | 3 |
| Total Hours 120.5 | 3 | 3 |

1. It is recommended that students fulfill Goal 6 with a course from within their major. PHSX 503 Undergraduate Research counts toward KU Core Goal 6 if taken for at least 3 credit hours.
2. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Minor in Astrobiology

#### Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department’s research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billions of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate...
Undergraduate programs in astronomy

Astronomy degrees are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

Courses for Nonmajors

ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, biology, or geology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

Requirements for the Minor in Astrobiology

Students selecting this minor must complete courses as specified in each of the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Minor Requirements</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Astrobiology Core</strong></td>
<td></td>
</tr>
<tr>
<td>ASTR 191</td>
<td>The Quest for Extraterrestrial Life</td>
<td>3-4</td>
</tr>
<tr>
<td>ASTR 503</td>
<td>Undergraduate Research</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Astrobiology Required Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by the following:</td>
<td></td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 105</td>
<td>History of the Earth</td>
<td></td>
</tr>
<tr>
<td>GEOL 121</td>
<td>Life Through Time: DNA to Dinosaurs</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Physical Astronomy, Honors</strong></td>
<td></td>
</tr>
<tr>
<td>ASTR 391</td>
<td>Physical Astronomy, Honors</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Principles of Molecular and Cellular Biology</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 150 Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Astronomy Core</strong></td>
<td></td>
</tr>
<tr>
<td>ASTR 293</td>
<td>The Quest for Extraterrestrial Life</td>
<td>3-4</td>
</tr>
<tr>
<td>ASTR 503</td>
<td>Undergraduate Research</td>
<td></td>
</tr>
</tbody>
</table>

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Minor Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by a minimum of 12 hours of minor coursework.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Minor Hours in Residence</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by a minimum of 10 hours of KU resident credit in the minor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Minor Junior/Senior Hours</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by a minimum of 9 hours of KU resident credit in the minor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Minor Graduation GPA</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by a minimum of a 2.0 KU GPA in courses in the minor. GPA calculations include all courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (<a href="https://degreeprogress.ku.edu/node/2/">https://degreeprogress.ku.edu/node/2/</a>).</td>
<td></td>
</tr>
</tbody>
</table>

Minor in Astronomy

Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department's research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billions of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate studies in STEM, many find employment in the private sector in diverse situations ranging from financial analysts to physicians. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

Undergraduate programs in astronomy

Astronomy degrees are offered through the Department of Physics and Astronomy. The astronomy curriculum offers undergraduates a survey of modern astronomy and an introduction to physical science, gives science and engineering students an introduction to astronomy and astrophysics, and prepares students majoring in astronomy for graduate study in astronomy or related fields.

Courses for Nonmajors

ASTR 191 surveys a wide range of contemporary astronomy topics while ASTR 293 discusses a shorter list of astrophysically extreme objects in greater detail; both courses require eligibility for MATH 101. ASTR 394 is open to students with previous coursework in astronomy, biology, or geology; ASTR 391 offers an introduction to physical astronomy at a calculus-based level.

Requirements for the Minor in Astronomy

Students selecting this minor must complete courses as specified in each of the following areas:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Physics I</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 211 General Physics I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 216 and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 210 General Physics I for Engineers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 216 and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 213 General Physics I Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 201 Calculus Supplement to College Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 114 and College Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General Physics II</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 212 General Physics II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 236 and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 214 General Physics II Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 202 Calculus Supplement to College Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 115 and College Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General Physics III and Intermediate Physics Laboratory</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 313 General Physics III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHSX 316 Intermediate Physics Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Physical Astronomy, Honors</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASTR 391 Physical Astronomy, Honors</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Astronomy Required Electives. Satisfied by at least 5 hours in any combination of ASTR courses numbered above 300.</td>
<td></td>
</tr>
</tbody>
</table>

**Minor Hours & Minor GPA**

While completing all required courses (above), minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**
Satisfied by 20 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (https://degreeprogress.ku.edu/gpa/).

**Why study physics and astronomy?**

Our goal is to understand the physical universe. The questions addressed by our department’s research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billionths of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate studies in STEM, many find employment in the private sector in diverse careers ranging from financial analysts to physicians. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

**Requirements for the Minor in Physics**

**Physics Minor Course Requirements**

Student selecting this minor must complete courses as specified in each of the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>General Physics I</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 201 Calculus Supplement to College Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 114 and College Physics I</td>
<td>4-5</td>
</tr>
<tr>
<td></td>
<td>PHSX 210 General Physics I for Engineers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 216 and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 213 General Physics I Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 214 General Physics II Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 211 General Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 216 and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General Physics II</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by one of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 202 Calculus Supplement to College Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 115 and College Physics II</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PHSX 212 General Physics II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 236 and General Physics II Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 214 General Physics II Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 211 General Physics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 216 and General Physics I Laboratory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 213 General Physics I Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>General Physics III and Intermediate Physics Laboratory</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 313 General Physics III</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>&amp; PHSX 316 and Intermediate Physics Laboratory I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Mechanics I</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 521 Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or EPHX 521 Mechanics I</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Electricity and Magnetism</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHSX 531 Electricity and Magnetism</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or EPHX 531 Electricity and Magnetism</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Physics Required Elective</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied by any 3 credit hour PHSX course numbered 500 or above.</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours**
21-22

**Minor Hours & Minor GPA**

While completing all required courses (above), minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**
Satisfied by 21 hours of major courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the major.
Minors Junior/Senior (300+) Hours
Satisfied by a minimum of 13 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in the minor. GPA calculations include all courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Undergraduate Certificate in Astrophysics of Origins

The undergraduate certificate, Astrophysics of Origins, offers an exposure to the wonders of the Universe and the possible future of space exploration in the 21st century. Building on foundational coursework in physics, the certificate course offerings provide exposure to astrophysics and the search for life in the Universe as well as a cultural appreciation of origin stories from many cultures.

1. PHSX 210 (General Physics I for Engineers, 3 credit hours) or PHSX 211 (General Physics I, 4 credit hours) or PHSX 213 (General Physics I, Honors, 5 credit hours).
2. PHSX 212 (General Physics II, 3 credit hours)
3. Any two of the following courses: ASTR 391 (Physical Astronomy, Honors, 3 credit hours); ASTR 394 (Quest For Extraterrestrial Life, 3 credit hours); PHSX 594 (Cosmology and Culture, 3 credit hours).

This certificate thus requires between 12 and 14 credit hours.

Master of Science in Physics

Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department’s research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billionths of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Physics and Astronomy Graduate Program

Most admitted students have an undergraduate grade-point average of at least a B (3.0 on a 4.0 scale), overall and in the major. A baccalaureate degree with a major in physics is desirable but not required. Recommended preparation consists of courses in mechanics, electromagnetic theory, thermal physics, introductory quantum mechanics, advanced laboratory, and at least one course in mathematics beyond differential equations. Working knowledge of computers and of an advanced programming language is helpful. A student with less than the recommended preparation may enroll in these courses for graduate credit.

The General and Subject GRE are not required for admissions to the Physics and Astronomy graduate program. Submit your graduate application online (https://gradapply.ku.edu/apply/). Send all other requested application materials to the department:

The University of Kansas
Department of Physics and Astronomy
Graduate Coordinator
1251 Wescoe Hall Dr.
1082 Malott Hall
Lawrence, KS 66045

M.S. Degree in Physics

Candidates must complete a minimum of 30 credit hours of advanced lecture courses (numbered 500 or above) in physics and related subjects within a period of 7 years. Credit toward the 30 required hours is not given to students who take courses at a lower level after having completed similar upper level courses (as determined by the department) with a grade of B- or higher.

Program requirements include

1. Within 12 months of entering the program the student must fulfill the requirements of the individualized plan of study (https://physics.ku.edu/graduate-program/additional-requirements/) for all graduate degrees to certify an undergraduate knowledge of Physics. Visit the Department’s website for more information on these requirements and the process of certification.
2. 4 basic courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 711</td>
<td>Quantum Mechanics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 718</td>
<td>Mathematical Methods in Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 821</td>
<td>Classical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 831</td>
<td>Electrodynamics I</td>
<td>3</td>
</tr>
</tbody>
</table>

3. 2 additional courses chosen from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 721</td>
<td>Chaotic Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 731</td>
<td>Molecular Biophysics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 741</td>
<td>Nuclear Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 761</td>
<td>Elementary Particles I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 781</td>
<td>Solid State Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 792</td>
<td>Topics in Advanced Astrophysics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 793</td>
<td>Physical Cosmology</td>
<td>3</td>
</tr>
</tbody>
</table>
4. A minimum of 2 hours in PHSX 899 Master’s Research/Thesis is required, with a maximum of 6 hours that count toward the master’s degree. No more than 3 hours will be allowed unless directed towards completion of a thesis on original research or a written report. Students must consult with the research advisor before enrolling in more than 3 credit hours.

5. The remaining 6 to 10 hours of advanced electives must be either advanced lecture courses or advanced undergraduate laboratory courses. (This proviso excludes seminars and special problems courses.)

6. All graduate students, after their first semester, will deliver at least 1 oral presentation (https://physics.ku.edu/graduate-program/additional-requirements/) per semester.

7. General Examination: Candidates must pass a general oral examination in physics. The examination is given shortly before completion of other work for the degree. A master’s thesis is not required but may be submitted if the candidate and the director of the candidate’s research believe it to be appropriate.

Please visit the departmental web page (https://physics.ku.edu/graduate-program/) for additional information, e.g., milestones.

Please visit the University’s policy library website (https://policy.ku.edu/graduate-studies/ma-program-time-constraints/) for information on time constraints.

M.S. with emphasis in Computational Physics and Astronomy

This degree is a subspecialty program for students with a background in physics, astronomy, computer science, mathematics, or engineering who wish to become familiar with computer-based approaches to problems in these fields. This degree is intended as a terminal MS that can be completed in two years. Minimum preparation expected includes a year’s course in general physics, mathematics through differential equations, and a knowledge of python, FORTRAN, C++ or another programming language suited to scientific applications. Students pursuing this degree with an applied mathematics emphasis may wish to consider also earning a Graduate Certificate in Applied Mathematics (https://catalog.ku.edu/liberal-arts-sciences/math/applied-mathematics-gradcert/#text).

Degree Requirements

A total of at least 33 hours of credits including 30 hours of graduate credit is required for the degree. At least 50% of these hours must be at the 700 level or above. Courses numbered 500 or above count for graduate credit. Some of the courses listed below are undergraduate level EECS courses that do not count as graduate credit. Students entering the program may have satisfied several of these requirements but a total of 30 hours of graduate credit is still required. No more than the required 6 hours of PHSX 899 (Master’s Research/Thesis) may be counted toward the degree.

1. Within 12 months of entering the program the student must fulfill the requirements of the individualized plan of study (https://physics.ku.edu/graduate-program/additional-requirements/) for all graduate degrees to certify an undergraduate knowledge of Physics. Visit the Department’s website for more information on these requirements and the process of certification.

2. Required Courses (24 credit hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX/ASTR 815</td>
<td>Computational Methods in Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 718</td>
<td>Mathematical Methods in Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>MATH/EECS 781</td>
<td>Numerical Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>or EECS 639</td>
<td>Introduction to Scientific Computing</td>
<td>3</td>
</tr>
<tr>
<td>EECS – 1 course at the 300 level or above (in addition to MATH/EECS 781)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EECS or MATH - 1 course at the 700 level or above in EECS or MATH (in addition to MATH/EECS 781 and the EECS 300+ requirement)</td>
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<tr>
<td>PHSX 899</td>
<td>Master’s Research/Thesis</td>
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<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>EECS 360</td>
<td>Signal and System Analysis</td>
<td>4</td>
</tr>
<tr>
<td>EECS 368</td>
<td>Programming Language Paradigms</td>
<td>3</td>
</tr>
<tr>
<td>EECS 388</td>
<td>Embedded Systems</td>
<td>4</td>
</tr>
<tr>
<td>EECS 448</td>
<td>Software Engineering I</td>
<td>4</td>
</tr>
<tr>
<td>EECS 560</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>EECS 672</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>EECS 731</td>
<td>Introduction to Data Science</td>
<td>3</td>
</tr>
<tr>
<td>EECS 738</td>
<td>Machine Learning</td>
<td>3</td>
</tr>
<tr>
<td>EECS 739</td>
<td>Parallel Scientific Computing</td>
<td>3</td>
</tr>
<tr>
<td>EECS 837</td>
<td>Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>MATH 611</td>
<td>Time Series Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 647</td>
<td>Applied Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 650</td>
<td>Nonlinear Dynamical Systems (cannot be counted along with PHSX 721)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 727</td>
<td>Probability Theory</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 627</td>
<td>Probability</td>
<td></td>
</tr>
<tr>
<td>MATH 728</td>
<td>Statistical Theory</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 628</td>
<td>Mathematical Theory of Statistics</td>
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</tr>
<tr>
<td>MATH/EECS 782</td>
<td>Numerical Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 783</td>
<td>Applied Numerical Methods for Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHSX/ASTR Courses Numbered 500 and above</td>
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</tbody>
</table>

Footnote 1: Courses below the 500 level do not count towards the required 30 hours of graduate credit.

4. All graduate students, after their first semester, will deliver at least 1 oral presentation (https://physics.ku.edu/graduate-program/additional-requirements/) per semester.

5. An important component of this degree is the completion and documentation of a successful computer project. A thesis must be
presented that describes the basic physics involved in the project, the method of implementing the project, and a discussion of the results. An oral defense of the thesis is required before a committee of at least 3 members of the graduate faculty.

Please visit the departmental web page (https://physics.ku.edu/graduate-program/) for additional information, e.g., milestones.

Doctor of Philosophy in Physics

Why study physics and astronomy?

Our goal is to understand the physical universe. The questions addressed by our department's research and education missions range from the applied, such as an improved understanding of the materials that can be used for solar cell energy production, to foundational questions about the nature of mass and space and how the Universe was formed and subsequently evolved, and how astrophysical phenomena affected the Earth and its evolution. We study the properties of systems ranging in size from smaller than an atom to larger than a galaxy on timescales ranging from billions of a second to the age of the universe. Our courses and laboratory/research experiences help students hone their problem solving and analytical skills and thereby become broadly trained critical thinkers. While about half of our majors move on to graduate studies in STEM, many find employment in the private sector in diverse situations ranging from financial analysts to physicians. Graduates of all our degree programs can be found in key positions regionally, nationally, and internationally. In this way, our department is at the forefront of telling the academic story of the University of Kansas to people around the state and around the world.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog. Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Physics and Astronomy Graduate Program

Most admitted students have an undergraduate grade-point average of at least a B (3.0 on a 4.0 scale), overall and in the major. A baccalaureate degree with a major in physics is desirable but not required. Recommended preparation consists of courses in mechanics, electromagnetic theory, thermal physics, introductory quantum mechanics, advanced laboratory, and at least one course in mathematics beyond differential equations. Working knowledge of computers and of an advanced programming language is helpful. A student with less than the recommended preparation may enroll in these courses for graduate credit.

The General and Subject GRE are not required for admissions to the Physics and Astronomy graduate program. Submit your graduate application online (https://gradapply.ku.edu/). Send all other requested application materials to the department:

The University of Kansas
Department of Physics and Astronomy
Graduate Coordinator
1251 Wescoe Hall Dr.
1082 Malott Hall
Lawrence, KS 66045-7572

Ph.D. Degree Requirements

Undergraduate Preparation

All students must adhere to the General Requirements for all Graduate Degrees (https://physics.ku.edu/graduate-program/additional-requirements/), which are part of each student's Individualized Plan for ensuring student preparation.

Course Requirements

What follows are the default set of requirements for all Ph.D. candidates.

1. A total of 10 advanced lecture courses (30 hours of level 700 and above) is required. This excludes all seminars, classes taken as part of the Individualized Plan, and colloquia.

2. Core Courses

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PHSX 711</td>
<td>Quantum Mechanics I</td>
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</tr>
<tr>
<td>PHSX 811</td>
<td>Quantum Mechanics II</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 821</td>
<td>Classical Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 831</td>
<td>Electrodynamics I</td>
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</table>

3. Other required courses:

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PHSX 717</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHSX 718</td>
<td>Mathematical Methods in Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 815</td>
<td>Computational Methods in Physical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 871</td>
<td>Statistical Physics I</td>
<td>3</td>
</tr>
<tr>
<td>PHSX 931</td>
<td>Electrodynamics II</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Two additional PHSX lecture courses numbered 700 or above. This excludes PHSX 815 (computational physics) and PHSX 717 (graduate seminar). The 2 courses must be in different sub-fields of physics and they may not be used to simultaneously satisfy other degree requirements. (For example: if PHSX 911 is being used to satisfy the PHSX 811 core requirement, it may not also be used for this requirement.)

5. One credit hour of Colloquium is required (PHSX 700). See Department website (https://physics.ku.edu/graduate-program/physics-PhD/course-requirements/) for explanation.

6. All graduate students, after their first semester, will deliver at least 1 oral presentation per semester.

The courses listed above comprise the Department course requirements common to all students except those pursuing a multi-disciplinary plan of study, which is described below. Subsequent work, consisting of advanced courses in appropriate fields and seminars, will be selected by the student and the advisor on the basis of the student's need and intended field of specialization. The student's dissertation committee will
determine the adequacy of the student's courses and seminars and will specify the total course requirements.

Students who wish to pursue a more multidisciplinary plan of study may incorporate coursework from up to two other natural science, engineering, or mathematics (SEM) departments at KU by substituting non-PHSX/PHSX/ASTR courses at the 600 level and above from these other disciplines for the two additional electives previously described. The research advisor, or in the absence of one, the Departmental Graduate Advisor (who is the default advisor for all students without a research advisor), shall approve all such outside course choices and provide documentation for the student file on the approved courses and their rationale.

Students who wish to take courses in the social sciences, humanities, or professional schools must submit a detailed plan of study that must be approved by the Physics and Astronomy Graduate Committee. Please note that while these unique plans involving non-STEM fields will be approved by the Physics and Astronomy Graduate Committee, please consult the departmental web page for more information on those requirements and the process of certification.

Preliminary Candidacy

To be admitted to preliminary candidacy, each graduate student must satisfy the following department requirements:

1. Within 12 months of entering the program the student must fulfill the requirements of the individualized plan of study (https://physics.ku.edu/graduate-program/additional-requirements/) for all graduate degrees to certify an undergraduate knowledge of Physics. Visit the Department's website for more information on those requirements and the process of certification.

2. Achieve a minimum core course grade point average of 3.2. The core course GPA is computed from the following equally weighted elements:
   a. Grade obtained in PHSX 711 Quantum Mechanics I
   b. Grade obtained in PHSX 811 Quantum Mechanics II
   c. Grade obtained in PHSX 821 Classical Mechanics
   d. Grade obtained in PHSX 831 Electrodynamics I
   e. Average grade of 2 other PHSX lecture courses numbered 700 or higher, excluding PHSX 815 (computational physics) and PHSX 717 (graduate seminar).

3. Students may repeat of the core courses (PHSX 711, PHSX 811, PHSX 821, PHSX 821, and PHSX 831) once for the purpose of improving the core GPA. In calculating the core GPA, the Department will use only the better of the two grades.

4. The two additional 700 level or higher PHSX lecture courses (#4 under course requirements) must be taken at KU, but students entering with graduate credit from other institutions may petition the Graduate Committee for a waiver for any of the 4 named core courses. For the purposes of the core GPA, grades (of "B" or better) from the previous institution may be used for at most 3 of the 4 named courses.

5. Graduate students are normally expected to complete all core courses by the end of their second year of enrollment.

Decision on Preliminary Candidacy

Once requirements for Preliminary Candidacy have been met, the Graduate Committee will decide whether or not to admit the student to Preliminary Candidacy. Once requirements for Preliminary Candidacy have been met and confirmed by the Graduate Committee, the Graduate Committee Chair will report this result to the Graduate Faculty.

Research Skills and Responsible Scholarship

By the end of 1 year after being admitted to preliminary candidacy, the student must complete PHSX 815/ASTR 815, Computational Physics and Astronomy, with a grade of "B" or higher in order to satisfy the Research Skills requirement. Note that this course has significant prerequisites in undergraduate Computer Science. The Responsible Scholarship requirement is filled via completion of PHSX 717.

Pedagogical Instruction

Every student who receives a GTA appointment will be required to complete PHSX 702 at the first offering of the course starting with the semester of the student's initial GTA appointment. Failure to complete this class at the first opportunity may affect consideration for subsequent GTA appointments.

Comprehensive Examination

After completing a major portion of the required course work and satisfying the computing skills requirement, the student must pass the comprehensive examination.

As a written component of the exam, the student will write a 2,000 to 4,000 word paper on a topic in their chosen sub-field that is relevant to their thesis work. There is also an oral component of the exam in which the student makes an oral research presentation to a committee of faculty. This committee then asks the students questions both on their presentation and on general physics and astronomy.

Post-Comprehensive Requirements

Upon passing the comprehensive examination, the student becomes a candidate for the Ph.D. degree. Each candidate must complete a research project that has been approved by the dissertation committee. The committee establishes the candidate's course requirements and directs the research.

At least once each year after passing the comprehensive examination, the student must schedule a meeting with his or her dissertation committee to discuss progress towards the completion of the dissertation and any other concerns.

Final Oral Examination

To be awarded the PhD in Physics, a candidate for the degree must complete a dissertation and pass a final oral examination.

Please consult the departmental web page (https://physics.ku.edu/graduate-program/) for additional information.

Department of Political Science

Why study political science?

Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe. In the broadest sense, political science is the study of governments and governmental procedures. Political science is as old as civilization, because people always have been interested in their government and in their leaders. But political science as it is thought of today, as one of the social sciences, is a comparatively new discipline. It developed in
the United States during the last century as political scientists developed an ability to make increasingly scientific observations of government. Political scientists are concerned with the origins and sources of governmental organizations, their growth, and their decline, as well as with the processes and structure of government.

Ask yourself, Am I interested in public affairs? Am I a good analytical and critical thinker? Am I curious about the world and its workings? Do I communicate well orally and in writing? Do I want to be a knowledgeable citizen? Am I interested in the relationship between government and the people? Am I curious about how decisions are made and how conflicts are resolved?

Undergraduate Programs

Course work is for students studying contemporary political processes as part of their general education, for students majoring in allied social sciences, for students planning to enter professions such as law and teaching, and for majors in political science.

Courses for Nonmajors

Political Science offers several introductory courses that may be used as electives, to fulfill KU Core requirements, or to prepare for study in advanced topics in the same area.

Public Affairs Internship Program

The department supervises integrated internships for majors who are second-semester juniors or seniors. They are offered during the spring semester in Topeka and Washington, D.C. Programs consist of up to 12 hours in political science—an internship, participation in an intern seminar, and directed readings. Students serve as interns in Topeka or Washington at least 4 days each week and attend weekly seminars. Students also may enroll in a directed readings course with a faculty member on campus. Readings provide a theoretical and analytical study program related to the internship and the seminar. Contact the department early in the fall semester.

Graduate Programs

The department offers M.A. and Ph.D. degrees for students interested in academic work in political science leading to teaching and research careers. Political science graduates also have found careers in the public, private, and not-for-profit sectors. Ph.D. students can pursue concentrations in U.S. politics, comparative politics, international relations, political theory, and public policy.

Students who are interested in enrolling in graduate level coursework in the Department of Political Science without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status.

Fields of Graduate Study

For graduate study, courses in the department are divided into the following fields:

- U.S. political institutions and processes
- Comparative politics
- International relations
- Public policy
- Political philosophy and empirical theory

Courses

POLS 102. Introduction to Political Science as a Career. 1 Credits. S
Provides an overview of the discipline of political science; emphasizes developing an understanding of opportunities in political science at the University of Kansas and careers with a political science degree. Major sub-fields within the discipline are discussed as well as the benefits of particular tracks within the departmental coursework. The course helps students plan their goals for their education and match those goals to career goals. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Enrollment by permission of the instructor only.

POLS 110. Introduction to U.S. Politics. 3 Credits. SF S
An introduction to basic American governmental institutions, political processes, and policy.

POLS 111. Introduction to U.S. Politics Honors. 3 Credits. SF S
Open only to students in the College Honors Program or by consent of instructor.

POLS 125. Intelligence: Supporting National Security. 3 Credits. S
This course examines the evolution of the U.S. Intelligence Community and how it is adapting to new international security challenges. The course discusses the historical background of U.S. intelligence and how political ideology, domestic policies, technology, and the threat have shaped today’s U.S. Intelligence Community. The course provides an overview of the roles, missions, and structure of the U.S. Intelligence Community and how the various components support national security decision makers. The course also provides an overview of diplomacy and intelligence as tools of statecraft. Course looks at foreign intelligence services, their targets, and operational successes and failures. Finally, the course addresses emerging national security issues potentially shaping future U.S. intelligence operations. On completion of the course, students will have an in-depth understanding of the U.S. Intelligence Community, how it supports national security decision makers, and how it can influence policy development.

POLS 130. US Intelligence Community. 3 Credits. S
This course provides a comprehensive look at the roles, missions, and structure of the U.S. Intelligence Community. Students will develop an understanding of the components of the intelligence process used by the U.S. Intelligence Community: (1) planning and direction, (2) collection, (3) processing, (4) analysis and production, and (5) dissemination. This course also addresses the various polices and executive orders shaping intelligence collection both domestically and abroad, such as, intelligence oversight and restrictions on sharing and dissemination of information within and between local, state, and federal government agencies and the private sector. On completion of the course, students will have an in-depth understanding of the roles of the various components of the U.S. Intelligence Community and the intelligence processes used to support national security decision makers. Prerequisite: POLS 125.

POLS 150. Introduction to Comparative Politics. 3 Credits. SF S
An introduction to the comparative study of political systems emphasizing governmental structures, parties, electoral techniques, and recent trends in the field. The course also considers major differences between (1) representative and autocratic systems, and (2) developed and underdeveloped nations.

POLS 151. Introduction to Comparative Politics Honors. 3 Credits. SF S
Open only to students in the College Honors Program or by consent of instructor.

POLS 170. Introduction to International Politics. 3 Credits. SF S
A study of the nation-state system including the role of nationalism, sovereignty, and power. Patterns of state action including neutralism, collective security, war, and cooperation through international organizations are stressed. Specific examples of contemporary international problems are also analyzed and discussed.

**POLS 171. Introduction to International Politics Honors. 3 Credits. SF S**
Open only to students in the College Honors Program or by consent of instructor.

**POLS 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Political Science. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**POLS 199. Data I: Dealing with Data. 3 Credits. S**
Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to derive knowledge and insights from data. This course teaches students the core concepts of inference and computing, working with real behavioral, economic, geographic, physical, social, and text data. Students obtain basic statistics training from a computational perspective using simulation to answer questions, explore problems, and delve into social issues surrounding data analysis such as privacy and design. (Same as ECON 199, PSYC 199 and SOC 199.)

**POLS 249. Study Abroad Topics in Political Science: _____ 1-6 Credits. S**
This course is designed for the study of special topics in Political Science at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

**POLS 301. Introduction to Political Theory. 3 Credits. S**
An examination of the perennial issues and major concepts in political philosophy. Ideas such as community, liberty, equality, justice, and democracy are examined in order to understand the various meanings given to these concepts in political discourse and to understand the role of these ideas in various political theories.

**POLS 306. Political Science Methods of Inquiry. 3 Credits. S**
An introduction to the social science methods of investigation and analysis that are used in political science as a discipline and, in many cases, in public and private sector analytical work as well. The nature of political science data sources and methods of data collection, the logic of social scientific inquiry, and key methods of data analysis are emphasized. Prerequisite: POLS 110 or POLS 150 or POLS 170 (or their Honors equivalents), or consent of instructor.

**POLS 308. Topics in Social Justice: _____ 3 Credits.**
The study of selected problems in social justice or equity. Course is repeatable for different topics.

**POLS 310. Contemporary Issues in U.S. Politics. 3 Credits. S**
An examination of issues and problems concerning government and politics in American society. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement.

**POLS 320. Introduction to Public Policy. 3 Credits. S**
Offers an introduction to the policy-making process covering policy formulation, adoption, and implementation. Overview of major theories of the policy-making process, the actors involved in the process, and the constraints and enhancements offered by the broader political environment. The theoretical frameworks are applied to several substantive policy areas.

**POLS 325. Intelligence Analytics. 3 Credits. S**
This course develops advanced critical thinking, writing, oral communication skills by enhancing the student's ability to apply analytic tradecraft methods to intelligence products. Course emphasizes in-class, hands-on exercises to enhance the student's ability to apply structured analytic techniques, critically assess bias and logical fallacies in information sources, critiquing analytical products, and applying sound analytical tradecraft to individual and team writing exercises and oral presentations. Course also emphasizes the team-oriented environment of the intelligence profession, specifically focusing on standards of practice found in US intelligence agencies. On completion of the course, students will have an understanding of the analytic processes and guidelines the U.S. Intelligence Community uses to create intelligence products for national security decision makers. Prerequisite: POLS 125 and POLS 130.

**POLS 330. Introduction to Public Administration. 3 Credits. S**
Introduction to administration, public policy and policy makings is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 330.) Prerequisite: POLS 110.

**POLS 331. Introduction to Public Administration, Honors. 3 Credits. S**
Introduction to administration, public policy and policy making, for honors students, is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as PUAD 331.) Prerequisite: POLS 110.

**POLS 345. Counterintelligence. 3 Credits. S**
This course provides an overview and history of the counterintelligence discipline; the structure and operations of the U. S. counterintelligence community including its legal foundation; and the privacy and civil liberties implications of counterintelligence operations. Course discusses how counterintelligence has evolved from the Cold War-era, with its focus on counter espionage, to 21st Century challenges such as threats from non-state actors and to our cyber networks. Course also addresses the emerging national security issues which will shape future U.S. counterintelligence operations. On completion of the course, students will have an understanding of how the U.S. counterintelligence capabilities and programs work to detect and neutralize the impact of espionage against US interests. Prerequisite: POLS 125 and POLS 130.

**POLS 350. Contemporary Issues in Comparative Politics. 3 Credits. S**
This course will survey selected current political issues around the globe. The focus of the course will be on understanding and analyzing the wide diversity of political phenomena that mark countries around the world. Topics may include such things as elections and electoral politics; political parties; government stability; democratization; ethnic, racial, caste, or religious conflict; protest and revolutionary movements; social movements (environmental, feminist, and others); and the politics of economic reform. This course is intended primarily for non-majors, and does not meet the junior/senior level course field distribution requirement.

**POLS 360. Ancient Roots of Modern Politics. 3 Credits. S**
This course examines the political thought and practice of Ancient Greece and Rome, and the enduring impact of these cultures upon contemporary
political institutions. Students will consider topics such as origins of democracy in Ancient Athens; the Roman Republic as a model for the constitution of the United States; and the causes and results of Rome's transition from Republic to monarchy. The course will also introduce students to key perspectives in the analysis of ancient and modern politics, for example constitutional theory, political psychology, and source criticism. All readings will be in English; no knowledge of any ancient languages is required. (Same as CLSX 360.)

POLS 370. Contemporary Issues in International Politics. 3 Credits. S
A survey of selected issues in current international relations. Topics include global economic interdependence, regional conflicts and nationalism, United States military and economic policy in the post-Cold War era, the role of international organizations such as the United Nations and the European community, global environmental problems and the contemporary role of international law. This course is intended primarily for non-majors and does not meet the junior/senior level course field distribution requirement.

POLS 399. Data 2: Foundations of Data Science. 3 Credits. S
Data science empowers its users to provide data-driven solutions to problems and questions in the world. This course provides foundational skill and knowledge behind this power. This knowledge and skill includes learning to formulate effective questions to answer with data, computer programming, data management and wrangling, exploratory data analysis and visualization, statistical inference and prediction, data-driven decision making, and communication. (Same as ECON 399 and PSYC 399.) Prerequisite: PSYC 199/POLS 199/ECON 199 or EECS 138; and PSYC 201 or MATH 365 or ECON 426 or POLS 306 or SOC 380 or MATH 101 or MATH 104 or MATH 115 or MATH 121.

POLS 471. Politics of Human Trafficking. 3 Credits. S
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 714, POLS 714, or GIST 714. (Same as GIST 471 and WGSS 514.) Prerequisite: Sophomore standing or consent of instructor.

POLS 492. Field Work in Politics and Policy-Making. 3-6 Credits. S
This offering provides course credit for field work in politics and policy-making that takes place outside the department's Spring Semester internship programs in Washington, D.C. and Topeka. Consent of Instructor is required prior to enrollment.

POLS 493. Directed Readings. 1-3 Credits. U
Individual and supervised readings in selected areas of political science. Course is repeatable for different areas; however, only 3 hours of directed readings can be applied to the major. Prerequisite: Junior level and consent of department.

POLS 494. Washington Semester Intern Seminar. 3 Credits. S
Intern seminar in Washington, D.C. Students meet weekly during Washington Semester program, in speaker/seminar format. Participation is expected, and a term paper is a requirement. Prerequisite: Consent of instructor.

POLS 495. Topeka Semester Intern Seminar. 3 Credits. S
Intern seminar at statehouse in Topeka. Students meet weekly during this program, in speaker/seminar format. Participation is expected, and a term paper is a requirement. Prerequisite: Consent of instructor.

POLS 496. Washington Semester Field Work. 3-6 Credits. S
Supervised internships in public and private agency offices in the Washington, D.C. area. This course is open only to students who are participating in the department's organized, supervised, semester-long Washington internship program. In order to be eligible for the program, students must have junior or senior standing, an overall grade-point average of 2.75, must have completed POLS 110 and have a 3.0 grade point average in all political science courses. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor is required prior to enrollment.

POLS 497. Topeka Semester Field Work. 3-6 Credits. S
Supervised internships in public and private agency offices in the Topeka area. This course is open only to students who are participating in the department's organized, supervised, semester-long Topeka internship program. In order to be eligible for the program, students must have junior or senior standing, an overall grade point average of 2.75, must have completed POLS 110 and have a 3.0 grade point average in all political science courses. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor is required prior to enrollment.

POLS 498. Honors Thesis. 3-6 Credits. S
Political science majors who in their senior year who wish to become candidates for graduation with honors in political science must enroll in and successfully complete six hours of honors thesis work. Consent of the department is required and candidate must have minimum grade point averages of 3.5 in political science courses and 3.25 in all courses, in both in-residence and combined work.

POLS 499. Capstone Research/Field Work Experience. 3 Credits. S
Capstone research and/or field work experience project for political science majors. Project specified under the direction of a faculty mentor and approved by the undergraduate director. Prerequisite: Senior standing and 12 hours of upper division credit in POLS.

POLS 501. Contemporary Political Thought. 3 Credits. S
An examination of the major theoretical questions concerning citizenship and government in modern society. Major ideologies and important contemporary philosophers are examined to determine how they address such issues as the meaning of the public interest, the just distribution of power and privilege, the proper role of government in society, and legitimate methods for making collective decisions. Prerequisite: POLS 301, or consent of instructor.

POLS 502. History of Political Thought. 3 Credits. S
A survey of major concepts and theories in political philosophy from Plato to Marx. The emphasis is on understanding major classics in western political thought. Prerequisite: Sophomore level or consent of instructor.

POLS 503. Politics in Literature. 3 Credits. S
An examination and analysis of the portrayal of politics and political problems in literature. Classical and modern texts will be considered, including dramas, poems, and novels. Prerequisite: Sophomore level or consent of the instructor.

POLS 512. Latino Politics in the U.S.. 3 Credits. S
An overview of the political position of Latinas/os in the United States. The focus is on the three largest Latino groups in the U.S.: Mexican-Americans, Cuban-Americans, and Puerto Ricans; as well as an examination of other South American and Central American populations in the U.S. The main topics include identity formation, the political circumstances of Latinos, relationship to the electoral process, political behavior, and the policy process.

**POLS 515. American Political Parties. 3 Credits. S**
Survey of the development of the American political party system, stressing party organization, nominating systems, campaigns, elections, role of mass media, and party finances. Prerequisite: Sophomore level or consent of the instructor.

**POLS 516. Public Opinion and American Democracy. 3 Credits. S**
This course examines the construction, administration, and interpretation of public opinion polls. The course will also examine the role of public opinion in the democratic process and the formation of public opinion.

**POLS 520. Political Campaigns. 3 Credits. H**
This course will examine the communication involved in political campaigns. Students will be exposed to theories and ideas related to campaigns and will apply this knowledge to current political activity. Although the primary focus of the course is politics, students interested in public relations and strategic communication will also benefit from learning and practicing media relations strategies. The mediated nature of modern political communication, as well as the communication strategies of campaigns and journalists, will be examined in a semester-long simulated campaign. By the end of the semester, students will become more informed users and consumers of political campaign messages. (Same as COMS 607.) Prerequisite: COMS 130.

**POLS 521. Mass Media and Politics. 3 Credits. H**
The primary goal of this course is to critically examine the role of mass media in U.S. politics. Students learn how information makes it into news coverage, as well as how media content affects individuals, political campaigns, and governing decisions. The course covers media effects theories, news bias and polarization, political entertainment, and other topics. Although the primary focus of the course is politics, students interested in public relations and strategic communication will also benefit from learning about U.S. journalism. By the end of the semester, students will become able to critically evaluate political and media systems in the U.S. (Same as COMS 335.) Prerequisite: COMS 130.

**POLS 528. Environmental Justice and Public Policy. 3 Credits. S**
This course provides an overview of environmental justice, both as a social movement and as a public policy initiative. Environmental justice examines the distribution of environmental externalities across different socio-economic and racial groups. We will discuss several different public policy areas that have been impacted by the environmental justice movement: hazardous waste facility siting, urban redevelopment and Brownfields, transportation policy, and Native American sovereignty. We will also touch upon international environmental policy in an environmental justice context. Throughout the course we will evaluate empirical issues in studying environmental justice. (Same as EVRN 528.) Prerequisite: POLS 306 or a statistics class or consent of instructor.

**POLS 561. Liberation in Southern Africa. 3 Credits. W**
This course examines struggles for freedom in southern Africa and the consequences of political, economic, and social changes in the region. The end of colonial rule, the demise of white-settler domination, and the fall of the apartheid regime is discussed. As a major political event of the twentieth century, the liberation of southern Africa had both local and global consequences. The course analyzes transnational issues of liberation and resistance to consider broader regional and international perspectives. Course themes pay particular attention to gender and ethnicity and include a focus on democratization and contemporary meanings of liberation. Prior coursework in African Studies is strongly recommended, but not required. (Same as AAAS 561 and HIST 561.)

**POLS 562. Women and Politics. 3 Credits. S**
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women’s representation in the U.S., women and U.S. public policy, gender and legal theory, international women’s movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women’s activism have challenged the narrow focus of the discipline as well as redefined women’s place in society. (Same as WGSS 562.) Prerequisite: Sophomore level or consent of the instructor.

**POLS 563. Comparative Political Economy. 3 Credits. S**
This course studies fiscal, monetarist, and trade policies to assess the usefulness and problems posed by these policy instruments across countries. This includes examining exchange rates, interest rates, budget deficit, trade deficit, and debt, to understand their composition and relevance to domestic economy, employment, investment, development, and international trade, the problems they pose, and how these may be overcome. We then examine when, how, and why government enacts these instruments across countries and regions. Prerequisite: Sophomore level or consent of the instructor.

**POLS 564. Elections and Political Parties Around the World. 3 Credits. S**
An examination of the diverse forms of election rules and their consequences for political parties, politicians, and voters. The course will survey election rules in theory and practice; the design and re-design of election rules in new and established democracies; and how elections affect party strategies or governance and representation, and the types of party systems that emerge. The course will also incorporate intensive studies of election campaigns occurring during the semester that the course meets. Prerequisite: Sophomore level or consent of the instructor.

**POLS 565. Political Change in Asia. 3 Credits. S**
This course focuses on three periods of major political changes in Asia since 1945: independence from colonization; adoption of governance; and steps toward democratization. The focus on political change is to help students see that a) many countries initiate political reforms domestically; b) the ability to implement changes is correlated to ability to win support; c) the institutional process may favor some groups over others; d) the ability to mediate political stability depends on (a), (b), and (c). Prerequisite: Sophomore level or consent of the instructor.

**POLS 582. Transnational Terrorism. 3 Credits. S**
The course provides a study of the patterns of transnational terrorism. First, it introduces students to the analytical study of terrorism. The course traces the evolution of terrorism, from the French Revolution to the modern day era. It also covers how scholarship defines, conceptualizes, and measures terrorism. The second goal is to introduce students to key scholarly debates within the literature. Some of the example questions we ask are: are democracies more vulnerable to terrorism? Does globalization render states open to being attacked by transnational actors? Is tortue warranted as an effective counterterrorism tactic? The readings draw on empirical scholarship on the causes and consequences of transnational terrorism. (Same as GIST 585.) Prerequisite: Sophomore level or consent of instructor.

**POLS 600. Contemporary Feminist Political Theory. 3 Credits. S**
A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is
influenced by women traditionally excluded from mainstream feminist thought, namely U.S. woman of color and women of post-colonial societies. This course is a service learning course that provides students with on-site practicum, mentoring, and networking skills. (Same as WGSS 600.) Prerequisite: Sophomore level or consent of the instructor.

POLS 603. Democratic Theory. 3 Credits. S
Detailed study of the typical and perennial dilemmas that arise in theories of democratic governance with an emphasis on contemporary analytical investigations of democratic systems. Prerequisite: Sophomore level or consent of the instructor.

POLS 606. Introduction to Political Computing. 3 Credits. S
This course allows student to learn the major software programs associated with data analysis in politics, including R and STATA. Students also learn the major sources of political and policy data. Students will conduct data collection and analysis for specific political research activities like public opinion surveys, voting behavior, Congressional behavior, comparisons of political processes in different countries, and the evaluation of public policies. Prerequisite: POLS 306.

POLS 607. Modern Political Theory. 3 Credits. S
An analysis of works by various authors, with the intention of exploring the political ideas that emerge in conjunction with the appearance of modern science, the Enlightenment, the Industrial Revolution, and Romanticism. Topics will include the modern conceptions of the nature of being, truth, justice, and the relationship of the individual to the community. Prerequisite: Sophomore level or consent of the instructor.

POLS 609. Topics in Political Theory: ____. 3 Credits. S
A study of selected theorists in relation to a topic in political theory. Sample topics include: revolution; authority and community; elements of political power; political elites: ideology, human nature in politics, political conflict, etc. Theorists will range from ancient to contemporary. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

POLS 610. Constitutional Law: Governmental Powers. 3 Credits. S
The Supreme Court viewed as a political branch of our government. Special emphasis on the Court's role in determining powers of government and their relationships. Prerequisite: Junior level or consent of instructor.

POLS 611. Constitutional Law: Civil Liberties. 3 Credits. S
The constitutional limits on governmental powers are studied with special emphasis on constitutional guarantees of individuals freedom. Prerequisite: Junior level or consent of instructor.

POLS 612. Psychology in Politics. 3 Credits. S
An examination of psychological perspectives on political phenomena. Topics include political personality, foreign policy decision making, international conflict and cooperation, voting behavior, and political participation and socialization. Prerequisite: Sophomore level or consent of the instructor.

POLS 613. Comparative U.S. State Politics. 3 Credits. S
A systematic comparative analysis of structures, functions, and policies of state political systems. Prerequisite: Junior level or consent of the instructor.

POLS 614. Urban Politics. 3 Credits. S
A survey of the social, cultural, economic, and structural differences among cities and an investigation into how these factors affect urban politics and policies. Specific topics include leadership, governmental reform, citizen participation, inter-ethnic conflict, and economic development. Prerequisite: Sophomore level or consent of the instructor.

POLS 615. Campaigns and Elections. 3 Credits. S
This course examines the behavior of candidates, campaigns, and voters in the electoral process. Topics will include the role of media, the impact of money, the operations of political campaigns and the effect of campaign laws.

POLS 616. Interest Group Politics. 3 Credits. S
Study of internal group organization and the politics of interests within the U.S. policy-making process. Prerequisite: Sophomore level or consent of the instructor.

POLS 617. The Congress. 3 Credits. S
Descriptive and comparative analysis of legislative institutions and processes in the United States, covering Congress and state legislatures. Prerequisite: Sophomore level or consent of the instructor.

POLS 618. The Presidency. 3 Credits. S
The office of the President of the United States, its place in the constitutional and political system. Emphasis is given to modern experience and current problems. Prerequisite: Sophomore level or consent of the instructor.

POLS 619. Topics in American Politics: ______. 1-3 Credits. S
A study of selected contemporary problems of policy or politics in the United States. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

POLS 620. Formulation of Public Policy. 3 Credits. S
Analysis and evaluation of the structures and processes involved in the formulation of public policy at all levels of government. Prerequisite: Sophomore level or consent of the instructor.

POLS 621. Public Policy Analysis. 3 Credits. S
An introduction to the study and analysis of public policy with emphasis on the concepts and techniques of policy thinking. The methods of policy description, explanation, evaluation, and choice will be applied to a variety of policy topics, e.g. health care, defense, environmental protection, education, etc. Prerequisite: Sophomore level or consent of the instructor.

POLS 622. The Politics of Social Policy. 3 Credits. S
An examination of the formulation and execution of key social policies in the United States, such as welfare policy, crime and drug control policy, disability rights policy, education policy, and social regulatory policy concerning controversial social issues such as abortion and gun control. Prerequisite: Sophomore level or consent of the instructor.

POLS 624. Environmental Politics and Policy. 3 Credits. S
Analysis of environmental politics and the formulation and implementation of environmental policy. Examines the history and development of environmental politics as well as current trends. Themes include interest groups, business interests, political institutions, and specific environmental policy issues. (Same as EVRN 620.)

POLS 625. Extremist Groups and Government Response. 3 Credits. S
Examines left- and right-wing extremist political groups in America and how the government has developed policies and respond to these groups. Special attention will be given to the process of policy adoption and implementation and how the government might respond to extremist groups in the future. Issues and themes will include groups such as the left-wing terrorists of the 1960s and 1970s, right-wing anticomunist groups of the 1950s and 1960s, international terrorists acting in the U.S., hate crime, ecoterrorism, citizen militia groups, and pro- and anti-abortion extremist groups. Prerequisite: Sophomore level or consent of the instructor.

POLS 626. Political Polling and Survey Research. 3 Credits. S
This course focuses on the role of polling in the political process and introduces the theory and methods used in survey research. Topics include the role of polling in campaigns and the policy process, how survey research firms produce polls, analysis of polling for campaigns and public opinion, the psychology of survey response, survey construction, and sampling. Other data collection techniques commonly used in politics and political science such as focus groups and experiments will be covered. Students will conduct original surveys. Prerequisite: Junior level or consent of instructor.

**POLS 628. The Politics of Public Health. 3 Credits. S**
This course examines the social, institutional and political context of public health policy in the United States. We will examine factors that shape the nation's public health, explore the role of government in reducing risk and promoting well being, and analyze the major institutions responsible for monitoring, protecting and promoting general public health. Themes include the social determinants of health, health disparities, emerging infectious diseases, food safety, transportation, and environmental health. (Same as EVRN 628.) Prerequisite: POLS 110 and POLS 306 are recommended.

**POLS 629. Topics in Public Policy: __________. 1-3 Credits. S**
Examination of the U.S. political system and policy formulation and administration through intensive analysis of selected current public policy problems. Sample topics include the environment, education, and economic well-being. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

**POLS 630. Politics of Identity. 3 Credits. S**
This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as WGSS 630.) Prerequisite: Sophomore level or consent of the instructor.

**POLS 633. Iran, Turkey, and the Kurds. 3 Credits. NW S**
This course examines the contemporary political and social dynamics within these three communities residing along the northern stretch of what is commonly referred to as the Middle East. Using social and political theory as a starting point, students will comparatively study critical elements and issues facing the members of these societies. Issues and themes for comparison will include the structure and institutions of politics, nation-building and nationalism, Islam and politics, women and politics, and regional and global engagement. (Same as GIST 633.) Prerequisite: GIST 220, POLS 150, SOC 130, or consent of instructor.

**POLS 640. Politics of Reproductive Policy. 3 Credits. S**
Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. This course is a service learning course that provides students with on-site practicum, mentoring, and networking skills. (Same as WGSS 640.) Prerequisite: Sophomore level or consent of the instructor.

**POLS 643. The European Union. 3 Credits. S**
This course will introduce students to the politics of the European Union. The course will cover three closely connected topics. First, it will discuss the institutional make-up of the EU, such as the European commission, the European parliament, the European Council, and the European court of justice. It will assess how well these institutions deal with the growing importance of transnational issues, such as migration and economic policy issues. Second, the course will examine how national governments pursue national interests at the level of the European Union. Third, the class will study how well the EU represents the citizens of European countries. Finally, the course will assess the extent to which the EU has successfully developed into a supra-national federation. (Same as EURS 604.) Prerequisite: Sophomore standing or consent of instructor.

**POLS 644. Justice and Public Policy in Democratic Societies. 3 Credits. S**
Examines the ethical and philosophical choices that inform public policy in democratic societies. The guiding idea of the course is that public policies reflect underlying decisions about the nature of state authority and the just use of that authority. The theoretical focus is on modern European and American liberal democratic thought; the empirical focus is global. Among the policy issues examined in the course are public education, immigration, gender equality, same-sex marriage, and drugs. Prerequisite: Sophomore level or consent of the instructor.

**POLS 645. Corruption, Crisis and Scandal. 3 Credits. S**
This course investigates political events and decisions that are considered illegal or illegitimate. Cases from the U.S. and around the world are considered. Issues discussed include the misuse of governmental power and funds, electoral fraud, and bribery. Conditions under which problems arise and reforms that address them are considered. Prerequisite: Junior level or consent of instructor.

**POLS 648. Western European Politics. 3 Credits. W**
This class is an introductory course to European politics which pursues three goals. First, the class is designed to introduce you to a variety of different aspects of European political systems, their main political actors, and basic historical traditions. A second objective consists of discussing the enormous transformation of European politics that is currently underway in Europe. Third, you will become acquainted in some detail with the institutions and operating procedures of four political systems that we focus on: France, Germany, Great Britain, and the European Union. These systems represent the range of traditions we encounter in Western and Central Eastern Europe so they serve as an example of how European politics work. Prerequisite: POLS 150.

**POLS 650. Palestinians and Israelis. 3 Credits. S**
Examines the international relations, political institutions, and social politics of these two ethonational communities in relation to each other. Specific topics include the historical evolution of the Israeli-Palestinian conflict, prospects for conflict resolution, electoral systems and political parties in the two nations, state-society relations, social movements, and roles of gender and religion. Prerequisite: Nine hours of Political Science, including POLS 150/POLS 151 or POLS 170/POLS 171, or permission of instructor.

**POLS 652. Politics in Europe. 3 Credits. S**
The study of the politics and government of Europe. Major countries are covered in depth, while smaller democracies are grouped according to political concepts. Prerequisite: Sophomore level or consent of the instructor.

**POLS 653. Gender, War, and Peace. 3 Credits. S**
This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should
feminists support women's access to combat positions or oppose the military? What if women ruled the world—would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as WGSS 653.) Prerequisite: Sophomore level or consent of the instructor.

POLS 654. Politics and Government of Russia and the Central Eurasian States. 3 Credits. S/W
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Sophomore level or consent of the instructor.

POLS 655. Politics of East-Central Europe. 3 Credits. S/W
This course analyzes Communist political theory in its application to the countries of East-Central Europe with consideration of their traditional backgrounds and their patterns of political, social, and economic developments. It constructs a theoretical model of the communist state and discusses its variations by description and comparison of the governments and political processes of Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, and Yugoslavia. Prerequisite: Sophomore level or consent of the instructor.

POLS 656. Government and Politics of East Asia. 3 Credits. NW S/W
A comparative examination of the contemporary political institutions, processes and ideas of China, Japan, and Korea. (Same as EALC 656.) Prerequisite: Junior level or consent of the instructor.

POLS 657. Government and Politics of Southeast Asia. 3 Credits. NW S/W
An evaluation of the traditional and contemporary political institutions, behavior and ideas of the countries of Southeast Asia. Prerequisite: Sophomore level or consent of the instructor.

POLS 658. Theories of Politics in Latin America. 3 Credits. S/W
This course examines how political science can be used to explain the political dynamics of Latin America. The course will be devoted to understanding different theories about politics -- many of which have been devised by political scientists whose primary focus of study is not Latin America -- and examining their uses and limitations in understanding Latin America. Among the themes we will be examining are the relationships between economic growth, political culture, and democracy, the role of the military in politics, the political impact of new social movements (such as the women's movement and religious movements), theories of revolution, and understanding the prevalence of political corruption in the region. Along the way, we will analyze how political scientists attempt to develop hypotheses, gather data, and test theories. Prerequisite: Sophomore level or consent of the instructor.

POLS 659. Political Dynamics of Latin America. 3 Credits. S/W
Study of the institutions, processes, and special problems of selected Latin American countries. Prerequisite: Sophomore level or consent of the instructor.

POLS 660. Politics of Development: Latin America, Africa, and Asia. 3 Credits. NW S/W
A focus on topics pertinent to all of the underdeveloped areas such as the role of the military, styles of political leadership, land tenure systems, the role of the middle sectors, the nature of bureaucracy, the activity of the students, and foreign policy attitudes. Prerequisite: Sophomore level or consent of the instructor.

POLS 661. Politics of the Middle East. 3 Credits. NW S/W
Survey of domestic and international political developments in the Middle East. Topics include: emergence of the modern nation-state, the role of Islam, leadership patterns, competing political ideologies, prospects for democratization, foreign policy relations, and regional conflicts. Prerequisite: Sophomore level or consent of the instructor.

POLS 662. Gender and Politics in Africa. 3 Credits. S
This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women's health, gender and militarism. We also explore women's roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as AAAS 662 and WGSS 662.) Prerequisite: Sophomore level or consent of instructor.

POLS 663. Populism and Nationalism. 3 Credits. S
This course will acquaint students with the various understandings and manifestations of the important phenomena of populism and nationalism around the world, including the United States. These political phenomena and their existence around the world and at home highlight the importance of the concepts of identity, citizenship, and practices of exclusion among others. While nationalism and populism are far from synonymous, they both underscore the challenges in the dynamic interaction between politics, society and culture(s). Prerequisite: Junior/Senior standing or consent of instructor.

POLS 665. Politics in Africa. 3 Credits. W
A survey of politics in Africa, focused on the countries of sub-Saharan or Black Africa. The course includes a historical discussion of precolonial Africa, colonization and the creation of contemporary states, and the politics of independence, before examining contemporary political systems and the forces influencing patterns of politics on the continent. (Same as AAAS 600.) Prerequisite: POLS 150 or AAAS 105 or AAAS 305 or consent of instructor.

POLS 666. Political Economy of East Asia. 3 Credits. S
This course provides basic understanding of fiscal, monetarist, and trade politics; how governments in East Asia use them to pursue growth; the extent to which these governments follow or controvert economics to pursue growth; and how the performances of economies in East Asia relate to the U.S. and global economies. (Same as EALC 666.) Prerequisite: POLS 150.

POLS 667. Islam and Politics. 3 Credits. W
This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as GIST 667 and SOC 640.) Prerequisite: A principal course in sociology, POLS 150, or consent of instructor.

POLS 668. Reform in Contemporary China. 3 Credits. NW H/W
Examines the epochal changes that have occurred in China from Deng Xiaoping's rise to power in 1978 to the present. Includes a focus on the historical background of the revolutionary period before examining the political and economic changes that spawned the 1989 "prodemocracy" movement at Tiananmen. The course includes an analysis of the events of the 1990s focusing on U.S.-China political and economic relations and the destabilizing effects of inflation, infrastructural reform, political and
POLS 669. Topics in Comparative Politics: _____. 2-3 Credits. S
A study of selected contemporary problems of policy or politics affecting several countries. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

POLS 670. United States Foreign Policy. 3 Credits. S
An evaluation of the formulation of United States foreign policy in the post-World War II period. Economic, military, and diplomatic dimensions of policy; internal and external influences on policy; theories of foreign policy decision-making. Prerequisite: Nine hours of political science.

POLS 671. International Cooperation. 3 Credits. S
An examination of the gains possible from international cooperation and the barriers to achieving cooperation. Theoretical perspectives on international cooperation will be explored along with cases such as trade, the environment, arms control, and the European community. Prerequisite: Sophomore level or consent of the instructor.

POLS 672. International Political Economy. 3 Credits. S
Structural theories of the international political economy provide the framework for a consideration of the nature of hegemony, the management problem of multinational corporations, the role of international regimes and organizations, development, and dependency. Prerequisite: Junior level or consent of instructor.

POLS 673. International Organization. 3 Credits. S
International organizations are examined with special emphasis devoted to the United Nations. A central theme of the course rests upon the question of whether strengthened international organization offers the only alternative to further world wars. Prerequisite: Junior level or consent of instructor.

POLS 674. Global Justice and Foreign Policy. 3 Credits. H
This course reviews how philosophical perspectives elucidate the role ethics plays in foreign policy. It covers human rights doctrines, issues of economic and political justice, just war theory (jus ad bellum) and just conduct of war (jus en bello) and humanitarian intervention. Prerequisite: Junior level or consent of instructor.

POLS 675. Russian Foreign Policy. 3 Credits. S/W
Examination of the history of Soviet and Russian foreign policy and current issues of foreign policy in the Post-Soviet era. Analysis of foreign policy making in Russia and the other Post-Soviet states. Emphasis on the changed nature of international security problems after the cold war and on the role of foreign policy in economic development. Prerequisite: Junior level or consent of instructor.

POLS 676. International Relations of Asia. 3 Credits. S/W
An intensive study of the problems of ideological conflict, diplomatic relations, strategic arrangements, economic cooperation, and cultural exchange in East and Southeast Asia with special emphasis upon the roles of major world powers. (Same as EALC 676.) Prerequisite: Sophomore level or consent of the instructor.

POLS 677. U.S. National Security Policy. 3 Credits. S
An investigation into (1) how security policy is made; (2) the evolution of changing assumptions, strategies and goals since 1945; and (3) the present policy and its alternatives. Prerequisite: Sophomore level or consent of the instructor.

POLS 678. Chinese Foreign Policy. 3 Credits. S/W
In-depth examination of China's changing policies toward other countries with special emphasis on policy-making process, negotiating behavior, military strategy, economic relations, and cultural diplomacy. (Same as EALC 678 and GIST 678.) Prerequisite: Sophomore level or consent of the instructor.

POLS 679. International Conflict. 3 Credits. S
Examination of the historical and theoretical issues surrounding the sources and control of international conflict. Topics will include political and anthropological theories of conflict, the role of force in the international system, international law and just war approaches, nuclear conflict, arms control, and nonviolent alternatives to conflict. Prerequisite: Sophomore level or consent of the instructor.

POLS 680. International Relations in Political Philosophy. 3 Credits. S
A consideration of classical and modern theories of the international system, such as the writing of Thucydides, Machiavelli, twentieth-century realists, and others. Topics include, theories of the state, the role of ethics and normative judgments in the world order, the nature and use of power, the relationship between domestic and international politics. Prerequisite: Sophomore level or consent of the instructor.

POLS 682. Trafficking, Organized Crime and Terrorism: U.S. Government Response. 3 Credits. S
The course addresses multiple ways, in which international terrorism, organized crime, and trafficking intersect and new challenges that the trafficking-terrorism nexus poses to national and international security. It surveys national and international responses by the U.S. government to the crime-terror nexus. Prerequisite: POLS 110, or POLS 170, or POLS 150, or POLS 582, or POLS 625 or consent of instructor.

POLS 684. International Law: The State and the Individual. 3 Credits. S
International law has assumed an increasingly significant role in international life. This course will examine major law including (but not limited to): the changing status and role of the state; rights of minorities and self-determination; the environment; and human rights. The course will examine the central questions and the relevant international legal principles associated with each issue. Prerequisite: Junior level or consent of instructor.

POLS 685. International Law: Laws of Armed Conflicts. 3 Credits. S
This course examines the principles, roles, and functions of international law in the conduct of war. As the course reviews the development and application of the basic rules of armed conflict, several current issues and conflicts are addressed including: the legitimate use of force; the proper definitions of combatants and civilians; actions that constitute war crimes, the legality of new weapons technology, and, if the laws of armed conflict apply to the current “war on terrorism.” Prerequisite: Junior level or consent of instructor.

POLS 686. International Human Rights. 3 Credits. S
The course introduces students to historical and philosophical bases of contemporary human rights, theoretical approaches and methodological challenges to studying human rights questions, and acquaints them with the main topics, controversies, and tensions in the scholarship, practice and politics of human rights. (Same as GIST 686.) Prerequisite: Sophomore level or consent of instructor is required.

POLS 687. Introduction to Cyber Intelligence. 3 Credits. S
Course will provide instruction about the fundamental principles, impact and issues of cyber intelligence. Course will focus on cyber intelligence supporting operations in cyberspace (to include risk management functions, cyber defense, cyber espionage, and cyber-attack) as well as intelligence developed through cyberspace. Topics include cyber-threats, cyber defense, and cyber warfare as well as ethical and legal considerations. In addition to providing a foundation of understanding
The course will cover U.S. counterterrorism policy and practices historically and in the current era. For international (multinational) terrorism, the course will focus on how the historical actions of western powers contributed to the rise of terrorist groups, as well as the evolution of U.S. responses to these groups. Groups examined could include Hamas and Al-Qaeda. For domestic terrorism, the course will focus on the evolution of counterterrorism responses within the U.S., with particular attention to far-right terrorism, including the Oklahoma City Bombing. We will examine U.S. counterterrorism policy in the law, as well as in the practices of Intelligence, Department of Defense, and law enforcement. Prerequisite: POLS 125 or POLS 130 or permission from the instructor.

POLS 689. Topics in International Relations. 3 Credits. 
A study of selected problems in international relations. Course is repeatable for different topics. Prerequisite: Sophomore level or consent of the instructor.

POLS 690. Research and Diplomacy Lab. 3 Credits. S 
This course is designed to provide students with basic tools and an understanding of interdisciplinary social science research and to simultaneously partner with an innovative program implemented by the US Department of State. While learning about the research process and research design, students enrolling in this course team up with a group of four or more students to address a real world problem posed by a State Department officer with whom they have contact through videoconferencing throughout the semester. The team engages in extensive and systematic research to address the problem and presents their finding in a formal report presented to the State Department in the desired format. Prerequisite: GIST 220 or POLS 150 or POLS 170 or instructor permission.

POLS 691. Diplomacy Lab. 1 Credits. S 
This course is a supplemental research lab designed to partner with an sr level course offering an innovative program implemented by the US Department of State. Students enrolling in this course team up with a group of four or more students to address a real world problem posed by a State Department officer. This one-credit hour course is intended to function as a special lab project and must be taken in conjunction with a standard course that has a diplomacy lab option. Prerequisite: Instructor permission required.

POLS 692. International Security and Migration Policy. 3 Credits. S 
This course examines the politics of migration in receiving and sending states with special attention to the policies of developed democracies, including the US and UK, and the member states of the European Union and Schengen zone. It aims to introduce students to the theories of international migration with special attention to the migration-security nexus. Toward this end, topics cover neoclassical economic models of international migration, the effects of globalization on migration policies, and how perceived economic and security interests shape migration policies. Second, the course will cover the political consequences of migration for sending and receiving states, the economics and politics of migration, including remittances, public opinion, interest group politics, and the role of institutions. Third, the course encompasses different types of migration policies including visas, asylum and refugee admissions, and citizenship and naturalization. Finally, the course examines the foreign policy consequences of international migration, giving special consideration to the migration-security nexus. Throughout the course students are exposed to two major questions: (1) what are the effects of migration on both the states that receive immigrants and the states that send emigrants and (2) how do policymakers respond to these effects? Prerequisite: POLS 170.

POLS 705. Research Design for Political Science. 3 Credits. 
Introduction to the discipline of political science, the philosophy of science, research design, and data acquisition. Prerequisite: Graduate standing or consent of instructor.

POLS 706. Research Methods I. 3 Credits. 
An introduction to quantitative research methods, including probability theory, hypothesis-tests, and multiple regression. Includes regression diagnostics, the treatment of numeric and categorical predictors, interaction effects and elementary nonlinear models. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and lab sessions where computing applications are taught.

POLS 707. Research Methods II. 3 Credits. 
This course covers basic techniques for multivariate analysis, focusing on multiple regression. Topics include interpretation of regression statistics, diagnostics for common problems, dummy variables, instrumental variables, basic time series methods including adjustment for autocorrelated error, logistic models, and nonlinear modeling; additional techniques may be covered at the discretion of the instructor. Prerequisite: POLS 706.

POLS 708. Advanced Qualitative Research Methods. 3 Credits. 
An examination of qualitative research approaches frequently employed within political science. Topics may include the use of case studies, archival and documentary research, content analysis, interviewing and focus group techniques, ethnographic fieldwork, narrative and discourse analysis, and others. The course will examine the strengths and limitations of these methods in relation to major research traditions such as culturalist approaches, historical institutionalism, rational choice, and constructivism. Prerequisite: POLS 705 and either graduate standing or consent of instructor.

POLS 712. The Electoral Process. 3 Credits. 
A study of the characteristics of voting behavior and the influences upon such behavior in the United States. Emphasis is placed upon relevant research findings concerning partisanship and participation in politics, and on the methodology employed in the study of political behavior. Prerequisite: Twelve hours of political science and consent of instructor.

POLS 714. Politics of Human Trafficking. 3 Credits. 
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level.
POL 719. Topics in the American Political Institutions: ______. 3 Credits.
A seminar to be offered as occasion demands, dealing with, but not limited to special topics in the presidency, congress, and judicial processes. Prerequisite: Graduate standing or consent of instructor.

POL 754. Politics and Government of Russia and the Central Eurasian States. 3 Credits.
The collapse of the Soviet system and the problems of transforming a central planned authoritarian state into a free market democracy. The roles of ethnic and national tensions, economic decay, and cultural factors. Prerequisite: Eight hours in the social sciences and/or history, including POLS 150, or consent of instructor.

POL 782. Transnational Terrorism. 3 Credits.
The course provides a study of the patterns of transnational terrorism. First, it introduces students to the analytical study of terrorism. The course traces the evolution of terrorism, from the French Revolution to the modern day era. It also covers how scholarship defines, conceptualizes, and measures terrorism. The second goal is to introduce students to key scholarly debates within the literature. Some of the example questions we ask are: are democracies more vulnerable to terrorism? Does globalization render states open to being attacked by transnational actors? Is torture warranted as an effective counterterrorism tactic? The readings draw on empirical scholarship on the causes and consequences of transnational terrorism.

POL 789. Topics in International Relations: ______. 2-3 Credits.
A study of selected problems in international relations. Prerequisite: Consent of instructor.

POL 810. American Politics. 3 Credits.
A survey and critical examination of recent theoretical developments and research focusing on national institutions, electoral behavior, and policy-making processes. Emphasis is given to conceptualizing and analyzing the changing nature of the American political system.

POL 812. Political Psychology. 3 Credits.
A critical examination of the principal areas in current literature in political psychology, including psychological perspectives on mass political behavior, elite decision making, and international relations. Attention will be given to articulating and evaluating theories, constructing research questions and programs, and comparing methodologies.

POL 820. Policy Formulation and Adoption. 3 Credits.
Survey of the literature on the institutional, socioeconomic, and political forces influencing the formulation and adoption of public policy, as well as policy change, at all levels of government. Topics include problem definition, agenda setting, and the methods of decision-making. This is a research seminar so students will be required to conduct an original research project.

POL 825. Urban Policy and Administration. 3 Credits.
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. In so doing, the course examines a range of current substantive policy and administrative issues facing urban communities and governments. (Same as PUAD 825.)

POL 850. Introduction to Comparative Politics. 3 Credits.
This course provides a graduate level introduction to the field of Comparative Politics. Among topics it will survey are: the history and development of the field; classic works and major founding concerns of the field; methodological and epistemological debates; competing paradigms which had characterized Comparative Politics (structural-functionalist, culturalists, state-centrists, institutionalists, rational choice, and other); theory building and the role of area studies.

POL 851. Comparative Institutions and Government. 3 Credits.
This course provides a survey of the subfield of political institutions within Comparative Politics. Among the topics it will cover are: identifying regime types (democracy vs. non-democracy); comparative electoral systems; party systems; presidential vs. parliamentary systems; comparative legislatures; constitutional engineering and democratic transitions, and others. Prerequisite: POLS 850.

POL 857. Comparative Political Behavior. 3 Credits.
The course introduces students to the vast literature on comparative elections and comparative political parties. It pursues a twofold goal. First, the course surveys the large comparative electoral behavior literature. The themes covered in the first half include a discussion of why voters participate in elections, how voters form preferences, how psychological processes affect mass views, and how these, in turn, influence party preferences. Second, the course introduces students to the supply-side of politics and the role of political parties. This second part of the course, therefore, examines why parties form in the first place, what motives they have, what choices they offer in short, how and why parties compete. Together, the way voters form preferences and the logic of party formation illuminate a central element of the democratic process.

POL 870. International Relations. 3 Credits.
Critical evaluation of the major approaches to international relations and their application to conflict and conflict resolution, foreign policy, and international political economy.

POL 878. Conducting and Analyzing Fieldwork in Developing Countries. 3 Credits.
An introduction to fieldwork and surveys conducted in developing and non-democratic countries. The course covers the challenges of conducting interviews and surveys in these countries. The intent is to develop the research skills necessary for data collection and fieldwork as well as evaluating an analyzing survey data collected by other researchers in developing countries. Prerequisite: POLS 705 or equivalent or consent of the instructor.

POL 899. Thesis. 1-6 Credits.
Enrollment for writing thesis for master's degrees. Graded on a satisfactory progress/limited progress/no progress basis.

POL 904. Statistical Computing Foundations. 3 Credits.
This is an interdisciplinary course for social science researchers who need to develop routines to estimate and evaluate statistical models. It introduces tools for software development, primarily with the statistical programming language R (and related languages like C). Topics include
code organization and optimization, concurrent version management, LaTeX document preparation, and high-performance computing on the KU Linux cluster. Examples from various fields are considered. Prerequisite: Two courses in graduate level statistics and familiarity with R.

**POLS 906. Advanced Regression. 3 Credits.**
Covers topics appropriate for a second course in regression analysis. The content will vary according to the interest of the instructor and students, but will generally include such topics as multiple imputation of missing data, the generalized linear model (GLM), and specialized models for longitudinal data. The course will include a review of the principles of maximum likelihood estimation and applications of matrix algebra and differential calculus in statistical applications.

**POLS 909. Topics in Methodology: _____ 3 Credits.**
An intensive seminar in a method (or a variety of relevant methods) of theoretical or empirical research designed for Ph.D. students only. Emphasis is on deepening the understanding and ability to use advanced methods of analysis. Prerequisite: Admission to the Ph.D. program or consent of instructor.

**POLS 910. Research Seminar in American Government. 2-3 Credits.**
A faculty and advanced graduate student collegial research experience focusing on American politics, policy-making and administration, with faculty and students engaged in the production of scholarly research articles, books and conference papers. Topics will be chosen by individual students with consent of the seminar professor.

**POLS 911. The U.S. Congress. 3 Credits.**
This seminar employs various theoretical and methodological perspectives to explore the burgeoning post-1960 literature on Congress. Traditional subjects such as committees, parties, and elections are examined through applications of formal models, behavioral analyses, and participant observation.

**POLS 913. State and Local Politics. 3 Credits.**
A survey of the theories and research findings dealing with political parties in American politics, including third and minor parties. Topics to be covered include the development and evolution of the party system, the nature of party organization and the recruitment of party activists, the role of parties in the electoral process, the impact of parties upon public policy, and party reform.

**POLS 919. Topics in U.S. Government and Politics: _____ 2-3 Credits.**
A seminar to be offered as occasion demands, dealing with, but not limited to, bureaucracy, legislative policy, federalism, and special problems in U.S. politics.

**POLS 940. Teaching Political Science. 1 Credit.**
A discussion of teaching methods and approaches. Students are expected to develop a personal teaching portfolio that describes their outlook on teaching political science and provides sample teaching materials. This course must be taken by all graduate teaching assistants and assistant instructors during the first year of their appointment. Grades are issued on a pass/fail basis.

**POLS 954. Politics in Post-Soviet States. 3 Credits.**
In-depth study of the politics of Russia, Ukraine, and the other Post-Soviet states. Focus on the problems of transforming a centrally planned authoritarian system to a free market democracy.

**POLS 955. Politics of Advanced Industrial Societies. 3 Credits.**
Theory and research on the patterns of behavior that characterize the politics of North America, Europe, and developed regions of Asia. Topics include corporatism and alternative forms of interest intermediation, economic theories of socialization and electoral choice, and the role of the state; its finances, adaptation, and the problem of power and legitimacy. Prerequisite: POLS 850 or permission of instructor.

**POLS 959. Topics in Comparative Politics: _____ 1-3 Credits.**
Study of selective topics in comparative government and politics.

**POLS 960. Politics of Developing Countries. 2-3 Credits.**
Designed to acquaint students with the principal theories, approaches and types of empirical analysis generally employed to explain and interpret the creation and implementation of foreign policy. Topics include rational actor models, collective and bureaucratic processes, societal influences, cognitive and psychological factors, and comparative foreign policy. Prerequisite: POLS 870. An undergraduate United States foreign policy class is recommended.

**POLS 972. Theories of International Conflict. 3 Credits.**
An in-depth survey of theories and research on international conflict. Topics will range from anthropological studies of conflict in primitive societies to contemporary theories of nuclear conflict. The course will also cover current empirical research methodology and results of research on international conflict, as well as models of conflict processes. Prerequisite: POLS 870.

**POLS 973. International Political Economy. 3 Credits.**
Provides an eclectic survey of major developments in the field. Topics include the intellectual origins of IPE; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., IMF, IBRD, MNCs, etc.). (Same as SOC 873.) Prerequisite: POLS 870 or consent of instructor.

**POLS 977. Ethics in International Relations Theory. 3 Credits.**
This course examines how issues of International Ethics have been treated in International Relations theory. This course begins by reviewing several theoretical perspectives of International Relations and how these perspectives have historically understood the role ethics plays in international politics. By the end of the semester, students should have a firm understanding of (1) the salient issues of international ethics in world politics and (2) whether and how IR scholars have (theoretically and methodologically) placed those issues in their research paradigms. The issues areas the course will cover include, but are not limited to, human rights doctrines, issues of economic and political justice, just war theory (jus ad bellum) and just conduct of war (jus in bello), and humanitarian intervention. The course will assess the role international law has played in stemming and/or punishing human rights abuses. Students will review several historical cases of genocide, as well as several cases of truth and reconciliation commissions.

**POLS 979. Topics in International Relations: _____ 3 Credits.**
To be offered periodically when topics of special interest arise.

**POLS 980. International Organizations. 3 Credits.**
Considers theoretical and empirical work on international governmental and non-governmental organizations (IOs). Specifically highlights the evolving scholarly debates regarding the function, design, and delegation of authority to IOs as well as their behavior and change.
Explores these questions in depth through a wide range of cases, including comprehensive coverage of the United Nations, Bretton Woods Institutions, and the European Union, and their activities in issue areas concerning international security, trade, finance, development, humanitarian aid, and the environment.

**POLS 993. Directed Readings. 1-5 Credits.**
Designed to meet the needs of graduate students whose study in political science cannot be met with present course. Prerequisite: Consent of instructor.

**POLS 997. Preparation for the Comprehensive Examination. 1-6 Credits.**
An independent reading course for students preparing to take the Ph.D. comprehensive examination. May be taken for two semesters or six credits, whichever comes first. Graded A, B, C, D, or F depending on the results of the comprehensive examination.

**POLS 999. Doctoral Dissertation. 1-15 Credits.**
Enrollment for writing doctoral dissertations. Graded on a satisfactory progress/limited progress/no progress basis.

## Bachelor of Arts and Bachelor of General Studies in Political Science

### Why study political science?
Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe. In the broadest sense, political science is the study of governments and governmental procedures. Political Science is as old as civilization, because people always have been interested in their government and in their leaders. But political science as it is thought today, as one of the social sciences, is a comparatively new discipline. It developed in the United States during the last century as political scientists developed an ability to make increasingly scientific observations of government. Political scientists are concerned with origins and sources of governmental organizations, their growth, and their decline, as well as with the processes and structure of government.

Ask yourself, Am I interested in public affairs? Am I a good analytical and critical thinker? Am I curious about the world and it's workings? Do I communicate well orally and in writing? Do I want to be a knowledgeable citizen? Am I interested in the relationship between government and the people? Am I curious about how decisions and made and how conflicts are resolved?

## Undergraduate Admission

### Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

## Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

### Requirements for the B.A. or B.G.S. Major

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td>Political Science Core Knowledge and Skills</td>
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<tr>
<td>Majors</td>
<td>complete a course in each of the following:</td>
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<tr>
<td></td>
<td>Introduction to U.S. Politics. Satisfied by one of the following:</td>
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<td>POLS 110</td>
<td>Introduction to U.S. Politics</td>
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<tr>
<td>or POLS 111</td>
<td>Introduction to U.S. Politics-Honors</td>
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<td></td>
<td>Introduction to Comparative or International Politics. Satisfied by one of the following:</td>
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<td>POLS 150</td>
<td>Introduction to Comparative Politics</td>
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<tr>
<td>or POLS 151</td>
<td>Introduction to Comparative Politics-Honors</td>
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<td>or POLS 170</td>
<td>Introduction to International Politics</td>
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<tr>
<td>or POLS 171</td>
<td>Introduction to International Politics-Honors</td>
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<tr>
<td>Diversity and Social Justice. Satisfied by one of the following:</td>
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<td>POLS 301</td>
<td>Introduction to Political Theory</td>
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<tr>
<td>or POLS 308</td>
<td>Topics in Social Justice: _____</td>
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<tr>
<td>or POLS 501</td>
<td>Contemporary Political Thought</td>
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<tr>
<td>or POLS 612</td>
<td>Psychology in Politics</td>
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<td>or POLS 630</td>
<td>Politics of Identity</td>
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<td>or POLS 640</td>
<td>Politics of Reproductive Policy</td>
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<tr>
<td>or POLS 644</td>
<td>Justice and Public Policy in Democratic Societies</td>
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<tr>
<td>or POLS 674</td>
<td>Global Justice and Foreign Policy</td>
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<tr>
<td>or POLS 680</td>
<td>International Relations in Political Philosophy</td>
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<tr>
<td>or POLS 686</td>
<td>International Human Rights</td>
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<td>Political Science Methods of Inquiry. Satisfied by:</td>
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<tr>
<td>POLS 306</td>
<td>Political Science Methods of Inquiry</td>
<td>3</td>
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<td>Political Science Required Distribution of Electives</td>
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<tr>
<td>Majors</td>
<td>complete an elective course from at least 2 different subfields below.</td>
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<td></td>
<td>Political Philosophy &amp; Empirical Theory</td>
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<td>Satisfied by one of the following:</td>
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<tr>
<td>POLS 501</td>
<td>Contemporary Political Thought</td>
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<tr>
<td>or POLS 301</td>
<td>Introduction to Political Theory</td>
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<td>POLS 502</td>
<td>History of Political Thought</td>
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<td>POLS 503</td>
<td>Politics in Literature</td>
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<td>POLS 600</td>
<td>Contemporary Feminist Political Theory</td>
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<td>POLS 603</td>
<td>Democratic Theory</td>
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<td>POLS 607</td>
<td>Modern Political Theory</td>
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<td>POLS 609</td>
<td>Topics in Political Theory: _____</td>
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<td>POLS 626</td>
<td>Political Polling and Survey Research</td>
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<td>POLS 644</td>
<td>Justice and Public Policy in Democratic Societies</td>
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<tr>
<td>POLS 680</td>
<td>International Relations in Political Philosophy</td>
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### U.S. Political Institutions & Processes
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<table>
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<td>POLS 512</td>
<td>Latino Politics in the U.S.</td>
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<td>POLS 515</td>
<td>American Political Parties</td>
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<tr>
<td>POLS 516</td>
<td>Public Opinion and American Democracy</td>
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<tr>
<td>POLS 520</td>
<td>Political Campaigns</td>
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<td>POLS 521</td>
<td>Mass Media and Politics</td>
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<tr>
<td>POLS 610</td>
<td>Constitutional Law: Governmental Powers</td>
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<tr>
<td>POLS 611</td>
<td>Constitutional Law: Civil Liberties</td>
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<td>POLS 612</td>
<td>Psychology in Politics 1</td>
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<td>POLS 613</td>
<td>Comparative U.S. State Politics</td>
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<td>POLS 614</td>
<td>Urban Politics</td>
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<td>POLS 615</td>
<td>Campaigns and Elections</td>
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<td>POLS 616</td>
<td>Interest Group Politics</td>
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<td>POLS 617</td>
<td>The Congress</td>
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<td>POLS 618</td>
<td>The Presidency</td>
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<td>POLS 619</td>
<td>Topics in American Politics: ______</td>
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<td>POLS 620</td>
<td>Formulation of Public Policy 1</td>
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<td>POLS 630</td>
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<td>POLS 645</td>
<td>Corruption, Crisis and Scandal</td>
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<td>POLS 667</td>
<td>Islam and Politics</td>
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### Public Policy
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<td>Introduction to Public Administration</td>
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<td>POLS 528</td>
<td>Environmental Justice and Public Policy</td>
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<td>POLS 620</td>
<td>Formulation of Public Policy 1</td>
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<td>POLS 621</td>
<td>Public Policy Analysis</td>
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<td>POLS 623</td>
<td>The Politics of Social Policy</td>
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<td>POLS 624</td>
<td>Environmental Politics and Policy</td>
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<td>POLS 625</td>
<td>Extremist Groups and Government Response</td>
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<td>POLS 628</td>
<td>The Politics of Public Health</td>
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### Foreign Governments & Comparative Politics
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<td>Liberation in Southern Africa</td>
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<td>POLS 562</td>
<td>Women and Politics</td>
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<td>POLS 563</td>
<td>Comparative Political Economy</td>
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<td>POLS 564</td>
<td>Elections and Political Parties Around the World</td>
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<td>Political Change in Asia</td>
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<td>POLS 600</td>
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<td>Justice and Public Policy in Democratic Societies</td>
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<td>POLS 650</td>
<td>Palestinians and Israelis</td>
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<tr>
<td>POLS 652</td>
<td>Politics in Europe</td>
</tr>
<tr>
<td>POLS 653</td>
<td>Gender, War, and Peace</td>
</tr>
<tr>
<td>POLS 654</td>
<td>Politics and Government of Russia and the Central Eurasian States</td>
</tr>
<tr>
<td>POLS 655</td>
<td>Politics of East-Central Europe</td>
</tr>
<tr>
<td>POLS 656</td>
<td>Government and Politics of East Asia</td>
</tr>
<tr>
<td>POLS 657</td>
<td>Government and Politics of Southeast Asia</td>
</tr>
<tr>
<td>POLS 658</td>
<td>Theories of Politics in Latin America</td>
</tr>
<tr>
<td>POLS 659</td>
<td>Political Dynamics of Latin America</td>
</tr>
<tr>
<td>POLS 660</td>
<td>Politics of Development: Latin America, Africa, and Asia</td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
</tr>
<tr>
<td>POLS 665</td>
<td>Politics in Africa</td>
</tr>
<tr>
<td>POLS 666</td>
<td>Political Economy of East Asia</td>
</tr>
<tr>
<td>POLS 667</td>
<td>Islam and Politics</td>
</tr>
<tr>
<td>POLS 668</td>
<td>Politics and Society in China</td>
</tr>
<tr>
<td>POLS 669</td>
<td>Topics in Comparative Politics: ______</td>
</tr>
</tbody>
</table>

### International Relations
Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 612</td>
<td>Psychology in Politics 1</td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
</tr>
<tr>
<td>POLS 670</td>
<td>United States Foreign Policy</td>
</tr>
<tr>
<td>POLS 671</td>
<td>International Cooperation</td>
</tr>
<tr>
<td>POLS 672</td>
<td>International Political Economy</td>
</tr>
<tr>
<td>POLS 673</td>
<td>International Organization</td>
</tr>
<tr>
<td>POLS 674</td>
<td>Global Justice and Foreign Policy</td>
</tr>
<tr>
<td>POLS 675</td>
<td>Russian Foreign Policy</td>
</tr>
<tr>
<td>POLS 676</td>
<td>International Relations of Asia</td>
</tr>
<tr>
<td>POLS 677</td>
<td>U.S. National Security Policy</td>
</tr>
<tr>
<td>POLS 678</td>
<td>Chinese Foreign Policy</td>
</tr>
<tr>
<td>POLS 679</td>
<td>International Conflict</td>
</tr>
<tr>
<td>POLS 680</td>
<td>International Relations in Political Philosophy</td>
</tr>
<tr>
<td>POLS 684</td>
<td>International Law: The State and the Individual</td>
</tr>
<tr>
<td>POLS 685</td>
<td>International Law: Laws of Armed Conflicts</td>
</tr>
<tr>
<td>POLS 689</td>
<td>Topics in International Relations:</td>
</tr>
<tr>
<td>POLS 692</td>
<td>International Security and Migration Policy</td>
</tr>
</tbody>
</table>

### Political Science Required Electives
Majors must complete 4 elective courses (12 hours), of which 3 courses (9 hours) must be upper-level courses.

### Capstone Experience
Recommended for majors but not required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 493</td>
<td>Directed Readings</td>
</tr>
<tr>
<td>POLS 494</td>
<td>Washington Semester Intern Seminar</td>
</tr>
<tr>
<td>POLS 495</td>
<td>Topeka Semester Intern Seminar</td>
</tr>
<tr>
<td>POLS 496</td>
<td>Washington Semester Field Work</td>
</tr>
<tr>
<td>POLS 497</td>
<td>Topeka Semester Field Work</td>
</tr>
<tr>
<td>POLS 498</td>
<td>Honors Thesis</td>
</tr>
<tr>
<td>POLS 499</td>
<td>Capstone Research/Field Work Experience</td>
</tr>
</tbody>
</table>

### Honors Experience
Recommended for students with a minimum grade point average of 3.5 in Political Science coursework and 3.25 overall. These averages must be achieved before the final semester.

### Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Departmental Honors

1. Eligibility:

Undergraduate majors in the department with senior standing, a minimum 3.5 GPA in Political Science and a minimum 3.25 overall GPA are eligible to enroll in departmental honors work. These GPA levels also must be achieved at the end of the candidates’s final semester for both in-residence and combined work.

2. Procedures:

Majors wishing to pursue the honors program must file a declaration of intent form with the department’s Undergraduate Studies Coordinator no later than at enrollment for the final semester of undergraduate study. Normally students will be expected to enroll at the beginning of their senior year of study, for two consecutive semesters.

Students pursuing honors will enroll in POLS 498, Honors Thesis, with an individual faculty member who has agreed to serve as thesis adviser, thus accepting responsibility for directing the honors research project. Enrollment for 3 hours for two consecutive semesters in POLS 498 is usually expected. In unusual cases students may enroll for 6 hours in one semester, doing all the thesis work in that period.

3. Requirements for graduation with honors:

Completion of a written research project which has been read and approved by a committee of at least three members of the College faculty (of whom at least two must be political science faculty, including thesis advisor). The committee will then certify successful completion of the honors thesis enrollment. Work considered by the project director to be less than “A” quality will not be considered for honors and will not be presented to the committee for approval. The written report is expected to be more than an extended term paper, while something less than a graduate-level thesis. It must reflect analysis and perceptive understanding of the subject matter being studied.

4. Research timetable:

It is strongly recommended that students follow a relatively strict schedule in completing their research studies, in order to avoid having the honors oral examination come very late in the final semester. The following timetable is recommended:

1. A research design should be submitted by the middle of the first semester of enrollment.
   a. At the latest, the first draft of the written report should be completed approximately 2 months before the end of the semester in which honors are to be awarded (e.g., March 15, or October 15)
   b. At the latest, the final draft of the written report should be completed 1 month before the end of the semester in which honors are to be awarded.

BA in Political Science

Below is a sample 4-year plan for students pursuing the BA in Political Science. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication, BA Writing I)¹</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing I)¹</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>POLS 110 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>POLS 102</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st Semester of Another Language, unless req for mjr (BA Second Language)⁶</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>POLS 150 or 170 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
<td>POLS 301 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### BGS in Political Science

Below is a sample 4-year plan for students pursuing the BGS in Political Science. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>POLS 102 (Recommended for Majors)</td>
<td>1</td>
</tr>
<tr>
<td>POLS 110 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Hours | 15 | 15 |

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>POLS 301 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>POLS 150 or 170 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Hours | 15 | 15 |

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS Elective from Unique Sub-Field 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>POLS Elective 100+ (Major Requirement)</td>
<td>3</td>
<td>POLS Elective from Unique Sub-Field 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>POLS Elective 100+ (Major Requirement)</td>
<td>3</td>
<td>POLS Elective from Unique Sub-Field 300+ (Major Requirement)</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Hours | 15 | 15 |

---

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

---

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. For a list sub-fields and courses used to fulfill the sub-field requirements, and POLS 400+ elective requirements, review the degree requirements tab in the catalog, or see your advisor.
3. A student may count no more than 6 hours toward the major from the following courses combined: POLS 493, POLS 494, POLS 495, POLS 496, POLS 497, or POLS 498.
4. POLS 493, POLS 494, POLS 495, POLS 496, POLS 497, and POLS 498 are recommended capstone courses for majors.
5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.
opportunities to explore other majors and/or minors. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Second Area of Study/ Elective/Degree/Junior-Senior Hours
3 POLS 306 (Major Requirement) 3

Second Area of Study/ Elective/Degree/Junior-Senior Hours
3 Second Area of Study/ Elective/Degree/Junior-Senior Hours

Second Area of Study/ Elective/Degree/Junior-Senior Hours
3 Second Area of Study/ Elective/Degree/Junior-Senior Hours

Senior Hours
15

Fall Hours Spring Hours
POLS Elective 300+ (Major Requirement) 3 POLS Elective 300+ (Major Requirement) 3
POLS Elective 300+ (Major Requirement) 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours
Second Area of Study/ Elective/Degree/Junior-Senior Hours 3
Goal 6 Integration and Creativity 3,4 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours
BGS Career Course (BGSC - may be met by POLS 494, 495, 496, 497, 600, or 640) 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours

Total Hours 120

1 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

2 For a list of sub-fields and courses used to fulfill the sub-field requirements, and POLS 300+ elective requirements, review the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/political-science/ba-bgs/#requirementstext) tab in the catalog, or see your advisor.

3 A student may count no more than 6 hours toward the major from the following courses combined: POLS 493, POLS 494, POLS 495, POLS 496, POLS 497, or POLS 498.

4 POLS 493, POLS 494, POLS 495, POLS 496, POLS 497, and POLS 498 are recommended capstone courses for majors.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal.

Minor in Intelligence and National Security Studies

The minor in Intelligence & National Security Studies in Political Science supports the Defense Intelligence Agency’s (DIA) Intelligence Community Centers for Academic Excellence mission, which is to enhance the recruitment & retention of an ethically and culturally diverse workforce with capabilities critical to U.S. national security interests. DIA has identified specific core courses as fundamental to the academic preparation for entry-level positions within the U.S. Intelligence Community. This minor directly supports these core requirements. Students complete six courses (18 hours), four of which are the required core for the INSS minor (12 hours).

• To complete the INSS minor in Political Science, students complete six courses (18 hours), four of which are the required core for the INSS minor (12 hours) and available through KU Online

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 125</td>
<td>Intelligence: Supporting National Security</td>
<td>3</td>
</tr>
<tr>
<td>POLS 130</td>
<td>US Intelligence Community</td>
<td>3</td>
</tr>
<tr>
<td>POLS 325</td>
<td>Intelligence Analytics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 345</td>
<td>Counterintelligence</td>
<td>3</td>
</tr>
</tbody>
</table>

In addition to the four core courses, students then complete two additional courses related to INSS (6 hours) from the list below (Each course is offered at least once per year on the KU Lawrence campus):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 625</td>
<td>Extremist Groups and Government Response</td>
<td>3</td>
</tr>
<tr>
<td>POLS 652</td>
<td>Politics in Europe</td>
<td>3</td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
<td>3</td>
</tr>
<tr>
<td>POLS 675</td>
<td>Russian Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 677</td>
<td>U.S. National Security Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 678</td>
<td>Chinese Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 682</td>
<td>Trafficking, Organized Crime and Terrorism: U.S. Government Response</td>
<td>3</td>
</tr>
<tr>
<td>POLS 687</td>
<td>Introduction to Cyber Intelligence</td>
<td>3</td>
</tr>
<tr>
<td>POLS 688</td>
<td>U.S. Counterterrorism Approaches to International and Domestic Terror Groups</td>
<td>3</td>
</tr>
<tr>
<td>POLS 692</td>
<td>International Security and Migration Policy</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 358</td>
<td>Introduction to Geographic Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 526</td>
<td>Remote Sensing of Environment</td>
<td>4</td>
</tr>
<tr>
<td>POLS 656</td>
<td>Government and Politics of East Asia</td>
<td>3</td>
</tr>
<tr>
<td>POLS 676</td>
<td>International Relations of Asia</td>
<td>3</td>
</tr>
<tr>
<td>POLS 633</td>
<td>Iran, Turkey, and the Kurds</td>
<td>3</td>
</tr>
<tr>
<td>POLS 667</td>
<td>Islam and Politics</td>
<td>3</td>
</tr>
<tr>
<td>GIST 371</td>
<td>Environmental Geopolitics</td>
<td>3</td>
</tr>
</tbody>
</table>

Additionally, participation in 10 hours of campus activities with INSS focus, such as lectures, workshops and other events, will be required. As designed, the INSS minor will fulfill the majority of the required ICCAE Knowledge Units within the core and optional intelligence topics categories. Upon completion of the minor, students will have in-depth knowledge of the intelligence community, intelligence collection, intelligence analysis, and threats the United States faces in the public and private sectors.
Minor in Political Science

The minor is a general political science minor that allows students to take coursework across the different subfields in political science. This provides options to students beyond the major to broaden student learning and understanding in an important discipline that will impact their lives beyond college. Students in more than one minor offered through the political science department cannot overlap more than one course between two minors.

Requirements for the Minor

Students in more than one minor offered through the Political Science department cannot overlap more than one course between two minors. (See also general regulations for minors in the Undergraduate tab of the Liberal Arts and Sciences section of the catalog)

General Option

18 credit hours of coursework in Political Science, 12 of which must be taken at the junior/senior level.

Global Security Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 170</td>
<td>Introduction to International Politics</td>
<td>3</td>
</tr>
<tr>
<td>or POLS 171</td>
<td>Introduction to International Politics Honors</td>
<td></td>
</tr>
<tr>
<td>or POLS 110</td>
<td>Introduction to U.S. Politics</td>
<td></td>
</tr>
<tr>
<td>or POLS 111</td>
<td>Introduction to U.S. Politics Honors</td>
<td></td>
</tr>
</tbody>
</table>

and

Elective Upper Division Courses (5 courses-15 credits- must be selected from this list)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 582</td>
<td>Transnational Terrorism</td>
<td></td>
</tr>
<tr>
<td>POLS 625</td>
<td>Extremist Groups and Government Response</td>
<td></td>
</tr>
<tr>
<td>POLS 661</td>
<td>Politics of the Middle East</td>
<td></td>
</tr>
<tr>
<td>POLS 667</td>
<td>Islam and Politics</td>
<td></td>
</tr>
<tr>
<td>POLS 670</td>
<td>United States Foreign Policy</td>
<td></td>
</tr>
<tr>
<td>POLS 672</td>
<td>International Political Economy</td>
<td></td>
</tr>
<tr>
<td>POLS 673</td>
<td>International Organization</td>
<td></td>
</tr>
<tr>
<td>POLS 677</td>
<td>U.S. National Security Policy</td>
<td></td>
</tr>
<tr>
<td>POLS 682</td>
<td>Trafficking, Organized Crime and Terrorism: U.S. Government Response</td>
<td></td>
</tr>
<tr>
<td>POLS 689</td>
<td>Topics in International Relations:</td>
<td></td>
</tr>
<tr>
<td>POLS 493</td>
<td>Directed Readings</td>
<td></td>
</tr>
</tbody>
</table>

Minor Hours & GPA

While completing all required courses, majors must also meet each of the following hour and grade point average minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Minor in Public Policy in the United States

Students majoring in various social science disciplines are encouraged to minor in Public Policy. Students earning a BA or BGS can obtain a minor; the minor consists of 18 credit hours.

Requirements for the Public Policy in the U.S. Minor

The Public Policy in the U.S. minor involves course work focused on domestic U.S. public policy and the political environment surrounding the making and implementation of policy.

*NOTE - Students in more than one minor offered through the political science department cannot overlap more than one course between two minors.

Public Policy in U.S. Minor Core

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 110</td>
<td>Introduction to U.S. Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 320</td>
<td>Introduction to Public Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

Public Policy in U.S. Minor Electives

At least 12 hours of POLS courses from approved list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 493</td>
<td>Directed Readings (if content is appropriate)</td>
<td>1-3</td>
</tr>
<tr>
<td>POLS 528</td>
<td>Environmental Justice and Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 563</td>
<td>Comparative Political Economy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 613</td>
<td>Comparative U.S. State Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 614</td>
<td>Urban Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 620</td>
<td>Formulation of Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 621</td>
<td>Public Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>POLS 623</td>
<td>The Politics of Social Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 624</td>
<td>Environmental Politics and Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 625</td>
<td>Extremist Groups and Government Response</td>
<td>3</td>
</tr>
<tr>
<td>POLS 628</td>
<td>The Politics of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>POLS 629</td>
<td>Topics in Public Policy:</td>
<td>1-3</td>
</tr>
<tr>
<td>POLS 630</td>
<td>Politics of Identity</td>
<td>3</td>
</tr>
<tr>
<td>POLS 640</td>
<td>Politics of Reproductive Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 644</td>
<td>Justice and Public Policy in Democratic Societies</td>
<td>3</td>
</tr>
<tr>
<td>POLS 670</td>
<td>United States Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 672</td>
<td>International Political Economy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 673</td>
<td>International Organization</td>
<td>3</td>
</tr>
<tr>
<td>POLS 675</td>
<td>Russian Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 677</td>
<td>U.S. National Security Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 720</td>
<td>The Scope of Public Policy (graduate level)</td>
<td>3</td>
</tr>
</tbody>
</table>
scientists are concerned with the origins and sources of governmental ability to make increasingly scientific observations of government. Political science, as a comparatively new discipline, developed in the social sciences. It developed in the late 19th century as a distinct field of inquiry. However, the study of government and governance, which involves understanding the processes and structures that govern human interactions, has a much longer history, dating back to ancient civilizations.

Political science is as old as civilization, because people always have been interested in their government and their leaders. But political science as it is thought of today, as one of the social sciences, is a comparatively new discipline. It developed in the United States during the last century as political scientists developed an ability to make increasingly scientific observations of government. Political scientists are concerned with the origins and sources of governmental organizations, their growth, and their decline, as well as with the processes and structure of government.

What's special about the Political Science graduate program?
Our medium size allows faculty to teach seminars on a variety of topics with individualized mentoring in and out of the classroom. Graduate students work closely with faculty on research and themselves publish independent papers and win fellowships and awards. This productivity is complemented by a diverse group of students, many coming from around the world. In addition, by the time of graduation most of our graduate students will teach their own classes. We believe teaching is important part of a graduate education and serves our students well in an increasingly competitive job market. Our unique Thompson Summer Scholarship Research Program offers students the opportunity to engage in a genuine collaborative research project with selected faculty. Working with faculty on a variety of research topics, students maximize their potential by earning a competitive stipend and sharpening their research skills across the summer months. The program has generated many conference papers and publications as well. Our department therefore offers unparalleled access to our faculty and valuable opportunities in both research and teaching.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
The MA program in Political Science accepts applications for the fall semester only. Applications and all required supplemental materials must be submitted by the deadlines listed on the program's website (https://kups.ku.edu/admissions/) to be considered for admission.

Application Materials
Applicants should upload the supporting application documents listed below to the online application (https://gradapply.ku.edu/apply/). There is no need to send copies of application materials directly to the Department of Political Science.

- Copy of official transcripts (http://graduate.ku.edu/transcripts/) from all colleges or universities attended
- Statement of purpose (no longer than two pages, single spaced)
- Resume or CV
- Official GRE score report no more than five years old (this requirement is waived for applicants who will hold an MA from an institution which conducts all instruction entirely in English by the beginning of their first term in the program)
- Three letters of recommendation (preferably from faculty members)

Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Junior/Senior Hours in Residence
Satisfied by a minimum of 12 hours of KU resident credit in the minor.

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Undergraduate Certificate in Intelligence and National Security Studies
The undergraduate certificate in Intelligence & National Security Studies (INSS) introduces students to the highly desired skills and competencies necessary to work within the US Intelligence Community. Combining courses and extracurricular activities, the INSS certificate demonstrates to future employers that you are knowledgeable about the dynamic, multidisciplinary field of intelligence, it's role in security and diplomacy, and the ethics and laws governing intelligence collection and dissemination. Open only to undergraduates.

Students must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 125</td>
<td>Intelligence: Supporting National Security</td>
<td>3</td>
</tr>
<tr>
<td>POLS 130</td>
<td>US Intelligence Community</td>
<td>3</td>
</tr>
<tr>
<td>POLS 325</td>
<td>Intelligence Analytics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 345</td>
<td>Counterintelligence</td>
<td>3</td>
</tr>
</tbody>
</table>

Students enrolled in the certificate program are also required to participate in 20 hours of campus activities through workshops, lectures, etc. that have an intelligence/national security focus (the effort to complete these experience points will not exceed 2 credit hours).

Master of Arts in Political Science
Why study political science?
Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe. In the broadest sense, political science is the study of governments and governmental procedures. Political science is as old as civilization, because people always have been interested in their government and in their leaders. But political science as it is thought of today, as one of the social sciences, is a comparatively new discipline. It developed in the United States during the last century as political scientists developed an ability to make increasingly scientific observations of government. Political scientists are concerned with the origins and sources of governmental
Non-native speakers of English must meet KU's English proficiency ([https://gradapply.ku.edu/english-requirements/](https://gradapply.ku.edu/english-requirements/)) requirements.

**Contact**

Visit the Admissions ([https://kups.ku.edu/admissions/](https://kups.ku.edu/admissions/)) page on the Department of Political Science website for detailed information about the application process.

**M.A. Degree Requirements**

All candidates for the M.A. degree must complete, at a satisfactory level,

1. 30 semester hours of graduate credit, 21 of which must be earned in courses at the 700 level or above;  
2. Research methods through POLS 706; and  
3. A comprehensive master’s oral examination.

The student selects a principal advisor from the Graduate Faculty by the end of the first year to choose courses and prepare for the comprehensive examination. The examination is administered by a 3-person M.A. committee that includes the student’s principal advisor and 2 other members of the KU Graduate Faculty selected by the student in consultation with the principal advisor. One member of the committee may be from another department (including Special Status members of the Graduate Faculty).

Directed readings courses in excess of 5 hours cannot be counted toward the 30 hours required for the degree. With prior written approval, candidates may count up to 6 graduate hours taken outside the department (either at KU or at another institution accredited by the North Central Association of Colleges and Schools) toward the 30 hours required for the degree.

Applicants who have not completed at least 15 undergraduate credit hours in political science may be admitted with the provision that they complete additional hours of course work.

All candidates must fulfill the requirements of either the thesis or the non-thesis option for the Master of Arts degree.

**Thesis Option**

Upon completion and certification of an acceptable thesis, candidates may count 6 credit hours of thesis enrollment toward the 30 credit hours required for the M.A. degree.

**Non-thesis Option**

Candidates may substitute a minimum of two 800- or 900-level research courses plus satisfactory performance on a comprehensive written examination administered by the three-person M.A. committee before the oral examination.

**Doctor of Philosophy in Political Science**

**Why study political science?**

Because political science advances our understanding of politics, power, governance, and public policy in the United States and across the globe. In the broadest sense, political science is the study of governments and governmental procedures. Political science is as old as civilization, because people always have been interested in their government and in their leaders. But political science as it is thought of today, as one of the social sciences, is a comparatively new discipline. It developed in the United States during the last century as political scientists developed an ability to make increasingly scientific observations of government. Political scientists are concerned with the origins and sources of governmental organizations, their growth, and their decline, as well as with the processes and structure of government.

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**Admission to Graduate Studies**

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Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

The PhD program in Political Science accepts applications for the fall semester only. Applications and all required supplemental materials must be submitted by the deadlines listed on the program's website ([https://kups.ku.edu/political-science-graduate-program/](https://kups.ku.edu/political-science-graduate-program/)) to be considered for admission.

**Application Materials**

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- Copy of official transcripts ([http://graduate.ku.edu/transcripts/](http://graduate.ku.edu/transcripts/)) from all colleges or universities attended  
- Statement of purpose (no longer than two pages, single spaced)  
- Resume or CV
Ph.D. Degree Requirements

Students who complete the Master of Arts degree may be eligible to pursue the PhD degree. Students must complete coursework in two major subfields, one minor subfield, and research methods.

Major Subfields

The major subfields must be drawn from the four subfields listed below (American Politics, Comparative Politics, International Relations, and Public Policy). Before their first attempt at the written preliminary examination in any subfield, all doctoral students must complete at least four graduate level courses courses in that field, three of which are at the 700 level or above. Enrollment in directed research covering a particular subfield may be substituted for one of the four courses/seminars. Students should consult their faculty advisor to plan a schedule of courses in each of their major subfields to provide adequate preparation for the written preliminary examination based on the requirements outlined below.

American Politics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 810</td>
<td>American Politics</td>
<td>3</td>
</tr>
<tr>
<td>3 elective courses selected in consultation with faculty advisor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comparative Politics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 850</td>
<td>Introduction to Comparative Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLS 851</td>
<td>Comparative Institutions and Government</td>
<td>3</td>
</tr>
<tr>
<td>POLS 957</td>
<td>Comparative Political Behavior</td>
<td>3</td>
</tr>
<tr>
<td>one elective course selected in consultation with faculty advisor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

International Relations

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 870</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POLS 972</td>
<td>Theories of International Conflict</td>
<td>3</td>
</tr>
<tr>
<td>POLS 973</td>
<td>International Political Economy</td>
<td>3</td>
</tr>
<tr>
<td>one elective course selected in consultation with faculty advisor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Public Policy

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 720</td>
<td>The Scope of Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>POLS 820</td>
<td>Policy Formulation and Adoption</td>
<td>3</td>
</tr>
<tr>
<td>two elective courses selected in consultation with faculty advisor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Minor Subfield

The minor subfield may be another of the major subfields, a related field from an outside department, or an interdisciplinary program. If the choice is not an additional major subfield, the student must obtain written approval of their faculty advisor and the Director of Graduate Studies. Students must complete at least four graduate level courses in the minor subfield, three of which are at the 700 level or above. Enrollment in directed research covering a particular subfield may be substituted for one of the four courses. Students should select courses for their minor subfield in consultation with their faculty advisor. Courses for the minor subfield may not be applied to another examination field.

Research Skills & Responsible Scholarship

Doctoral students must complete the three courses listed below to meet the Research Skills & Responsible Scholarship requirement.

Research Methods

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 705</td>
<td>Research Design for Political Science</td>
<td>3</td>
</tr>
<tr>
<td>POLS 706</td>
<td>Research Methods I</td>
<td>3</td>
</tr>
<tr>
<td>POLS 707</td>
<td>Research Methods II</td>
<td>3</td>
</tr>
</tbody>
</table>

Additionally, doctoral students must supplement this coursework with one of the following options, to be approved at any time prior to registering for written preliminary examinations:

- An additional research methods course selected in consultation with their faculty advisor
- Proficiency in a foreign language approved by the student's faculty advisor and the Director of Graduate Studies as demonstrated by one of the following options
  - Two semesters of a single foreign language completed no more than five years prior to the time of approval
  - Native speaker of a foreign language

Written Preliminary Examinations

All doctoral students are required to complete written preliminary examinations in their two major subfields prior to completing their comprehensive oral examination. Students must complete all courses in their major subfields, the research skills and responsible scholarship requirement, the doctoral residency requirement, and resolve any grades of Incomplete before registering for the written preliminary examinations.

Comprehensive Oral Examination

To become a doctoral candidate, the student must satisfactorily complete a comprehensive oral examination. No student may attempt the comprehensive oral examination until they have passed the two written preliminary examinations.

Dissertation

After passing the comprehensive oral examination, the doctoral candidate must write a dissertation approved by a departmental dissertation committee and pass a final oral defense of the dissertation to qualify for the doctoral degree.

Additional Information

Additional information about course and degree requirements for the Political Science doctoral program is located in the department's graduate

Prelaw Preparation

Preparing for Law School

For admission to law school, an applicant must complete a bachelor’s degree and, most often, take the Law School Admission Test (LSAT). No particular course of undergraduate study is recommended; this comports with the views of the American Bar Association (http://www.americanbar.org/groups/legal_education/resources/pre_law.html) (ABA). However, the program should be sufficiently rigorous to provide the skills of comprehension and analysis essential to the study of law.

To prepare for law school, students should take courses that challenge and interest them, but no specific courses are required or recommended. The ABA recommends the development of numerous skills in preparation for a legal education—including analytical and problem solving skills; critical reading, writing, oral communication and listening skills; general research, task organization and management skills. Filling or exceeding general education and major requirements satisfies many of these objectives. Consult an academic advisor about undergraduate courses beyond general education and major requirements.

Students should submit law school applications the fall semester one academic year before entering law school. For most students, this is fall of the senior year. Admission is competitive, and law schools examine a number of factors. The undergraduate grade-point average and score on the LSAT are particularly important in this process. All grades on the transcript, including transfer work, are reported to the Law School Admission Council (LSAC) and used by them to calculate their version of the applicant's cumulative grade point average. The LSAT tests skills in reading comprehension, logical reasoning, and analytical reasoning. It is offered 6 times during the academic year: June, July, September/October, November, January and March. Most applicants take the June, July or September/October test to submit applications early in the review process. The September/October test date sometimes coincides with midterm examinations, so, many students prefer to take the LSAT in the summer after their junior year. Students can register for the LSAT online through the Law School Admission Council (http://www.lsac.org/). Law schools also consider personal statements, letters of recommendation, extracurricular activities, and the rigor of the academic curriculum in determining admission.

Many academic policy options, such as the Credit/No Credit (http://www.policy.ku.edu/) option and the course-repeat policy (http://www.policy.ku.edu/), have different consequences for law school applicants. For example, LSAC doesn’t recognize the course repeat policy, and calculates both grades as part of your cumulative grade point average. And although NC isn’t factored into your KU gpa, LSAC treats it like an F and calculates that as part of your gpa. Therefore, it can be helpful to consult the Pre-Law advisor before electing such options.

If you have questions about the Legal Education Accelerated Degree (LEAD) Program, please visit their information page (https://collegeadvising.ku.edu/lead/).

If you have questions about KU's Law School, view the School of Law (p. 720) section of the online catalog.

Premedical Professions Preparation

Premedical Professions Advising

Predentistry, premedicine, preoptometry, and preveterinary medicine are career interests, usually developed together with completing a bachelor’s degree. Students prepare by taking courses required for entry, studying to learn concepts and perform well academically, volunteering and shadowing to get experience, taking a standardized admissions test, and applying for admission to graduate-level professional schools.

For more information, visit the website (https://prehealth.ku.edu/).

Predentistry

Predentistry is a career interest, usually developed together with completing a bachelor’s degree and major. Students prepare by taking courses to meet dental school entry requirements, studying to learn concepts and perform well academically, shadowing or working in dental practices, and volunteering to serve people in need. They take the Dental Admission Test (https://www.ada.org/education/testing/exams/dental-admission-test-dat/) (DAT) and apply for admission to dental schools, usually in the summer between the junior and senior year.

Dental schooling is four years of graduate-level, professional education and training. There is no dental school in Kansas, however, there is an agreement for some seats for Kansas residents at the University of Missouri—Kansas City (UMKC) School of Dentistry.

Most dental schools require:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition or ENGL 10H: Honors Introduction to English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing or ENGL 20H: Freshman-Sophomore Honors Proseminar</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology or BIOL 151: Principles of Molecular and Cellular Biology, Honors</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors</td>
<td></td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Principles of Organismal Biology or BIOL 153: Principles of Organismal Biology, Honors</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 170</td>
<td>Chemistry for the Chemical Sciences I</td>
<td></td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 175</td>
<td>Chemistry for the Chemical Sciences II</td>
<td></td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>&amp; CHEM 331</td>
<td>and Organic Chemistry I Laboratory</td>
<td></td>
</tr>
</tbody>
</table>
Most medical schools require:

- A bachelor’s degree and major in a science field.
- Completion of prerequisite courses, typically by the end of the junior year.
- Performance well academically, volunteering or working in health care settings, and serving people in need.
- Taking the Medical College Admission Test (MCAT).

Medical schooling is four years of graduate-level, professional education between the junior and senior year. Some also require:

- Calculus.
- Organic Chemistry I or II.
- Biology I or II.
- Anatomy.
- Psychology.

For more information, visit the website (https://prehealth.ku.edu/dentistry/).

Premedicine

Premedicine is a career interest, usually developed together with completing a bachelor's degree and major. Students prepare by taking courses to meet medical school entry requirements, studying to learn concepts and perform well academically, volunteering or working in health care settings, and serving people in need. They take the Medical College Admission Test (MCAT) and apply for admission to medical schools, usually in the summer between the junior and senior year.

Medical schooling is four years of graduate-level, professional education and training, followed by a three- to six-year residency program. The only medical school in Kansas is the KU School of Medicine.

Most medical schools require:
Genetics. Satisfied by:
- BIOL 350 Principles of Genetics
- or BIOL 360 Principles of Genetics, Honors

Statistics. Satisfied by one of the following:
- PSYC 210 Statistics in Psychological Research
- PSYC 211 Statistics in Psychological Research, Honors
- MATH 365 Elementary Statistics
- BIOL 570 Introduction to Biostatistics

The MCAT also requires knowledge from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td>3-7</td>
</tr>
<tr>
<td>BIOL 636</td>
<td>Biochemistry I</td>
<td></td>
</tr>
<tr>
<td>&amp; BIOL 638</td>
<td>and Biochemistry II</td>
<td></td>
</tr>
</tbody>
</table>

Psychology. Satisfied by one of the following:
- PSYC 104 General Psychology
- or PSYC 105 General Psychology, Honors

Sociology. Satisfied by one of the following:
- SOC 104 Elements of Sociology
- SOC 105 Elements of Sociology, Honors
- SOC 160 Social Problems and American Values
- SOC 161 Social Problems and American Values, Honors

And, the KU School of Medicine also strongly encourages candidates to complete an immunology course before entering medical school:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 503</td>
<td>Immunology</td>
<td>3</td>
</tr>
</tbody>
</table>

BIOL 503 has a pre-requisite of BIOL 400: Fundamentals of Microbiology, which is also recommended by most medical schools.

For more information, visit the website [https://prehealth.ku.edu/medicine/](https://prehealth.ku.edu/medicine/).

Preoptometry

Preoptometry is a career interest, usually developed together with completing a bachelor's degree and major. Students prepare by taking courses to meet optometry school admission requirements, studying to learn concepts and perform well academically, shadowing or working in optometry practices, and volunteering to serve people in need. They take the Optometry Admission Test [http://www.ada.org/en/oat/)](http://www.ada.org/en/oat/) (OAT) and apply for admission to optometry schools, usually in the summer between the junior and senior year.

Optometry schooling is four years of graduate-level, professional education and training. There is no optometry school in Kansas, however, there are agreements for some seats for Kansas residents at the University of Missouri - St. Louis School of Optometry, Northeastern State University of Oklahoma College of Optometry, and the Southern College of Optometry in Tennessee.

Most optometry schools require:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
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Most also require or recommend:
The Kansas State College of Veterinary Medicine requires:

- Kansas State College of Veterinary Medicine.
- Education and training. The only veterinary school in Kansas is the Veterinary schooling is four years of graduate-level, professional study, usually in the summer between the junior and senior year.

For more information, visit the website (https://prehealth.ku.edu/).

**Preveterinary Medicine**

Preveterinary medicine is a career interest, usually developed together with completing a bachelor's degree and major. Students prepare by taking courses to meet veterinary school admission requirements, studying to learn concepts and perform well academically, shadowing or working in veterinary practices, and volunteering to help people and other animals in need. They take the Graduate Record Examination (http://www.ets.org/gre/) (GRE) and apply for admission to veterinary schools, usually in the summer between the junior and senior year.

Veterinary schooling is four years of graduate-level, professional education and training. The only veterinary school in Kansas is the Kansas State College of Veterinary Medicine.

The Kansas State College of Veterinary Medicine requires:

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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td></td>
<td>Anatomy with lab. Satisfied by one of the following:</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 240 &amp; BIOL 241</td>
<td>Fundamentals of Human Anatomy and Human Anatomy Observation Laboratory</td>
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</tr>
<tr>
<td></td>
<td>Biochemistry. Satisfied by:</td>
<td>3-4</td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td></td>
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<tr>
<td></td>
<td>or BIOL 636 Biochemistry I</td>
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<tr>
<td></td>
<td>Physiology with lab: Satisfied by one of the following:</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 246 &amp; BIOL 247</td>
<td>Principles of Human Physiology and Principles of Human Physiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>BIOL 546 &amp; BIOL 547</td>
<td>Mammalian Physiology and Mammalian Physiology Laboratory</td>
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</table>

Some require additional mathematics, psychology, and/or other courses.

For more information, visit the website (https://prehealth.ku.edu/veterinary/).

**Department of Psychology**

**The Psychology Department at the University of Kansas**

Our mission is to further our understanding of behavior and the physiological, cognitive, and social processes associated with behavior. Psychology is also the profession that applies the science of behavior to practical problems, such as clinical, psychological disorders. This mission includes the discovery and dissemination of principles pertaining to both individual and group psychological functioning and its development. In addition to doing this critical research, we expend great effort in training students at both the undergraduate and graduate levels so that these students will be well equipped with the knowledge and methods that will place them at the forefront of progress across a broad range of the psychological disciplines.

**Psychology Undergraduate Program**

Students have many reasons for wanting to major in psychology. Some are simply fond of observing the behavior of others around them, fascinated with the results of their observations and curious to learn why people behave as they do. Some plan to become psychologists.
themselves or to enter one of the many professions where a background in psychology can be useful -- such as, business, teaching, medicine, nursing, law, social work, the ministry, counseling, student services, child development, administration, or human resources.

**Psychology Graduate Program**

We offer a single doctoral degree which may be earned in one of the following programs: brain, behavior, and quantitative science, clinical psychology, or social psychology. Students admitted to one of these programs enter with the expectation of continuing graduate study through the Ph.D. as the department does not admit terminal master's students.

A separate clinical child psychology training program has been developed for doctoral students in an interdepartmental program with the Department of Applied Behavioral Science. For more information regarding the clinical child psychology program, please visit their website (https://ccpp.ku.edu/).

**Undergraduate Programs**

Undergraduate courses are designed as part of a general education, for students preparing for careers in professional fields, and for students majoring in psychology, including those anticipating graduate work.

**Preparation for Graduate Study**

Students who plan to apply for graduate work in psychology should supplement their beginning course in methodology (PSYC 200/PSYC 201) and statistics (PSYC 210/PSYC 211) with a laboratory course (e.g., PSYC 618, PSYC 620, PSYC 622, PSYC 624, or PSYC 625). Methods (PSYC 200/PSYC 201) and Statistics (PSYC 210/PSYC 211) should be taken as early as possible in the undergraduate education. The laboratory course should be completed during the junior or senior year.

**Graduate Programs**

We offer a single doctoral degree in psychology which may be earned in one of the following programs: brain, behavior, and quantitative science, clinical psychology, and social psychology. Please visit our Psychology Graduate Program (http://psych.ku.edu/overview-phd/) webpage for more details.

All of our programs boast distinguished and award-winning faculty, notable research publications, and a deep foundation in the historical progress of psychological advances.

A separate clinical child psychology training program has been developed for doctoral students in an interdepartmental program with the Department of Applied Behavioral Science. For more information regarding the clinical child psychology program, please visit their website (https://ccpp.ku.edu/).

**Non-Degree Seeking**

Students who are interested in enrolling in graduate level coursework in the Department of Psychology without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s Non-Degree Seeking (http://psych.ku.edu/overview/) webpage for further details.

Questions regarding the our graduate programs can be directed to our graduate coordinator, Katie Williams, ktwilliams@ku.edu.

**Courses**

**PSYC 102. Orientation Seminar in Psychology. 1 Credits. S**
Provides an overview of the discipline of psychology. Emphasizes developing an understanding of opportunities in psychology at the University of Kansas, exploring service-learning options related to the major, and helping students plan goals for their education through an understanding of their personal values and options within and outside the discipline. Open to KU-degree-seeking students only. Contact the Psychology Department to enroll in the course. Non-degree-seeking and non-KU students may enroll in the course by signing up with KU Continuing Education. Graded on a satisfactory/unsatisfactory basis.

**PSYC 104. General Psychology. 3 Credits. SI S**
A basic introduction to the science of psychology.

**PSYC 105. General Psychology, Honors. 3 Credits. SI S**
Open to students in College or Departmental Honors programs or by permission of instructor.

**PSYC 177. First Year Seminar: _____ 3 Credits. SI**
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in psychology. May not contribute to major requirements in psychology. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

**PSYC 199. Data I: Dealing with Data. 3 Credits. S**
Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to derive knowledge and insights from data. This course teaches students the core concepts of inference and computing, working with real behavioral, economic, geographic, physical, social, and text data. Students obtain basic statistics training from a computational perspective using simulation to answer questions, explore problems, and delve into social issues surrounding data analysis such as privacy and design. (Same as ECON 199, POLS 199 and SOC 199.)

**PSYC 200. Research Methods in Psychology. 3 Credits. S**
An examination of the scientific "ways of knowing" employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Prerequisite: PSYC 104.

**PSYC 201. Research Methods in Psychology, Honors. 3 Credits. S**
An examination of the scientific "ways of knowing" employed by psychologists to discover the laws governing human behavior across a wide domain. The focus of the course is upon these methods and the statistical techniques that support them. Open to students in University and Departmental Honors programs or by permission of instructor. Not open to students taking PSYC 200. Prerequisite: PSYC 104.

**PSYC 202. Study Abroad Topics in: _____ 1-6 Credits. S**
This course is designed for the study of special topics in Psychology equivalent to courses at the 100 and 200 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

**PSYC 210. Statistics in Psychological Research. 3 Credits. S**
An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Prerequisite: PSYC 104.

**PSYC 211. Statistics in Psychological Research, Honors. 3 Credits. S**
An introduction to statistical concepts and methods as they relate to analysis and interpretation of psychological data. Open only to student in University and Departmental Honors programs or by permission of
instructor. Not open to students who have taken PSYC 210. Prerequisite: PSYC 104.

**PSYC 250. Human Development. 3 Credits. S**
This course examines the psychological, social, and physical development of humans across the lifespan from conception through infancy, childhood, adolescence, adulthood and death. The course will explore the broad array of factors that contribute to development including cognitive, emotional, social, neurological, physical, genetic, and environmental influences. (Same as ABSC 250.) Prerequisite: PSYC 104 or PSYC 105.

**PSYC 318. Cognitive Psychology. 3 Credits. S**
An introduction to contemporary research and theory in human learning and memory, relevant perceptual processes, and higher functions such as language. Prerequisite: PSYC 104.

**PSYC 319. Cognitive Psychology, Honors. 3 Credits. S**
Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104.

**PSYC 320. Personality. 3 Credits. S**
A survey of personality theories, development, assessment and current research. Prerequisite: PSYC 104.

**PSYC 321. Personality, Honors. 3 Credits. S**
Honors version of PSYC 320. Open to students in College or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104.

**PSYC 323. Philosophy of Psychology. 3 Credits. HR**
The philosophy of psychology is a relatively new field of inquiry in philosophy and so the question of what the philosophy of psychology is remains an open question. In this course, we will understand the philosophy of psychology in two ways. First, it is the study of the nature of psychology and the various capacities and mechanisms that make cognition possible. We will consider whether there is a unique psychological level of explanation or whether psychology ultimately reduces to the brain. We will also explore various philosophical puzzles raised by consideration of psychological abilities like memory, attention, and emotion. Second, philosophy of psychology is a subfield of philosophy of science, where we examine a particular science-here, experimental psychology–as a way to explore broader questions about what science is, how science explains phenomena, and how values intersect with its investigations. All of this makes it an exciting time to study the philosophy of psychology as students in this course, student’s interests will play a role in selecting topics and shaping the direction of our inquiry. (Same as PHIL 323.)

**PSYC 333. Child Development. 3 Credits. S**
A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Prerequisite: PSYC 104.

**PSYC 334. Child Development, Honors. 3 Credits. S**
A survey course on the science and application of child and adolescent development; including physical, motoric, social, emotional, and cognitive changes from conception through adolescence. The course covers methods and theory, genetics, and may incorporate content on aggression, morality, parenting, media, and peers. Open to students in University or Departmental Honors Programs or by permission of instructor. Prerequisite: PSYC 104.

**PSYC 350. Psychological Disorders. 3 Credits. S**
A broad survey of psychopathology, with a focus on the primary symptoms, causes, consequences, and treatments of its major manifestations, including: anxiety disorders, mood disorders, trauma-related disorders, eating disorders, substance-use disorders, personality disorders, and psychotic-spectrum disorders. Relevant scholarship from neuroscience, cognitive science, medicine, behavioral science, and sociocultural perspectives will be integrated throughout. Prerequisite: PSYC 104.

**PSYC 351. Psychological Disorders, Honors. 3 Credits. S**
Open to students in College or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104.

**PSYC 360. Social Psychology. 3 Credits. S**
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Prerequisite: PSYC 104.

**PSYC 361. Social Psychology, Honors. 3 Credits. S**
An introduction to the psychology of social behavior. Systematic consideration of such concepts as social influence, conformity and deviation, social attitudes and prejudice, socialization and personality, communication and propaganda, morale, and leadership. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: PSYC 104.

**PSYC 370. Behavioral Neuroscience. 3 Credits. N**
A survey of topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

**PSYC 371. Behavior Neuroscience, Honors. 3 Credits. N**
A survey of basic topics related to the biological processes underlying behavior in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and neuropharmacology. Selected topics within the area of behavioral neuroscience are also covered, such as motivation, appetite, reward, homeostasis, biological rhythms, addiction, aggression, stress, emotion, and sleep. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

**PSYC 375. Cognitive Neuroscience. 3 Credits. N**
A survey of topics related to the biological processes underlying cognition in humans and in animals, including the physiology of neuronal and synaptic transmission, neurochemistry, and functional neuroanatomy. Selected topics within the area of cognitive neuroscience also covered, such as sensory processing, hearing, vision, learning and memory, attention, motor control, language, hemispheric asymmetry, executive function, and neuroplasticity. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

**PSYC 380. Clinical Neuroscience. 3 Credits. N**
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Prerequisite: An introductory course in Psychology,
an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 381. Clinical Neuroscience, Honors. 3 Credits. N
The organization and function of the nervous system as it relates to topics of interest to psychologists, including pain, anxiety, stress, sleep, depression, schizophrenia, akinetic and dyskinetic movement disorders, and senile dementia. Open to students in University or Departmental Honors programs or by permission of instructor. Prerequisite: An introductory course in Psychology, an introductory course in Biology, and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 385. Social Neuroscience. 3 Credits. S
This course is designed to acquaint students with the Social Neuroscience approach as well as recent findings using this approach. The class will focus on particular social phenomena and (a) evaluate the utility of current social neuroscience research examining these phenomena and (b) consider future experimental designs using the Social Neuroscience approach to further inform our understanding of each phenomenon. Prerequisite: An introductory course in Psychology; an introductory course in Biology; and PSYC 200 or PSYC 201 and PSYC 210 or PSYC 211.

PSYC 390. The Psychology of Aging. 3 Credits. S
Social, psychological, and economic adjustments required by aging; changes in cognition, role and personality necessitated by advancing age. Not open to students with credit in PSYC 691. Prerequisite: PSYC 104.

PSYC 399. Data 2: Foundations of Data Science. 3 Credits. S
Data science empowers its users to provide data-driven solutions to problems and questions in the world. This course provides foundational skill and knowledge behind this power. This knowledge and skill includes learning to formulate effective questions to answer with data, computer programming, data management and wrangling, exploratory data analysis and visualization, statistical inference and prediction, data-driven decision making, and communication. (Same as ECON 399 and POLS 399.) Prerequisite: PSYC 199/POLS 199 or ECON 199 or EECS 138; and PSYC 210 or MATH 365 or ECON 426 or POLS 306 or SOC 380 or MATH 101 or MATH 104 or MATH 115 or MATH 121.

PSYC 402. Study Abroad Topics in: 1-6 Credits. S
This course is designed for the study of special topics in Psychology equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

PSYC 410. Intimate Relationships. 3 Credits. S
A social psychological perspective on adult intimate relationships, examining friendship, dating, committed relationships, and the dissolution of committed relationships. Topics include romance, jealousy, self-disclosure, power, loneliness, and social support. Discussion of heterosexual and homosexual relationships, traditional forms (e.g., marriage) of relationships as well as alternative lifestyles (e.g., cohabitation) and gender-linked differences in relationships. (Same as WGS 410.) Prerequisite: PSYC 104.

PSYC 412. Introduction to Motivation and Emotion. 3 Credits. S
An examination of contemporary issues, theories, and research in motivation and emotion. Prerequisite: PSYC 360 or PSYC 361, or consent of instructor.

PSYC 415. Social and Cultural Sources of Self. 3 Credits. S
An interdisciplinary exploration of the social and cultural sources of self-experience. The first part of the course emphasizes a general process: how the development and experience of self, though it might seem essentially personal, is shaped by social interaction. The second part of the course highlights particular cases: how self-experience may be constructed differently depending on the particular social and cultural settings a person inhabits. Cases include influences of gender, socioeconomic status, and age group on the construction of self-experience within societies from around the world, and ethnic-identity groups within the USA. Prerequisite: PSYC 104.

PSYC 418. Introduction to Cognitive Science. 3 Credits. S
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and SPLH 418.) Prerequisite: Consent of instructor.

PSYC 430. Cognitive Development. 3 Credits. S
A basic survey course in the development of thinking and understanding in normal children. The course will cover Piaget's theory and information processing theories at the advanced undergraduate level. Topics include perception, attention, learning, memory, language, problem solving, and individual differences from birth to the mid-teens. Prerequisite: PSYC 104 or ABSC 160.

PSYC 435. Psycholinguistics I. 3 Credits. S
A detailed examination of issues in the processing of language. The course provides a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processes are examined. (Same as LING 435.) Prerequisite: An introductory course in linguistics or permission of instructor.

PSYC 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N LFE
This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercial ancestry test. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, BIOL 449, and SPLH 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

PSYC 453. Psychological Foundations of Musical Behavior. 3 Credits. S
Study of human musical behavior, including basic psychoacoustic phenomena, musical taste, functional music, musical ability, cultural organization of musical sounds, and the affective response. Prerequisite: General Psychology, MENT 370, or consent of instructor.

PSYC 460. Honors in Psychology. 1-2 Credits. S
A seminar for juniors and seniors in the Honors Program in Psychology. Students who have been admitted to the Honors Program in Psychology may enroll for one credit for one or both semesters of their junior year and are required to enroll for two credits for both semesters in their senior year.

PSYC 465. Stereotyping and Prejudice Across Cultures. 3 Credits. S
This course covers a variety of theoretical views concerning the origins of stereotypes and the factors that maintain them, as well as how and when the revision of such beliefs take place. Analysis of various stereotypes
Students who are preparing to enter the workforce are introduced to current challenges and trends in professional development and workforce psychology. In addition to discussion of interdisciplinary research centered around career management topics such as preventing burnout, recognizing and eliminating bias in interviews, or predictors of job satisfaction and productivity, emphasis is placed on the creation of a job dossier and tools to help bridge skills from the classroom and their place in an individual's career. Prerequisite: Junior or senior status.

PSYC 492. Psychology and Social Issues. 3 Credits. S
A study of psychological aspects of selected social issues in contemporary American society. Race relations and the civil rights movement. Political extremism. Public opinion and social change. Social psychological approaches to a variety of social problems. Prerequisite: PSYC 360 or 361, or consent of instructor.

PSYC 499. Conceptual Issues in Psychology. 3 Credits. S
This course examines classic issues in psychology--free-will and determinism, nature and nurture, the mind-body problem, approaches to human action, cultural influences on psychological theories, the evolution of intellectual paradigms, and inductive and deductive approaches to social scientific research--from multiple perspectives within psychology and related social sciences. Prerequisite: PSYC 104 or equivalent.

PSYC 500. Intermediate Statistics in Psychological Research. 3 Credits. U
A second course in statistics with emphasis on applications. Analysis of variance, regression, analysis, analysis of contingency tables; possibly selected further topics. Prerequisite: Grade of B- or better in PSYC 210 or PSYC 211.

PSYC 502. Human Sexuality. 3 Credits. S
An introduction to the field of human sexuality. Topics to be covered include sexual anatomy and physiology, fertilization, pregnancy, birth and lactation, human sexual response, sexuality across the life cycle, love, marriage, alternatives to marriage, sexual orientation, sex differences in behavior, parenthood, sexually transmitted diseases, sex and the law, and sex education. (Same as WGSS 502.) Prerequisite: Any previous coursework in either WGSS or PSYC.

PSYC 513. Behavioral Economics. 3 Credits.
Decisions link our thoughts to our actions and as a result define who we are and who people think we are. This makes decision making a fundamental life skill. But, can we make better decisions? This course will introduce you to the science of decision making that has developed as scholars including biologists, economists, mathematicians, philosophers, psychologists, and others have sought to answer this very question.

Over the course of the semester we will examine what we have learned so far such as how people predict and mispredict events, how people make decisions and how their decisions can be quite irrational from one perspective but simultaneously appear quite reasonable, how people bargain and why they sometimes choose to cooperate and other times not, and why negotiating can be so difficult. (Same as ECON 513.) Prerequisite: PSYC 104 or ECON 142; MATH 101 or MATH 103 or MATH 104, or eligibility for MATH 115 or MATH 125 or MATH 126.

PSYC 518. Human Memory. 3 Credits. S
In-depth coverage of human memory phenomena, including phenomena concerning acquisition, storage and retrieval, unconscious forms of memory, memory monitoring and control, and practical aspects of memory such as autobiographical memory, mnemonic techniques and eyewitness memory. Prerequisite: PSYC 104.

PSYC 520. Memory and Eyewitness Testimony in Children. 3 Credits. S
A review of the literature on the development of memory in young children, and the implications of this research for understanding children's eyewitness testimony. The course will present current
research on children's long-term memory abilities, the impact of stress on recall performance, the effectiveness of various types of interviewing techniques, and the suggestibility of children's recollections. Policy issues and potential guidelines for the elicitation and evaluation of children's memory reports in both clinical and legal arenas will be discussed. Prerequisite: PSYC 104 or ABSC 160, or consent of instructor.

**PSYC 521. Women and Violence. 3 Credits. S**

An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as WGSS 521.) Prerequisite: PSYC 104.

**PSYC 533. The Psychology of Addictive Behaviors. 3 Credits. S**

The course will take an in-depth look at addiction processes using an interdisciplinary perspective. The course will cover processes that lead to the development of substance use disorders, as well as advanced topics in prevention and treatment. Addiction is a behavioral disorder, and the seminar will focus heavily on learning theory and conditioning processes that can yield problem substance use. Readings will be derived from a variety of sources, including both animal and human studies. This seminar is appropriate for graduate students from a variety of disciplines, as well as advanced undergraduate students who satisfy the prerequisite requirements. This course is offered at the 500 and 800 level with additional assignments at the 800 level. Not open to students with credit in PSYC 823. Prerequisite: PSYC 104.

**PSYC 535. Developmental Psychopathology. 3 Credits. S**

A review of contemporary psychological and developmental disorders of children and youth. Course presents current models of psychopathology, classification systems, assessment methods, and treatment approaches designed for the individual, the family, and the community. Specific attention is given to age, gender, and cultural differences and similarities. Topics include: anxiety disorders, oppositional behavior disorders, physical/sexual abuse, learning disabilities, depression, chronic physical illness, and autism. (Same as ABSC 535.) Prerequisite: ABSC 160 or PSYC 333, or instructor permission.

**PSYC 545. Culture and Psychology. 3 Credits. S**

The course considers the relationship between culture and psyche. One theme throughout the course involves revealing the cultural grounding of psychological functioning. The second and complementary theme involves identifying the psychological processes involved in the phenomenon of culture. Prerequisite: PSYC 333, 334, 360 or 361 or consent of instructor.

**PSYC 555. Evolutionary Psychology. 3 Credits. S**

A review of evolutionary theory and its application to human personality, cognition, interpersonal relationships, family dynamics, and development. Prerequisite: PSYC 104 and at least 3 additional hours in Psychology, or consent of instructor.

**PSYC 565. Applied Developmental Psychology. 3 Credits. S**

An advanced study of the application of theories and concepts of developmental and behavioral psychology to a range of specific issues and problems of childhood and adolescence. This course relies heavily on the empirical research literature. Topics include contemporary social issues and child development, research in applied settings, assessment, intervention, and prevention, as well as program evaluation. Prerequisite: ABSC 160 or PSYC 333, and ABSC/PSYC 535.

**PSYC 566. Psychology and the Law. 3 Credits. S**

An application of psychological processes and concepts to the American legal system. Among the topics covered are the socialization of legal attitudes, opinions about the purposes of the criminal justice system and especially of prisons, the concept of "dangerousness," the nature of jury decision making, and the rights of prisoners, patients, and children.

**PSYC 570. Group Dynamics. 3 Credits. S**

A study of the processes underlying the dynamics of the group, including the observation of group phenomena and a consideration of their relation to research findings. Prerequisite: PSYC 360 or 361, or consent of instructor.

**PSYC 572. Psychology and International Conflict. 3 Credits. S**

A study of psychological approaches to analysis and intervention in the field of international conflict and peace-making. Focus on major contributions and important paradigms for explanation and action. Prerequisite: PSYC 360 or consent of instructor. Background study in international relations or recent world history desirable.

**PSYC 578. Social Attitudes. 3 Credits. S**

An introduction to the study of attitudes focusing on problems of measurement and on empirical findings and theories of attitude acquisition and change. Prerequisite: PSYC 360, 361, or consent of instructor.

**PSYC 580. Research Lab. 1-5 Credits. S**

Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor.

**PSYC 590. Nonverbal Communication. 3 Credits. S**

Examination of non-linguistic behavior in human communication, including proxemics (spacing), kinesics (movement and expression), and paralinguistics (voice quality). Includes phylogenetic and developmental perspectives, methods of analysis, applications to interpersonal problems. (Same as COMS 590.) Prerequisite: COMS 356 or PSYC 210 or PSYC 211.

**PSYC 592. Psychological Significance of Physical Illness and Disability. 3 Credits. S**

A lecture course to help students become more aware of and responsive to the psychological needs of persons with physical illnesses or disabilities. Emphasis is upon the meanings of such conditions in individuals' lives and the effects of treatment and rehabilitation settings on psychological adaptation. Prerequisite: PSYC 104.

**PSYC 595. Eating and Weight Disorders. 3 Credits.**

This course is an intensive seminar in which students will critically examine up-to-date research and theoretical models on eating and weight disorders. Content will include diagnosis and assessment, as well as psychological, social, cognitive, biological, and "addiction" model influences/perspectives. Students will gain exposure to literature on treatment and prevention of eating disorders and obesity. Class will include critical discussion, brief lecture, and active-learning strategies to facilitate learning during class. Students will also participate in group work. Prerequisite: PSYC 350 or instructor permission.

**PSYC 598. Positive Psychology. 3 Credits. S**

An introduction to the core assumptions and research findings associated with human strengths and positive emotions. Also an exploration of interventions and applications informed by positive psychology in counseling and psychotherapy, and its application to school, work, family and other close relationships. (Same as EPSY 580.) Prerequisite: PSYC 104 or consent of instructor.

**PSYC 605. Health Psychology. 3 Credits. S**

Review of research and theory concerning the role of psychological factors in the development of physical illness and the contribution
of psychologists to the treatment and prevention of physical illness. Prerequisite: PSYC 104.

**PSYC 618. Experimental Psychology: Human Learning. 6 Credits. S**

Lectures and laboratory research on human information processing as related to theories of word recognition, reading, and language comprehension. Major emphasis on experimental design, data analysis, interpretation, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor.

**PSYC 620. Experimental Psychology: Sensation, Perception, and Cognition. 6 Credits. S**

Lectures and laboratory work on human sensory processes and how they result in perceptions of the environment. Experience is provided in designing and implementing research as well as in the skills necessary for statistical analysis, interpretation of data, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor.

**PSYC 622. Experimental Psychology: Social Behavior. 6 Credits. S**

Lectures, laboratory and field work on various issues in research in social psychology (e.g., conformity, attitude change, social processes). Two two-hour periods a week and appointment for research. Prerequisite: PSYC 104, PSYC 360, and PSYC 210 or PSYC 211 or consent of instructor.

**PSYC 624. Experimental Psychology: Clinical Psychology. 6 Credits. S**

Lectures and laboratory research on contemporary issues in clinical psychology. Emphasis on experimental design, data analysis, interpretation of data, and scientific writing. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor.

**PSYC 625. Experimental Psychology: Methods in Psychophysiology and Neuroscience. 6 Credits. S**

Lectures and laboratory work on psychophysiology and neuropsychology research methods. Overview of psychophysiological tools to measure the central and peripheral nervous systems. Experience designing and implementing neuropsychology and psychophysiology research. Prerequisite: PSYC 104 and PSYC 210 or PSYC 211 or consent of instructor.

**PSYC 626. Adolescent Behavior and Development. 3 Credits. S**

Impact of factors of social environment and physical growth upon psychological development from puberty to young adulthood. (Same as ABSC 626; Prerequisite: PSYC 104, PSYC 333, or ABSC 160.

**PSYC 630. Clinical Psychology. 3 Credits. S**

The historical and empirical foundations of clinical psychology. Significant trends in theory, research, and social organization which have shaped clinical practice. A review of clinical practice. Prerequisite: PSYC 104.

**PSYC 632. Advanced Child Behavior and Development. 3 Credits. S**

An advanced course in child development that includes a survey of the field's principles and theoretical approaches, and current issues in research and practice. Topics will include: prenatal development, cognition and language, social-emotional development, socialization influences in childhood, developmental psychopathology, and social policies. (Same as ABSC 632.) Prerequisite: ABSC 160, PSYC 333, or instructor permission, and senior or graduate status.

**PSYC 644. Behavioral Pharmacology. 3 Credits. S**

Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis is placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neurophysiology, and the nervous system. Prerequisite: PSYC 104 or consent of instructor.

**PSYC 650. Statistical Methods in Behavioral and Social Science Research I. 4 Credits. S**

Elementary distribution theory, t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 790 will have different course requirements. Prerequisite: A grade of B- or better in a beginning course in statistics (e.g., PSYC 210 or PSYC 211, MATH 365, POLS 306, COMS 356, SOC 380, or equivalent) is recommended, or consent of instructor.

**PSYC 651. Anova and Other Factorial Designs. 4 Credits. S**

Course covers one-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social, educational, and behavior sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 791 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

**PSYC 678. Drugs and Behavior. 3 Credits. S**

A survey of the methods used to study the effects of drugs on behavior, and of the effect of selected drugs on behavior, particularly the narcotics, hallucinogens, and drugs used in the treatment of mental illness. Prerequisite: PSYC 104.

**PSYC 687. Factor Analysis. 4 Credits. S**

This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 887 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

**PSYC 689. Conceptual Issues in Human Sexuality. 3 Credits. S**

An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 689.) Prerequisite: Any previously completed course in PSYC or WGSS.

**PSYC 690. Seminar: _____. 1-5 Credits. U**
Discussion of current problems in psychological theory and research. Prerequisite: PSYC 104 and sophomore status.

PSYC 691. The Psychology of Aging. 3 Credits. S
Social, psychological, and economic adjustments required by aging; changes in cognition, role and personality necessitated by advancing age. Not open to students with credit in PSYC 390. Prerequisite: PSYC 104 or consent of instructor.

PSYC 693. Multivariate Analysis. 4 Credits. S
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 893 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 694. Multilevel Modeling I. 4 Credits. S
Introduction to statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. Emphasis will be on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 894 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 695. Multilevel Modeling II. 4 Credits. S
Introduction to statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, and hierarchical CFA. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Students taking this course as PSYC 895 will have different course requirements. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 697. Longitudinal Data Analysis. 3 Credits. S
Reviews and contrasts various statistical models for the analysis of change. Course focuses on techniques to analyze longitudinal (repeated measures) data beyond the repeated-measures ANOVA framework. Applications across the behavioral and social sciences are emphasized. Students taking this course as PSYC 991 will have different course requirements. Prerequisite: PSYC 696 or equivalent, or consent of instructor.

PSYC 698. Bayesian Data Analysis. 3 Credits. S
This course will provide a tutorial introduction to doing Bayesian data analysis. The course is intended to make advanced Bayesian methods accessible to all students in the behavioral and social sciences. During the course we will cover the fundamental of Bayesian methods and work from the simplest model up through hierarchical or multilevel models for all types of data from binary to continuous to count data. By the end of the course each student should be able to carry out their own Bayesian data analysis for nearly any question they might ask in the social and behavioral sciences. Open only to undergraduate students. Not open to students with credit in PSYC 797. Prerequisite: PSYC 650 or equivalent, or consent of instructor.

PSYC 704. Research Practicum in Clinical Child Psychology. 3 Credits.
This course provides students in the Clinical Child Psychology Program with the opportunity to enhance and consolidate their research activities by fulfilling one of the elective cluster course requirements. This practicum involves a contract with a research advisor and the program director. The contract includes definable products and dates for completion to prepare research for submission for publication, develop a grant proposal, or conduct additional research project independent of other requirements in the program. The course is not to be taken as an overload, but is to be part of a full-time course schedule. May be repeated. (Same as ABSC 704.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

PSYC 706. Special Topics in Clinical Child Psychology: ______. 3 Credits.
A course offering detailed discussion of the literature and research methods of a special topic within clinical child and pediatric psychology. Topic and instructor may change by semester and will be announced in the Schedule of Classes. May be repeated. (Same as ABSC 706.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

PSYC 710. Feminist Issues in Psychology. 3 Credits.
Detailed examination and discussion of psychological theory and research from a feminist perspective. Specific topics will vary. The goal of the course is to facilitate students’ ability to develop feminist critiques of existing research and theory as well as to generate nonsexist alternative approaches. Open to advanced undergraduates with consent of instructor. Prerequisite: Some familiarity with research methods in the social sciences.

PSYC 723. Advanced Cognitive Psychology. 3 Credits.
Advanced cognitive psychology reviewing theories of pattern recognition, attention, working memory, language comprehension and problem solving. Emphasis will be placed upon the application of these theories to real-life situations. Prerequisite: PSYC 104 and six additional credit hours in psychology, or permission of the instructor.

PSYC 725. Cognitive Neuroscience. 3 Credits.
A survey of the critical issues within cognitive and behavioral neuroscience. The course will provide information about neuronal physiology, functional neuroanatomy, and psychophysiological research methods. Human cognition and the neurophysiology that subserves the primary cognitive functions will be discussed.

PSYC 735. Psycholinguistics I. 3 Credits. LFE
A detailed examination of issues in the processing of language. The course will provide a survey of research and theory in psycholinguistics, reflecting the influence of linguistic theory and experimental psychology. Spoken and written language comprehension and language production processing will be examined. (Same as LING 735.)

PSYC 737. Psycholinguistics II. 3 Credits.
An in-depth examination of selected topics in psycholinguistics. Topics may include spoken language processing, written language processing, neurolinguistics, prosody, and syntactic processing. (Same as LING 737.) Prerequisite: PSYC 735/LING 735 or consent of instructor.

PSYC 750. Advanced Seminar in Gender Identity and Sexual Orientation. 3 Credits.
Design and execution of research on the causes and consequences of variations in gender identity, sexual orientation or affectional preference, sex roles, and sex-linked behaviors. Prerequisite: Consent of instructor.

**PSYC 757. Theories of Perception. 3 Credits.**
A consideration of the facts and theories of human perception. The emphasis will be on vision, although hearing, smell, pain, and other senses will also be discussed. Of particular concern is the question of perceptual modifiability and the response of the human observer to unusual sensory environments. Prerequisite: PSYC 104.

**PSYC 774. Advanced Social Psychology I. 3 Credits.**
First semester of a two-semester course. Designed to provide a thorough background in social psychology and to motivate a continuing exploration of theoretical problems and issues in the field. Combines examination of historical development of theories and methods in social psychology with analysis of theoretical and methodological approaches to a variety of contemporary topics.

**PSYC 775. Advanced Social Psychology II. 3 Credits.**
A continuation of PSYC 774.

**PSYC 777. Social Psychology: Theory, Research, and Clinical Applications. 3 Credits.**
Basic theories in social psychology, as well as their applications to the process of coping with life events. The focus is on the nature of each theory, including the history and more recent developments; however, where clinical applications have been made of a particular theory, these will be discussed.

**PSYC 780. Research Lab. 1-5 Credits. S**
Supervised research under the guidance of a faculty member in the Department of Psychology. Students will be part of a collaborative laboratory environment, and will be involved in research design, data collection, and data analysis, and will take part in regularly scheduled laboratory meetings. Prerequisite: Permission of instructor.

**PSYC 782. Research Methods in Child Language. 3 Credits.**
A survey of methods for studying phonological, morphological, syntactic, and semantic change during language development. Methods include: diary interpretation, language sample analysis, probe elicitation tasks, and clinical assessment. (Same as CLDP 782 and LING 782.)

**PSYC 787. Multidisciplinary Perspectives on Gerontology and Aging. 3 Credits.**
A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, COMS 787, and SOC 767.)

**PSYC 790. Statistical Methods in Psychology I. 4 Credits.**
Elementary distribution theory; t-test; simple regression and correlation; multiple regression and multiple correlation; curvilinear regression; logistic regression; general linear model. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: A beginning course in statistics and graduate standing, or consent of instructor.

**PSYC 791. Statistical Methods in Psychology II. 4 Credits.**
Continuation of PSYC 790. One-way analysis of variance, linear trends, contrasts, post hoc tests; multi-way analysis of variance for crossed, blocked, nested, and incomplete designs; analysis of covariance; repeated measures analysis of variance; general linear model. Applications across the social, educational, and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 795. Computing and Psychology. 3 Credits.**
Introduction to the use of personal computers to facilitate and standardize administration of research protocols and to automate data collection. Lectures and projects emphasize direct application to research in the behavioral sciences. Prerequisite: Graduate standing in the Department of Psychology and consent of instructor.

**PSYC 796. Computer Models of Brain and Behavior. 3 Credits.**
An introduction to the techniques of computer modeling with applications in the study of brain-behavior mechanisms. Early and contemporary efforts to simulate the neuron, neural networks, and neural processes which regulate behavior, are reviewed. Application of modeling techniques in sample brain-behavior problem areas are used to illustrate the operation of thresholds, feedback, dynamic equilibrium, redundancy, plasticity, network structure, and similar constructs. Programming skill in a high-level language available on personal computers or mainframe is required. Prerequisite: EECS 128 or EECS 138 or PSYC 795, and PSYC 370, or equivalent courses or experience.

**PSYC 797. Bayesian Data Analysis. 3 Credits.**
This course will provide a tutorial introduction to doing Bayesian data analysis. The course is intended to make advanced Bayesian methods accessible to all students in the behavioral and social sciences. During the course we will cover the fundamental of Bayesian methods and work from the simplest model up through hierarchical or multilevel models for all types of data from binary to continuous to count data. By the end of the course each student should be able to carry out their own Bayesian data analysis for nearly any question they might ask in the social and behavioral sciences. Not open to students with credit in PSYC 698. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 798. Introduction to Mathematical Methods in Psychology. 3 Credits.**
A first course in scaling and modeling psychological processes. Substantive areas treated selected from sensation, perception, learning, memory, preference, choice and decision processes, problem solving, games, social interaction, and individual differences. May be repeated with permission. Prerequisite: Previous course work beyond the introductory level in psychology or a closely related area, a course in statistics, and a course in calculus.

**PSYC 799. Proseminar in Child Language. 2 Credits.**
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, CLDP 799, LING 799, and SPLH 799.)

**PSYC 800. Experimental Psychology: ______. 3 Credits.**
An advanced survey of theory and research in a selected area of experimental psychology. Continual enrollment for four semesters is required of entering graduate students in experimental psychology. Open to other students with graduate standing in psychology or a closely related field. May be repeated with permission.

**PSYC 802. Social-Psychological Aspects of Health, Disability, and Associated Life Stress. 3 Credits.**
Disabling myths; perception of causes and effects of disease and disability; attitudes and interpersonal relations; hoping, coping, and reality issues; values; professional-client relations; public media and societal rehabilitation. A departmental core course for graduate students.
PSYC 803. Fundamentals of Psychological Assessment and Intervention with Children. 3 Credits.
Lecture and supervised experience covering the theoretical and empirical literature on assessment and intervention methods for children, adolescents, and families. Students will learn and demonstrate evidence-based clinical interviewing skills, behavioral observation techniques, risk assessment techniques, therapeutic communication approaches, strategies for providing assessment feedback to families, and ethical principles related to the provision of assessment and psychotherapy (including client file and resource management.) The course requires interaction with clinical populations and communication with referral sources. (Same as ABSC 803.) Prerequisite: Graduate student in clinical child psychology program.

PSYC 805. History of Psychology. 3 Credits.
A historical survey of basic concepts and theories in psychology with emphasis on their relationship to contemporary issues in theory.

PSYC 809. Professional Issues: Clinical Child Psychology. 1 Credit.
Consideration of special problems confronting the child and family oriented scientist-practitioner, and in the development of a professional identity. Topics include critical issues, including ethical, legal, cultural, empirical, and clinical aspects of research and practice. May be repeated. (Same as ABSC 809.) Prerequisite: Graduate standing in clinical child psychology.

PSYC 810. History and Ethics in Psychology. 3 Credits.
A historical survey of basic concepts and theories in psychology with emphasis on their relationship to contemporary issues. Examination of historical and contemporary code of ethics and its application to the conduct of clinical psychologists.

PSYC 811. Achievement and Intellectual Assessment in Clinical Child Psychology. 3 Credits.
Course covers the basic theory, research, administration, and reporting of psychological assessment of development, intelligence, and achievement for children, adolescents, and adults within cultural and developmental contexts. The range of psychological instruments examined includes, for example, WIAT, K-ABC, W-J, S-B, WISC, WAIS, and WPPSI. (Same as ABSC 811.) Prerequisite: Graduate standing in clinical child psychology.

PSYC 812. Behavioral and Personality Assessment of Children. 3 Credits.
Lecture, laboratory, field work, and supervision. Theory and applications in the psychological evaluation of children with standardized assessment techniques. The administration, scoring, interpretation, and reporting of behavioral and personality functioning in children. (Same as ABSC 812.) Prerequisite: Graduate standing in clinical child psychology.

PSYC 814. Advanced Child and Family Assessment. 3 Credits.
Lecture, laboratory, field work, and supervision. Supervised experience in specialized psychological assessment approaches for children and families. Emphasis on interviewing, observation, psychometric scales, consultation, rationale, administration, analysis, and reporting of mental health functioning of children and families. Experience with clinical populations, and communication with referral sources. Prerequisite: Graduate student in clinical child psychology.

PSYC 815. Design and Analysis for Developmental Research. 3 Credits.
Coverage of the philosophy and basic principles of group-design research, with a special emphasis on designs that are appropriate for developmental studies. Designs for both experimental and quasi-experimental research are covered, and appropriate statistical procedures are presented concomitantly with the designs. Individual-difference analyses and statistical control issues are also addressed.

PSYC 816. Design and Analysis for Neuroimaging Research. 3 Credits.
Course covers research design and analysis issues for event-related potential (ERP) and functional magnetic resonance imaging (fMRI) studies. Repeated measures, statistical parametric mapping, principal components analysis, and independent components analysis techniques are covered. Both practical and theoretical aspects of these statistical techniques will be explored in Matlab environment. Matrix algebra recommended but not required. Prerequisite: PSYC 790 and 791 or equivalent are required.

PSYC 818. Experimental Research Methods in Social Psychology. 3 Credits.
Systematic discussion of the techniques of research in social psychology, with practice in the utilization of selected methods. Prerequisite: One course in social psychology in addition to introductory social psychology.

PSYC 819. Field and Evaluation Research Methods in Social Psychology. 3 Credits.
Basic principles and practices of field methods in basic and applied research in social psychology and related fields; relationships between field and laboratory studies; special emphasis on survey and evaluation research methods and study designs; client and respondent relationships; research and public policy.

PSYC 820. Advanced Child Development. 3 Credits.
A survey of the basic empirical research in the field of child development, covering intelligence, cognition, perception, personality, social behavior, and socialization processes. These literatures are integrated and their implications for social application are addressed. Prerequisite: A course in child development or equivalent.

PSYC 821. Women and Violence. 3 Credits.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as WGSS 821.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor.

PSYC 823. The Psychology of Addictive Behaviors. 3 Credits.
The course will take an in-depth look at addiction processes using an interdisciplinary perspective. The course will cover processes that lead to the development of substance use disorders, as well as advanced topics in prevention and treatment. Addiction is a behavioral disorder, and the seminar will focus heavily on learning theory and conditioning processes that can yield problem substance use. Readings will be derived from a variety of sources, including both animal and human studies. This seminar is appropriate for graduate students from a variety of disciplines, as well as advanced undergraduate students who satisfy the prerequisite requirements. This course is offered at the 500 and 800 level with additional assignments at the 800 level. Not open to students with credit in PSYC 533. Prerequisite: PSYC 104 or equivalent.

PSYC 825. Social Development. 3 Credits.
A lecture and discussion course in social development. It includes such topics as theoretical approaches to the study of social development, as well as the literature on family processes, peer relations, aggression and prosocial behavior, child abuse and neglect, family violence, child care, and the media. (Same as ABSC 825.) Prerequisite: A course in child psychology or development.

PSYC 831. Advanced Human Learning and Memory. 3 Credits.
An in-depth analysis of current research and theory. Focus will be on experimental methodology in these areas.

**PSYC 832. Clinical Health Psychology: Health Promotion and Disease Prevention. 3 Credits.**

An overview of the field of health psychology as applied to health promotion and disease prevention. Content areas include history and current research regarding behavioral and psychosocial risk factors for disease, as well as empirically supported assessment and therapeutic techniques for risk factor reduction and health promotion. Prerequisite: Graduate student in psychology or health-related fields, or permission of instructor.

**PSYC 833. Clinical Health Psychology: Acute and Chronic Illness. 3 Credits.**

An overview of the field of health psychology as applied to acute and chronic illness in adult, adolescent, and child populations. Content areas include psychological aspects of acute and chronic illness, including relevant empirically supported assessment and intervention strategies, adherence to medical regimens, pain, and enhancement of the psychologist's role in medical settings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 834. Clinical Health Psychology: Physical Aspects of Health and Disease. 3 Credits.**

An overview of physical manifestations of health and disease. Content areas include overview of anatomy and physiology of each body system, description of how deviations form normal anatomical development and physiological function result in common disorders, methods for distinguishing psychological from organic etiologies, indications of side effects of medications for common disorders, and description of roles of key members of health care team members. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 835. Clinical Practicum IV: Health. 3 Credits.**

Supervised assessment and treatment of individuals and families within a medical setting, as well as multidisciplinary consultation. Inpatient and outpatient clinical health psychology rotations may include pediatrics, oncology, pain, rehabilitation, and other health psychology related fields. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 970 and graduate student in clinical health psychology specialty.

**PSYC 836. Clinical Practicum V: Health. 3 Credits.**

Continuation of PSYC 835. Prerequisite: Graduate student in clinical health psychology specialty.

**PSYC 838. Assessment and Management of Chronic Pain Across the Life Span. 3 Credits.**

Focuses on chronic pain affecting a person’s life span from childhood to older adults. Topics include traditional versus modern biopsychosocial models along with treatments/measurements of chronic pain. In addition to medical and non-medical (mainly cognitive-behavioral) treatments for chronic pain. Also discussed will be experimental designs/determining significance in pain research and ethical/policy issues related therein. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 839. Palliative Care in Health Psychology. 3 Credits.**

Based on the biopsychosocial model, this course focuses on the current practice of palliative care in community and hospital settings by health care professionals. Classes will be discussion based, centered on current issues and controversies in care of the chronically ill and dying. Recent research will be highlighted, as will cultural perspectives on death. Students will be expected to identify applicable literature for presentation and class discussion, along with assigned readings. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 840. Psychology of Women's Health. 3 Credits.**

A seminar devoted to examination of psychosocial and behavioral factors in women's health. Content areas include women and the health care system, social roles and health, gender differences, and similarities in morbidity and mortality, gynecologic health, chronic diseases, and health-related behaviors. Prerequisite: Graduate student in psychology or health-related field, or by permission of instructor.

**PSYC 841. Stress and Coping. 3 Credits.**

Theories and research on conceptualization, assessment, and effects of stress. Focus on coping processes and other determinants of adjustment to stressful conditions. Discussion of psychological interventions for managing stress and trauma. Prerequisite: Graduate student in psychology or related fields.

**PSYC 842. Specialized Health Psychology Practicum. 1-3 Credits.**

Specialized advanced practicum in clinical health psychology, with an area of emphasis mutually defined by student and instructor. Prerequisite: Consent of instructor.

**PSYC 843. Behavioral Pharmacology. 3 Credits.**

Addresses psychological and behavioral effects of drugs, including psychotropic medications. A central theme is that effects of drugs frequently cannot be characterized solely from a pharmacological perspective. Thus, emphasis will be placed on examining the interaction of pharmacological and behavioral variables. For example, how do psychological factors moderate responses to drugs? The nature of this area assumes some knowledge of general psychology, research methods, biology, chemistry, neurophysiology, and the nervous system. Specific course structure will be modified to suit student interests. Prerequisite: Graduate student in psychology or health-related fields, or by permission of instructor.

**PSYC 844. Mental Health and Aging. 3 Credits.**

Reviews recent research and application in the field of mental health and aging. Theoretical perspectives appropriate for understanding mental health issues with increased age are discussed. The epidemiology, assessment, diagnosis, and treatment methods associated with a variety of mental health conditions are surveyed. The community mental health resources available for older adults are discussed as well as practically-related issues such as evaluations of functional independence and competency among older adults. Prerequisite: Graduate student in psychology or related health field, or permission of instructor.

**PSYC 845. Impression Formation and Interpersonal Behavior. 3 Credits.**

Intensive investigations of the processes involved in impression formation and of the effects of established impressions upon interpersonal communications. (Same as COMS 835.) Prerequisite: PSYC 670 or COMS 535.

**PSYC 846. Practicum in Clinical Child Psychology I. 1-3 Credits.**

Introductory practicum experience for the Clinical Child Psychology Program. Orientation to psychological evaluation and treatment of children, adolescents, and their families and initial development of professional self-assessment skills. Students acquire specific clinical competencies through shadowing cases, assisting with interpretation of test of intelligence and academic achievement, conducting behavioral observations in field settings, and performing co-therapy of cases presenting to the KU Child and Family Services Clinic. May be taken in
more than one semester. (Same as ABSC 846.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**PSYC 847. Practicum in Clinical Child Psychology II. 1-3 Credits.**
Intermediate practicum experience for the Clinical Child Psychology Program. Development of specific competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire specific clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic. Students develop ability to identify specific treatment goals and select therapeutically interventions that are conceptually congruent with clients' presenting problems and are based on sound empirical evidence. Students also develop the ability to integrate and synthesize test results, interview material, and behavioral observations into coherent case conceptualizations. May be taken in more than one semester. (Same as ABSC 847.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

**PSYC 848. Clinical Practicum VI: Health. 3 Credits.**
Intensive clinical psychology practice, including group and individual supervision that may be taken either through Clinical Psychology or an approved site outside of the university. Focus is on the acquisition and demonstration of advanced therapy skills with a focus on acquiring core Health Psychology competencies. Graded on a satisfactory/unsatisfactory basis. Prerequisite: PSYC 835 and PSYC 836 and graduate student in clinical health psychology specialty.

**PSYC 849. Clinical Practicum VII: Health. 3 Credits.**
Continuation of PSYC 848. Graded on a satisfactory/unsatisfactory basis. Prerequisite: PSYC 848 and graduate student in clinical health psychology specialty.

**PSYC 850. Assessment I: Foundations of Psychological Assessment. 3 Credits.**
Introduction to the history, methods and theory underlying psychological assessment techniques and methods. Students learn to administer, score, and interpret mental status exams and intelligence tests for children, adolescents and adults. Structured diagnostic assessments are introduced and practiced. Psychological report writing is introduced and practiced. The psychometric theory underlying the construction and validation of personality assessment instruments is reviewed. Prerequisite: Graduate student in clinical psychology or consent of instructor.

**PSYC 855. Assessment II: Integrative Psychological Assessment. 3 Credits.**
Lecture, laboratory and field work. Students learn to administer, score and interpret various personality assessment instruments. Students apply skills acquired in previous coursework to write integrated psychological assessment reports based on anamnesis, structured interview data, intelligence tests, and both objective and projective personality assessment instruments. Prerequisite: PSYC 850 or consent of instructor.

**PSYC 860. Affective Science. 3 Credits.**
An in-depth analysis of current research and theory in affective bases of psychological science. Emphasis will be placed on basic research on emotion, culture, and psychopathology using a broad range of experimental, psychophysiological, and neural methods to test theories about affective psychological mechanisms underlying human behavior. Prerequisite: Graduate student in psychology or health-related fields.

**PSYC 863. Clinical Neuropsychology Across the Lifespan. 3 Credits.**
Reviews neural development and the brain-behavior relationships in intact, injured, and diseased brain systems. Details basic issues in clinical assessment and reporting of cognitive impairment resulting from developmental disorders, stroke, traumatic brain injury, and brain-disease. Selected topics include perception, speech, memory/dementia, judgment, and attention. Prerequisite: Graduate status and PSYC 961 or consent of instructor.

**PSYC 864. Clinical Neuropsychology. 3 Credits.**
Brain-behavior relationships in humans; structure and function of the brain; evaluation of function; the interpretation of neuropsychological data. Lecture and laboratory.

**PSYC 865. Advanced Psychological Assessment: Interview Based Techniques. 3 Credits.**
Lecture and fieldwork. Advanced clinical interviewing. Structured diagnostic interviewing. Coverage of specialized areas of clinical interviewing (e.g., motivational interviewing). Report writing focused on documentation of clinical and structured interviewing. Prerequisite: PSYC 855 or consent of instructor.

**PSYC 870. Cognitive Development. 3 Credits.**
A lecture/discussion course in cognitive development. The course will contrast the theory and research of Jean Piaget and his followers, with an information processing or cognitive psychology approach to issues. Topics include development of perception, attention and information getting; memory and metamemory; problem solving; discrimination learning and concept formation; and individual differences in cognitive styles and strategies. Prerequisite: A course in child psychology or development, a course in cognitive psychology, or consent of instructor.

**PSYC 872. Attention, Perception, and Learning in Infancy. 3 Credits.**
Coverage of the basic literatures on perceptual-cognitive behavior during the first three years of life, as assessed by measures of attention, perception, learning, and memory. Course material is approached from an information-processing framework.

**PSYC 875. Advanced Assessment: Integration of Assessment Techniques. 3 Credits.**
Lecture and fieldwork on selection, administration, scoring and interpretation and integration of data from personality and abilities tests. Focus on assessments includes history, theory and application in psychological assessment batteries. Emphasis on advanced training in objective personality assessment, projective personality assessment, psychometric theory and integrated report writing. Prerequisite: PSYC 855 or consent of instructor.

**PSYC 879. Applied Nonparametric Statistical Methods. 4 Credits.**
This course covers nonparametric statistical methods for testing hypotheses when the assumptions of ordinary parametric statistics are not met. Topics include a review of parametric statistics, sampling distributions, the logic of hypothesis testing, and motivations for using nonparametric techniques. In-depth coverage will be given to distribution-free procedures, sign tests, contingency tables, median tests, chi-square and other goodness-of-fit tests, rank correlations, randomness tests, Monte Carlo methods, resampling methods, tests of independence, 1-sample, 2-sample, and k-sample methods, permutation tests, and function smoothing and splines. There will be an emphasis on the theory underlying nonparametric methods. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 and 791 or equivalent, or consent of instructor.

**PSYC 881. Proseminar in Quantitative Behavioral and Social Sciences. 1 Credit.**
This course is an open forum discussion of issues, topics, and presentations in quantitative behavioral and social sciences. The course can be repeated for credit and is open to any graduate student in any discipline across the behavioral and social sciences.

**PSYC 882. Theory and Method for Research of Human Environments. 3 Credits.**
Conceptual and technical methods for analysis of behavioral environments; theory and research utilization of behavior settings and other ecobehavioral units. Prerequisite: Nine hours of social science including at least one course dealing with research methods and consent of instructor.

**PSYC 885. Altruism and Helping Behavior. 3 Credits.**
Review of contemporary research of prosocial behavior. Topics to be covered include the existence of altruism, why people do and do not help others, and the effect of institutional roles on the behavior of service professionals such as therapists, counselors, and social workers.

**PSYC 887. Factor Analysis. 4 Credits.**
This course covers the theory behind, and application of, exploratory factor analysis. Topics include a review of multiple linear regression and matrix algebra. In-depth coverage is devoted to diagrams, model specification, goodness of fit, model selection, parameter estimation, rotation methods, scale development, and sample size and power issues. Extensions to confirmatory settings are elaborated. Both the theory underlying factor analytic techniques and hands-on application using software are emphasized. Applications across the social and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 888. Diversity Issues in Clinical Psychology. 3 Credits.**
Review of individual differences pertaining to culture, ethnicity, race, gender, sexual orientation, age, etc., as these have an impact upon theory, research, assessment, and treatment issues in clinical psychology. (Same as ABSC 888.) Prerequisite: Graduate status in clinical psychology, or instructor permission.

**PSYC 889. Conceptual Issues in Human Sexuality. 3 Credits.**
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as WGSS 889.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor.

**PSYC 890. Foundations of the Mind. 3 Credits.**
Advances in cognitive psychology have illuminated the way in which we understand mind and mental processes and have the power to affect how we conduct our lives as moral beings (e.g., Are human beings alone in the animal kingdom in possessing minds?). In this graduate course, we will cover key historical and social events that shaped the field; when and how cognitive psychology became a science; and future directions of studying the mind, especially in light of cognitive neuroscience. Students will analyze and critically evaluate cognitive psychological theory, empirical research, and practice in a historical context, as well as develop ideas, critique, and conclusions of their own on the accomplishments and prospects of the science of cognitive psychology. Readings and discussion include an analysis of significant theoretical, historical, and empirical work of topics in cognitive psychology, as well as the cognitive and brain sciences more generally.

**PSYC 891. Intelligence and Cognition. 3 Credits.**
This course concerns the nature of intelligence. Theory and research on cognitive abilities, reasoning, and complex problem-solving are surveyed. Special emphasis is given to contemporary cognitive ability research that applies both experimental and correlation methods to understand the nature of intelligence.

**PSYC 892. Test Theory. 4 Credits.**
This course begins with recommendations for how to write a test (with or without correct answers, for assessing a wide variety of constructs of interest in social and behavioral sciences), covers basics of classical test theory, and then emphasizes modern statistical methods for analyzing item data. Methods include factor analysis of categorical responses, methods for identifying measurement invariance (differential item functioning), and item response theory. Lectures and Laboratory. This course is offered at the 600 and 800 levels, with additional assignments at the 800 level. Prerequisite: PSYC 790/650 or equivalent, or consent of instructor.

**PSYC 893. Multivariate Analysis. 4 Credits.**
Introduction to the central methods used in the analysis of multivariate data. Includes linear transformations, multivariate analysis of variance, multivariate multiple regression, discriminant analysis, canonical correlation, factor analysis, and an introduction to methods for clustering and classification. Applications across the behavior and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 894. Multilevel Modeling. 4 Credits.**
Statistical methods for modeling multilevel (hierarchically structured) data. Topics include a review of ordinary least squares regression analysis, random effects ANOVA, intraclass correlation, multilevel regression, testing and probing interactions, maximum likelihood estimation, model assumptions, model evaluation, and the analysis of longitudinal data. There will be a heavy emphasis on the theory underlying multilevel modeling techniques and hands-on application using software. Applications across the social, educational, and behavioral sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 895. Categorical Data Analysis. 4 Credits.**
Multivariate analyses of count data. Error models, statistical inference, loglinear models, logit models, logistic regression. Homogeneity, symmetry, and selected other topics. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 896. Structural Equation Modeling I. 4 Credits.**
Introduction to statistical methods for modeling latent variables. Topics include a review latent variables, covariance structures analysis, mean structures analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), multiple group CFA, longitudinal CFA, longitudinal SEM, Hierarchical CFA, and Multi-trait Multi-Method SEM. Applications across the behavioral and social sciences are emphasized. Course consists of three hours of lecture and a required one-hour lab session where computing applications are taught. Prerequisite: PSYC 790 or equivalent, or consent of instructor.

**PSYC 897. Master's Thesis in Clinical Child Psychology. 1-10 Credits.**
Supervised research experience completing thesis leading to master's degree. (Same as ABSC 897.)
PSYC 930. Research Seminar on Intimate Relationships. 3 Credits.
Consideration of current psychological theory and research on adult intimate relationships: friendship, dating, committed relationships, dissolution of committed relationships. Students will be expected to be involved in on-going empirical research in the area. Prerequisite: Graduate level courses in research design and statistics.

PSYC 933. Seminar: The Measurement of Attitudes. 3 Credits.
An examination of the concept of attitude and the methods developed to assess the various aspects of attitudes. Prerequisite: PSYC 578 or consent of instructor.

PSYC 934. Developmental Theory. 3 Credits.
An intensive study of traditional and recent developmental theories with an emphasis upon the role of heredity, early stimulation, reinforcement, and modification as each affects the course of the development of children.

PSYC 935. Seminar in Group Dynamics. 3 Credits.
Intensive examination of selected problems in the functioning of small groups. May be taken for two semesters.

PSYC 936. Group Therapeutic Techniques. 3 Credits.

PSYC 943. Advanced Practicum in Clinical Child Psychology III. 1-3 Credits.
Advanced practicum experience for the Clinical Child Psychology Program. Development of advanced competencies in assessment and intervention with children, adolescents, and their families through didactics, field experience, and supervision. Students acquire advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., formal case presentation), and modeling of clinical competencies for junior students. Students will demonstrate the ability to implement empirically derived therapeutic interventions in consideration of individual differences, cultural values, and individual preferences. Students in external practicum sites will demonstrate an understanding of evidence-based models of consultation and provision of consultation to care providers in professional contexts. May be taken in more than one semester. (Same as ABSC 943.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

PSYC 944. Advanced Practicum in Clinical Child Psychology IV. 1-3 Credits.
Advanced practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies in assessment, intervention, and consultation with children, adolescents, and their families through didactics, field experience, and supervision in the semester(s) prior to required clinical internship. Students demonstrate advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum (i.e., integrated case presentation), and modeling of clinical competencies for junior students. Course requirements include the development of portfolios for demonstration of clinical competencies and application to clinical internships. May be taken in more than one semester. (Same as ABSC 944.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

PSYC 946. Theories and Methods of Psychotherapy. 3 Credits.
Comparative examination and analysis of major theories and approaches to psychotherapeutic interventions, core principles of therapeutic change, scientific approaches to establishing treatment efficacy, current intervention issues. Prerequisite: Nine hours in graduate clinical psychology or consent of instructor.

PSYC 947. Advanced Practicum in Clinical Child Psychology V. 1-5 Credits.
Specialized practicum experience for the Clinical Child Psychology Program. Demonstration of advanced competencies related to supervision and consultation in clinical psychology. With faculty supervision, students will develop and demonstrate the ability to provide effective supervision to less advanced students in the program in selected cases appropriate to the service setting. Further development of advanced clinical competencies through supervised provision of assessment and interventions for cases presenting to the KU Child and Family Services Clinic and/or approved external practicum sites, leadership of didactic components of practicum, and modeling of clinical competencies for junior students. May be taken in more than one semester. (Same as ABSC 947.) Prerequisite: Graduate standing in clinical child psychology and instructor permission.

PSYC 949. Evidence Based Practice in Psychology. 3 Credits.
This course provides an overview of theoretical and applied issues germane to evidence-based treatment in clinical psychology. The course will include an in-depth examination of several psychotherapy protocols which have been identified as empirically supported, with considerable attention accorded to implementation of techniques within the context of evidence-based practice.

PSYC 950. Clinical Supervision and Consultation: Theory & Research. 1 Credits.
Lecture, readings, and discussion of theory and research related to the practices of clinical supervision and consultation. Developmental and competency based approaches to supervision with exposure to other approaches. Professional issues, ethics, and multicultural aspects of supervision and consultation. Prerequisite: Previous or concurrent enrollment in PSYC 969 or consent of instructor.

PSYC 951. Clinical Supervision Practicum. 1-3 Credits.
Fieldwork in supervision under direction of instructor. Practice in supervision of clinical work, assessment, psychotherapy, and documentation. Prerequisite: Previous or concurrent enrollment in PSYC 950 and PSYC 969, or consent of instructor.

PSYC 955. Close Relationships and Adult Attachment: Theory, Research, and Current Controversies. 3 Credits.
Review of attachment theory literature and the research it has generated in clinical developmental, personality, and social psychology. The course will allow discussion of a wide range of issues including the evolution of behavioral systems that underlie close human relationships, the developmental roots of relational styles and affect-regulation processes, the role of mental representations in interpersonal behavior, and some of the attachment and close relationship processes involved in good and poor mental health. Prerequisite: Graduate standing or consent of instructor.

PSYC 956. Social Neuroscience. 3 Credits.
Acquaint students with the Social Neuroscience approach as well as recent findings using this approach. The course will focus on particular social phenomena and (a) evaluate the utility of current social neuroscience research examining these phenomena and (b) consider future experimental designs using the Social Neuroscience approach to further inform our understanding of each phenomenon. After being acquainted with foundational concepts, students will analyze findings in a number of core content domains (including emotions, emotion regulation, self, stereotyping, attitudes and beliefs, social decision making, cooperation, close relationships), focusing on neuroscience's contribution beyond traditional methods. Prerequisite: Graduate standing or consent of instructor.

PSYC 960. Advanced Psychopathology. 3 Credits.
Review of current nosology of adult psychopathological syndromes emphasizing development of diagnostic skills. Critical survey of recent research and theory related to the etiology, course, prognosis, and treatment of adult psychopathological conditions. Prerequisite: Graduate student status in clinical psychology, clinical child psychology, or counseling psychology.

PSYC 961. Biological Foundations of Psychopathology. 3 Credits.
A review of fundamental topics in the neurosciences and their relevance to selected psychopathological disorders. The fundamental topics are taken from genetics, neuroanatomy, neurophysiology, and neurochemistry. The disorders include schizophrenia, depression, anxiety disorders, Alzheimer's disease, Parkinson's disease, and Huntington's disease. Prerequisite: Graduate student in clinical psychology or consent of instructor.

PSYC 962. Advanced Personality. 3 Credits.
A survey of selected advanced topics in the area of personality. Includes review of theoretical and research issues in the area of personality. Prerequisite: Consent of instructor.

PSYC 963. Clinical Child Psychology Internship. 1 Credits.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by qualified clinical child psychology faculty and field staff clinicians. Required of all clinical child psychology program students. An intensive guided experience in application of clinical child psychology theory, methods, and practices. Integrates scientific and clinical aspects of field. (Same as ABSC 963.) Prerequisite: Completion of Ph.D. comprehensive examinations, graduate standing in clinical child psychology, and permission of clinical child psychology faculty.

PSYC 964. Clinical Practicum I. 3 Credits.
Lecture, laboratory and field work, and supervision appointment. Psychological evaluation and treatment of individuals, couples, families, and groups; supervised, progressive experience in psychological treatment and in the clinical evaluation of intellectual, personality, and social functioning. Emphasis in selection of and training in psychological intervention strategies is on the use of empirically supported treatments where possible. Grading on Satisfactory/Fail basis. Prerequisite: Graduate student in clinical psychology program.

PSYC 965. Clinical Practicum II. 3 Credits.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 964 or permission of instructor.

PSYC 966. Clinical Practicum III. 1-3 Credits.
A continuation of PSYC 964. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 964 or permission of instructor.

PSYC 967. Psychotherapy with Families. 3 Credits.
Clinical approaches to marriage and family therapy. Intensive consideration of the theoretical positions, research findings, clinical methods, and technical problems in marriage and family therapy. Prerequisite: PSYC 946.

PSYC 968. Research Methods in Clinical Psychology. 3 Credits.
Systematic consideration of research methods in clinical psychology including identification of a research problem, selection of the research design and assessment strategies, and methods of evaluating the results. The principles, pitfalls, artifacts, biases, and sources of controversy in research in this area are also covered. Prerequisite: Graduate standing in clinical or counseling psychology.

PSYC 969. Clinical Practicum IV. 1-3 Credits.
Lecture, laboratory, field work, and supervision appointment. Advanced psychological treatment of the individual, couple, family, and group client; supervised, progressive experience in the clinical application of psychotherapeutic treatment methods with emphasis on the use of empirically supported interventions where possible. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 966 or consent of instructor.

PSYC 970. Clinical Practicum V. 3 Credits.
A continuation of PSYC 969. Grading on Satisfactory/Fail basis. Prerequisite: PSYC 969 or consent of instructor.

PSYC 974. Clinical Internship. 1 Credits.
Clinical Internship.

PSYC 975. Clinical Child Psychology Internship. 3 Credits.
Clinical Child Psychology Internship.

PSYC 976. Clinical Psychology Internship. 1-3 Credits.
Three consecutive enrollments, covering a minimum of eleven months of experience in an approved clinical psychology field setting; supervision by clinical psychology faculty and field staff clinical psychologists. Required of all clinical psychology program students. An intensive guided experience in the application of clinical psychology theory, methods, and practices. An emphasis upon the relationships between scientific and
clinical functions. Integrations between research and clinical practice. Prerequisite: Completion of Ph.D. comprehensive examinations and consent of clinical psychology faculty.

**PSYC 975. Professional and Ethical Problems in Clinical Psychology. 3 Credits.**
Interprofessional relationships, case security, legal aspects, ethical code of practice, clinic administration, and problems in the clinical practice of psychology. Issues involving ethics in research will also be explored. Prerequisite: Consent of instructor.

**PSYC 976. Therapeutic Interventions with Children. 3 Credits.**
Clinical approaches to the therapeutic treatment of children with special emphasis on research findings and laboratory (practicum) experience. A survey of relationship therapies, operant strategies, system approaches, parent education and play therapy by the right therapist for a specific child with a particular problem. (Same as ABSC 976.) Prerequisite: Instructor permission.

**PSYC 977. Specialized Clinical Practicum. 1-4 Credits.**
Lecture; laboratory and field work, and supervision appointment. Specialized psychological services for the evaluation and/or treatment of the individual client or the group or the institution. Investigation of and experience in a specialized practicum area not covered in regular courses. Prerequisite: Students must consult with members of the clinical faculty and propose an acceptable project in advance of enrollment.

**PSYC 980. Special Problems in Psychology. 1-5 Credits.**
Investigation of a special research problem or directed reading in an area not covered in regular courses. Prerequisite: Consent of instructor.

**PSYC 981. Teaching Psychology. 1 Credit.**
Discussion of the problems and techniques of teaching psychology at the undergraduate level. A minimum of one credit of this course must be taken by all assistant instructors during the two semesters of the first year of their appointment in the department. Only three hours may count toward the Ph.D. degree.

**PSYC 982. Issues in Scientific Conduct. 3 Credits.**
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equality, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as CLDP 982 and SPLH 982.)

**PSYC 983. Methods & Professional Issues in the Cognitive & Brain Sciences. 3 Credits.**
Methodology, inferential problems, and professional issues in the cognitive and brain sciences. Prerequisite: PSYC 790 and PSYC 791 or consent of instructor.

**PSYC 986. Interprofessional and Integrated Behavioral Health Care. 3 Credits.**
Overview of current interprofessional care models in primary care. Review integrated behavioral health care approaches to common mental health disorders and approach to lifestyle issues, such as smoking, exercise and poor sleep, and how they impact health. Learn how medical and behavioral health services come together within primary care at an interprofessional level to deliver health care. Review research emerging on integrated and interprofessional care models. Prerequisite: Graduate student in psychology, health related field, or permission of instructor.

**PSYC 990. Methods for Clustering and Classification. 3 Credits.**
Statistical methods for identifying classes, clusters, and taxa. Topics include k-means, discriminant analysis, hierarchical clustering algorithms, additive trees, neural network models for clustering, latent class models, finite mixture models, and models for skills/cognitive diagnosis. Applications across the social and behavior sciences are emphasized. Prerequisite: PSYC 790 and PSYC 791 or equivalent, or consent of instructor.

**PSYC 991. Longitudinal Data Analysis. 3 Credits.**
Reviews and contrasts various statistical methods for the analysis of change. Course focuses on various techniques to analyze longitudinal (repeated-measures) data beyond the repeated-measures ANOVA framework. Techniques covered included latent change scores, latent difference scores, individual-differences modeling of latent residual and change scores, intra-individual differences modeling (e.g., growth curve, mixed modeling) and growth mixture modeling. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor.

**PSYC 993. Seminar: _____. 1-5 Credits.**

**PSYC 996. Structural Equation Modeling II. 3 Credits.**
Continuation of PSYC 896. Advanced applications of modern methods for testing hypotheses on multivariate correlational data in the behavioral and social sciences. Topics include advanced confirmatory factor analysis, mediation and moderation among latent variables, latent growth curve modeling, and other latent variable mean and covariance structures analysis techniques. Applications across the behavioral and social sciences are emphasized. Prerequisite: PSYC 896 or equivalent, or consent of instructor.

**PSYC 998. Doctoral Dissertation in Clinical Child Psychology. 1-10 Credits.**
Research experience making original contribution to literature in clinical child psychology. (Same as ABSC 998.)

**PSYC 999. Dissertation. 1-12 Credits.**
Dissertation hours. Graded on a satisfactory progress/limited progress/no progress basis.

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**Bachelor of Arts and Bachelor of General Studies in Psychology**

**Bachelor of Arts and Bachelor of General Studies in Psychology**

See here for more information ([https://catalog.ku.edu/liberal-arts-sciences/#undergraduatetext](https://catalog.ku.edu/liberal-arts-sciences/#undergraduatetext)) on the difference between a BA and a BGS.

Psychology examines all aspects of human behavior: Why do people behave the way they do? What makes people happy or unhappy? What are the relationships between the mind and the brain? Majoring in psychology allows you to explore the behavior of people and how their minds work, and then apply that knowledge to the modern world.

Students have many reasons for wanting to major in psychology. Some are simply fond of observing the behavior of others around them, fascinated with the results of their observations and curious to learn why people behave as they do. Some plan to become psychologists themselves or to enter one of the many professions where a background in psychology can be useful – such as, business, teaching, medicine, nursing, law, social work, the ministry, counseling, student services, child development, administration, or human resources.

Our department offers a wide variety of psychology courses (p. ___) from which to choose and additional experiences and opportunities are available beyond the classroom. There are many chances
to engage in extracurricular enrichment, including Psi Chi (http://psych.ku.edu/psi-chi), a research-focused Honors Program (http://honors.ku.edu/), research assistantships and volunteer opportunities in faculty labs (http://psych.ku.edu/undergraduate-research/).

Our scientific approach to understanding human behavior equips students with a solid foundation of analytical, research and interpersonal skills for careers in many fields with a human service emphasis.

Learn more about career paths available to psychology majors:
What are you going to do with that degree? (http://benschmidt.org/jobs/
Where do college graduates work? (https://www.census.gov/dataviz/

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Requirements for the B.A. or B.G.S. Major**

**B.A. or B.G.S. Major in Psychology**

**Psychology Major Course Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC</td>
<td>Psychology Core Knowledge and Skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete a course in each of the following 9 areas:</td>
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</tr>
<tr>
<td>PSYC 102</td>
<td>Orientation Seminar in Psychology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>General Psychology, Satisfied by:</td>
<td></td>
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<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 105</td>
<td>General Psychology, Honors</td>
<td></td>
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<tr>
<td>Research Methods in Psychology, Satisfied by:</td>
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<td></td>
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<tr>
<td>PSYC 200</td>
<td>Research Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 201</td>
<td>Research Methods in Psychology, Honors</td>
<td></td>
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<tr>
<td>Statistics in Psychological Research, Satisfied by:</td>
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<td></td>
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<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 211</td>
<td>Statistics in Psychological Research, Honors</td>
<td></td>
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</tbody>
</table>

**Five PSYC courses at the 300-level**

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity, Equity, and Ethical Behavior</td>
<td>15</td>
</tr>
<tr>
<td>Majors must complete 3 hours. Choose one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 465</td>
<td>Stereotyping and Prejudice Across Cultures</td>
</tr>
<tr>
<td>PSYC 492</td>
<td>Psychology and Social Issues</td>
</tr>
<tr>
<td>PSYC 545</td>
<td>Culture and Psychology</td>
</tr>
<tr>
<td>PSYC 592</td>
<td>Psychological Significance of Physical Illness and Disability</td>
</tr>
</tbody>
</table>

**Psychology Required Electives**

Majors must complete 9 hours, at least 6 of these hours must be completed with courses numbered 300 or higher.

**Psychology Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 37 hours of major courses. Note: No more than 3 hours of PSYC 480, PSYC 481, or PSYC 483 may count toward the minimum hours required for the major. (No more than a 6-hour combination of these courses may be counted toward the major.)

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in Psychology can be found here: Psychology (p. 1737), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Psychology can be found here: Psychology (p. 1739), or by using the left-side navigation.

**Departmental Honors**

Students may inquire about departmental honors as soon as they are admitted to the undergraduate major. The department website (http://psych.ku.edu/babgs-honors/) has details. Participation usually begins in the senior year. A 3.5 grade-point average in psychology courses is required. Students follow individualized courses of study arranged through the director. Students who complete PSYC 460, individual research, and a paper under the direction of an instructor may graduate with departmental honors.

**BA in Psychology**

Below is a sample 4-year plan for students pursuing the BA in Psychology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
### Freshman

#### Fall

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/ BA Writing I) &lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/ BA Writing II) &lt;sup&gt;1&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (<em>Suggested</em> Goal 1.2 Quantitative Literacy)</td>
<td>3</td>
<td>PSYC 210 (BA Quantitative Reasoning (BAQR); Major Requirement)&lt;sup&gt;2,5&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
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<tr>
<td>PSYC 102 (Major Requirement)</td>
<td>1</td>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3</td>
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<tr>
<td>PSYC 104 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>PSYC 200 (Major Requirement)&lt;sup&gt;5&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>17</td>
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</table>

#### Sophomore

#### Fall

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)&lt;sup&gt;8&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100 &amp; BIOL 102 (or BIOL 150)&lt;sup&gt;3&lt;/sup&gt;</td>
<td>3-4</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>PSYC 360 (PSYC Core Course (Major Requirement)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;7&lt;/sup&gt;</td>
<td>3</td>
<td>PSYC Core Course (Major Requirement)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;7&lt;/sup&gt;</td>
<td>1</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;7&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>13-14</td>
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#### Junior

#### Fall

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness (may be completed by a 3rd level language)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC Core Course (Major Requirement)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
<td>PSYC Core Course (Major Requirement)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>PSYC Core Course (Major Requirement)&lt;sup&gt;9&lt;/sup&gt;</td>
<td>3</td>
<td>PSYC Core Course (Major Requirement)&lt;sup&gt;4&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>PSYC Elective 100+ (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;7&lt;/sup&gt;</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;7&lt;/sup&gt;</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours&lt;sup&gt;7&lt;/sup&gt;</td>
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<td></td>
<td>15</td>
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#### Senior

#### Fall

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>PSYC Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours 120-121

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. An introductory course in Biology is required for the Biological Psychology course requirement in the major. Choose to take either BIOL 100 and BIOL 102, or BIOL 150 which will also fulfill the lab science requirement.
4. There are six core courses that must be taken for the PSYC major: PSYC 318/PSYC 319, PSYC 333/PSYC 334, PSYC 350/PSYC 351, PSYC 360/PSYC 361, one of the following: PSYC 370, PSYC 371, PSYC 375, PSYC 380, or PSYC 381 as well as one of the following: PSYC 465, PSYC 492, PSYC 545, or PSYC 592.
5. Both PSYC 200 and PSYC 210 are required for the major. Take whichever one has not already been taken.
6. LA&S 490: Internship Exploration is recommended for PSYC majors to fulfill Goal 6 Integration & Creativity. If LA&S 490 is not taken, be sure to choose another Goal 6 course, or approved experience, to fulfill the requirement.
7. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
8. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
BGS in Psychology

Below is a sample 4-year plan for students pursuing the BGS in Psychology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3</td>
<td>PSYC 200 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 102 (Major Requirement)</td>
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<td>BIOL 100 (Goal 3 Natural Science, Major Requirement)</td>
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<tr>
<td>PSYC 104 (Goal 3 Social Science, Major Requirement)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Goal 3 Arts and Humanities</td>
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</tr>
<tr>
<td>PSYC 210 (Goal 1.2 Quantitative Literacy, Major Requirement)</td>
<td>3</td>
<td>PSYC Core (Major Requirement)</td>
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</tr>
<tr>
<td>PSYC Core - PSYC 360 Recommended (Major Requirement)</td>
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<td>PSYC Core (Major Requirement)</td>
<td>3</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>PSYC Core (Major Requirement)</td>
<td>3</td>
<td>PSYC Elective 100+ (Major Requirement)</td>
<td>3</td>
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<tr>
<td>PSYC Core (Major Requirement)</td>
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<td>PSYC Core (Major Requirement)</td>
<td>3</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tbody>
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### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td>LING 320 (Goal 6 Integration and Creativity)</td>
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</tr>
<tr>
<td>PSYC Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>PSYC Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>BGS Career Course (BGSC)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>2</td>
</tr>
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</table>

### Total Hours 120

1. An introductory course in Biology is required for the Biological Psychology course requirement in the major. Choose to take either BIOL 100 or BIOL 150.
2. Hour requirements (incl. 45 Jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours.
3. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
4. There are six core courses that must be taken for the PSYC major: PSYC 318/PSYC 319, PSYC 333/PSYC 334, PSYC 350/PSYC 351, PSYC 360/PSYC 361. Also, one of the following: PSYC 370, PSYC 371, PSYC 375, PSYC 380, or PSYC 381 as well as one of the following: PSYC 465, PSYC 492, PSYC 545, or PSYC 592. PSYC 360 is recommended to take first because it is a major pre-requisite for the Diversity, Equity, and Ethical Behavior requirement.
5. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

### Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### IMPORTANT COURSE SEQUENCING NOTES:

Typically offered FALL ONLY - PSYC 333, PSYC 370, PSYC 375
Typically offered SPRING ONLY - PSYC 380
Bachelor of Science in Behavioral Neuroscience

B.S. in Behavioral Neuroscience Overview

Behavioral Neuroscience is a new major in Psychology at the University of Kansas. The concentration in behavioral neuroscience is designed for students with a focused interest in the biological bases of behavior and thought. The concentration is well suited for students who are contemplating professional or mainly research careers in medicine, pharmacology, veterinary medicine, animal science, neurology, neurobiology, and neuroscience. It is also suitable as a degree for those headed into other health-related fields or graduate school in other areas of psychology. As a behavioral neuroscience major, you will take courses in many different departments because, as you explore the neural basis of behavior and prepare to enter the neuroscience research field, you will need to acquire knowledge in the realms of chemistry, biology, psychology, statistics, and even computer science.

For additional information and advising for the BS Major please contact:

Dr. Michael Vitevitch
Director, BS Major in Behavioral Neuroscience
mvitevit@ku.edu

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.S. Degree

B.S. in Behavioral Neuroscience

In addition to degree and major requirements, all students must complete the KU Core.

Behavioral Neuroscience Prerequisite or Co-Requisite Knowledge

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majors must complete courses as specified in each of the following areas. These hours do not contribute to the minimum number of hours required for the major.</td>
<td></td>
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<tr>
<td></td>
<td>Mathematics. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: ____</td>
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</tr>
<tr>
<td>or MATH 104</td>
<td>Pre calculus Mathematics</td>
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<tr>
<td>MATH 115</td>
<td>Calculus I</td>
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</tr>
<tr>
<td>or MATH 125</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>Computing. Satisfied by:</td>
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</tr>
<tr>
<td>EECS 138</td>
<td>Introduction to Computing: ____ (Python, C++, or MATLAB are recommended)</td>
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</tr>
<tr>
<td>Biology. Satisfied by:</td>
<td></td>
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</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
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<tr>
<td>or BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
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<tr>
<td>Chemistry. Satisfied by:</td>
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<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
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</tbody>
</table>

Students completing this degree as part of their preparation to apply to medical school should consult a College Advisor for information about other courses that might be required to complete that preparation.

BEHAVIORAL NEUROSCIENCE CORE KNOWLEDGE AND SKILLS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PSYC 102</td>
<td>Orientation Seminar in Psychology</td>
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<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
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<tr>
<td>or PSYC 105</td>
<td>General Psychology, Honors</td>
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<tr>
<td>Research methods and Statistics (9-10 hours) Satisfied by:</td>
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<tr>
<td>PSYC 200</td>
<td>Research Methods in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 201</td>
<td>Research Methods in Psychology, Honors</td>
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</tr>
<tr>
<td>PSYC 210</td>
<td>Statistics in Psychological Research</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 211</td>
<td>Statistics in Psychological Research, Honors</td>
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</table>

Students may choose from one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PSYC 500</td>
<td>Intermediate Statistics in Psychological Research</td>
<td>3-4</td>
</tr>
<tr>
<td>PSYC 650</td>
<td>Statistical Methods in Behavioral and Social Science Research I</td>
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</tr>
<tr>
<td>PSYC 687</td>
<td>Factor Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 693</td>
<td>Multivariate Analysis</td>
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</tr>
<tr>
<td>PSYC 694</td>
<td>Multilevel Modeling I</td>
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</tr>
<tr>
<td>PSYC 696</td>
<td>Structural Equation Modeling I</td>
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</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
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<tr>
<td>MATH 526</td>
<td>Applied Mathematical Statistics I</td>
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</tbody>
</table>

Majors must complete two of the following Behavioral Neuroscience Courses (6 hours minimum). Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 370</td>
<td>Behavioral Neuroscience</td>
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</tr>
<tr>
<td>or PSYC 371</td>
<td>Behavior Neuroscience, Honors</td>
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</tr>
<tr>
<td>PSYC 375</td>
<td>Cognitive Neuroscience</td>
<td></td>
</tr>
<tr>
<td>PSYC 380</td>
<td>Clinical Neuroscience</td>
<td></td>
</tr>
<tr>
<td>or PSYC 381</td>
<td>Clinical Neuroscience, Honors</td>
<td></td>
</tr>
</tbody>
</table>
Goals, please visit the Neuroscience. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://clas.ku.edu/undergrad/tools/gpa/).

### Behavioral Neuroscience Major Hours & GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 41-42 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by 31-32 hours of junior/senior level major coursework.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BS in Behavioral Neuroscience. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>Math 101</td>
<td>3</td>
<td>MATH 200</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 385</td>
<td>Social Neuroscience</td>
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</tr>
<tr>
<td>Elective Courses in Psychology or Other Disciplines (note that additional prerequisites may be required for some classes listed).</td>
<td>12</td>
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<tr>
<td>PSYC 390</td>
<td>The Psychology of Aging</td>
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<tr>
<td>PSYC 318</td>
<td>Cognitive Psychology</td>
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<td>PSYC 418</td>
<td>Introduction to Cognitive Science</td>
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<tr>
<td>PSYC 535</td>
<td>Developmental Psychopathology</td>
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<td>PSYC 555</td>
<td>Evolutionary Psychology</td>
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<tr>
<td>PSYC 595</td>
<td>Eating and Weight Disorders</td>
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<tr>
<td>PSYC 605</td>
<td>Health Psychology</td>
<td></td>
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<tr>
<td>PSYC 630</td>
<td>Clinical Psychology</td>
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<tr>
<td>PSYC 723</td>
<td>Advanced Cognitive Psychology</td>
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<tr>
<td>LING 438</td>
<td>Neurolinguistics I</td>
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<tr>
<td>SPLH 620</td>
<td>The Communicating Brain: The Ultimate Personal Computer</td>
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<tr>
<td>BIOL 435</td>
<td>Introduction to Neurobiology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 650</td>
<td>Advanced Neurobiology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Applied Research Experience (4 hours minimum), Satisfied by: 4

| PSYC 449      | Laboratory/Field Work in Human Biology | |       |
| PSYC 460      | Honors in Psychology | |       |
| PSYC 480      | Independent Study | |       |
| PSYC 481      | Research Practicum | |       |

**Integrative Capstone** 6

| PSYC 625      | Experimental Psychology: Methods in Psychophysiology and Neuroscience | |       |

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 125 or 115</td>
<td>3-4 Behavioral Neuroscience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 150 or 100</td>
<td>(BS requirement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 210</td>
<td>3 Goal 4.2 Global Awareness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 370, 371, 375, 380, 381, or 385 (Major requirement)</td>
<td>3</td>
<td>PSYC 370, 371, 375, 380, 381, or 385 (Major requirement)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 500, 650, 687, 693, 694, 696, MATH 365, or MATH 526 (Major Requirement)</td>
<td>3</td>
<td>Behavioral Neuroscience Elective Course 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral Neuroscience Elective Course 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Applied Research Experience 300+ (Major Requirement) 1**

| 2 | 2 Applied Research Experience 300+ (Major Requirement) |       |

**Second Area of Study/ Elective/Degree/Junior-Senior Hours** 3

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 625 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>6</td>
<td>Behavioral Neuroscience Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 625 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>6</td>
<td>Behavioral Neuroscience Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Area of Study/ Elective/Degree/Junior-Senior Hours** 3
Minor in Psychology

Why Minor in Psychology?

A Minor in Psychology will add a strong emphasis to any degree plan at the University of Kansas. Our courses offer real world and practical applications to enhance your major(s) of choice and demonstrate to graduate programs and employers that you bring a unique understanding of statistical and research methodology, critical analysis, and the complexities of human nature.

We invite you to explore our minor further by visiting our department site (http://psych.ku.edu/ba-behavioral-neuroscience-honors/) and our advisors site (https://psych.ku.edu/staff/). Students on the KU Edwards Campus in Overland Park should contact Alyson Germinder (agerminder@ku.edu).

Declaring a Psychology Minor

To declare the Psychology minor, you will need to meet with your advisor.

Requirements for the Minor

Students selecting this minor must complete each of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 105</td>
<td>General Psychology, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Psychology Required Electives - Choice Electives

Satisfied by 2 courses chosen from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 318</td>
<td>Cognitive Psychology</td>
</tr>
<tr>
<td>or PSYC 311</td>
<td>Cognitive Psychology, Honors</td>
</tr>
<tr>
<td>PSYC 333</td>
<td>Child Development</td>
</tr>
<tr>
<td>or PSYC 334</td>
<td>Child Development, Honors</td>
</tr>
<tr>
<td>PSYC 350</td>
<td>Psychological Disorders</td>
</tr>
<tr>
<td>or PSYC 351</td>
<td>Psychological Disorders, Honors</td>
</tr>
<tr>
<td>PSYC 360</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>or PSYC 361</td>
<td>Social Psychology, Honors</td>
</tr>
<tr>
<td>PSYC 370</td>
<td>Behavioral Neuroscience</td>
</tr>
<tr>
<td>or PSYC 371</td>
<td>Behavior Neuroscience, Honors</td>
</tr>
<tr>
<td>PSYC 375</td>
<td>Cognitive Neuroscience</td>
</tr>
<tr>
<td>PSYC 380</td>
<td>Clinical Neuroscience</td>
</tr>
<tr>
<td>or PSYC 381</td>
<td>Clinical Neuroscience, Honors</td>
</tr>
</tbody>
</table>

Psychology Minor Remaining Electives

The remaining elective courses may include any undergraduate courses offered by the Department of Psychology including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 480</td>
<td>Independent Study</td>
</tr>
<tr>
<td>PSYC 481</td>
<td>Research Practicum</td>
</tr>
<tr>
<td>PSYC 483</td>
<td>Undergraduate Internship in Psychology</td>
</tr>
</tbody>
</table>

A maximum of 3 hours of PSYC 480 or PSYC 481 or PSYC 483, or any combination of these 3 courses totaling 3 hours may count toward the minor.

Psychology Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours

Satisfied by 18 hours of minor courses.

Minor Hours in Residence

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Departmental Honors

Students may inquire about departmental honors as soon as they are admitted to the undergraduate major. The department website (http://psych.ku.edu/ba-behavioral-neuroscience-honors/) has details. Participation usually begins in the senior year. A 3.5 grade-point average in psychology courses is required. Students follow individualized courses of study arranged through the director. Students who complete PSYC 460, individual research, and a paper under the direction of an instructor may graduate with departmental honors.

Minor in Psychology

Second Area of Study/Elective/Degree/Junior-Senior Hours

<table>
<thead>
<tr>
<th>2</th>
<th>3</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 120-121

1. Students are required to complete 4 hours minimum towards the Applied Research Experience. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

2. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

3. Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

Departmental Honors

Students may inquire about departmental honors as soon as they are admitted to the undergraduate major. The department website (http://psych.ku.edu/ba-behavioral-neuroscience-honors/) has details. Participation usually begins in the senior year. A 3.5 grade-point average in psychology courses is required. Students follow individualized courses of study arranged through the director. Students who complete PSYC 460, individual research, and a paper under the direction of an instructor may graduate with departmental honors.

Minor in Psychology

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We invite you to explore our minor further by visiting our department site (http://psych.ku.edu/ba-behavioral-neuroscience-honors/) and our advisors site (https://psych.ku.edu/staff/). Students on the KU Edwards Campus in Overland Park should contact Alyson Germinder (agerminder@ku.edu).

Declaring a Psychology Minor

To declare the Psychology minor, you will need to meet with your advisor.
Minor in Social and Behavioral Sciences Methodology

Minor in Social and Behavioral Sciences Methodology (SBSM)

Are you interested in psychology but have a different academic path in mind? Would you like to enhance your current major for more attention in the workforce?

The Minor in Quantitative Behavioral and Social Sciences is a program that provides undergraduate students a broadened and coordinated platform for advanced training in research methodology and practical research experience.

Students electing to minor in SBSM are provided with an opportunity to receive advanced training in quantitative and qualitative methods as applied in the behavioral and social sciences. This Minor allows students to develop graduate-level expertise in applied statistical methods. Students who graduate with this Minor acquire skills that will significantly enhance their career opportunities in areas related to their primary major (e.g., sociology, political science, psychology, a foreign language).

We invite you to explore this unique minor further by visiting our department site (http://quantitative.ku.edu/minor-requirements/) and meeting with our advisors (https://psych.ku.edu/staff/).

Declaring a Psychology Minor

To declare the Psychology minor, you will need to meet with your advisor.

Requirements for the Social and Behavioral Sciences Methodology Minor

Social and Behavioral Science Methodology Minor Course Requirements

Students selecting this minor must complete each of the following:

Prerequisite Knowledge for Minor

Satisfied by a course in elementary statistics with a B- or better grade (e.g., COMS 356; MATH 365, MATH 526; POLS 306; PSYC 210; PUAD 332; SOC 380). This prerequisite does not count towards the SBSM minor hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 650</td>
<td>Statistical Methods in Behavioral and Social Science Research I.</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 694</td>
<td>Multivariate Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 696</td>
<td>Structural Equation Modeling I</td>
<td></td>
</tr>
<tr>
<td>PSYC 697</td>
<td>Longitudinal Data Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Minor Electives. Satisfied by additional graduate-level courses or guided research experience as needed to bring total hours completed to the minimum of 18 hours required for the minor. Options include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 480</td>
<td>Independent Study</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 481</td>
<td>Research Practicum</td>
<td></td>
</tr>
<tr>
<td>PSYC 483</td>
<td>Undergraduate Internship in Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 651</td>
<td>Anova and Other Factorial Designs</td>
<td></td>
</tr>
<tr>
<td>PSYC 687</td>
<td>Factor Analysis</td>
<td></td>
</tr>
<tr>
<td>PSYC 694</td>
<td>Multilevel Modeling I</td>
<td></td>
</tr>
<tr>
<td>PSYC 696</td>
<td>Structural Equation Modeling I</td>
<td></td>
</tr>
<tr>
<td>PSYC 697</td>
<td>Longitudinal Data Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Social and Behavioral Methods Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

<table>
<thead>
<tr>
<th>Minor Hours</th>
<th>Minor Junior/Senior (300+) Hours in Residence</th>
<th>Minor Junior/Senior (300+) Hours</th>
<th>Minor Junior/Senior Graduation GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied by 18 hours of minor courses.</td>
<td>Satisfied by a minimum of 9 hours of KU resident credit in the minor.</td>
<td>Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the minor.</td>
<td>Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (<a href="http://clas.ku.edu/undergrad/tools/gpa/">http://clas.ku.edu/undergrad/tools/gpa/</a>).</td>
</tr>
</tbody>
</table>

Sample Plan

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 650</td>
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<td>PSYC 696</td>
<td>Structural Equation Modeling I</td>
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<tr>
<td>PSYC 697</td>
<td>Longitudinal Data Analysis</td>
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</tr>
<tr>
<td>PSYC 480</td>
<td>Independent Study</td>
<td>4</td>
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<tr>
<td>PSYC 481</td>
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<td>PSYC 483</td>
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<tr>
<td>PSYC 697</td>
<td>Longitudinal Data Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Undergraduate Certificate in Data Science

We are awash in data, models, and predictions. This flood of data has opened up seemingly unlimited possibilities: it allows businesses to make
informed recommendations for their clients, health officials to use text and image processing to track and classify health information, or community organizers to help spread the news and civic information through social networks. Whatever your field of study, you need to deal with data. This interdisciplinary data science certificate prepares students to harness data and help realize some of its many possibilities. Students will receive training in mathematics, computation, and statistics; data collection, management, description, and analysis; communication and project management; and ethics, problem-solving, and judgment and decision making.

**Undergraduate Certificate in Mind and Brain**

The Mind & Brain certificate provides students majoring in different fields with cross-disciplinary training in several ancillary fields that study various aspects of the mind and brain. The program requires two introductory courses from two different fields (LING, PHIL, PSYC), and two junior/senior level electives.

### Requirements for the Undergraduate Certificate in Mind and Brain

12 credit hours, of which at least 6 must be taken at the junior/senior level.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LING 110</td>
<td>Language and Mind</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Choose one course from the following:</td>
<td></td>
</tr>
<tr>
<td>PHIL 140</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 150</td>
<td>Philosophical Communication</td>
<td></td>
</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choose 2 of the following:</td>
<td>6</td>
</tr>
<tr>
<td>LING/ANTH</td>
<td>Language in Culture and Society</td>
<td></td>
</tr>
<tr>
<td>320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LING 435</td>
<td>Psycholinguistics I</td>
<td></td>
</tr>
<tr>
<td>LING 438</td>
<td>Neurolinguistics I</td>
<td></td>
</tr>
<tr>
<td>PHIL 386</td>
<td>Modern Philosophy from Descartes to Kant</td>
<td></td>
</tr>
<tr>
<td>PHIL 622</td>
<td>Philosophy of Social Science</td>
<td></td>
</tr>
<tr>
<td>PHIL 654</td>
<td>Philosophy of Mind</td>
<td></td>
</tr>
<tr>
<td>PSYC 318</td>
<td>Cognitive Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 375</td>
<td>Cognitive Neuroscience</td>
<td></td>
</tr>
<tr>
<td>PSYC/LING</td>
<td>Introduction to Cognitive Science</td>
<td></td>
</tr>
<tr>
<td>PHIL 418</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Individual courses, including special topics courses, can be approved as counting toward this requirement per the data science steering committee. They may contact the current chair of the data science steering committee to evaluate its potential inclusion as an elective course towards the certificate.

## Master of Arts in Psychology

### Department of Psychology Master's Overview

Our department does not admit terminal master's students.

We offer a single doctoral degree in psychology which may be earned in one of the following programs: brain, behavior, and quantitative science (http://bbq.ku.edu/), clinical psychology (https://psychology.ku.edu/clinical/), and social psychology (http://social.ku.edu/). Please visit our department website (https://psychology.ku.edu/) for more information on these programs. Students admitted to one of these programs enter with the expectation of continuing graduate study through the Ph.D.

All of our programs boast distinguished and award-winning faculty, notable research publications, and a deep foundation in the historical progress of psychological advances.

A separate clinical child psychology training program has been developed for doctoral students in an interdepartmental program with the Department of Applied Behavioral Science. For more information regarding the clinical child graduate program, please visit their website (https://ccpp.ku.edu/).

### Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of
Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The department does not admit students seeking the terminal master’s degree, as students enter the department with the expectation of earning the Ph.D. For further information regarding the application process for our program, including department-specific deadlines and required supplemental documentation, please visit the Admissions ([https://psychology.ku.edu/psychology-graduate-program/](https://psychology.ku.edu/psychology-graduate-program/)) page of the department website, or contact the department's graduate program coordinator.

M.A. Degree Requirements

Within 2 years of first enrollment in the Ph.D. program, the student must earn at least 30 graduate credit hours, no more than 6 of which may be in courses offered by other departments. Courses required for the M.A. degree are determined in consultation with faculty of the program in which the student is enrolled as part of the process of development of an individualized program. No more than 6 thesis hours may be applied to the 30 hours required for the M.A. At least 50% of coursework for the master’s degree must be taken at the 700 level or above. The student must complete an acceptable thesis based on an empirical study and pass an oral examination. The oral examination may cover the thesis as well as more general material.

Doctor of Philosophy in Psychology

The Department of Psychology Graduate Program at the University of Kansas

We offer a single doctoral degree in Psychology which may be earned in one of the following programs: brain, behavior, and quantitative science, clinical psychology, and social psychology. Admission decisions are made separately within each program. Students admitted to one of these programs enter with the expectation of continuing graduate study through the Ph.D. as the department does not admit terminal master's students.

All of our programs boast distinguished and award-winning faculty, notable research publications, and a deep foundation in the historical progress of psychological advances.

Please visit our department website ([https://psychology.ku.edu/](https://psychology.ku.edu/)) for more information on these programs.

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In addition to the general admissions requirements ([http://policy.ku.edu/graduate-studies/admission-to-graduate-study/?num1_1=](http://policy.ku.edu/graduate-studies/admission-to-graduate-study/?num1_1=)) from the Office of Graduate Studies, applicants are required to have completed 15 credit hours in psychology or a closely related field, including a first course in statistics and a course in experimental psychology or psychological research methods.

Submit your graduate application online ([https://gradapply.ku.edu/apply/](https://gradapply.ku.edu/apply/)). For further information regarding the application process, including department-specific deadlines and required supplemental documentation, please visit the Admission ([https://psychology.ku.edu/psychology-graduate-program/](https://psychology.ku.edu/psychology-graduate-program/)) page of the department website, or contact the department's graduate program coordinator.

Ph.D. Degree Requirements

Although graduate education is offered through separate programs, each student prepares an individualized plan of study in consultation with faculty members. These plans indicate how the student proposes to fulfill the requirements for the M.A. and Ph.D. degrees, including all general requirements and conditions.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

Social Psychology

The social psychology program is an intensive research training experience seeking students who are committed to empirical, scholarly work. The major research interests of faculty members are stereotyping, prejudice, intergroup relations, person perception, close relationships, emotion and motivation, self and identity, culture.

In addition to course work, the central requirement of the program is continuous involvement in research. Research opportunities range from laboratory experimentation to field research. Depending on backgrounds and goals, students may move from one research setting to another or concentrate on a particular type of research throughout their training.

Requirements

Students are guided by individually tailored plans called contracts. These describe sequences of learning experiences developed by the student and a 3-member faculty committee. Beginning students are urged to enroll in basic courses in theory and research in social
psychology and statistics. The contract specifies students' long-range goals, specialties, other fields of psychology or related disciplines in which they will become proficient, proposed sequence of course work, research and teaching experiences they hope to obtain, plans for the M.A. proposal, comprehensive requirements and dissertation landmarks, and an approximate timetable. Contract details can be changed by agreement of the student and faculty committee.

The contract is a general framework that permits students' graduate work to be adapted to their interests and abilities and provides a standard against which progress can be assessed. Students' contracts must specify how the research skills and responsible scholarship requirement is to be met. The research skills requirement typically is met by completion of 6 graduate courses in statistics and research design. The responsible scholarship requirement is met via coursework as specified in the contract, completion of online tutorials, and attendance at ethics proseminars. All contracts must comply with other departmental and general rules including residence and time limits.

**Brain, Behavior, and Quantitative Science**

The Brain, Behavior, and Quantitative Science program provides instruction and research training for students pursuing careers in the academic, public, and private sectors that draw on the research and scholarly interests of the core faculty. These interests include behavioral economics, cognitive neuroscience, cognitive science, developmental science, learning, and quantitative and computational methods. Across all areas, a strong emphasis is placed on students developing a fundamental understanding of psychological theory, acquiring advanced statistical and computational skills and expertise, and learning how to apply this science to improve the development and/or well-being of individuals in society. Toward this end, the program requires both coursework and sustained involvement in the research endeavor, whether in the laboratory or in the field, and (where appropriate) active engagement in opportunities to translate basic science into practice or application.

**Requirements**

Students are guided by individually tailored plans, or contracts. These contracts are a mutual agreement between the student and a faculty committee that describe a set of learning experiences designed to allow the student to establish a career in the behavioral sciences whether that is within or outside of academia. In general, each contract specifies a set of courses tailored to each student that provides the student training in core substantive areas of psychology, quantitative and computational psychology, and training in translational science that are relevant to the goals of the degree on which the faculty and student agree. In addition, the contract specifies a student's long-term goals, planned research activities, other professional development necessary for the student to achieve his/her goals, a plan for the evaluation of progress in the program, and a timeline with proposed completion dates. As a part of this contract system students are evaluated annually on their progress within the program.

The contract is a general framework that permits students to adapt their graduate work to their interests, strengths, and weaknesses. It also provides a standard against which progress can be assessed. Students contracts must specify how the research skills and responsible scholarship requirement will be met; the research skills requirement typically is met by completion of a set of graduate courses in statistics and research design and work in a research laboratory, while the responsible scholarship requirement is met via (a) coursework as specified in the contract, (b) completion of online tutorials associated with obtaining IRB certification, and (c) attendance at ethics proseminars. All contracts must comply with other departmental and general rules including residence and time limits.

Students will complete 36-60 total credit hours including at least 18 credit hours of research. For more information on course requirements please visit the Brain, Behavior, and Quantitative Science website (http://bbq.ku.edu/) and view our curriculum (http://bbq.ku.edu/curriculum/) page.

**Clinical Science**

The clinical psychology program educates students to master knowledge in the field of scientific psychology so that they can generate new scientific knowledge and theory related to the field of clinical psychology, and can make independent contributions to the evolving base of skills and scientific knowledge required for clinical practice. All students take basic course work and practica in academic/research and clinical application. Students may take electives or practica to augment either aspect of training. About half the graduates pursue academic/research-oriented careers, and the rest undertake careers emphasizing applied activities (e.g., psychotherapy in community mental health centers or hospitals). Information is available from the graduate admission secretary or online (http://psych.ku.edu/clinical/).

**Major Area of Study in Health and Rehabilitation Psychology**

Work centers on the psychosocial and biomedical aspects of physical health, illness, and disability. Students apply the knowledge and techniques to problems of prevention, assessment, treatment, and rehabilitation. A detailed overview is available from the graduate admission secretary or online (http://psych.ku.edu/clinical/).

**Requirements**

Individual plans of study are designed to meet the standards established by state licensing boards and professional organizations. Individualization is achieved by selecting among alternate ways of meeting specific requirements and by selected electives or choosing the health and rehabilitation emphasis. The plan of study constitutes an agreement between the student and the entire clinical faculty. Program requirements:

**General Core Requirements for Psychological Science**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PSYC 790</td>
<td>Statistical Methods in Psychology I</td>
<td>4</td>
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<tr>
<td>PSYC 791</td>
<td>Statistical Methods in Psychology II</td>
<td>4</td>
</tr>
<tr>
<td>EPSY 810</td>
<td>Regression and ANOVA: General Linear Models</td>
<td>3</td>
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<tr>
<td>EPSY 812</td>
<td>Meta-Analysis</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 905</td>
<td>Fundamentals of Multivariate Modeling</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 896</td>
<td>Structural Equation Modeling I</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 991</td>
<td>Longitudinal Data Analysis</td>
<td>3</td>
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**Cognitive, Social, and Affective Bases of Behavior**

Completion of:

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<tbody>
<tr>
<td>PSYC 925</td>
<td>Seminar in Cognitive, Affective, and Social Bases of Psychology</td>
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<tr>
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<td>PSYC 705</td>
<td>Human Development through the Lifespan</td>
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<tr>
<td>PSYC 870</td>
<td>Cognitive Development</td>
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**Biological Bases of Behavior**

Completion of:

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<tbody>
<tr>
<td>PSYC 961</td>
<td>Biological Foundations of Psychopathology</td>
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**Diversity and Inclusion**

1 course from the following:

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>PSYC 888</td>
<td>Diversity Issues in Clinical Psychology</td>
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</tr>
<tr>
<td>EPSY 875</td>
<td>Understanding Cultural &amp; Individual Differences in Professional Psychology</td>
<td>3</td>
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</tbody>
</table>

**History, Ethics, and Professional Issues**

Completion of:

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<th>Title</th>
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</thead>
<tbody>
<tr>
<td>PSYC 810</td>
<td>History and Ethics in Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 898</td>
<td>Proseminar: Professional Issues in Clinical and Health Psychology</td>
<td>1</td>
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</tbody>
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**Research Skills and Responsible Scholarship**

The research skills requirement is met by completion of 2 graduate courses in statistics and 1 research design course. The responsible scholarship requirement is met by 1 course in research design, 1 course in ethics, and completion of online tutorials.

**Thesis and Dissertation (18 hours)**

The student must complete a master’s thesis based on an empirical study (minimum of 6 hours) and an empirical doctoral dissertation (minimum of 12 hours) and defend each in separate oral examinations. The thesis should be completed by the end of the second year and written in a form suitable for journal submission.

**Electives/Independent Study (6 credit hours, minimum)**

Because a minimum of 86 hours of graduate credit is required for the degree, the hours not included in the requirements above may be elective courses selected by the student and his or her advisor.

**Examinations: Task**

Each student must propose and demonstrate competence in one task or project. This task typically is done in the third year. It may be in applied/clinical, research/methodology, or program evaluation. A complete description is available from the clinic office or online (http://psych.ku.edu/clinical/).

Upon completion of all degree requirements except the dissertation and internship, the student must pass the oral comprehensive examination. This examination addresses a proposal for the dissertation as well as related, general questions in the field. It should be taken before completion of 4 calendar years for students entering with the B.A. and 3 years for students entering with the M.A. The faculty believes that the student is best served by completing the entire dissertation before the internship.

**Internship (3 hours)**

Students must complete a 12-month predoctoral internship at a setting approved by the clinical psychology faculty. Clinical students may complete their internships at any setting approved by the American Psychology Association.

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**Graduate Certificate in Health Psychology**

**Benefits of a Graduate Certificate in Health Psychology**

Health psychology is involved in many professions, including psychology, educational psychology, allied health professions, exercise science, sociology, social welfare, and many others. Today’s health care is an inter-professional approach to service and health psychology is
part of patient contact and research being conducted in all health areas. Researchers and providers that have education and training in health psychology are in high demand with the changes in health care emerging. Our graduate certificate supplies broad and specific education in health psychology theory, research, and clinical applications. For more information regarding our program, please visit our graduate certificate program (https://psychology.ku.edu/graduate-certificate-health-psychology-overview/) website.

From the very beginning, health psychology has always been a “hybrid” discipline. Following from those interdisciplinary roots, the health psychology certificate would welcome students from a broad range of programs who have a variety of educational goals.

Students in Health Service Delivery Programs. Course offerings provide students the option of selecting classes that could be used to inform practice with patients with chronic or acute health problems. Practicum training is NOT offered, but didactic work can be used to inform training offered in other programs that prepare students to deliver mental or physical health related services (e.g., counseling psychology, social welfare, physical therapy, and nursing).

Students interested in Health Promotion. Course offerings provide students the option of selecting classes that could be used by students interested in careers related to health promotion or primary prevention, or careers that involve communication about health care (e.g., health, sport, and exercise science, public policy, health care administration).

Students interested in Transdisciplinary Research. Course offerings provide students the option of selecting classes with an applied focus in other domains of social science (e.g., social psychology, cognitive psychology, quantitative psychology, philosophy/ethics).

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Current Department of Psychology GRADUATE STUDENTS
Psychology department graduate students who wish to pursue a Health Psychology Graduate Certificate should consult with Dr. Nancy Hamilton. The Department will then request that the College/school add a certificate to a graduate degree-seeking student’s plan.

Current KU Graduate Students Outside of THE Department of Psychology
Current KU graduate students outside of the Department of Psychology who wish to pursue the certificate will complete an application (https://gradapply.ku.edu/apply/) through Graduate Studies. Students must be in good standing with their graduate degree program in order to participate in the certificate program. A graduate GPA of 3.0 or higher is required for admission.

Application requirements include:
• Statement of one’s interest in Health Psychology
• Current Degree Progress Report (DPR) or Advising Report; a current graduate GPA of 3.0 or higher is required
• Letter of support from home academic department

Non-KU Students
Non-KU graduate students must complete an application (https://gradapply.ku.edu/apply/) through Graduate Studies for admissions to the certificate program. Students must have earned a bachelor’s degree.

Application requirements include:
• One letter of recommendation from persons familiar with your academic work or potential for graduate school
• Official Graduate Record Examination (GRE) scores – University of Kansas institutional code is 6871.
• Transcripts from all institutions from which a degree was obtained, or any institutions attended post-bachelors. Copies of official transcripts that you have opened may be uploaded to the application online and used for admissions consideration. If you are admitted, sealed, or official electronic transcripts showing degree conferral, if applicable, must be provided by the end of your first semester at KU. Send official, sealed transcripts to:

KU Visitor Center
1502 Iowa St.
Lawrence, KS 66045
OR
graduateadm@ku.edu

• Applicants who indicate English is not their native language: Proof of English proficiency, (https://gradapply.ku.edu/english-requirements/) as required by the Office of Graduate Studies.

Application Deadline:
Applications for the program are accepted on a rolling basis. For more information on admission to a graduate certificate program, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Questions? Please contact our graduate program coordinator.

Health Psychology Graduate Certificate Program Requirements
Students must maintain a 3.0 or higher GPA in courses taken in the certificate program and maintain good standing in any University program of study for which they are enrolled.

For more information regarding program requirements and a complete list of approved electives, please visit our health psychology graduate
**Course Requirements:**

To complete the health psychology graduate certificate, 12 credit hours of graduate work must be completed, including:

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<th>Code</th>
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<tbody>
<tr>
<td>PSYC 832</td>
<td>Clinical Health Psychology: Health Promotion and Disease Prevention</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 833</td>
<td>Clinical Health Psychology: Acute and Chronic Illness</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 834</td>
<td>Clinical Health Psychology: Physical Aspects of Health and Disease</td>
<td>3</td>
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*Students who wish to take more than one of these courses may count the other course(s) as an elective.

**Elective Courses**

Certificate students must also complete three electives chosen from the program’s list of approved courses or petition the director and co-director to take an alternative course offered and not approved (example: pediatric psychology, courses at KUMC in MPH, or other areas).

**Total Hours**

*Only one course outside of the department of psychology can be included in these 12 credit hours.

**Department of Religious Studies**

**Why study religious studies?**

Religions have been and remain among the most powerful forces shaping human history. Their discourses and practices inform the way we perceive ourselves, those around us, and existence at large, even when we are not actively religious. They are central to understanding both what divides us and what unites us. The academic study of religion is a trans-disciplinary endeavor to understand from an objective perspective how religious traditions shape the lives of their adherents, without seeking to promote or disapprove any specific belief system. Religious Studies acquaints students with the diversity of religious cultures and introduces them to key methods and theories employed in their examination as "religion."

**Undergraduate Programs**

The undergraduate degree in the Department of Religious Studies is a research, analysis, and writing intensive program that features close work with faculty in small classroom settings. It seeks to develop a foundational knowledge of the world’s diversity of religious cultures and critical awareness of the ways in which religion shapes how we see and act toward ourselves, others, and the environment around us. Through the study of specific religious traditions and settings, students come away with a background that is invaluable to understanding and working with people of other cultures, whether in international business or simply as an informed global citizen.

**Graduate Programs**

**IMPORTANT:** The department is not accepting applications for the 2022-2023 academic year.

The department offers a graduate program leading to the Master's of Arts, as well as a Graduate Certificate program. Both programs enable students to pursue specialized advanced work that builds on the interests of the students in tandem with the specializations of the faculty. At all levels, interdepartmental and interdisciplinary cooperation is encouraged as important to a comprehensive program. Continuing research in religious studies is indispensable and intimately related both to teaching and to the wider exchange and advancement of knowledge.

A library of some 15,000 volumes, owned by the Friends of the Department of Religious Studies at the University of Kansas, is housed with and used by the department in Smith Hall's Moore Reading Room. The Department of Religious Studies at KU is also generally able to provide substantial financial support for students seeking the M.A. degree in the department. Non-degree seeking students who have completed an undergraduate degree may apply to take graduate-level courses in Religious Studies.

**Courses**

**REL 100. Introduction to Religious Ethics. 3 Credits.**

In this class we will learn how religious values are used to make ethical judgments, but we will also ask if and how those judgments influence practices or the behavior of people in their everyday lives. What causes a disjunction between norms and behavior? What is the tension between different values when deciding how to act? What about differences of opinion between and even within different religious traditions? What happens when societal expectations conflict with religious values or vice versa? Or when ethical reasoning leads to two different conclusions about how to act? Using specific cases, such as human rights, environmental and sexual ethics, race and violence students will learn how ethical reasoning unfolds in different religious traditions, what values support that reasoning and what happens in society when those values compete.

**REL 102. Violence and Religious Ethics. 3 Credits.**

This course will examine the connection between violence and religion from an ethical perspective. It will focus primarily on Jewish, Christian and Muslim ethical theories, which will be compared and applied to specific cases. We will also consider the ethical justifications for inter-religious conflict and the impact violence has had on targeted religious communities. The course will begin with an interrogation of the meaning of religion, ethics and religious violence-exploring questions like: Are religions inherently violent? Are theories derived from religious ethics used to justify violence? How are acts of violence morally justified? We will then consider these questions in more depth by comparing ethical theories within Judaism, Christianity and Islam, such as just war theory and jihad theory, to see whether religions encourage or seek to curb violence. In addition, each moral theory will be studied in light of specific historical or present cases. Case studies include the Crusades, Medieval Spain, ISIS, white nationalism in America, and recent killings in places of worship. The course will end on a positive note, by examining ethical theories within religions that promote peace, and comparing theories that justify peace with theories that justify war.

**REL 104. Introduction to Religious Studies. 3 Credits.**

This course introduces students to the academic study of religions. It acquaints students with key methods and issues in religious studies, and provides an introductory survey of selected religions. Not open to students who have taken REL 105.
REL 105. Introduction to Religious Studies, Honors. 3 Credits. HR
This course introduces students to the academic study of religions. It acquaints students with key methods and issues in religious studies, and provides an introductory survey of selected religions. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 104.

REL 106. Asian Religions. 3 Credits. HR/NW H/W
A basic introduction to religion in India, China, and Japan with emphasis upon religions that affect the modern period. (Same as EALC 105.)

REL 107. Jews, Christians, Muslims. 3 Credits. HR H
A basic introduction to the major religious traditions of the Near East, Europe, and the Americas, with an emphasis on their development through the modern period and their expressions in contemporary life. Not open to students who have taken JWSH 109. (Same as JWSH 107.)

REL 124. Understanding the Bible. 3 Credits. HR H
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in the history and religious life of the people who produced and used them. Cannot be taken concurrently with REL 315. Not open to students who have taken REL 125 or JWSH 125. (Same as JWSH 124.)

REL 125. Understanding the Bible, Honors. 3 Credits. HR H
An introduction to the literature of the Bible, exploring the relationships among the various types of literature present and the function of each type in history and religious life of the people who produced and used them. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have taken REL 124 or JWSH 124. (Same as JWSH 125.)

REL 130. Myth, Legend, and Folk Belief in East Asia. 3 Credits. NW H/W
A survey of the commonly held ideas about the beginning of the world, the role of gods and spirits in daily life, and the celebrations and rituals proper to each season of the year. The purpose of the course is to present the world view of the ordinary peoples of East Asia. (Same as ANTH 293, EALC 130.)

REL 137. Religious Ethics and Moral Decisions. 3 Credits. H
When faced with ethical dilemmas how do we decide what is the right course of action? In what ways are our decisions affected by religious ideas about morality? In this class we examine the ethical problems we encounter every day in light of the solutions offered from various religious traditions. Cases to be examined include issues of life and death, war and peace, sexual morals, torture, the treatment of animals and the environment.

REL 138. Religion and Moral Decisions, Honors. 3 Credits. H
Honors version of REL 137. Introduction to religious viewpoints on individual and social ethics. This course examines the influence of religious thought on the making of moral decisions, and on value development in relation to specific moral issues. Open only to students who have been admitted to the University Honors Program or by permission of instructor.

REL 171. Religion in American Society. 3 Credits. HR H
A broad introduction to religion in American culture. This class emphasizes the well-established religions with large followings (viz. Judaism, Catholicism, Eastern Orthodoxy, and Protestantism). Some attention is also given to other religions active in America. Other topics covered include the relationship of church and state, religion in ethnic and racial minority groups, and women and religion. (Same as AMS 290.)

REL 177. First Year Seminar: _____ . 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Religious Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

REL 200. Study Abroad Introductions to: _____ . 1-4 Credits. H
This course is designed for the study of special topics in Religious Studies. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

REL 306. God, Buddhism, and the Good Life. 3 Credits. HR
This course introduces students to rigorous philosophic debates about some gripping existential questions surrounding the value of religion with God, a religion without God (focusing on Buddhism), and atheism. We will explore arguments for opposing answers regarding topics such as: whether atheism threatens the value of life; differences in how the self is viewed in Western and Eastern religions; and differences in how morality is grounded in these different traditions. We will examine the compatibility of atheism with Buddhism, and of Buddhism with belief in God. (Same as PHIL 306.) Prerequisite: A 100-level Philosophy course or permission of instructor.

REL 315. Miracles, Martyrs, and Heretics. 3 Credits. H/W
A study of ancient Christian culture and religion employing the popular categories of miracles, martyrs and heretics as entry points into the basic features of religious thought and practice. Prerequisite: An undergraduate course in the humanities.

REL 316. Ancient Magic and Witches. 3 Credits. H
This course provides a survey of magic and witchcraft in ancient Greece and Rome and interprets these practices through anthropological theories of magic and witchcraft. Emphasized topics may include magicians, witches, ghosts, spirits, demons, divination, and spells. This course considers issues such as how magic works, how people engage with the divine, the marginalization of magical practitioners, and the difference between magic, witchcraft and religion. All readings will be in English; no knowledge of any ancient languages is required. (Same as CLSX 316.)

REL 320. The Bible Then and Now. 3 Credits.
An introduction and survey of the history and interpretation of the Jewish and Christian bibles from their first formation to the present day. Students will explore the way the text, interpretation and format of the Bible have adjusted over time to accommodate religious, political, social and technological changes. Class will occasionally meet in the university’s rare book collection to study rare bibles. (Same as JWSH 320.)

REL 323. The Jewish World of Jesus. 3 Credits. H
An introduction to the figure of Jesus in his ancient Jewish context. What was Jewish life like in Jesus’s time? What did the early Jesus movement share with other forms of Judaism, and how did it differ? Evidence from the New Testament, the Dead Sea Scrolls, and other textual and archaeological sources will be used to explore the first-century Jewish society of which both Jesus and the first Christians were a part. (Same as JWSH 323.)

REL 325. Introduction to Judaism. 3 Credits. H
Analyzes a selection of the core texts, teachings, and practices of Jewish religious traditions in terms of classical and contemporary understanding. (Same as JWSH 325.)

REL 326. The Talmud: Its Origins, Nature, and Evolution. 3 Credits. H
This course demystifies the Talmud, arguably the most central yet also the most mysterious text of rabbinic Judaism. Students are introduced to the scope, substance, styles, and major figures of the Talmud, and also learn how the text came into being over the course of several centuries.
REL 327. Religious Zionisms. 3 Credits. H
A survey of the many types of Religious Zionism, from the origins of the movement to the present, from Left to Right, and from Jewish to Christian. The class asks questions about the relationship between religion and politics in Israel using case studies as examples, and also considers the views of religious Jewish anti-Zionists. No previous knowledge of Judaism or Israeli history is required.

REL 329. Mystical Tradition in Judaism. 3 Credits. H
Mystical experiences and supernatural encounters in Jewish texts and tradition: Dybbuks and demons, angels and Elijah; from ecstatic enlightenment to succumbing to satan - Jewish texts and tradition are riddled with the arcane, the occult and the mystical. This course will mine the sources for a deep exploration of these aspects of Judaism that are most often obscured by "normative" teachings and practices, yet remain deeply embedded in the customs and beliefs of Jews around the world. (Same as JWSH 330.)

REL 330. Native American Religions. 3 Credits. NW H
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (myth), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Not open to students who have completed REL 331.

REL 331. Native American Religions, Honors. 3 Credits. NW H
A survey of religious traditions among selected Native American peoples. Topics include religious freedom, ritual activity, cultural narrative (myth), kinship, healing practices, ecology, government relations, impact of colonization, impact of missionization, contact between cultures, and secularization. Open only to students in the University Honors Program or by permission of instructor. Not open to students who have completed REL 330.

REL 333. Magic, Mysteries, Mummies in Ancient Egypt. 3 Credits. H
A study of ancient Egyptian culture and religion employing the popular categories of magic, mysteries and mummies as entry points into the basic features of religious belief and practice. Prerequisite: Any course in the Humanities or Social Sciences.

REL 334. Studies in Ritual: _______. 3 Credits. H
A study of ritual theory and a comparative study of ritual activity among selected religious traditions. May be repeated if topic varies.

REL 339. History of Religion in America. 3 Credits. H
Survey of the development of religious institutions and ideas in America from colonial times to the present. Emphasis is given to the mainstream religious traditions (Protestant, Catholic, Jewish), but attention is also paid to other phenomena, including nonwestern and native American religions.

REL 341. Mysticism. 3 Credits. H
The nature of mystical experience and reflection as expressed in selected mystical literature of the world's religions.

REL 345. Christianity. 3 Credits. H
An introductory examination of the history, doctrines, and practices of Christianity. Selected readings from the creeds, papal decrees, and major Christian theologians.

REL 350. Islam. 3 Credits. NW H/W
Islam's Origins, the prophet Muhammed, the Holy Koran, religious symbols and moral mandates, and historical developments. (Same as AAAS 349.)

REL 355. Muslim Societies. 3 Credits. H
In this class we study Muslim societies throughout the world. We examine variation between regions by looking at Muslim history and culture in different countries, such as Pakistan, Indonesia, Mali, Bosnia, Egypt, Yemen, and others.

REL 357. Women and Gender in Islam. 3 Credits. H
Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. Also examines how Muslim women have impacted those developments. (Not open to students who have taken REL 657.)

REL 360. The Buddhist Tradition in Asia. 3 Credits. W
A historical and geographical survey of the Buddhist tradition from its origins in India to modern day developments in the three major regional Buddhist cultures of Southeast Asia, Tibet, and East Asia (China, Korea, and Japan). Prerequisite: Prior coursework in Asian studies or permission of instructor.

REL 373. The Supreme Court and Religious Issues in the United States. 3 Credits. H
Historical study of the interpretation of the religion clauses of the First Amendment with special reference to the questions of establishment, the free exercise of religion, freedom of religious belief, worship, and action, and religion and the public schools. Not open to freshmen. (Same as HIST 373.)

REL 374. Religious Perspectives on Selfhood and Sexuality. 3 Credits. H
The nature of the self in its individual and social dimensions. Self experienced and expressed in sexuality. Survey of viewpoints in religious literature. (Same as WGSS 374.)

REL 376. American Judaism: Life and Thought. 3 Credits. H
A study of the conflicts between secularists and religiousists, between Zionists and synagogue representatives, and the patterns of compromise in American Jewish life. Questions of Americanism and Jewish survival, support for the State of Israel, and the bureaucratic structure of rabbincal training and philanthropy in America will be raised.

REL 379. Prophets and Profits. 3 Credits. H
The course will examine what religious traditions have had to say about controversies in economic ethics, focusing on how religious thinkers develop arguments on the basis of methods particular to their traditions. At the same time, it presents these traditions alongside secular approaches to economic ethics. Judaism, Christianity, Islam, Hinduism, and Buddhism will be considered, as will liberalism, Marxism, feminism, and natural law theory. Topics include economic inequality, wealth accumulation, licit and illicit commerce, slavery, and profit. Attention will also be paid to the methodological challenges of the study of the topic, which necessarily brings together political economy, ethics, economic history, and hermeneutics. Students will work with a diverse array of primary sources, from ancient scriptures to modern thinkers. The ultimate goal will be to understand how it is possible for thinkers within the same religious tradition to take differing stances on economic ethics, while considering themselves wholly grounded in tradition, depending on their relationships to the modern secular approaches we discuss.

REL 380. Philosophical Issues in Religion. 3 Credits. H
This course will consider, from a philosophical perspective, some of the problems in religion which arise in the development of "Natural Theology" broadly conceived. (Same as PHIL 350.)

REL 382. Jerusalem Through the Ages. 3 Credits. H
As a prominent site in the religious and cultural histories of Judaism, Christianity, and Islam, Jerusalem is uniquely situated as one of the world's most sacred cities. For more than 3,000 years, this city has been a focal point of religious and political activity. Through the critical reading
of historical and religious texts, and archaeological data, this course will explore the historical development of Jerusalem as a sacred place in Judaism, Christianity, and Islam. (Same as CLSX 382, HIST 382 and JWSH 382.)

REL 387. Enemies of Ancient Israel. 3 Credits. H
An exploration of the social world of the Bible through its antagonists and their cultures. We will examine the so-called “Bad Guys of the Bible” using the lenses of history, archaeology, geography, and religion to better understand their cultures and how they are portrayed in the biblical text. (Same as HIST 381 and JWSH 387.)

REL 400. Study Abroad Special Topics: ____. 1-4 Credits. H
This course is designed for the study of special topics in Religious Studies equivalent to courses at the 300 to 600 level at KU. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

REL 404. Undergraduate Seminar in Religion: ____. 1-3 Credits. H
Topic, instructor, prerequisite, and hours of credit to be announced in Schedule of Classes. Particular subject matter may vary given semester responding to student interest and taking advantage of special faculty competence. Class discussion, readings, and individual projects.

REL 405. Directed Study in Religion. 1-4 Credits. H
Investigation of a special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences may be repeated, with maximum cumulative credit of four hours. Course taken for one hour of credit may not be used to fulfill College distribution requirement. Prerequisite: One previous course in religious studies at the University of Kansas and permission of instructor.

REL 425. Religion and Film. 3 Credits. H
An examination of the treatment of religious themes through the medium of film and an examination of the attitudes of religious organizations toward films and film production. Selected films will be viewed and analyzed from the perspectives taken within religious studies.

REL 450. Popular Culture in the Muslim World. 3 Credits. NW H
A study of pop songs, television, comics, and other idioms of popular culture from different parts of the Muslim world, with attention to Muslims’ sense of humor, tragedy, aesthetics, and pertinent issues of the day. (Same as AAAS 450.)

REL 477. Gender and Religion. 3 Credits. H
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as HUM 477 and WGSS 477.) Prerequisite: An introductory course in Humanities, Religious Studies or Women, Gender & Sexuality Studies.

REL 490. Senior Seminar in Theories and Methods. 3 Credits. H
A capstone course for religious studies majors to survey methods and theories in religious studies. Prerequisite: Religious Studies major or permission of the instructor.

REL 494. Research Internship. 1-3 Credits. S
Practical research experience in Religious Studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or outreach project. Credit hours are graded by faculty on a satisfactory/unsatisfactory basis. May be used as a component of the Research Experience Program (REP). Prerequisite: Permission of the instructor.

REL 499. Undergraduate Honors Research. 1-3 Credits. H
Required for Departmental Honors. May be taken more than once; total credit not to exceed 6 hours. Prerequisite: Open only to candidates for degree with departmental honors and with consent of the student's research supervisor.

REL 500. Readings in Non-English Religious Texts. 1-4 Credits. H
This course provides directed readings for students in either primary or secondary texts related to religious studies utilizing material in languages other than English.

REL 502. Special Topics in Religion: ____. 3 Credits. H
Topic and instructor to be announced in Schedule of Classes. May be offered by different instructors under different subtopics, and may be taken more than once if subject matter varies sufficiently. Prerequisite: One previous course in Religious Studies or instructor permission.

REL 507. Religion in India. 3 Credits. NW H/W
Survey of religious thought and practice in India from the Vedic period to the present.

REL 509. Religion in Japan. 3 Credits. NW H/W
Survey of religious thought and practice in Japan from the Jomon period to the present. (Same as EALC 509.)

REL 510. Religion in Korea. 3 Credits. W
Survey of religious thought and practice in Korea from the Three Kingdoms period to the present. Prerequisite: REL 106/EALC 105; EALC 104; or permission of instructor.

REL 511. Buddhist Art of Korea. 3 Credits. H
Introduction to the history of Buddhist architecture, painting, sculpture and illuminated scriptures in Korea from the 4th through the 19th centuries, with particular emphasis on their stylistic, geographical, social, devotional and literary contexts. Not open to students who have taken HA 361 or HA 561. Work requirements will be greater for graduate students. (Same as HA 561.) Prerequisite: A college level introduction to Asian art history, or consent of instructor.

REL 523. The Dead Sea Scrolls. 3 Credits. H
A study of the archeological evidence and texts from the Dead Sea area that provide primary evidence for Jewish religious belief and practice in the Greek and Roman periods (ca. 250 B.C.E. - 135 C.E.). Prerequisite: REL 124 or JWSH 124 or consent of instructor.

REL 525. Jews and Christians. 3 Credits. H/W
This course examines the ways Jews and Christians have interacted with and characterized one another at various points in their histories. Special emphasis is placed on the gradual separation of the two religious traditions in the 1st-4th centuries. (Same as JWSH 525.) Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor.

REL 557. Modern Islamic Reform Movements. 3 Credits. H
This course examines movements of renewal and reform in the Islamic world today. Also studies the conditions that gave rise to calls for reform throughout the Muslim majority world, as well as the impact reform movements have had on the practices and beliefs of Muslims today.

REL 560. Modern Jewish Thought. 3 Credits. H
This course examines how a number of prominent Jewish thinkers from the seventeenth century through the present have encountered and engaged the special challenges posed by modernity to religious traditions, including the challenge of science to the validity of miracles, the challenge of the secular state to religious authorities, and the challenge of historical studies to the integrity of scripture. Thinkers covered may include Spinoza, Mendelssohn, Frankel, Hirsch, Geiger, Hermann Cohen, Buber, Rosenzweig, Arendt, Scholtem, Leo Strauss, Levinas, and Derrida. Prerequisite: A previous course in Religious Studies or Jewish Studies; or consent of instructor.

REL 570. Studies in Judaism. 3 Credits. H
A study of the major intellectual sources of the Jewish tradition from the Mishna, Talmud, Midrash, prayerbook, philosophers, the Zohar, and the Shulchan Aruch. Prerequisite: A course in Religious Studies or Jewish Studies numbered 300 or above.

REL 572. Judaism and Political Theology. 3 Credits. H
A consideration of the relationship between religion and politics in Judaism, and of the relevance of Judaism to broader discussions about religion and politics. Topics will include sovereignty, secularization, pluralism, democracy, and revolution. (Same as JWSH 562.) Prerequisite: At least one course in Jewish Studies or Religious Studies, or permission of instructor.

REL 573. Judaism and Sexuality. 3 Credits. H
An exploration of the complex interactions of Judaism, Jewishness, and sexuality. The course serves as a basic introduction to traditional Jewish understandings of gender and power, love and sex, and the body and embodiment. It also introduces the changes undergone by this tradition under the impact of contemporary feminism and queer theory. Prerequisite: At least one course in Jewish Studies or Religious Studies, or permission of instructor.

REL 585. New Religious Movements (Western). 3 Credits. H
A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, rooted primarily in Christianity and Judaism.

REL 586. New Religious Movements (Nonwestern). 3 Credits. H/W
A survey of the beliefs, practices, and social impact of religious minorities in the United States, both contemporary and historical, which have developed primarily from sources other than Christianity and Judaism.

REL 650. Sufism. 3 Credits. NW H
A survey of developments in Sufi (Islamic Mystical) thought, poetry, and ritual throughout Muslim history and across the Muslim world. Prerequisite: AAAS 349/REL 350 or permission of instructor.

REL 657. Women and Gender in Islam. 3 Credits. W
Focusing on issues of gender, this course follows major religious developments in the Islamic tradition. It examines how Muslim women have impacted these developments. (Not open to students who have taken REL 357.) (Same as AAAS 657.) Prerequisite: AAAS 349/REL 350, graduate standing, or permission of instructor.

REL 671. American Communes. 3 Credits. H
An examination of utopian communities in North America from the seventeenth century to the present. The course will survey the history, literature, and social dynamics of representative communal societies and movements including the Shakers, the Hutterites, the Oneida Community, Catholic religious communities, egalitarian communities, and other religious and secular communities.

REL 701. Approaches to the Study of Religion. 3 Credits.
An introduction to the various methods by which social scientists, historians, philosophers, and theologians study the meaning, influence, and significance of religion as an integral part of society and its cultural heritage. Prerequisite: Graduate student or permission of instructor.

REL 704. Russian Orthodoxy in Historical Perspective. 3 Credits.
This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and laity; institutional structures; the relationships between Church and State; interactions with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REES 704.)

REL 724. Magic and Myth in Ancient Egypt. 3 Credits.
A study of the basic features of ancient Egyptian culture and religion, with an emphasis on magic, myth and archaeology. Prerequisite: An introductory course in Religious Studies or consent of instructor.

REL 731. Studies in Christianity. 3 Credits.
Study of religious thought, practice, and institutions of Christianity with an emphasis on the examination of primary documents.

REL 734. Studies in Ritual: ______. 3 Credits.
A study of ritual theory and a comparative study of ritual activity among selected religious traditions. May be taken more than once if topic varies.

REL 742. Seminar in Western Religious Thought: ______. 3 Credits.
An analysis of the thought of selected thinkers of the Christian, Jewish, and/or Islamic traditions. May be taken more than once if subject matter varies sufficiently. Prerequisite: REL 512, REL 539, or REL 570 or permission of the instructor.

REL 800. Readings. 1-4 Credits.

REL 827. Seminar in Religion, Text and Textuality. 3 Credits.
This seminar explores issues surrounding the production and use of authoritative religious texts (sacred texts) in religious traditions, including such topics as scripturality and canon, scriptural hermeneutics, and material and ritual dimensions of scriptural practice. Specific case studies and content to be selected by the instructor.

REL 837. Seminar in Religion, Media and Performance. 3 Credits.
This seminar explores aspects of performance and the media of performance in lived religion, which might include such topics as ritual, the body, mass media and the internet, and visual and material culture. Specific case studies and content to be selected by the instructor.

REL 847. Seminar in Religion, Society and Social Change. 3 Credits.
This seminar explores issues regarding the social dimensions of religiosity/lived religion, ranging from aspects of religious institutionalization, authority, and normativity to alternative religiousities and alterity. Specific case studies and content to be selected by the instructor.

REL 857. Seminar in Religious Subjectivity, Experience, and Narrative. 3 Credits.
This seminar explores issues regarding the subjective and experiential dimension of lived religiosity, including such things as religious experience and mysticism, modes of personal religious expression and embodiment, and dynamics of personal and collective religious narrative and identity. Specific case studies and content to be selected by the instructor.

REL 899. Thesis. 1-3 Credits.

Bachelor of Arts and Bachelor of General Studies in Religious Studies

The undergraduate degree in the Department of Religious Studies is a research, analysis, and writing intensive program that features close work with faculty in small classroom settings. It seeks to develop a foundational knowledge of the world’s diversity of religious cultures and critical awareness of the ways in which religion shapes how we see and act toward ourselves, others, and the environment around us. Through the study of specific religious traditions and settings, students come away with a background that is invaluable to understanding and working with
people of other cultures, whether in international business or simply as an informed global citizen.

Career Opportunities

Religious studies majors and minors develop expertise and skills that serve them well wherever life takes them. Our graduates have been successful in many different areas. Studying religion provides a solid foundation for work in fields as diverse as journalism, law, politics, nongovernmental organizations, ministry, and education. No matter what their intended careers, students benefit from the critical reading, writing, and analytical skills that the academic study of religion instills.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Admission to the Major

There are no departmental prerequisites for admission to the major. However, once the major is declared, careful attention should be paid to the requirements of the major itself.

Religious Studies Program

The Religious Studies major consists of required courses, distribution requirements, and electives. The required introductory course and capstone seminar focus on theoretical and methodological issues in the study of religion. Distribution requirements encourage students to approach the study of religion from a variety of angles, from a focus on individual religions to the interaction between religions in specific regions to the exploration of comparative issues and themes. Electives allow students to tailor their course of study to their specific interests and pursue a depth of knowledge in particular aspects of the study of religion.

Requirements for the B.A. or B.G.S. Major

The major consists of at least 27 hours in religious studies. 15 hours must be in courses numbered 300 and above, and 8 of these junior/senior hours must be completed in residence at KU. The 27 hours may include no more than 12 transfer hours, no more than 12 hours from study abroad, and no more than 15 hours in combination of the two.

Religious Studies Major Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>REL 104</td>
<td>Introduction to Religious Studies</td>
<td>3</td>
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<tr>
<td>or REL 105</td>
<td>Introduction to Religious Studies, Honors</td>
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<tr>
<td>REL 124</td>
<td>Understanding the Bible</td>
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<tr>
<td>REL 125</td>
<td>Understanding the Bible, Honors</td>
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<tr>
<td>REL 325</td>
<td>Introduction to Judaism</td>
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<td>REL 330</td>
<td>Native American Religions</td>
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<tr>
<td>REL 331</td>
<td>Native American Religions, Honors</td>
<td></td>
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<tr>
<td>REL 345</td>
<td>Christianity</td>
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<tr>
<td>REL 350</td>
<td>Islam</td>
<td></td>
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<tr>
<td>REL 357</td>
<td>Judaism and Political Theology</td>
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<tr>
<td>REL 360</td>
<td>The Buddhist Tradition in Asia</td>
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<tr>
<td>REL 523</td>
<td>The Dead Sea Scrolls</td>
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<tr>
<td>REL 525</td>
<td>Jews and Christians</td>
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<td>REL 557</td>
<td>Modern Islamic Reform Movements</td>
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<td>REL 560</td>
<td>Modern Jewish Thought</td>
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<td>REL 724</td>
<td>Magic and Myth in Ancient Egypt</td>
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<tr>
<td>REL 106</td>
<td>Asian Religions</td>
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<tr>
<td>REL 171</td>
<td>Religion in American Society</td>
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<tr>
<td>REL 339</td>
<td>History of Religion in America</td>
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<tr>
<td>REL 507</td>
<td>Religion in India</td>
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<td>REL 509</td>
<td>Religion in Japan</td>
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<tr>
<td>REL 510</td>
<td>Religion in Korea</td>
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<tr>
<td>REL 585</td>
<td>New Religious Movements (Western)</td>
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<tr>
<td>REL 586</td>
<td>New Religious Movements (Nonwestern)</td>
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<tr>
<td>REL 137</td>
<td>Religious Ethics and Moral Decisions</td>
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<tr>
<td>REL 138</td>
<td>Religion and Moral Decisions, Honors</td>
<td></td>
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<tr>
<td>REL 327</td>
<td>Religious Zionisms</td>
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<tr>
<td>REL 334</td>
<td>Studies in Ritual:_____</td>
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<tr>
<td>REL 341</td>
<td>Mysticism</td>
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<tr>
<td>REL 357</td>
<td>Women and Gender in Islam</td>
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<tr>
<td>REL 373</td>
<td>The Supreme Court and Religious Issues in the United States</td>
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<tr>
<td>REL 374</td>
<td>Religious Perspectives on Selfhood and Sexuality</td>
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<tr>
<td>REL 425</td>
<td>Religion and Film</td>
<td></td>
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<tr>
<td>REL 477</td>
<td>Gender and Religion</td>
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<tr>
<td>REL 572</td>
<td>Judaism and Political Theology</td>
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</tr>
<tr>
<td>REL 573</td>
<td>Judaism and Sexuality</td>
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</tbody>
</table>
Religious Studies Required Electives
Satisfied by 4 courses (12 hours) within, or cross-listed with, the Religious Studies Department course offerings.

**Capstone Experience**
Satisfied by:
- REL 490 Senior Seminar in Theories and Methods

**Religious Studies Major Hours & Major GPA**
While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

### Major Hours
Satisfied by 27 hours of major courses.

### Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major, of which 9 must be at the junior/senior level (300+).

### Major Junior/Senior (300+) Hours
Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

### Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in Religious Studies can be found here: Religious Studies (p. 1755), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Religious Studies can be found here: Religious Studies (p. 1756), or by using the left-side navigation.

### Departmental Honors
To be eligible for honors in religious studies, an undergraduate student must have a minimum grade-point average of 3.5 in the department. The student must also complete and defend an individual research project, as evidenced by completion of at least 3 hours of REL 490: Undergraduate Honors Research with a grade of B or better. Interested students should contact the Undergraduate Director for more information.

### BA in Religious Studies
Below is a sample 4-year plan for students pursuing the BA in Religious Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman
<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>REL 104 (Goal 3 Arts and Humanities)</td>
<td>3</td>
<td>REL 100+ Specific Religious Traditions (Major Requirements)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td>2nd Semester Language (BA Second Language)</td>
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<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
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</tr>
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</table>

#### Sophomore
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<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL Elective 100+ Religion in Specific Regions (Major Requirement)</td>
<td>3</td>
<td>REL 300+ Elective 1 of 4 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
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</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
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#### Junior
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>REL 100+ Thematic Approaches to Religion (Major Requirement)</td>
<td>3</td>
<td>REL 300+ Elective 3 of 4 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>REL 300+ Elective 2 of 4 (Major Requirement)</td>
<td>3</td>
<td>REL 300+ Elective 4 of 4 (Major Requirement)</td>
<td>3</td>
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<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
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</table>

#### Senior
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<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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</tbody>
</table>

#### Notes
- F’s and repeated courses are included in GPA calculations.
- GPA calculations include all junior/senior courses in the field of study.
- Interested students should contact the Undergraduate Director for more information.
Second Area of Study/ Elective/Degree/Junior- Senior Hours²

<table>
<thead>
<tr>
<th></th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Senior</th>
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<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td>REL 104 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3 REL 100+ Specific Religious Traditions, Major Requirement¹</td>
<td>REL Elective 300+ (4 of 4), Major Requirement¹</td>
<td>REL 490 (Goal 6 Integration &amp; Creativity, Major Requirement SPRING ONLY)</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3 Goal 2.1 Written Communication (2 of 2)</td>
<td>3 Goal 2.2 Oral Communication</td>
<td>3 REL 490 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3 Goal 2.2 Oral Communication</td>
<td>3 Goal 2.2 Oral Communication</td>
<td>3 REL 490 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3 REL 490 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3 REL 490 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
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<td>15</td>
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</table>

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BGS in Religious Studies

Below is a sample 4-year plan for students pursuing the BGS in Religious Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
1 Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

2 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Minor in Religious Studies

The undergraduate minor in the Department of Religious Studies is a research, analysis, and writing intensive program that features close work with faculty in small classroom settings. It seeks to develop a foundational knowledge of the world’s diversity of religious cultures and critical awareness of the ways in which religion shapes how we see and act toward ourselves, others, and the environment around us. Through the study of specific religious traditions and settings, students come away with a background that is invaluable to understanding and working with people of other cultures, whether in international business or simply as an informed global citizen.

Career Opportunities

Religious studies majors and minors develop expertise and skills that serve them well wherever life takes them. Our graduates have been successful in many different areas. Studying religion provides a solid foundation for work in fields as diverse as journalism, law, politics, nongovernmental organizations, ministry, and education. No matter what their intended careers, students benefit from the critical reading, writing, and analytical skills that the academic study of religion instills.

Religious Studies Minor

The Religious Studies minor consists of a required course, distribution requirements, and electives. The required introductory course focuses on theoretical and methodological issues in the study of religion. Distribution requirements encourage students to approach the study of religion from a variety of angles, from a focus on individual religions to the interaction between religions in specific regions to the exploration of comparative issues and themes. Electives allow students to tailor their course of study to their specific interests and pursue a depth of knowledge in particular aspects of the study of religion.

Religious Studies Minor Course Requirements

Students selecting this minor must complete a course in each of the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 104</td>
<td>Introduction to Religious Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Specific Religious Traditions

Satisfied by 1 course (3 hours) chosen from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 107</td>
<td>Jews, Christians, Muslims</td>
<td>3</td>
</tr>
<tr>
<td>REL 124</td>
<td>Understanding the Bible</td>
<td>3</td>
</tr>
<tr>
<td>REL 125</td>
<td>Understanding the Bible, Honors</td>
<td>3</td>
</tr>
<tr>
<td>REL 325</td>
<td>Introduction to Judaism</td>
<td>3</td>
</tr>
<tr>
<td>REL 330</td>
<td>Native American Religions</td>
<td>3</td>
</tr>
<tr>
<td>REL 331</td>
<td>Native American Religions, Honors</td>
<td>3</td>
</tr>
<tr>
<td>REL 345</td>
<td>Christianity</td>
<td>3</td>
</tr>
<tr>
<td>REL 350</td>
<td>Islam</td>
<td>3</td>
</tr>
<tr>
<td>REL 360</td>
<td>The Buddhist Tradition in Asia</td>
<td>3</td>
</tr>
<tr>
<td>REL 523</td>
<td>The Dead Sea Scrolls</td>
<td>3</td>
</tr>
<tr>
<td>REL 525</td>
<td>Jews and Christians</td>
<td>3</td>
</tr>
<tr>
<td>REL 557</td>
<td>Modern Islamic Reform Movements</td>
<td>3</td>
</tr>
<tr>
<td>REL 560</td>
<td>Modern Jewish Thought</td>
<td>3</td>
</tr>
<tr>
<td>REL 724</td>
<td>Magic and Myth in Ancient Egypt</td>
<td>3</td>
</tr>
</tbody>
</table>

Religion in Specific Regions

Satisfied by 1 course (3 hours) chosen from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 106</td>
<td>Asian Religions</td>
<td>3</td>
</tr>
<tr>
<td>REL 171</td>
<td>Religion in American Society</td>
<td>3</td>
</tr>
<tr>
<td>REL 339</td>
<td>History of Religion in America</td>
<td>3</td>
</tr>
<tr>
<td>REL 507</td>
<td>Religion in India</td>
<td>3</td>
</tr>
<tr>
<td>REL 509</td>
<td>Religion in Japan</td>
<td>3</td>
</tr>
<tr>
<td>REL 510</td>
<td>Religion in Korea</td>
<td>3</td>
</tr>
<tr>
<td>REL 585</td>
<td>New Religious Movements (Western)</td>
<td>3</td>
</tr>
<tr>
<td>REL 586</td>
<td>New Religious Movements (Nonwestern)</td>
<td>3</td>
</tr>
</tbody>
</table>

Thematic Approaches to Religion

Satisfied by 1 course (3 hours) chosen from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 137</td>
<td>Religious Ethics and Moral Decisions</td>
<td>3</td>
</tr>
<tr>
<td>REL 138</td>
<td>Religion and Moral Decisions, Honors</td>
<td>3</td>
</tr>
<tr>
<td>REL 341</td>
<td>Mysticism</td>
<td>3</td>
</tr>
<tr>
<td>REL 357</td>
<td>Women and Gender in Islam</td>
<td>3</td>
</tr>
<tr>
<td>REL 373</td>
<td>The Supreme Court and Religious Issues in the United States</td>
<td>3</td>
</tr>
<tr>
<td>REL 374</td>
<td>Religious Perspectives on Selfhood and Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>REL 379</td>
<td>Prophets and Profits</td>
<td>3</td>
</tr>
<tr>
<td>REL 425</td>
<td>Religion and Film</td>
<td>3</td>
</tr>
<tr>
<td>REL 477</td>
<td>Gender and Religion</td>
<td>3</td>
</tr>
<tr>
<td>REL 572</td>
<td>Judaism and Political Theology</td>
<td>3</td>
</tr>
<tr>
<td>REL 573</td>
<td>Judaism and Sexuality</td>
<td>3</td>
</tr>
</tbody>
</table>

Religious Studies Minor Required Elective

Satisfied by completing 6 additional hours in REL courses at the 300 level or above.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

Religious Studies Minor Hours & Minor GPA

While completing all required courses (above), minors must also meet each of the following hour and grade-point average minimum standards:

Minor Hours

Satisfied by 18 hours of major courses.

Minor Hours in Residence

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

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**Master of Arts in Religious Studies**

**Why study Religious Studies?**
Religions have been and remain among the most powerful forces shaping human history. Their discourses and practices inform the way we perceive ourselves, those around us, and existence at large, even when we are not actively religious. They are central to understanding both what divides us and what unites us. The academic study of religion is a trans-disciplinary endeavor to understand from an objective perspective how religious traditions shape the lives of their adherents, without seeking to promote or disprove any specific belief system. Religious Studies acquaints students with the diversity of religious cultures and introduces them to key methods and theories employed in their examination as "religion."

For those interested in working towards a Ph.D. in Religious Studies and a career in academics, or embarking on an equivalent level of training in a related profession, the Department of Religious Studies is equipped to help the individual student acquire the skills needed for advanced levels of study, whether it be specialized work in languages, methodological approaches, or area studies. The study of religion being an inherently interdisciplinary field, and department faculty share synergies with colleagues and programs across the campus that enable students to seek specialized training in a diversity of regions, cultures, and approaches to the study of religion. Our faculty is committed to help students articulate the intellectual and professional objectives that have brought them to study of religion, and to acquire the training to see these goals to fruition.

The Department of Religious Studies at KU is able to provide substantial financial support for students seeking the MA degree.

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**Admission to Graduate Studies**
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

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**Graduate Admission**
Eligibility criteria for admission to the M.A. program follow Graduate Studies’ admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/) set by Graduate Studies. A Bachelor’s degree in Religious Studies is not required for admission, but the department expects applicants to demonstrate experience in the humanities and social sciences.

For all domestic or international M.A. applicants, please check the application requirements through the Religious Studies website (https://religiousstudies.ku.edu/).

Potential students must submit a complete online graduate application (https://gradapply.ku.edu/apply/). For additional questions regarding program requirements and application processes, please contact the Director of Graduate Studies, Dr. Jackie Brinton (https://religiousstudies.ku.edu/jacqueline-brinton/). Applicants may also contact the department directly:

The University of Kansas
Department of Religious Studies
Smith Hall, Room 109A
1300 Oread Ave. | Lawrence, KS 66045
785-864-4341 | rstudies@ku.edu

**M.A. Degree Requirements**
The department offers thesis and non-thesis M.A. options. The requirements for these are:

1. 30 (thesis) or 33 (non-thesis) graduate credit hours, chosen in consultation with the student’s advisor or the Graduate Director.
   - Coursework must include the following:
     - (a) REL 701 Approaches to the Study of Religion (3 hrs)
     - (b) Three graduate seminars (courses numbered 700 or above, excluding REL 800 Readings and REL 899 Thesis), of which two must be chosen from the following set of theory and method-oriented seminars (9 hrs):
       | Code | Title                                           | Hours |
       |------|-------------------------------------------------|-------|
       | REL 727 | Seminar in Religion, Text and Textuality | 3     |
       | REL 737 | Seminar in Religion, Media and Performance   | 3     |
       | REL 747 | Seminar in Religion, Society and Social Change | 3     |
       | REL 757 | Seminar in Religious Subjectivity, Experience, and Narrative | 3   |
     - (c) One course focusing on Western Religious Traditions and one course focusing on Non-Western Religious Traditions (see Table above). (6 hrs)
     - (d) At least 12 hours (4 courses) in an articulated concentration of the student’s own design. These courses may overlap with those in (b) and (c) above.
     - (e) For thesis students, 1-3 credit hours of REL 899 Thesis.
     - (f) A total of at least 18 (thesis) or 21 (non-thesis) graduate credit hours in Religious Studies, including (a)–(e) above, plus electives if applicable. Remaining hours may be taken outside of the department.

2. A final examination:
(a) For the thesis option, the student must write and orally defend a thesis that meets minimum department and University requirements.

(b) For the non-thesis option, the student must produce and orally defend a research portfolio.

**Graduate Handbook:** Further information on fulfillment of degree requirements and other department and University policies and procedures can be found in the Department of Religious Studies Graduate Handbook.

**Approved Courses for Requirement 1(c):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 525</td>
<td>Jews and Christians</td>
<td></td>
</tr>
<tr>
<td>REL 557</td>
<td>Modern Islamic Reform Movements</td>
<td></td>
</tr>
<tr>
<td>REL 560</td>
<td>Modern Jewish Thought</td>
<td></td>
</tr>
<tr>
<td>REL 570</td>
<td>Studies in Judaism</td>
<td></td>
</tr>
<tr>
<td>REL 731</td>
<td>Studies in Christianity</td>
<td></td>
</tr>
<tr>
<td>REL 761</td>
<td>Seminar in Western Religious Thought:</td>
<td></td>
</tr>
</tbody>
</table>

**B. Non-Western Religious Traditions**

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL 507</td>
<td>Religion in India</td>
<td></td>
</tr>
<tr>
<td>REL 509</td>
<td>Religion in Japan</td>
<td></td>
</tr>
<tr>
<td>REL 510</td>
<td>Religion in Korea</td>
<td></td>
</tr>
</tbody>
</table>

**Graduate Certificate in Religious Studies**

The Graduate Certificate in Religious Studies (https://religiousstudies.ku.edu/graduate-certificate-religious-studies) is designed to provide students with a solid grounding in the academic study of religion, including exposure to key theoretical and methodological issues within the interdisciplinary field of Religious Studies. The certificate program enables students to integrate Religious Studies methodologies, as well as deeper knowledge of particular religious traditions, into their own academic interests or professional training.

Completion of the certificate in Religious Studies represents an additional credential for graduate students from a variety of academic disciplines and fields of study. The certificate will enhance the qualifications of students seeking careers in research and teaching, journalism, the nonprofit sector, government, the arts, or any other field in which understanding the breadth of human cultural diversity is useful.

Enrollment in the program is open to students admitted to a regular KU graduate program as well as students who are not currently enrolled at KU.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Eligibility criteria for admission to the graduate certificate program follow Graduate Studies’ admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study). Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements) set by Graduate Studies. A Bachelor’s degree in Religious Studies is not required for admission, but the department expects applicants to demonstrate experience in the humanities and social sciences.

For all applicants (current graduate students and non-KU students), please check the application requirements on the Religious Studies website (https://religiousstudies.ku.edu). Potential students must submit a complete online graduate application (https://gradapply.ku.edu/apply/). For additional questions regarding program requirements and application processes, please contact the Director of Graduate Studies, Dr. Jackie Brinton (https://religiousstudies.ku.edu/jacqueline-brinton). Applicants may also contact the department directly:

**The University of Kansas**

**Department of Religious Studies**

Smith Hall, Room 109A
1300 Oread Ave. | Lawrence, KS 66045

785-864-4341 | rstudies@ku.edu

The Graduate Certificate in Religious Studies requires 12 hours of coursework:

- REL 701 Approaches to the Study of Religion (3 hrs);
- 9 additional hours of graduate-level coursework in Religious Studies.

Up to 3 hours of appropriate coursework in other departments may be substituted in consultation with the Graduate Director.

**Department of Slavic, German, and Eurasian Studies**

The department offers three degrees: the B.A., the M.A., and the Ph.D. The Bachelor of Arts degree program offers fundamental training in language, linguistics, second language acquisition, as well as interdisciplinary studies in the areas of Russia, German-speaking Europe, Eastern Europe, as well as Eurasia.

Our interdisciplinary department is deeply invested in helping students navigate a geopolitically complex and evolving world through rigorous language study, paired with the interdisciplinary study of culture, linguistics, literature, history, political science, art history, and other disciplines. Our program is characterized by interdisciplinary flexibility, a variety of co-curricular activities, and personalized academic advising and mentoring. On and off we teach 10 languages on a regular basis and expose students to major European and Eurasian languages like Russian and German, as well as specialized training in unique less commonly taught languages like Persian, Polish, Serbo-Croatian and others. All these languages, within the interdisciplinary curriculum of SGES can open up new career pathways for students, and help them bring tangible skills and a unique global approach to their careers in a range of fields from business, to law, medicine, intelligence, as well as traditional academic paths. Our students tend to have a second major or a minor in foreign languages, within the interdisciplinary curriculum of SGES can open up new career pathways for students, and help them bring tangible skills and a unique global approach to their careers in a range of fields from business, to law, medicine, intelligence, as well as traditional academic paths. Our students tend to have a second major or a minor in
such as Global & International Studies, History, Business, Environmental Studies, Music, Microbiology, and Linguistics.

Our graduates have pursued their passion for language and culture in many ways: working for a non-profit organization affiliated with the U.S. Department of State; translating for a medical software company; intelligence; serving on the human resources team of a global sporting goods company; politics; teaching high school; working as copy editor of a newspaper; and pursuing academic graduate work, social welfare, law, and speech pathology.

The department offers several study abroad programs to Germany, Russia, Ukraine.

Graduate training at the Masters and Doctoral levels focuses on Russian literature and culture, Russian, East European, and Eurasian Studies, Slavic linguistics, and/or Slavic language pedagogy.

Working closely with KU’s Center for Russian, East European, and Eurasian Studies (CREES), the department offers a variety of Slavic-related events throughout the year, including visiting distinguished lecturers, exhibits, and musical and theatrical performances. Students participate in an active Slavic East European and Eurasian Studies Club, and multiple language tables.

The Max Kade Center for German-American Studies houses collections on German ethnic culture in the United States and fosters scholarship and student engagement in German-American and transatlantic studies. For further information, contact german@ku.edu.

Undergraduate Programs

The undergraduate major in Slavic, German, & Eurasian Studies prepares students to pursue a range of careers connected with Russia and Central Europe, including those related to international work in business, government, nonprofit organizations, etc. The undergraduate major serves equally as solid preparation for graduate study in Slavic languages and literatures and related fields and for entrance to professional schools such as law or journalism. Students learn these languages to pursue careers with international dimensions; enhance job opportunities; connect with their heritage, family, and communities; explore other literatures and cultures; and pursue personal interests.

The undergraduate program gives students solid functional language skills in speaking, reading, listening, and writing. Students develop the strategies and linguistic awareness to continue language study throughout their lives. The program acquaints undergraduates with the most significant works of the literature and culture of the Slavic region and gives them the tools and frameworks necessary to understand, analyze, and critique those works and place them in their cultural context. Students work with sources in English and in the original languages to develop transferable reading and analytical skills.

The department strongly encourages students to plan a substantial study abroad experience (at least a summer but preferably a semester or an academic year) as part of the major. Study abroad experience contributes to mastery of the language and facilitates students’ encounters with the people, practices, and attitudes of the culture in ways that can never be replicated on an American university campus.

Placement

Students may establish eligibility for enrollment in the second course in Polish, Russian, or Bosnian/Croatian/Serbian by having earned college credit in the first course in that language or by having studied the language in high school. Students with previous study should contact the department to arrange a consultation about enrollment at the appropriate level.

Retroactive Credit

Students with no prior college or university Russian course credit are eligible for retroactive credit according to this formula:

- 3 hours of retroactive credit are awarded to a student with 2 or 3 years of high school Russian who enrolls initially at KU in a third-level Russian course (RUSS 204) and receives a grade of C or higher.
- 6 hours of retroactive credit are awarded to a student with 3 or 4 years of high school Russian who enrolls initially at KU in a fourth-level Russian course (RUSS 208) and receives a grade of C or higher.
- 9 hours of retroactive credit are awarded to a student with 4 years of high school Russian who enrolls initially at KU in a Russian course with a fourth-level course as a prerequisite and receives a grade of C or higher.

Courses for Nonmajors

Some courses in Slavic literatures and cultures are taught in English and fulfill various goals and learning outcomes related to the KU CORE, as well as existing B.A. requirements in the humanities and non-Western culture.

Students may fulfill the College language requirement for the B.A. degree by taking 2 years in one of the following languages: Russian, Polish, Bosnian/Croatian/Serbian, Slovene, Ukrainian, or Turkish.

Courses are available in Russian for special purposes (Russian for Reading, Russian for the Professions). RUSS 110 Intensive Elementary Russian (10 credit hours) frequently is offered in the summer.

Graduate Programs

The department offers programs leading to Master of Arts and Doctor of Philosophy degrees in Slavic Languages and Literatures.

Master of Arts

The Master of Arts degree in Slavic and Eurasian Languages & Literatures provides students with foundational knowledge of the language, literature, culture, and linguistics in a region of study (Russian, Polish, Bosnian-Croatian-Serbian). Working in a collegial and supportive environment, M.A. students extend their foundational knowledge of the field, while being encouraged to grow intellectually and develop new and innovative interpretive frameworks. Some of the work done at the M.A. level includes: reading key literary works in their historical, cultural, stylistic, and genre contexts; familiarization with literary theory; work on professionalization and job market readiness; learning technological and Digital Humanities skills; language testing and coursework to improve language capacity.

Doctor of Philosophy

Building on the M.A. foundational base, the KU Ph.D. degree program encourages students to develop their particular intellectual interests in collaboration with KU faculty in their areas of specialization. Ph.D. students also learn a second Slavic language and develop knowledge of a secondary field. For the secondary field, students are encouraged to choose from philosophy, linguistics, religion, history, theater and cinema, literary theory, comparative literature, and folklore.
Two concentrations are offered in the Ph.D. Program:

- Russian Literature
- Slavic Linguistics (including language pedagogy)

Ph.D. students who focus their studies on Russian literature and Slavic linguistics have a full-service curriculum from which to choose their courses. Ph.D. Doctoral students who wish to pursue a Ph.D. concentration in another literature that the department offers, such as Bosnian/Croatian/Serbian, Polish, or Ukrainian may develop an individualized program of study in consultation with faculty.

Ph.D. students interested in Russian culture, intellectual history, or Slavic folklore pursue their studies through the Russian literature Ph.D. concentration.

**Departmental Funding**

The department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year, .50 full-time equivalent (FTE) appointments come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed based on performance for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach at a variety of levels, providing them with a strong base of teaching experience upon entering the job market. Additional information about teaching for the department is available on the Graduate Programs overview (http://slavic.ku.edu/ma-slavic-overview/) page of our departmental website.

**Additional Funding**

There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/ku-funding/) for KU graduate students.

**Graduate Non-Degree Seeking Status**

Students who are interested in enrolling in graduate-level coursework in the Department of Slavic and Eurasian Languages & Literatures without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s webpage (http://slavic.ku.edu/nds-overview/) for further details.

**Courses**

**BCRS 104. Elementary Bosnian/Croatian/Serbian I. 5 Credits. U F1**

Beginning language course. Development of basic communicative and cultural competencies with interactive approach. Students acquire communicative skills for elementary personal and social needs. They are introduced to the basic Bosnian/Croatian/Serbian language rules and to the cultural context in which Bosnian/Croatian/Serbian discourse occurs. Through regular engagement with authentic multimedia materials they learn to recognize differing aspects of Bosnian/Croatian/Serbian and American life, culture, and values.

**BCRS 105. Elementary Bosnian/Croatian/Serbian I, Honors. 5 Credits. U F1**

Similar to BCRS 104 but with additional work aimed at accelerating the student’s progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor.

**BCRS 108. Elementary Bosnian/Croatian/Serbian II. 5 Credits. U F2**

Second-semester language course, continuation of BCRS 104. Further development of basic communicative and cultural competencies with interactive approach. Students continue the acquisition of communicative skills for elementary personal and social needs and their introduction to the basic Bosnian/Croatian/Serbian language rules and cultural context in which Bosnian/Croatian/Serbian discourse occurs. Through regular engagement with authentic multimedia materials they learn to recognize differing aspects of Bosnian/Croatian/Serbian and American life, culture, and values. Prerequisite: BCRS 104 or BCRS 105, or placement by examination.

**BCRS 109. Elementary Bosnian/Croatian/Serbian II, Honors. 5 Credits. U F2**

Continues BCRS 105. Similar to BCRS 108 but with additional work aimed at accelerating the student’s progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 104 or 105. Open only to students admitted to the University Honors Program, or by permission of instructor.

**BCRS 150. Beginning Bosnian/Croatian/Serbian I. 3 Credits. H**

Fundamentals of B/C/S grammar, reading, speaking, and writing. Introduction to the cultural context in which B/C/S discourse occurs. Online course, designed to accommodate the needs of students regardless of age, educational background, or occupation who want to acquire basic communicative skills in B/C/S. No previous knowledge of BCS or other foreign languages required. The course does not satisfy the College of Liberal Arts and Sciences foreign language requirement. Not open to students with credit in BCRS 104 or BCRS 105.

**BCRS 177. First Year Seminar: _____. 3 Credits. U**

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Bosnian/Croatian/Serbian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**BCRS 204. Intermediate Bosnian/Croatian/Serbian I. 3 Credits. U F3**

Second-year language course. Further development of communicative and cultural competencies with a content-based, interactive approach. Students develop the ability to understand and produce short written and spoken texts in BCS through engagement with a variety of authentic materials representative of cultural diversity of the studied area. They contrast and compare features of individual BCS-speaking countries and their cultures as well as differing aspects of B/C/S and American life, culture, and values. Prerequisite: BCRS 108 or permission of the instructor.

**BCRS 205. Intermediate Bosnian/Croatian/Serbian I, Honors. 3 Credits. U F3**

Similar to BCRS 204 but with additional work aimed at accelerating the student’s progress to proficiency and widening understanding of cultural context. Prerequisite: Open only to students who have received an A
in BCRS 108 or an A or B in BCRS 109, and who are admitted to the University Honors Program, or by permission of instructor.

**BCRS 208. Intermediate Bosnian/Croatian/Serbian II. 3 Credits. U F4**
A continuation of BCRS 204. Prerequisite: BCRS 204.

**BCRS 209. Intermediate Bosnian/Croatian/Serbian II, Honors. 3 Credits. U F4**
Similar to BCRS 208 but with additional work aimed at accelerating the student's progress to proficiency and widening understanding of cultural context. Prerequisite: BCRS 204 or 205. Open only to students admitted to the University Honors Program, or by permission of instructor.

**BCRS 380. Intensive Croatian. 6 Credits. U**
This program consists of a six-week intensive language course in intermediate and advanced Croatian phonetics, conversation, and grammar, and is offered each summer in Croatia. In addition to the practical language work, there is a program of lectures on modern Croatian history, literature, and other cultural topics. Various excursions and tours bring the students into first-hand contact with the people, natural beauty and culture of Croatia. This program is a cooperative effort between the University of Kansas and faculty of the University of Zadar.

**BCRS 504. Advanced Bosnian/Croatian/Serbian I. 3 Credits. H/W FP**
A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 208, or equivalent.

**BCRS 508. Advanced Bosnian/Croatian/Serbian II. 3 Credits. H/W FP**
A practical Bosnian/Croatian/Serbian course involving the advanced study of the grammar, reading of texts on a variety of subjects, conversation and composition. Taught in Bosnian/Croatian/Serbian. Designed for students who have had two and one-half or more years of Bosnian/Croatian/Serbian language. Prerequisite: BCRS 504, or equivalent.

**BCRS 675. Readings in Bosnian/Croatian/Serbian. 1-6 Credits. H/W FP**
Individually tailored readings and independent work in Bosnian/Croatian/Serbian language and culture. Prerequisite: Two years of Bosnian/Croatian/Serbian, and consent of instructor.

**Courses**

**GERM 100. German Reading Course I. 3 Credits. U**
Primarily for graduate students in other departments but also open to seniors planning to pursue graduate study. Fundamentals of grammar and reading texts of medium difficulty. Does not count toward undergraduate language requirement. Previous study of German not necessary. Not open to native speakers of German.

**GERM 101. German Reading Course II. 3 Credits. U**
Continuation of GERM 100. Advanced grammar and reading advanced texts in the students’ respective fields. Does not count toward undergraduate language requirement. Not open to native speakers of German. Prerequisite: GERM 100 or permission of instructor.

**GERM 104. Elementary German I. 5 Credits. U F1**
Introductory German; no previous German required. Development of students’ balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 108.

**GERM 108. Elementary German II. 5 Credits. U F2**
Continuation of GERM 104. Further development of students’ balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on everyday topics and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 201. Prerequisite: GERM 104 or placement by examination.

**GERM 111. Introduction to German I. 3 Credits. U**
Introduction to German for special purposes; no previous German required. Provides basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Introduction to the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement.

**GERM 112. Introduction to German II. 3 Credits. U**
Continuation of GERM 111. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 111 or permission of instructor.

**GERM 113. Introduction to German III. 1.5 Credits. U**
Continuation of GERM 112. Further development of basic familiarity with the German language, focusing on speaking and reading skills and the essentials of German grammar. Continued exploration of the culture of the German-speaking world. Three class hours per week; may be delivered by video conference or face-to-face. Does not satisfy any KU language requirement. Prerequisite: GERM 112 or permission of instructor.

**GERM 124. German Cinema in Context. 3 Credits. HL H**
Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the
films' sources, ideologies, techniques, and artistic achievements. Does not count toward the German major or minor.

GERM 125. German Cinema in Context (Honors). 3 Credits. HL
Course content similar to GERM 124. Taught in English. Screening and analysis of German films from the early 20th century to the present. Readings, lectures, and discussions on the films' sources, ideologies, techniques, and artistic achievements. Does not count toward German major or minor.

GERM 128. Introduction to the Arts in German-Speaking Europe. 3 Credits. H
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 328.

GERM 130. Today's Challenges in German-Speaking Europe. 3 Credits. H
This course explores significant political, social, and cultural challenges facing German-speaking Europe today. Specific issues may include migration, the environment, national identity, European integration, business, remembering the past, and technology. Focus on Germany, Austria, and Switzerland and to a lesser extent Belgium, Luxembourg, and Liechtenstein. Taught in English. Does not count toward the German Studies major or minor.

GERM 132. The City of Berlin in German Culture. 3 Credits. H/W
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 332.

GERM 148. Germanic Mythology, Religion, and Folklore. 3 Credits. H/W
Taught in English. Introduction to the pagan myths and beliefs of Teutonic antiquity and their survival in the popular traditions of Germanic countries, within the framework of comparative mythology, archaeology, and anthropology. Does not count toward the German major or minor.

GERM 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in German. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

GERM 201. Intermediate German I. 3 Credits. U F3
Continuation of GERM 108. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who complete this course successfully should take GERM 202. Prerequisite: GERM 108 or placement by examination.

GERM 202. Intermediate German II. 3 Credits. U F4
Continuation of GERM 201. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts in different genres and to interpret, compare, and contrast German and American cultural phenomena. Emphasis on interaction. Not open to native speakers of German. Students who successfully complete this course should take GERM 301. Prerequisite: GERM 201 or placement by examination.

GERM 203. Introduction to Business German: Deutsch im Berufsalltag. 3 Credits. H F4
Continuation of GERM 201; completes language proficiency sequence. Further development of students' balanced knowledge of the German language and culture, including the ability to understand and produce short spoken, written, and multimedia texts on the topics related to professional communication and to interpret, compare, and contrast German and American business cultural phenomena. Emphasis on interaction. Recommended for students planning to take GERM 352 and GERM 462. Not open to native speakers of German. Prerequisite: GERM 201 or placement by examination.

GERM 220. Study Abroad Topics in the German Language. 1-5 Credits. U
This course is for elementary- and intermediate-level instruction in the German language while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies.

GERM 222. Study Abroad Topics in German Studies: ______. 1-3 Credits. H/W
This course is for elementary- and intermediate-level German Studies courses taught in German taken while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies.

GERM 233. Introduction to German Conversation. 3 Credits. H/W
Students learn basic techniques and strategies, expand vocabulary and idiomatic usage, and improve accuracy in grammar and pronunciation. Prerequisite: Only open to students in the KU Summer Language Institute in Eutin, Germany and GERM 108. Corequisite: GERM 201 and GERM 202.

GERM 240. Introduction to Translation and Translation Theory. 3 Credits. H
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as AAAS 250, LING 250, SLAV 250 and SPAN 202.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

GERM 250. Migrants and New Media in 21st-century Germany. 3 Credits. H
This course investigates the phenomenon of human migration through the lens of New Media (documentaries, film essays, digitized political performance art, gallery installations) in Germany. Drawing also on cinematic, historical, and legal texts, we will uncover the complex layers of existence that result when migrants cross a national border. Students will better understand the nuanced aesthetics and sociopolitical context of Germany's New Media production. Ultimately, we will analyze how
German productions inform the global debate on migration and our understanding of migrant experiences.

**GERM 301. High Intermediate German I. 3 Credits.** H/W FP
Continuation of GERM 202. Further development of students' use of German through reading and discussion of literary and non-literary texts (spoken, written, multimedia), combined with intensive grammar review. Introduction to expressive functions of German with emphasis on spoken and written communication. Not open to native speakers of German. Students who complete this course successfully should take GERM 302. Prerequisite: GERM 202 or placement by examination.

**GERM 302. High Intermediate German II. 3 Credits.** H/W FP
Continuation of GERM 301. Refinement and expansion of students’ use of German. Reading and discussion in German of literary and non-literary texts (spoken, written, multimedia), combined with continued intensive grammar review. Emphasis on better understanding German grammatical structures and acquisition of vocabulary. Not open to native speakers of German. Students who complete this course successfully should take GERM 401. Prerequisite: GERM 301 or placement by examination.

**GERM 315. Magic, Murder, Monsters: German Literature and the Modern Era. 3 Credits.** H
Introduction in English to German writers 1750-present featuring texts about the supernatural and monstrous. Students examine how encounters with magic and construction of monsters reflect particular cultural anxieties, fears, and ideals as relating to historical developments, industrialization, and scientific advancement. Discussion of themes such as gender, sexuality, class, race, empire, war, politics, and technology in German-speaking Europe. Readings include works in translation by influential German writers. Open to first-year students and non-majors. GERM 315 is required for admission to all courses beyond GERM 402 except GERM 462. (Same as EARS 315.)

**GERM 320. Border Crossings in German Culture. 3 Credits.** HT
Taught in English. Exploration of writers, filmmakers, and artists who have emigrated from, or migrated to German-speaking Europe. Emphasis on both their transnational impact and their representations of border crossings. Topics may include exile communities before, during, and after World War II and multiculturalism in contemporary Germany, Austria, and Switzerland.

**GERM 322. Study Abroad Topics in German Studies: _____ 1-5 Credits.** H
This course is for 300-level German Studies courses taught in German taken while studying abroad. Transfer credits must be arranged through the KU Office of Study Abroad, with permission from the departmental undergraduate advisor. May be repeated for credit if content varies. Prerequisite: GERM 302 or the equivalent.

**GERM 328. The Arts in German-Speaking Europe. 3 Credits.** HL
Taught in English. Exploration of the arts in German-speaking Europe: major cultural periods, movements, art forms, and people (artists, architects, composers, writers, filmmakers) from the Middle Ages to the present. Consideration of the arts within the larger European historical and cultural context from which they emerged. Does not count toward the German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 128.

**GERM 330. Topics in: _____ 3 Credits.** H
Taught in English. Interdisciplinary study of selected aspects of the society or culture of German-speaking Europe or of the European experience. Does not count toward the German major or minor.

**GERM 332. Berlin in German Culture. 3 Credits.** HL
Taught in English. Introduction to Berlin within the context of major German and European historical, social, intellectual, and artistic developments since 1800. Exploration of complex epochs such as the Bismarck, Nazi, Cold War, and post-unification eras through journalism, literature, sociological writings, and film. Does not count toward German major or minor. This course is offered at the 100 and 300 levels with additional assignments at the 300-level. Not open to students who have completed GERM 132.

**GERM 333. German Conversation and Idioms. 3 Credits.** H
Intensive practice in conversational German with instruction in proper pronunciation as well as an introduction to idiomatic usage. Only for students in the KU Summer Language Institute in Holzkirchen, Germany or in courses offered through the KU Language Training Center. Prerequisite: GERM 202 or equivalent fourth-semester German course.

**GERM 334. Review of German Grammar. 3 Credits.** H
Intensive review and practice of select topics in German grammar. Offered only for students in the KU Summer Language Institute in Holzkirchen, Germany or in courses offered through the KU Language Training Center. Prerequisite: GERM 202 or equivalent fourth-semester German course.

**GERM 336. The German Transatlantic Experience. 3 Credits.** U
Introduction to the migration of German-speaking Europeans to North America, 17th century-present. Consideration of European and North American factors motivating migration, the journey to the New World, the experiences of immigrants and their descendants, and the ways in which German-speaking Europeans shaped the multicultural history of America. Taught in English.

**GERM 350. Studies in German Language, History, and Culture. 3 Credits.** SC H
Students visit museums and cultural sites in Cologne, Berlin, Munich, and other locations, with a focus on the 20th century. Discussion and written assignments in German. Offered only for the KU Summer Language Institute in Holzkirchen, Germany. Prerequisite: GERM 202 or equivalent fourth-semester German course.

**GERM 353. German Conversation. 3 Credits.** H/W FP
Further development of practical conversational skills for students with intermediate proficiency in German. Discussion of topics from everyday German life and current affairs, based on German newspapers and magazines. May be repeated but counts only once toward the major or minor. Not open to native speakers of German. Prerequisite: GERM 202.

**GERM 362. German and Germany in Global Business Culture I. 3 Credits.** H/W
High-intermediate content-based course with focus on the language skills needed to engage actively with the German business world, including applying for internships and jobs. Introduction to common cultural practices in the German business environment. Use of multimedia sources to explore current events and issues in Germany and their significance within a global business context. Not open to native speakers of German. Prerequisite: GERM 202.

**GERM 370. German Studies Topics: _____ 3 Credits.** H
Exploration of German Studies topics such as literature, film, philosophy, social institutions, language, the arts, media. Topics vary, and course may address topics across a narrow or broad time frame. Course conducted in German. May be repeated if content varies. Prerequisite: GERM 302.

**GERM 375. Topics in Film of German-Speaking Europe: _____ 3 Credits.** H
Examination of topics such as Expressionism, Turkish-German culture in contemporary German film, popular filmmaking, post-unification film,
German literature as film, German film and national identity. Topics and periods vary. Prerequisite: GERM 302.

GERM 400. Introduction to German Literary Masterpieces. 3 Credits. H/W FP
For students enrolled in the KU Summer Language Institute in Germany. Selected works of major German Language writers of the 19th and 20th centuries. Not open to native speakers of German. Prerequisite: GERM 302.

GERM 401. Advanced German I. 3 Credits. H FP
Continuation of GERM 302. Expansion and refinement of proficiency in German (speaking, listening, reading, writing), increased understanding of German grammatical structures, development of a more sophisticated vocabulary, and introduction to stylistics through discussion and analysis of literary and nonliterary texts. Students successfully completing GERM 401 may take all other GERM courses at the 400 and 500 levels. Prerequisite: GERM 302.

GERM 402. Advanced German II. 3 Credits. H FP
Continuation of GERM 401. Development of advanced proficiency in German through analysis and discussion of literary and nonliterary texts and practice in advanced composition. Emphasis in both discussions and papers on style and rhetoric and on developing skill in textual analysis. Focus on advanced German grammar and on style and idiomatic expression in spoken and written German. Prerequisite: GERM 401.

GERM 411. German Culture 1150-1750. 3 Credits. H FP
Exploration of major cultural periods and movements within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 315 and GERM 401.

GERM 412. German Culture 1750-Present. 3 Credits. H FP
Exploration of major cultural periods and movements 1750-present within the framework of historical and political change, with investigation of themes such as nation and national identity, founding myths, geography, and language. Study of forms of culture in German-speaking Europe, including visual art, music, literature, architecture, and the press. Prerequisite: GERM 315 and GERM 401.

GERM 421. Exiles, Migrants, and Refugees in German Literature and Film. 3 Credits. H
What does it mean to cross a border in today's world? This course explores different examples of "border crossing" in German-speaking Europe and in their broader European and transatlantic context. Engaging with literature, film, and works of art from the 20th to 21st centuries, we will address topics such as fictional representations of America; exile literature before and during World War II; the Berlin Wall and divided Germany; and migration and multiculturalism in contemporary Germany, Austria, and Switzerland. This course is taught in German. Prerequisite: GERM 302.

GERM 453. Investigation and Conference: _____ 1-3 Credits. H/W FP
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work is required. Not open to native speakers of German.

GERM 462. German and Germany in Global Business Culture II. 3 Credits. H/W FP
Advanced content-based course with focus on the language skills needed to examine the German social market economy, legal forms of companies, and the business planning process. Use of multimedia sources to explore current German business and economic issues in international, transatlantic, and global contexts. Team research project and presentation. Prerequisite: GERM 362 or permission of instructor.

GERM 475. Topics in German Studies: _____ 3 Credits. H FP
Exploration of cultural forms such as literature, film, philosophy, social institutions, linguistics, the arts, and the press. Examination of how cultural meaning is produced and interpreted. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies. Prerequisite: GERM 315 and GERM 401.

GERM 480. Literature and Culture of German-Speaking Europe 1150-1750. 3 Credits. H FP
Exploration of medieval and early modern literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 315 and GERM 401.

GERM 481. Literature and Culture of German-Speaking Europe 1750-1830. 3 Credits. H FP
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 315 and GERM 401.

GERM 482. Literature and Culture of German-Speaking Europe 1830-1918. 3 Credits. H FP
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 315 and GERM 401.

GERM 483. Literature and Culture of German-Speaking Europe 1918-Present. 3 Credits. H FP
Exploration of literature within the framework of major cultural movements and historical, political, and economic change. Prerequisite: GERM 315 and GERM 401.

GERM 501. Advanced German III. 3 Credits. H FP
Focus on usage-based grammar of contemporary German. Extensive reading and analysis of grammatical structures in context and integration of form, meaning, and use. Exploration of grammatical structures using contemporary electronic textual analysis tools. Prerequisite: GERM 402.

GERM 550. History of the German Language. 3 Credits. H FP
Introduction to basic concepts of German philology and historical linguistics and exploration of the development of a national German language. Prerequisite: GERM 315 and GERM 401.

GERM 550. Structure of the German Language. 3 Credits. H FP
This course provides an overview of the structure of modern standard German. Students will explore different levels of the linguistic system of German (including phonology, morphology, and syntax) and complete practical exercises. Prerequisite: GERM 315 and GERM 401.

GERM 575. Topics in Genre: _____ 3 Credits. H FP
Study of the definition, style, form, and content of a specific literary genre in German-language literature and the social, cultural, political, and economic factors that led to its emergence. Consideration of the genre's suitability for particular writers or periods. Topic and period vary. May be repeated if content varies. Prerequisite: GERM 315 and GERM 401.

GERM 579. Investigation and Conference: _____ 1-3 Credits. H/W FP
Independent study and directed reading on special topics. Permission of the instructor who will supervise the student's work required. Prerequisite: GERM 315 and GERM 401.

GERM 580. Senior Capstone Course: German-Speaking Europe Today. 3 Credits. H FP
Students write and present a research paper on an aspect of contemporary German-speaking Europe. Focus on learning or refining the linguistic and research-related skills needed to produce a research
paper. Students synthesize their knowledge of German Studies with coursework they have completed in other disciplines. Conducted in German and English. Required of all German Studies majors in senior year. Prerequisite: GERM 315, GERM 401, and senior standing.

**GERM 598. Research for Departmental Honors. 3 Credits. H FP** Research for a departmental honors project, on a topic chosen in conjunction with the faculty advisor. Emphasis on independent study and writing. Open to students with previous coursework in German at the 400 level, an overall 3.0 GPA, and at least a B+ average in advanced work in German. Prerequisite: GERM 315, GERM 401, senior standing, and permission of Undergraduate Advisor.

**GERM 599. Departmental Honors Project. 3 Credits. H FP** Continuation of GERM 598. Course consists of completion of Departmental Honors project. Quality of project determines whether student receives credit only or Honors in German. Prerequisite: GERM 598.

**GERM 616. Topics in German Literature: ___. 3 Credits. H/W** Readings and discussions in German of selected literary works on a particular topic or theme (e.g., nature, women, art and literature, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

**GERM 618. Topics in German Language and Linguistics: ___. 3 Credits. H/W** Readings and discussions in German in an area of specialized language or linguistic study (e.g., lexical fields, modern German dialects, etc.). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

**GERM 620. Topics in German Culture and Folklore: ___. 3 Credits. H/W** Readings and discussions in German on some aspect of German culture or folklore, including Landeskunde (study of contemporary Germany). May be repeated. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416, and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

**GERM 626. Idiomatic Usage in Modern Colloquial and Literary German. 3 Credits. H/W** Practical exercises in the systematic study of idioms and synonyms, designed to foster a more discriminating and effective usage of German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

**GERM 630. Advanced German Grammar. 3 Credits. H/W** Recommended for students intending to teach German. Prerequisite: Two literature courses from GERM 400, GERM 408, and GERM 416 and two composition courses from GERM 340, GERM 344, and GERM 348, or equivalent.

**GERM 700. Introduction to Graduate Studies in German. 3 Credits.**

An introduction to the skills required of students enrolled in graduate degree programs in German Studies; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to10-page conference paper.

**GERM 701. Introduction to the Study of Literature. 3 Credits.**

Introduction to methods of literary research and presentation of seminar papers. Exercises in the use of basic guides to the study of German language and literature, in the documentation of scholarly research, and in the writing of interpretive essays, based on reading and discussion of selected works from different periods of the departmental "Basic Reading List.

**GERM 710. Workshop for M.A. Students. 1 Credits.**

Discussion of policies in the M.A. program, examinations, thesis proposals, writing of theses, grant proposals, conference presentations, publications of scholarship, and entrance into the academic job market. Required of all M.A. students in the first year in the program. Does not count toward completion of 30 hours of course work for the M.A.

**GERM 712. The Structure of Modern Standard German. 3 Credits.**

A comprehensive introduction to the structure and usage of contemporary German, including phonetics, phonology, morphology, syntax, text linguistics, semantics, pragmatics, and language variation. Students will listen to lectures, read texts on German linguistics, participate in discussions, and work extensively on linguistic problems involving German.

**GERM 716. Topics in German Literature: ___. 3 Credits.**

Intensive study of a selected topic in German literature. May be repeated. Offered only in conjunction with GERM 616 when taught by a Max Kade Distinguished Visiting Professor. Graduate students will be assigned additional work.

**GERM 734. Age of Goethe. 3 Credits.**

Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history.

**GERM 736. Post-Romantic Nineteenth Century. 3 Credits.**

Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history.

**GERM 738. Twentieth Century. 3 Credits.**

Reading and discussion of major literary works in the period; combined with lectures and background readings on literary, cultural, and political history.

**GERM 751. Topics in German Studies: ___. 3 Credits.**

Course covers key topics in German Studies and represents the expertise of faculty in the department as well as department-affiliated faculty. Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics. May be repeated as topics vary.

**GERM 753. Investigation and Conference: ___. 1-6 Credits.**

To be taken only in exceptional cases. Permission of the instructor who will supervise the student's work is required.

**GERM 756. Studies in Enlightenment Literature: ___. 3 Credits.**

**GERM 800. Seminar: Teaching German as a Second Language. 3 Credits.**

Introduction to selected aspects of second-language acquisition, foreign-language pedagogy, and contrastive grammar, with the major concentration on practical guidance in teaching elementary German, in test preparation and grading, and in the use of equipment.
GERM 801. Practicum in GTAs. 1 Credits.
Discussion of matters relating to the teaching of German in specific courses. Required of all GTAs in each semester of teaching, unless enrolled in GERM 800. Does not count toward completion of 30 hours of course work for the M.A. or 27 hours of course work for the Ph.D.

GERM 855. Introduction to German Applied Linguistics. 3 Credits.
Introduction to theories and topics in German applied linguistics.

GERM 860. Introduction to Modern German Dialects. 3 Credits.
Introduction to modern German dialects, methods of dialect research and aspects of linguistic assimilation and loss as well as a survey of German-American dialects. Prerequisite: Permission of instructor required.

GERM 899. Master's Thesis. 3 Credits.
May not be repeated.

GERM 900. Workshop for Ph.D. Students. 1 Credits.
Discussion of policies in the Ph.D. program, research specializations, examinations, dissertation proposals, writing of dissertations, grant proposals, conference presentations, publication of scholarship, and entrance into the academic job market. Required of all Ph.D. students in the first year in the program. Does not count toward completion of 27 hours of course work for the Ph.D.

GERM 953. Investigation and Conference: _____ 1-6 Credits.
To be taken only in exceptional cases. Permission of the instructor who will supervise the student's work is required.

GERM 960. Seminar on Writers of the Age of Goethe: _____ 3 Credits.

GERM 962. Seminar in Romanticism: _____ 3 Credits.

GERM 967. Seminar in Special Topics: _____ 3 Credits.

GERM 999. Doctoral Dissertation. 1-10 Credits.

Courses

PERS 110. Elementary Iranian/Dari/Tajik Persian I. 5 Credits. U F1
Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Five hours of class per week.

PERS 120. Elementary Iranian/Dari/Tajik Persian II. 5 Credits. F2
Continuation of PERS 110. Vocabulary acquisition, pronunciation, grammar, and writing. Course includes reading of simple texts. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Five hours of class per week. Prerequisite: PERS 110 or departmental permission.

PERS 210. Intermediate Iranian/Dari/Tajik Persian I. 3 Credits. U F3
A continuation of PERS 120. Course emphasizes oral and written work in Persian. Systematic review of grammar and introduction to reading in cultural texts. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Prerequisite: PERS 120 or departmental permission.

PERS 220. Intermediate Iranian/Dari/Tajik Persian II. 3 Credits. U F4
A continuation of PERS 210. Course emphasizes oral and written work in Persian. Systematic review of grammar and introduction to reading in cultural texts. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Prerequisite: PERS 210 or departmental permission.

PERS 310. Advanced Iranian/Dari/Tajik Persian I. 3 Credits. U FP
Enhancement of speaking, comprehension, reading and writing abilities in Persian. Readings from Persian literature introduced. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Prerequisite: PERS 220 or placement exam that establishes a level of proficiency in Persian suited to Advanced Persian I.

PERS 320. Advanced Iranian/Dari/Tajik Persian II. 3 Credits. U FP
Enhancement of speaking, comprehension, reading and writing abilities in Persian. Readings from Persian literature introduced. Main emphasis on Iranian Persian; acquaintance with basic differences between Iranian, Dari and Tajik Persian. Interested students to be provided with additional opportunities to improve their linguistic skills in the dialect of their interest. Prerequisite: PERS 310 or placement exam that establishes a level of proficiency in Persian suited to Advanced Persian II.

PERS 593. Directed Study in Persian Culture and Literature: _____ 1-3 Credits. U FP
This course is designed for students seeking proficiency in Persian beyond PERS 320. The instructor directs the student through readings and materials in Persian that add to the student's substantive knowledge of Persian culture in Iran, Afghanistan, and Tajikistan. May be taken multiple semesters for credit with varying content. Prerequisite: PERS 320 and consent of instructor.

Courses

PLSH 104. Elementary Polish I. 5 Credits. U F1
First Semester. Essentials of grammar, practice in reading, writing, and speaking Polish.

PLSH 105. Elementary Polish, Honors. 5 Credits. U
Honors version of PLSH 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor.

PLSH 108. Elementary Polish II. 5 Credits. U F2
Second semester. A continuation of PLSH 104. Prerequisite: PLSH 104.

PLSH 109. Elementary Polish II, Honors. 5 Credits. U
A continuation of PLSH 105. Honors version of PLSH 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: PLSH 104 or PLSH 105. Open only to students admitted to the University Honors Program, or by permission of instructor.

PLSH 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Polish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

PLSH 204. Intermediate Polish I. 3 Credits. U F3
Second-year course in the language with emphasis on reading, composition, and conversation. Prerequisite: PLSH 108.

**PLSH 208. Intermediate Polish II. 3 Credits. U F4**
A continuation of PLSH 204. Prerequisite: PLSH 204.

**PLSH 504. Advanced Polish I. 3 Credits. H/W FP**
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two or more years of Polish language. Prerequisite: PLSH 208 or equivalent.

**PLSH 508. Advanced Polish II. 3 Credits. H/W FP**
A practical Polish language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Polish. Designed for students who have had two and one-half or more years of Polish. Prerequisite: PLSH 504 or equivalent.

**PLSH 675. Readings in Polish Language and Literature. 1-6 Credits. H/W FP**
Directed individual readings on various topics concerning Polish literature and/or language. Prerequisite: Two years or four semesters of Polish, and consent of instructor.

## Courses

**REES 110. Understanding Russia and Eastern Europe. 3 Credits. SC H/W**
A multidisciplinary introduction to Russia and Eastern Europe. The course explores the geography, history, and politics of this complex region, as well as the diverse cultures, ethnicities, languages, and religions. A special focus of the course is the current socio-political situation in Russia and Eastern Europe in the context of the fall of communism nearly 30 years ago and the ongoing post-communist transition. Students will watch a movie every two weeks as a visual representation of issues discussed via scholarly articles and chapters, newspaper articles and news clips, video lectures, documentary and animated films, music videos, and literature. This course is offered at the 100 and 300 level with additional assignments at the 300 Level. Not open to students with credit in REES 310.

**REES 111. Understanding Russia and Eastern Europe, Honors. 3 Credits. H/W**
A multidisciplinary introduction to Russia and Eastern Europe. The course explores the geography, history, and politics of this complex region, as well as the diverse cultures, ethnicities, languages, and religions. A special focus of the course is the current socio-political situation in Russia and Eastern Europe in the context of the fall of communism nearly 30 years ago and the ongoing post-communist transition. Students in the course watch one feature film from Russia or Eastern Europe per week as a visual representation of issues discussed via scholarly articles and chapters, newspaper articles and news clips, video lectures, documentary and animated films, music videos, and literature. This course is offered at the 100 and 300 level with additional assignments at the 300 Level. Not open to students with credit in REES 111.

**REES 220. Societies and Cultures of Eurasia. 3 Credits. W**
The purpose of this course is to acquaint students with the societies and cultures of Eurasia (primarily Central Asia, Russia, and the Caucasus region). This interdisciplinary course reviews the geography, history, economics, social and political structures, religion, literature, music, and art of the region. The focus is mainly on the twentieth-century and topics of interest include the collapse of empires, the rise and fall of communism, the disintegration of the USSR and rise of authoritarianism, nationalism, and various forms of Islam in the region.

**REES 221. Societies and Cultures of Eurasia, Honors. 3 Credits. W**
The purpose of this course is to acquaint students with the societies and cultures of Eurasia (primarily Central Asia, Russia, and the Caucasus region). This interdisciplinary course reviews the geography, history, economics, social and political structures, religion, literature, music, and art of the region. The focus is mainly on the twentieth-century and topics of interest include the collapse of empires, the rise and fall of communism, the disintegration of the USSR and rise of authoritarianism, nationalism, and various forms of Islam in the region. Open only to students admitted to the University Honors Program or by permission of instructor.

**REES 310. Understanding Russia and Eastern Europe. 3 Credits. NW S/W**
A multidisciplinary introduction to Russia and Eastern Europe. The course explores the geography, history, and politics of this complex region, as well as the diverse cultures, ethnicities, languages, and religions. A special focus of the course is the current socio-political situation in Russia and Eastern Europe in the context of the fall of communism nearly 30 years ago and the ongoing post-communist transition. Students in the course watch one feature film from Russia or Eastern Europe per week as a visual representation of issues discussed via scholarly articles and chapters, newspaper articles and news clips, video lectures, documentary and animated films, music videos, and literature. This course is offered at the 100 and 300 level with additional assignments at the 300 Level. Not open to students with credit in REES 110.

**REES 311. Understanding Russia and Eastern Europe, Honors. 3 Credits. SC S**
A multidisciplinary introduction to Russia and Eastern Europe. The course explores the geography, history, and politics of this complex region, as well as the diverse cultures, ethnicities, languages, and religions. A special focus of the course is the current socio-political situation in Russia and Eastern Europe in the context of the fall of communism nearly 30 years ago and the ongoing post-communist transition. Students in the course watch one feature film from Russia or Eastern Europe per week as a visual representation of issues discussed via scholarly articles and chapters, newspaper articles and news clips, video lectures, documentary and animated films, music videos, and literature. This course is offered at the 100 and 300 level with additional assignments at the 300 Level. Not open to students with credit in REES 111.

**REES 480. Topics in Russian and East European Studies: _____. 1-3 Credits. H**
Interdisciplinary examination of topics involving two or more disciplines in Russian, East European, and Eurasian studies.

**REES 492. Research Methods in Russian, East European, and Eurasian Studies. 3 Credits. H**
Development of interdisciplinary research skills and familiarity with resources and issues in the study of Russian, East European, and Eurasian Studies. Preparation for REES 496.

**REES 496. Capstone Research Seminar in Russian and East European, and Eurasian Studies. 3 Credits. H**
Interdisciplinary original research conducted using at least one REES language and resulting in a research paper. Prerequisite: REES 492.

**REES 498. Directed Readings. 1-3 Credits. H**

Individual and supervised readings in selected areas of Russian, East European, and Eurasian Studies. Prerequisite: Prior permission of instructor and either CREES director or associate director.

**REES 499. Capstone Research Seminar in Russian, East European, and Eurasian Studies, Honors. 3 Credits. H**

Research and writing of a substantial paper, involving interdisciplinary original research and use of sources in at least one REES language, and presentation of this paper to an Honors committee of three REES faculty members. This thesis must be substantially different from any other Honors thesis. Prerequisite: REES 492.

**REES 510. Understanding Central Asia. 3 Credits. NW S/W**

An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in REES 710. (Same as GEOG 590.) Prerequisite: One previous interdisciplinary area studies course or the instructor's permission.

**REES 704. Russian Orthodoxy in Historical Perspective. 3 Credits.**

This course examines Russian Orthodoxy as a religious system and the institution of the Russian Orthodox Church from its first appearance in Russia to the present. It focuses on beliefs and practices of the clergy and laity; institutional structures; the relationships between Church and State; interactions with non-Orthodox religious communities; responses to Soviet atheist policies; Orthodox influences on political theory, philosophy, literature, and the fine arts. (Same as REL 704.)

**REES 710. Understanding Central Asia. 3 Credits.**

An intensive, multidisciplinary survey of Central Asia, focusing on the former Soviet republics-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan-with additional coverage of neighboring regions (the Caucasus and the Caspian basin, Afghanistan, and western China). The course addresses the history of the region (from the Silk Road to Soviet rule), geography, religion, and the building of post-Soviet states and societies. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in REES 710. (Same as GEOG 590.)

**REES 799. Directed Readings in Russian and East European Studies. 1-5 Credits.**

**REES 895. Special Problems in Area Studies: _____ 3 Credits.**

Interdisciplinary examination of topics involving two or more of the cooperating disciplines in Russian and East European studies.

**REES 897. Research. 1 Credits.**

Enrollment to fulfill Masters continuous enrollment rule. Prerequisite: Completion of all degree requirements except submission of seminar paper or comprehensive examination.

**REES 898. Seminar in Russian and East European Studies. 3 Credits.**

Mastery of interdisciplinary research skills, and knowledge of resources and scholarship on the study of Russian, east European, and Eurasian Studies.

**REES 899. Capstone Research Seminar in Russian, East European, and Eurasian Studies. 3 Credits.**

Research, write, and present a professional-quality paper, involving interdisciplinary original research, consultation with REES faculty, and substantial use of sources in at least one REES language. Prerequisite: REES 898.

**Courses**

**RUSS 104. Elementary Russian I. 5 Credits. U**

First semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian.

**RUSS 105. Elementary Russian I, Honors. 5 Credits. U**

Honors version of RUSS 104, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: Open only to students admitted to the University Honors Program, or by permission of instructor.

**RUSS 108. Elementary Russian II. 5 Credits. U F2**

Second semester. Five hours of basic language acquisition and oral practice per week. Essentials of grammar, practice in comprehending, speaking, reading, and writing Russian. A continuation of RUSS 104. Prerequisite: RUSS 104.

**RUSS 109. Elementary Russian II, Honors. 5 Credits. U**

A continuation of RUSS 105. Honors version of RUSS 108, with additional work aimed at accelerating students progress to proficiency and expanding their cultural competence. Prerequisite: RUSS 104 or RUSS 105. Open only to students admitted to the University Honors Program, or by permission of instructor.

**RUSS 110. Intensive Elementary Russian. 10 Credits. U F1/F2**

Intensive course in elementary Russian providing the student with a complete survey of Russian grammar, and proficiency in understanding, reading, and speaking basic Russian. Twenty contact hours per week. Same content as RUSS 104 and RUSS 108 combined.

**RUSS 150. Beginning Russian I. 3 Credits. U**

Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. No previous knowledge of Russian or other foreign languages required.

**RUSS 152. Beginning Russian II. 3 Credits. U**

Continuation of RUSS 150. Does not fulfill BA foreign language requirement. Prerequisite: RUSS 150 or equivalent.

**RUSS 177. First Year Seminar: _____ 3 Credits. U**

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Russian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**RUSS 204. Intermediate Russian I. 5 Credits. U F3**

This course is designed to develop speaking, reading, and listening proficiency within the context of a review of grammar. Prerequisite: RUSS 108, RUSS 110, or equivalent.

**RUSS 208. Intermediate Russian II. 5 Credits. U F4**

Continuation of RUSS 204. Completes the undergraduate foreign language requirement. The course is designed to develop speaking, reading, and listening proficiency within the context of detailed grammatical review. Prerequisite: RUSS 204 or equivalent.

**RUSS 212. Second Year Russian I. 3 Credits. U F3**
A review of Russian and further development of all four language skills. This course is intended for non-specialists and for students fulfilling the language requirement. Prerequisite: RUSS 108 or RUSS 110.

RUSS 216. Second Year Russian II. 3 Credits. U F4
Continuation of RUSS 212. More focused development of students' oral skills and reading abilities. This course fulfills the college foreign language requirement. Prerequisite: RUSS 204 or RUSS 212.

RUSS 250. Continuing Russian I. 3 Credits. U
Fundamentals of Russian grammar, reading, speaking, and writing. Course designed to accommodate the needs of students regardless of age, educational background, or occupation. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 152 or equivalent.

RUSS 252. Continuing Russian II. 3 Credits. U
A continuation of RUSS 250. Does not count towards the fulfillment of the undergraduate language requirement. Does not count towards the undergraduate major in Slavic. Prerequisite: RUSS 250 or equivalent.

RUSS 504. Advanced Russian I. 3 Credits. H/W FP
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had four semesters of Russian. Prerequisite: RUSS 208 or RUSS 216.

RUSS 508. Advanced Russian II. 3 Credits. H/W FP
A practical Russian language course involving advanced study of the grammar, reading of texts on a variety of subjects, conversation, and composition. Taught in Russian. Designed for students who have had two and one-half or more years of Russian language. Prerequisite: RUSS 504.

RUSS 512. Russian for the Professions I. 3 Credits. U FP
This course focuses on the active mastery of language structures and vocabulary needed for people using Russian in professional capacities, particularly such as business and journalism. Materials will be drawn from the current Russian press and electronic media. Designed for students who have had basic language training and want to develop specialized language skills. Prerequisite: RUSS 208 or RUSS 216.

RUSS 516. Russian for the Professions II. 3 Credits. U FP
A continuation of RUSS 512. Prerequisite: RUSS 504, RUSS 512, or RUSS 522.

RUSS 522. Problems in Translating Russian into English I. 3 Credits. H/W FP
Introduction to the process of translating texts from Russian, focusing on kinds of translation, lexical and textual factors, and the revision process. Prerequisite: Two years minimum of Russian language courses.

RUSS 550. Advanced Conversation, Composition, and Grammar in Russian: Summer Program. 6 Credits. H/W FP
 Held in Russia. Twenty-four hours of class work weekly, plus lectures and excursions, for six weeks at St. Petersburg University. Prerequisite: RUSS 208 or the equivalent of twenty-two hours of Russian language courses.

RUSS 675. Readings in Russian. 1-6 Credits. H/W FP
Prerequisite: Two years of Russian, and consent of instructor.

RUSS 700. Classics of Russian Culture. 3 Credits.
This advanced Russian language class explores the monuments of Russian culture (1700-1980) in the context of the country's history, customs, artistic traditions and literary trends. It is designed to develop reading, writing, and speaking skills of advanced language students and includes the preparation of written and oral reports in Russian.

Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

RUSS 704. Contemporary Russian Culture. 3 Credits.
This advanced Russian language class explores issues in contemporary Russian culture (literature and the arts, societal trends and issues, politics, and national life) based on Russian film, television, and print materials. It is designed to develop reading, writing, and speaking skills of advanced language students who wish to develop high levels of fluency, accuracy, and idiomatic expressiveness. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

RUSS 708. Russian Phonetics and Grammar. 3 Credits.
A survey of fundamental issues in Russian phonetics, morphology, and syntax. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major linguistic categories of Russian. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

RUSS 712. Introduction to Russian Literature. 3 Credits.
Readings for this advanced Russian language class will be drawn from representative prose, poetry, and drama of 19th or 20th century authors. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing the major texts and literary trends of the Russian tradition. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

RUSS 716. Stylistics. 3 Credits.
Practical examination of the features of stylistic registers available in contemporary Russian, ranging from slang to colloquial speech to educated journalistic, scientific, and literary styles. The course will develop reading, writing, and speaking skills necessary for discussing and analyzing stylistic registers. Includes the preparation of both written and oral reports. Discussion format; conducted entirely in Russian. Prerequisite: RUSS 508 or equivalent.

Courses

SLAV 101. Introduction to Slovene. 1 Credits. H
Teaches skills for survival communication in Slovene and basic orientation in Slovene culture. Blended short course, designed to give a student rudimentary linguistic and cultural preparation for functioning in Slovene-speaking environment. Recommended for participants of study abroad in Slovenia. No previous knowledge of Slovene or other foreign languages required. The course does not count toward undergraduate language requirement.

SLAV 104. Elementary Slavic Language I: ____. 5 Credits. U F1
First semester. Essentials of grammar, practice in speaking and writing a Slavic language. Simple readings from selected texts. Course may be used to teach the fundamentals of any Slavic language, for example, Slovenian, Macedonian, Slovak, etc.

SLAV 140. Understanding Russia. 3 Credits. HT H/W
An introduction to literature, history, political systems, spirituality, and the visual arts from a Russian perspective.

SLAV 141. Understanding Russia, Honors. 3 Credits. HT H/W
An introduction to literature, history, political systems, spirituality, and the visual arts from a Russian perspective.

SLAV 144. Survey of Russian Literature in Translation. 3 Credits.
HL H/W
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others.

**SLAV 145. Survey of Russian Literature in Translation, Honors. 3 Credits.** HL H/W
A survey of the principal works of Russian literature including such authors as Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Pasternak, Solzhenitsyn, and others.

**SLAV 148. Introduction to Slavic Folklore. 3 Credits.** HL H/W
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries.

**SLAV 149. Introduction to Slavic Folklore, Honors. 3 Credits.** HL H/W
An introduction to the various forms of folklore among the Slavic peoples, with particular emphasis on the folk literature, customs, and artifacts of Russia, Poland, and the South Slavic countries.

**SLAV 152. Robots, Rockets, Radios: Progress and Technology in 20th-Century Slavic Literatures. 3 Credits.** HL
This course introduces students to masterworks of literature written in response to the technological advances of the 20th century by some of the best authors in Czech, Polish, Russian, Ukrainian, and formerly Yugoslav literatures. The writers covered include Karel Capek, Yuri Olesha, Valerian Pidmohylny, Ivo Andric, Stanislav Lem, Vaclav Havel, and Oksana Zubzhiko. Literary readings are supplemented with screenings of several films from the region. The course analyzes the ideological contexts in which these texts appeared, such as Soviet communism's dependence on technology and industrialization, post-World War II disillusionment with ideas of progress, and the Space Race.

**SLAV 177. First Year Seminar: ______. 3 Credits.** U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Slavic. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**SLAV 205. Muslim Lives: Politics, Culture, and Society. 3 Credits.** S
The course provides a general introduction to Muslim communities and societies by surveying some of the major aspects of Muslims' lived experiences from the early Islamic period to the modern globalized world. It will challenge the essentialized notion of a "Muslim world," which is usually presented as a monolithic society. Through the course, students will develop a basic understanding of the rich diversity of Muslim communities in terms of cultural mores, religious practices, and sociopolitical conditions. Religious and sociopolitical practices will be analyzed in their ethical and moral perspectives. (Same as GIST 205.)

**SLAV 230. The Vampire in Literature, Film, and Television. 3 Credits.** H
The vampire has been a fascinating and terrifying imagined other in human society for centuries. This course begins with the historical development of the vampire legend in Eastern Europe leading up to its contemporary Russian and English literary and cinematic variations. We will contextualize the various incarnations of the vampire and endeavor to consider the ethical significance of such a figure, through questions such as: What are the moral implications of becoming or being a vampire subject? Are there different ethical rules at play? Are vampires always unethical?

**SLAV 250. Introduction to Translation and Translation Theory. 3 Credits.** H
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as AAAS 250, GERM 240, LING 250 and SPAN 202.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

**SLAV 305. Language, Gender, and Sexuality. 3 Credits.** S
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and Considerations of power, hegemony, and imperialism. (Same as ANTH 325, GIST 303, JWSH 305 and WGSS 325.)

**SLAV 310. Modern Turkey: Culture and Society. 3 Credits.** H/W
As a country that is geographically in the middle of a strategic global region, a key NATO ally, a candidate for EU membership, and representing a mix of democratic traditions, military coups, and authoritarian leaders combined with periods of rapid and drastic socioeconomic transformation, for one reason or another, Turkey seems to always be a country under the spotlight. This course is designed to give an overview of Modern Turkey and familiarize the student with its history, society and culture. Topics to be covered include the early republican period, ethnic and religious minorities, religion and secularism, music, cuisine, women, gender and sexuality, religious and national holidays, cinema and TV, among others. The primary purpose of this course is to help students develop necessary analytical and interpretive skills to identify, compare, and analyze Turkish cultural practices, products and perspectives as they relate to basic social, political, and historical contexts. No background knowledge of Turkey or the Turkish language is required. (Same as GIST 310 and TURK 310.)

**SLAV 316. The Peoples and Cultures of Southeastern Europe Through Film. 3 Credits.** HL H
This course presents an introduction to the study of the culture of the South Slavs and other peoples of Southeastern Europe, combining background modules in geography, linguistic culture, history, folklore and contemporary cultural criticism with critical viewings of artistic films. The course serves as an introduction to humanistic inquiry about the peoples and cultures of Southeastern Europe.

**SLAV 317. The Peoples and Cultures of Southeastern Europe Through Film, Honors. 3 Credits.** HL H
This course is similar in content to SLAV 316, but with an additional honors project. Prerequisite: Eligibility for or admission to the university Honors Program.

**SLAV 318. Jews and Slavs in Eastern Europe. 3 Credits.** H
Jews and Slavs have shared territory from the Middle Ages to the present day. The contact between these culturally and linguistically distinct groups have shaped many centuries of Eastern European history - from the extreme violence of the pogroms to long periods of peaceful coexistence and cooperation. “Jews and Slavs” examines the history and cultural geography of Slavic-Jewish contact from the perspectives of both groups.
Through literature, film, journalism, and folklore, students learn about the profound influence Jews and Slavs have had on each other, the uneasy feelings that accompanied their interactions, and the creative and fascinating impact their interaction had on both cultures. (Same as JWSH 318.)

SLAV 320. Graphic Novels as Memory. 3 Credits. H
This course examines the interaction between literature and memory, in particular how authors respond to major historical events and contribute to shaping the collective memory of those events. Students will read graphic novels inspired by memories of the Holocaust and Communism. Through the visual and textual mix of the graphic novel, we will consider the impact of historical upheavals on the lives of ordinary individuals, drawing connections to contemporary national and global socio-political problems. Students will write on these topics in a variety of academic and non-academic genres, including: journal, article summary, synthetic essay, analytical essay, and reflection essay/creative writing. (Same as GiST 321.)

SLAV 322. Soviet and Post-Soviet Russian Cinema. 3 Credits. H
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences) and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. (Same as FMS 322.)

SLAV 330. Russian Business Culture. 3 Credits. H
The course examines how geography, history, and traditions of Russia impact its contemporary business practices. It addresses influence of Russian culture on business communication (verbal and nonverbal), relationship building, the role of manager, the functioning of teams, negotiation, and decision making. Topics also include cultural aspects of relationship between businesses and the state, entrepreneurship, advertising, and consumerism. Students examine business practices that foreign businessmen encounter in Russia.

SLAV 340. The Language Landscape of Eastern Europe. 3 Credits. HT H
Topics include current events, such as the resurgence of ethnonationalism, in which language and identity projects are aided by the internet and social media as well as case studies of emergent language-based nations. Students will gain an appreciation of the key role that languages play in creating a diverse Eastern Europe. This course will help prepare students for careers in international business, diplomacy, and politics, among others. This course is offered at the 300 and 500 level with additional assignments as the 500 level. Not open to students with credit in SLAV 341 or SLAV 540. Prerequisite: Membership in the College Honors Program or consent of instructor.

SLAV 340. The Language Landscape of Eastern Europe, Honors. 3 Credits. HT H
Topics include current events, such as the resurgence of ethnonationalism, in which language and identity projects are aided by the internet and social media as well as case studies of emergent language-based nations. Students will gain an appreciation of the key role that languages play in creating a diverse Eastern Europe. This course will help prepare students for careers in international business, diplomacy, and politics, among others. This course is offered at the 300 and 500 level with additional assignments as the 500 level. Not open to students with credit in SLAV 340 or SLAV 540. Prerequisite: Membership in the College Honors Program or consent of instructor.

SLAV 370. War and Violence Russian Literature and Film. 3 Credits. H
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level.

SLAV 379. Topics in: ________. 1-3 Credits. H
Exploration of Slavic cultural forms such as literature, film, linguistics, arts, and press. Topics vary, and course may address topics across a narrow or broad time frame. May be repeated if content varies.

SLAV 494. Research Internship. 1-3 Credits. H
Practical research experience in Slavic Studies gained by assisting a faculty member on a faculty research, editorial, pedagogical, or digital project. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Declaration of a Slavic Languages and Literatures major and permission of instructor.

SLAV 495. Senior Capstone Seminar. 3 Credits. H
The Senior Capstone Seminar offers undergraduate majors an opportunity to define, design and execute a substantial research/creative project under the mentorship of a faculty member. The project integrates the knowledge and skills gained in the coursework for the major and across the undergraduate curriculum, and demonstrates the students competence in the field of Slavic studies. Prerequisite: Slavic major status, senior standing.

SLAV 499. Honors Thesis. 3 Credits. H/W
Independent study and preparation of honors thesis. Required of all students working for a degree with honors in Slavic languages and literatures.

SLAV 500. Russia Today. 3 Credits. H/W
Study and discussion of contemporary problems in Russia and the former Soviet Union; readings in Russian, based on articles in newspapers, journals, etc. Conducted in Russian. Prerequisite: RUSS 208 or equivalent.

SLAV 503. Post-Soviet Communication. 3 Credits. H
The course is designed to acquaint students with the shifting manner of public discourse in Post-Soviet Russia and help them to explore in some depth cross-cultural communication between America and Russia. In addition to contemporary and historical background on Russian communicative practices, students examine discourse in business development, mass media, marketing, and advertising. All readings in English. (Same as OOMS 503.)

SLAV 506. Masterworks of Polish and Czech Literature. 3 Credits. H/W
A survey of West Slavic Literature and Civilization (Polish and Czech) from its beginnings to the present with emphasis on the most important trends: Renaissance, Romanticism, Positivism/Realism, Modernism and Avant-guard; Socialist realism, and Post-modernism. The course combines lecture, discussion and small group activities. Movie clips, recordings, and slides are used to reflect various cultural dimensions of West Slavic Civilization. No knowledge of Polish or Czech is required. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 706. Prerequisite: Any previous course in SLAV or RUSS.
SLAV 508. South Slavic Literature and Civilization. 3 Credits. H/W
An introductory survey of the literature and culture of the South Slavic peoples: the Slovenes, Croats, Bosniacs, Serbs, Montenegrins, Macedonians and Bulgarians. No language required.

SLAV 510. The Russian Literary Genius. 3 Credits. H/W
Topics and problems in Russian cultural history as treated in the masterworks of Russian literature. Readings selected from the works of Pushkin, Tolstoy, Dostoevsky, Pasternak, Bulgakov, Solzhenitsyn, and other great Russian writers. Readings in English, no prerequisite for non-Russian majors. Russian majors will do some of the readings in Russian.

SLAV 516. Love, Lust and Liberty: Polish and Czech Film Adaptations. 3 Credits. H
A comparative study of several most representative and best works of 19th- and 20th-century Polish and Czech fiction and drama and their film adaptations. By providing a broad cultural and historical background of the works, the course offers a thorough introduction to modern culture of Poland and the Czech Republic. Readings and discussions are in English, and no knowledge of Polish or Czech is required.

SLAV 522. The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings. 3 Credits. H/W
This course covers the main grammatical categories of Russian, including word formation, case, animacy, voice and reflexive verbs, imperatives, aspect, and word order. It is intended not only for linguists but anyone seeking a better understanding of the grammatical systems of Russian. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 722. Prerequisite: Two years of Russian language study or the equivalent.

SLAV 526. The Pragmatics of Slavic Languages. 3 Credits. H
This course introduces students to the study pragmatics: the relationship between utterances, the contexts in which these utterances were produced, and their reception and interpretation by the speakers. It investigates how grammatical choices on the sentence level (such as case, aspect, impersonalization, and more) affect and are influenced by the context in which utterances are produced, and how social variables such as gender, age, peer pressure, institutional power, and other factors are influential in production and interpretation of meaning. Other topics include extra-linguistic elements such as gesture and prosody, (im)politeness expressions, the pragmatics of narratives, and cross-cultural differences in contexts and reception of specific speech genres. Prerequisite: RUSS 508 or consent of instructor.

SLAV 530. Introduction to Russian Poetry. 3 Credits. H/W
An introduction to the principles of Russian versification and to masterpieces of Russian poetry selected from the 18th, 19th, and 20th centuries. Students will learn to read, translate, and analyze poems in terms of rhyme, meter, euphony, metaphor, and other prosodic features. Emphasis will be placed upon preparing students for independent study and appreciation of Russian poetry in the original. Prerequisite: Language proficiency.

SLAV 532. Dostoevsky. 3 Credits. H/W
A study of the life and works of Fyodor Dostoevsky. In translation. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 732. Prerequisite: Any previous course in SLAV or RUSS.

SLAV 534. Tolstoy. 3 Credits. H/W
A study of the life and works of Leo Tolstoy. In translation. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 734. Prerequisite: Any previous course in SLAV or RUSS.

SLAV 540. The Language Landscape of Eastern Europe. 3 Credits. H
Topics include current events, such as the resurgence of ethnonationalism, in which language and identity projects are aided by the internet and social media as well as case studies of emergent language-based nations. Students will gain an appreciation of the key role that languages play in creating a diverse Eastern Europe. This course will help prepare students for careers in international business, diplomacy, and politics, among others. This course is offered at the 300 and 500 level with additional assignments as the 500 level. Not open to students with credit in SLAV 340 or SLAV 341.

SLAV 550. The Russian Novel in the Age of Realism. 3 Credits. H/W
This course traces the evolution of the Russian novel from its beginnings with Pushkin and through the novels of Turgenev, Goncharov, Dostoevsky, Tolstoy, and others. In translation. Russian majors will read most works in Russian. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 760. Prerequisite: Two years of Russian language or consent of the instructor.

SLAV 555. Readings in Slovene. 1-6 Credits. H
Individually tailored coursework in Slovene, from beginning to advanced level. Can include development of all four skills depending on the needs of the student. Prerequisite: Consent of instructor.

SLAV 564. The Woman Question in Nineteenth-Century Russian Literature. 3 Credits. H
An exploration of the "woman question" in nineteenth-century Russia as treated in literary texts. Authors to be included are: Tolstoy, Turgenev, Dostoevsky, Chekhov, as well as women writers such as Karolina Pavlova and Evgeniia Tur, and prominent literary and social critics. Readings in English. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 764. Prerequisite: Any previous course in SLAV or RUSS.

SLAV 567. Post-Soviet Literature. 3 Credits. H
A survey of post-Soviet literary art, from approximately 1985 to the present, dealing with a range of subjects including the emergence of literature from the strictures of socialist realism and its relationship to postmodernism and postcolonialism. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 767. Prerequisite: Any previous course in SLAV or RUSS.

SLAV 570. War and Violence Russian Literature and Film. 3 Credits. H
This course focuses on artistic representations of violence resulting from historical events such as World War II, Soviet collectivization, the Gulag, and political purges. We consider Soviet literature and film, including works by Isaac Babel, Andrei Platonov, Anna Akhmatova, and Alexander Solzhenitsyn. Readings in English. The course is offered at the 300 and 500 levels, with additional assignments at the 500 level.

SLAV 572. Russian and East European Science Fiction. 3 Credits. H
A comprehensive introduction to Russian, Soviet, and East European science fiction as it emerged in dialogue with utopian thinking, fantasy writing, and other cultural trends, and to how it responded to wider social contexts. Particular emphasis will be placed on the unique features of the Slavic science fiction tradition and its relationship the dominant Western forms of the genre. This course is offered at the 500 and 700 level with
additional assignments at the 700 level. Not open to students with credit in SLAV 772. Prerequisite: Any previous course in SLAV or RUSS.

SLAV 600. Biography of a City: ______. 3 Credits. H/W
Examination in depth of the historical, social, intellectual, and artistic development of one or more major Slavic urban centers.

SLAV 626. The Cultural Impact of Ottoman Empire on the South Slavs. 3 Credits. H
An examination of the cultural development of the South Slavs in the context of the Ottoman invasions and subsequent rule (14th-19th century), focusing on the frontier aspects of the Balkans, military culture, religion, economics and banditry, as well as other aspects of material and folk culture. No language requirement. Prerequisite: SLAV 316 or SLAV 508; or consent of instructor.

SLAV 630. Slavic Folklore. 3 Credits. H/W
Introduction to the phenomena and problems of Slavic folklore. Prerequisite: Two years of Russian on the college level.

SLAV 664. Soviet Russian Literature: 1930-1990. 3 Credits. H/W
Readings in the period, in all genres. In translation; no prerequisite for non-Russian majors. Russian majors are required to have senior standing and read most works in Russian.

SLAV 668. Nabokov. 3 Credits. H/W

SLAV 675. Readings in Slavic Studies (English). 1-3 Credits. H
Directed readings on Slavic culture in English. For non-majors. Prerequisite: Instructor permission.

SLAV 678. Readings in Slavic Linguistics. 1-6 Credits. H/W
Directed individual readings on various topics concerning Slavic linguistics. Prerequisite: Proficiency in at least one Slavic language, and consent of instructor.

SLAV 679. Topics in: ______. 1-6 Credits. H
Intensive study of a selected topic from Slavic languages, literatures, linguistics, or pedagogy.

SLAV 706. Masterworks of Polish and Czech Literature. 3 Credits.
A survey of West Slavic literature and civilization (Polish and Czech) from its beginnings to the present with emphasis on the most important trends: Renaissance, Romanticism, Positivism/Realism, Modernism and Avant-guard; Socialist realism, and Post-modernism. The course combines lecture, discussion and small group activities. Movie clips, recordings, and slides are used to reflect various cultural dimensions of West Slavic Civilization. No knowledge of Polish or Czech is required. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 506.

SLAV 710. Introduction to Slavic Languages and Linguistics. 3 Credits.
The Slavic languages and peoples, including briefly: their origin, prehistory, and early culture. Basic linguistic methodology as applied to Slavic material from the beginnings of Slavic linguistics to the present.

SLAV 712. Russian Poetry: Twentieth Century. 3 Credits.
Readings from the works of the major poets, in Russian. Prerequisite: Language proficiency.

SLAV 722. The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings. 3 Credits.
This course covers the main grammatical categories of Russian, including word formation, case, animacy, voice and reflexive verbs, imperatives, aspect, and word order. It is intended not only for linguists but anyone seeking a better understanding of the grammatical systems of Russian. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 522. Prerequisite: Two years of Russian language study or the equivalent.

SLAV 723. Soviet and Post-Soviet Russian Cinema. 3 Credits.
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences) and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. Not open to students with credit in SLAV 322/FMS 322. (Same as FMS 722.) Prerequisite: Graduate standing or instructor permission.

SLAV 726. Chekhov. 3 Credits.
A study of the life and works of Anton Chekhov. Open to senior Russian majors and graduate students. Readings in Russian. Prerequisite: Three years of Russian or the equivalent.

SLAV 732. Dostoevsky. 3 Credits.
A study of the life and works of Fyodor Dostoevsky. In translation. No prerequisite. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 532.

SLAV 734. Tolstoy. 3 Credits.
A study of the life and works of Leo Tolstoy. In translation. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 534.

SLAV 740. Introduction to Graduate Studies in Slavic Languages and Literatures. 3 Credits.
This course is an introduction to the skills required of students doing graduate degrees in Slavic languages and literatures; areas covered include 1) introduction to literary theory and criticism, 2) bibliography and research methods, including database management software, 3) preparation and presentations of a research/conference paper, 4) technology training, including web design, on-line portfolio, and digital humanities, and 5) professional ethics and awareness of the academic market and alternative careers. We will also be working on practical, professionally useful goals, such as how to (better) make use of technology, how to create a CV and modify it for different positions, how to write an abstract, and how to produce a conference paper. Course requirements will include a variety of smaller assignments and two larger projects, a web-based professional portfolio and an 8 to 10-page conference paper.

SLAV 748. Old Church Slavic. 3 Credits.
A course in the first written language of the Slavs (9-12th centuries AD), with discussion of Indo-European, Baltic and Common Slavic background. Prerequisite: Two years of Russian or the study of another ancient Indo-European language.

SLAV 754. Seminar in Slavic Verbal Aspect. 3 Credits.
A detailed examination of the morphology and usage of verbal aspect in Russian and other Slavic languages, which is a particularly troublesome area for foreign learners of Russian. Prerequisite: SLAV 522.

SLAV 760. The Russian Novel in the Age of Realism. 3 Credits.
This course traces the evolution of the Russian novel from its beginnings with Pushkin and through the novels of Turgenev, Goncharov, Dostoevsky, Tolstoy, and others. In translation. Russian majors will read most works in Russian. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 550. Prerequisite: Two years of Russian language or consent of the instructor.

SLAV 762. Russian Theatre and Drama from Stanislavski and Chekhov to the Present. 3 Credits.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as THR 725.)

SLAV 764. The Woman Question in Nineteenth-Century Russian Literature. 3 Credits.
An exploration of the "woman question" in nineteenth-century Russia as treated in literary texts. Authors to be included are: Tolstoy, Turgenev, Dostoevsky, Chekhov, as well as women writers such as Karolina Pavlova and Evgenia Tur, and prominent literary and social critics. Readings in English. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 564.

SLAV 767. Post-Soviet Literature. 3 Credits.
A survey of post-Soviet literary art, from approximately 1985 to the present, dealing with a range of subjects including the emergence of literature from the strictures of socialist realism and its relationship to concepts of postmodernism and postcolonialism. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 567.

SLAV 772. Russian and East European Science Fiction. 3 Credits.
A comprehensive introduction to Russian, Soviet, and East European science fiction as it emerged in dialogue with utopian thinking, fantasy writing, and other cultural trends, and to how it responded to wider social contexts. Particular emphasis will be placed on the unique features of the Slavic science fiction tradition and its relationship the dominant Western forms of the genre. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in SLAV 572.

SLAV 804. Comparative Slavic Linguistics. 3 Credits.
An examination of the development of the Slavic languages from the Common Slavic period to the present, proceeding from Indo-European. Prerequisite: Graduate standing in Russian.

SLAV 824. Proseminar in Methods of Teaching Slavic Languages I. 1-3 Credits.
Required for all teaching assistants, assistant instructors engaged in the teaching of Slavic languages and persons planning for careers in teaching Slavic languages. Combines discussion of theoretical teaching concepts with practical solution of problems arising concurrently in Slavic language courses. Students enrolled for two or three hours will study advanced Slavic grammar topics and stylistics as they apply to the teaching of Slavic languages.

SLAV 899. Ph.D. Seminar Slavic Linguistics. 3 Credits.
Topics in Slavic linguistics. Content will vary. May be repeated. Prerequisite: Ph.D. student in Slavic Languages and Literatures.

SLAV 999. Dissertation. 1-9 Credits.
Dissertation Hours. Graded on a satisfactory progress/limited progress/no progress basis.

Courses

TURK 104. Elementary Turkish I. 5 Credits. U F1
Basic language acquisition, including essentials of grammar, speaking, and writing standard (Osmanli) Turkish.

TURK 108. Elementary Turkish II. 5 Credits. U F2
Continuation of TURK 104. Prerequisite: TURK 104.

TURK 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Turkish. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

TURK 204. Intermediate Turkish I. 3 Credits. U F3
Second-year course in Turkish language with emphasis on reading, composition, and conversation. Prerequisite: TURK 108.

TURK 208. Intermediate Turkish II. 3 Credits. U F4
Continuation of TURK 204. Prerequisite: TURK 204.

TURK 310. Modern Turkey: Culture and Society. 3 Credits. H/W
As a country that is geographically in the middle of a strategic global region, a key NATO ally, a candidate for EU membership, and representing a mix of democratic traditions, military coups, and authoritarian leaders combined with periods of rapid and drastic socioeconomic transformation, for one reason or another, Turkey seems to always be a country under the spotlight. This course is designed to give an overview of Modern Turkey and familiarize the student with its history, society and culture. Topics to be covered include the early republican period, ethic and religious minorities, religion and secularism, music, cuisine, women, gender and sexuality, religious and national holidays, cinema and TV, among others. The primary purpose of this course is to help students develop necessary analytical and interpretive skills to identify, compare, and analyze Turkish cultural practices, products and perspectives as they relate to basic social, political, and historical contexts. No background knowledge of Turkey or the Turkish language is required. (Same as GIST 310 and SLAV 310.)

TURK 314. Turkish Culture Through Film and Literature. 3 Credits. H
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey's geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level.

TURK 514. Turkish Culture Through Film and Literature. 3 Credits. H
This course introduces the student to Turkish culture, with a focus on the 20th and 21st centuries, mainly through films and literature. Among the topics are Turkey's geography, politics, history, religion, feminism, poetry, music and cuisine. This interdisciplinary course does not require any previous knowledge of Turkey or the Turkish Language; it is open to both undergraduate and graduate students. Representative works of major authors and film directors will be discussed and analyzed in their historical, political and theoretical contexts. The course is offered at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: REES 550 or permission of instructor.

TURK 675. Readings in Turkish: _____ 3 Credits. U FP
Bachelor of Arts in German Studies

Why study German Studies?

Knowledge of the language and culture of German-speaking Europe provides students with linguistic and transcultural competence that will enable them to participate productively in a rapidly changing world. German is an official language in six central European countries and the most widely spoken language in the European Union. The United States maintains important economic, political, security, and cultural ties with the German-speaking countries. About 50 million people in the United States claim German ancestry.

Our students complete a diverse and challenging program that encompasses not only the German language but also courses that explore literature, the arts, history, business, and politics. Our program is characterized by interdisciplinary flexibility, a variety of co-curricular activities, and personalized academic advising and mentoring.

Courses

UKRA 104. Elementary Ukrainian I. 5 Credits. U F1
First semester. Five hours per week of recitation and drill in the spoken language. Essentials of grammar, practice reading, writing and speaking Ukrainian.

UKRA 108. Elementary Ukrainian II. 5 Credits. U F2
Second semester. Continuation of UKRA 104. Prerequisite: UKRA 104.

UKRA 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Ukrainian. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

UKRA 204. Intermediate Ukrainian I. 3 Credits. U F3
Second year course in Ukrainian language with emphasis on reading, composition, and conversation. Prerequisite: UKRA 108.

UKRA 208. Intermediate Ukrainian II. 3 Credits. U F4
Second semester. Continuation of UKRA 204. Prerequisite: UKRA 204.

UKRA 504. Advanced Ukrainian I. 3 Credits. H
This is a practical Ukrainian language course that will help students acquire advanced-level proficiency in the skills of speaking, reading, writing, and listening. Cultural understanding and pragmatic competence are given special emphasis. Taught in Ukrainian. Designed for students who have had two or more years of Ukrainian language. Prerequisite: UKRA 208 or consent of instructor.

UKRA 508. Advanced Ukrainian II. 3 Credits. H
This is a practical Ukrainian language course that will help students acquire advanced-level proficiency in the skills of speaking, reading, writing, and listening. Cultural understanding and pragmatic competence are given special emphasis. Taught in Ukrainian. Designed for students who have had two-and-a-half or more years of Ukrainian language. Prerequisite: UKRA 504 or consent of instructor.

UKRA 675. Readings in Ukrainian Language. 1-6 Credits. H FP
Directed individual readings on various topics concerning the Ukrainian language. Prerequisite: Two years of Ukrainian.

The College of Liberal Arts and Sciences is no longer admitting students to this degree.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

The following should be completed as early as possible:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>GERM 104</td>
<td>Elementary German I</td>
<td>5</td>
</tr>
<tr>
<td>GERM 108</td>
<td>Elementary German II</td>
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</tr>
<tr>
<td>GERM 201</td>
<td>Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 202</td>
<td>Intermediate German II</td>
<td>3</td>
</tr>
</tbody>
</table>
Requirements for the B.A. Major

Required Courses

After completion of GERM 202 Intermediate German II, students must complete 15 credits as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>GERM 301</td>
<td>High Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 302</td>
<td>High Intermediate German II</td>
<td>3</td>
</tr>
<tr>
<td>GERM 315</td>
<td>Magic, Murder, Monsters: German Literature and the Modern Era</td>
<td>3</td>
</tr>
<tr>
<td>GERM 401</td>
<td>Advanced German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 580</td>
<td>Senior Capstone Course: German-Speaking Europe Today</td>
<td>3</td>
</tr>
</tbody>
</table>

GERM 315 must be completed before students can take a course beyond GERM 402 (except GERM 462).

Admission to 400- and 500-level courses after GERM 402 (except GERM 462) without completion of GERM 315 is only with permission of the Undergraduate Advisor.

Elective Courses

A minimum of 15 credit hours at the 300, 400, and 500 levels must be completed beyond the required courses. 12 of these credit hours must be at the 400 or 500 level. In exceptional cases, undergraduates may take courses at the 600 level with permission of the Undergraduate Advisor and the instructor.

With permission of the Undergraduate Coordinator, 6 credit hours (300-500 level) may be counted toward the major by completing two approved courses offered in English by German Studies or offered by other departments with significant content related to German-speaking Europe.

German studies majors are strongly encouraged to study abroad and should discuss this opportunity with the Undergraduate Coordinator early in their undergraduate career.

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and GPA minimum standards:

Major Hours

Satisfied by 30 hours of major courses.

Major Hours in Residence

At least 15 hours of coursework at the 300, 400, and 500 levels, including the senior capstone course, GERM 580, must be completed in residence at KU.

Major Junior/Senior Hours

Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BA in German Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 104 (Goal 4.2 Global Awareness, 1st Semester Language (BA Second Language))</td>
<td>5</td>
<td>GERM 108 (2nd Semester Language (BA Second Language))</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 Goal 3 Social Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

|               | 14    | 17         |

Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 201 (3rd Semester Language (BA Second Language))</td>
<td>3</td>
<td>GERM 202 (4th Semester Language (BA Second Language))</td>
<td>3</td>
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<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3 Goal 3 Natural Science</td>
<td>3</td>
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<tr>
<td>Goal 4.1 US Diversity</td>
<td>3 BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
</tbody>
</table>

|               | 15    | 16         |

Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 301 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>GERM 302 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>GERM 315 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>GERM Elective 300 - 500+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>GERM Elective 300 - 500+</td>
<td>3 Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

|               | 15    | 15         |
To qualify for the B.A. in German Studies with departmental honors, the student must have a minimum grade point average of 3.5 in German Studies at graduation. Students must complete an honors research project during their final year at KU. Topics are selected in consultation with the faculty thesis director from German Studies. Applications for departmental honors are normally during the fall of senior year. Upon acceptance of an application, the student registers for the GERM 401 (Major Requirement) in the fall and the GERM Elective 300-500+ (Major Requirement) in the spring. The student presents the completed research project to the Departmental Honors Committee about one month before concluding his or her final semester at KU. A grade of B or higher in GERM 598 and GERM 599 is required for departmental honors. GERM 598 and GERM 599 may not be used to satisfy other course requirements.

**Study Abroad**

German Studies conducts two Summer Language Institutes in Germany for students in second-, third-, and fourth-year German. Students normally enroll for 6-9 credit hours and live with German families.

Juniors and seniors are encouraged to spend a semester or a full academic year at a university in Germany. Consult with the Office of Study Abroad and the Undergraduate Advisor early in your undergraduate career.

German Studies offers competitive study abroad scholarships. Graduating seniors may apply for Direct Exchange Program fellowships at universities in Germany. For information, consult the department (http://germanic.ku.edu/) or the Office of International Programs (http://www.studyabroad.ku.edu/).

**Bachelor of Arts in Slavic, German, and Eurasian Studies**

**Why study Slavic languages and literatures?**

If you have turned on a TV set or logged on Twitter lately, you probably have seen a news item on Russia or Ukraine, not to mention countries like Turkey and Iran. From Russian, Polish, Ukrainian, to Bosnian/Croatian/Montenegrin/Serbian (BCMS), to Czech, Turkish, Persian/Tajik/Dar/Farsi, you probably have seen a news item on Russia or Ukraine, not to mention countries like Turkey and Iran. From Russian, Polish, Ukrainian, to Bosnian/Croatian/Montenegrin/Serbian (BCMS), to Czech, Turkish, Persian/Tajik/Dar/Farsi, to Yiddish, our department offers only critical languages. In fact, the US government classifies these languages as critical (https://www.nsep.gov/content/critical-languages) for national security interests, and there are a number of federal scholarships that you can apply for to study them.

Think about how Russia has become a power player even in just US politics the last few years through hacking or other cybersecurity threats. With the end of the Cold War, the study of languages like Russian has considerably decreased in the US, and as this language has become more important to national security and the global economy, there are not nearly enough Americans who speak it. The US government and national and international employers need individuals with specialized language skills. Some of these languages can be more challenging, but we commit to helping students advance in them. You do not need to have special language abilities to study a language like Russian, you just have to come to class and do the same things you would in any other class, just with a more fun alphabet. And if you consider how many people study more commonly taught languages like Spanish and French, you could take in to these beautiful, off-the-beaten path places! You can go to Moscow, Russia and study at the Higher School of Economics for a
semester. Or you can spend your summers in Nur-Sultan, Kazakhstan, or Zadar, Croatia and Lviv, Ukraine.

And we don’t just offer language learning. Our department is multi-disciplinary and we want our students to come out with strong cultural awareness of the region, but also core critical thinking and writing skills. So you can study a language, but also learn about vampires in Slavic and American culture, or robots and scifi writings, explore the linguistic reflections of identity, while reading about socialism, Marxism, and other varieties of Russian political thought.

We welcome applicants from all backgrounds to consider a Slavic major or minor in combination with another field of study.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Requirements for the B.A. Major**

The student completes a minimum of 30 hours of study (29 hours for Russian emphasis) in one of 5 concentrations: German, Polish, Russian, South Slavic (Bosnian/Croatian/Montenegrin/Serbian), and Russian, East European, and Eurasian Studies. The department encourages students to fulfill core requirements from courses in the SLAV 140/SLAV 141, SLAV 144/SLAV 145, and SLAV 148/SLAV 149 series, GERM general education courses, or the REES 110/REES 111/REES 310 or REES 220/REES 221 series. Beyond the minimum required hours, students are strongly encouraged to take additional courses in the Slavic, German, and Eurasian Studies department and appropriate background courses in the history, philosophy, and political science of the respective regions.

**German Studies Concentration**

We offer students a diverse and challenging program in the language and culture of German-speaking Europe, including literature, the arts, history, business, and politics. Courses at the 100, 200, and 300 levels emphasize student involvement with the aim of developing students’ use of the German language, including the ability to comprehend, interpret, and produce spoken, written, and multimedia texts in different genres.

Cultural topics are integrated into instruction starting in the first semester. At the 400 and 500 levels, survey courses provide students with a broader perspective on German cultural traditions, while other advanced courses often have a thematic focus. Courses taken in departments such as the history of art, philosophy, political science, sociology, and theatre will enhance students’ study of the language and culture of German-speaking Europe.

**First- and Second-Year Preparation**

The following should be completed as early as possible:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 104</td>
<td>Elementary German I</td>
<td>5</td>
</tr>
<tr>
<td>GERM 108</td>
<td>Elementary German II</td>
<td>5</td>
</tr>
<tr>
<td>GERM 201</td>
<td>Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 202</td>
<td>Intermediate German II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required Courses**

After completion of GERM 202 Intermediate German II, students must complete 15 credits as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 301</td>
<td>High Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 302</td>
<td>High Intermediate German II</td>
<td>3</td>
</tr>
<tr>
<td>GERM 315</td>
<td>Magic, Murder, Monsters: German Literature and the Modern Era</td>
<td>3</td>
</tr>
<tr>
<td>GERM 401</td>
<td>Advanced German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 580</td>
<td>Senior Capstone Course: German-Speaking Europe Today</td>
<td>3</td>
</tr>
</tbody>
</table>

GERM 315 must be completed before students can take a course beyond GERM 402 (except GERM 462).

Admission to 400- and 500-level courses after GERM 402 (except GERM 462) without completion of GERM 315 is only with permission of the Undergraduate Advisor.

**Elective Courses**

A minimum of 15 credit hours of GERM courses at the 300, 400, and 500 levels must be completed beyond the required courses. 12 of these credit hours must be at the 400 or 500 level. In exceptional cases, undergraduates may take courses at the 600 level with permission of the Undergraduate Advisor and the instructor.

With permission of the Undergraduate Coordinator, 6 credit hours (300-500 level) may be counted toward the emphasis by completing two approved courses offered in English by Slavic, German, and Eurasian Studies or offered by other departments with significant content related to German-speaking Europe.

German studies students are strongly encouraged to study abroad and should discuss this opportunity with the Undergraduate Coordinator early in their undergraduate career.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and GPA minimum standards:
Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
At least 15 hours of coursework at the 300, 400, and 500 levels, including the senior capstone course, GERM 580, must be completed in residence at KU.

Major Junior/Senior Hours
Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Polish Studies Concentration
Majors choosing this option must complete courses as indicated in following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prerequisite Knowledge and Skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The following courses provide fundamental skills for the major, but do not contribute to the minimum required hours for the major.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary Polish I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PLSH 104</td>
<td>Elementary Polish I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Elementary Polish II. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PLSH 108</td>
<td>Elementary Polish II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Intermediate Polish I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PLSH 204</td>
<td>Intermediate Polish I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Polish Studies Emphasis Core Knowledge and Skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intermediate Polish II. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PLSH 208</td>
<td>Intermediate Polish II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced Polish I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PLSH 504</td>
<td>Advanced Polish I</td>
<td>3</td>
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<tr>
<td></td>
<td>Advanced Polish II. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>PLSH 508</td>
<td>Advanced Polish II</td>
<td>3</td>
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<tr>
<td></td>
<td>Readings in Polish Language and Literature. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>West Slavic Literature and Civilization (Polish and Czech). Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>SLAV 506</td>
<td>Masterworks of Polish and Czech Literature</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Required Electives Satisfied by 4 courses (12 hours) chosen from the following:</td>
<td>12</td>
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<tr>
<td>PLSH 675</td>
<td>Readings in Polish Language and Literature</td>
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<tr>
<td>SLAV 144/145</td>
<td>Survey of Russian Literature in Translation</td>
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<tr>
<td>SLAV 318</td>
<td>Jews and Slavs in Eastern Europe</td>
<td></td>
</tr>
<tr>
<td>SLAV 320</td>
<td>Graphic Novels as Memory</td>
<td></td>
</tr>
<tr>
<td>SLAV 340/341</td>
<td>The Language Landscape of Eastern Europe</td>
<td></td>
</tr>
<tr>
<td>SLAV 516</td>
<td>Love, Lust and Liberty: Polish and Czech Film Adaptations</td>
<td></td>
</tr>
<tr>
<td>ECON 560</td>
<td>Economic Systems</td>
<td></td>
</tr>
<tr>
<td>HIST 377</td>
<td>Everyday Communism in Eastern Europe</td>
<td></td>
</tr>
</tbody>
</table>

Senior Capstone Seminar. Satisfied by:
SLAV 495 Senior Capstone Seminar 3

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

Major Hours & Major GPA
While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
Satisfied by at least 15 hours of KU resident credit in major.

Major Junior/Senior (300+) Hours
Satisfied by at least 12 hours of KU resident credit in major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Russian Concentration
Majors choosing this option must complete courses as indicated in following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prerequisite Knowledge and Skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The following courses provide fundamental skills for the major, but do not contribute to the minimum required hours for the major.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary Russian I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>RUSS 104</td>
<td>Elementary Russian I</td>
<td>5</td>
</tr>
<tr>
<td>or RUSS 110</td>
<td>Intensive Elementary Russian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary Russian II. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>RUSS 108</td>
<td>Elementary Russian II</td>
<td>5</td>
</tr>
<tr>
<td>or RUSS 110</td>
<td>Intensive Elementary Russian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intermediate Russian I. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>RUSS 204</td>
<td>Intermediate Russian I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Russian Concentration Core Knowledge and Skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intermediate Russian II. Satisfied by:</td>
<td></td>
</tr>
<tr>
<td>RUSS 208</td>
<td>Intermediate Russian II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Advanced Russian Language. Satisfied by one of the following:</td>
<td>6</td>
</tr>
<tr>
<td>RUSS 504</td>
<td>Advanced Russian I</td>
<td></td>
</tr>
<tr>
<td>&amp; RUSS 508</td>
<td>and Advanced Russian II</td>
<td></td>
</tr>
<tr>
<td>RUSS 512</td>
<td>Russian for the Professions I</td>
<td></td>
</tr>
<tr>
<td>&amp; RUSS 516</td>
<td>and Russian for the Professions II</td>
<td></td>
</tr>
<tr>
<td>Russian Linguistics. Satisfied by one course (3 hours, 200+) chosen from:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SLAV 340</td>
<td>The Language Landscape of Eastern Europe</td>
<td></td>
</tr>
<tr>
<td>SLAV 341</td>
<td>The Language Landscape of Eastern Europe, Honors</td>
<td></td>
</tr>
<tr>
<td>SLAV 522</td>
<td>The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings</td>
<td></td>
</tr>
<tr>
<td>SLAV 540</td>
<td>The Language Landscape of Eastern Europe</td>
<td></td>
</tr>
</tbody>
</table>
Russian Literature. Satisfied by 1 course (3 hours, 400+) chosen from:

- SLAV 510 The Russian Literary Genius
- SLAV 530 Introduction to Russian Poetry
- SLAV 532 Dostoevsky
- SLAV 534 Tolstoy
- SLAV 564 The Woman Question in Nineteenth-Century Russian Literature
- SLAV 572 Russian and East European Science Fiction
- SLAV 664 Soviet Russian Literature: 1930-1990
- SLAV 667 Post-Soviet Literature
- SLAV 668 Nabokov
- SLAV 762 Russian Theatre and Drama from Stanislavski and Chekhov to the Present

Required Electives
Satisfied by 3 courses (9 hours) in Russian literature, linguistics, culture, or advanced language chosen in consultation with the major advisor. Note that only one (1) 100-level course (either SLAV 140/SLAV 141, SLAV 144/SLAV 145, or SLAV 148/SLAV 149) may count as a required elective for the Russian emphasis major.

Language
- RUSS 512 Russian for the Professions I
- RUSS 516 Russian for the Professions II
- RUSS 522 Problems in Translating Russian into English I
- RUSS 700 Classics of Russian Culture
- RUSS 704 Contemporary Russian Culture
- RUSS 708 Russian Phonetics and Grammar
- RUSS 712 Introduction to Russian Literature
- RUSS 716 Stylistics

Linguistics
- SLAV 340 The Language Landscape of Eastern Europe
- SLAV 341 The Language Landscape of Eastern Europe, Honors
- SLAV 522 The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings
- SLAV 526 The Pragmatics of Slavic Languages
- SLAV 540 The Language Landscape of Eastern Europe

Culture
- SLAV 330 Russian Business Culture
- SLAV 370 War and Violence Russian Literature and Film
- SLAV 322 Soviet and Post-Soviet Russian Cinema
- SLAV 500 Russia Today
- SLAV 503 Post-Soviet Communication
- SLAV 600 Biography of a City: _____

Literature
- SLAV 510 The Russian Literary Genius
- SLAV 530 Introduction to Russian Poetry
- SLAV 532 Dostoevsky
- SLAV 534 Tolstoy
- SLAV 564 The Woman Question in Nineteenth-Century Russian Literature
- SLAV 572 Russian and East European Science Fiction
- SLAV 664 Soviet Russian Literature: 1930-1990
- SLAV 667 Post-Soviet Literature
- SLAV 668 Nabokov
- SLAV 762 Russian Theatre and Drama from Stanislavski and Chekhov to the Present

Senior Capstone Seminar. Satisfied by:
- SLAV 495 Senior Capstone Seminar

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

Major Hours & Major GPA
While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 29 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

South Slavic Studies Concentration
Majors choosing this option must complete courses as indicated in following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAV 668</td>
<td>Nabokov</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 762</td>
<td>Russian Theatre and Drama from Stanislavski and Chekhov to the Present</td>
<td>3</td>
</tr>
</tbody>
</table>

Prerequisite Knowledge and Skills
The following courses provide fundamental skills for the major, but do not contribute to the minimum required hours for the major.

Elementary Bosnian/Croatian/Serbian I. Satisfied by:
- BCRS 104 Elementary Bosnian/Croatian/Serbian I
- BCRS 108 Elementary Bosnian/Croatian/Serbian II
- BCRS 504 Intermediate Bosnian/Croatian/Serbian I
- BCRS 508 Intermediate Bosnian/Croatian/Serbian II

Intermediate Bosnian/Croatian/Serbian II. Satisfied by:
- BCRS 204 Intermediate Bosnian/Croatian/Serbian I
- BCRS 208 Intermediate Bosnian/Croatian/Serbian II

Advanced Bosnian/Croatian/Serbian I. Satisfied by:
- BCRS 208 Intermediate Bosnian/Croatian/Serbian II
- BCRS 508 Advanced Bosnian/Croatian/Serbian II

South Slavic Literature and Civilization. Satisfied by:
- SLAV 508 South Slavic Literature and Civilization

Required Electives
Satisfied by 5 courses (15 hours) chosen from the following:
- BCRS 380 Intensive Croatian
- BCRS 675 Readings in Bosnian/Croatian/Serbian
- ECON 560 Economic Systems
Mayors in Global & International Studies, History, or Political Science.

Slavic, German, and Eurasian Studies and is easily paired with a double concentration offers a flexible course of study within the Department of and culminating in an intensive research capstone experience, the students to choose from a range of offerings based on their interests and culture with courses on the region’s history and politics. Allowing and Eurasian Studies. The concentration pairs the study of language disciplinary boundaries to gain expertise in Russian, East European, and Eurasian Studies Concentration.

The REES concentration, offered in partnership with KU’s nationally-recognized Center for Russian, Eastern Europe, and Eurasia, training the next generation of professionals, policymakers, and citizens to understand and engage this geopolitically vital and culturally diverse world region.

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

**Major Hours & Major GPA**

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 30 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Russian, East European, and Eurasian Studies Concentration**

The Russian, East European, and Eurasian Studies (REES) concentration offers students the opportunity to undertake the interdisciplinary study of Russia, Eastern Europe, and Eurasia, training the next generation of professionals, policymakers, and citizens to understand and engage this geopolitically vital and culturally diverse world region.

The REES concentration, offered in partnership with KU’s nationally-recognized Center for Russian, Eastern Europe, and Eurasian Studies, allows students to take a wide array of courses across traditional disciplinary boundaries to gain expertise in Russian, East European, and Eurasian Studies. The concentration pairs the study of language and culture with courses on the region’s history and politics. Allowing students to choose from a range of offerings based on their interests and culminating in an intensive research capstone experience, the concentration offers a flexible course of study within the Department of Slavic, German, and Eurasian Studies and is easily paired with a double major in Global & International Studies, History, or Political Science.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 377</td>
<td>Everyday Communism in Eastern Europe</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 144/145</td>
<td>Survey of Russian Literature in Translation</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 316</td>
<td>The Peoples and Cultures of Southeastern Europe Through Film</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 340/341</td>
<td>The Language Landscape of Eastern Europe</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 558</td>
<td>Readings in Slovene</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 626</td>
<td>The Cultural Impact of Ottoman Empire on the South Slavs</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 630</td>
<td>Slavic Folklore</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 679</td>
<td>Topics in: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

Senior Capstone Seminar. Satisfied by:

| SLAV 495 | Senior Capstone Seminar | 3 |

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

**Prerequisite Language Skills**

Students selecting this concentration must complete 4th semester proficiency in a Russian, East European, or Eurasian Language. This entails completion of one of the following courses, or its equivalent:

**Bosnian-Croatian-Serbian:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCRS 208</td>
<td>Intermediate Bosnian/Croatian/Serbian II</td>
<td>3</td>
</tr>
</tbody>
</table>
| Czech:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CZCH 208</td>
<td>Intermediate Czech II</td>
<td>3</td>
</tr>
</tbody>
</table>
| Polish:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSH 208</td>
<td>Intermediate Polish II</td>
<td>3</td>
</tr>
</tbody>
</table>
| Persian/Dari/Tajik:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERS 220</td>
<td>Intermediate Iranian/Dari/Tajik Persian II</td>
<td>3</td>
</tr>
</tbody>
</table>
| Russian:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSS 208</td>
<td>Intermediate Russian II</td>
<td>5</td>
</tr>
</tbody>
</table>
| Turkish:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURK 208</td>
<td>Intermediate Turkish II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Russian, East European, and Eurasian Studies Concentration**

### Core Knowledge and Skills

Introductory course. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REES 110</td>
<td>Understanding Russia and Eastern Europe</td>
<td>3</td>
</tr>
<tr>
<td>or REES 111</td>
<td>Understanding Russia and Eastern Europe, Honors</td>
<td>3</td>
</tr>
<tr>
<td>or REES 310</td>
<td>Understanding Russia and Eastern Europe, Honors</td>
<td>3</td>
</tr>
<tr>
<td>or REES 311</td>
<td>Understanding Russia and Eastern Europe, Honors</td>
<td>3</td>
</tr>
<tr>
<td>REES 220</td>
<td>Societies and Cultures of Eurasia</td>
<td>5</td>
</tr>
<tr>
<td>or REES 221</td>
<td>Societies and Cultures of Eurasia, Honors</td>
<td>5</td>
</tr>
<tr>
<td>SLAV 140</td>
<td>Understanding Russia</td>
<td>3</td>
</tr>
<tr>
<td>or SLAV 141</td>
<td>Understanding Russia, Honors</td>
<td>3</td>
</tr>
<tr>
<td>HIST 117</td>
<td>Russia, An Introduction</td>
<td>3</td>
</tr>
</tbody>
</table>

### REES Area Studies Electives

21 hours of interdisciplinary area studies courses focusing on Russia, Eastern Europe, and Eurasia. Most courses offered by the Department of Slavic, German, and Eurasian Studies count as electives. Other potential courses are listed below. Please note that is only a partial list. CREEES posts a list of eligible courses on its website prior to enrollment each semester, and other courses may be approved in consultation with CREEES.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 600</td>
<td>Special Topics in Architecture: _____ (Socialist Cities)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 505</td>
<td>History of Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 399</td>
<td>Topics in Regional Studies: _____ (Geography of the Former Soviet Union)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 781</td>
<td>Environmental Geopolitics</td>
<td>3</td>
</tr>
<tr>
<td>GIST 335</td>
<td>Iran Through Literature and Film</td>
<td>3</td>
</tr>
<tr>
<td>HIST 139</td>
<td>The Global Cold War</td>
<td>3</td>
</tr>
<tr>
<td>HIST 333</td>
<td>Eurometro: Visions of the European Metropolis, 1849-1939</td>
<td>3</td>
</tr>
<tr>
<td>HIST 334</td>
<td>The Great War: The History of World War I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 340</td>
<td>The History of the Second World War</td>
<td>3</td>
</tr>
<tr>
<td>HIST/JWSH 343</td>
<td>The Holocaust in History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 377</td>
<td>Everyday Communism in Eastern Europe</td>
<td>3</td>
</tr>
<tr>
<td>HIST 378</td>
<td>Beyond the Iron Curtain: Soviet Perspectives on the Cold War</td>
<td>3</td>
</tr>
</tbody>
</table>
While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 30 hours of major courses.

**Major Junior/Senior (300+) Hours**
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Sample 4-year plans for the BA degree in Slavic, German, and Eurasian Studies with concentrations in the following can be found here: German Studies, (p. 1784) Polish (p. 1784), Russian (p. 1785), Russian, East European, and Eurasian Studies (p. 1786), South Slavic Studies (p. 1787) or by using the left-side navigation.

**Departmental Honors**
Undergraduates with a grade-point average of 3.5 in Slavic courses are eligible for departmental honors. Before enrolling, students must consult an undergraduate advisor to formulate an appropriate topic. Students complete SLAV 499 Honors Thesis (3 hours above the major requirements) during 1 semester of the senior year. The honors thesis is evaluated by a committee of 3 faculty members. The candidate makes an oral defense before this committee.

**Study Abroad**
The department offers a semester study abroad program at the Higher School of Economics in Moscow, Russia, and in conjunction with the Center for Russian, East European, and Eurasian Studies, conducts summer institutes at universities in:
- Nur-Sultan, Kazakhstan (for Russian)
- Lviv, Ukraine (for Ukrainian)
- Zadar, Croatia (for Croatian)
- Almaty, Kazakhstan (internship program)

Consult the Slavic department office or the Office of Study Abroad. Credit for non-KU programs is not automatic and is evaluated in consultation with the Slavic department undergraduate director.

Undergraduate and graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

**Slavic Language Programs in Russia and Eastern Europe**
KU students may take intermediate or advanced Bosnian/Croatian/Serbian at a 6-week summer institute in Croatia or attend a summer language program in Poland.

Graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.
### BA in Slavic, German, and Eurasian Studies with concentration in German Studies

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GERM 104</td>
<td>5</td>
<td>Goal 3 Social Science</td>
<td>3</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>1</td>
<td>GERM 108</td>
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</tr>
<tr>
<td><strong>Total Hours</strong></td>
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<table>
<thead>
<tr>
<th>Sophomore</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 201</td>
<td>3</td>
<td>GERM 202</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>13</strong></td>
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<table>
<thead>
<tr>
<th>Junior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 301</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>GERM 315</td>
<td>3</td>
<td>GERM 302</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>GERM Elective 300-500+</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>GERM Elective 300-500+</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 401</td>
<td>3</td>
<td>GERM 580 (Goal 6 Integration and Creativity, Major Requirement)</td>
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<td></td>
</tr>
<tr>
<td>GERM 300-500+</td>
<td>3</td>
<td>GERM 300-500+ Elective</td>
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</tr>
<tr>
<td>GERM 300-500+</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### BA in Slavic, German, and Eurasian Studies with concentration in Polish Studies

Below is a sample 4-year plan for students pursuing the BA in Slavic, German, and Eurasian Studies with a concentration in Polish Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td></td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PLSH 104 (FALL ONLY)</td>
<td>5</td>
<td>PLSH 108 (SPRING ONLY)</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

### BA in Slavic, German, and Eurasian Studies with concentration in Russian

Below is a sample 4-year plan for students pursuing the BA in Slavic, German, and Eurasian Studies with a concentration in Russian Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy (BAQR)</td>
<td>3</td>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
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</tr>
<tr>
<td>RUSS 104</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
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<tr>
<td>Goal 3 Social Science</td>
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<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</table>

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Major Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Major Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>PLSH 675 (SPRING ONLY)</td>
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<tr>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>SLAV 495 (Major Requirement, Goal 6 Integration and Creativity)</td>
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</tr>
</tbody>
</table>

#### Total Hours 120

1. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
2. The Polish emphasis requires 4 courses (12 hours) of electives. Visit the degree requirements (p. 1779) tab for a list of approved electives.
3. Typically Goal 6 is fulfilled with a major course. If a major course is not approved for Goal 6, plan to take a course outside of the major. A free elective may need to be used to fulfill pre-requisites.
4. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
<table>
<thead>
<tr>
<th>Junior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Russian Linguistics Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RUSS 504</td>
<td>3</td>
<td>Russian Literature Elective 400+ (Major Requirement)</td>
<td>3</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>RUSS 508</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Required Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>SLAV 495 (Capstone, and Goal 6 Integration and Creativity)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Major Required Elective 300+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Major Required Elective 300+ (Major Requirement)</td>
<td>3</td>
<td></td>
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</table>

Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. The Russian emphasis requires completion of one of the following combinations: RUSS 504 & RUSS 508, or RUSS 512 & RUSS 516.
4. One course is required from the list of Linguistics electives and one course from the list of Literature electives. See the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/slavic-languages-literature/ba/#requirementstext) tab for a list of approved electives.
5. The Russian emphasis requires 3 courses (9 hours) of electives. Visit the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/slavic-languages-literature/ba/#requirementstext) tab for a list of approved electives.

6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level. The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

BA in Slavic, German, and Eurasian Studies with concentration in Russian, East European, and Eurasian Studies

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tbody>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
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<tr>
<td>1st Semester Language (BAQR)</td>
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<td>Goal 2.2 Communication</td>
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<tr>
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<td>Goal 4.1 US Diversity</td>
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<td>BA Laboratory/Field Experience (LFE)</td>
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<tr>
<td>Goal 3H Arts and Humanities</td>
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### Senior

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<tr>
<th>Fall</th>
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<td>(1 of 2, Goal 6</td>
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<td>Integration and Creativity)</td>
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<td>3</td>
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<tr>
<td>Second Area of Study</td>
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<td></td>
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<tr>
<td>Elective/Degree/Junior-Senior Hours</td>
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<td></td>
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<td>Second Area of Study</td>
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<tr>
<td>Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
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<tr>
<td>Second Area of Study</td>
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<td>Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study</td>
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<tr>
<td>Elective/Degree/Junior-Senior Hours</td>
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<td></td>
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<tr>
<td>Second Area of Study</td>
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<td></td>
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</tr>
<tr>
<td>Elective/Degree/Junior-Senior Hours</td>
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</table>

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (https://catalog.ku.edu/search/?P=ENGL %20102) (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. The BA degree requires 4th-semester language proficiency. The REES major requires 4th-semester language proficiency in a Russian, Eastern European, or Eurasian language.

4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

5. 21 hours of interdisciplinary area studies courses focusing on Russia, Eastern Europe, and Eurasia. Most courses offered by the Department of Slavic, German, and Eurasian Studies count as electives. CREES posts a list of eligible courses on its website prior to enrollment each semester, and other courses may be approved in consultation with CREES.

6. Capstone Options:
   - GIST Option: GIST 610 and GIST 698
   - HIST Option: HIST 301 and HIST 696
   - Literature, Linguistics and Culture Option: SLAV 495 and SLAV 510 or SLAV 600 or SLAV 710
   - Politics Option: POLS 306 and POLS 493 or POLS 498

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours, of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BA in Slavic, German, and Eurasian Studies with concentration in South Slavic Studies

Below is a sample 4-year plan for students pursuing the BA in Slavic, German, and Eurasian Studies with a concentration in South Slavic Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.1 First Year Seminar or Critical Thinking</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
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<td>BCRS 108 (SPRING ONLY)</td>
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17

#### Sophomore

<table>
<thead>
<tr>
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<th>Hours</th>
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<tbody>
<tr>
<td>Goal 3 Arts and Humanities</td>
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<td>BCRS 208 (SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
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<td>Goal 3 Natural Science</td>
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<tr>
<td>BCRS 204 (FALL ONLY, Goal 4.2 Global Awareness)</td>
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15
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
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<td>3 Second Area of Study/ Elective/Degree/ Junior-Senior Hours</td>
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<tr>
<td>Senior</td>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
<td>Hours</td>
</tr>
<tr>
<td>Major Required Elective 300+ (Major Requirement)</td>
<td>3 Second Area of Study/ Elective/Degree/ Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/ Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/ Junior-Senior Hours</td>
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<td>3 Major Required Elective 300+ (Major Requirement)</td>
<td>3 Major Required Elective 300+ (Major Requirement)</td>
<td>3 Major Required Elective 300+ (Major Requirement)</td>
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</tr>
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<td>Second Area of Study/ Elective/Degree/ Junior-Senior Hours</td>
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<td>3 Major Required Elective 300+ (Major Requirement)</td>
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<tr>
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<tr>
<td>Second Area of Study/ Elective/Degree/ Junior-Senior Hours</td>
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<td>Total Hours</td>
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1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
3. The South Slavic Studies emphasis requires 5 courses (15 hours) of electives. For a list of approved electives visit the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/slavic-languages-literature/ba/#requirements#text) tab.
4. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

### Major in Russian, East European, and Eurasian Studies

**Why study Russian, East European, and Eurasian Studies?**

The University of Kansas Russian, East European, and Eurasian Studies (REES) program covers a broad geographic region, home to rich and diverse cultures that have had an enormous impact on today's world. Interdisciplinary study of Russia, Eastern Europe, and Eurasia creates informed citizens with in-depth understanding of this geopolitically and culturally critical world region, which plays a central role in today's political, economic, cultural, and environmental issues.

The KU REES program is collaborative and interdisciplinary in nature, and offers a unique opportunity to study contemporary politics and medieval history, environmental problems and great works of literature and art, as well as multiple other related subjects. It offers opportunities to study abroad in a variety of culturally rich, exciting places. Crucially, it prepares students for a wide range of careers in research, business, government, and the nonprofit sector, with the opportunity to make a profound impact on both national and international levels.

The College of Liberal Arts and Sciences is no longer admitting students to this degree.

### Undergraduate Admission

#### Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

#### Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.
Requirements for the Major
Bachelor of Arts in Russian, East European, and Eurasian Studies Course Requirements

Students take intensive REES language and course work to enhance their traditional disciplinary study. The most common REES major combinations are with Global & International Studies, Slavic Languages & Literatures, Political Science, and History.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BCRS 208</td>
<td>Intermediate Bosnian/Croatian/Serbian II</td>
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<td>CZCH 208</td>
<td>Intermediate Czech II</td>
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</tr>
<tr>
<td>PLSH 208</td>
<td>Intermediate Polish II</td>
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<tr>
<td>PERS 210</td>
<td>Intermediate Iranian/Dari/Tajik Persian I</td>
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<td>RUSS 208</td>
<td>Intermediate Russian II</td>
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<td>TURK 208</td>
<td>Intermediate Turkish II</td>
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<td>UYGR 202</td>
<td>Intermediate Uyghur II</td>
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</tr>
<tr>
<td>UKRA 208</td>
<td>Intermediate Ukrainian II</td>
<td>3</td>
</tr>
</tbody>
</table>

Prerequisite Language Skills

Students selecting this major must complete 4th semester proficiency in a Russian, East European, or Eurasian language. This entails completion of one of the following courses:

- Bosnian-Croatian-Serbian:
  - BCRS 208 Intermediate Bosnian/Croatian/Serbian II
- Czech:
  - CZCH 208 Intermediate Czech II
- Polish:
  - PLSH 208 Intermediate Polish II
- Iranian/Dari/Tajik Persian:
  - PERS 210 Intermediate Iranian/Dari/Tajik Persian I
- Russian:
  - RUSS 208 Intermediate Russian II
- Turkish:
  - TURK 208 Intermediate Turkish II
- Uyghur:
  - UYGR 202 Intermediate Uyghur II
- Ukranian:
  - UKRA 208 Intermediate Ukrainian II

Introductory Course

Satisfied by one of the following:

- REES 110 Understanding Russia and Eastern Europe
- REES 111 Understanding Russia and Eastern Europe, Honors
- REES 310 Understanding Russia and Eastern Europe
- REES 311 Understanding Russia and Eastern Europe, Honors
- REES 220 Societies and Cultures of Eurasia
- REES 221 Societies and Cultures of Eurasia, Honors
- SLAV 140 Understanding Russia
- SLAV 141 Understanding Russia, Honors
- HIST 117 Russia, An Introduction

REES Area Studies Electives

21 hours of interdisciplinary area studies courses focusing on Russia, Eastern Europe, and Eurasia, taken in consultation with the advisor. Out of the 21 distribution hours, 12 should be upper-division area studies courses (300 level and higher).

Research Methods and Capstone Experience

Satisfied by one of the following tracks, typically completed in the senior year, culminating in a final capstone paper. Students are encouraged to select a track based on their interests and the availability of courses. Students taking a methods/capstone sequence in another department may petition to substitute that sequence.

Global and International Studies Track:

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<th>Code</th>
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<td>&amp; GIST 698</td>
<td>and Capstone Seminar</td>
<td></td>
</tr>
<tr>
<td>HIST 301</td>
<td>The Historian's Craft</td>
<td>6</td>
</tr>
<tr>
<td>&amp; HIST 696</td>
<td>and Seminar in: _____</td>
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</tr>
<tr>
<td>Literature, Linguistics, and Culture Track:</td>
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<tr>
<td>POLS 306</td>
<td>Political Science Methods of Inquiry</td>
<td>4-6</td>
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<tr>
<td>&amp; POLS 493</td>
<td>and Directed Readings</td>
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</tr>
</tbody>
</table>

Majors are strongly encouraged to study abroad. Please see your advisor about this opportunity.

Russian, East European, and Eurasian Major Hours & GPA

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 30 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

Major Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

Major Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the major in Russian, East European, and Eurasian Studies (REES). The REES major requires 4th-semester language proficiency in a REES language, plus one additional semester of an advanced language course (i.e. 5th semester language course).

To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>ENGL 101 (Goal 2.1, (2 crs req), BA Writing I)^1</td>
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<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
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<td>6</td>
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<tr>
<td>MATH 101</td>
<td>3</td>
<td>Quantitative Reasoning (Goal 1.2, BA Quantitative Reasoning)^3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)^2</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)^2</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>REES 110 or 111 (Major Requirement), or</td>
<td>3</td>
<td>3 Goal 2.2 Communication</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>REES 220 or 221</td>
<td>3</td>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>LA&amp;S 292 (Research Methods (recommended ))</td>
<td>1</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Lab Science (BA Lab Requirement)</td>
<td>1-2</td>
</tr>
<tr>
<td>REES Distribution Elective (Major Requirement)</td>
<td>3</td>
<td>REES Distribution Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>13-14</td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>REES Advanced Level Language (5th semester, Major Requirement)</td>
<td>3-5</td>
<td>Slavic Languages and Literatures 500+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>REES Distribution Elective (Major Requirement)</td>
<td>3</td>
<td>REES Distribution Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15-17</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REES 492 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
<td>REES 496 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>REES Distribution Elective (Major Requirement)</td>
<td>3</td>
<td>REES Distribution Elective (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>REES Distribution Elective (Major Requirement)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
<tr>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
<td>Elective or possible minor course 300+ (Total Hours)</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Hours 120-123</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. The BA degree requires 4th-semester language proficiency. The REES major requires 4th-semester language proficiency especially in a Russian, Eastern European, or Eurasian language.

3. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

4. The REES major requires 18.0 hours of elective course work from each of the following geographic distribution categories: Russia & Eastern Europe, South & Central Europe, and Europe & Central Eurasia; and each of the following disciplinary distribution areas: Arts, Culture, & Religion, History, and Social Sciences. There is not a specific order these must be taken, but it is recommended to take Jr/Sr level courses when possible.

5. A list of courses that fulfills this requirement can be found under the degree requirements tab.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours, of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Honors

#### Departmental Honors

Honors in Russian, East European, and Eurasian Studies is open to REES majors who have earned, both at the time of entry into the program and at graduation, a grade-point average of 3.5 or higher in courses that satisfy requirements for the REES major.

Students must complete REES 492 Research Methods in Russian, East European, and Eurasian Studies and REES 499 (Honors) Capstone Seminar in Russian, East European, and Eurasian Studies with a grade of B or better. The research paper produced in REES 499 must demonstrate the student’s proficiency in at least one of the REES languages through the use of foreign language sources. The paper is evaluated by an honors committee of at least three REES faculty members who have read and commented on the research paper and heard its oral defense. The committee is constituted by the student in consultation with either the director or associate director of CREES.

### Study Abroad

Though not required, study abroad is strongly encouraged. Courses taken abroad may count toward the major if approved by the REES advisor.

Consult the Center for Russian, East European, and Eurasian Studies (http://www.crees.ku.edu/) or the Office of Study Abroad (http://www.studyabroad.ku.edu/) for information about programs.

### Minor in German Studies

#### Why study German Studies?

Knowledge of the language and culture of German-speaking Europe provides students with linguistic and transcultural competence that will enable them to participate productively in a rapidly changing world. German is an official language in six central European countries and the most widely spoken language in the European Union. The United States maintains important economic, political, security, and cultural ties with the German-speaking countries. About 50 million people in the United States claim German ancestry.
Our students complete a diverse and challenging program that encompasses not only the German language but also courses that explore literature, the arts, history, business, and politics. Our program is characterized by interdisciplinary flexibility, a variety of co-curricular activities, and personalized academic advising and mentoring. German Studies majors and minors acquire research skills they need to study issues relevant to our field. Many German Studies majors and minors study abroad for a summer, semester, or year, often supported by departmental scholarships, and some complete internships in Germany. All German Studies students have opportunities to make use of the rich resources available at KU, including the Spencer Museum of Art, KU Libraries, Max Kade Center for German-American Studies, Office of Study Abroad, Center for Undergraduate Research, and Career Center. Our students tend to have a second major or a minor in fields such as Global & International Studies, History, Business, Environmental Studies, Music, Microbiology, and Linguistics.

Our graduates have pursued their passion for language and culture in many ways: working for a non-profit organization affiliated with the U.S. Department of State; translating for a medical software company; serving on the human resources team of a global German sporting goods company; teaching high school German; working as copy editor of a newspaper; and pursuing graduate work in Germanic Languages & Literatures, social welfare, law, and speech pathology.

Requirements for the Minor

The minor requires 18 hours in courses numbered 300 and above. The prerequisite is completion of the proficiency sequence in German (GERM 202 or equivalent).

German Studies Minor Course Requirements

Required Courses

After completion of GERM 202: Intermediate German II, students must complete the following two courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERM 301</td>
<td>High Intermediate German I</td>
<td>3</td>
</tr>
<tr>
<td>GERM 302</td>
<td>High Intermediate German II</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses

12 additional hours at the 300, 400, and 500 levels. GERM 315 is strongly encouraged because it is a prerequisite for courses above GERM 402 (except GERM 462).

With permission of the Undergraduate Coordinator, one approved 3-credit course offered in English by German Studies or by another department with significant content related to German-speaking Europe (300-500 level) may be counted toward the German minor. A 600-level course may be counted only with approval of the Undergraduate Coordinator.

Minor Hours & GPA

While completing required courses, minors must also meet each of the following hour and grade point average minimum standards:

| Minor Hours                              | 18 hours of minor courses. |
| Minor Hours in Residence                 | Satisfied by a minimum of 9 hours of junior/senior (300+) hours of KU resident credit in the minor. |

Minor Junior/Senior Hours

Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

Minor Graduation GPA

Satisfied by a minimum of a 2.0 GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including Fs and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Minor in Russian, East European, and Eurasian Studies

Why study Russian, East European, and Eurasian Studies?

The University of Kansas Russian, East European, and Eurasian Studies (REES) program covers a broad geographical region, which is home to rich and diverse cultures that have had an enormous impact on today's political, economic, cultural, and environmental issues. The interdisciplinary study of Russia, Eastern Europe, and Eurasia creates culturally informed citizens who can act on national and international issues.

The REES minor is highly flexible. It complements traditional disciplinary study in another field with REES coursework and general area knowledge.

Requirements for the Minor

Russian, East European, and Eurasian Studies Minor Course Requirements

Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introductory Course</td>
<td>3</td>
</tr>
<tr>
<td>Satisfied by one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REES 110</td>
<td>Understanding Russia and Eastern Europe</td>
<td></td>
</tr>
<tr>
<td>or REES 111</td>
<td>Understanding Russia and Eastern Europe, Honors</td>
<td></td>
</tr>
<tr>
<td>or REES 310</td>
<td>Understanding Russia and Eastern Europe</td>
<td></td>
</tr>
<tr>
<td>or REES 311</td>
<td>Understanding Russia and Eastern Europe, Honors</td>
<td></td>
</tr>
<tr>
<td>REES 220</td>
<td>Societies and Cultures of Eurasia</td>
<td></td>
</tr>
<tr>
<td>or REES 221</td>
<td>Societies and Cultures of Eurasia, Honors</td>
<td></td>
</tr>
<tr>
<td>SLAV 140</td>
<td>Understanding Russia</td>
<td></td>
</tr>
<tr>
<td>or SLAV 141</td>
<td>Understanding Russia, Honors</td>
<td></td>
</tr>
<tr>
<td>HIST 117</td>
<td>Russia, An Introduction</td>
<td></td>
</tr>
<tr>
<td>REES Area Studies Electives</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>15 hours of interdisciplinary area studies courses focusing on Russia, Eastern Europe, and Eurasia. Most courses offered by the Department of Slavic, German, and Eurasian Studies count as electives. Other potential courses are listed below. Please note that is only a partial list. CRES posts a list of eligible courses on its website prior to enrollment each semester, and other courses may be approved in consultation with CRES.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARCH 600</td>
<td>Special Topics in Architecture: _____ (Socialist Cities)</td>
<td></td>
</tr>
<tr>
<td>ECON 505</td>
<td>History of Economic Analysis</td>
<td></td>
</tr>
<tr>
<td>GEOG 399</td>
<td>Topics in Regional Studies: _____ (Geography of the Former Soviet Union)</td>
<td></td>
</tr>
</tbody>
</table>
Minor in Slavic Languages and Literatures

Why study Slavic languages and literatures?

The study of Russia, Eastern Europe, and Eurasia studying their languages and cultures gives you a different perspective on the world we live in and allows you to pursue in demand professional opportunities in business and national security.

The Department of Slavic, German, and Eurasian Studies offers comprehensive undergraduate programs in Russian, Polish, and Bosnian/Croatian/Serbian and their literatures, and cultures. For each language, we offer a core curriculum of 3+ years of language study emphasizing all four skills (speaking, listening, reading and writing), supplemented by courses in culture, literature and linguistics. We also offer intensive Russian in the summer. For study abroad, we offer summer and semester options at the Higher School of Economics in Moscow, Russia, as well as a summer study abroad programs in Lviv, Ukraine.

The minor can add a unique global aspect to another career choice and field of study. It prepares students for a variety of careers in teaching or in graduate studies, as well as in fields such as translation, international business, art, art history, and travel.

Requirements for the Minor

6 minor tracks are offered.

Polish Studies Track

Students choosing this minor track must complete courses as indicated in following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSH 104</td>
<td>Elementary Polish I</td>
<td>5</td>
</tr>
<tr>
<td>PLSH 108</td>
<td>Elementary Polish II</td>
<td>5</td>
</tr>
<tr>
<td>PLSH 204</td>
<td>Intermediate Polish I</td>
<td>3</td>
</tr>
<tr>
<td>PLSH 208</td>
<td>Intermediate Polish II</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 506</td>
<td>Masterworks of Polish and Czech Literature</td>
<td>3</td>
</tr>
<tr>
<td>PLSH 675</td>
<td>Readings in Polish Language</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 320</td>
<td>Graphic Novels as Memory</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 340/341</td>
<td>The Language Landscape of Eastern Europe</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior (300+) Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Russian Track
Students choosing this minor track must complete courses as indicated in following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAV 516</td>
<td>Love, Lust and Liberty: Polish and Czech Film Adaptations</td>
<td></td>
</tr>
<tr>
<td>ECON 560</td>
<td>Economic Systems</td>
<td></td>
</tr>
<tr>
<td>HIST 377</td>
<td>Everyday Communism in Eastern Europe</td>
<td></td>
</tr>
</tbody>
</table>

| SLAV 534 | Tolstoy |     |
| SLAV 564 | The Woman Question in Nineteenth-Century Russian Literature |     |
| SLAV 572 | Russian and East European Science Fiction |     |
| SLAV 664 | Soviet Russian Literature: 1930-1990 |     |
| SLAV 667 | Post-Soviet Literature |     |
| SLAV 668 | Nabokov |     |
| SLAV 762 | Russian Theatre and Drama from Stanislavski and Chekhov to the Present |     |

Required Electives. Satisfied by 3 courses (9 hours) in Russian literature, linguistics, culture, or advanced language chosen in consultation with the major advisor.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSS 504</td>
<td>Advanced Russian I</td>
</tr>
<tr>
<td>RUSS 508</td>
<td>Advanced Russian II</td>
</tr>
<tr>
<td>RUSS 512</td>
<td>Russian for the Professions I</td>
</tr>
<tr>
<td>RUSS 516</td>
<td>Russian for the Professions II</td>
</tr>
<tr>
<td>RUSS 522</td>
<td>Problems in Translating Russian into English I</td>
</tr>
<tr>
<td>RUSS 700</td>
<td>Classics of Russian Culture</td>
</tr>
<tr>
<td>RUSS 704</td>
<td>Contemporary Russian Culture</td>
</tr>
<tr>
<td>RUSS 708</td>
<td>Russian Phonetics and Grammar</td>
</tr>
<tr>
<td>RUSS 712</td>
<td>Introduction to Russian Literature</td>
</tr>
<tr>
<td>RUSS 716</td>
<td>Stylistics</td>
</tr>
</tbody>
</table>

Linguistics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAV 340 &amp; SLAV 341</td>
<td>The Language Landscape of Eastern Europe and The Language Landscape of Eastern Europe, Honors</td>
</tr>
<tr>
<td>SLAV 522</td>
<td>The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings</td>
</tr>
<tr>
<td>SLAV 526</td>
<td>The Pragmatics of Slavic Languages</td>
</tr>
<tr>
<td>SLAV 540</td>
<td>The Language Landscape of Eastern Europe</td>
</tr>
<tr>
<td>SLAV 550</td>
<td>Russia Today</td>
</tr>
<tr>
<td>SLAV 564</td>
<td>Post-Soviet Literature</td>
</tr>
<tr>
<td>SLAV 600</td>
<td>Biography of a City: _____</td>
</tr>
<tr>
<td>SLAV 710</td>
<td>The Russian Literary Genius</td>
</tr>
<tr>
<td>SLAV 730</td>
<td>Introduction to Russian Poetry</td>
</tr>
<tr>
<td>SLAV 732</td>
<td>Dostoevsky</td>
</tr>
<tr>
<td>SLAV 734</td>
<td>Tolstoy</td>
</tr>
<tr>
<td>SLAV 764</td>
<td>The Woman Question in Nineteenth-Century Russian Literature</td>
</tr>
<tr>
<td>SLAV 767</td>
<td>Post-Soviet Literature</td>
</tr>
<tr>
<td>SLAV 768</td>
<td>Nabokov</td>
</tr>
<tr>
<td>SLAV 772</td>
<td>Russian Theatre and Drama from Stanislavski and Chekhov to the Present</td>
</tr>
</tbody>
</table>
Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 20 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Russian Business and Professional Culture Track

Students choosing this minor track must complete courses as indicated in the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRUS 04</td>
<td>Elementary Russian I</td>
<td>5</td>
</tr>
<tr>
<td>PRUS 08</td>
<td>Elementary Russian II</td>
<td>5</td>
</tr>
<tr>
<td>PRUS 020</td>
<td>Intermediate Russian I</td>
<td>5</td>
</tr>
</tbody>
</table>

**Russian Business and Professional Culture Required Courses**

Intermediate Russian II. Satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRUS 020</td>
<td>Intermediate Russian II</td>
<td>5</td>
</tr>
</tbody>
</table>

**Advanced Russian, satisfied by one of the following:**

- PRUS 054 & PRUS 058 | Advanced Russian I and Advanced Russian II | 6 |
- PRUS 052 & PRUS 056 | Russian for the Professions I and Russian for the Professions II | 6 |

Russian Business/Professional Culture, satisfied by the following two required courses:

- SLAV 330 | Russian Business Culture | 3 |
- SLAV 503 | Post-Soviet Communication | 3 |

**Required Research Project, satisfied by:**

- PRUS 675 | Readings in Russian | 1 |

### Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Slavic Cultures in Translation Track

Students choosing this minor track must complete courses as indicated in the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAV 056</td>
<td>Masterworks of Polish and Czech Literature or SLAV 050</td>
<td>South Slavic Literature and Civilization</td>
</tr>
</tbody>
</table>

Slavic Culture, Satisfied by two of the following:

- SLAV 140/141 | Understanding Russia | 6 |
- SLAV 144/145 | Survey of Russian Literature in Translation | 6 |
- SLAV 148/149 | Introduction to Slavic Folklore | 6 |
- SLAV 340/341 | The Language Landscape of Eastern Europe | 6 |

**Junior/Senior Slavic Literature and Culture. Satisfied by 3 junior/senior (300+) SLAV courses (9 hours) from the following:**

- SLAV 318 | Jews and Slavs in Eastern Europe | 9 |
- SLAV 510 | The Russian Literary Genius | 9 |
- SLAV 516 | Love, Lust and Liberty: Polish and Czech Film Adaptations | 9 |
- SLAV 532 | Dostoevsky | 9 |
- SLAV 534 | Tolstoy | 9 |
- SLAV 564 | The Woman Question in Nineteenth-Century Russian Literature | 9 |
- SLAV 626 | The Cultural Impact of Ottoman Empire on the South Slavs | 9 |
- SLAV 664 | Soviet Russian Literature: 1930-1990 | 9 |
- SLAV 667 | Post-Soviet Literature | 9 |
- SLAV 668 | Nabokov | 9 |
- SLAV 762 | Russian Theatre and Drama from Stanislavski and Chekhov to the Present | 9 |

### Minor Hours & Minor GPA
While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.
Minor Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Slavic Jewish Studies Track

Students choosing this minor track must complete courses as indicated in following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAV 318</td>
<td>Jews and Slavs in Eastern Europe</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 340</td>
<td>The Language Landscape of Eastern European or SLAV 540</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 506</td>
<td>Masterworks of Polish and Czech Literature</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 508</td>
<td>South Slavic Literature and Civilization</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 516</td>
<td>Love, Lust and Liberty: Polish and Czech Film Adaptations</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 626</td>
<td>The Cultural Impact of Ottoman Empire on the South Slavs</td>
<td>3</td>
</tr>
</tbody>
</table>

Judaism/Jewish Religious Expression. Satisfied by one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWSH 300</td>
<td>Topics in Jewish Studies: _____</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 325</td>
<td>Introduction to Judaism or REL 325</td>
<td>3</td>
</tr>
<tr>
<td>JWSH 525</td>
<td>Jews and Christians</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Electives. Satisfied by 2 of the following: 6

Geography
- GEOG 590 Understanding Central Asia

History
- HIST 115 French Revolution to the Present: Europe 1789-Present
- HIST 117 Russia, An Introduction
- HIST 340 The History of the Second World War
- HIST 341 Hitler and Nazi Germany
- HIST 377 Everyday Communism in Eastern Europe
- HIST 378 Beyond the Iron Curtain: Soviet Perspectives on the Cold War
- HIST 564 Medieval Russia
- HIST 565 Imperial Russia
- HIST 568 Rise and Fall of the Soviet Union

Jewish Studies
- JWSH 325 Introduction to Judaism or REL 325 Introduction to Judaism
- JWSH 343 The Holocaust in History
- JWSH 344 Modern Jewish History
- JWSH 327 Jewish Secular Culture
- JWSH 335 History of Jewish Women
- JWSH 525 Jews and Christians

Russian, East European and Eurasian Studies
- REES 220 Societies and Cultures of Eurasia

Slavonic
- SLAV 318 Jews and Slavs in Eastern Europe
- SLAV 320 Graphic Novels as Memory
- SLAV 340 The Language Landscape of Eastern Europe or SLAV 540 The Language Landscape of Eastern Europe
- SLAV 506 Masterworks of Polish and Czech Literature
- SLAV 508 South Slavic Literature and Civilization
- SLAV 516 Love, Lust and Liberty: Polish and Czech Film Adaptations
- SLAV 626 The Cultural Impact of Ottoman Empire on the South Slavs

Yiddish
- YDSH 300 Studies in Yiddish: _____

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

South Slavic Studies Track

Students choosing this minor track must complete courses as indicated in following areas:

<table>
<thead>
<tr>
<th>Prerequisites</th>
</tr>
</thead>
</table>

The following courses provide fundamental skills for the minor, but do not contribute to the minimum required hours for the minor.

Elementary Bosnian/Croatian/Serbian I. Satisfied by:
- BCRS 104 Elementary Bosnian/Croatian/Serbian I 5

Elementary Bosnian/Croatian/Serbian II. Satisfied by:
- BCRS 108 Elementary Bosnian/Croatian/Serbian II 5

Intermediate Bosnian/Croatian/Serbian I. Satisfied by:

**South Slavic Studies Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCRS 204</td>
<td>Intermediate Bosnian/Croatian/Serbian I</td>
<td>3</td>
</tr>
<tr>
<td>BCRS 208</td>
<td>Intermediate Bosnian/Croatian/Serbian II</td>
<td>3</td>
</tr>
<tr>
<td>SLAV 508</td>
<td>South Slavic Literature and Civilization</td>
<td>3</td>
</tr>
</tbody>
</table>

9 hours in South Slavic languages, history, cultures, or literatures at the 300 level or above, chosen from courses in the South Slavic studies emphasis

Required Electives. Satisfied by 3 courses (9 hours) chosen from the following: 9

Geography
- GEOG 590 Understanding Central Asia
Undergraduate Certificate in Slavic and Eurasian Languages

BCRS 380  Intensive Croatian (summer in Croatia)
BCRS 675  Readings in Bosnian/Croatian/Serbian
ECON 560  Economic Systems
HIST 377  Everyday Communism in Eastern Europe
SLAV 316  The Peoples and Cultures of Southeastern Europe Through Film
SLAV 340/341  The Language Landscape of Eastern Europe
SLAV 558  Readings in Slovene
SLAV 626  The Cultural Impact of Ottoman Empire on the South Slavs
SLAV 630  Slavic Folklore
SLAV 679  Topics in: _____ (Slavic Culture)

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**
Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior (300+) Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the field of study including F’s and repeated courses. See the Semester/ Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Study Abroad

The department offers a semester study abroad program at the Higher School of Economics in Moscow, Russia, and in conjunction with the Center for Russian, East European, and Eurasian Studies, conducts summer institutes at universities in

- Nur-Sultan, Kazakhstan (for Russian)
- L’viv, Ukraine (for Ukrainian)
- Zadar, Croatia (for Croatian)
- Almaty, Kazakhstan (internship program)

Consult the Slavic department office or the Office of Study Abroad. Credit for non-KU programs is not automatic and is evaluated in consultation with the Slavic department undergraduate director.

Undergraduate and graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

Slavic Language Programs in Russia and Eastern Europe

KU students may take intermediate or advanced Bosnian/Croatian/Serbian at a 6-week summer institute in Croatia or attend a summer language program in Poland.

Graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

Undergraduate Certificate in Slavic and Eurasian Languages

The language certificate, which consists of the equivalent of two years of language study, aims to give students basic intermediate level proficiency in any of the languages in the department, a training that can serve as a helpful professional credential to be paired with another degree.

Generally, completion of two elementary and two intermediate language courses in a single language offered in the department. The table below shows the courses that will be part of this certificate. The actual course list will be maintained on a website so that the courses counting toward the certificate can be updated routinely as the languages available at KU change, which could occur with changes in Title VI funding and with changes in departmental faculty. Any language taught by the department will be added to the website list of languages that satisfy the requirements of this certificate.

Complete one of the language sequences below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCRS 104</td>
<td>Elementary Bosnian/Croatian/Serbian I</td>
<td>5</td>
</tr>
<tr>
<td>or BCRS 105</td>
<td>Elementary Bosnian/Croatian/Serbian I, Honors</td>
<td></td>
</tr>
<tr>
<td>BCRS 108</td>
<td>Elementary Bosnian/Croatian/Serbian II</td>
<td>5</td>
</tr>
<tr>
<td>or BCRS 109</td>
<td>Elementary Bosnian/Croatian/Serbian II, Honors</td>
<td></td>
</tr>
<tr>
<td>BCRS 204</td>
<td>Intermediate Bosnian/Croatian/Serbian I</td>
<td>3</td>
</tr>
<tr>
<td>or BCRS 205</td>
<td>Intermediate Bosnian/Croatian/Serbian I, Honors</td>
<td></td>
</tr>
<tr>
<td>BCRS 208</td>
<td>Intermediate Bosnian/Croatian/Serbian II</td>
<td>3</td>
</tr>
<tr>
<td>or BCRS 209</td>
<td>Intermediate Bosnian/Croatian/Serbian II, Honors</td>
<td></td>
</tr>
</tbody>
</table>

Courses online

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERS 110</td>
<td>Elementary Iranian/Dari/Tajik Persian I</td>
<td>5</td>
</tr>
<tr>
<td>PERS 120</td>
<td>Elementary Iranian/Dari/Tajik Persian II</td>
<td>5</td>
</tr>
<tr>
<td>PERS 210</td>
<td>Intermediate Iranian/Dari/Tajik Persian I</td>
<td>3</td>
</tr>
<tr>
<td>PERS 220</td>
<td>Intermediate Iranian/Dari/Tajik Persian II</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses online

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSH 104</td>
<td>Elementary Polish I</td>
<td>5</td>
</tr>
<tr>
<td>or PLSH 105</td>
<td>Elementary Polish, Honors</td>
<td></td>
</tr>
<tr>
<td>PLSH 108</td>
<td>Elementary Polish II</td>
<td>5</td>
</tr>
<tr>
<td>or PLSH 109</td>
<td>Elementary Polish II, Honors</td>
<td></td>
</tr>
<tr>
<td>PLSH 204</td>
<td>Intermediate Polish I</td>
<td>3</td>
</tr>
<tr>
<td>PLSH 208</td>
<td>Intermediate Polish II</td>
<td>3</td>
</tr>
</tbody>
</table>

Courses online

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURK 104</td>
<td>Elementary Turkish I</td>
<td>5</td>
</tr>
<tr>
<td>TURK 108</td>
<td>Elementary Turkish II</td>
<td>5</td>
</tr>
</tbody>
</table>
Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year; .50 full-time equivalent (FTE) appointments come with:
- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed, based on funding availability and performance, for up to 3 years for M.A. students, and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs receive thorough training in language instruction, close mentoring, and the opportunity to teach at a variety of levels, which provides a strong base of teaching experience upon entering the job market.

### Additional Funding

There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://www.graduate.ku.edu/funding/) for KU graduate students.

### Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

### Graduate Admission

Apply to the graduate program via the Graduate Studies online application system (https://gradapply.ku.edu/apply).

For additional information regarding departmental admissions requirements, deadlines and the application process, please visit the graduate page of the Slavic and Eurasian Languages and Literatures (http://slavic.ku.edu/) website.

### Slavic Languages and Literatures Concentration

#### Requirements

1. At least 30 hours of graduate work in Slavic languages and literatures including SLAV 710 and SLAV 824, and a minimum of 3 courses in Slavic literature and 3 courses in Slavic linguistics.
2. A written and oral examination.

At least 50% of coursework for the master’s degree must be taken at the 700 level or above.

For students who plan to continue in the graduate program, the M.A. written and oral examination serves as a qualifying examination for advancement to Ph.D. work. For students who seek only the M.A. degree, successful completion of the M.A. written and oral examination signals the end of the program.

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### Master of Arts in Slavic Languages and Literatures

#### M.A. Program Overview

The Master of Arts degree in Slavic Languages & Literatures provides students with foundational knowledge of the language, literature, culture, and linguistics of a region of study (Russian, Polish, Bosnian-Croatian-Serbian). Working in a collegial and supportive environment, M.A. students learn the general contours and common ground of the field; read key works embedded in their historical, cultural, stylistic, and genre contexts; learn various methodological and theoretical frameworks and strategies; improve their language capacity, and develop research, writing, interpretive, and technological skills.

The M.A. prepares students for several career pathways. While completion of the M.A. is most often the gateway to Ph.D. work in the field, many students use the M.A. to build skills for a professional career. KU Slavic M.A. students go on to satisfying work in the public and private sectors, in the U.S. and abroad.

#### Departmental Funding

The department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year; .50 full-time equivalent (FTE) appointments come with:
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### Master of Arts in Slavic Languages and Literatures

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For additional information regarding departmental admissions requirements, deadlines and the application process, please visit the graduate page of the Slavic and Eurasian Languages and Literatures (http://slavic.ku.edu/) website.
Students planning to work toward the Ph.D. may begin study of a second Slavic language during their M.A. work. Such study does not count toward M.A. degree requirements.

Students completing the M.A. degree without intent to continue to Ph.D. work have the opportunity, in consultation with the graduate advisor, to adjust their program to meet specific career goals.

**Russian, East European, and Eurasian Studies Concentration**

Requirements for the degree include 30 credit hours with at least 50% of coursework at or above the 700 level. The requirements for the degree are distributed as follows:

1. At least 1 course in a REES-area advanced foreign language (500-level or higher) for 3 credit hours.

2. 7 graduate-level area studies courses focusing on the REES region for a total of 21 credit hours, taken in consultation with the advisor.

3. Successful completion of one of the following research methods and capstone sequences, totaling 6 credit hours and culminating in a research paper using materials in the student’s chosen target language. Students may choose a given track based on their interests and the availability of courses. Students taking an equivalent methods/capstone sequence in another department may petition to substitute that sequence. Prior to enrolling in the second course in their selected sequence, students must have completed an advanced language course in the target language.

### Code | Title | Hours
--- | --- | ---
GIST 710 | Research Design for International Area Studies | 
GIST 810 | Graduate Writing Experience | 
GIST 898 | or GIST 898 Thesis and Research Project Writing |
HIST 802 | Seminar in: _____ | 
HIST 805 | The Nature of History | 
SLAV 760 | The Russian Novel in the Age of Realism | 
SLAV 762 | Russian Theatre and Drama from Stanislavski and Chekhov to the Present | 
or SLAV 767 Post-Soviet Literature |
Linguistics and Culture Option
SLAV 710 | Introduction to Slavic Languages and Linguistics | 
SLAV 722 | The Grammatical Categories of Russian: Linguistic Units, Functions and Meanings | 
or SLAV 824 Proseminar in Methods of Teaching Slavic Languages |
Politics Option
POLS 705 | Research Design for Political Science | 
POLS 899 | Thesis | 

4. Pass a comprehensive examination in addition to regular course examinations. Information about opportunities and requirements for graduate work with a Russian or East European concentration in any department at KU may be obtained from the department.

Requirements may be modified in special cases with the director’s approval, particularly for students with special needs such as Experienced

Teacher Fellows, Foreign Area Officers, or candidates for degrees in the professional schools. All students are encouraged to study abroad.

**Study Abroad**

The department offers a semester study abroad program at the Higher School of Economics in Moscow, Russia, and in conjunction with the Center for Russian, East European, and Eurasian Studies, conducts summer institutes at universities in

- Nur-Sultan, Kazakhstan (for Russian)
- L’viv, Ukraine (for Ukrainian)
- Zadar, Croatia (for Croatian)
- Almaty, Kazakhstan (internship program)

Consult the Slavic department office or the Office of Study Abroad. Credit for non-KU programs is not automatic and is evaluated in consultation with the Slavic department undergraduate director.

Undergraduate and graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

**Slavic Language Programs in Russia and Eastern Europe**

KU students may take intermediate or advanced Bosnian/Croatian/Serbian at a 6-week summer institute in Croatia or attend a summer language program in Poland.

Graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

**Doctor of Philosophy in Slavic Languages and Literatures**

**Overview of Doctoral Program**

The Doctor of Philosophy degree in Slavic Languages & Literatures builds further on the foundational knowledge and the structured classroom learning that students engaged in during M.A. work. Working under the close mentorship of their advisors, Ph.D. students develop a minor in a related field, learn advanced pedagogical and interpretive strategies, continue to improve language skills, and engage in self-motivated, independent study to develop an area of specialization.

While most KU Ph.D. students find positions as academics, some choose to pursue professional positions in academic support, digital humanities, research, and government service. See Ph.D. Alumni ([http://slavic.ku.edu/doctor-philosophy-alumni-ku-slavic-department/) on the Department’s website.

**Areas of Concentration**

Two concentrations are offered in the Ph.D. program:

- Russian Literature
- Slavic Linguistics

Additional information regarding academic opportunities in culture, intellectual history, folklore, or language pedagogy is available on the departmental Ph.D. Overview ([http://slavic.ku.edu/phd-slavic-overview/]).
Departmental Funding
The department does its best to provide funding in the form of Graduate Teaching Assistantship (GTA) appointments to all incoming graduate students. GTA appointments are awarded for the academic year; .50 full-time equivalent (FTE) appointments come with:

- a competitive academic year (9 month) salary
- a 100% tuition waiver for all courses at KU
- payment of up to 3 hours of student fees
- optional University-subsidized group health insurance

The appointments are guaranteed, based on funding availability and performance, for up to 3 years for M.A. students, 5 years for Ph.D. students and 6 years for students who receive both an M.A. and a Ph.D. at The University of Kansas. GTAs in the department receive thorough training in language instruction, close mentoring, and the opportunity to teach at a variety of levels, providing them with a strong base of teaching experience upon entering the job market.

Additional Funding
There are also university fellowships for truly outstanding students. Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for KU graduate students.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission
Apply to the graduate program via the Graduate Studies online application (https://gradapply.ku.edu/) system.

For additional information regarding departmental admissions requirements, deadlines and the application process, please visit the graduate page of the Slavic and Eurasian Languages and Literatures (http://slavic.ku.edu/) website.

Ph.D. Degree Requirements
Students admitted to Ph.D. work in Russian literature or Slavic linguistics must fulfill M.A. requirements and pass the qualifying examination. Students also must fulfill all specific requirements in the concentration, master a western European language, complete and defend a professional Ph.D. portfolio, and write a dissertation.

All Ph.D. students are expected to enroll in courses in their concentrations numbered 500 and above offered in a given semester

1. If they have not previously had the courses or their equivalent,
2. If it is judged that the course material aids in preparation for the defense of the professional Ph.D. portfolio, and

3. If it is feasible to incorporate such courses into a given semester’s program.

Requirements for Ph.D. Concentration in Russian Literature
- Detailed knowledge of the history and development of Russian literature
- Oral and written competence in Russian language plus an orientation in its structure and history
- Reading competence in a second Slavic language and a general knowledge of the history of its literature
- A minimum of 9 graduate credit hours in a minor subject inside the department; some outside coursework may be considered with program approval.
- An acceptable dissertation

Requirements for Ph.D. Concentration in Slavic Linguistics
- Detailed knowledge of the structure and history of two Slavic languages, one of which is considered the student’s major language, plus reading competence in a third Slavic language (Knowledge of a third Slavic language is not required for students with a sub-concentration in second language studies).
- Oral and written competence in the major Slavic language
- A minimum of 9 graduate semester credit hours in a minor subject inside the department; some outside coursework may be considered with program approval.
- Basic knowledge of general and comparative linguistics
- An acceptable dissertation

Examinations
Qualifying Examination
All students must take the qualifying examination to be admitted to Ph.D. work. For KU students, the M.A. examination serves as the qualifying examination. Students who hold the M.A. degree from another institution but begin Ph.D. work at KU are required to take the qualifying examination within 2 semesters of entry into the program.

Research Skills & Responsible Scholarship Requirement
The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. Graduate students in Slavic Languages and Literatures must demonstrate (through course work or examination) reading competence in a western European language, preferably French or German. The student must also take part in all required graduate colloquia. These cover a variety of topics intended to promote and model responsible scholarship and professional development. Faculty and graduate students participate in these colloquia each semester. Issues of responsible scholarship are also imbedded in the curriculum.

Professional ph.d. portfolio Examination
Students must pass an oral comprehensive examination consisting of their presentation and defense of their professional Ph.D. portfolio after fulfilling all other requirements for the Ph.D., with the exception of the dissertation. The professional Ph.D. portfolio includes the dissertation
prospectus as well as other materials that document the student's command of major and minor fields, ability to undertake research, and the skills necessary to traverse the profession independently.

**Dissertation Defense**

Students demonstrate satisfactory completion of the Ph.D. program in their final oral defense of the dissertation and its field and by prompt submission of the thesis.

**Study Abroad**

The department offers a semester study abroad program at the Higher School of Economics in Moscow, Russia, and in conjunction with the Center for Russian, East European, and Eurasian Studies, conducts summer institutes at universities in:

- Nur-Sultan, Kazakhstan (for Russian)
- L'viv, Ukraine (for Ukrainian)
- Zadar, Croatia (for Croatian)
- Almaty, Kazakhstan (internship program)

Consult the Slavic department office or the Office of Study Abroad. Credit for non-KU programs is not automatic and is evaluated in consultation with the Slavic department undergraduate director.

Undergraduate and graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

**Slavic Language Programs in Russia and Eastern Europe**

KU students may take intermediate or advanced Bosnian/Croatian/Serbian at a 6-week summer institute in Croatia or attend a summer language program in Poland.

Graduate students at KU are encouraged to spend a summer, semester, and/or year studying and conducting research in their country of interest.

**Department of Sociology**

**Why study sociology?**

The study of sociology provides valuable insights into the social institutions and processes that shape human behaviors, histories, and opportunities. Sociologists focus on the actions, beliefs, values, norms, organizations, institutions, and other social forces that characterize a society and shape people's lives. It directs attention to how the parts of society fit together as well as the causes and consequences of social change. The insight gained from the study of sociology leads to a greater understanding of how formal and informal rules of society contribute to different opportunities and constraints for different groups of individuals, and how these change over time. As a scientific discipline, sociology teaches students how to use empirical data to understand current social realities and act effectively on the central issues of our time. Few academic disciplines have such a broad scope and relevance.

**Undergraduate Programs**

The department educates sociologists for careers in teaching, research, and some applied fields. Undergraduate course work in sociology can contribute to professional training in architecture, business, education, journalism, law, medicine, public health, and social work.

Sociology majors can earn a Bachelor of Arts (BA) or Bachelor of General Studies (BGS). Both the BA and the BGS require a generous sampling of courses in the humanities, social sciences, and natural sciences. Because of its compatibility with other majors, many of our students earn double majors. For example, many sociology undergraduates also major in history, philosophy, political science, or anthropology, or earn a second degree in journalism.

Students majoring in a wide range of disciplines will find a minor in Sociology enhances their perspective on their field. Sociology is often the minor of choice for students majoring in Psychology, Anthropology, American Studies, Economics, Applied Behavioral Science, History, Political Science, and Global and International Studies and those in professional schools such as Journalism, Business, or Education.

**Graduate Programs**

The department offers a full graduate program in sociology leading to the M.A. and Ph.D. degrees, educating sociologists for careers in teaching and research and for fields of practical application. It also contributes to professional education in such fields as social welfare, social policy, architecture, education, journalism, personnel administration, business, and medicine. Aside from professional interests, the department offers instruction to assist students in deepening their understanding of social relations and, hence, of the social context of their own lives.

Students who are interested in enrolling in graduate level coursework in the Department of Sociology without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s non-degree seeking webpage (https://sociology.drupal.ku.edu/non-degree-seeking/) for further details.

**Courses**

**SOC 104. Elements of Sociology. 3 Credits. SC S**

The study of social life, including how human groups are organized, how they change, and how they influence individuals. Consideration is given to a variety of human organizations and social institutions and how these groups and institutions both determine, and are determined by, human beings. This course may not be taken for credit by those who have taken SOC 304.

**SOC 105. Elements of Sociology, Honors. 3 Credits. SC S**

The study of social life, including how human groups are organized, how they change, and how they influence individuals. Consideration is given to a variety of human organizations and social institutions and how these groups and institutions both determine, and are determined by, human beings. Open only to students on dean's honor roll or enrolled in Honors Program, or consent of instructor. May not be taken by those who also have credit for SOC 304.

**SOC 130. Comparative Societies. 3 Credits. NW S/W**

Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western civilization.

**SOC 131. Comparative Societies, Honors. 3 Credits. NW S**

Description and analysis of the culture, structure, and development of societies that are historically unrelated to the traditions of Western Civilization. Open only to students enrolled in the University Honors program or by consent of instructor. May not be taken by students who have credit in SOC 130.
SOC 150. Self and Society. 3 Credits. SI S
Discuss the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. May not be taken by anyone who has completed SOC 305 or its equivalent.

SOC 160. Social Problems and American Values. 3 Credits. SF S
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. May not be taken by anyone who has already completed SOC 306 or its equivalent.

SOC 161. Social Problems and American Values, Honors. 3 Credits. SF S
Explores competing explanations for the causes of, and cures for, the enduring problems of American society. Critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course may not be taken for credit by those who have taken SOC 160 or SOC 306. Open only to students admitted to the University Honors Program or by consent of instructor.

SOC 177. First Year Seminar: ____. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Sociology. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

SOC 199. Data I: Dealing with Data. 3 Credits. S
Data science is an interdisciplinary field that uses scientific methods, processes, algorithms and systems to derive knowledge and insights from data. This course teaches students the core concepts of inference and computing, working with real behavioral, economic, geographic, physical, social, and text data. Students obtain basic statistics training from a computational perspective using simulation to answer questions, explore problems, and delve into social issues surrounding data analysis such as privacy and design. (Same as ECON 199, POLS 199 and PSYC 199.)

SOC 200. Sociological Introduction to: _____. 3 Credits. S
A sociological introduction to selected topics of current interest in Sociology. Please refer to the schedule of classes for current topics offered. Check the Sociology Department website for course descriptions of current special topics course offerings. May be repeated for credit as topics vary.

SOC 220. Sociology of Families. 3 Credits. SC S
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. May not be taken by anyone who has already taken SOC 308 or its equivalent.

SOC 230. Introduction to Social Inequality in the U.S.. 3 Credits. S
By the end of this course, students will be able to describe the major dimensions of inequality in the U.S. (including race, class, and gender), understand the structural basis of inequality, critically assess how inequality exists in major social institutions, and understand how inequalities in race, class, and gender shape social interaction.

SOC 280. Introduction to Social Research. 3 Credits. S
An introduction to the nature and methods of social research, including both qualitative and quantitative approaches. Topics may include: hypothesis formulation and testing; how to design a research project, collect and analyze data; elementary statistical procedures; and ethical issues. Prerequisite: Six hours of Sociology credit, including SOC 104/ SOC 105/SOC 304. A minimum GPA of 2.3 in all Sociology courses is strongly recommended for students planning to enroll in this course.

SOC 295. Study Abroad Topics in: _____. 1-6 Credits. S
This course is designed for the study of special topics in Sociology at the freshman/sophomore level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor.

SOC 304. Principles of Sociology. 3 Credits. SC S
An introduction to sociological concepts, methods, and substantive findings more intensive than that provided in SOC 104. Students may take this course in lieu of SOC 104 to satisfy requirements for the major and the minor. This course may not be taken for credit by those who have taken SOC 104.

SOC 305. Principles of Self and Society. 3 Credits. SI S
Discusses the way our identities, values, and behavior have been and continue to be shaped by social and situational factors. Attention is paid to the influence of factors like language, culture, social roles, specific social institutions, and broad structures of inequality and power on how we see ourselves and others. This course provides a more intensive coverage of the subject matter than that provided in SOC 150. May not be taken by anyone who has already taken SOC 150 or its equivalent.

SOC 306. Principles of Social Problems. 3 Credits. SF S
This course is designed to explore competing explanations for the causes of, and cures for, the enduring problems of American society. The course critically analyzes dominant definitions of social problems, the political and economic roots of these problems, and the public policies aimed at reducing them. This course provides a more intensive coverage of the subject matter than that provided in SOC 160. May not be taken by anyone who has already completed SOC 160 or its equivalent.

SOC 308. Principles of Family Sociology. 3 Credits. SC S
Analysis of the family as a social institution primarily in the U.S. context. Topics considered are: current and historical changes in how the family is constituted, contrasting sociological theories of family relationships, sexuality in relation to family life, the coexistence of love and hate in families, family dissolution and reformation, and the care of children. A key theme is diversity: social class, gender, race/ethnicity, and age. This course provides a more intensive coverage of the subject matter than that provided in SOC 220. May not be taken by anyone who has already taken SOC 220 or its equivalent.

SOC 312. Population and Society. 3 Credits. S
An examination of the causes and consequences of population change in the United States and around the world with special focus on the impact of changes in populations on social institutions. We use social demographic perspectives to explore patterns of birth, illness, death, population concentration, population migration and immigration, and changes in these over time. Prerequisite: One of the following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220.

SOC 320. Organizations in Society. 3 Credits. S
An analysis of complex organizations in modern societies. Attention is given to the rise of bureaucracy in business and government; the way organizations influence and respond to their social cultural environments;
and the various roles that individuals play in organizations. Prerequisite: A principal course in sociology.

SOC 321. Wealth, Power, and Inequality. 3 Credits. S
This class focuses on economic inequality and the political and social forces that create and sustain it in the United States and internationally. The variables of race, ethnicity, status, and gender are analyzed as they relate to the differences in the distribution of wealth and power, and attention is paid to how these multiple variables shape opportunities.

SOC 324. Being Deviant in America. 3 Credits. S
In this course students will study traits, conditions, actions, and behaviors that violate social norms and elicit negative societal reactions. This includes the social, cultural, and individual factors that explain deviance; motivations behind deviant behavior; and efforts by society to control deviants. In short, you will undertake a sociological examination of those on the margins of society and societal efforts to “deal with” them. (Same as AMS 324.)

SOC 326. Health, Gender, and Society. 3 Credits. S
Comparative examination of the health status of men and women in relation to key elements of contemporary societies, including not only medicine and health care services, but also systems of social inequality and stratification, cultural constructions of gender, and social policies. Emphasis will be placed on the U.S.; however, the course also will provide international comparisons and an overall global context.

SOC 330. American Society. 3 Credits. S
The social structure and organization of American society with special reference to long-term and recent social changes. (Same as AMS 330.) Not open to students with credit for SOC 132. Prerequisite: A principal course in sociology.

SOC 332. The United States in Global Context. 3 Credits. S
Examines the influence abroad of U.S. culture, policies and practices and the impact of other countries on U.S. culture, society, and politics. Among the topics that may be examined are race, ethnicity, colonialism, imperialism, migration, technology, communications and media, popular culture, language, health, domestic and transnational organizations, as well as economic, political, religious, military and educational institutions. (Same as AMS 332.)

SOC 335. American Society, Honors. 3 Credits. SC S
The social structure and organization of American society with special reference to long-term and recent social changes. Not open to students who have credit for AMS 330 or SOC 330. Open to students in the University Honors Program, students on the dean's honor roll, and by permission of the department.

SOC 340. The Community. 3 Credits. S
Structures, functions, and processes of change in local communities; interrelations of towns and small cities with rural areas and metropolitan centers with their hinterlands. Prerequisite: A principal course in sociology or ANTH 108 or ANTH 308.

SOC 341. Urban Sociology. 3 Credits. S
Examination of the process of urbanization in modern societies, including the size, growth, functions, and ecology of cities and systems of cities; such urban social institutions as the economy, politics, and the family; and major contemporary urban policies and problems. Each topic will be analyzed from several sociological perspectives. Prerequisite: A principal course in sociology.

SOC 342. Sociology of Immigration. 3 Credits. S
International migration reshapes politics, economics, social relations, and racial/ethnic identities. Using the United States and other countries as case studies, we explore the variations among immigrant groups and their experiences in social institutions such as the family, religion, education, labor market, and government. We consider the influence of national origin, gender, class, and culture on immigration and reception experiences, as well as issues of assimilation, transnationalism and identity. Prerequisite: SOC 104.

SOC 343. American Racial and Ethnic Relations. 3 Credits. S
Race is an ever-present feature of American life. It is a polarizing topic in our politics and a prism through which we perceive social differences. In this course, we examine the major institutions and societal forces that shape the reality of race in thought and in material reality. Moving from past to present, we consider how slavery, segregation, the urban ghetto, and mass incarceration contribute to the social construction of race. By reviewing traditions of research on race in the U.S. and abroad, students will analyze how legacies of race and racism in the U.S. continue to influence our identities, culture, politics, and relations of power and inequality.

SOC 350. Transnational Migration. 3 Credits. S
A historically-conscious, sociological exploration of political, cultural and health issues involved in transnational migration, this course invites the student to situate current transnational migration within specific historical social processes within both postcolonial Africa and the postcolonial West. The course examines parallels from the experience of migration in other parts of the world, specifically Asia and Latin America. The aim is an understanding and appreciation of both the interconnectedness of the world's peoples and, crucially, of the world's histories.

SOC 352. Sociology of Sex Roles. 3 Credits. S
An examination of sex roles, sex stereotypes, and major issues involved in sex-role research. Emphasizes explanations of inequality between American males and females in the family and at work. The course is designed around lectures, panels, workshops, and films.

SOC 355. Protest, Activism, and Dissent. 3 Credits. S
This course explores theories and concepts related to collective behavior and social movements. We will examine why people protest, what strategies and tactics activists use and why, and the conditions under which protest succeeds or fails. We will focus on contemporary social movements in the United States, examining dissent and activism of both the political left and right.

SOC 360. Sociology of Social Control. 3 Credits. S
This course examines changing methods of social control in society. Social control can be formal (e.g., law and criminal justice system) or informal (e.g., families, peer groups). This course examines the ways that we, as a society, attempt to respond to matters such as deviance, illness, crime, and poverty. This course will survey the many varieties of formal and informal social control faced by individuals in society, and the ways in which individuals resist and conform to various disciplinary and control regimes. Prerequisite: a principal course in Sociology.

SOC 363. The Sociology of Culture. 3 Credits. S
This class explores the role of cultural forms (music, film, fashion, food, and art) in everyday life. Throughout the semester, we will critically engage with core topics in cultural sociology, including, how culture reflects the social order, the role of culture in reproducing race, gender, and class inequality, the processes by which cultural forms are socially created and received, and the relationship between culture and historical change.

SOC 364. Society, Popular Culture, and the Media. 3 Credits. S
An overview of sociological theory and research on culture created and distributed through the mass media and its role in shaping our common sense interpretations of our daily lives. Topics include the social organization of the media, the relation between popular culture and the
media, themes communicated in various elements of popular culture, and how various groups interpret cultural messages and incorporate them in their lives.

SOC 380. Elementary Statistics and Data Analysis. 3 Credits. S
An introduction to social scientific data analysis, with an emphasis on descriptive and inferential statistics. Specific topics include sampling, measures of association and correlation, significance testing, the logic of causal inference, the use of computer programs for data analysis, multivariate analysis, and the critical evaluation of social science research findings. Prerequisite: MATH 101.

SOC 385. Environmental Sociology. 3 Credits. S
This course invites students to study society and its impact on the environment. Environmental problems are social problems. This course will address such items as social paradigms, theories, inequalities, movements, and research. (Same as EVRN 385.)

SOC 386. Sociology of Global Food. 3 Credits. U
The Sociology of Global Food offers a critical examination of the global food system since the Industrial Revolution. Topics include the industrialization of agriculture, sustainable agriculture, and the role of food and agriculture in organizing society. This course discusses the emergence of current debates around food and agriculture including food activism, technological developments, human/environmental relationships, and labor issues. There is a lab component to this course. (Same as EVRN 386.) Prerequisite: Junior standing.

SOC 400. Sociology Special Topics: _____ 3 Credits. S
The study of selected topics of current interest in Sociology. Check the notes section in the schedule of classes for the description of this course. May be repeated for credit as topics vary.

SOC 401. Sociology Special Topics, Honors: _____ 3 Credits. S
The study of selected topics of current interest in Sociology. Contact department for course descriptions of current offerings. May be repeated for credit as topics vary. Open only to students in the University Honors Program, or consent of the instructor. Prerequisite: Enrollment in the University Honors Program, or consent of the instructor.

SOC 405. Sociology of Aging and the Life Course. 3 Credits. S
A survey of theory and research in social gerontology, giving primary attention to aging and the aged as affected by social organization, including such social institutions as familial, economic, political, and health care; organizational processes such as social stratification; and living environments including community and housing. In these contexts, certain demographic, cross-cultural, social-psychological, and physiological aspects of aging will also be considered.

SOC 410. Sociology of Death and Dying. 3 Credits. S
The primary purpose of this course is to provide an understanding of the ways in which the experiences of death and dying are shaped by social structures. This course will also acquaint the student with the social implications of death and dying and to examine death-related behaviors, both individual and collective, through which these aspects of life are experienced. This course covers theoretical, practical, cross-cultural and historical aspects of death and dying. Social, psychological, biomedical, economic and legal issues surrounding death and dying are explored. Students examine their own ideas, feelings and attitudes towards death and dying, and reflect on the origins and significance of those beliefs. Prerequisite: Junior or Senior Standing.

SOC 424. Sociology of Health and Medicine. 3 Credits. S
This introductory course in medical sociology examines how social factors influence health and the organization of medical services. Students explore the distribution and experiences of illnesses across key social categories (e.g., gender, social class, etc.) The course also addresses contemporary issues in health and medicine, such as how health care systems vary cross-nationally, the training of health care workers, patient-physician relationships, and the use of medical technologies.

SOC 425. Sociology of Global Health. 3 Credits. S
The course explores social dimensions of health throughout the world. It examines how infectious and degenerative diseases have reflected and affected the demographics, social structure, economy, and culture of societies, and how societies have mobilized their political, economic, social and cultural resources to deal with health challenges. It focuses in particular on the role of socioeconomic inequality—both within and across countries—in shaping the emergence, spread, prevention, and treatment of disease. Prerequisite: A sociology course at the 100 or 200-level.

SOC 427. School and Society. 3 Credits. S
This course examines education as a social institution and the reciprocal relationship between schools and society. It focuses particularly on the relationship between education and inequality and on education in the U.S., but also includes international comparisons. Prerequisite: Junior or Senior standing or permission of instructor.

SOC 430. Cross-Cultural Sociology. 3 Credits. W
A systematic introduction to cross-cultural issues from the standpoint of sociology, designed to acquaint students with the full range of substantive and methodological issues that arise in comparative sociological inquiry, with a primary focus on non-western societies. Specific topics to be addressed may include war and peace, stratification and inequality, race and ethnicity, and political authority and power, all viewed in the light of cross-cultural research and theory.

SOC 436. Ethnicity in the United States: _____. 3 Credits. S
An examination of the history, sociology, and culture of U.S. ethnic categories (e.g., American Indians, Latinos, Asian Americans, Jewish Americans, Irish Americans). The specific group studied varies from semester to semester. Course may be repeated for credit with different topics. (Same as AMS 436.)

SOC 437. Global Ethnic and Racial Relations. 3 Credits. W
This course uses written and visual materials to examine race, ethnicity, and nationalism around the world. Emphasis is on ways in which social forces, gender roles, sexual practices, cultural patterns, and political organization work together to construct and reinforce ethnic, racial, and national identities, boundaries, movements, and conflicts. Historical and contemporary comparisons are made between the U.S. and countries in Africa, Asia, the Americas, the Caribbean, Europe, the Pacific Islands, and the Middle East. (Same as AAAS 437 and AMS 437.)

SOC 450. Gender and Society. 3 Credits. S
An overview of sociological theory and research on the social practices constructing men and women as “opposites” and creating systematic inequality between them in class-, race-, and nation-specific ways. We consider arguments and evidence that gender is something we are, something we do, a part of every social institution, and a major aspect of how we are organized as a society.

SOC 454. Women and Work. 3 Credits. S
Sociological investigation of women’s changing relationship to paid and unpaid labor in the economy and the family. Several theories are compared in these contexts: Characteristics of employed women, including occupational distribution and pay; women’s experiences in “traditional” and “nontraditional” occupations, including professions and management; socialization and education for employment; integration of marriage, housework, and child care; anti-discriminatory laws and policies. Prerequisite: A principal course in Sociology.

SOC 455. Society and the Economy. 3 Credits. S

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SOC 455. Society and the Economy. 3 Credits. S
An analysis of how economic organizations such as firms and markets are embedded within broader social structures with attention being given to such topics as: world economic crises and their social bases; capitalist and socialist economies; primitive and advanced economic systems; multinational corporations; the nature of housework; and the transformation of economic systems.

SOC 461. Competing Perspectives on Crime and Deviance. 3 Credits. S
Advanced analysis of the social organization and cultural processes of deviance, including crime, violence, and social control. The course surveys and applies sociological, as well as criminological, theoretical perspectives in deviance. Particular attention is paid to the economic, gender, sexual, and racial inequalities and diversity of experience that shapes, and is shaped by, deviance in American society.

SOC 462. Violence and Society. 3 Credits. S
This class applies a sociological perspective to the various forms of violence that beset modern society. We will consider a range of behavior and practices commonly considered violent, including suicide, harassment, sexual assault, street crime, gun violence, terrorism, and genocide. We will address the extent, impact, and sociological significance of these forms of violence. We will also consider the failures and successes of various organizational, institutional, and legal solutions to violence.

SOC 463. Sociology of Surveillance. 3 Credits. S
An overview of social science theory and research on the practices for keeping close watch on people. Surveillance strategies are adopted in the interests of security, governance, and commerce, but also for personal care, empowerment, resistance, and even play. We consider a host of social, political, ethical, and legal questions related to long-standing notions of privacy, civil liberties, and personal autonomy.

SOC 480. Sociological Theory. 3 Credits. S
An introduction to the principal texts in sociological theory and the ideas that made them important. Primary materials are emphasized, ranging from medieval to the current age. The goal of the course is to show continuity and change in the theoretical tradition of sociology, and to demonstrate the continued importance of classical ideas. Prerequisite: SOC 104 or SOC 105 or SOC 304 or permission of instructor.

SOC 490. Internship in Sociology. 3 Credits. S
The purpose of this course is to encourage students to think sociologically about social issues by working as volunteer interns for non-profit community or campus organizations. Enrollment must be approved by a faculty mentor and the departmental Undergraduate Studies Committee. For additional information go to the Sociology department website. Prerequisite: 21 credits in sociology with a 3.0 GPA and permission of the instructor.

SOC 495. Study Abroad Advanced Topics in: _____ 1-6 Credits. S
This course is designed for the study of special topics in Sociology at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. No more than 6 hours of SOC 295 or SOC 495 may count towards the Sociology major or minor.

SOC 499. Honors Course. 3-6 Credits. S
Intensive study and research under faculty direction including the writing of a thesis. Enrollment may be split between two semesters, but no grade will be given until completion of the thesis. Admission to honors candidacy is open only to majors who have shown a marked capability for independent study and have completed either SOC 280 or SOC 480.

SOC 525. Sociology of Work. 3 Credits. S
A consideration of problems in the conceptual and empirical definition of occupations and professions. It will involve the examination of the process of professionalization, the differentiation and integration of labor, career patterns, the work situation, the study of leisure, and the social consequences of changes in occupations and professions. Prerequisite: A principal course in sociology.

SOC 529. Globalization. 3 Credits. S
Addresses sociological aspects of the growth of transnational economic, cultural, institutional, and political interconnections, the freer and faster movement of goods, images, ideas, people, and institutional forms across national borders, and the consequences and problems of these processes. The focus is on recent (later 20th century to the present) global restructuring in the context of historical shifts in capitalist development. (Same as GIST 529.) Prerequisite: SOC 104 or GIST 220.

SOC 532. Sociology of the Middle East. 3 Credits. NW S
The sociological analysis of social, historical, and contemporary issues pertaining to the Middle East and to relations between the Middle East and other regions of the world. We use sociological theoretical perspectives to address such topics as nationalism and identity; religion, race and ethnicity; gender, socioeconomic development, and sociopolitical and economic relations with the United States. Prerequisite: One of the following: SOC 104, SOC 110, SOC 150, SOC 160, or SOC 220.

SOC 560. Law and Criminal Justice. 3 Credits. S
An analysis of the sources and procedures of development of the criminal law and analysis of the practices of law enforcement, prosecution, and judicial action, principally in the United States. Prerequisite: A principal course in sociology.

SOC 600. Sociological Perspectives: _____ 3 Credits. S
Analysis of various sociological perspectives and/or the application of various perspectives to a given social phenomenon. May be repeated as topics vary. Prerequisite: A principal course in sociology.

SOC 617. Women and Health Care. 3 Credits. S
Critical analysis of the current health status and health needs of women, exploring how lay, medical, and research assumptions have influenced both the clinical/scientific literature and the organization of health services. The course includes a focus on historical patterns in women's health issues and social change actions. (Same as HP&M 620.)

SOC 619. Political Sociology. 3 Credits. S
The study of politics and society in the United States and abroad, including power and authority-who has them, how are they acquired, when are they challenged; state formation, the expansion of central governments, and patterns of political domination; political and nationalist movements; the politics of gender, class, race, and ethnicity; political culture and ideology; ethnic and nationalist conflict; revolution and political change. Prerequisite: A principal course in sociology or consent of instructor.

SOC 625. Work Roles in Health and Medicine. 3 Credits. S
A sociological examination of medical and health-care occupations and professions. The selection of careers, socialization processes, and the development of professional identities. Interactions among practitioners, health-care teams, consumers, and professional and community power structures. Control and coordination of work. The impact of increasing specialization and changes in the demographic makeup of client and professional populations. Coping with medical failure and other problems inherent in medical and health-care work.

SOC 629. Sociology of Sport. 3 Credits. S
Examination of organized sport as a social institution and its relation to other social institutions (e.g., political, economic, educational, and religious), with special emphasis on American society. Analysis of the
social correlates of sports participation and a consideration of the role of sport in social change. Prerequisite: A principal course in American studies or sociology, or consent of instructor.

**SOC 640. Islam and Politics. 3 Credits. W**
This course gives students a basic understanding of Islam and Islamic movements, explores the economic, social, political, and cultural context in which these movements take place, and examines the impact of Islam on politics in select countries. Issues such as compatibility of political Islam and democratic politics, political economy in Muslim societies, fundamentalism in Islam, gender relations, identity politics and questions on clash of civilizations are explored. (Same as GIST 667 and POLS 667.) Prerequisite: A principal course in sociology, POLS 150, or consent of instructor.

**SOC 660. Sociology of Mental Illness. 3 Credits. S**
The sociology of mental illness concerns itself with the study of mental disorders as social phenomena. The course will be concerned with (1) the social factors and social processes that contribute to mental disorders, (2) the social definitions of mental disorders as forms of social deviance, (3) the social facets in the treatment and care of disordered persons, and (4) the social aspects of the prevention of mental disorders. Prerequisite: A principal course in sociology.

**SOC 662. Corrections. 3 Credits. S**
Legal systems for handling offenders and the development of the laws creating these systems. Emphasis on the various parts (police, courts, probation, penitentiary institutions, and parole) of the system will vary. Prerequisite: A principal course in sociology.

**SOC 698. Individual Undergraduate Research. 1-12 Credits. S**
Library or field research either as part of an ongoing project or as an independent study project. One to twelve hours. May be taken from one or more faculty during one or more semesters, the total hours not to exceed 12. No more than 3 credits may be applied to satisfy requirements for the sociology major. Prerequisite: Two courses in sociology and consent of instructor.

**SOC 707. Seminar in Historical Sociology. 1-4 Credits.**
Each seminar will explore problems at the intersection of sociology and history. Topic, instructors, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics and students may take more than one topic. No prerequisite.

**SOC 722. Sociology of Gender. 3 Credits.**
This course will offer a range of sociological perspectives on the role of gender in society. The particular substantive focus will vary each semester to allow flexibility for in-depth analysis of gender relationships in such areas as politics, health and aging, and work.

**SOC 760. Social Inequality. 3 Credits.**
A comprehensive review of the major theoretical and empirical approaches used in the study of institutionalized social inequality. Reference to the origins, forms, cultural and structural variations and their changes over time, consequences and ideologies of social inequality. Prerequisite: A distribution course in sociology.

**SOC 767. Multidisciplinary Perspectives on Gerontology and Aging. 3 Credits.**
A seminar coordinated by the Gerontology Program. The seminar explores essential areas of gerontology for researchers and practitioners, providing a multidisciplinary (biology, health services, behavioral and social sciences, human services) perspective on aging. The seminar surveys contemporary basic and applied research, service programs, and policy and management issues in gerontology. (Same as ABSC 787, AMS 767, COMS 787, and PSYC 787.)

**SOC 780. Advanced Topics in Sociology: ______. 3 Credits.**
Topics will vary from semester to semester and instructor to instructor to allow flexibility for in-depth analysis of particular topics.

**SOC 802. Classical Social Theory. 3 Credits.**
This seminar will focus on the later 19th and early 20th century "theories of society," addressing the origins and developmental tendencies of Western modernity and their relation to premodern social orders. Primary texts of the major theorists (e.g. Marx, Durkheim, Nietzsche, Weber, Simmel, and Mead) will be studied in historical context. The tradition's analytical and critical resources and problematic features will also be explored. Finally, the connections between this tradition and contemporary sociological approaches will be explored.

**SOC 803. Issues in Contemporary Theory: ______. 3 Credits.**
A critical examination of recent trends and debates in sociological theory. This is a thematically oriented course in which classical as well as contemporary views will be explored. Attention will be directed to theoretical issues under discussion in fields such as symbolic interactionism, semiology, ethnology, critical theory, macrosociology, and others.

**SOC 810. Sociological Inquiry. 3 Credits.**
The goals of this course are to understand the characteristics of sociologically interesting and rigorous research and to design a research proposal that shares those characteristics. Students will read books and articles representing a variety of research approaches (ethnographies, surveys, interviews, document analyses, historical studies, comparative research, etc.), and will analyze those approaches in order to understand their theoretical and methodological significance. Students will also distribute their proposals to the other students in the course for comment and critique. Assignments will include a research proposal such as a draft for an external grant proposal, M.A. thesis proposal for students at the M.A. level or a dissertation proposal draft for students at the Ph.D. level. Course may be repeated for credit toward graduate degree. Prerequisite: The course is open only to students enrolled in the Sociology graduate program.

**SOC 811. Sociological Research. 3 Credits.**
The use of the scientific method to study social phenomena including: the formulation and testing of hypotheses; techniques for collecting data; measuring social variables; interpreting research findings; the relationship of theory and facts. Course may be repeated for credit toward graduate degree. Prerequisite: The course is open only to students enrolled in the Sociology graduate program.

**SOC 812. Analytic Methods in Sociology. 3 Credits.**
Consideration of quantitative methods of analysis including both parametric and non-parametric techniques. Prerequisite: A course in statistics.

**SOC 820. Political Sociology. 3 Credits.**
This course offers an overview of the different perspectives and key arguments comprising the field of political sociology, including both classical and contemporary readings. The issues studied in this field include the nature of power and the nature of the state, relations between state and society, and social movements, political organization and civic participation, political culture, voting behavior, comparative political systems, warfare, democracy and economic development, citizenship, nationalism, revolutions, and globalization.

**SOC 824. Health and Social Behavior. 3 Credits.**
This course provides students with an analytic understanding of the organization, professional, and interpersonal behavior that characterizes
contemporary health and health care. Emphasis is placed on examination and integration of conceptual frameworks, theories, and research findings bearing on basic behavioral/managerial issues such as authority relations in health care settings, models of illness behavior and health services utilization, the impact of organizational structure on employee and client attitudes and behavior, and the culture of professional medicine in relation to patient care.

SOC 873. International Political Economy. 3 Credits. Provides a broad survey of major developments in the field. Topics include the intellectual origins of international political economy; the historical evolution of the international system; North-South and Western trade, investment, and monetary relations; foreign aid, debt technology transfer, development, international economic institutions (e.g., International Monetary Funds, World Bank, Multinational Corporations, etc.). (Same as POLS 973.)

SOC 891. Individual Master’s Readings. 1-6 Credits. Individual study of special topics or problems by students working on a master’s degree.

SOC 892. Teaching Seminar. 1-3 Credits. Seminar on sociology course design and development. Topics covered include syllabus design, exam strategies and design, course design, content of and approaches to teaching introductory and other sociology courses, student grading and evaluation. Required of all teaching assistants assigned to courses in sociology. May not be repeated for credit toward graduate degree.

SOC 893. Leading Discussion Sections in Sociology. 1 Credits. This course covers matters relating to the teaching of discussion sections in sociology. Topics covered will include the current week’s reading assignments, material that will be covered in the lecture, upcoming exams or other assignments, and potential activities for discussion sections. This course does not count toward completion of 54 hours of graduate credit hours required for the PhD program in sociology. Graded on a satisfactory/unsatisfactory basis. Prerequisite: A current GTA appointment to lead discussion sections in sociology.

SOC 899. Thesis. 1-8 Credits. Thesis hours. Graded on a satisfactory progress/limited progress/no progress basis.

SOC 900. Seminar on Special Topics in Theory: _____ 1-4 Credits. Each seminar will explore problems of theory in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic.

SOC 920. Seminar on Special Topics in Social Organizations: _____ 1-4 Credits. Each seminar will explore problems of social organization in sociology. Topic, instructor, and hours of credit will be announced in the Schedule of Classes. Seminars will be offered by different instructors on different topics, and a student may take more than one topic.

SOC 991. Individual Doctoral Readings. 1-6 Credits. Individual study of special topics or problems by students working on a doctorate.

SOC 995. Professionalization Proseminar. 3 Credits. The main objective of this course is to help students understand and deal with several "nuts and bolts" professional issues regarding the discipline of sociology and being a professional sociologist. This course is for advanced doctoral students who are close to being on the job market, whether they are pursuing academic or non-academic careers.

SOC 999. Dissertation. 1-12 Credits. Dissertation hours. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts and Bachelor of General Studies in Sociology

Why study sociology?
The study of sociology provides valuable insights into the social institutions and processes that shape human behaviors, histories, and opportunities. Sociologists focus on the actions, beliefs, values, norms, organizations, institutions, and other social forces that characterize a society and shape people's lives. It directs attention to how the parts of society fit together as well as the causes and consequences of social change. The insight gained from the study of sociology leads to a greater understanding of how formal and informal rules of society contribute to different opportunities and constraints for different groups of individuals, and how these change over time. As a scientific discipline, sociology teaches students how to use empirical data to understand current social realities and act effectively on the central issues of our time. Few academic disciplines have such a broad scope and relevance.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.
Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Requirements for the B.A. or B.G.S. Major

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociology Core Knowledge and Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Majors must complete a course in each of the following areas:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elements of Sociology. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology</td>
<td></td>
</tr>
<tr>
<td>SOC 105</td>
<td>Elements of Sociology, Honors</td>
<td></td>
</tr>
<tr>
<td>SOC 304</td>
<td>Principles of Sociology</td>
<td></td>
</tr>
</tbody>
</table>

Introduction to Social Research. Satisfied by:

| SOC 280    | Introduction to Social Research            | 3     |
| Elementary Statistics & Data Analysis. Satisfied by: | |
| SOC 380    | Elementary Statistics and Data Analysis    | 3     |

Sociology Theory. Satisfied by:

| SOC 480    | Sociological Theory                       | 3     |

Sociology Required Electives

Majors must complete an additional 21 hours of sociology courses beyond the core courses above. At least 15 hours of these must be at the junior/senior (300+) level. Up to 3 hours may be chosen from SOC 490 or SOC 698, and up to 6 hours from SOC 499, to be applied to this requirement.

| Upper-level sociology electives. Satisfied by 15 sociology hours at the Junior/Senior (300+) level | |
| Additional sociology electives. Satisfied by 6 additional sociology hours at the upper or lower level | |

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

| Major Hours | Satisfied by 33 hours of major courses. |
| Major Hours in Residence | Satisfied by a minimum of 15 hours of KU resident credit in the major. At least 15 credit hours at the 300+ level, including SOC 280, SOC 380, and SOC 480, must be taken at KU. |
| Major Junior/Senior Hours | Satisfied by a minimum of 21 hours from junior/senior courses (300+) in the major. |
| Major Junior/Senior Graduation GPA | Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/). |

Graduation Plan

With careful planning and commitment to a full-time course load, you can graduate in 4 years. Download a sample 4-year plan (p. 1807) for sociology.

Double Majors

Sociology majors may want to consider a second major in philosophy; history; women’s studies; area studies; or one of the natural or social sciences; or a second degree in journalism or other professional disciplines.

A sample 4-year plan for a BA degree in Sociology can be found here: Sociology (p. 1807), or by using the left-side navigation.

A sample 4-year plan for the BGS degree in Sociology can be found here: Sociology (p. 1808), or by using the left-side navigation.

Departmental Honors

Working under the supervision of a faculty mentor, the undergraduate student must complete 6 hours of work in SOC 499 culminating in a superior thesis. The thesis must be certified by 3 members of the College faculty, at least 2 of whom must be from sociology, nominated by the candidate and approved by the departmental honors coordinator. The student also must achieve a grade-point average of at least 3.5 in sociology.

BA in Sociology

Below is a sample 4-year plan for students pursuing the BA in Sociology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

Freshman

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 104, 105, or 304 (Goal 3 Social Science, Major Requirement)</td>
<td>3 SOC Elective 100+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Literacy)</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 Goal 3 Arts and Humanities</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3 Goal 2.2 Communication</td>
<td></td>
</tr>
</tbody>
</table>

Sophomore

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC Elective 100+ (Major Requirement)</td>
<td>3 SOC 280 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 SOC Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3 Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3</td>
</tr>
</tbody>
</table>
Second Area of Study/ Elective/Degree/Junior-Senior Hours
3 Second Area of Study/ Elective/Degree/Junior-Senior Hours

Second Area of Study/ Elective/Degree/Junior-Senior Hours
1

Senior Hours
14
15

Junior
Hours Spring Hours
SOC 380 (BA Quantitative Reasoning (QR); Major Requirement) 3 Soc 480 (Major Requirement) 3
SOC Elective 300+ (Major Requirement) 3
SOC Elective 300+ (Major Requirement) 3
Goal 4.2 Global Awareness 3 Goal 5 Social Responsibility & Ethics 5

Second Area of Study/ Elective/Degree/Junior-Senior Hours
3 Second Area of Study/ Elective/Degree/Junior-Senior Hours

Second Area of Study/ Elective/Degree/Junior-Senior Hours
3

Senior Hours
15
15

Fall
Fall
SOC Elective 300+ (Major Requirement) 3
SOC Elective 300+ (Major Requirement) 3
Goal 6 Integration & Creativity 4
3 Second Area of Study/ Elective/Degree/Junior-Senior Hours
5
Second Area of Study/ Elective/Degree/Junior-Senior Hours
3
Second Area of Study/ Elective/Degree/Junior-Senior Hours
3
Second Area of Study/ Elective/Degree/Junior-Senior Hours
3
Second Area of Study/ Elective/Degree/Junior-Senior Hours
3

Total Hours 120

1  The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2  MATH 101 is a prerequisite for SOC 380, which is a required course for the Sociology Major.
3  Up to 3 hours of hours of SOC 490 or SOC 698, and 6 hours of SOC 499 are allowed to count toward the major.
4  Check the KU Core website to see which Sociology electives fulfill this goal. If a Sociology elective already taken is being used to fulfill this Core Goal, an alternative elective course will need to be taken to fulfill your total hours requirement.
5  Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors. A number of Sociology electives can be used to fulfill KU Core Goals 1.1, 4.1, 4.2, or 5.1.

BGS in Sociology

Below is a sample 4-year plan for students pursuing the BGS in Sociology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website. (http://kucore.ku.edu/courses/) A number of Sociology electives are eligible to fulfill KU Core Goals 1.1, 4.1, 4.2, or 5.1.

Freshman

Fall
Fall
SOC 104, 105, or 304 (Goal 3 Social Science, Major Requirement) 3 SOC Elective 100+ (Major Requirement) 3
Goal 2.1 Written Communication (1 of 2) 3 Goal 2.1 Written Communication (2 of 2) 3
MATH 101 (Goal 1.2 Quantitative Literacy) 1 3 Goal 2.2 Communication 3
First Year Seminar (Goal 1.1 Critical Thinking) 4 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3
Second Area of Study/ Elective/Degree/Junior-Senior Hours 2 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3
Second Area of Study/ Elective/Degree/Junior-Senior Hours 5 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3
Second Area of Study/ Elective/Degree/Junior-Senior Hours 5 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3

Sophomore

Fall
Fall
SOC Elective 100+ (Major Requirement) 1 3 SOC 280 (Major Requirement) 3
Goal 3 Natural Science 3 SOC Elective 300+ (Major Requirement) 3
Goal 3 Humanities 3 Goal 4.1 US Diversity 4 3
Second Area of Study/ Elective/Degree/Junior-Senior Hours 2 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 2
Second Area of Study/ Elective/Degree/Junior-Senior Hours 2 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 2
Second Area of Study/ Elective/Degree/Junior-Senior Hours 7 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 7

15 15
Minor in Sociology

Why study sociology?

The study of sociology provides valuable insights into the social institutions and processes that shape human behaviors, histories, and opportunities. Sociologists focus on the actions, beliefs, values, norms, organizations, institutions, and other social forces that characterize a society and shape people’s lives. It directs attention to how the parts of society fit together as well as the causes and consequences of social change. The insight gained from the study of sociology leads to a greater understanding of how formal and informal rules of society contribute to different opportunities and constraints for different groups of individuals, and how these change over time. As a scientific discipline, sociology teaches students how to use empirical data to understand current social realities and act effectively on the central issues of our time. Few academic disciplines have such a broad scope and relevance.

Requirements for the Minor

| Sociology Minor |
|-----------------|-----------------|
| Code | Title | Hours |
| SOC 104 | Elements of Sociology | 3 |

Sociology Minor Electives

Satisfied by 15 hours required, 12 hours at the 300-level or above.

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

Minor Hours

Satisfied by 18 hours of minor courses.

Minor Hours in Residence

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Doctor of Philosophy in Sociology

Sociology Graduate Program

Sociology offers a distinct perspective on understanding the social world. Our discipline emphasizes how institutions and structural forces outside the individual—the family, organizations, politics, economics, culture—shape individual and group behavior, opportunities, and histories. As a major teaching and research unit, we seek to ensure that the knowledge imparted to our students is current and that they learn the skills of critical inquiry, analytical evaluation, and historical sensibilities.

### Minor in Sociology

#### Why study sociology?

The study of sociology provides valuable insights into the social institutions and processes that shape human behaviors, histories, and opportunities. Sociologists focus on the actions, beliefs, values, norms, organizations, institutions, and other social forces that characterize a society and shape people’s lives. It directs attention to how the parts of society fit together as well as the causes and consequences of social change. The insight gained from the study of sociology leads to a greater understanding of how formal and informal rules of society contribute to different opportunities and constraints for different groups of individuals, and how these change over time. As a scientific discipline, sociology teaches students how to use empirical data to understand current social realities and act effectively on the central issues of our time. Few academic disciplines have such a broad scope and relevance.

#### Requirements for the Minor

**Sociology Minor**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sociology Minor Electives**

Satisfied by 15 hours required, 12 hours at the 300-level or above.

**Minor Hours & Minor GPA**

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

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1. MATH 101 is a prerequisite for SOC 380, which is a required course for the Sociology Major.
2. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
3. Up to 3 hours of hours of SOC 490 or SOC 698, and 6 hours of SOC 499 are allowed to count toward the major.
4. Check the KU Core website to see which Sociology electives fulfill this goal. If a Sociology elective already taken is being used to fulfill this Core Goal, an alternate elective course will need to be taken to fulfill your total hours requirement.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The Department of Sociology at the University of Kansas offers a Ph.D. program in sociology. Upon admission, all students are enrolled as Ph.D. students, but must complete all requirements for a M.A. degree during their progress toward the Ph.D. degree.

To be considered for admission, applicants must have completed 15 credit hours in sociology, including a course in sociological theory, and a course in statistics.

Applications also must include:

- A statement of academic interests and professional goals
- 3 recommendation rating forms and letters from individuals who can evaluate the applicant’s academic performance
- 1 complete set of transcripts from all colleges and universities attended
- A current résumé/curriculum vitae
- A writing sample (senior or master's thesis preferred)
- A nonrefundable application fee
- Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/) set by KU Graduate Studies.
- GRE scores are optional for applicants for Fall 2022 admission.

The applicant’s record should indicate considerable academic promise and a high level of motivation.

Submit your graduate application online (https://gradapply.ku.edu/apply/). Most application materials can be attached to the online application.

Ph.D. Degree Requirements

For the Ph.D., students must complete 54 hours of graduate coursework, which includes both M.A. and Ph.D. coursework requirements. Thesis and dissertation hour enrollments are also required.

1. Within the first 2 years of the program, students must complete all M.A. level requirements, including coursework, portfolio, thesis, and a final exam. If a student does not complete all the M.A. level requirements within the first 2 years of the program, s/he will not be eligible for the renewal of his/her GTA/GRA funding. 36 hours of graduate credit are required for the M.A., including:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 810</td>
<td>Sociological Inquiry</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Methods (Must include SOC 812)</td>
<td>6</td>
</tr>
</tbody>
</table>

2. During their first year in the program, students must begin compiling portfolios of their professional work.

3. Students must complete an M.A. thesis under the direction of a sociology faculty member of the student’s choosing, an oral defense of the thesis, and a final exam for the M.A. Degree.

4. After completing the requirements for the M.A. degree above, students must attain the requisite levels of competence in the history and theory of sociology and in methods of sociological research by completing the courses listed below. Students must complete an additional 18 graduate credit hours from the coursework list above. This should include:

- An additional 3 credit hours of theory (must be SOC 802 or SOC 902 if not completed during M.A. level work)
- An additional 3 credit hours of methods
- An additional 9 credit hours of electives

*Individual Doctoral Readings courses (SOC 891) may not be used to meet these requirements except by approved petition.

5. Students must complete the Research Skills and Responsible Scholarship (RSRS) requirement. The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. Doctoral students in sociology meet this requirement by completion of the following courses: SOC 810, SOC 812, SOC 910. Additional information about this requirement can be found under Doctoral Degree Requirements, Doctor of Philosophy (http://catalog.dept.ku.edu/201314/...
schools/gs/programs/#docreqs), Research Skills in the Graduate Studies section of the online catalog.

6. Students must compile portfolios of their professional work successfully demonstrating command of 2 fields of specialization within sociology and preparation to undertake dissertation research.

7. Students must pass an oral comprehensive examination and defense of dissertation proposal, within the first 6 semesters post-M.A. degree. The oral comprehensive examination and dissertation proposal defense occur at the same time. The oral comprehensive examination refers to an oral examination of the student’s understanding of the 2 fields of specialization. The dissertation committee must consist of at least 5 members, 4 of whom are members of the sociology department.

8. The candidate must continue to enroll in accordance with the Office of Graduate Studies Post-comprehensive Enrollment policy (http://policy.ku.edu/graduate-studies/doctoral-candidacy/) until all Ph.D. degree requirements have been met.


**Non-thesis (Terminal) M.A. Option**

A student who wishes to complete a master's degree but does not wish to continue on to the doctoral level of the program may choose the non-thesis, terminal M.A. option. Completion of these requirements leads to the M.A. degree but does not allow the student to proceed to doctoral study. Non-thesis students must complete 30 hours of graduate credit. Coursework requirements are the same as listed above for the thesis-option M.A., but thesis hours (SOC 899) are not required.

A final oral examination over course work in sociology is also required.

**Handbook for Graduate Students**

A more detailed account of advising procedures, degree requirements, and program options is set forth in the department’s *Manual of Graduate Study in Sociology*, which is available on the department's website (https://sociology.ku.edu/).

**Department of Spanish and Portuguese**

**Why study Spanish and Portuguese?**

Spanish, the second most spoken language in the world with approximately 559 million speakers, is the official language in 21 countries. The United States ranks second behind Mexico in the number of Spanish speakers. Similarly, Portuguese, the sixth most spoken language with approximately 210 million people, is the official language in 9 nations. Fluency in more than one language and an understanding of literary and cultural texts prepare students to become global citizens. In the Department of Spanish and Portuguese, we hone students' oral and written skills of global languages and enrich their critical understanding of the world today.

**Undergraduate Programs**

The department offers course work for students seeking proficiency in a foreign language and for majors in Spanish or a related field.

**Placement**

Students who have not studied Spanish in high school should seek permission to enroll in SPAN 104. For permission to enroll in this course, a student must show his or her high school transcript to the advising specialist in the Department of Spanish and Portuguese. Students who have had limited study of Spanish (1 to 3 years in high school or 1 semester of Spanish at another institution of higher learning, equivalent to SPAN 104) and are not placed in the intermediate level should enroll in SPAN 111. Only students who complete SPAN 104 at KU are eligible to enroll in SPAN 108.

Students with 2 to 4 years of high school Spanish can be placed in the intermediate level (SPAN 212, SPAN 216, SPAN 220, or SPAN 324) by taking the placement examination and consulting the advising specialist. Heritage speakers should take the placement test and consult with the department's advising specialist about the next steps for placement.

Students registered with Disability Resources (http://www.disability.ku.edu/) should contact them for placement advising.

**Retroactive Credit**

Students with no prior college or university Spanish course credit are eligible for retroactive credit according to this formula:

- 3 hours of retroactive credit are awarded to a student who enrolls initially at KU in a third-level Spanish course (SPAN 212) and receives a grade of C or higher.
- 6 hours of retroactive credit are awarded to a student who enrolls initially at KU in a fourth-level Spanish course (SPAN 216) and receives a grade of C or higher.
- 9 hours of retroactive credit are awarded to a student who enrolls initially at KU in a 3-credit-hour Spanish course with a fourth-level course as a prerequisite and receives a grade of C or higher.

Students interested in retroactive credit should consult the department before enrolling.

Students entering KU with previous study of Portuguese should take the Portuguese placement examination administered by the department.

**Courses for Nonmajors**

Students may fulfill the College foreign language requirement by

1. Passing the proficiency examination or
2. Completing SPAN 216 or PORT 216 or
3. Completing a course in Spanish or Portuguese that has SPAN 216 or PORT 216 as a prerequisite.

Minors may consult with the department's advising specialist and their faculty advisor in the department if they have questions about their program of study.

Candidates for the B.S. in education who are majoring in Spanish or minoring in Brazilian Studies should consult the School of Education and Human Sciences.

**Graduate Programs**

The department offers a full graduate program leading to the M.A. and the Ph.D. degrees. Students who complete their graduate studies with the M.A. degree are well prepared to enter a variety of fields, including...
international business, teaching, and government. The Ph.D. program takes advantage of the literature specialties of the faculty, and Ph.D. recipients generally go on to university or college teaching.

A detailed description is available from the departmental office as well as the department's website (http://www2.ku.edu/~spanport/). This includes specific distribution requirements, fields of specialization, and information on the comprehensive examinations. Students should request information and application forms as early as possible, especially if they plan to apply for financial aid.

Students who are interested in enrolling in graduate level coursework in the Department of Spanish & Portuguese without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department's admission (http://spanport.ku.edu/graduate-admissions/) webpage for further details.

Courses

PORT 104. Elementary Brazilian Portuguese I. 5 Credits. U F1
This course introduces students to the essential vocabulary and fundamentals of grammar of Brazilian Portuguese through practice in speaking, listening comprehension, reading and writing. Active preparation and participation required. Classes conducted in Portuguese. Emphasis on conversation.

PORT 106. Elementary Brazilian Portuguese, Accelerated I. 3 Credits. U F1
Designed for students with intermediate proficiency in Spanish (or with previous work in Portuguese) to acquire proficiency in Portuguese more rapidly. Covers the same material as PORT 104 and PORT 108 and prepares students to intermediate level study of Portuguese. Prerequisite: SPAN 111 or Span 108 or consent of instructor.

PORT 108. Elementary Brazilian Portuguese II. 5 Credits. U F2
A continuation of PORT 104. Prerequisite: PORT 104.

PORT 110. Elementary Brazilian Portuguese, Accelerated II. 3 Credits. U F2
A continuation of PORT 106. Prerequisite: PORT 106.

PORT 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Portuguese. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

PORT 212. Intermediate Brazilian Portuguese I. 3 Credits. U F3
A review of Brazilian Portuguese grammar, with practice in reading, composition, and conversation. Prerequisite: PORT 108 or PORT 110 or consent of instructor.

PORT 216. Intermediate Brazilian Portuguese II. 3 Credits. U F4
A continuation of PORT 212. Prerequisite: PORT 212.

PORT 220. Intensive Intermediate Brazilian Portuguese. 3-6 Credits. U F3/F4
The course is designed for students who have completed the first year of Portuguese language studies at KU or equivalent. This course covers the same material as PORT 212 and PORT 216. Prerequisite: PORT 110, PORT 108, or consent of the instructor.

PORT 300. Brazilian Culture. 3 Credits. HT H
Prehistoric and colonial Portuguese origins of Brazil and its independent development in the nineteenth and twentieth centuries. Key aspects of economic, political, and social factors; special attention to intellectual history. Readings in English.

PORT 320. Introduction to Portuguese and Brazilian Literatures. 3 Credits. H/W FP
Advanced reading course and an introduction to the study of Luso-Brazilian literature. Discussions in Portuguese. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 340. Textual Analysis and Critical Reading. 3 Credits. HL H FP
Introduction to Brazilian cultural and literary studies. Critical readings and interpretation of Brazilian cultural expressions with emphasis on acquiring the skills and vocabulary for discussing and writing critical analyses. Conducted in Portuguese. Not open to students who have taken PORT 540. Prerequisite: Grade of A or B in PORT 216 or consent of instructor.

PORT 347. Brazilian Studies: _____ 3 Credits. H FP
A topics course dedicated to the study of special historical moments, authors, or themes in Brazilian literary and cultural history. Topics studied always lead to an examination of Brazilian culture and society through the critical study of literature, film, and music, in contrast with aspects of U.S. culture or other Latin American societies. Although the course may cover multiple genres and periods, it always emphasizes the plurality of Brazilian people, its history of slavery and immigration, diverse ethnic composition, rich religious milieu, and complex class system. Students also discuss the differences between the geographical regions in the country, and discuss controversial topics such as racism and religion. Given the historical similarities between the two societies, students must confront the experiences they learn about in Brazil to similar ones in the United States. Course conducted in Portuguese and may be repeated for credit as the topic varies. Not open to students who have taken PORT 547. Prerequisite: PORT 216 or consent of instructor.

PORT 348. Portuguese Language and Brazilian Culture for Business. 3 Credits. H FP
Cultural studies approach to contemporary Brazilian society for students interested in business. Explores how Brazilians negotiate their place in a global cultural context and how they perceive business. Readings include selections from literature, history, journalism, social analysis, and popular culture and business. Exercises help English speakers develop analytical skills, as well as vocabulary and communication skills related to business and professional life in Brazil. Not open to students who have taken PORT 548. Prerequisite: PORT 216 or consent of instructor.

PORT 350. Portuguese Language and Brazilian Culture for International Business. 3 Credits. H/W FP
A topics course dedicated to the study of special historical moments, authors, or themes in Brazilian literary and cultural history. Topics studied always lead to an examination of Brazilian culture and society through the critical study of literature, film, and music, in contrast with aspects of U.S. culture or other Latin American societies. Although the course may cover multiple genres and periods, it always emphasizes the plurality of Brazilian people, its history of slavery and immigration, diverse ethnic composition, rich religious milieu, and complex class system. Students also discuss the differences between the geographical regions in the country, and discuss controversial topics such as racism and religion. Given the historical similarities between the two societies, students must confront the experiences they learn about in Brazil to similar ones in the United States. Course conducted in Portuguese and may be repeated for credit as the topic varies. Not open to students who have taken PORT 547. Prerequisite: PORT 216 or consent of instructor.

PORT 354. Cultural Studies in Brazilian Film: _____ 3 Credits. H FP
A theoretical and historical approach to Brazilian film with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Given in Portuguese or English. May be repeated for credit as topic varies. Students will be expected to attend film screenings in addition to regular class meetings. Not open to students who have taken PORT 545. Prerequisite: PORT 216 or consent of instructor.

PORT 355. Studies in Brazilian Film: _____ 3 Credits. H FP
A theoretical and historical approach to Brazilian film with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Given in Portuguese or English. May be repeated for credit as topic varies. Students will be expected to attend film screenings in addition to regular class meetings. Not open to students who have taken PORT 545. Prerequisite: PORT 216 or consent of instructor.

PORT 388. Intermediate Brazilian Portuguese Conversation. 1 Credits. U
Conversational reinforcement with an emphasis on oral communication skills in a cultural context. Two class meetings per week. Prerequisite: PORT 212 or consent of instructor.

PORT 394. Special Readings in Brazilian Studies. 1-3 Credits. H FP
Direct readings in (a) fields not covered by student's course work, and/or
(b) field of student's special interest approved by the department. May be repeated for credit if content varies. Prerequisite: PORT 216 and three-hours upper-division credit in Portuguese, or consent of instructor.

PORT 471. Studies in Brazilian Culture and Civilization: _____ 1-3 Credits. H FP
A study of Brazilian culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies.

PORT 475. Studies in Brazilian Literature: _____ 1-3 Credits. H FP
A study of the literature of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies.

PORT 488. Advanced Brazilian Portuguese Conversation. 1 Credits. U
Two recitations weekly. More advanced than PORT 388. Prerequisite: PORT 216 or consent of the instructor.

PORT 490. Intensive Advanced Portuguese. 3-6 Credits. H/W FP
This is a composition course for students with an intermediate level of the language to develop control of written communication at an advanced level. Advanced composition, conversation, and stylistics, plus an introduction to Brazilian literature. Prerequisite: Four semesters of Portuguese, or consent of instructor.

PORT 509. Portuguese Phonetics and Phonology. 3 Credits. H/W FP
An analytical and practical study of contemporary Portuguese phonetics. Prerequisite: PORT 490 and PORT 488, or consent of instructor.

PORT 540. Textual Analysis and Critical Reading. 3 Credits. HL H FP
A more intensive treatment of the content of PORT 340. Not open to students who have taken PORT 340. Prerequisite: Consent of instructor.

PORT 547. Brazilian Studies: _____ 3 Credits. H FP
A more intensive treatment of the content of PORT 347. Not open to students who have taken PORT 347. Prerequisite: PORT 216 or consent of instructor.

PORT 548. Portuguese Language and Brazilian Culture for Business. 3 Credits. H FP
A more intensive treatment of the content of PORT 348. Course conducted in Portuguese. Not open to students who have taken PORT 348. Prerequisite: Consent of instructor.

PORT 560. Survey of Portuguese Literature. 3 Credits. H/W FP
Emphasis on Gil Vicente, Camoes, Eca de Queiroz, and Fernando Pessoa. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 565. Studies in Brazilian Film: _____ 3 Credits. H FP
A more intensive treatment of the content of PORT 365. Not open to students who have taken PORT 365. Prerequisite: Consent of instructor.

PORT 611. Accelerated Basic Portuguese for Spanish Speakers. 3 Credits. U
Contrastive phonological and morphological analysis of standard Spanish and the major dialect of Brazilian Portuguese, followed by a presentation of major grammatical and phonological stumbling blocks for Spanish speakers. Drills on grammar, syntax, and pronunciation emphasize those areas in which Brazilian Portuguese differs most significantly from Spanish. Prerequisite: Graduate student status in Spanish. Undergraduates in Spanish may be admitted with consent of instructor.

PORT 612. Accelerated Basic Portuguese for Spanish Speakers II. 3 Credits. U
A continuation of PORT 611, with special emphasis on reading and writing skills. Prerequisite: PORT 611.

PORT 740. Survey of Brazilian Literature. 3 Credits.
A survey of Brazilian literature from 1500 to present. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 742. The Brazilian Novel. 3 Credits.
The development of the novel in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 746. The Brazilian Short Story. 3 Credits.
The development of the short story in Brazil and analysis of representative works of the nineteenth and twentieth centuries. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 750. Brazilian Poetry. 3 Credits.
A study of the principal movements and an analysis of representative works from the colonial period to the present. Emphasis on modernists and post-modernists. Prerequisite: A fourth semester course in Portuguese or consent of instructor.

PORT 760. Contemporary Brazilian Literature. 3 Credits.
A survey of Brazilian cultural expressions and literature in the Twentieth Century. Conducted in Portuguese. Prerequisite: PORT 216 or consent of instructor.

PORT 780. Special Readings in Portuguese and Brazilian Literature. 1-3 Credits.
May be taken more than once; total credit not to exceed five hours. Directed private readings with conferences with instructor. Prerequisite: Consent of department.

PORT 785. Special Topics in Brazilian Cultural and Literary Studies: _____ 3 Credits.
Topics vary by semester. The course may be taken more than once, with full credit, provided there is no duplication in the material covered. Conducted in Portuguese.

PORT 970. Seminar in Brazilian Literature: _____ 3 Credits.

Courses

SPAN 100. Spanish Reading Course. 3 Credits. U
A special course for candidates for advanced degrees designed to aid them in obtaining a reading knowledge of Spanish. Intensive study of the fundamentals of grammar, proceeding to the reading of material of medium difficulty. Open to graduate students and to seniors who are applying for entrance to a graduate school. The course does not satisfy any part of the undergraduate language requirement. This course is primarily for graduate students who are fulfilling their language requirement(s) for advanced degrees.

SPAN 101. Orientation Seminar in Spanish and Portuguese. 1 Credits. H
Provides an overview of the field of Hispanic Studies. Emphasizes developing an understanding of opportunities in Spanish and Portuguese at KU and the Spanish and Portuguese program curricula, exploring service-learning and other extracurricular options available at KU and beyond, and helping students plan goals for their education through an understanding of their personal values and aspirations as they relate to the field. Graded on a satisfactory/unsatisfactory basis.

SPAN 104. Elementary Spanish I. 5 Credits. U F1
For beginning students of Spanish who do not place into SPAN 111. Active preparation and participation required. Classes conducted in Spanish. Not open to native speakers of Spanish.
SPAN 107. Elementary Spanish Conversation. 1-4 Credits. U
Activities to improve elementary level conversation skills. Does not fulfill any portion of the College of Liberal Arts and Sciences foreign language requirement. Available only to study abroad participants.

SPAN 108. Elementary Spanish II. 5 Credits. U F2
Only for students who have completed SPAN 104 at the University of Kansas. This course prepares students for Intermediate level study of Spanish. Active preparation and participation is required. Classes conducted in Spanish. Not open to native speakers of Spanish. Offered in spring semester. Prerequisite: SPAN 104.

SPAN 111. Intensive Elementary Spanish. 5 Credits. U F1/F2
For students who have had some previous study of Spanish, but who do not place into the Intermediate level. This course prepares students for Intermediate level study of Spanish. Active preparation and participation required. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: At least one previous high school or college course in Spanish or placement. See departmental guidelines.

SPAN 170. Hispanic Language, Culture and Civilization I-A: _____ 1-3 Credits. U
For students in their first year of language study or the equivalent.
An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies.

SPAN 171. Hispanic Language, Culture and Civilization I-B: _____ 1-3 Credits. U
A continuation of SPAN 170. For students in their first year of language study or the equivalent. An intensive orientation of the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies.

SPAN 177. First Year Seminar: _____ 3 Credits. HL
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in Spanish. May not contribute to major requirements in Spanish. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

SPAN 202. Introduction to Translation and Translation Theory. 3 Credits. H
This course provides an introduction to the concepts of applied translation as well as an overview of translation theory. Translation is a severely misunderstood activity and profession, and mechanical translation has been justifiably downgraded in communicative foreign language teaching. This course is intended for students of any foreign language (classical or modern) who are interested in the field and profession of literary and non-literary translation. The course focuses on written translation and does not treat (oral) interpretation in detail. (Same as AAAS 250, GERM 240, LING 250 and SLAV 250.) Prerequisite: Study of a foreign language, minimum two semesters of the same language.

SPAN 212. Intermediate Spanish I. 3 Credits. U F3
A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 or placement. See departmental guidelines.

SPAN 213. Honors Intermediate Spanish I. 3 Credits. U F3
Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111 with grade of A, or permission of the department.

SPAN 216. Intermediate Spanish II. 3 Credits. U F4
A continuation of SPAN 212. A fully integrated content-based and form-focused approach to intermediate-level Spanish. Students process and practice a wide range of vocabulary and grammatical structures in order to complete tasks that promote critical exploration of the Spanish-speaking world and the development of listening, reading, speaking, writing, and intercultural competencies. Emphasis on process writing. Classes conducted in Spanish. Not open to native speakers of Spanish. Prerequisite: SPAN 212 or placement.

SPAN 217. Honors Intermediate Spanish II. 3 Credits. U F4
Not open to native speakers of Spanish. Prerequisite: SPAN 212 or SPAN 213 with a grade of A, or permission of the department.

SPAN 220. Intensive Intermediate Spanish. 6 Credits. U F3/F4
This course is designed for students who would like to acquire proficiency in Spanish more rapidly. The material covered in the course is the same as in SPAN 212 and 216. Not open to native speakers of Spanish. Prerequisite: SPAN 108 or SPAN 111, with a grade of A or B.

SPAN 270. Hispanic Language, Culture and Civilization II-A: _____ 1-3 Credits. U
For students in their second year of language study or the equivalent.
An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies.

SPAN 271. Hispanic Language, Culture and Civilization II-B: _____ 1-3 Credits. U
A continuation of SPAN 270. For students in their second year of language study or the equivalent. An intensive orientation to the culture of Spanish-speaking countries. Includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major nor the language requirement. May be repeated for credit if content varies.

SPAN 300. Developments in Hispanic Cultures. 3 Credits. HL H
The development of social and cultural patterns in the Spanish-speaking world, including the intersection of those patterns with issues related to politics, economics and/or personal values. Assigned readings may be in English or in Spanish. Does not count toward the Spanish major. Prerequisite: SPAN 108, SPAN 109, or SPAN 111; or two years of high school Spanish.

SPAN 302. The Spanish Inquisition. 3 Credits. H
A broad historical study of the Spanish Inquisition from 1478 to its afterlife in modern culture, including its use in political debates and its depiction in popular culture. Topics include anti-Semitism, the nature of the inquisitorial investigation, the use of torture, censorship and the relationship between the Inquisition, the Spanish monarchy and other religious and lay authorities. Taught in English. Will not count toward the Spanish major. (Same as HIST 325 and JWSH 315.)

SPAN 322. Spanish Grammar: Form and Meaning in Context. 3 Credits. U FP
Analysis of the most important morphological and syntactic phenomena with an emphasis on their form and function through a review of salient grammatical points in preparation for advanced work in Spanish.
Recommended for students who have completed Spanish 216, 217, or 220 with a grade of C or higher, or placement through examination. Course does not count toward the Major. Prerequisite: Four semesters of college-level Spanish or the equivalent. Students who have taken SPAN 324 or SPAN 325 may take this course with the permission of the instructor.

SPAN 323. Spanish Composition and Cultural Analysis. 3 Credits. U FP
Systematic review of writing in Spanish, intensive study of vocabulary and stylistics for formal written communication, and development of essential writing and analytical skills for advanced courses in Spanish. Prerequisite: SPAN 216 or SPAN 217 or SPAN 220 with a grade of C or higher; or SPAN 322, or consent of instructor.

SPAN 324. Grammar and Composition. 3 Credits. U FP
Systematic grammar review and development of essential writing skills for advanced courses in Spanish. Recommended for students with a grade of B or better in SPAN 216, SPAN 217, or SPAN 220. Concurrent enrollment in SPAN 328 is strongly recommended, and completion of both SPAN 324 and SPAN 328 is required for enrollment in SPAN 340 and SPAN 346. Prerequisite: SPAN 216 or SPAN 217 or SPAN 220 with a grade of C or higher; or SPAN 322.

SPAN 325. Spanish for Heritage Learners. 3 Credits. H FP
A comprehensive review of the Spanish language for students whose personal or cultural ties to the language do not include extensive formal academic study, with an emphasis on the development of skills tied to cultural analysis and communication (written and oral) necessary for success in more advanced courses in Spanish. Prerequisite: SPAN 216, or SPAN 217, or SPAN 220, or appropriate placement test score as defined by the Department of Spanish & Portuguese, or consent of the Department of Spanish & Portuguese, or consent of instructor.

SPAN 326. Spanish for Health Care Workers. 3 Credits. FP
This course is designed to provide students with the linguistic and cultural competencies necessary to communicate with and help treat Spanish speaking patients with limited English proficiency. Includes a general review of pertinent grammar, specific vocabulary groups relating to assessment and care of patients, vocabulary to establish rapport, and discussions leading to cultural competencies. Students who have completed SPAN 424 or above may take the course with the permission of the instructor. Prerequisite: Completion of SPAN 216 with a grade of C or better.

SPAN 328. Intermediate Spanish Conversation. 2 Credits. U FP
Conversational reinforcement of topics presented in SPAN 323 or SPAN 324 with an emphasis on oral communication skills in a cultural context. Concurrent enrollment in SPAN 324 is strongly recommended. Completion of both 324 and 328 is required for enrollment in SPAN 340 and SPAN 346. Two class meetings per week. Not available to study abroad participants. Prerequisite: SPAN 216 or SPAN 217 or SPAN 220 with a grade of C or higher; or SPAN 322.

SPAN 329. Intermediate Spanish Conversation II: ______. 1 Credit. U FP
Open to students who have completed SPAN 328 and heritage speakers. Native speakers may take the course with permission of the instructor. The course topic will focus on Spanish conversation in a particular professional setting, such as business, theater, law, film, medicine, and fine arts. Course may be repeated for credit if the topic varies. Prerequisite: SPAN 328 or consent of instructor.

SPAN 330. Service Learning Internship Spanish. 1-3 Credits. U FP
An opportunity for students to utilize and improve their Spanish language skills in an internship or volunteer work in business, schools, government, hospitals, churches, and various types of service organizations. Students must have approval of instructor to register and must provide written confirmation of acceptance for volunteer work in an agency that provides service to a Spanish-speaking public before the course begins. Periodic supervisor evaluations and a reflection journal in Spanish are required, in addition to other materials requested by the instructor. Class format may be an independent internship taken for variable credit under instructor supervision. Will not count toward Spanish major. Prerequisite: Students must have completed a minimum of 12 hours of Spanish in courses at the 200-level or above, and completion of SPAN 324 with a grade of B or better.

SPAN 340. Textual Analysis and Critical Reading. 3 Credits. HL H/W FP
Critical readings and interpretation of Hispanic literatures, with emphasis on acquiring the skills and vocabulary necessary for discussing and writing literary analyses. Taught in Spanish. Prerequisite: SPAN 323, or SPAN 324 and SPAN 328, or SPAN 325. A grade of B- or higher in SPAN 344 is strongly recommended for students enrolling in this course. Concurrent enrollment in SPAN 346 is strongly recommended.

SPAN 345. Transatlantic Hispanic Cultures. 3 Credits. H FP
This course offers an introductory overview of Hispanic cultures, focusing on the political, economic, social, linguistic, and artistic development that shaped the historical and cultural bonds between Latin America and Spain. Enhances the cultural competence acquired in previous Spanish classes and prepare students for upper-level work in the major. Taught in Spanish. Prerequisite: SPAN 323, or SPAN 324 and SPAN 328, or SPAN 325. A grade of B- or higher in SPAN 323 or SPAN 324 or SPAN 325 is strongly recommended for students enrolling in this course. Concurrent enrollment in SPAN 340 is strongly recommended.

SPAN 370. Hispanic Language, Culture and Civilization III-A: ______. 1-3 Credits. U FP
An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study-abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies.

SPAN 371. Hispanic Language, Culture and Civilization III-B: ______. 1-3 Credits. U FP
A continuation of SPAN 370. An intensive orientation to the culture of Spanish-speaking countries. Also includes elements of grammar, conversation, and composition. Available only to study abroad participants. Will not count toward the Spanish major. May be repeated for credit if content varies.

SPAN 390. Interpretation of Hispanic Literature. 3 Credits. H
A study of selected works in literary theory that are pertinent to the field of Hispanism and of selected problems in literary interpretation and comparative literature methodology, designed to examine and apply systematically basic critical principles and approaches to the field of Hispanic literature. Discussion of these approaches is related to the previous study of literature and deepened through individual papers written by participants and presented to the group. Does not count toward the major in Spanish. Prerequisite: Completion of one junior-senior course in a language and literature department.

SPAN 424. Advanced Spanish Composition and Grammar. 3 Credits. H/W FP
Extensive practice in writing, with attention to vocabulary, grammar usage, and discourse structure. Thorough review of syntax and grammar. Conducted in Spanish. Concurrent enrollment in SPAN 428 is strongly recommended.
topics, authors, or themes in literary and cultural history. Readings may include selections from both Spain and the countries of Spanish America, but the Spanish American content will be significant and the course will count toward the Latin American literature requirement in the Spanish major. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 430 or consent of instructor. A grade of "C" or better in SPAN 430 is strongly recommended for students enrolling in this course.

SPAN 442. Advanced Spanish Conversation. 2 Credits. U FP
Emphasis on developing fluid expression of opinions, ideas, and points of view through discussion of selected texts and cultural materials. Two class meetings per week. Taught in Spanish. Concurrent enrollment in SPAN 424 is recommended. Prerequisite: SPAN 420 or consent of instructor. A grade of C or higher in SPAN 420 is strongly recommended for students enrolling in this course.

SPAN 429. Spanish Phonetics. 3 Credits. H/W FP
An analytical and practical study of contemporary Spanish phonetics. Prerequisite: SPAN 424 and SPAN 428, or consent of instructor.

SPAN 440. Topics in Transatlantic Hispanic Studies: ____. 3 Credits. H/W FP
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 430 or consent of instructor. A grade of "C" or better in SPAN 430 is strongly recommended for students enrolling in this course.

SPAN 441. Special Topics in Spanish Literature and Culture: ____. 1-3 Credits. H FP
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Spanish literature and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Spanish literature requirement. Prerequisite: SPAN 430 or consent of instructor. A grade of C or better in SPAN 430 is strongly recommended for students enrolling in this course.

SPAN 442. Special Topics Latin American Literature and Cultures: ____. 1-3 Credits. H FP
A topics course dedicated to the study of special historical moments, topics, authors, or themes in Latin American literary and cultural history. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. This course may be used to partially or fully fulfill 400-level peninsular Latin American literature requirement. Prerequisite: SPAN 430 or consent of instructor. A grade of C or better in SPAN 430 is strongly recommended for students enrolling in this course.

SPAN 443. Topics in Hispanic Studies - Peninsular Emphasis: ____. 3 Credits.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. Readings may include selections from both Spain and the countries of Spanish America but the peninsular content will be significant and the course will count toward the Peninsular literature requirement in the Spanish major. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 430 or consent of instructor. A grade of "C" or better in SPAN 430 is strongly recommended for students enrolling in this course.

SPAN 444. Topics in Hispanic Studies - Latin American Emphasis: ____. 3 Credits.
A topics course dedicated to the study of special historical moments, topics, authors, or themes in literary and cultural history. Readings may include selections from both Spain and the countries of Spanish America, but the Spanish American content will be significant and the course will count toward the Latin American literature requirement in the Spanish major. The course may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 430 or consent of instructor. A grade of "C" or better in SPAN 430 is strongly recommended for students enrolling in this course.
SPAN 453. Twentieth Century Spanish Studies: ______. 3 Credits. H FP
Reading and analysis of the literature and culture of Spain from 1900 to the present. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 460. Colonial Spanish-American Studies: ______. 3 Credits. H FP
Reading and analysis of Spanish-American literature and culture from the Conquest to Independence, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 461. Nineteenth Century Spanish-American Studies: ______. 3 Credits. H FP
Reading and analysis of Spanish-American literature and culture from Independence to 1900, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 462. Twentieth Century Spanish-American Studies: ______. 3 Credits. H FP
Reading and analysis of Spanish-American literature and culture from 1900 to the present, organized by topic. The course may cover multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 463. National Traditions in Spanish America: ______. 3 Credits. H FP
Reading and analysis of Spanish-American literature and cultural history from the perspective of a selected nation or nations. The course explores the role of literature and cultural expression in constructing the modern nation and local traditions. Readings may cover selections from multiple genres, authors, and periods. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of “C” or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 464. Reading and Analysis of U.S. Latino/a Literatures: ______. 3 Credits. H FP
The course covers multiple genres, authors, periods, regions, or topics. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 340 or consent of instructor. A grade of C or better in SPAN 340 is strongly recommended for students enrolling in this course.

SPAN 470. Studies in Spanish Culture and Civilization: ______. 1-3 Credits. H FP
A study of Spanish culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies.

SPAN 471. Studies in Spanish-American Culture and Civilization: ______. 1-3 Credits. H FP
A study of Spanish American national or regional culture with emphasis on one or more of the following aspects: history, politics, ethnology, anthropology, religious and secular traditions, issues of cultural identity, music, art, architecture, and popular culture. Available only to study-abroad participants. May be repeated for credit if content varies.

SPAN 474. Studies in Spanish Literature and Culture: ______. 1-3 Credits. H FP
A study of the literature and cultural production of a particular author, group of authors, period, genre, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies.

SPAN 475. Studies in Latin-American Literature and Culture: ______. 1-3 Credits. H FP
A study of the literature and cultural production of a particular author, group of authors, period, genre, country, region, or theme. Available only to study-abroad participants. May be repeated for credit if content varies.

SPAN 494. Special Readings in Spanish. 1-3 Credits. H/W FP
Directed reading in (a) fields not covered by student's course work, and/or (b) field of student's special interest approved by the department. Conferences. May be repeated for credit if content varies. Prerequisite: Twenty-five hours of Spanish.

SPAN 496. Honors in Spanish. 3 Credits. H/W FP
Honors seminar. May be repeated for credit. Required of all students working for a degree with honors in Spanish.

SPAN 500. Hispanic Literature in Translation: ______. 3 Credits. H A study of the literature in English translation of a particular author, period, genre, country, region, or theme. Discussion in English and frequent critical papers. All course readings and writing assignments are also in English. May be repeated for credit as the topic varies. Will not count toward the Spanish major. Prerequisite: Completion of one junior-senior level literature course in any language.

SPAN 501. Studies in Hispanic Literature: ______. 3 Credits. H A study of the literature of a particular author, period, genre, country, region, or theme. May be repeated for credit as the topic varies. May be taken for elective credit in the Spanish major. Will not count toward the Latin American literature requirement in the Spanish major. Prerequisite: SPAN 340, plus completion of one junior-senior level literature course in any language.

SPAN 520. Structure of Spanish. 3 Credits. H/W FP
A study of the Spanish language as it is spoken today, from perspectives of contemporary linguistics. Reading and analysis of recent publications in the field. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor.

SPAN 522. Advanced Studies in Spanish Language: ______. 3 Credits. H/W FP
Extensive language analysis and practice on one topic such as stylistics, translation, conversation/spoken discourse, or creative writing. Course conducted in Spanish and may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and SPAN 428, or consent of the instructor.

SPAN 540. Colloquium on Hispanic Studies: ______. 3 Credits. H FP
An advanced course dedicated to the critical study of special historical moments, topics, authors or themes in literary and cultural history. This course is designed to provide sophistication, focus, and analytical depth in literary and cultural study through exploration of secondary sources as well as theoretical material. Reading may include selections from both Spain and the countries of Spanish America and may cover multiple genres, authors, periods, or regions. Course conducted in Spanish and
may be repeated for credit as the topic varies. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses.

SPAN 550. Colloquium on Spanish Film. 3 Credits. H FP
A theoretical and historical exploration of Spanish cinema. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses.

SPAN 560. Colloquium on Latin American Film. 3 Credits. H FP
An overview of Latin American cinema from its origins to the present with particular attention to thematic concerns, such as cultural and national identity, and of literary discourse. Students will be expected to attend film screenings in addition to regular class meetings. Prerequisite: SPAN 424 and six hours of 400-level Spanish literature courses.

SPAN 570. Studies in Hispanic Linguistics: ____. 3 Credits. U FP
Theoretical and applied analysis of one or more of the following components of the Spanish language: phonology/phonetics, morphology, syntax, semantics, pragmatics. May be repeated for credit if content varies. Prerequisite: SPAN 424 and SPAN 428.

SPAN 681. Language Teaching for Oral Proficiency. 1 Credits. U FP
A summer course designed principally for secondary school language teachers. Provides an orientation to proficiency-based models in foreign language instruction, national standards in the rating of foreign language proficiency, and curriculum development sessions which address issues of articulation in foreign language curricula. (Not applicable toward a major or graduate degree in German.)

SPAN 722. Special Topics in Spanish Literature: ____. 2-3 Credits.
The content of this course will vary, and the course may be taken more than once with full credit, provided there is no duplication in the material studied. Prerequisite: A survey course in Spanish peninsular literature taught in Spanish.

SPAN 730. Topics in the Literature of 13th- and 14th-Century Iberia: ____. 3 Credits.
A theoretically informed study of representative works from 13th- and 14th-century Iberia. Course may be repeated for credit provided that the topic changes.

SPAN 733. Print Culture in Early Modern Spain. 3 Credits.
A study of the literature produced during the period of early printed books with emphasis on the diffusion of new literary forms during the late 15th- and early 16th-centuries.

SPAN 739. Topics in Early Modern Spanish Drama: ____. 3 Credits.
Selected plays of such authors as Lope de Vega, Tirso de Molina, Calderón, and María de Zayas. Course may be repeated for credit provided that the topic changes.

SPAN 745. Don Quixote. 3 Credits.
Linguistic and literary study. Examination of traditional interpretations. The life and thought of Cervantes. Theoretical readings.

SPAN 755. 19th Century Spanish Novel. 3 Credits.
The rise and development of realism. Prerequisite: A survey course in Spanish literature from the 18th century to the present.

SPAN 762. The Spanish Novel Since the Civil War. 3 Credits.
A study of the major works and movements occurring since the Spanish Civil War.

SPAN 764. Modern Spanish Poetry. 3 Credits.
Modern poetry of Spain, beginning with Becquer and ending with the "Generation of the 1920's." Close study of the works of the major poets; readings in poetic theory. Prerequisite: A general survey course of the literature of Spain of the 18th, 19th, and 20th centuries.

SPAN 770. Spanish-American Drama. 3 Credits.
Study of several exceptional plays of 20th century Spanish America in light of critical methodologies, national theatre movements, and performance aspects.

SPAN 772. The Modern Spanish-American Novel, 1900-1950. 3 Credits.
A study of selected novels in Spanish America from the 1900 to 1950. Topics may vary. Prerequisite: A survey course in Spanish American literature.

SPAN 774. Spanish-American Poetry. 3 Credits.
A study of the twentieth century poetic tradition in Spanish America, including major movements and a range of poets who represent the variety of writing in the genre until the 21st century.

SPAN 780. Introduction to Hispanic Studies. 3 Credits.
What does the field of Hispanic Studies encompass? How do we understand our roles as scholars, as teachers, and as members of our communities? How does the field of Hispanic Studies reflect and act upon the dialectics between our thoughts, our actions, our words, and our worlds? With specific attention to incoming graduate students, this course serves to show how Hispanic Studies is a venue to engage in transdisciplinary work and through a variety of methods and approaches. SPAN 780 invites students to reflect on their current career path, and on their role as beginning scholars in Hispanic Studies. The course combines theoretical texts with various forms of cultural expression -including the literary- providing incoming graduate students with a glimpse at the multiple directions and possibilities in the field. In addition, it exposes incoming students to resources available to them at KU, both in and outside the department. Prerequisite: Graduate student status in Spanish. Undergraduates in Spanish may be admitted with consent of instructor.

SPAN 781. Colonial Identities. 3 Credits.
This course centers on the dynamics of identity of Creoles, Amerindians, Blacks and members of the castes in colonial Spanish America. It concentrates on how members of these racial and ethnic groups relate to coloniality, space, place and gender.

SPAN 785. Special Topics in Spanish-American Literature: ____. 2-3 Credits.
The content of this course will vary, and the course may be taken more than once with full credit provided there is no duplication in the material covered. Prerequisite: A survey course in Spanish American literature.

SPAN 795. Literary Theory and Criticism. 3 Credits.
Systematic study of the development of theories of literature. Emphasis usually placed on twentieth century although scope may vary. Prerequisite: 700-level course in Spanish or concurrent enrollment.

SPAN 801. Teaching Spanish in Institutions of Higher Learning. 3 Credits.
Required of all teaching assistants who teach beginning Spanish at the University of Kansas for the first time. Instruction in classroom procedures for first year Spanish, demonstration of teaching techniques, and survey of current methodology.

SPAN 802. Colloquium in Methods of Teaching Spanish Language. 1-3 Credits.
Combines discussion of theoretical teaching concepts and development of pedagogical materials with practical solutions arising concurrently in Spanish languages courses.
Bachelor of Arts in Spanish

Why pursue a major in Spanish?

Spanish, the second most spoken language in the world with approximately 559 million speakers, is the official language in 21 countries. Moreover, according to the Instituto Cervantes, the United States ranks second behind Mexico in the number of Spanish speakers. Similarly, Portuguese, the official language in 9 nations, is spoken by approximately 210 million people over the world (the sixth most spoken language). Fluency in more than one language and an understanding of literary and cultural texts create educated citizens who can contribute to the betterment of our society.

A major in Spanish demonstrates to future employers and/or graduate schools that you have the ability to communicate effectively in Spanish, a high level of cultural competency, and carefully refined analytical and writing skills. Our curriculum is designed to help students hone their oral and written language skills and to learn more about Spanish, Spanish American, and Luso-Brazilian cultures through literary and cultural studies. (See the degree requirements section for the Portuguese courses that can be counted toward the Spanish major). This knowledge is highly beneficial if you plan a career path with an international component or with an orientation toward the predominantly Hispanic populations in the United States. The major is useful in such diverse careers as advertising, marketing, journalism, health services, government, social welfare, and public administration (to name only a few). See the University Career Center's page (https://career.ku.edu/foreign-languages-international-studies/) for foreign language and international studies careers for more information about careers in which you can use your Spanish major.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

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<td>or SPAN 32</td>
<td>Grammar and Composition</td>
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<td>Intermediate Spanish Conversation</td>
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<td>Students who meet the qualifications may substitute SPAN 325 for the SPAN 323 or 324 and SPAN 328, or SPAN 325. A grade of B- or higher is strongly recommended in order to go on to advanced-level Spanish classes.</td>
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### Requirements for the B.A. Major

**Spanish Major Core Knowledge and Skills**

Majors must complete at least 1 course (3 hours) in each of the following areas:

**Literature:** Peninsular Spanish Literary and Cultural Studies. Satisfied by 1 of the following:
- SPAN 440 Topics in Transatlantic Hispanic Studies: _____
- SPAN 441 Special Topics in Spanish Literature and Culture: _____
- SPAN 443 Topics in Hispanic Studies - Peninsular Emphasis: _____
- SPAN 450 Medieval Spanish Studies: _____
- SPAN 451 Early Modern Spanish Studies: _____
- SPAN 452 Nineteenth Century Spanish Studies: _____
- SPAN 453 Twentieth Century Spanish Studies: _____

**Language:** Advanced Spanish Composition and Grammar. Satisfied by 1 of the following:
- SPAN 428 Advanced Spanish Composition and Grammar: 3
- SPAN 429 Spanish Phonetics
- SPAN 448 Spanish Language and Culture for Business
- SPAN 520 Structure of Spanish
- SPAN 522 Advanced Studies in Spanish Language: _____
- SPAN 570 Studies in Hispanic Linguistics: _____

**Literature:** Latin American Literary and Cultural Studies. Satisfied by 1 of the following:
- SPAN 440 Topics in Transatlantic Hispanic Studies: _____
- SPAN 442 Special Topics Latin American Literature and Cultures: _____
- SPAN 444 Topics in Hispanic Studies - Latin American Emphasis: _____
- SPAN 460 Colonial Spanish-American Studies: _____
- SPAN 461 Nineteenth Century Spanish-American Studies: _____
- SPAN 462 Twentieth Century Spanish-American Studies: _____
- SPAN 463 National Traditions in Spanish America: _____
- SPAN 464 Reading and Analysis of U.S. Latino/a Literatures: _____

**Language:** Advanced language, linguistics, or Portuguese. Satisfied by 1 of the following:
- SPAN 520 Structure of Spanish
- SPAN 522 Advanced Studies in Spanish Language: _____
- SPAN 570 Studies in Hispanic Linguistics: _____
- PORT 212 Intermediate Brazilian Portuguese I
- PORT 216 Intermediate Brazilian Portuguese II
- PORT 220 Intensive Intermediate Brazilian Portuguese
- PORT 320 Introduction to Portuguese and Brazilian Literatures
- PORT 340 Textual Analysis and Critical Reading
- PORT 347 Brazilian Studies: _____

**Spanish Major Required Electives.** Majors must complete 2 additional courses (6 hours) from the following courses: any Spanish 400+ or 500-level course (literature, language or culture), or PORT 212 or higher (except PORT 300, PORT 346, and PORT 611).

- SPAN 428 Advanced Spanish Composition and Grammar: 2
- SPAN 429 Spanish Phonetics
- SPAN 448 Spanish Language and Culture for Business
- SPAN 520 Structure of Spanish
- SPAN 522 Advanced Studies in Spanish Language: _____
- SPAN 570 Studies in Hispanic Linguistics: _____
- PORT 212 Intermediate Brazilian Portuguese I
- PORT 216 Intermediate Brazilian Portuguese II
- PORT 220 Intensive Intermediate Brazilian Portuguese
- PORT 320 Introduction to Portuguese and Brazilian Literatures
- PORT 340 Textual Analysis and Critical Reading
- PORT 347 Brazilian Studies: _____

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 32 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BA in Spanish. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
<table>
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<tr>
<th>Freshman</th>
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<td>SPAN 111 (Goal 4.1 US Diversity, Major Pre-Requisite)</td>
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<td>SPAN 212 (Goal 4.2 Global Awareness, Major Pre-Requisite)</td>
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<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td>Quantitative Reasoning (QR)</td>
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<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
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<td>COMS 130 (Goal 2.2 Communication)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Total Hours 120</td>
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1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Initial SPAN placement determined by online Spanish placement module or previous SPAN college-credit. The Spanish department recommends that students with some prior Spanish experience begin with SPAN 111 or higher, by placement. Only students with no prior Spanish experience should begin in SPAN 104 and discussion with an advisor is recommended.

3. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

4. Spanish majors must have completed 6 credit hours of Hispanic Literature (SPAN 440 or above) coursework before taking the Spanish Capstone course.

5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

6. Advanced Language or Portuguese (Choose one): SPAN 520, SPAN 522, SPAN 570, PORT 212 or higher Portuguese language course.

7. Latin American Literature (Choose one): SPAN 440, SPAN 442, SPAN 460, SPAN 461, SPAN 462, SPAN 463

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Departmental Honors

Undergraduates contemplating honors work should consult their advisers. A declaration of intent form must be submitted to the department. The department notifies students of acceptance to candidacy. At graduation, the student must have a minimum grade-point average of 3.5 in Spanish. 6 hours in SPAN 496 Honors in Spanish generally are required, which may be fulfilled in a variety of ways as described here: each 3-hour SPAN 496 course will include a major research paper. While enrolled in SPAN 496, the student completes 2 courses, one in Peninsular literature and the other in Spanish American literature, from the following options:

1. Graduate courses at the 700 level;
2. Upper-division literature courses at the 500 level, including SPAN 540, SPAN 550, and SPAN 560 (only available to students who have already completed the 500-level capstone course);
3. An independent study course (may only be taken once for SPAN 496 credit).

The student attends 2 courses for SPAN 496 credit and writes 2 honors papers under the supervision of 1 or more faculty members. A committee of 3 faculty members evaluates these papers, and the student makes an oral summary of their content.

Study Abroad

The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina, Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica, Buenos Aires, Argentina, and Salamanca, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu/).

Graduate students have the opportunity to teach and conduct research during summer sessions in Buenos Aires, Argentina; or Barcelona, Spain. The department also has a graduate exchange agreement with the Universidade de Santiago de Compostela, Spain.

Minor in Brazilian Studies

Why pursue a minor in Brazilian Studies?

Portuguese is the official language of nine countries. It is one of the official languages of the European Union and it is also an official language in the Americas, Africa, and Asia. In 1958, it was declared one of the six critical languages by the National Defense Education Act. Within the U.S., it is spoken within the Portuguese, Brazilian, and Cape Verdean communities in states like Massachusetts, Rhode Island, New York, New Jersey, Connecticut, Pennsylvania, California, Florida, Georgia, Louisiana, Iowa, and Kansas.

Brazil is home to the Amazon Forest and River and is the most biodiverse country in the world. It is the fifth-largest country in the world by land area and sixth largest by population. It is also a multicultural and diverse country. Afro-Brazilians constitute the largest black population outside of Africa; the largest Japanese population outside of Japan also lives in Brazil. It has one of the world’s largest economies and the United States is its second trading partner.

A minor in Brazilian Studies is the ideal complement for those studying Portuguese and/or Spanish, as well as for anyone interested in Latin America from a professional or personal perspective. Our interdisciplinary minor will allow you to improve your Portuguese language skills and to learn about the culture, history, politics, and economy of Brazil, South America’s largest country.

See the University Career Center’s page (https://career.ku.edu/foreign-languages-international-studies/) for foreign language and international studies careers for more information about careers in which you can use your Brazilian Studies minor.

Requirements for the Brazilian Studies Minor

This program consists of 6 3-credit-hour courses (for a total of 18 credit hours) in which students pursue Brazilian studies beyond the 3 first semesters of basic language classes. In consultation with departmental advisors, students combine their course work in several academic areas, such as language, business, economics, film and media studies, geography, history, political science, and theatre.

Brazilian Studies Minor Course Requirements

Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>
| Prerequisite Knowledge

Satisfied by Intermediate Brazilian Portuguese I-PORT 212 or equivalent placement.

Requirements for the Minor

Satisfied by 3 courses from each of the following groups:

Group I: 9

| PORT 216 | Intermediate Brazilian Portuguese II                               | 3     |
| PORT 220 | Intensive Intermediate Brazilian Portuguese (Open only to students abroad) | 3     |
| PORT 300 | Brazilian Culture                                                  | 3     |
| PORT 320 | Introduction to Portuguese and Brazilian Literatures               | 3     |
| PORT 340 | Textual Analysis and Critical Reading                              | 3     |
| PORT 490 | Intensive Advanced Portuguese (Open only to students abroad)       | 3     |

Group II: 9

| HIST 579 | The History of Brazil                                              | 3     |
| PORT 347 | Brazilian Studies:                                                 | 3     |
| PORT 348 | Portuguese Language and Brazilian Culture for Business             | 3     |
| PORT 365 | Studies in Brazilian Film:                                         | 3     |
| PORT 394 | Special Readings in Brazilian Studies                              | 3     |
| PORT 471 | Studies in Brazilian Culture and Civilization:                    | 3     |
| PORT 475 | Studies in Brazilian Literature:                                  | 3     |
| PORT 565 | Studies in Brazilian Film:                                         | 3     |

Depending on their content, the following courses may substitute for required or elective courses by petition:

| ECON 582 | Economic Development                                              |       |
| HIST 580 | Economic History of Latin America (with at least 1/3 of focus on Brazil and a paper on Brazil) |       |
| POLS 659 | Political Dynamics of Latin America (with at least 1/3 of focus on Brazil and a paper on Brazil) |       |
Minor in Spanish

Why pursue a minor in Spanish?

The Spanish minor provides students the opportunity to achieve cultural and linguistic competency and complements many majors within the College of Liberal Arts & Sciences as well as other degree programs across the university.

Spanish, the second most spoken language in the world with approximately 559 million speakers, is the official language in 21 countries. Moreover, according to the Instituto Cervantes, the United States ranks second behind Mexico in the number of Spanish speakers. Fluency in more than one language and understanding culture and analytical understandings of literary and cultural texts create educated citizens who can contribute to the betterment of our society.

A minor in Spanish demonstrates to future employers and graduate schools that you have achieved a certain level of linguistic ability and understanding of Hispanic cultures. Our curriculum is designed to help students hone their oral and written language skills and to learn more about Spanish and Spanish American cultures through literary and cultural studies. This knowledge is highly beneficial if you plan a career path with an international component or with an orientation toward the predominantly Hispanic populations in the United States. The minor is useful in such diverse careers as advertising, marketing, journalism, health services, government, social welfare, and public administration (to name only a few). See the University Career Center’s page (https://career.ku.edu/foreign-languages-international-studies/) for foreign language and international studies careers for more information about careers in which you can use your Spanish minor.

Requirements for the Spanish Minor

The minor requires 18-20 hours, as well as prerequisite knowledge.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prerequisites</td>
<td></td>
</tr>
<tr>
<td>To advance to SPAN 340, it is strongly recommended that students earn a grade of B- or higher in either SPAN 325 or both SPAN 328 and either SPAN 323 or SPAN 324, or have departmental consent.</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Minor Requirements</td>
<td></td>
</tr>
<tr>
<td>Students must complete 18-20 hours of coursework, including the following required courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 101</td>
<td>Orientation Seminar in Spanish and Portuguese</td>
<td>1</td>
</tr>
<tr>
<td>SPAN 323</td>
<td>Spanish Composition and Cultural Analysis or SPAN 324</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 328</td>
<td>Intermediate Spanish Conversation</td>
<td>2</td>
</tr>
<tr>
<td>Students who meet the qualifications may substitute SPAN 325 for the SPAN 323 or SPAN 324 and SPAN 328 requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPAN 340</td>
<td>Textual Analysis and Critical Reading</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 346</td>
<td>Transatlantic Hispanic Cultures</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 424</td>
<td>Advanced Spanish Composition and Grammar</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 428</td>
<td>Advanced Spanish Conversation</td>
<td>2</td>
</tr>
<tr>
<td>A 3 hour, 400-level literature course (SPAN 440, 441, 442, 443, 444, 450, 451, 452, 460, 461, 462, 463, 464)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Minor Hours & GPA

While completing required courses, minors must also meet each of the following hour and grade point average minimum standards:

<table>
<thead>
<tr>
<th>Minor Hours</th>
<th>Satisfied by 18 hours of minor courses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor Hours in Residence</td>
<td>Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.</td>
</tr>
<tr>
<td>Minor Junior/Senior Hours</td>
<td>Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the minor.</td>
</tr>
<tr>
<td>Minor Graduation GPA</td>
<td>Satisfied by a minimum of 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (<a href="http://clas.ku.edu/undergrad/tools/gpa/">http://clas.ku.edu/undergrad/tools/gpa/</a>).</td>
</tr>
</tbody>
</table>

Study Abroad

The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina, Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica, Buenos Aires, Argentina, and Salamanca, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu/).
Graduate students have the opportunity to teach and conduct research during summer sessions in Buenos Aires, Argentina; or Barcelona, Spain. The department also has a graduate exchange agreement with the Universidade de Santiago de Compostela, Spain.

**Master of Arts in Spanish**

The master’s degree program provides students with the opportunity to study the major movements and writers in Iberia and Latin America, acquire the critical and theoretical tools necessary to engage literary and cultural analysis with sophistication, and develop communicative competence through pedagogical and scholarly formation.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission**

1. In addition to the general admission requirements (https://gradapply.ku.edu/apply/) from the Office of Graduate Studies, which includes holding (or anticipate completing by the time of admission) a B.A. or B.S. degree from an accredited U.S. college or university or the equivalent degree from a foreign university, the applicant must have 15 semester hours of literature courses at the survey level or above in Spanish or the equivalent of the undergraduate major in Spanish at KU.

2. The selection committee gives strong consideration to letters of recommendation, the breadth and depth of preparation, and Graduate Record Examination scores, if available. Deficiencies in preparation specified by the selection committee may be made up early in the graduate program, although the time required to complete the degree is correspondingly greater.

Submit your graduate application online (https://gradapply.ku.edu/apply/). Send all other requested application materials to the department:

The University of Kansas
Department of Spanish and Portuguese
Wescoe Hall
1445 Jayhawk Blvd., Room 2650
Lawrence, KS 66045

**M.A. Degree Requirements**

At least 50% of coursework for the master’s degree must be taken at the 700 level or above.

1. A minimum of 30 hours of graduate credit in literature, including one seminar in Peninsular literature or in Spanish-American literature.

2. A minimum of one course with a focus on each of the following:
   a. Medieval/Early Modern Peninsular
   b. Colonial Latin America (prior to 19th Century)
   c. Modern/Contemporary Peninsular (19th-21st Century)
   d. Modern/Contemporary Latin/o America

3. Students in the MA considering pursuing a Ph.D. should enroll in SPAN 795, or an alternative course with a focus in literary theory.

4. It is highly recommended that students take at least one course with a focus on film studies or cultural studies.

5. Two of the required 30 hours of coursework may be taken outside of the department with the approval of the graduate advisor.

6. SPAN 801: Teaching Spanish in Institutions of Higher Learning—required of all GTAs during their first semester of teaching.

7. Reading knowledge of another foreign language as approved by the department.

8. A portfolio defense or general examination based on the appropriate department reading lists, partly written and partly oral.

For additional information, please see our Graduate Handbook (https://spanport.ku.edu/academics/).

**Study Abroad**

The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina, Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica, Buenos Aires, Argentina, and Salamanca, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu/).

Graduate students have the opportunity to teach and conduct research during summer sessions in Buenos Aires, Argentina; or Barcelona, Spain. The department also has a graduate exchange agreement with the Universidade de Santiago de Compostela, Spain.

**Doctor of Philosophy in Spanish**

The Department of Spanish and Portuguese has developed a Ph.D. to address the needs of a new generation of doctoral students in the humanities. The program provides a rigorous and comprehensive education in the traditional disciplines of Iberian and Latin American literary studies, while also allowing for engagement with larger issues relating to the role of the humanities in the contemporary world. Students admitted to the doctoral program will have the opportunity to develop research interests under the guidance of diverse faculty and to acquire the skills to teach successfully at the University level.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Admission**

1. The applicant must hold (or anticipate completing by the time of admission) an M.A. or M.S. degree from an accredited U.S. college or university or the equivalent degree from a foreign university and must
meet the general admission requirements (https://gradapply.ku.edu/apply/) from the Office of Graduate Studies.

2. Strong consideration is given to letters of recommendation, breadth and depth of preparation, and Graduate Record Examination scores, if available.

Submit your application online (https://gradapply.ku.edu/). Send all other requested application materials to

The University of Kansas
Department of Spanish and Portuguese
Wescoe Hall
1445 Jayhawk Blvd., Room 2650
Lawrence, KS 66045-7594

Ph.D. Degree Requirements

The degree of Doctor of Philosophy is offered with emphasis on Spanish or Spanish-American literature.

Requirements

Once admitted, the aspirant must

1. Present a reading knowledge of 2 foreign languages, other than Spanish, appropriate to the specialization;
2. Complete all course work prescribed by the advisory committee (this course work is to include a minimum of 5 seminars, at least 4 at KU, one literary theory course, and a guideline of a minimum of 24 hours in Hispanic literatures at KU beyond the 30 hours required for the M.A. degree);
3. Present a minor in a field other than Spanish or Spanish-American literature. Minimum of one minor (9 credits), either through courses outside the department, or a minor in Lusophone Studies that includes courses in our department. Please see our Graduate Student Handbook (https://spanport.ku.edu/academics/) for more information;
4. Complete a minimum of 2 semesters of quarter-time teaching or 1 semester of half-time teaching in the Department of Spanish and Portuguese;
5. Research Skills and Responsible Scholarship Requirement. The university requires that every doctoral student have training in responsible scholarship and research skills pertinent to the field of research and appropriate to the doctoral level. This requirement must be met before taking the comprehensive oral exam. Please contact your advisor or the director of graduate studies for specific requirements.
6. Pass a comprehensive examination, partly written and partly oral; and
7. Write and defend a dissertation.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

See also the general requirements for the Doctor of Philosophy degree in Graduate Studies (p. 2408) section of the online catalog and in the KU Policy Library.

Study Abroad

The department offers summer programs in Barcelona, Spain; Buenos Aires, Argentina, Salvador (Bahia), Brazil. KU offers semester/academic year programs in San José, Costa Rica, Buenos Aires, Argentina, and Salamanca, Spain. More information is available from the Office of Study Abroad (http://www.studyabroad.ku.edu/).

Graduate students have the opportunity to teach and conduct research during summer sessions in Buenos Aires, Argentina; or Barcelona, Spain. The department also has a graduate exchange agreement with the Universidade de Santiago de Compostela, Spain.

Department of Speech-Language-Hearing: Sciences and Disorders

Why study speech, language, and hearing?

Because communication is central to human behavior, and the treatment of communication disorders requires specialized knowledge and skills.

Career Opportunities

An undergraduate degree in SPLH contributes to preparation for careers in a range of fields related to communication disorders including neuroscience, medicine and related health professions, education, and assistive technology. In addition, an undergraduate degree in speech-language hearing is an entry point for graduate study in speech-language pathology or audiology. Most states have laws mandating that speech-language pathologists and audiologists be licensed to practice their profession. The minimum requirement for licensure in most states is a master’s degree for speech-language pathology and the Au.D. for audiology. Speech-language pathologist and audiologists are in high demand with job growth expected to continue into the future. Individuals with bachelor degrees may work as an assistant to licensed professionals in settings such as schools and clinics, or may pursue employment in related fields.

Undergraduate Programs

Basic study in speech, language, and hearing is provided through B.A. and B.G.S. programs. Undergraduates study the basic processes of human communication. Programs are designed for the student who seeks a career related to speech, language, or hearing or to communication development and communication disorders. The majority of undergraduate courses are offered both fall and spring semester to maintain a smaller class size and facilitate timely graduation. Courses are taught using interactive and flexible formats that provide ample opportunity for hands-on experiential learning. There are numerous opportunities to engage in learning outside the classroom through faculty-mentored research projects, collaborative clinical experiences, and study abroad opportunities. Courses and experiences set the stage for a successful career in audiology, speech-language pathology, neuroscience, medicine and related health professions, education, and assistive technology.

Qualified KU undergraduates may earn both a B.A. in Speech-Language-Hearing: Sciences and Disorders and M.A. in Speech-Language Pathology in approximately 5 years through the Accelerated M.A. program (p. 1837).

Graduate Programs

Graduate study at KU is offered through the Intercampus Program in Communicative Disorders, which is a partnership between the Department of Speech-Language-Hearing on the Lawrence campus and the Department of Hearing and Speech on the medical center campus in
Kansas City. Degrees offered include a clinical doctorate in audiology, a master’s degree in speech-language pathology, a post-master’s clinical doctorate in speech-language pathology, and Ph.D. degrees in audiology and speech-language pathology. Students engage in classes, research, and clinical work in Lawrence and at KU Medical Center in Kansas City.

Students who are interested in enrolling in graduate level coursework in the Department of Speech-Language-Hearing without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. Admission is highly selective and non-degree seeking students must consult with an advisor on class selection prior to enrollment. See the Department’s website (http://www.kumc.edu/school-of-health-professions/hearing-and-speech.html) for further details.

Courses

**SPLH 161. Survey of Communication Disorders. 3 Credits. SI S**
Provides a general understanding of normal and deviant speech, language, and hearing in adults and children. This course considers the normal development of communication behavior, the nature of communication disorders, and the interaction of speech pathology and audiology with allied fields (e.g., education, medicine, psychology, special education).

**SPLH 177. First Year Seminar: ______. 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Speech-Language and Hearing. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**SPLH 220. The Physics of Speech. 4 Credits. N**
An introduction to the acoustic structure of speech intended for nonscience majors. Emphasis will be placed on the methods and standards by which scientists measure and evaluate the physical characteristics of speech. Topics will include: simple harmonic motion, the propagation of sound waves, aerodynamic aspects of vocal fold vibration, resonance, digital speech processing, frequency analysis, and speech synthesis. Three class hours and one laboratory per week. (Same as LING 120.) Prerequisite: MATH 101 or 104 or equivalent.

**SPLH 250. Study Abroad Topics in: ______. 1-5 Credits. S**
A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

**SPLH 418. Introduction to Cognitive Science. 3 Credits. S**
Examines the data and methodologies of the disciplines that comprise Cognitive Science, an inter-disciplinary approach to studying the mind and brain. Topics may include: consciousness, artificial intelligence, linguistics, education and instruction, neural networks, philosophy, psychology, anthropology, evolutionary theory, cognitive neuroscience, human-computer interaction, and robotics. (Same as LING 418, PHIL 418, and PSYC 418.) Prerequisite: Consent of instructor.

**SPLH 430. Communication in Autism. 3 Credits.**
This course will provide you with an introduction to the characteristics and communication of individuals with Autism Spectrum Disorder (ASD). This course will focus on diagnostic criteria, early identification, communication assessment and intervention considerations, and partnering with families who have family members with ASD. This course is offered at the 400 and 800 levels with additional assignments at the 800 level. Not open to students with credit in SPLH 830.

**SPLH 449. Laboratory/Field Work in Human Biology. 1-3 Credits. N**
This biological anthropology lab course builds upon concepts introduced in ANTH 150 and ANTH 304. It provides students with practical, hands-on experience in biological anthropology laboratory methods and theory. Topics include: genetics, osteology, forensic anthropology, modern human biological variation, primatology, paleoanthropology, and human evolution. Students integrate their knowledge of human variation, genetics, and critical approaches to the concept of social and biological race. For the final project, students analyze genetic markers using a commercialancestortest. They will either be given anonymous data to work with, or, if they pay an optional laboratory fee, they can investigate their own genome for the final project. This fee for self-study is not required for full participation in the final project. (Same as ANTH 449, BIOL 449, and PSYC 449.) Prerequisite: Either ANTH 304, ANTH 340, Human Biology major, or permission of instructor.

**SPLH 450. Study Abroad Topics in: ______. 1-5 Credits. S**
A course designed to enhance international experience in topic areas related to speech-language-hearing at the junior/senior level. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if the content differs. Prerequisite: Department permission.

**SPLH 451. Directed Study Abroad in Speech-Language-Hearing. 1-3 Credits. S**
An independent study designed to enhance international experience in topic areas related to speech-language-hearing. Investigation of special topic or project selected by the student with advice, approval, and supervision by a KU SPLH instructor and an authorized agent of the study abroad site. Experience must be arranged through the Office of KU Study Abroad. Such study may take the form of directed reading and/or directed research/clinical observation. A daily journal and final report is required. A maximum of six hours of credit may be counted, with no more than three in a single area of study. Prerequisite: Consent of instructor

**SPLH 452. Examining Global Perspectives in Speech-Language-Hearing: ______. 3 Credits.**
For students enrolled in an SPLH-sponsored Study Abroad program. Students participate in 12 hours of meetings in preparation for the Study Abroad experience. Pre-trip meetings focus generally on multi-cultural issues relevant to speech-language-hearing practice as well as specific cultural, linguistic, and service delivery issues for the target country. Students spend two weeks abroad, visiting sites to observe different types of service delivery for people with disabilities and places that are culturally and historically relevant. Periodic debriefing and small group discussions are conducted during the time abroad. A daily journal and post-visit reflection paper is required. Prerequisite: Instructor permission required.

**SPLH 462. Principles of Speech Science. 3 Credits. N**
Survey of the physiology of speech production, and the physics of sound. Emphasis upon methodologies in the laboratory study of normal speech. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120 or consent of instructor.

**SPLH 463. Principles of Hearing Science. 3 Credits. N**
This class discusses the concepts and principles relevant to normal hearing processing: anatomy, psychophysical methods, and basic subjective correlates of the auditory system. Prerequisite: SPLH 120, or concurrent enrollment in SPLH 120, or consent of instructor.

**SPLH 464. Undergraduate Seminar in: ______. 1-3 Credits. S**
Course organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion,
readings, and individual projects. (Distribution credit given for two-three hours only.)

**SPLH 465. Fundamentals of Clinical Phonetics. 1 Credits. S**
Introduction to classification of American English speech sounds based on articulatory phonetics. Practice in phonetic transcription and analysis of normal and abnormal speech. Laboratory exercises to give students hands-on experience with selected topics from lecture. Prerequisite: Corequisite: SPLH 120.

**SPLH 466. Language Science. 3 Credits. S**
Introduction to structure/function of human languages as it relates to language development and disorders; processes involved in the expression and reception of language and the methodologies employed to study these processes.

**SPLH 479. Mentored Research Experience. 2-8 Credits. S**
Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor’s guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially meets the requirements for Research Experience Certification. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Research Experience Coordinator.

**SPLH 498. Departmental Honors Research. 2-8 Credits. S**
Study may be directed toward either reading for integration of knowledge and insight in Speech-Language-Hearing, or original research in the field. Student creates a plan of activities at the beginning of each semester under the mentor’s guidance. Student and mentor review this plan at the end of each semester to evaluate progress. In the final semester of enrollment, student must complete a written report or a public oral presentation detailing the purpose, methods, results, and impact of the research. This final product partially fulfills the requirements for Departmental Honors. (Eight hours maximum credit, which may be distributed through 4 semesters. No student may enroll for less than two hours credit or more than 4 hours of credit in a given semester). Prerequisite: Consent of Departmental Honors Coordinator.

**SPLH 499. Directed Study in Speech-Language-Hearing. 1-3 Credits. S**
Investigation of special topic or project selected by the student with advice, approval, and supervision of an instructor. Such study may take the form of directed reading and/or directed research/clinical observation. Individual reports and conferences. (Distribution credit given for two-three hours only.) A maximum of six hours of credit may be counted, with not more than four in a single area of study.) Prerequisite: Consent of instructor.

**SPLH 516. Speech Perception. 2 Credits. S**
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. Prerequisite: SPLH 120 Physiology of Speech. Prerequisite or Corequisite: SPLH 463 Principle of Hearing Science.

**SPLH 565. Language Sample Analysis Lab. 1 Credits. S**
The study of the analysis of language produced by children with respect to its phonological, lexical, morphological, syntactic, and pragmatic characteristics. Prerequisite: Corequisite: SPLH 566.
reviews of research paper drafts. Prerequisite: 9 credits of SPLH course work; English 101 and ENGL 102 (or course meeting core skill in written communication); or consent of instructor.

SPLH 668. Introduction to Audiological Rehabilitation. 2 Credits.
Introduction to methods for treating hearing disorders in adults and children, as well as conditions that result in hearing loss. Course includes clinical observation and extensive hands-on experience with clinical techniques. This course should only be taken by graduate students in SPLH who have not completed this prerequisite. Not open to students with credit in SPLH 568. Prerequisite: Graduate standing.

SPLH 670. Beginning Clinical Practice in Audiology. 1-3 Credits.
Testing of hearing using pure tone air and bone conduction tests with both normal and hearing-impaired individuals. Prerequisite: SPLH 568, or concurrent enrollment in SPLH 568, overall GPA 3.0 and consent of instructor.

SPLH 672. Clinical Practice in Speech-Language Pathology. 3 Credits.
Clinical practice with children and adults. Group and individual conferences with staff required. Repeatable once for credit. Prerequisite: SPLH 571 and overall GPA of 3.0.

SPLH 716. Speech Perception. 2 Credits.
Acoustic and perceptual characteristics of phonemes, words, and connected speech for normal-hearing adults and infants; how speech perception is assessed clinically and is affected by hearing loss, aging, use of amplification, talker differences, and linguistic factors. (Same as AUD 816.)

SPLH 736. Foundations of Early Intervention. 3 Credits.
This course explores evidence-based principles and practices of providing early intervention services, including requirements of IDEA Part C, mission and key principles of early intervention and recommended practices and standards. Students will engage in guided field observations of assessment, intervention and collaborative practices, reflective practice and teaching/coaching activities. (Same as SPED 736.)

SPLH 737. Infants and Toddler with Significant Needs. 3 Credits.
This course explores the challenges infants and toddlers with significant developmental needs face and how to best support their participation in daily activities. Challenges faced by medical, physical, communication, social-emotional, hearing, vision, and mental health issues will be discussed along with how to support these needs across disciplines and in the home and community activities. This course will provide in-depth review of the unique challenges these children and families face and how providers from various backgrounds can work together to best support children and families. Environmental adaptations and direct instructional techniques to maximize independence tailored to the infant and toddler’s strengths and needs will be explored. Information is also provided on assistive technology designed to provide supports. Functional behavioral assessment procedures, proactive intervention strategies and psycho-educational approaches as well as the development of collaborative support plans will be studied. (Same as SPED 737.)

SPLH 752. Examining Global Perspectives in Speech-Language-Hearing: ______. 3 Credits.
For students enrolled in an SPLH-sponsored Study Abroad program. Students will participate in 12 hours of meetings in preparation for the Study Abroad experience. Pre-trip meetings will focus generally on multicultural issues relevant to speech-language-hearing practice as well as specific cultural, linguistic, and service delivery issues for the target country. Students may be required to facilitate discussions or prepare presentations for these meetings. Students will spend two weeks abroad, visiting sites to observe different types of service delivery for people with disabilities and places that are culturally and historically relevant. Students may partner with undergraduates to facilitate any clinically focused experiences. Periodic debriefing and small group discussions will be conducted during the time abroad. A daily journal and post-visit reflection paper will be required.

SPLH 764. Seminar in: ______. 1-3 Credits.
The subject matter of this seminar will be special topics from speech pathology and audiology. Special prerequisite may be established for a given topic.

SPLH 799. Proseminar in Child Language. 2 Credits.
A review and discussion of current issues in children's language acquisition. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. (Same as ABSC 797, CLDP 799, LING 799 and PSYC 799.)

SPLH 816. Language Development. 3 Credits.
Study of language acquisition in children, including the morphologic, syntactic, and semantic components. Methods of language measurement, the role of comprehension, and pragmatic aspects of language use will be included. Not open to students who have credit for SPLH 566. Laboratory by appointment.

SPLH 820. Developmental Phonological Disorders. 2 Credits.
Focuses on speech and non-speech characteristics of children with developmental phonological disorders. Emphasis placed on collection and phonetic transcription of speech samples, phonological analysis of transcribed data, and decision-making processes in assessment and intervention.

SPLH 822. Dysarthria/Apraxia. 2 Credits.
This course describes the neuroanatomic bases of motor-speech processes, the diagnosis, classification, assessment, prognosis, and treatment of dysarthria(s) and apraxia(s).

SPLH 824. Fluency Disorders. 2 Credits.
The nature of stuttering in children and adults is discussed. Theories regarding etiology, development, and maintenance of the disorder are presented. Emphasis is placed on various clinical approaches to assessment, measurement, and treatment.

SPLH 826. Phonatory Disorders. 2 Credits.
This course reviews the function of the laryngeal and respiratory mechanisms including the parameters and processes of phonation. Primary content addresses diagnosis, description, and treatment of organic and non-organic disorders of phonation.

SPLH 828. Speech Disorders in Special Populations. 2 Credits.
This course reviews anatomy and physiology of the velopharyngeal mechanism. Diagnosis and management of velopharyngeal dysfunction and associated problems considered. Anatomy, physiology, and rehabilitation associated with certain oral, pharyngeal, and laryngeal abnormalities discussed. Emphasis is on the speech problems of adults following medical management. Populations include individuals with laryngectomies, glossectomies, and tracheotomies.

SPLH 830. Communication in Autism. 3 Credits.
This course will provide an introduction to the characteristics and communication of individuals with Autism Spectrum Disorder (ASD). This course will focus on diagnostic criteria, early identification, communication assessment and intervention considerations, and partnering with families who have family members with ASD. This course is offered at the 400 and 800 levels with additional assignments at the 800 level. Not open to students with credit in SPLH 430.

SPLH 832. Dysphagia. 2 Credits.
This course covers normal and disordered swallowing. Evaluation and treatment of swallowing disorders, the dysphagia team, and dysphagia in special populations are considered.

**SPLH 833. Dysphagia Treatment in Adults. 2 Credits.**
This course is designed to build critical thinking and analysis skills for developing and implementing appropriate treatment plans for adults with dysphagia. Foundations of non-instrumental swallow assessment, rehabilitation, and compensation will be addressed. This course will also cover issues of ethics, cultural considerations in dysphagia management, and professional communication. Learning experiences will include evidence-based curriculum, hands-on practice, and critical thinking activities. Prerequisite: SPLH 832.

**SPLH 834. Augmentative and Alternative Communication and Literacy. 2 Credits.**
This course is designed to provide resources and information to prepare students to collaborate with others in increasing the literacy opportunities and skills of individuals with complex communication needs, particularly those who use augmentative and alternative communication.

**SPLH 838. Augmentative and Alternative Communication in Schools. 2 Credits.**
This course provides information about augmentative and alternative communication (AAC) services in school settings. Students will participate in readings and activities that will provide information concerning the roles, responsibilities, and contributions of school speech-language pathologists relative to AAC.

**SPLH 840. Language Disorders of Children: Infants and Toddlers. 2 Credits.**
This course examines factors relating to language disorders in the birth to three population. At-risk populations, as well as those with known etiologies, are considered. Information on assessment, intervention, and service delivery models is addressed. Issues relating to Public Law 99-457 are also examined.

**SPLH 842. Language Disorders of Children: Preschool. 2 Credits.**
This course examines language disorders of preschool-age children in the late preschool years. The course includes information on incidence, characteristics, assessment, and intervention. Theoretical issues and their implication for language intervention are also examined.

**SPLH 844. Language Disorders of Children: School Age. 2 Credits.**
This course examines language development during the school years and how problems in this development interact with school performance. Emphasis is placed on the role of the speech-language pathologist in the early identification, assessment, and remediation of language-learning problems.

**SPLH 846. Language Disorders of Adults. 2 Credits.**
Neurological aspects of language processes, classification of aphasia, and assessment of language deficits are discussed. Management approaches including intervention strategies and rehabilitation are also considered.

**SPLH 848. Language Disorders of Special Populations. 2 Credits.**
This course focuses on communication differences in individuals with intellectual disabilities, autism, cerebral palsy, dual sensory impairments, and other conditions affecting communication competence. Communication characteristics as well as assessment and intervention strategies are studied.

**SPLH 850. Cognitive-Linguistic Disorders of Adults. 2 Credits.**
This course will prepare students to work with adults with acquired cognitive-linguistic disorders, with a focus on: Alzheimer's Disease, Traumatic Brain Injury, and Right Hemisphere Disorder, including etiologies and disease processes. Theoretical and practical knowledge will be presented regarding the primary cognitive domains of attention, memory, and executive function, as well as their impact on discourse-level language. The course will cover neuroanatomy, assessment procedures, interventions, family/communication partner training, and psychosocial aspects of cognitive-linguistic disorders.

**SPLH 852. Augmentative and Alternative Communication. 2 Credits.**
This course describes augmentative and alternative communication (AAC) assessment and intervention issues as they apply to children and adults with both congenital and acquired speech and/or language disabilities. Areas of study include AAC systems, assessment strategies and procedures, intervention strategies, and AAC information resources.

**SPLH 853. Augmentative and Alternative Communication and Adult Acquired Disorders. 2 Credits.**
This course will discuss the concepts and evidence related to assessment and intervention in the area of augmentative and alternative communication for adults with acquired disorders. Content will be related specifically to adults with acquired communication disorders and focus more on high tech than low tech but information and evidence related to both will be presented. Information about AAC systems appropriate for adults, assessment protocols, approaches to intervention, and advocacy will be applied in a case-based format.

**SPLH 854. Reading Disorders. 2 Credits.**
This course addresses the perceptual, linguistic, and cognitive processes utilized in written communication. Acquired and developmental disorders of written language are examined in relation to issues concerning characteristics, etiology, early identification, assessment, and remediation.

**SPLH 860. Evaluation of Speech and Language. 2 Credits.**
Provides a general framework for speech and language evaluations. Issues related to initiation and termination of treatment are discussed. Practice is provided in evaluating norm- and criterion-referenced information used in diagnostic, referral, and treatment decisions.

**SPLH 861. Seminar in Research Methodology in Speech Pathology and Audiology: _____ 3 Credits.**
This seminar is concerned with the design, instrumentation, execution, and reporting of research in audiology and speech pathology. SPLH 760 or its equivalent and some statistics are recommended before entering this seminar.

**SPLH 862. Clinical Processes. 1 Credits.**
Orients student to clinical procedures, policies, requirements, and expectations of program. Therapy models, planning, and philosophies are discussed along with implementation and evaluation of therapy procedures. Professional issues are also considered. May be repeated for credit.

**SPLH 864. Advanced Clinical Practice in Speech-Language Pathology. 1-6 Credits.**
Students conduct supervised clinical work in a variety of settings. May be repeated for credit. Prerequisite: Department approval. Group and individual conferences with staff required.

**SPLH 866. Field Study in Speech-Language Pathology. 5-12 Credits.**
The field study provides work experiences in clinical and/or research activities. The student takes this course near the end of the degree.
SPLH 868. Professional Issues. 1 Credits.
Forum for the presentation and discussion of scientific and professional issues by faculty and advanced graduate students. May be repeated for credit. Prerequisite: Advisor’s consent.

SPLH 874. Master’s Research Practicum. 1-3 Credits.
This course is designed to give students experience in conducting research. Students apply and extend their knowledge and skills by participating in a research project under the supervision of a mentor. Students may assist with or independently conduct research in speech, language, or hearing. Prerequisite: SPLH 660 or equivalent research methods course.

SPLH 876. Independent Study in Problems of Speech, Language, and Hearing. 1-6 Credits.
Investigation of special topics by individual master’s level students. Paper required. Prerequisite: Consent of instructor.

SPLH 888. Multicultural Considerations in Speech-Language-Hearing I. 1 Credits.
This course introduces foundational concepts of culture and diversity, bilingualism, bias, and components and processes leading to cultural competency. Students explore health and educational disparities in the United States and beyond. Students will reflect on their cultural identity, and how their experiences and perspectives may differ from others, and how their experiences can influence service delivery in speech-language pathology and audiology. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level.

SPLH 889. Multicultural Considerations in Speech-Language-Hearing II. 1 Credits.
This course builds on foundational concepts from SPLH 888 by exploring potential cultural and linguistic characteristics of populations that are typically underrepresented in many sectors of the Unites States, including education and health care. Case studies are implemented to examine cultural and linguistic influences on assessment and treatment processes in speech-language pathology and audiology. This course is offered at the 500 and 800 levels, with additional assignments at the 800 level. Prerequisite: SPLH 888 or consent of instructor.

SPLH 899. Master’s Thesis. 1-6 Credits.
Thesis Hours. Graded on a satisfactory progress/limited progress/no progress basis.

SPLH 900. Proseminar in Communicative Disorders. 1 Credits.
A weekly forum for students and faculty to discuss professional issues and interdisciplinary research in communicative disorders and related fields. May be repeated for credit. Limited to two hours credit counted toward an MA or AuD degree. Limited to four hours credit counted toward the PhD degree. Graded on a satisfactory/unsatisfactory basis.

SPLH 964. Seminar in: ___. 1-3 Credits.
The subject matter of this seminar will be special topics from speech pathology and audiology, including those related to research methodology and research or academic careers. Special prerequisites may be established for a given topic.

SPLH 970. Independent Study in Problems of Speech and Hearing. 1-6 Credits.
Investigation of special topics by individual students. Paper required.

SPLH 974. Doctoral Research Practicum. 1-6 Credits.
Application of research methodology in a laboratory situation. Emphasis is on direct participation in designing and conducting an experimental investigation in speech or hearing.

SPLH 975. Directed Teaching: Speech Pathology and Audiology. 1-3 Credits.
Provides experiences in classroom and laboratory instruction under supervision of graduate faculty. Variable credit to reflect amount of instructional responsibility assumed. May be repeated up to a maximum of six semester hours.

SPLH 976. Independent Study in Grant Writing. 1-3 Credits.
Students will identify a funding agency appropriate for their research, learn the application procedures for that agency, and draft a grant application following the identified agency’s format. The faculty mentor will arrange for a review of the grant application following the agency’s review criteria and format. May be repeated up to a maximum of three credits.

SPLH 982. Issues in Scientific Conduct. 3 Credits.
Lectures and discussion on issues in the conduct of a scientific career, with emphasis on practical topics of special importance in behavioral science. Topics will include the academic and scientific roles of behavioral scientists, establishing a research lab, communicating research findings, tenure processes, gender equity, ethical conduct, and good scientific citizenship. Discussions will highlight important case studies. (Same as CLDP and PSYC 982.)

SPLH 998. Investigation and Conference (For Doctoral Candidates). 1-8 Credits.
(Limited to eight hours credit towards the Ph.D. degree.) Readings, critical thinking, and scientific writing in preparation for the oral comprehensive exam.

SPLH 999. Doctoral Dissertation. 1-12 Credits.
Dissertation Hours. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts and Bachelor of General Studies in Speech-Language-Hearing

Why study speech, language, and hearing?

Communication is central to human behavior, and the treatment of communication disorders requires specialized knowledge and skills.

Undergraduates in the Department of Speech-Language-Hearing: Sciences and Disorders study the basic processes of human communication. Programs are designed for the student who seeks a career in speech, language, or hearing or is interested in normal communication development and communication disorders.

Beginning with the undergraduate experience, you’ll find stimulating course work, clinical observation, and a variety of hands-on laboratory projects. To practice as a speech-language pathologist, you will need to earn a master’s degree. Plan to pursue doctoral studies if you want to practice audiology or do research in speech, language, and hearing processes and disorders.

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year
students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

Both the B.A. and the B.G.S. aspirant should fulfill the College general education requirements. Students also should complete SPLH 161, SPLH 220, SPLH 463 SPLH 465, SPLH 466, and elective courses in human physiology, psychology, and linguistics during their first 2 years. College Academic Advisors and Faculty members can help students select appropriate course work.

Requirements for the B.A. or B.G.S. Major

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<th>Code</th>
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<tr>
<td></td>
<td>Speech-Language-Hearing Prerequisite or Co-Requisite Requirements</td>
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<td>Majors must complete this requirement, however, these hours do not contribute to the minimum number of hours required for the major. Mathematics. Satisfied by one of the following:</td>
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<td>MATH 101 College Algebra: _____</td>
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<td>MATH 104 Precalculus Mathematics</td>
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<td>Or upper-level placement</td>
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<td>Statistics. An introductory statistics course (PSYC 210, MATH 365) is recommended.</td>
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<td>Speech-Language-Hearing Introductory Knowledge</td>
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<td>Majors must complete a course in the following areas (recommended within first and second year):</td>
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<td>Survey Communication Disorders. Satisfied by:</td>
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<td></td>
<td>SPLH 161 Survey of Communication Disorders</td>
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<td></td>
<td>The Physics of Speech. Satisfied by:</td>
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<td>SPLH 220 The Physics of Speech</td>
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<td></td>
<td>Speech-Language-Hearing Core Knowledge and Skills</td>
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<td></td>
<td>Principles of Speech Science. Satisfied by:</td>
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<td>SPLH 462 Principles of Speech Science</td>
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<td>Principles of Hearing Science. Satisfied by:</td>
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<td></td>
<td>SPLH 463 Principles of Hearing Science</td>
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<td></td>
<td>Fundamentals of Clinical Phonetics. Satisfied by:</td>
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<td>SPLH 465 Fundamentals of Clinical Phonetics</td>
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<td>Language Science. Satisfied by:</td>
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<td>SPLH 466 Language Science</td>
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<td>Language Sample Analysis Laboratory. Satisfied by:</td>
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<td>SPLH 565 Language Sample Analysis Lab</td>
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<td>Language Development. Satisfied by:</td>
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<td>SPLH 566 Language Development</td>
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<td>Introduction to Audiological Assessment &amp; Rehabilitation. Satisfied by:</td>
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<td>SPLH 568 Introduction to Audiological Assessment and Rehabilitation</td>
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<td></td>
<td>Introduction to Speech- Language Pathology. Satisfied by:</td>
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<td>SPLH 571 Introduction to Speech-Language Pathology</td>
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<td>The Communicating Brain: The Ultimate Personal Computer. Satisfied by:</td>
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<td>SPLH 620 The Communicating Brain: The Ultimate Personal Computer</td>
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<td>Research Methods in Speech-Language-Hearing. Satisfied by:</td>
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<td>Further Speech-Language-Hearing Study</td>
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<td>SPLH 450 Study Abroad Topics in: _____</td>
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<td>SPLH 451 Directed Study Abroad in Speech-Language-Hearing</td>
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<td>SPLH 452 Examining Global Perspectives in Speech-Language-Hearing: _____</td>
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<td>SPLH 497 Mentored Research Experience</td>
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<td>SPLH 498 Departmental Honors Research</td>
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<td>SPLH 499 Directed Study in Speech-Language-Hearing</td>
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<td>SPLH 516 Speech Perception</td>
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<td>SPLH 588 Multicultural Considerations in Speech-Language-Hearing I</td>
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<td>SPLH 589 Multicultural Considerations in Speech-Language-Hearing II</td>
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<td>After completing the requirements, students with grade-point averages of 3.0 or higher may enroll in any one of the following:</td>
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<td>SPLH 670 Beginning Clinical Practice in Audiology</td>
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<td></td>
<td>SPLH 672 Clinical Practice in Speech-Language Pathology</td>
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Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 35 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 28 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of
study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Please refer to the sample 4-year plan of the BA degree in Speech-Language-Hearing (p. 1832) for more information.

Please refer to the sample 4-year plan of the BGS degree in Speech-Language-Hearing (p. 1833) for more information.

**Departmental Honors**

The honors program offers exceptional undergraduates the opportunity to work closely with individual faculty members on scholarly projects over an extended period of time. Students are admitted to the program and matched with faculty through an application process that occurs each semester during course enrollment. Contact the Honors Coordinator for details. The following are required:

1. A grade-point average at graduation of at least 3.5 in the major.
2. Completion of 6 to 8 credit hours in SPLH 498 Departmental Honors Research. Students work under the direction of faculty members. Students may change areas of interest or faculty supervisors at the beginning of a semester with the consent of the honors coordinator. In the final semester of SPLH 498 enrollment, students also must complete a written report or public oral presentation detailing the purpose, methods, results, and impact of the research. Academic credit but no honors designation is given to students who meet the requirements for any semester but do not complete all requirements for departmental honors.

**BA in Speech-Language-Hearing**

Below is a sample 4-year plan for students pursuing the BA in Speech-Language-Hearing. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

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<tr>
<td>SPLH 161 (Goal 3 Social Science, Major Requirement)</td>
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<td>SPLH 220 (Major Requirement)</td>
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<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
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<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
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<td>MATH 101 (Goal 1.2 Quantitative Literacy)²</td>
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<td>BA Quantitative Reasoning (OR)⁹</td>
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<td>1st Semester Language (BA 2nd Language)</td>
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<td>2nd Semester Language (BA 2nd Language)</td>
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<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
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### Sophomore

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<tr>
<td>SPLH 462 (Major Requirement)</td>
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<td>SPLH 463 (Major Requirement SPRING ONLY)⁵</td>
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<td>SPLH 465 (Major Requirement)</td>
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<td>Goal 3 Natural Science⁹</td>
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<td>SPLH 466 (Major Requirement)</td>
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<td>Lab Science (BA Lab Requirement)⁹</td>
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### Junior

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<td>SPLH 566 (Major Requirement)</td>
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<td>Goal 4.1 US Diversity</td>
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<td>SPLH 565 (Major Requirement)</td>
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<td>Goal 5 Social Responsibility &amp; Ethics</td>
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<td>SPLH 571 (Major Requirement)</td>
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<td>Goal 3 Arts and Humanities</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁸</td>
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<td>2nd Area of Study/Elective/Degree/Junior-Senior Hours⁸</td>
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### Senior

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<td>SPLH 660 (Major Requirement)</td>
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<td>SPLH Recommended Elective, or elective⁶</td>
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<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>SPLH Recommended Elective, or elective⁶</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁸</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁸</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁸</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁸</td>
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</tr>
<tr>
<td></td>
<td>15</td>
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</tbody>
</table>

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. MATH 101 is the pre-requisite course for SPLH 220.
3. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
4. SPLH 463 is only offered in the spring.
5. SPLH 463 is a pre-requisite for SPLH 568.
6. Recommended electives for SPLH majors are SPLH 497/SPLH 498 (SPLH 498 requires major GPA 3.5 or higher and consent of honors coordinator); SPLH 670 and SPLH 672 (both require completion of major requirements and a 3.0 GPA or higher).
7 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

8 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

9 ASHA (American Speech-Language-Hearing Association) Recommendations: BIOL 100 recommended KU Core Goal 3N, BIOL 102 recommended for BA LFE, MATH 365 recommended for BA Quantitative Reasoning, SOC 104 recommended for KU Core 4.1, PSYC 104 recommended for an elective.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to pursue additional majors and/or minors.

### BGS in Speech-Language-Hearing

Below is a sample 4-year plan for students pursuing the BGS in Speech-Language-Hearing. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 161 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>SPLH 220 (Major Requirement)</td>
<td>4</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Literacy)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
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<td>3</td>
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</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 462 (Major Requirement)</td>
<td>3</td>
<td>SPLH 463 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 465 (Major Requirement)</td>
<td>1</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 466 (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3</td>
</tr>
</tbody>
</table>

### Goal 4.1 US Diversity

| Second Area of Study/ Elective/Degree/Junior-Senior Hours² | 3     |

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 620</td>
<td>3</td>
<td>SPLH 660 (Goal 6 Integration &amp; Creativity)</td>
<td>3</td>
</tr>
<tr>
<td>BGS Career Prep Course (BGSC)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours²</td>
<td>3</td>
<td>3</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours 120

1 MATH 101 is the pre-requisite for SPLH 220.

2 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

3 SPLH 463 is only offered in the spring.

4 SPLH 463 is the pre-requisite for SPLH 568.

5 Recommended electives for SPLH majors are SPLH 497/SPLH 498 (SPLH 498 requires major GPA 3.5 or higher and consent of honors coordinator); SPLH 670 and SPLH 672 (both require completion of major requirements and a 3.0 GPA or higher).

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Minor in Speech-Language-Hearing

Why study speech, language, and hearing?

Communication is central to human behavior. A minor in SPLH can be combined with a variety of majors to better prepare students to work in careers related to normal speech-language-hearing processing and development as well as careers that serve individuals with communication disorders. Typical related careers include neuroscience, medicine, health related professions, education, and assistive technology. Careful course selection can allow you to focus on a theme within SPLH that is well-suited to your career aspirations. Themes include: communication neuroscience, speech-language development and disorders, and hearing science and disorders. Alternatively, a student who wants to get to know the field better can sample a variety of courses to take a more generalist approach to the minor.

Requirements for the Minor: Communication Neuroscience Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 161</td>
<td>Survey of Communication Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 220</td>
<td>The Physics of Speech</td>
<td>4</td>
</tr>
<tr>
<td>SPLH 462</td>
<td>Principles of Speech Science</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 463</td>
<td>Principles of Hearing Science</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 466</td>
<td>Language Science</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 620</td>
<td>The Communicating Brain: The Ultimate Personal Computer</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

Requirements for the Minor: Speech-Language Development and Disorders Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 161</td>
<td>Survey of Communication Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 462</td>
<td>Principles of Speech Science</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 465</td>
<td>Fundamentals of Clinical Phonetics</td>
<td>1</td>
</tr>
<tr>
<td>SPLH 466</td>
<td>Language Science</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 565</td>
<td>Language Sample Analysis Lab</td>
<td>1</td>
</tr>
<tr>
<td>SPLH 566</td>
<td>Language Development</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 571</td>
<td>Introduction to Speech-Language Pathology</td>
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<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>18</strong></td>
</tr>
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</table>

Requirements for the Minor: Hearing Science and Disorders Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 161</td>
<td>Survey of Communication Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 220</td>
<td>The Physics of Speech</td>
<td>4</td>
</tr>
<tr>
<td>SPLH 463</td>
<td>Principles of Hearing Science</td>
<td>3</td>
</tr>
<tr>
<td>SPLH 516</td>
<td>Speech Perception</td>
<td>2</td>
</tr>
<tr>
<td>SPLH 568</td>
<td>Introduction to Audiological Assessment and Rehabilitation</td>
<td>4</td>
</tr>
<tr>
<td>SPLH 620</td>
<td>The Communicating Brain: The Ultimate Personal Computer</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

Requirements for the Minor: General Track

Students who would rather create their own area of focus may take SPLH 261 for a broad overview of the discipline. Students then select a minimum of 9 credits of foundational coursework followed by a minimum of 6 credits of applied coursework. Across foundational and applied coursework, students need to obtain a minimum of 12 credits at the junior/senior level. Total required hours = 18

Courses with clinical content can be taken as directed study with the permission and support of a faculty mentor.

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and grade-point average minimum standards:

Minor Hours in Residence

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

Minor Junior/Senior Hours

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Undergraduate Certificate in Learning and Communication in Children with Autism

This is an opportunity to gain formal recognition for completing courses and experiences specifically focused on learning and communication in children with autism. Students completing this certificate program will learn about communication development in children with Autism Spectrum Disorders (ASD) and learn about behavioral intervention strategies. It is designed to promote interest in undergraduates who may be considering careers such as education or becoming a therapist. An additional goal is to promote awareness of some of the communication challenges faced by individuals with ASD so that participants in the certificate program will become more informed citizens in our increasingly diverse world. Completion of the certificate will be noted on student’s transcripts.
Master of Arts in Speech-Language Pathology

The master's degree in speech-language pathology is designed to produce highly skilled clinicians seeking to enter the field and is typically completed in five full-time semesters (including a summer semester). The program length may vary, for example, for the student requiring prerequisites to be completed or one pursuing additional thesis or coursework. A master's degree from KU will, in most circumstances, satisfy the American Speech-Language-Hearing Association's certification standards for continuing on to the clinical fellowship year. A certificate of clinical competence in speech-language pathology is awarded upon completion of a successful clinical fellowship.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the M.A. Program

Prospective students are admitted to the M.A. program for the summer or fall semester. The deadline to submit applications is January 5th.

Eligibility criteria for admission to the M.A. program follow Graduate Studies' admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission in the program, a student must hold a bachelor's degree.

Ideally students will have completed an undergraduate degree in speech pathology or a related field. Individuals who have not completed prerequisite coursework may apply and be admitted on an exceptional basis if they have exceptionally strong academic credentials. For a full list of the prerequisite course work please see our prerequisite (http://splh.ku.edu/academics/degrees/pre-req/) page.


Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Requirements for the M.A. Degree with a Major in Speech-Language Pathology

Students with undergraduate degrees in other fields (e.g., psychology, linguistics) typically need to complete undergraduate prerequisite coursework in communication sciences and disorders before applying and/or being admitted to a graduate program in speech-language pathology or audiology.

Prerequisite Course Work for the MA SLP Graduate Program

- An acceptable bachelor's degree
- Coursework in speech-language-hearing must include the following: Physics of Speech; Principles of Speech Science; Principles of Hearing Science; Fundamentals of Clinical Phonetics; Language Analysis Lab; Language Development; Introduction to Audiological Assessment and Rehabilitation; Introduction to Speech-Language Pathology; Research Methods in Speech-Language-Hearing; Statistics.
- Additional requirements for ASHA Certification include coursework in biological sciences, physical sciences, and social/behavioral sciences. Courses in biological and physical sciences specifically related to communication sciences and disorders cannot be applied to this requirement.

Degree Requirements

The program requires 34 credit hours of experiences for breadth and an additional 12 to 16 hours for depth. All of these credit hours are at the 700-level or above, with the exception of the Advanced Elective hours. Advanced Electives can include any approved graduate courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>SPLH 888</td>
<td>Multicultural Considerations in Speech-Language-Hearing I</td>
<td>1</td>
</tr>
<tr>
<td>SPLH 889</td>
<td>Multicultural Considerations in Speech-Language-Hearing II</td>
<td>1</td>
</tr>
<tr>
<td>SPLH 860</td>
<td>Evaluation of Speech and Language</td>
<td>2</td>
</tr>
<tr>
<td>SPLH 862</td>
<td>Clinical Processes</td>
<td>2</td>
</tr>
</tbody>
</table>
Technical Standards

The master's degree in speech-language pathology signifies the holder will satisfy the academic and practicum requirements as stated by the American Speech-Language-Hearing Association to be eligible to continue on to the clinical fellowship year. It follows that graduates must have the knowledge and skills to practice in the area of speech-language pathology. Therefore, all individuals admitted to the University of Kansas Intercampus Program in Communicative Disorders must meet the following abilities and expectations with or without accommodation(s). KU is an AA/EQ/Title XI institution.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to one of the following offices:

Cynthia Ukoko  
Senior Coordinator for Academic Accommodations  
3901 Rainbow Boulevard, MS 4029  
Kansas City, KS 66160  
cukoko@kumc.edu  
913-588-7035; 711 TTY

Andrew Shoemaker  
Director  
Student Access Center  
1450 Jayhawk Blvd., Room 22  
Lawrence, KS 66045  
shoe@ku.edu  
785-864-4064; 711 TTY

The culminating activity in the preparation of a speech-language pathologist is clinical reasoning. Therefore, a candidate for the master's degree must be able to make correct observations and have the skills of measurement, calculation, reasoning, analysis, and synthesis.

All students admitted to the KU Intercampus Program in Communicative Disorders must be able to meet the following requirements and expectations with or without accommodation(s).

Observation/Sensory Motor

• Observe demonstrations and learn from experiences in the classroom, laboratory, and clinical situations.
• Carry out speech/language/hearing assessments and intervention strategies/techniques including the operation of complex, electronic instrumentation. Diagnosis, assessment, and intervention of speech/language/hearing problems typically necessitates the functional use of the senses of vision, hearing, and touch such as palpating certain areas of the patient's head and neck.
• Comprehend text, numbers, images and graphs.
• Observe and respond to subtle cues of patient's moods, temperament, and social behavior.

Physical/Psychomotor

• Perform actions requiring coordination of both gross and fine muscular movement, equilibrium and use of tactile, hearing, and visual senses.
• Respond quickly in clinic situations, not only for safety, but also therapeutically.
• Travel to numerous clinical sites for practical experience.
• Use an electronic keyboard to operate instruments and to calculate, record, evaluate, and transmit information.

Communication

• Be able to share and to elicit information from patients/clients, supervisor, peers and other health professionals verbally and in a recorded format.
• Effectively, confidently, and sensitively converse with patients and their families.
• Comprehend technical and professional materials.
• Prepare papers, produce reports, and complete documentation for patient records.
• Assimilate papers, produce reports, and complete documentation for patient records.
• Take paper, computer, and laboratory examinations and prepare scholarly papers.

Judgment

• Demonstrate judgment in the classroom, laboratory, and clinical situations that shows the intellect and emotional health necessary to make mature, sensitive, and effective decisions in the following areas:
  • relationships with professors, supervisors, peers, and patients/clients
  • professional and ethical behavior
  • effectiveness of diagnostic, assessment, and intervention strategies.
• Demonstrate an understanding of the rationale and justification for one's performance.
• Critically evaluate one’s own performance and be flexible toward change to promote professional and clinical process.
• Recognize and correct behaviors disruptive to classroom teaching, research, and patient care.
• Manage the use of time to complete clinical and academic assignments within realistic constraints.
• Recognize potentially hazardous materials, equipment, and situations and proceed in a manner to minimize risk of injury to those in the area.
• Make correct observations and have the problem solving skills necessary for measurement, calculation, reasoning, analysis, and synthesis.

**Accelerated Master of Arts in Speech-Language Pathology**

The accelerated master’s degree in speech-language pathology is designed to produce highly skilled clinicians seeking to enter the field. This program enables qualified students to earn a Bachelor’s degree in Speech-Language-Hearing: Sciences and Disorders and count 12 hours of 700-level or above course work in the major completed in Year 4 of study for both the Bachelor’s and M.A. Speech-Language Pathology degrees. The M.A. is completed in the fifth year or beyond.

An accelerated master’s degree from KU will, in most circumstances, satisfy the American Speech-Language-Hearing Association (http://www.asha.org/)’s certification standards for continuing on to the clinical fellowship year. A certificate of clinical competence in speech-language pathology is awarded upon completion of a successful clinical fellowship.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Careful course selection and steady progression through the undergraduate career is necessary to ensure all requirements for both degrees may be completed within the approximate 5-year time-frame. All prospective students should discuss their interest in admission to the Accelerated M.A. program (https://gradapply.ku.edu/apply/) and proceed in a manner to minimize risk of injury to those in the area. A certificate of clinical competence in speech-language pathology is awarded upon completion of a successful clinical fellowship.

Prospective students are eligible to apply to the graduate program in Spring semester (Jan 5th deadline) of their third year. The following program requirements must be met by this time:

- Major and cumulative GPA of at least 3.00;
- On track to complete all requirements for a BA or BGS degree in SPLH from KU by the end of the Spring semester of the fourth year;
- The following courses must be complete at the time of application: SPLH 161, SPLH 220, SPLH 462, SPLH 463, SPLH 465, SPLH 466, SPLH 568, SPLH 571


Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

**Accelerated M.A. Degree Progression Requirements**

Upon review of the Application for Admission, SPLH will notify the student of his or her eligibility to begin coursework in the program. Final acceptance to the graduate program will be contingent upon the following:

- Successful completion of all requirements for the bachelor’s degree;
- Grades of B- or above in all SPLH graduate-level coursework taken in Year 4;
- A cumulative GPA of 3.0 for all coursework completed in Years 1-4;
- A GPA of 3.0 for all graduate coursework completed in Year 4.

Please note that admission to the graduate program through the traditional process is highly competitive. Students applying to the Accelerated M.A. program will be reviewed with other students applying to the M.A. SLP program. Similar criteria will be used to select students for both programs. If a student is not admitted to the Accelerated M.A. program, they are encouraged to meet with their undergraduate advisor to discuss undergraduate activities to pursue in Year 4 to become more competitive and to re-apply to the M.A. SLP program through the traditional process in Year 4.

The course requirements for this accelerated program are fulfilled by a combination of graduate-level courses taken for both undergraduate and graduate credit in Year 4, and graduate credit courses taken in Year 5 (and beyond). Numerous graduate-level courses are regularly offered that fulfill distribution requirements for both the Bachelor’s and M.A. degrees.

The student must be approved to begin coursework toward the Accelerated M.A. program prior to enrolling in any 700 level or above courses that are to count for both undergraduate and graduate credit.

During the Senior Year (Year 4), the student must take the following SPLH courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPLH 860</td>
<td>Evaluation of Speech and Language</td>
<td></td>
</tr>
<tr>
<td>SPLH 862</td>
<td>Clinical Processes</td>
<td></td>
</tr>
<tr>
<td>SPLH 864</td>
<td>Advanced Clinical Practice in Speech-Language Pathology</td>
<td></td>
</tr>
</tbody>
</table>
SPLH 700+ level basic electives, as defined by the MA SLP handbook  6
SPLH 588 Multicultural Considerations in Speech-Language-Hearing I  1
SPLH 589 Multicultural Considerations in Speech-Language-Hearing II  1

These courses, taken in the fall and spring term of year 4, (11-12 credit hours) will count toward the master's degree and the 120 hour requirement for the undergraduate degree.

In addition to the 11-12 credit hours of graduate coursework taken during Year 4, students must complete an additional 34-39 credit hours of graduate study to obtain a total of 46-50 graduate credits. This will consist of an additional 22-23 credits in breadth and 12-16 in depth as defined by the MA SLP handbook (https://www.kumc.edu/school-of-health-professions/academics/departments/hearing-and-speech/academics/student-handbooks.html). All of these credit hours are at the 700-level or above, with the exception of 6 Advanced Elective hours. These 6 Advanced Electives can include any approved graduate courses. All requirements outlined in the MA SLP handbook must be met to confer the MA degree and be eligible for ASHA certification as a speech-language pathologist.

Comprehensive Examination

All candidates for the M.A. degree, including students enrolled in the Accelerated M.A. program, must maintain a portfolio of work, pass both formative and summative exams, and complete a research requirement (thesis or non-thesis option). Typically, the formative exam will occur in the summer between Year 4 and Year 5, and the summative exam will occur in the last semester of enrollment.

Progression Requirements

Given the accelerated nature of this program, each student’s progress will be closely monitored at various points during the program:

1. Upon approval to begin coursework toward the Accelerated M.A. track, the student must meet with their assigned SPLH faculty mentor to plan the final year of undergraduate study (Year 4). Performance in graduate coursework during Year 4 must meet the academic standing and student performance expectations outlined in the MA SLP handbook (https://www.kumc.edu/school-of-health-professions/academics/departments/hearing-and-speech/academics/student-handbooks.html) or the consequences detailed in the handbook will be enacted (e.g., remediation plan created).

2. In the final semester of undergraduate work and prior to being formally admitted, the student must meet with their assigned SPLH faculty mentor to review the student’s performance in SPLH courses. The student must earn a grade of “B-” or better in these courses and have a cumulative GPA of 3.0 to be eligible for admission to the master’s program. If these conditions are not met, then the following actions are possible:
   a. For grade(s) of C+ or C: Students may be admitted with monitoring by the Advising Committee;
   b. For grade(s) of C, D, F: Students may be admitted with monitoring by the Advising Committee and will need to re-take the course(s) because grades below C cannot count towards graduate requirements;
   c. For students that fail to meet progression criteria in year four, the program may deny formal admission to the graduate program.

3. During Year 5 (and beyond), performance must meet the academic standing and student performance expectations outlined in the MA SLP handbook (https://www.kumc.edu/school-of-health-professions/academics/departments/hearing-and-speech/academics/student-handbooks.html) or the consequences detailed in the handbook will be enacted (e.g., remediation plan created).

4. If the baccalaureate degree is not completed at the end of Year 4, the student will not be permitted to enroll in courses for graduate credit toward the master’s degree until the baccalaureate degree has been conferred.

5. Students should complete all requirements for the Accelerated M.A. within 1-1.5 years of receiving the bachelor’s degree. If unforeseen circumstances prevent the timely completion of the master’s degree, the student must consult with their graduate advisor to develop an alternative plan for completion.

Accelerated M.A. Sample Academic Plan.

Please consult with an advisor for an individual program plan. Students will apply to the Accelerated M.A. program during the spring semester (Jan 5th deadline) of their third year. Students complete their undergraduate degree at the end of the spring term in Year 4. If progression criteria is met, students will be admitted and begin their graduate coursework in the summer following undergraduate degree conferral. Please see the admissions tab of the catalog for further details.
SPLH 466 3 SPLH 571 4
Goal 3 Social Science (PSYC 104 or SOC 104 recommended) 3 Goal 3 Arts and Humanities 3

16 17

Year 3
Fall Hours Spring Hours
SPLH 568 4 Goal 5 Social Responsibility & Ethics 3
Goal 4.1-U.S. Diversity 3 Goal 4.2 Global Awareness 3
SPLH 620 3 SPLH 660 3
SPLH 672 3 Goal 3 Natural Science (BIOL 100 recommended) 3
SPLH Research 3 BA Laboratory/Field Experience (LFE) 1
SPLH Elective (SPLH Research or SPLH 670 or SPLH 672 recommended) 3

16 16

Year 4
Fall Hours Spring Hours Summer Hours
MA Basic Elective-1 2 MA Basic Elective-3 2 SPLH 864 1
SPLH 860 2 SPLH 864 3 MA Basic Elective-4 2
SPLH 588 1 SPLH 589 1
Statistics 3 SPLH 862 1
Second Area of Study/Elective/Degree/Junior-Senior Hours 3 Second Area of Study/Elective/Degree/Junior-Senior Hours 3
MA Basic Elective 2

13 10 3

Year 5
Fall Hours Spring Hours Summer Hours
SPLH 862 1 SPLH 866 5 SPLH 864 1
SPLH 864 3 MA Advanced Elective-1 2 Research 3
MA Basic Elective-5 2 MA Advanced Elective-2 2
MA Basic Elective-6 2 MA Advanced Elective-3 2
MA Basic Elective-7 2 SPLH 868 1

15 14-15

The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

4 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Accelerated M.A. Sample Academic Plan.

Please consult with an advisor for an individual program plan. Students will apply to the Accelerated M.A. program during the spring semester (Jan 5th deadline) of their third year. Students complete their undergraduate degree at the end of the spring term in Year 4. If progression criteria is met, students will be admitted and begin their graduate coursework in the summer following undergraduate degree conferral. Please see the admissions tab of the catalog for further details.
### Doctor of Audiology

The Doctor of Audiology (Au.D.) degree is intended to produce audiologists for clinical practice and is designed to be completed in four years (including summers).

This program has been planned to meet the academic and clinical requirements of the American Speech-Language-Hearing Association (ASHA). The ASHA Council on Academic Accreditation in Audiology and Speech-Language Pathology accredits this program.

A combined Au.D./Ph.D. track also is available. This track facilitates the completion of both degrees in a 6-year post-baccalaureate period. Students who wish to earn both Au.D. and Ph.D. degrees should contact an advisor.

### Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

A bachelor's degree is required. It is expected students will have obtained a broad general education to serve as a background prior to graduate study. Undergraduate course work in mathematics and in basic and applied sciences is strongly encouraged.

If the bachelor's degree is not in the area of audiology or communication sciences and disorders, applicants should have 12 hours of basic sciences and mathematics in addition to courses in the following content areas (or their equivalents):

- Physics of Speech
- Principles of Speech Science

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### Doctor of Audiology

| Goal 2.2 Communication | SPLH 463 | 3 |
| SPLH 462 | 3 SPLH 566 | 3 |
| SPLH 465 | 1 SPLH 565 | 1 |
| SPLH 466 | 3 SPLH 571 | 4 |
| Goal 3 Social Science (PSYC 104 or SOC 104 recommended) | 3 Goal 3 Arts and Humanities | 3 |

#### Year 3

<table>
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<tr>
<th>Fall</th>
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<th>Spring</th>
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<tr>
<td>SPLH 568</td>
<td>4 Goal 5 Social Responsibility &amp; Ethics</td>
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<td>3 Goal 4.2 Global Awareness</td>
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<tr>
<td>SPLH 620</td>
<td>3 SPLH 660</td>
<td>3</td>
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<tr>
<td>SPLH 300+ Elective</td>
<td>3 Goal 3 Natural Science (BIOL 100 recommended)</td>
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<tr>
<td>SPLH Elective (SPLH Research or SPLH 670 or SPLH 672 recommended)</td>
<td>3 BA Laboratory/Field Experience (LFE) (BIOL 102 recommended)</td>
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<tr>
<td>SPLH Elective (SPLH Research or SPLH 670 or SPLH 672 recommended)</td>
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#### Year 4

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<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tr>
<td>MA Basic Elective-1</td>
<td>2 MA Basic Elective-3</td>
<td>2 SPLH 864</td>
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<tr>
<td>SPLH 860</td>
<td>2 SPLH 864</td>
<td>3 MA Basic Elective-4</td>
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<tr>
<td>SPLH 588</td>
<td>1 SPLH 589</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>3 SPLH 862</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
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<td></td>
<td></td>
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<tr>
<td>MA Basic Elective</td>
<td>2 Second Area of Study/Elective/Degree/Junior-Senior Hours¹</td>
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#### Year 5

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
<tr>
<td>SPLH 862</td>
<td>1 SPLH 866</td>
<td>5 SPLH 864</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

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| Goal 3 Arts and Humanities | SPLH 462 | 3 |
| SPLH 566 | 3 |
| SPLH 565 | 1 |
| SPLH 465 | 1 |
| SPLH 571 | 4 |
| SPLH 466 | 3 |
| SPLH 571 | 4 |
| SPLH 565 | 1 |
| SPLH 466 | 3 |
| SPLH 571 | 4 |

#### Total Hours 152-153

Doctor of Audiology
• Principles of Hearing Science
• Language Development
• Intro to Aud Assessment and Rehab
• Intro to Speech-Language Pathology

Background Check
The Joint Commission requires all incoming students to obtain a background check (p. 2415). This one-time fee must be paid directly to the company performing the background investigation and the report provided to KU after acceptance into the program. For more information, please see the School of Health Professions background check instructions. (http://www.kumc.edu/school-of-health-professions/background-checks-and-drug-screening-for-students.html) A drug screening may be required prior to work in clinical settings.

International Students:
An applicant is considered an international student if he or she requires a visa, or currently resides in the U.S. with non-immigrant status, or currently resides in the U.S. while applying for permanent residency. Additional requirements and documentation, such as proof of English language proficiency, are required for international students to become eligible for KU programs. Please review the information for international students (http://www.kumc.edu/school-of-health-professions/information-for-international-applicants.html) before applying.

All students, both domestic and foreign, must meet minimum English proficiency (p. 2414) requirements.

For more information or to contact the program, please visit the IPCD website (http://hearing.kumc.edu).

The Au.D. program prepares students to meet the academic and clinical requirements for the ASHA Certificate of Clinical Competence. The degree is designed to be completed in 4 years (including summers, with a common entry point in fall semester). A minimum of 98 credit hours including academic course work, independent research, and clinical practicum is required.

Specific guidelines for certification are contained in the ASHA Certification and Membership Handbook, available on the ASHA website http://www.asha.org/.

Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AUD 810</td>
<td>Diagnostic Audiology</td>
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<tr>
<td>AUD 811</td>
<td>Hearing Disorders</td>
<td>3</td>
</tr>
<tr>
<td>AUD 813</td>
<td>Psychoacoustics and Theories of Hearing</td>
<td>3</td>
</tr>
<tr>
<td>AUD 814</td>
<td>Hearing Conservation</td>
<td>1</td>
</tr>
<tr>
<td>AUD 816</td>
<td>Speech Perception</td>
<td>2</td>
</tr>
<tr>
<td>AUD 817</td>
<td>Pediatric Audiology</td>
<td>3</td>
</tr>
<tr>
<td>AUD 818</td>
<td>Vestibular Systems and Disorders</td>
<td>3</td>
</tr>
<tr>
<td>AUD 819</td>
<td>Hearing Aids I</td>
<td>3</td>
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<tr>
<td>AUD 820</td>
<td>Rehabilitative Audiology and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>AUD 821</td>
<td>Hearing Aids II</td>
<td>3</td>
</tr>
<tr>
<td>AUD 822</td>
<td>Electro-Acoustics and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>AUD 823</td>
<td>Cochlear Implants and Hearing Assistance</td>
<td>2</td>
</tr>
<tr>
<td>AUD 824</td>
<td>Central Auditory Processing</td>
<td>2</td>
</tr>
<tr>
<td>AUD 826</td>
<td>Tinnitus Management</td>
<td>2</td>
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<tr>
<td>AUD 828</td>
<td>Genetics and Hearing Loss</td>
<td>2</td>
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<tr>
<td>AUD 829</td>
<td>Anatomy and Physiology of the Hearing and Vestibular Mechanisms</td>
<td>3</td>
</tr>
<tr>
<td>AUD 846</td>
<td>Independent Study in Problems in Audiology</td>
<td>2</td>
</tr>
<tr>
<td>AUD 851</td>
<td>Auditory Evoked Potentials</td>
<td>3</td>
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<tr>
<td>AUD 853</td>
<td>Pharmacology for Audiology</td>
<td>2</td>
</tr>
<tr>
<td>AUD 858</td>
<td>Business Audiology</td>
<td>2</td>
</tr>
<tr>
<td>AUD 940</td>
<td>Seminar in Audiology: _____</td>
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<tr>
<td>AUD 941</td>
<td>Grand Rounds in Audiology (taken years 1 &amp; 2 for a total of 4 credits)</td>
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</tr>
<tr>
<td>AUD 942</td>
<td>Investigation and Conference</td>
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</tr>
<tr>
<td>AUD 946</td>
<td>Advanced Grand Rounds in Audiology (taken years 3 &amp; 4 for a total of 4 credits)</td>
<td>4</td>
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<tr>
<td>PTRS 828</td>
<td>Medical Imaging</td>
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<tr>
<td>SPLH 888</td>
<td>Multicultural Considerations in Speech-Language-Hearing I</td>
<td>1</td>
</tr>
<tr>
<td>SPLH 889</td>
<td>Multicultural Considerations in Speech-Language-Hearing II</td>
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</table>

Clinical Experiences

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>AUD 842</td>
<td>Interprofessional Education for Audiologists</td>
<td>1</td>
</tr>
<tr>
<td>AUD 843</td>
<td>Clinical Practice in Audiology (taken years 1 &amp; 2, minimum of 4 credits)</td>
<td>4</td>
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<tr>
<td>AUD 944</td>
<td>Clinical Rotation (taken year 3, minimum of 5 credit hours)</td>
<td>5</td>
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<tr>
<td>AUD 945</td>
<td>Clinical Externship (taken year 4, minimum of 13 credits)</td>
<td>13</td>
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</table>

Other

| Statistics | determined in consultation with academic advisor | 3     |
| Electives | determined in consultation with academic advisor | 6     |

| GSMC 501 | Foundations of Interprofessional Collaboration I: Introduction to Interprofessional Collaboration | 0     |
| GSMC 502 | Foundations of Interprofessional Collaboration II: Application Interprofessional Collaboration | 0     |

Total Hours 98

Other Requirements:
• Pass comprehensive exam taken in year 2
• Completion of 1 of 2 research project options through enrollment in AUD 846

Degree requirements and course descriptions are subject to change. See student handbook for additional program information. In most cases, use the catalog of the year student entered the program. Other years' catalogs are:

For more information or to contact the program, please visit the IPCD website.

Example Plan of Study

Year 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
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<td>AUD 810</td>
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<td>3 AUD 821</td>
<td></td>
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<td>2</td>
</tr>
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<td>AUD 829</td>
<td>3 AUD 843</td>
<td>1 AUD 858</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>AUD 941</td>
<td>1 AUD 851</td>
<td>3 AUD 942</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
The culminating activity in the preparation of an audiologist is clinical reasoning. Therefore, a candidate for the Au.D. degree must be able to make correct observations and have the skills of measurement, calculation, reasoning, analysis, and synthesis.

All students admitted to the KU Intercampus Program in Communicative Disorders must be able to meet the following requirements and expectations with or without accommodation(s).

### Observation/Sensory Motor
- Observe demonstrations and learn from experiences in the classroom, laboratory, and clinical situations.
- Carry out speech/language/hearing assessments and intervention strategies/techniques including the operation of complex, electronic instrumentation. Diagnosis, assessment, and intervention of speech/language/hearing problems typically involves the functional use of the senses in order to palpate certain areas of the patients' head and neck.
- Interpret and comprehend text, numbers, and graphs displayed in print and video.
- Observe and respond to subtle cues of patient's moods, temperament, and social behavior.

### Physical/Psychomotor
- Perform actions requiring coordination of both gross and fine muscular movement, equilibrium and use of the senses.
- Respond quickly in clinic situations, not only for safety, but also therapeutically.
- Travel to numerous clinical sites for practical experience.
- Use an electronic keyboard to operate instruments and to calculate, record, evaluate, and transmit information.

### Communication
- Be able to share and to elicit information from patients/clients, supervisor, peers and other health professionals verbally and in a recorded format.
- Effectively, confidently, and sensitively converse with patients and their families.
- Interpret and comprehend technical and professional materials.
- Prepare papers, produce reports, and complete documentation for patient records.
• Assimilate information from written sources (texts, journals, medical/school records).
• Take paper, computer, and laboratory examinations and prepare scholarly papers.

Judgment
• Demonstrate judgment in the classroom, laboratory, and clinic situations that shows the intellect and emotional health necessary to make mature, sensitive, and effective decisions in the following areas:
  • Relationships with professors, supervisors, peers, and patients/clients
  • Professional and ethical behavior
  • Effectiveness of diagnostic, assessment, and intervention strategies.
• Demonstrate an understanding of the rationale and justification for one’s performance.
• Critically evaluate one’s own performance and be flexible toward change to promote professional and clinical process.
• Recognize and correct behaviors disruptive to classroom teaching, research, and patient care.
• Manage the use of time to complete clinical and academic assignments within realistic constraints.
• Recognize potentially hazardous materials, equipment, and situations and proceed in a manner to minimize risk of injury to those in the area.
• Make correct observations and have the problem solving skills necessary for measurement, calculation, reasoning, analysis, and synthesis.

Doctor of Philosophy in Speech-Language Pathology or Audiology

The Intercampus Program in Communicative Disorders offers Ph.D. programs in both speech-language pathology and in audiology for post-baccalaureate study of normal and disordered aspects of communication. These programs are designed to prepare suitably qualified individuals for leadership positions in research and academia. A major focus of these programs is to advance the science of these fields, and to elucidate the scientific basis for the procedures and processes used in clinical practice.

Students may pursue the Ph.D. in conjunction with entry-level clinical graduate degrees. As a result, the program offers both a combined M.A./Ph.D. and a combined Au.D./Ph.D. track. These tracks facilitate the completion of both degrees (the clinical graduate degree and the Ph.D.) in approximately a 6-year post-baccalaureate period. Students interested in the M.A./Ph.D track are encouraged to contact the program for information about the application process. Students who wish to earn both Au.D. and Ph.D. degrees should contact their advisor.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student.

Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Ph.D. Program

Although applications may be submitted at any time, January 5th is the deadline for priority status, as it aligns with funding and scholarship availability.

Eligibility criteria for admission to the Ph.D. program follow Graduate Studies’ admission policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission to graduate status in the program, a student must hold a bachelor’s degree.

Because PhD students pursue an individualized plan of study, a faculty mentor is a critical requirement of the program. Potential applicants should investigate faculty mentor possibilities by (1) reviewing faculty bios and laboratory information (http://ipcd.kumc.edu/), and (2) reading recent research articles written by KU faculty. Applicants are strongly encouraged to contact faculty who may be a good match to their interests prior to applying.


All students are expected to have strong command of the English Language. Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Upon admission, the student and his or her adviser choose a doctoral advisory committee. The committee is responsible for guiding the student’s progress through the selected program of study.

Incoming students who have not completed a substantive graduate research project (e.g., a master’s thesis, Au.D. research project, etc.) must initiate a thesis-equivalent research project, under the direction of a three-member committee, during the first year of enrollment. This project must be completed before the comprehensive oral examination.

Doctor of Philosophy in Speech-Language Pathology

Acquiring a doctorate in speech-language pathology at a minimum requires the following:

• Completion of academic coursework
  A minimum of 24 graduate hours in a major area of interest
  A minimum of 12 graduate hours in a correlative area
  A minimum of 15 graduate hours in research skills/responsible scholarship
Doctor of Philosophy in Audiology

Acquiring a doctorate in audiology at a minimum requires the following:

- Completion of academic coursework
  - A minimum of 24 graduate hours in a major area of interest
  - A minimum of 12 graduate hours in a correlative area
  - A minimum of 15 graduate hours in research skills/responsible scholarship
- Completion of a preliminary research experience
- Satisfactory performance on annual reviews
- Satisfactory performance on written and oral comprehensive examinations
- Satisfactory completion of a dissertation including written and oral prospectus, and written dissertation and oral defense of the dissertation
- Submission of the dissertation to the KU Office of Graduate Studies

Note that the above are the MINIMUM requirements. Each student's plan of study will vary depending on entry skills (i.e., relevant knowledge and skills acquired through prior training, work or research experience), chosen specialization, and career aspirations.

Students in this program must meet the general requirements of the university including the research skills and responsible scholarship requirement (http://policy.ku.edu/graduate-studies/research-skills-responsible-scholarship/) and fulfill the basic program requirements to receive the Ph.D. degree.

Technical Standards

The Ph.D. degrees in audiology and speech-language pathology signifies that the holder is ready to engage in a research career. Therefore, all individuals admitted to the University of Kansas Intercampus Program in Communicative Disorders must meet the following abilities and expectations with or without accommodation(s). KU is an AA/EO/Title XI institution.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose a disability are considered for the program if otherwise qualified. Qualified students with a disability who wish to request accommodations should provide appropriate documentation of disability and submit a request for accommodation to one of the following offices:

Cynthia Ukoko
Senior Coordinator for Academic Accommodations
3901 Rainbow Boulevard, MS 4029
Kansas City, KS 66160
cukoko@kumc.edu
913-588-7035; 711 TTY

Andrew Shoemaker
Director
Student Access Center
1450 Jayhawk Blvd., Room 22
Lawrence, KS 66045
shoe@ku.edu
785-864-4064; 711 TTY

The culminating activity in the preparation of a researcher is the ability to formulate, conduct and disseminate research. In the academic arena, teaching skills usually also are required. Therefore, a candidate for the Ph.D. degree must be able to make correct observations and have the skills of measurement, calculation, reasoning, analysis, and synthesis.

All students admitted to the KU Intercampus Program in Communicative Disorders must be able to meet the following requirements and expectations with or without accommodation(s).

Observation/Sensory Motor

- Observe demonstrations and learn from experiences in the classroom, laboratory, and other research settings.
• Carry out research techniques including the operation of complex, electronic instrumentation. Some types of research may involve the functional use of the senses in order to palpate certain areas of the patients’ head and neck or to observe the function of the head and neck.
• Interpret and comprehend text, numbers, and graphs displayed in print and video.
• Observe and respond to subtle cues of participant’s moods, temperament, and social behavior.

Physical/Psychomotor
• Perform actions requiring coordination of both gross and fine muscular movement, equilibrium and use of the senses.
• Respond quickly in research situations, not only for safety, but also therapeutically.
• Travel to numerous research sites for practical experience.
• Use an electronic keyboard to operate instruments and to calculate, record, evaluate, and transmit information.

Communication
• Be able to share and to elicit information from participants, mentors, peers and other research collaborators verbally and in a recorded format.
• Effectively, confidently, and sensitively converse with participants and their families.
• Interpret and comprehend technical and professional materials.
• Prepare papers, produce reports, and complete documentation for research purposes.
• Assimilate information from written sources (texts, journals, medical/school records).
• Take paper, computer, and laboratory examinations and prepare scholarly papers.

Judgment
• Demonstrate judgment in the classroom, laboratory, and other research situations that shows the intellect and emotional health necessary to make mature, sensitive, and effective decisions in the following areas:
  • Relationships with professors, collaborators, peers, and participants
  • Professional and ethical behavior
  • Effectiveness of research approaches.
• Demonstrate an understanding of the rationale and justification for one’s performance.
• Critically evaluate one’s own performance and be flexible toward change to promote professional and research process.
• Recognize and correct behaviors disruptive to classroom teaching, and research.
• Manage the use of time to complete research and academic assignments within realistic constraints.
• Recognize potentially hazardous materials, equipment, and situations and proceed in a manner to minimize risk of injury to those in the area.
• Make correct observations and have the problem solving skills necessary for measurement, calculation, reasoning, analysis, and synthesis.

Department of Women, Gender, and Sexuality Studies

About the Department
Founded in 1972, the Department of Women, Gender, and Sexuality Studies fosters the interdisciplinary study of women, gender, and sexuality through a rich multicultural and internationally informed academic environment. Our department seeks to produce intellectually rigorous, analytical and creative work that embodies the perspective of gender in its local and global dimensions through teaching, research, and outreach activities.

Undergraduate Programs
The Department of Women, Gender, and Sexuality Studies offers five undergraduate programs — two majors, two minors, and a certificate.

All majors and minors complete an interdisciplinary introductory course, a research methods class, and a range of topically and theoretically related courses from across the College. Majors take additional courses and culminate their studies in an independent research project supervised in the senior capstone seminar.

Our new undergraduate certificate provides a focused investigation of issues in Gender, Law & Policy in a four course sequence designed to complement other major and minor programs in the liberal arts and professional schools.

Graduate Programs
The Department of Women, Gender and Sexuality Studies supports interdisciplinary research on topics pertaining to women, gender, and sexuality and administers an interdisciplinary program leading to a graduate certificate, M.A. and Ph.D. degree. Additional cross-referenced courses are available to complete requirements for the graduate certificate and doctoral degree. Students may pursue the graduate certificate in addition to a KU graduate degree or as a standalone program.

Students who are interested in enrolling in graduate level coursework in the Department of Women, Gender, & Sexuality Studies without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s non-degree seeking admission webpage (http://wgss.ku.edu/admission-nds/) for further details.

Courses
WGSS 101. Introduction to Women, Gender, and Sexuality Studies. 3 Credits. SC S
This course examines the extensive role of gender in human life and examines the ways that gender structures power relations among individuals and within economic, political, educational and other social structures, with special attention paid to women’s issues and movements in the United States and globally. Through readings drawn from the fields of women’s studies, gender studies, and sexuality studies, this course examines and explores alternatives to traditional and/or normative constructions of gender and sexuality, and also considers other markers of difference, such as disability, race, class, and religion, which intersect with gender identity and sexual identity.

WGSS 102. Introduction to Women, Gender, and Sexuality Studies, Honors. 3 Credits. SC S
This course examines the extensive role of gender in human life and examines the ways that gender structures power relations among individuals and within economic, political, educational and other social structures, with special attention paid to women's issues and movements in the United States and globally. Through readings drawn from the fields of women's studies, gender studies, and sexuality studies, this course examines and explores alternatives to traditional and/or normative constructions of gender and sexuality, and also considers other markers of difference, such as disability, race, class, and religion, which intersect with gender identity and sexual identity. Similar in content to WGSS 101. Open only to students in the University Honors Program or by consent of the instructor.

WGSS 111. Introduction to Human Sexuality Studies. 3 Credits. S This interdisciplinary introduction to the study of human sexuality. We will consider some of the many ways that human sexuality has been understood and explained, drawing examples from multiple historical and contemporary sources. We will discuss how these understandings have changed over time and how they can vary depending on whose sexuality is being considered.

WGSS 177. First Year Seminar: ____. 3 Credits. U A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Women, Gender and Sexuality Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

WGSS 196. Study Abroad Topics in: ____. 1-6 Credits. S This course is designed for the study of special topics in Women's Studies. Coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

WGSS 305. Women, Gender, and Sexuality in the North American West. 3 Credits. H This course will provide students with an overview of how the history of women have profoundly shaped and given meaning to the development of the North American West (which includes present-day states and provinces in the U.S., Canada, and Mexico). The class will examine the lives of women who represent diverse backgrounds, lands, and time periods in this western region. In addition to women, lectures, readings, and discussion will focus on the themes of gender, masculinity, class, race, ethnicity, sexuality, labor, and environment. Broad in chronological scope that spans pre-contact into the twenty-first century, this course is not a comprehensive survey. Rather, the class will examine how women and groups of women across the region defined, survived, explored, cultivated, and imagined the West as a place that defined their homes, migrations, settlement patterns, as well as sites of captivity, displacement, war, and development. (Same as HIST 405.)

WGSS 311. Sex in History. 3 Credits. HT H This course offers a survey of the history of human sexuality in the Western world; the second half of the semester emphasizes the American experience. Topics for consideration may include: masturbation, pornography, sex work, homosexuality, bisexuality, "perversions" (paraphilias), sex and marriage, racialized sexualities, sexual violence, trans* identities and experiences, sexuality and national identities, and colonized sexualities. The course demonstrates the various ways in which sex, specifically the social and political meanings attributed to physical acts, changes over time and shapes human experiences and interactions far beyond the bedroom. (Same as AMS 323, HIST 332, and HUM 332.)

WGSS 319. History, Women, and Diversity in the U.S.. 3 Credits. H This survey course explores the history of being female in America through a focus on the ways differences in race, sexuality, ethnicity, class, and life cycle have shaped various aspects of women's lives. Themes to be explored could include, but are not limited to: social and political activism; intellectual developments; family; women's communities; work; sexuality; and culture. (Same as HIST 319.)

WGSS 320. From Goddesses to Witches: Women in Premodern Europe. 3 Credits. HT H This course examines the social, cultural, and political contexts of women's spirituality and their relations to gender relations in Europe from about 30,000 B.C.E. to the 16th century Protestant Reformation. Lectures move both chronologically and topically, covering such subjects as goddess-worshiping cultures, women's roles in Christian and Jewish societies, symbols of women, and male attitudes toward women. Students will be able to participate in weekly discussions of primary and secondary source readings about women. (Same as HIST 320.)

WGSS 321. From Mystics to Feminists: Women's History in Europe 1600 to the Present. 3 Credits. HT H This survey of women's history in Europe looks at changing patterns of women's economic roles and family structures in preindustrial and industrial society, the importance of women in religious life, cultural assumptions underlying gender roles, and the relationship of women to political movements, including the rise of feminism. (Same as HIST 321.)

WGSS 322. LGBTQ U.S. History, 1900-1900. 3 Credits. H This course will take students on the first part of an exciting journey through an alternative version of U.S. history, exploring the experiences and treatment of men who love men, women who love women, and people with unconventional sexual and gender identities, telling this story as it unfolded in the British colonies established in North America, through the revolutionary period, and in the United States over the course of the nineteenth and twentieth centuries, and into the early twenty-first century. The first part of this two course sequence begins in the colonial period and ends around 1900 as modern categories of sexuality and sexual orientation came into existence. We will examine the ways in which individuals who craved intimacy with members of the same sex understood and negotiated their desires in an often hostile world. And we will consider how Early America's remarkable diversity shaped this history of same-sex love and desire. (Same as HIST 322.)

WGSS 323. LGBTQ U.S. History, 1900-Present. 3 Credits. H This course will take students on the second part of an exciting journey through an alternative version of U.S. history, exploring the experiences and treatment of men who love men, women who love women, and people with unconventional sexual and gender identities, telling this story as it unfolded in the British colonies established in North America, through the revolutionary period, and in the United States over the course of the nineteenth and twentieth centuries, and into the early twenty-first century. The second part of this two course sequence focuses on the twentieth and twenty-first centuries. We will examine the changing understanding of non-normative sex, love, and desire; the political tactics, framings, and fights around sexual identities and rights; and the intersection of structural inequalities including, but not limited to, race, class, ability, and gender with LGBTQ histories. Please note that WGSS 322 or HIST 322 is not a prerequisite for WGSS 323 or HIST 323, though students interested in LGBTQ history should consider taking both. (Same as HIST 323.)

WGSS 324. History of Women and the Body. 3 Credits. H This course examines different notions about women and their bodies from a historical perspective. It discusses the arguments and circumstances that have shaped women's lives in relation to their bodies, and women's responses to those arguments and circumstances. This course covers a wide geographical and chronological spectrum, from
Ancient societies to the present, from Latin America and the Middle East, to North America and Western Europe. (Same as HIST 324.)

WGSS 325. Language, Gender, and Sexuality. 3 Credits. S
How do people express gender in diverse languages around the world? In a globalized world in which English is increasingly prominent, how are other languages changing to account for both global and local shifts in gender norms and expectations? This course will examine gender, multilingualism and globalization using approaches of sociolinguistics, linguistic anthropology, and communication studies. We will explore such topics as gender, sexuality, and multilingualism; gendered language variants; gender norms, politeness, and globalization; nonbinary and trans identities encoded in languages around the world, including but not limited to gender pronouns; identity, body, and linguistic practices; and considerations of power, hegemony, and imperialism. (Same as ANTH 325, GIST 303, JWSH 305 and SLAV 305.)

WGSS 327. Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies. 3 Credits. S
An exploration of the experiences and histories of people who identify as lesbian, gay, bisexual, and/or transgender (LGBT); of the influences on these experiences by individuals, the state, and artistic, legal and medical discourses; and of the intersections between sexual orientation, sexuality, ethnicity, class, and religion.

WGSS 329. Introduction to Queer Theory: Tools for Deconstructing Gender. 3 Credits. H
In the 1970s and 1980s, LGBT activists began questioning basic knowledge about sexuality and the body, challenging rigid identity categories, and offering new ways to think about gender. We now call this approach “queer theory,” and this course will introduce students to the texts and debates that have shaped this intellectual tradition. From ancient eunuchs to drag kings and queens, queer theory highlights how gender norms operate as forms of violence and oppression. We will explore how queer theory helps us understand difference, including its intersections with theories of feminism, race, and disability.

WGSS 330. Women in Contemporary African Literature. 3 Credits. NW H
A critical study of issues and questions raised about women in contemporary African literature and implications for the larger society through the analysis of theme, language, characterization, roles and functions of women in selected works. (Same as AAAS 340.)

WGSS 331. Sex and Gender in New Media. 3 Credits.
How do gender and sexuality shape digital worlds, and how do these spaces shape our understanding of ourselves? This course analyzes new media like social networking sites, gaming, and dating apps. Students will explore the identities, relationships, and communities that have emerged across these platforms, with a focus on the possibilities and challenges they offer for gender and sexual expression.

WGSS 333. The Politics of Physical Appearance. 3 Credits. S
An interdisciplinary analysis of standards of physical attractiveness and cultural conceptions of women’s bodies. Includes analysis of how these standards change across time and cultural groups, and of the impact of these standards on women as individuals and on social and political outcomes.

WGSS 335. History of Jewish Women. 3 Credits. H
This course explores the history of Jewish women from antiquity to the twentieth century. It examines the historical constructions of women’s gender roles and identities in Jewish law and custom as well as the social and cultural impact of those constructions in the context of the realities of women’s lives in both Jewish and non-Jewish society. There are no prerequisites for this course. (Same as HIST 335, JWSH 335.)

WGSS 339. Feminism and Social Change. 3 Credits.
How do feminists go about fighting for social change? From social media hashtags to citywide protests, what methods do they use, and how do they justify them? Where have they been effective, and what lessons can we learn from those successes? This course investigates historical and contemporary efforts to change the world, with an emphasis on movements for women’s rights and queer liberation in the United States.

WGSS 344. Black Feminist Theory. 3 Credits. HL H
This course will study the critical discourse produced by black female intellectuals, writers, and activists about their race, gender, sexual, and class identities. Students will explore black women’s distinct positionality through an examination of their theory as well as their praxis from the nineteenth century to the contemporary moment. By tracing the evolution of black feminist thought, the class will explore black women’s initiation of and engagement with political, social, and artistic conversations in various fields of scholarly inquiry including but not limited to literature, history, sociology, political science, and the law. (Same as AAAS 344 and ENGL 344.) Prerequisite: WGSS 101, AAAS 104, or prior completion of one 200-level English course.

WGSS 350. Black Love and Romance. 3 Credits. H
This course will examine representations of love and romance in African American literature and culture. In addition to the romance novel genre, the course studies different kinds of cultural texts, such as art, film, and music. It explores romantic relationships among black people, including related topics such as sex, desire, marriage, and singleness, and how these interpersonal relationships build families, communities, and collective bonds. The class will consider both the content and aesthetics of diverse texts in order to think about how black people connect intimately as well as how various social and cultural politics underline the nature of those intimacies.

WGSS 351. Women and Leadership: The Legislative Process. 3 Credits. S
Examines current and historical roles and impacts of women involved in legislatures. Explores what difference women make when they are public officials. Students meet with local women legislators, lobbyists and political officials. Students learn how to analyze issues, access power, lobby, and organize at the grassroots. The course is designed to prepare students for an optional legislative internship during the subsequent semester.

WGSS 355. International Women’s Rights. 3 Credits. SC
Women face discrimination and abuse around the world: at home, in the workplace, and in the public sphere. How are these systems of oppression connected? How are women working together for change, and what can you do to support their efforts? This course will investigate what feminist solidarity looks like around the world, with an emphasis on connections across different cultural and political contexts. (Same as GIST 355.)

WGSS 361. Youth, Sex, and Romance in Post-WWII United States. 3 Credits. H
Most people don’t think of sex and romance as having a history. And youth seems just a natural stage of life. But the nature of “courtship,” the definitions of sex, and the meaning of “youth” have changed dramatically over time, and people struggle over these definitions right up to the current day. In this class we try to make historical sense of those struggles by focusing on a volatile and complicated period in U.S. history: the years from World War II through the recent past. (Same as HIST 361.)

WGSS 364. Pregnancy in Modern Literature. 3 Credits. HL
An examination of pregnancy, childbirth and reproductive control as depicted in literature from various national traditions in the twentieth and twenty-first centuries. This course draws together voices from literature,
history, and feminist theory to deepen students’ understanding of the ways nationality, class, race, ability, and gender affect the aesthetics surrounding reproduction. Special attention is given to the relationship between society and the pregnant/postpartum individual. Other topics may include: eugenics, contraception, male pregnancy, and speculative reproduction. (Same as HUM 364.)

**WGSS 365. Angry White Male Studies. 3 Credits. H**
This course charts the rise of the “angry white male” in America and Britain since the 1950s, exploring the deeper sources of this emotional state while evaluating recent manifestations of male anger. Employing interdisciplinary perspectives this course examines how both dominant and subordinate masculinities are represented and experienced in cultures undergoing periods of rapid change connected to modernity as well as to rights-based movements of women, people of color, homosexuals and trans individuals. (Same as AMS 365, HIST 364 and HUM 365.)

**WGSS 366. Fat, Food and the Body in Global Perspective. 3 Credits. H**
An examination of fat and food as they relate to human embodiment in a variety of world locations. Bringing into a dialogue a number of disciplinary voices, including anthropology, fat studies, feminist theory, food studies, history, medicine, and psychology, the course applies theories of culture and embodiment to select global case studies as a means of approaching the pleasures, anxieties, health implications, and symbolic functions of ingesting food and drink. Topics may include the cultural and gender politics of fatness and thinness; anorexia and feederism; food, sex, and animality; vegetarianism, food scares and food purity movements; neoliberalism and the consuming body; and the material and symbolic aspects of fats and oils. (Same as HUM 366.)

**WGSS 374. Religious Perspectives on Selfhood and Sexuality. 3 Credits. H**
The nature of the self in its individual and social dimensions. Self experienced and expressed in sexuality. Survey of viewpoints in religious literature. (Same as REL 374.)

**WGSS 376. Love, Sexuality and Gender in Japanese Literature. 3 Credits. HL H**
An examination of Japanese attitudes toward love, sexuality and gender differences as revealed in literature from the tenth century to the present. Discussion format. Not open to students who have taken EALC 575/ WGSS 576. (Same as EALC 375.)

**WGSS 380. African Art and Gender. 3 Credits. HL H**
How does the rich relationship between art and gender provide an organizing metaphor for African artists across space and time? How do artists shape understandings of gender? In this course, we will examine gender in artistic practice alongside cultural binaries and consider how gender historically operated to define distinct roles for artists. We will study how formulations of gender and race intersected to impact artistic production and classification during the colonial and postcolonial periods. We will analyze materiality and the metaphor of childbirth, gender and Islamic textiles, and the concept of "craft." (Same as AAAS 380.)

**WGSS 381. Feminism and Philosophy. 3 Credits. H**
An examination of topics of philosophical interest that are important in the feminist movement such as the nature of sexism, the concept of sexual equality, the ethics of sexual behavior, the nature of love, feminist analyses of the value of marriage and family, the ethics of abortion and justifications for preferential treatment of women. (Same as PHIL 381.)

**WGSS 389. The Anthropology of Gender: Female, Male, and Beyond. 3 Credits. NW W**
This course will introduce students to cultural constructions and performances of masculinity, femininity, and alternative genders across time and space. Topics and cases will be drawn from primarily non-Western cultures, ranging from Japanese markets to Pacific Rim gardens, and from Haitian voudou to Maya royal politics. This course uses research by archeologists, linguists, biological anthropologists, and sociocultural anthropologists. (Same as ANTH 389.)

**WGSS 396. Studies in: ______. 3 Credits. H**
The interdisciplinary study of selected and different aspects of women's studies in different semesters.

**WGSS 397. Study Abroad Topic in: ______. 1-6 Credits.**
This course is designed for the study of special topics in Women's Studies at the junior/senior level. Course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

**WGSS 410. Intimate Relationships. 3 Credits. S**
A social psychological perspective on adult intimate relationships, examining friendship, dating, committed relationships, and the dissolution of committed relationships. Topics include romance, jealousy, self-disclosure, power, loneliness, and social support. Discussion of heterosexual and homosexual relationships, traditional forms (e.g., marriage) of relationships as well as alternative lifestyles (e.g., cohabitation) and gender-linked differences in relationships. (Same as PSYC 410.) Prerequisite: PSYC 104.

**WGSS 418. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Credits. NW H**
This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women’s literature, and erotic literature. Recommended: A course in East Asian studies. Not open to students who have taken EALC 618. This course is taught at the 400 and 600 levels with additional assignments at the 600-level. (Same as EALC 418.) Prerequisite: One course in EALC or WGSS.

**WGSS 440. Communication and Gender. 3 Credits. S**
Focuses attention on the relationship between communication and gender, including both physical and psychological dimensions. Topics include: sex role orientations and stereotypes; perceived and actual differences in verbal and nonverbal communication behaviors; the influence of gender on communication in a variety of contexts. (Same as COMS 440.) Prerequisite: COMS 130, or COMS 230.

**WGSS 468. Psychology of Women. 3 Credits. S**
A survey of the psychological theories about women; similarities and differences in the behavior of women and men; the effects of biological and social factors on the behavior of women and men; and issues of concern to women of different races, sexual orientations, ages, and so forth. (Same as PSYC 468.) Prerequisite: Any previously completed course in PSYC or WGSS.

**WGSS 477. Gender and Religion. 3 Credits. H**
Examination of the symbols, images, scriptures, rites and teachings that define gender in various religious traditions. (Same as HUM 477 and REL 477.) Prerequisite: An introductory course in Humanities, Religious Studies or Women, Gender & Sexuality Studies.

**WGSS 498. Independent Study. 1-3 Credits. S**
Intensive reading or research under faculty supervision culminating in the writing of a paper or research report. Can be used in two-course sequence for departmental honors in WGSS, followed by WGSS 499. Prerequisite: Permission of instructor required.
WGSS 499. Honors in Women, Gender and Sexuality Studies. 3 Credits. S
An individual research or creative project under the direction of a specialist in the area of the student's interest. May be counted towards the total hours required for the major. Prerequisite: WGSS 498 with a grade of an A or B, or equivalent independent study/research credits with approval of the project adviser and the Women, Gender and Sexuality Studies honors coordinator. Majors only.

WGSS 501. Doing Feminist Research. 3 Credits. S
How is feminist research more than research that just focuses on women? What does it mean to do research in a feminist way? This course explores feminist critiques of traditional methods and asks how we can build knowledge that is more just, collaborative, and politically engaged. Students practice basic skills in qualitative research methods like interviewing and participant observation, and they learn how to design their own research project using these methods. Suggested for the junior year. Prerequisite: Any previous coursework in WGSS or by permission of instructor.

WGSS 502. Human Sexuality. 3 Credits. S
An introduction to the field of human sexuality. Topics to be covered include sexual anatomy and physiology, fertilization, pregnancy, birth and lactation, contraception, human sexual response, sexuality across the life cycle, love, marriage, alternatives to marriage, sexual orientation, sex differences in behavior, parenthood, sexually transmitted diseases, sex and the law, and sex education. (Same as PSYC 502.) Prerequisite: Any previous coursework in either WGSS or PSYC.

WGSS 510. History of American Women: Colonial Times to 1870. 3 Credits. H
A survey of women's history in the United States, which will consider women's roles as housewives, mothers, consumers, workers, and citizens in pre-industrial, commercial and early industrial America. (Same as AMS 510 and HIST 530.)

WGSS 511. History of American Women: 1870 to Present. 3 Credits. H
A survey of women's history in the United States, which includes radical and reform movements, the impact of war and depression, professionalization, immigration, women's work, and the biographies of leading figures in women's history. (Same as AMS 511 and HIST 531.)

WGSS 514. Politics of Human Trafficking. 3 Credits. S
This course examines the politics of human trafficking—both labor and sex trafficking—using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 714, POLS 714, or GIST 714. (Same as GIST 471 and POLS 471.) Prerequisite: Sophomore standing or consent of instructor.

WGSS 515. Gender and Sexuality in Greek Culture. 3 Credits. H
This course explores various approaches to the study of gender and sexuality in Greek antiquity. Contents will vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 515.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

WGSS 516. Gender and Sexuality in Roman Culture. 3 Credits. HL H
This course explores various approaches to the study of gender and sexuality in Roman antiquity. Contents vary, and the course may focus on methodology and case studies, or on particular themes, historical periods, or artistic or literary genres. No knowledge of Greek or Latin is required. (Same as CLSX 516.) Prerequisite: Graduate status, or 6 credit hours in Classics, Greek, Latin, or Women, Gender and Sexuality Studies; or permission of instructor.

WGSS 517. Policing the Womb. 3 Credits. S
Women's reproductive bodies have at times been made hypervisible, subject to medical, legal, and social surveillance and intervention, while at other times invisible. Across these practices, gender and race have been socially constructed in particularly limited ways, which the state has used to justify restrictive case law rulings and policies governing reproductive outcomes. This course is designed to critically examine the history, development, and outcomes of policies and cultural practices related to reproduction that have limited people's decisional autonomy. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 717. Prerequisite: Any previous course in WGSS.

WGSS 521. Women and Violence. 3 Credits. S
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. The nature, prevalence, causes, and consequences of violence against women are discussed. (Same as PSYC 521.) Prerequisite: PSYC 104.

WGSS 533. Rococo to Realism: Painting in Europe c. 1750-1848. 3 Credits. H
This course considers European painting c. 1750 to 1848 within the context of dramatic political and industrial revolutions. Exploring the power of the visual to engage with broader circumstances and to effect change, we will examine the ways in which shifting constructions of gender, empire, colonialism, race, slavery, and class were addressed by such artists as Watteau, David, Vigée-Lebrun, Delacroix, Géricault, Goya, Turner, Constable, Ingres, Daumier, Bonheur, and Courbet. Graduate students will complete additional assignments. (Same as HA 533.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

WGSS 534. Impressionism and Post-Impressionism: 1848-1900. 3 Credits. H
This course considers French painting 1848 to 1900, a period marked by unprecedented technological advancements, the restructuring of Paris, and the rise of consumer culture. As large sections of the city were leveled to make way for broad boulevards, cafés, and department stores, some artists strove to represent the ever-changing spectacle of urban life; others found their inspiration away from the city. Focusing on Manet, Degas, Caillebotte, Morisot, Cassatt, Monet, Renoir, Seurat, Gauguin, Van Gogh, and Cézanne, we will explore how artists engaged with shifting constructions of modernity, gender, fashion, public and private, empire, race, class, and consumer and leisure cultures. Graduate students will complete additional assignments. (Same as HA 534.) Prerequisite: HA 100, HA 151, or the equivalent, or consent of instructor.

WGSS 540. Skin, Sex, and Disease. 3 Credits. H
This course explores the complex historical relationships between gender, race, health, sickness, and oppression over time. Students examine the impact race and gender have on structuring experiences of health,
sickness and health care; and examine the political activism surrounding definitions and concepts of health. Prerequisite: Any previous course in WGSS or by permission of instructor.

**WGSS 549. History of Feminist Theory. 3 Credits. H**
This discussion course will cover the development of feminist theories from the late Middle Ages to the 1970s. Reading will include Pisan, Wollstonecraft, Mill, Freud, Woolf, Beauvoir, Friedan, Daly, Kristeva, and others. (Same as HIST 649.) Prerequisite: Any previous course in WGSS or HIST or permission of instructor.

**WGSS 552. The Rhetoric of Women's Rights. 3 Credits. H**
An analysis of the themes and rhetorical strategies of the women's rights movement in America. The course will view the struggle for women's rights from a historical perspective and will conclude with contemporary issues concerning the role of women in society. (Same as COMS 552.) Prerequisite: COMS 130 or COMS 230.

**WGSS 553. Making a Pandemic: The History and Politics of HIV/AIDS. 3 Credits. H**
HIV/AIDS is a global pandemic fueled as much by political and historical forces as by epidemiology. This course will chart the disease's emergence, evolution of medical understanding and treatment, and spread of the pandemic through the lens of global structural inequalities, attitudes around sexuality, racism, and the lasting impact of colonialism. Through readings, assignments, films, and discussion, this course will lay bare for students the ways in which the current AIDS epidemic results as much from the disease's design itself as from the social and political world in which it operates. With HIV/AIDS as the focus, students will analyze and gain understandings of how different countries/communities/regions have experienced and responded to the disease, how those responses are informed by local cultural, historical, and political landscapes, and how larger global political forces have created the pandemic of today. Prerequisite: Any previous course in WGSS or by permission of instructor.

**WGSS 560. Race, Gender and Empire. 3 Credits. NW**
This course considers how colonialism has shaped race and gender, historically and today. It explores how Europeans justified colonial rule through sexist beliefs about Native peoples and how sexual exploitation was built into colonial occupation. Film, literature, and political essays help us examine the lasting legacies of these ideas and resistance against them - a field known as postcolonial studies. We use this lens to trace historical attitudes about the white man's burden into contemporary issues in international politics, asking how human rights programs and military intervention maintain global inequality and produce new kinds of empires. (Same as AAAS 560.) Prerequisite: Any WGSS or AAAS course, or permission of the instructor.

**WGSS 562. Women and Politics. 3 Credits. S**
This course exposes students to contemporary research on women and politics by surveying the sub-fields of political science. Topics include women's representation in the U.S., women and U.S. public policy, gender and legal theory, international women's movements, women and revolution, and women as political elites. We will examine the ways in which feminist theory and women's activism have challenged the narrow focus of the discipline as well as redefined women's place in society. (Same as POLS 562.) Prerequisite: Sophomore level or consent of the instructor.

**WGSS 563. Gender, Sexuality and the Law. 3 Credits. H**
This course provides a broad introduction to Western legal systems (especially the American legal system) and then focuses on how sex, gender, and sexuality operate in and are understood by those systems and how the law is a site of social and political struggle. Topics may include intimate relations, First Amendment law, sexual harassment and employment discrimination; reproduction policies and governance; rape and sexual assault; gender identity discrimination; and the legal understandings and constructions of equal protection and due process. No prior knowledge of legal concepts is necessary. Prerequisite: Any previous course in WGSS or by permission of instructor.

**WGSS 565. Gender, Culture, and Migration. 3 Credits. S**
This course examines the gendered experiences of transnational migration through a combination of ethnography, literature, film, and news media. How do different people experience the desire to migrate, the logistics of movement, and life in a faraway place? How does mobility shape ideas of family, community, and nation? How do class, race, sexuality, and legal status also influence these experiences, especially in rendering certain groups vulnerable to abuse and exploitation? Attention will also be paid to gendered thinking against migration, including the ways gender and sexuality influence xenophobia, border enforcement, refugee recognition, deportation policy, and contemporary political debates. (Same as GIST 565.) Prerequisite: Any 100 level AAAS course, WGSS 101, AMS 100, AMS 110, or GIST 220.

**WGSS 567. Native Feminisms. 3 Credits. SC H/W**
This course examines the foundation of Native feminist scholarship and the history of Native feminist activism. The class will begin by considering whether feminist theory can support contemporary Native women Native Two-Spirit (LGBTQ+) in their struggles against settler colonialism and heteropatriarchy. While the course begins by examining the North American experience, the course will also cover a range of international indigenous contexts, with a focus on the Global South and the Indigenous Pacific. Topics explored include the history of settler-colonialism, cultural revitalization and gender roles, change and continuity under cycles of settler-colonialism, the connection between colonialism and sexual violence in Native communities, debates over citizenship and sovereignty, and contemporary Native gender roles and identities. During the conclusion of the course, students will learn to identify how Native feminism informs activism and practice. (Same as ISP 567.) Prerequisite: Any previous course in WGSS or ISP, or by permission of instructor.

**WGSS 570. Men and Masculinities. 3 Credits. H**
An intensive examination of the history and theory of masculinities in the Western world. Students become acquainted with some of the key theories of men and masculinities, and develop research projects on a topic negotiated with the instructor. (Same as HUM 570.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

**WGSS 575. The Body, Self and Society. 3 Credits. H**
An intensive examination of the role of the human body in the creation of personal and social identities in the Western world. Students become acquainted with contemporary theories of embodiment and senses as they are applied to a variety of historical themes, and develop research projects on a topic negotiated with the instructor. (Same as HIST 625, HUM 575.) Prerequisite: An upper-division course in History, Humanities, or Women Gender and Sexuality Studies; or permission of instructor.

**WGSS 576. Love, Sexuality and Gender in Japanese Literature. 3 Credits. HL H**
An examination of Japanese attitudes toward love, sexuality, and gender differences as revealed in literature from the tenth century to the present. Discussion format. Not open to students with credit in EALC 375/ WGSS 376. (Same as EALC 575.) Prerequisite: One course in EALC or WGSS.

**WGSS 583. Love, Sex, and Globalization. 3 Credits. S**
Escalating transnational flows of information, commodities, and people have created innumerable kinds of “intimate” contacts on a global scale, such as mail order brides, child adoption, sex tourism, commodified romance, and emotional labor. Exploring the ways that cultural artifacts of
intimacy are rendered, fetishized, and reified in a free market economy, this course examines how discourses on love and sex encounter, confront, and negotiate the logics of the capitalist market, the discrepant narratives of (colonial) modernity, and the ethics of pleasure. In so doing, this course navigates the treacherous interplay among emotions—specifically love, sex, and money, seeking the potential and limits of cultural politics of emotions. (Same as ANTH 583.) Prerequisite: Any previous course in ANTH or WGSS.

WGSS 598. Sexuality and Gender in African History. 3 Credits. W

An examination of the history of sexuality and gender in Africa with a focus on the 19th and 20th centuries. Major issues and methods in the historical scholarship on gender and sexuality will be covered. Topics of historical analysis include life histories, rites of passage, courtship, marriage, reproduction, education, masculinities, homosexuality, colonial control, and changing gender relations. Prior course work in African history is suggested. Graduate students will complete an additional project in consultation with the instructor. (Same as AAAS 598 and HIIST 598.)

WGSS 600. Contemporary Feminist Political Theory. 3 Credits. S

A detailed introduction to feminist thought post-1960. Examines feminism in relation to the categories of political theory: liberal feminism, socialist feminism, radical feminism, and postmodern feminism. Within these categories and separately, we will also consider feminism as it is influenced by women traditionally excluded from mainstream feminist thought, namely U.S. woman of color and women of post-colonial societies. This course is a service learning course that provides students with on-site practicum, mentoring, and networking skills. (Same as POLS 600.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 601. Seminar in Women, Gender and Sexuality Studies. 3 Credits. S

Investigation of a topic related to women, gender or sexuality from an interdisciplinary perspective. Open only to majors in Women, Gender & Sexuality Studies and majors in Human Sexuality. Suggested for the senior year. Prerequisite: WGSS 501.

WGSS 618. Sexual Politics in Chinese Literature and Culture: Premodern Times. 3 Credits. NW H

This course uses myth, literature, history, biography, and other documents to discuss sexual politics in China from ca 1500 B.C.E. to the end of the last dynasty in 1911. Topics include: emperors, empresses, and consorts, polygamy, prostitution, love, yin and yang cosmology, the art of the bedchamber, women's literature, and erotic literature. (Same as EALC 618.) Prerequisite: A course in East Asian studies. Not open to students who have taken EALC 418. This course is taught at the 400 and 600 levels with additional assignments at the 600-level.

WGSS 630. Politics of Identity. 3 Credits. S

This seminar explores the nature of identity and how identity is relevant to politics and policy with a focus on political attitudes and behavior, institutions, and public policy. Topics include individual and group identity, identities such as gender, racial, sexual orientation, and partisan, and the enduring importance of identity for understanding politics as well as the policy process. The approach is multidisciplinary but political science perspectives are relied on more heavily. (Same as POLS 630.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 640. Politics of Reproductive Policy. 3 Credits. S

Reproductive policy has historically been a highly politicized policy arena, which has elicited attention from the political community as well as the public. This course moves beyond the popular rhetoric associated with reproductive issues, by critically investigating the history, development, implementation and the relative success of various reproductive policies in the United States. These policies are compared to, and assessed against, policies governing similar topics in various countries. This course is a service learning course that provides students with on-site practicum, mentoring, and networking skills. (Same as POLS 640.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 650. Service Learning in Women, Gender and Sexuality Studies. 3 Credits. S

This course, to be taken in the senior year, is designed to give students the opportunity to apply women's studies knowledge and ideas gained through course work to real-life situations in various agencies and women's centers. Open to Women's Studies majors and others with significant Women's Studies backgrounds. Prerequisite: Permission of instructor is required.

WGSS 652. Jazz and American Culture. 3 Credits. H

This course considers cultural and social histories of jazz, from the 1920s through the present day, as sites for exploring ideological struggles over such fields as race, class, gender, sexuality, democracy, capitalism, freedom, community, Americanness, and globalization in the U.S. The course will explore such questions as the following: What music was called jazz at what times and places? What did it mean to whom? Who played it? Who wrote about it? Who listened to it? Who danced to it? Who policed it? Who produced it? Who used it to rebel? Who used it to survive? What did all of these practices mean to participants? The course will examine struggles over social meanings in the U.S. through a study of jazz performance, labor, representation, marketing, consumption, censorship, and historiography. Prerequisite: A course in American studies, American history, or consent of instructor. (Same as AMS 650.)

WGSS 653. Gender, War, and Peace. 3 Credits. S

This course explores ways in which militarization and warfare are gendered processes. We ask, what does war tell us about gender, and what does gender tell us about war? Though the majority of fighters are men, women are essential to war efforts. They also represent a high proportion of the casualties of war. Yet women are rarely examined in relation to war; thus we work to uncover women's experiences of war. We also look to women's contributions to the peace movement in terms of both theory and practice, asking: Is peace a feminist issue? Should feminists support women's access to combat positions or oppose the military? What if women ruled the world—would that end wars? Does militarized masculinity harm men more than benefit them? How do states mobilize citizens to war and how is the process gendered? (Same as POLS 653.) Prerequisite: Sophomore level or consent of the instructor.

WGSS 662. Gender and Politics in Africa. 3 Credits. S

This course is designed to explore the field of gender and African politics. We begin by paying particular attention to African women's political roles during the pre-colonial and colonial society. Next, we examine the impetus, methods, and path of liberation struggles and how gender roles were shaped, shifted, and changed during these struggles. The majority of the class focuses on current issues in African politics, including gender and development, HIV/AIDS and women's health, gender and militarism. We also explore women's roles in political institutions, civil society organizations, trade and labor unions, and transnational movements. We also examine contemporary constructions of masculinity and femininity in African states and explore how these constructions affect social policy and national political agendas. (Same as AAAS 662 and POLS 662.) Prerequisite: Sophomore level or consent of instructor.

WGSS 664. Women, Health, and Healing in Africa. 3 Credits. H

The course explores the values, practices, cultural systems and social-economic conditions that influence the sickness and health of women in Africa. The focus is on theoretical and applied debates and issues including: contraception, infertility, and reproduction; HIV/AIDS and other sexually transmitted infections; spiritual suffering and mental
illness; trauma and violence; chronic illness, disability, and aging; pharmaceuticals, biotechnologies, and clinical research. Prerequisite: 6 hours of coursework in Anthropology and/or Women's Studies and/or African American Studies.

WGSS 689. Conceptual Issues in Human Sexuality. 3 Credits. S
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 689.) Prerequisite: Any previously completed course in PSYC or WGSS.

WGSS 696. Studies in: _____ 3 Credits. S
Interdisciplinary study of different aspects of women's studies in different semesters.

WGSS 701. Seminar in: _____ 3 Credits.
A research seminar in women's studies. Instructor and topic will vary.

WGSS 710. History of American Sexuality. 3 Credits.
This graduate seminar examines the history and significance of sexuality in American history from colonial times to the present. It will employ gender as an analytic category to explore the lived experiences of both men and women, as well as to question the formation of economic, political, and social institutions. Of necessity the class will examine the ways in which race, class, religion, and region, affect ideas about sexuality and its practice. Subjects will include abortion, contraception, prostitution, illegitimacy, homosexuality, rape, marriage, and the "sexual revolution." Prerequisite: Graduate standing.

WGSS 711. Feminist Jurisprudence. 3 Credits.
This seminar examines the role of law in perpetuating and remedying inequities against women. After studying the historical emergence of sexual equality law in the United States, we discuss several paradigmatic feminist legal theories, including formal equality, MacKinnon's "dominance" theory, relational/cultural feminism, intersectionality and queer theory. We then proceed to apply these analytical structures to various substantive areas of law of particular concern to women, including but not limited to pregnancy, sexual assault, domestic violence, and employment discrimination. Students will also present their own research to the class.

WGSS 713. The Politics of Marriage. 3 Credits.
This course focuses on the history and contemporary politics of the institution of marriage, concentrating primarily on the US context, but with exploration of marriage in other countries as well. We will consider how the law regulates marriage as well as the lived reality of marriage for the couples who enter it. Topics include romance, engagement, gender roles in marriage, divorce, child marriage, arranged marriage, same-sex marriage, and polygamy. Prerequisite: Graduate standing.

WGSS 714. Politics of Human Trafficking. 3 Credits.
This course examines the politics of human trafficking-both labor and sex trafficking-using an interdisciplinary approach. We begin by understanding how contemporary modern-day trafficking is operating and how it is defined by various groups. We study texts by social scientists, humanists, and journalists working in the field to get a more comprehensive picture of trafficking today. We also examine some of the key policies internationally, comparatively, and domestically that address human trafficking. Human trafficking has been one of the most non-partisan issues we have seen in the past several decades. Yet, the current movement to end trafficking also has deep chasms and ideological divisions. Using critical approaches, we will examine the limitations of many of the anti-trafficking movements and initiatives operating globally and work to understand how the framing of this issue can have a significant impact on the prevention of exploitation. This course is offered at the 400/500 and 700 level with additional assignments at the 700 level. Not open to students with credit in GIST 471, POLS 471, or WGSS 514. (Same as GIST 714 and POLS 714.) Prerequisite: Graduate standing.

WGSS 717. Policing the Womb. 3 Credits.
Women's reproductive bodies have at times been made hypervisible, subject to medical, legal, and social surveillance and intervention, while at other times invisible. Across these practices, gender and race have been socially constructed in particularly limited ways, which the state has used to justify restrictive case law rulings and policies governing reproductive outcomes. This course is designed to critically examine the history, development, and outcomes of policies and cultural practices related to reproduction that have limited people's decisional autonomy. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in WGSS 517.

WGSS 770. Research in Men and Masculinities. 3 Credits.
An intensive examination of the history and theory of masculinities in the Western World since the sixteenth century. Students will become acquainted with some of the key theories of men and masculinities, examine in depth the interplay between manhood and modernity, and develop research projects on a topic negotiated with the instructor. May be repeated if content varies sufficiently. (Same as HUM 770.)

WGSS 775. Advanced Study in the Body and Senses. 3 Credits.
An intensive examination of the role of the human body in the creation of personal and social identities in the West since the sixteenth century. Emphasis is on understanding how contemporary theories of embodiment are applied to concrete historical or contemporary problems. May be repeated if course content varies sufficiently. (Same as HUM 775.)

WGSS 797. Directed Readings. 1-3 Credits.
Directed reading in an area of women's studies in which there is no appropriate course in the offerings of the Women's Studies Program, but in which there is a member of the cooperating graduate faculty competent and willing to direct the program of study.

WGSS 800. History of Women, Gender and Sexuality Studies. 3 Credits.
An introduction to the field of women, gender, and sexuality studies, paying particular attention to its development, its reception by and influence on academic disciplines, and its institutionalization. Prerequisite: Graduate standing and consent of the instructor.

WGSS 801. Feminist Theory. 3 Credits.
A survey of contemporary feminist theories produced within and across disciplines (including but not limited to, eco-feminism, and liberal, cultural, materialist, psychoanalytic, radical, and black feminist thought). Prerequisite: Graduate standing and consent of the instructor.

WGSS 802. Feminist Methodologies. 3 Credits.
How is feminist research more than just research on feminist topics? What, if any, implications do various feminist theories have for how we execute research and for what we count as knowledge? This graduate seminar explores the joint epistemological and methodological foundations of feminist research in the humanities and social sciences. We will practice different research methods, assess their strengths and limitations, and learn how to integrate them in project design. Prerequisite: Graduate standing and consent of the instructor.

WGSS 803. Feminist Pedagogy. 1.5 Credits.
The goal of the course is to teach students to teach. By reading core texts of feminist pedagogy, understanding critical theories, and attending seminars at the Center for Teaching Excellence selected by instructor
and student, students will learn how to present knowledge and stimulate learning in the classroom, as well as such practical skills as leading discussion sections, preparing and presenting class sessions, developing syllabi, devising fair grading and helpful advising, and solving pedagogical problems like maintaining civility in the classroom and coping with academic misconduct. Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students.

WGSS 804. Professionalization Seminar in Women, Gender, and Sexuality Studies. 1.5 Credits.
The goal of this course is to train students in the skills essential to becoming effective scholars and educators, and successful members of the profession. The material to be covered by these three iterations includes 1) the ethics and practice of feminist research (e.g., protection of human subjects, conflicts of interest, confidentiality, legal strictures); 2) the practical aspects of producing knowledge (e.g., writing research papers, proper citation methods, conference presenting, responding to peer reviews); and 3) acquiring and securing a place in the work force (e.g., CV preparation, job interviews, grant writing, getting promotion [and, in the academy, tenure]). Prerequisite: Must be Women, Gender, and Sexuality Studies graduate students.

WGSS 811. Black Feminist Theory. 3 Credits.
This course surveys black feminist theory and thought across various disciplines. It examines the critical figures, texts, interventions, and debates constituting this evolving discourse, which centers black women’s social, political, and cultural praxis as well as considers their intersectional positionalities. Prerequisite: Graduate standing.

WGSS 812. Affect and Queer Theory. 3 Credits.
Since the mid-1990s affect has become central to the study of affective labor, anticipatory temporality, and neoliberal biopolitics across the social sciences and humanities. Exploring feminist epistemology of the lived experience, queer theory of nonnormative temporality, and postcolonial studies of the body politic, this course interrogates the interrelation of affect, knowledge, and power in and outside scholarly knowledge production, and rethinks pervasive binaries such as epistemology/ontology, discourse/materiality, and reason/emotion. It will also examine the possibilities and limitations of dominant affect theory and seek methodology to study affect more inclusively and critically.

WGSS 821. Woman and Violence. 3 Credits.
An examination of research on women and violence, including rape, domestic violence, sexual harassment, stalking, and child sexual abuse. Research on the nature, prevalence, causes, and consequences of violence against women is discussed. (Same as PSYC 821.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor.

WGSS 835. Colloquium in the History of Gender. 3 Credits.
This colloquium will cover theoretical and topical readings on the history of manhood, womanhood, and gender systems. (Same as AMS 835 and HIST 895.)

WGSS 889. Conceptual Issues in Human Sexuality. 3 Credits.
An examination of the social construction of sexuality and research methods and issues relevant to sexuality. These concepts are applied to various topics, such as defining and conceptualizing sex and gender, sexual dysfunction, sexual orientation, the social control of sexuality, sexual coercion and abuse, and abstinence-only sex education. The course does not cover anatomical or physiological aspects of sexuality. (Same as PSYC 889.) Prerequisite: Six hours in WGSS and/or PSYC, or permission of instructor.

WGSS 999. Doctoral Dissertation. 1-12 Credits.
Original research that is to be incorporated into a PhD dissertation. Graded on a satisfactory progress/limited progress/no progress basis.

Bachelor of Arts and Bachelor of General Studies in Human Sexuality

Why study human sexuality?
- Explore the diverse range of human sexual practices and taboos
- Compare scientific, historical, and creative understandings of sexual desire
- Learn to analyze and address problems of sexual violence, reproductive justice, and LGBTQ inclusivity.

Human Sexuality students focus on the social, political, and medical constructions of human sexuality. They draw from interdisciplinary methods, theories, and research to better understand how the social construction and lived experiences of sexuality relate to society, politics, medicine, and social movements.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First and Second Year Preparation
Students are encouraged to take WGSS 111 and meet with the academic advisor.

Requirements for the B.A. or B.G.S. Major
Students must complete 10 courses (30 hours) in the major, including a maximum of 2 courses (6 hours) at the 100 or 200 level and a minimum of 4 courses (12 hours) at the 500+ level.

In addition, students must complete coursework in the following areas:
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<th>Code</th>
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<td><strong>Introduction</strong></td>
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<td>WGSS 111</td>
<td>Introduction to Human Sexuality Studies</td>
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<td><strong>Social Science Perspective</strong></td>
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<td>Satisfied by one course (3 credit hours) that addresses sexuality from a social scientific perspective.</td>
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<td>SW 303</td>
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<td>WGSS/ANTH</td>
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<td>SOC 326</td>
<td>Health, Gender, and Society</td>
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<td>SOC 352</td>
<td>Sociology of Sex Roles</td>
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<td>ANTH 359</td>
<td>Anthropology of Sex</td>
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<td>Religion, Power, and Sexuality in Arab Societies</td>
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<td><strong>Humanities Perspective</strong></td>
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<td>WGSS 350</td>
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<td>Satisfied by</td>
<td>four additional courses (12 credit hours) that address sexuality.</td>
<td></td>
</tr>
<tr>
<td>Eligible courses include any of the above courses or the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WGSS 101</td>
<td>Introduction to Women, Gender, and Sexuality Studies</td>
<td></td>
</tr>
<tr>
<td>or WGSS 101</td>
<td>Introduction to Women, Gender, and Sexuality Studies, Honors</td>
<td></td>
</tr>
<tr>
<td>WGSS 327</td>
<td>Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies</td>
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<tr>
<td>WGSS 329</td>
<td>Introduction to Queer Theory: Tools for Deconstructing Gender</td>
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</tr>
<tr>
<td>WGSS 331</td>
<td>Sex and Gender in New Media</td>
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<tr>
<td>WGSS 333</td>
<td>The Politics of Physical Appearance</td>
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<tr>
<td>WGSS 339</td>
<td>Feminism and Social Change</td>
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<tr>
<td>WGSS 563</td>
<td>Gender, Sexuality and the Law</td>
<td></td>
</tr>
<tr>
<td>WGSS/ANTH</td>
<td>Love, Sex, and Globalization</td>
<td></td>
</tr>
</tbody>
</table>

**Other Courses That May Count for Major Requirements:**

The topics in the following courses vary by semester. If the majority of the course content addresses sexuality, this course may count toward a specific requirement within this program. Confirm with the major advisor.

| WGSS 177 | First Year Seminar: ________ |
| WGSS 196 | Study Abroad Topics in: ________ |
| WGSS 396 | Studies in: ________ |
| WGSS 397 | Study Abroad Topic in: ________ |
| WGSS 498 | Independent Study |
| ENGL 572 | Women and Literature: ________ |
| WGSS 650 | Service Learning in Women, Gender and Sexuality Studies |
| WGSS 696 | Studies in: ________ |

**Methods**

3

Satisfied by: (suggested for the junior year)

| WGSS 501 | Doing Feminist Research (Fall Only) |

**Capstone Project**

3

Satisfied by one course (3 credit hours) dedicated to completing a summative capstone project (WGSS 499 is completed as part of a sequence with WGSS 498. When completed as a sequence, 498 fulfills an elective and 499 fulfills the capstone requirement). Suggested for the senior year.

| WGSS 499 | Honors in Women, Gender and Sexuality Studies (By permission of honors supervisor) |
| WGSS 601 | Seminar in Women, Gender and Sexuality Studies (Spring Only) |

**Total Hours**

30

---

**Human Sexuality Major Hours & Major GPA**

While completing all required courses (above), majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 30 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior (300+) Hours**

Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Overlap Policies**

Students who wish to pursue more than one program offered by the department of Women, Gender, and Sexuality Studies may do so with the following restrictions: No more than four courses may be used to fulfill requirements for both the Women, Gender, and Sexuality Studies major and the Human Sexuality major – two of which would be specifically WGSS 501 and WGSS 601. No more than two courses may overlap between any of our majors and minors, or between our two minors – one of which would be WGSS 501. Students earning an undergraduate certificate in addition to another WGSS program can overlap one course – the introductory-level requirement.

For students pursuing a Bachelors of Arts degree, refer to this sample 4-year plan for a BA in Human Sexuality (p. 1856) or use the left-side navigation.

For students pursuing a Bachelor of General Studies degree, refer to this sample 4-year plan for a BGS in Human Sexuality (p. 1857) or use the left-side navigation.

**Summary**

- 3.5 GPA in the Human Sexuality major
- A senior honors thesis related to Human Sexuality written over two semesters (two three-credit courses)
- **Double majors:** earn Honors in both majors with one thesis that is relevant to both programs.

**GPA Requirements**

Students need a 3.5 GPA in their Human Sexuality major.

**Honors Thesis**

Students write an honors thesis that is pertinent to the study of Human Sexuality. An honors thesis is a piece of original research or other project supervised by a faculty member of any department. In most cases, the result will be a written document of some length, but this could vary depending on the topic and what the student and thesis advisor agree on.

The senior honors thesis or honors project must be approved by a three-member thesis committee (the thesis advisor and two other faculty members)
members, at least one of whom must be either in WGSS or serve as WGSS affiliate faculty).

Students take 6 credit hours of honors thesis work (3 hours per semester for 2 semesters) and they must earn a A or B in the first semester and a A the second. For these 6 hours, students can enroll in:

- WGSS 498 Independent Study in WGSS
- WGSS 499 Honors in Women, Gender and Sexuality Studies
  or
- WGSS 498 Independent Study in WGSS
- WGSS 601—Senior Capstone in WGSS
  or
- Two Honors Research or Independent Studies courses in any department

**Typical Timeline**

- Fall of the Junior Year: Take WGSS 501 to develop research interests and an idea for your thesis. Enroll in other courses that let you develop expertise in this area.
- Spring of the Junior Year: Get to know faculty members who share similar research interests by enrolling in their courses or visiting them in office hours. Identify a professor willing to supervise the thesis. **Inform the WGSS Honors Coordinator!**
- Fall Semester of the Senior Year: Enroll in 3 credit hours of WGSS 498 or in an Independent Study of another department. Begin researching the thesis topic. The student and thesis advisor should form a three-person faculty committee (the thesis advisor and two other faculty members, at least one of whom must be either in WGSS or serve as WGSS affiliate faculty). **Submit an Honors Intent Form** by 1 March to College Advising and Student Services, 109 Strong.
- Spring Semester of the Senior Year: In consultation with your thesis advisor, enroll in 3 credit hours of WGSS 499 or WGSS 601 or in an Independent Study of another department. Finish the thesis. Have the thesis committee read the thesis and vote to award Honors (or not). If the thesis is passed, the thesis advisor needs to **sign the Honors Certification Form**, which can be obtained by the student in the College Advising and Student Services office, 109 Strong; after the advisor signs this form, it is then submitted back to the College Advising and Student Services, 109 Strong, at least a week before the end of the graduation term. The thesis advisor should also notify the Honors Coordinator of the result.

**Double Majors**

Students who are satisfying double majors and pursuing Honors in both majors may use one honors thesis for both majors if they get approval from both departments. The thesis must be related to both majors, and the thesis committee must include faculty members from both departments. Students must fulfill both departments’ requirements for honors.

**BA in Human Sexuality**

Below is a sample 4-year plan for students pursuing the BA in Human Sexuality. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
### BGS in Human Sexuality

Below is a sample 4-year plan for students pursuing the BGS in Human Sexuality. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td>Major Elective 500+ (4 of 4), Major Requirement⁵</td>
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<td>WGSS 601 (Goal 6 Integration &amp; Creativity, Major Requirement SPRING ONLY)⁵</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁶</td>
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<td>Goal 2.1 Written Communication (1 of 2)</td>
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<td>WGSS 101 (HSX Major Elective (1 of 4), Goal 3 Social Science, Major Requirement)</td>
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<td>WGSS 111 (Major Requirement (typically spring))</td>
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<td>First Year Seminar Goal 1.1 (Critical Thinking)</td>
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<td>Goal 1.2 Quantitative Literacy</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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<td>International Focus Perspective (Major Requirement)²</td>
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<td>Humanities Perspective 300+, Major Requirement</td>
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<td>Major Elective 300+ (2 of 4), Major Requirement⁶</td>
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<td>Goal 3 Social Science (Overlap with major if possible)</td>
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<tr>
<td></td>
<td>Goal 3 Humanities (Overlap with major if possible)</td>
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<td>Goal 3 Natural Science</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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<th>Spring</th>
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<td>WGSS 501 (Major Requirement FALL ONLY)³</td>
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<td>Major elective 500+ (3 of 4), Major Requirement²</td>
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<td>Social Science perspective 300+ (Major Requirement)²</td>
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<td>Goal 4.2 Global Awareness (overlap with major if possible)</td>
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<tr>
<td></td>
<td>Goal 4.1 U.S. Diversity (overlap with major if possible)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
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<tr>
<td></td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁵</td>
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<tr>
<th>Senior</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Major Elective 500+ (4 of 4), Major Requirement²</td>
<td>3</td>
<td>WGSS 601 (Goal 6 Integration &amp; Creativity, Major Requirement) SPRING ONLY⁴</td>
<td>3</td>
</tr>
</tbody>
</table>

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Total Hours 120**

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

3. A list of courses that fulfill each requirement in the major can be found on the degree requirements (https://catalog.ku.edu/liberal-arts-sciences/women-gender-sexuality-studies/human-sexuality-ba-bgs/) tab of the catalog.

4. WGSS 501 is only offered in the fall semester, it is typically recommended for the fall of 3rd or 4th year.

5. WGSS 601 is only offered in the spring semester.

6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

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### Footnotes:

⁵ Major Requirement SPRING ONLY

⁶ Second Area of Study

² Perspective (Major Requirement)

³ Major Requirement FALL ONLY

⁴ SPRING ONLY

⁵ Elective/Degree/Junior-Senior Hours

⁶ Elective/Degree/Junior-Senior Hours
methods and modes of analysis to better identify, critique, and
science, psychology, and sociology. They learn to employ different
perspectives, including anthropology, history, law, literature, political
set of skills to critically analyze social issues from multiple disciplinary
Students in Women, Gender, and Sexuality Studies develop a broad
be a great fit for you.

Why study women, gender and sexuality?

• Confront social problems around gender and sexuality
• Collaborate with students and faculty from across the social sciences and humanities
• Build expertise on issues that matter most to you

If you are interested in how gender, race, class, and sexuality structure our world and interactions with one another, and if you are passionate about issues of social justice and inequality, then a degree in WGSS may be a great fit for you.

Students in Women, Gender, and Sexuality Studies develop a broad set of skills to critically analyze social issues from multiple disciplinary perspectives, including anthropology, history, law, literature, political science, psychology, and sociology. They learn to employ different methods and modes of analysis to better identify, critique, and

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

First- and Second-Year Preparation

It is recommended that students complete WGSS 101, the introductory course, and consult the undergraduate advisor.

Requirements for the B.A. or B.G.S. Major

Women, Gender, and Sexuality Studies Major Course Requirements

<table>
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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td></td>
<td>Introduction to Women, Gender, and Sexuality</td>
<td>3</td>
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<tr>
<td></td>
<td>Studies</td>
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<td>or WGSS 10</td>
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<tr>
<td></td>
<td>Introduction to Women, Gender, Sexuality</td>
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<td></td>
<td>Studies, Honors</td>
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</tbody>
</table>

Social Science Perspective:

Satisfied by any one course (3 hours) that is cross-referenced between WGSS and a social science department, including Anthropology; Applied Behavioral Science; Communication Studies; Economics; Geography and Atmospheric Science; Linguistics; Political Science; or Psychology.

Eligible courses include:

- SOC 220 Sociology of Families
- SW 303 Human Sexuality
- WGSS/ANTH 325 Language, Gender, and Sexuality
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>SOC 326</td>
<td>Health, Gender, and Society</td>
</tr>
<tr>
<td>SOC 352</td>
<td>Sociology of Sex Roles</td>
</tr>
<tr>
<td>ANTH 359</td>
<td>Anthropology of Sex</td>
</tr>
<tr>
<td>ANTH 372</td>
<td>Religion, Power, and Sexuality in Arab Societies</td>
</tr>
<tr>
<td>WGSS 351</td>
<td>Women and Leadership: The Legislative Process</td>
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<tr>
<td>WGSS/ANTH 389</td>
<td>The Anthropology of Gender: Female, Male, and Beyond</td>
</tr>
<tr>
<td>WGSS/PSYC 410</td>
<td>Intimate Relationships</td>
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<tr>
<td>WGSS/COMS 440</td>
<td>Communication and Gender</td>
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<tr>
<td>SOC 450</td>
<td>Gender and Society</td>
</tr>
<tr>
<td>SOC 454</td>
<td>Women and Work</td>
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<tr>
<td>WGSS/PSYC 468</td>
<td>Psychology of Women</td>
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<td>HSES 489</td>
<td>Health and Human Sexuality</td>
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<td>WGSS/PSYC 502</td>
<td>Human Sexuality</td>
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<tr>
<td>WGSS 514</td>
<td>Politics of Human Trafficking</td>
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<tr>
<td>WGSS 517</td>
<td>Policing the Womb</td>
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<tr>
<td>WGSS/PSYC 521</td>
<td>Women and Violence</td>
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<tr>
<td>WGSS/COMS 552</td>
<td>The Rhetoric of Women's Rights</td>
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<tr>
<td>WGSS/POLS 562</td>
<td>Women and Politics</td>
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<td>WGSS/POLS 600</td>
<td>Contemporary Feminist Political Theory</td>
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<td>SOC 617</td>
<td>Women and Health Care</td>
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<td>WGSS/POLS 630</td>
<td>Politics of Identity</td>
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<tr>
<td>WGSS/POLS 640</td>
<td>Politics of Reproductive Policy</td>
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<tr>
<td>WGSS/POLS 653</td>
<td>Gender, War, and Peace</td>
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<td>WGSS/POLS/ AAAS 662</td>
<td>Gender and Politics in Africa</td>
</tr>
<tr>
<td>WGSS/PSYC 689</td>
<td>Conceptual Issues in Human Sexuality</td>
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<td></td>
<td><strong>Humanities Perspective:</strong></td>
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<td>Satisfied by any one course (3 hours) that is cross-referenced</td>
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<tr>
<td></td>
<td>between WGSS and a humanities department, including African and African</td>
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<tr>
<td></td>
<td>American Studies; American Studies; Classics; English; Environmental</td>
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<tr>
<td></td>
<td>Studies; Film and Media Studies; Global and International Studies; History;</td>
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<td></td>
<td>History of Art; Humanities; Indigenous Studies; Jewish Studies; Latin</td>
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<td>American &amp; Caribbean Studies; Philosophy; or Religious Studies.</td>
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<td>Eligible courses include:</td>
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<td>WGSS 305 Women, Gender, and Sexuality in the North American West</td>
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<td>ENGL 306 Global Environmental Literature</td>
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<td>WGSS 311/AMS 323/HIST 332/HUM 332 Sex in History</td>
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<td><strong>HIST 317</strong> African American Women: Colonial Era to the Present</td>
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<td>WGSS/HIST 319 History, Women, and Diversity in the U.S.</td>
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<td>WGSS/HIST 320 From Goddesses to Witches: Women in Premodern Europe</td>
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<td>WGSS/HIST 321 From Mystics to Feminists: Women's History in Europe 1600 to</td>
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<td>WGSS/HIST 322 LGBTQ U.S. History, 1600-1900</td>
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<td>WGSS/HIST 323 LGBTQ U.S. History, 1900-Present</td>
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<td>WGSS/HIST 324 History of Women and the Body</td>
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<td>WGSS 330/AAAS 340 Women in Contemporary African Literature</td>
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<td>WGSS 350 Black Love and Romance</td>
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<td>WGSS/HIST 361 Youth, Sex, and Romance in Post-WWII United States</td>
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<td>WGSS/HUM 364 Pregnancy in Modern Literature</td>
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<td>WGSS/HUM 365 Angry White Male Studies</td>
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<td>AAAS 415 Women and Islam</td>
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<tr>
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<td>WGSS/HUM 570 Men and Masculinities</td>
</tr>
<tr>
<td></td>
<td>ENGL 572 Women and Literature:_____</td>
</tr>
<tr>
<td></td>
<td>WGSS/HUM 575 The Body, Self and Society</td>
</tr>
<tr>
<td></td>
<td>575/HIST 625</td>
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</tr>
<tr>
<td></td>
<td>WGSS 576/EALC 575 Love, Sexuality and Gender in Japanese Literature</td>
</tr>
<tr>
<td></td>
<td>or WGSS 37Love, Sexuality and Gender in Japanese Literature or EALC 375</td>
</tr>
<tr>
<td></td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
</tr>
<tr>
<td></td>
<td>or EALC 375Love, Sexuality and Gender in Japanese Literature</td>
</tr>
</tbody>
</table>
Bachelor of Arts and Bachelor of General Studies in Women, Gender, and Sexuality Studies

Sexuality and Gender in African History
HIST 598

Sexual Politics in Chinese Literature and Culture: Premodern Times
WGSS/EALC 618

or WGSS 41 Sexual Politics in Chinese Literature and Culture: Premodern Times

or EALC 41 Sexual Politics in Chinese Literature and Culture: Premodern Times

FMS 620 International Women Filmmakers

WGSS 652/AMS 650 Jazz and American Culture

Theoretical Perspective: 3

Satisfied by one course (3 hours) that addresses theoretical issues in gender, sexuality, and feminism.

Eligible courses include:

WGSS 329 Introduction to Queer Theory: Tools for Deconstructing Gender

WGSS/ENGL/AAAS 344 Black Feminist Theory

WGSS 359 Introduction to Feminist Theory

WGSS/PHIL 381 Feminism and Philosophy

PHIL 504 Philosophy of Sex and Love

WGSS 549/HIST 649 History of Feminist Theory

WGSS/AAAS 560 Race, Gender and Empire

WGSS/POLS 600 Contemporary Feminist Political Theory

International Perspective: 3

Satisfied by any one course (3 hours) that focuses primarily on global or non-US contexts.

Eligible courses include:

WGSS/HIST 320 From Goddesses to Witches: Women in Premodern Europe

WGSS/HIST 321 From Mystics to Feminists: Women's History in Europe 1600 to the Present

WGSS 330/AAAS 340 Women in Contemporary African Literature

WGSS/HIST 335 History of Jewish Women

WGSS/GIST 355 International Women's Rights

WGSS/HUM 366 Fat, Food and the Body in Global Perspective

ANTH/AAAS 372 Religion, Power, and Sexuality in Arab Societies

WGSS 376/EALC 375 Love, Sexuality and Gender in Japanese Literature

or WGSS 57 Love, Sexuality and Gender in Japanese Literature

or EALC 575 Love, Sexuality and Gender in Japanese Literature

WGSS/AAAS 380 African Art and Gender

WGSS/ANTH 389 The Anthropology of Gender: Female, Male, and Beyond

AAAS 415 Women and Islam

WGSS/EALC Sexual Politics in Chinese Literature and Culture: Premodern Times

AAAS 434 African Women Writers

WGSS/CLSX Gender and Sexuality in Greek Culture

515

WGSS/CLSX Gender and Sexuality in Roman Culture

516

WGSS/HA 533 Rococo to Realism: Painting in Europe c. 1750-1848

WGSS/HA 534 Impressionism and Post-Impressionism: 1848-1900

WGSS 553 Making a Pandemic: The History and Politics of HIV/AIDS

WGSS/AAAS Race, Gender and Empire

REL 573 Judaism and Sexuality

WGSS/GIST Gender, Culture, and Migration

565

WGSS/ANTH Love, Sex, and Globalization

583

WGSS/HIST/AAAS 598 Sexuality and Gender in African History

FMS 620 International Women Filmmakers

WGSS/POLS Gender, War, and Peace

653

WGSS/AAAS Gender and Politics in Africa

662

WGSS 664 Women, Health, and Healing in Africa

General Electives

Satisfied by all WGSS courses.

Eligible courses include all those listed above and the following:

WGSS 111 Introduction to Human Sexuality Studies

WGSS 177 First Year Seminar: _____

WGSS 196 Study Abroad Topics in: _____

WGSS 327 Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies

WGSS 331 Sex and Gender in New Media

WGSS 333 The Politics of Physical Appearance

WGSS 339 Feminism and Social Change

WGSS 396 Studies in: _____ (Can be designated as social science or humanities perspective by petition.)

WGSS 397 Study Abroad Topic in: _____

WGSS 498 Independent Study

WGSS/ISP 567 Native Feminisms

WGSS 563 Gender, Sexuality and the Law

WGSS 650 Service Learning in Women, Gender and Sexuality Studies

WGSS 696 Studies in: _____

Research Methods

3

Satisfied by: (suggested for the junior year)

WGSS 501 Doing Feminist Research (Fall Only)

Capstone Project

3
For students pursuing a Bachelor of Arts degree, refer to this requirement. Another WGSS program can overlap one course— the introductory-level WGSS 501 and the Human Sexuality major—two of which would be requirements for both the Women, Gender, and Sexuality Studies major and the department of Women, Gender, and Sexuality Studies may do so with the left-side navigation. Confirm with the major advisor.

Women, Gender, and Sexuality Studies Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 30 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Hours at Advanced Levels**

Satisfied by a maximum of 6 hours at the 100-200 level and a minimum of 12 credit hours 500+ level.

- 100 & 200 level: maximum 6 hours (1 requirement and up to 1 elective)
- 300 & 400 level: remaining credit hours (up to 5 electives)
- 500 & 600 level: minimum 12 credit hours (2 requirements and at least 2 electives)

**Major Junior/Senior (300+) Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Overlap Policies

Students who wish to pursue more than one program offered by the department of Women, Gender, and Sexuality Studies may do so with the following restrictions: No more than four courses may be used to fulfill requirements for both the Women, Gender, and Sexuality Studies major and the Human Sexuality major—two of which would be WGSS 501 and WGSS 601. No more than two courses may overlap between any of our majors and minors, or between our two minors—one of which would be WGSS 501. Students earning an undergraduate certificate in addition to another WGSS program can overlap one course—the introductory-level requirement.

For students pursuing a Bachelor of Arts degree, refer to this sample 4-year plan for a BA in Women, Gender, & Sexuality Studies (p. 1862) or use the left-side navigation.

GPA Requirements

Students need a 3.5 GPA in their WGSS major.

Honors Thesis

Students write an honors thesis that is pertinent to Women, Gender and Sexuality Studies. An honors thesis is a piece of original research or other project supervised by a faculty member of any department. In most cases, the result will be a written document of some length, but this could vary depending on the topic and what the student and thesis advisor agree on.

The senior honors thesis or honors project must be approved by a three-member thesis committee (the thesis advisor and two other faculty members, at least one of whom must be either in WGSS or serve as WGSS affiliate faculty).

Students take 6 credit hours of honors thesis work (3 hours per semester for 2 semesters) and they must earn an A or B in the first semester and an A the second. For these 6 hours, students can enroll in:

- WGSS 498 Independent Study in WGSS
- WGSS 498 Honors in Women, Gender and Sexuality Studies or
- WGSS 498 Independent Study in WGSS
- WGSS 601—Senior Capstone in WGSS or
- Two Honors Research courses or two Independent Studies in any department

Summary

- 3.5 GPA in the WGSS major
- A senior honors thesis related to WGSS written over two semesters (two three-credit courses)
- Double majors: earn Honors in both majors with one thesis that is relevant to both programs.

Typical Timeline

- Fall of the Junior Year: Take WGSS 501 to develop research interests and an idea for your thesis. Enroll in other courses that let you develop expertise in this area.
- Spring of the Junior Year: Get to know faculty members who share similar research interests by enrolling in their courses or visiting them in office hours. Identify a professor willing to supervise the thesis. Inform the WGSS Honors Coordinator!
- Fall Semester of the Senior Year: Enroll in 3 credit hours of WGSS 498 or in an Independent Study of another department. Begin researching the thesis topic. The student and thesis advisor should form a three-person faculty committee (the thesis advisor and two other faculty members, at least one of whom must be either in WGSS or serve as WGSS affiliate faculty). Submit an Honors Intent Form by 1 March to College Advising and Student Services, 109 Strong.
• Spring Semester of the Senior Year: In consultation with your thesis advisor, enroll in 3 credit hours of WGSS 499 or WGSS 601 in an Independent Study of another department. Finish the thesis. Have the thesis committee read the thesis and vote to award Honors (or not). If the thesis is passed, the thesis advisor needs to sign the Honors Certification Form, which can be obtained by the student in the College Advising and Student Services office, 109 Strong; after the advisor signs this form, it is then submitted back to the College Advising and Student Services, 109 Strong, at least a week before the end of the graduation term. The thesis advisor should also notify the Honors Coordinator of the result.

Double Majors

Students who are satisfying double majors and pursuing Honors in both majors may use one honors thesis for both majors if they get approval from both departments. The thesis must be related to both majors, and the thesis committee must include faculty members from both departments. Students must fulfill both departments’ requirements for honors.

BA in Women, Gender, and Sexuality Studies

Below is a sample 4-year plan for students pursuing the BA in Women, Gender, and Sexuality Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WGSS 101 or 102 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
</tbody>
</table>

Total Hours 17

### Sophomore

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS Humanities Perspective 300+ (Major Requirement)</td>
<td>3</td>
<td>WGSS Social Science Perspective 300+ (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities (overlap with major if possible)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity, as needed (overlap with major if possible)</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 15

### Junior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 501 (Research Methods (Major Requirement))</td>
<td>3</td>
<td>WGSS Elective 500+ (1 of 3), Major Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WGSS Theory Perspective 300+ (Major Requirement)</td>
<td>3</td>
<td>WGSS Elective 300+ (2 of 3), Major Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>WGSS International Focus Perspective 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness (overlap with major if possible)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 15

### Senior

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS Elective 500+ (3 of 3), Major Requirement</td>
<td>3</td>
<td>WGSS 601 (Goal 6 Integration &amp; Creativity, Major Requirement SPRING ONLY)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 15

### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.
3. A list of courses that fulfill each requirement in the major can be found on the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/women-gender-sexuality-studies/ba-bgs/#requirementstext) tab of the catalog.
WGSS 501 is only offered in the fall semester.

WGSS 601 is only offered in the spring semester.

Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in Women, Gender, and Sexuality Studies

Below is a sample 4-year plan for students pursuing the BGS in Women, Gender, and Sexuality Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 101 or 102 (Goal 3 Social Science, Major Requirement)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total | 15 | 15 |

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS Humanities Perspective 300+ (Major Requirement)</td>
<td>3</td>
<td>WGSS Social Science Perspective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 Human Diversity</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total | 15 | 15 |

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 501 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>WGSS Elective 500+ (1 of 3), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>WGSS Theory Perspective 300+ (Major Requirement)</td>
<td>3</td>
<td>WGSS Elective 300+ (2 of 3), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>WGSS International Focus Perspective 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total | 15 | 15 |

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS Elective 500+ (3 of 3), Major Requirement</td>
<td>3</td>
<td>WGSS 601 (Goal 6 Integration &amp; Creativity, Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>BGS Career Prep Course (BGS Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total | 15 | 15 |

#### Total Hours 120

1. A list of courses that fulfill each requirement in the major can be found on the degree requirements (http://catalog.ku.edu/liberal-arts-sciences/women-gender-sexuality-studies/ba-bgs/#requirements) tab of the catalog.

2. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

3. WGSS 501 is only offered in the fall semester. Recommended for the fall of the 3rd or 4th year.

4. WGSS 601 is only offered in the spring semester.

Please note:
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Minor in Human Sexuality**

**Why study human sexuality?**
- Explore the diverse range of human sexual practices and taboos
- Compare scientific, historical, and creative understandings of sexual desire
- Learn to analyze and address problems of sexual violence, reproductive justice, and LGBTQ inclusivity.

Human Sexuality students focus on the social, political, and medical constructions of human sexuality. They draw from interdisciplinary methods, theories, and research to better understand how the social construction and lived experiences of sexuality relate to society, politics, medicine, and social movements.

**Requirements for the Minor**

**Human Sexuality Minor Course Requirements**

The minor requires 18 hours. At least 12 hours must be at the junior/senior (300+) level or higher. Students with a major in WGSS and a minor in Human Sexuality may only overlap two courses.

Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td></td>
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</tr>
<tr>
<td>WGSS 111</td>
<td>Introduction to Human Sexuality Studies</td>
<td>3</td>
</tr>
<tr>
<td>Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WGSS 501</td>
<td>Doing Feminist Research (Fall Only)</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied by approved courses with a primary focus on sexuality.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligible courses include:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WGSS 101</td>
<td>Introduction to Women, Gender, and Sexualities</td>
<td></td>
</tr>
<tr>
<td>or WGSS 101</td>
<td>Introduction to Women, Gender, and Sexualities, Honors</td>
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<tr>
<td>SW 303</td>
<td>Human Sexuality</td>
<td></td>
</tr>
<tr>
<td>WGSS 311/AMS 323/HUM 332/HIST 332</td>
<td>Sex in History</td>
<td></td>
</tr>
<tr>
<td>WGSS/HIST 322</td>
<td>LGBTQ U.S. History, 1600-1900</td>
<td></td>
</tr>
<tr>
<td>WGSS/HIST 323</td>
<td>LGBTQ U.S. History, 1900-Present</td>
<td></td>
</tr>
<tr>
<td>WGSS/HIST 324</td>
<td>History of Women and the Body</td>
<td></td>
</tr>
<tr>
<td>WGSS/ANTH 325</td>
<td>Language, Gender, and Sexuality</td>
<td></td>
</tr>
<tr>
<td>SOC 326</td>
<td>Health, Gender, and Society</td>
<td></td>
</tr>
<tr>
<td>WGSS 327</td>
<td>Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies</td>
<td></td>
</tr>
<tr>
<td>WGSS 329</td>
<td>Introduction to Queer Theory: Tools for Deconstructing Gender</td>
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<tr>
<td>WGSS 331</td>
<td>Sex and Gender in New Media</td>
<td></td>
</tr>
<tr>
<td>WGSS 333</td>
<td>The Politics of Physical Appearance</td>
<td></td>
</tr>
<tr>
<td>WGSS 339</td>
<td>Feminism and Social Change</td>
<td></td>
</tr>
<tr>
<td>WGSS 350</td>
<td>Black Love and Romance</td>
<td></td>
</tr>
<tr>
<td>SOC 352</td>
<td>Sociology of Sex Roles</td>
<td></td>
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<tr>
<td>WGSS/GIST 355</td>
<td>International Women's Rights</td>
<td></td>
</tr>
<tr>
<td>ANTH 359</td>
<td>Anthropology of Sex</td>
<td></td>
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<tr>
<td>WGSS/HIST 361</td>
<td>Youth, Sex, and Romance in Post-WWII United States</td>
<td></td>
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<tr>
<td>WGSS/HUM 364</td>
<td>Pregnancy in Modern Literature</td>
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<tr>
<td>WGSS/HUM 365</td>
<td>Angry White Male Studies</td>
<td></td>
</tr>
<tr>
<td>ANTH/AAAS 372</td>
<td>Religion, Power, and Sexuality in Arab Societies</td>
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<tr>
<td>WGSS/REL 374</td>
<td>Religious Perspectives on Selfhood and Sexuality</td>
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<tr>
<td>WGSS/REL 374</td>
<td>Religious Perspectives on Selfhood and Sexuality</td>
<td></td>
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<tr>
<td>WGSS 376/EALC 375</td>
<td>Love, Sexuality and Gender in Japanese Literature</td>
<td></td>
</tr>
<tr>
<td>or WGSS 576</td>
<td>Love, Sexuality and Gender in Japanese Literature, Honors</td>
<td></td>
</tr>
<tr>
<td>or EALC 576</td>
<td>Love, Sexuality and Gender in Japanese Literature, Honors</td>
<td></td>
</tr>
<tr>
<td>ANTH/WGSS 389</td>
<td>The Anthropology of Gender: Female, Male, and Beyond</td>
<td></td>
</tr>
<tr>
<td>WGSS/PSYC 410</td>
<td>Intimate Relationships</td>
<td></td>
</tr>
<tr>
<td>REL/WGSS/HUM 477</td>
<td>Gender and Religion</td>
<td></td>
</tr>
<tr>
<td>HSES 489</td>
<td>Health and Human Sexuality</td>
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</tr>
<tr>
<td>WGSS/PSYC 502</td>
<td>Human Sexuality</td>
<td></td>
</tr>
<tr>
<td>PHIL 504</td>
<td>Philosophy of Sex and Love</td>
<td></td>
</tr>
<tr>
<td>WGSS/CLSX 515</td>
<td>Gender and Sexuality in Greek Culture</td>
<td></td>
</tr>
<tr>
<td>WGSS/CLSX 516</td>
<td>Gender and Sexuality in Roman Culture</td>
<td></td>
</tr>
<tr>
<td>WGSS/PSYC 521</td>
<td>Women and Violence</td>
<td></td>
</tr>
<tr>
<td>WGSS 540</td>
<td>Skin, Sex, and Disease</td>
<td></td>
</tr>
</tbody>
</table>
**Overlap Policies**

Students who wish to pursue more than one program offered by the department of Women, Gender, and Sexuality Studies may do so with the following restrictions: No more than four courses may be used to fulfill requirements for both the Women, Gender, and Sexuality Studies major and the Human Sexuality major – two of which would be WGSS 501 and WGSS 601. No more than two courses may overlap between any of our majors and minors, or between our two minors – one of which would be WGSS 501. Students earning an undergraduate certificate in addition to another WGSS program can overlap one course – the introductory-level requirement.

**Minor in Women, Gender, and Sexuality Studies**

**Why study women, gender and sexuality?**

- Confront social problems around gender and sexuality
- Collaborate with students and faculty from across the social sciences and humanities
- Build expertise on issues that matter most to you

If you are interested in how gender, race, class, and sexuality structure our world and interactions with one another, and if you are passionate about issues of social justice and inequality, then a WGSS program may be a great fit for you.

Students in Women, Gender, and Sexuality Studies develop a broad set of skills to critically analyze social issues from multiple disciplinary perspectives, including anthropology, history, law, literature, political science, psychology, and sociology. They learn to employ different methods and modes of analysis to better identify, critique, and productively understand the status of women in society and how structures of inequality interact with gender and sexuality.

**Requirements for the Minor**

**Women, Gender, and Sexuality Studies Minor Course Requirements**

The minor requires 18 hours. At least 12 hours must be at the junior/senior (300+) level or higher.

Students selecting this minor must complete the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td></td>
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</tr>
<tr>
<td>WGSS 101</td>
<td>Introduction to Women, Gender, and Sexuality Studies or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>WGSS 101 Introduction to Women, Gender, and Sexuality Studies, Honors</td>
<td></td>
</tr>
<tr>
<td>Theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WS 329</td>
<td>Introduction to Queer Theory: Tools for Deconstructing Gender</td>
<td>3</td>
</tr>
</tbody>
</table>

**Human Sexuality Minor Hours**

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
Minor in Women, Gender, and Sexuality Studies

WGSS/PHIL 381 Feminism and Philosophy
PHIL 504 Philosophy of Sex and Love
WGSS 549/ HIST 649 History of Feminist Theory
WGSS/AAAS 560 Race, Gender and Empire
WGSS/POLS 600 Contemporary Feminist Political Theory

Feminism and Philosophy

PHIL 504 Philosophy of Sex and Love
WGSS 549/ HIST 649 History of Feminist Theory
WGSS/AAAS 560 Race, Gender and Empire
WGSS/POLS 600 Contemporary Feminist Political Theory

Methods

WGSS 501 Doing Feminist Research (Fall Only)

Electives

Satisfied by any 3 additional WGSS courses (9 hours).

Eligible courses include:
- WGSS 111 Introduction to Human Sexuality Studies
- WGSS 177 First Year Seminar: _____
- WGSS 196 Study Abroad Topics in: _____
- SOC 220 Sociology of Families
- SW 303 Human Sexuality
- ENGL/GIST 306 Global Environmental Literature
- WGSS 311/ AMS 323/ HIST 332/ HUM 332 Sex in History
- HIST 317 African American Women: Colonial Era to the Present
- WGSS/HIST 319 History, Women, and Diversity in the U.S.
- WGSS/HIST 320 From Goddesses to Witches: Women in Premodern Europe
- WGSS/HIST 321 From Mystics to Feminists: Women's History in Europe 1600 to the Present
- WGSS/HIST 322 LGBTQ U.S. History, 1600-1900
- WGSS/HIST 323 LGBTQ U.S. History, 1900-Present
- WGSS/HIST 324 History of Women and the Body
- WGSS/ANTH 325 Language, Gender, and Sexuality
- SOC 326 Health, Gender, and Society
- WGSS 327 Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies
- WGSS 330/ AAAS 340 Women in Contemporary African Literature
- WGSS 331 Sex and Gender in New Media
- WGSS 333 The Politics of Physical Appearance
- WGSS/JWSH/ HIST 335 History of Jewish Women
- WGSS 339 Feminism and Social Change
- WGSS 350 Black Love and Romance
- WGSS 351 Women and Leadership: The Legislative Process
- SOC 352 Sociology of Sex Roles

WGSS/GIST 355 International Women's Rights
ANTH 359 Anthropology of Sex
WGSS/HIST 361 Youth, Sex, and Romance in Post-WWII United States
WGSS/HUM 364 Pregnancy in Modern Literature
WGSS/HUM 365 Angry White Male Studies
WGSS/HUM 366 Fat, Food and the Body in Global Perspective
ANTH/AAAS 372 Religion, Power, and Sexuality in Arab Societies
WGSS/REL 374 Religious Perspectives on Selfhood and Sexuality
WGSS 376/ EALC 375 Love, Sexuality and Gender in Japanese Literature
WGSS/AAAS 380 African Art and Gender
AAAS 388 The Black Woman
WGSS/ANTH 389 The Anthropology of Gender: Female, Male, and Beyond
WGSS 396 Studies in: _____
WGSS 397 Study Abroad Topic in: _____
WGSS/PSYC 410 Intimate Relationships
AAAS 415 Women and Islam
WGSS/EALC 418 Sexual Politics in Chinese Literature and Culture: Premodern Times
or WGSS 61 Sexual Politics in Chinese Literature and Culture: Premodern Times
or EALC 618 Sexual Politics in Chinese Literature and Culture: Premodern Times
AAAS 434 African Women Writers
WGSS/COMS 440 Communication and Gender
SOC 450 Gender and Society
SOC 454 Women and Work
WGSS/PSYC 468 Psychology of Women
WGSS/REL/ HUM 477 Gender and Religion
HSES 489 Health and Human Sexuality
WGSS 498 Independent Study
WGSS/PSYC 502 Human Sexuality
PHIL 504 Philosophy of Sex and Love
WGSS/AMS 510/HIST 530 History of American Women: Colonial Times to 1870
WGSS 511/ HIST 531/ AMS 511 History of American Women: 1870 to Present
WGSS/CLSX 515 Gender and Sexuality in Greek Culture
WGSS/CLSX 516 Gender and Sexuality in Roman Culture
Courses with a blank (___) vary by semester and may be repeated for credit. These courses all always count as general electives. If they include significant theoretical material, they may count toward specific requirements within the program as well. Confirm with the major advisor.

Women, Gender, and Sexuality Studies Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Overlap Policies

Students who wish to pursue more than one program offered by the department of Women, Gender, and Sexuality Studies may do so with the following restrictions: No more than four courses may be used to fulfill requirements for both the Women, Gender, and Sexuality Studies major and the Human Sexuality major – two of which would be WGSS 501 and WGSS 601. No more than two courses may overlap between any of our majors and minors, or between our two minors – one of which would be WGSS 501. Students earning an undergraduate certificate in addition to another WGSS program can overlap one course – the introductory-level requirement.

Undergraduate Certificate in Gender, Law and Policy

Why study gender, law & policy?

• Learn how gender and sexuality shape access to justice
• Use scientific, historical, cross-cultural, and literary tools to analyze the law from a critical perspective
• Build better policy solutions to real social problems

The Department of Women, Gender & Sexuality Studies now offers an undergraduate certificate investigating how legal institutions address gender, race, class and sexuality. This focused program is only four courses, with popular electives on topics such as intimate partner violence, human trafficking, reproductive justice, LGBTQ rights, electoral politics, feminist jurisprudence, and sex education. Available online and in-person, it is designed to fit alongside other major and minor programs from across campus.

This certificate requires 12 unique credit hours, including:

• One Introductory Course
• Two Electives
• One Capstone:
  • WGSS 563 Gender, Sexuality and the Law (available online)

Other relevant courses, including WGSS 396 Studies in: _____, may be approved by WGSS chair or undergraduate director.

Eligible WGSS Courses Include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Introductory Course</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Choose one of the following:</td>
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<tr>
<td></td>
<td>WGSS 101 Introduction to Women, Gender, and Sexuality Studies</td>
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<tr>
<td></td>
<td>or WGSS 102 Introduction to Women, Gender, and Sexuality Studies, Honors</td>
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<td></td>
<td>WGSS 111 Introduction to Human Sexuality Studies</td>
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<td></td>
<td><strong>Electives</strong></td>
<td>6</td>
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<tr>
<td></td>
<td>Choose two of the following:</td>
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<tr>
<td></td>
<td>WGSS/HIST 319 History, Women, and Diversity in the U.S.</td>
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<td></td>
<td>WGSS 327 Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies</td>
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<tr>
<td></td>
<td>WGSS 333 The Politics of Physical Appearance</td>
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<tr>
<td></td>
<td>WGSS 339 Feminism and Social Change</td>
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<td></td>
<td>WGSS 351 Women and Leadership: The Legislative Process</td>
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<td>WGSS/GIST 355 International Women’s Rights</td>
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<td>WGSS/PSYC 521 Women and Violence</td>
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<td>WGSS/COMS 552 The Rhetoric of Women’s Rights</td>
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<td></td>
<td>WGSS 553 Making a Pandemic: The History and Politics of HIV/AIDS</td>
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<td>WGSS/AAAS 560 Race, Gender and Empire</td>
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<td>WGSS/POLS 562 Women and Politics</td>
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<td></td>
<td>WGSS/GIST 565 Gender, Culture, and Migration</td>
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<td>WGSS/ISP 567 Native Feminisms</td>
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<td>WGSS/ANTH 583 Love, Sex, and Globalization</td>
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<td>WGSS/POLS 600 Contemporary Feminist Political Theory</td>
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<td>WGSS/POLS 630 Politics of Identity</td>
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<td>WGSS/POLS 640 Politics of Reproductive Policy</td>
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<td>WGSS 650 Service Learning in Women, Gender and Sexuality Studies</td>
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<td>WGSS/POLS 653 Gender, War, and Peace</td>
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<td>WGSS/POLS/AAAS 662 Gender and Politics in Africa</td>
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<td></td>
<td><strong>Capstone</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

WGSS 563 Gender, Sexuality and the Law

Total Hours 12

Courses with a blank (__) vary by semester. If the course directly addresses issues in law and policy, this course may count toward a specific requirement within this program. Confirm with the major advisor.

Overlap Policies:

Students earning the undergraduate certificate in Gender, Law, and Policy in addition to another WGSS program (major or minor) can overlap one course — the 100-level Introduction.

Master of Arts in Women, Gender, and Sexuality Studies

Overview of Women, Gender, & Sexuality Studies

WGSS was built out of the dual goals of examining inequalities resulting from gender, race, sexual orientation and class using an interdisciplinary lens, and translating this research into meaningful, tangible knowledge that contributes to the betterment of communities. Our interdisciplinary faculty members are engaged in research that examines many of the cutting edge issues vexing contemporary times, both domestically and globally, such as discrimination, violence, human trafficking, health and inequality, and migration, to name a few. The common thread throughout these different areas of research is the focus on investigating the factors that create and contribute to vulnerability across time and geography.

Women, Gender, and Sexuality Studies is one aspect of feminism, one where academic discussion and learning go on. WGSS students learn about the ways in which people’s roles in society have been constructed and the ways in which these roles have changed and continue to change. WGSS courses will make you informed about, and sensitive to issues of gender in relation to education, lifestyle, social roles and status, sexuality, legal status and equity. You will face these issues at work; WGSS courses will help you to deal with them in an informed, responsible, and just manner.

What will women, gender, & sexuality studies give me?

• Awareness of the issues facing people of all genders – and the world – today
• Knowledge of many different academic fields
• Critical thinking and problem-solving skills
• Strong writing and researching abilities
• A solid base on which to enter the workforce, pursue further education and have an impact in the world
• Graduates of WGSS go on to do many different things, and the possibilities are endless

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.
Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The Women, Gender, & Sexuality Studies MA program accepts applications for fall admission only. All applications and admissions materials must be received by the deadline listed on the department's website (http://wgss.ku.edu/admission-ma/) to be considered for admission for the following fall semester.

Application Materials

Applicants should upload the supporting application documents listed below to the online application (https://gradapply.ku.edu/apply/). There is no need to send copies of application materials directly to the Women, Gender, & Sexuality Studies department.

- Copy of official transcripts (http://graduate.ku.edu/transcripts/) from all colleges or universities attended
- Resume or CV
- Statement of purpose (no longer than two pages, single spaced)
- Three letters of recommendation

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Contact

Visit the Department of Women, Gender, & Sexuality Studies website for detailed information about MA admission requirements (http://wgss.ku.edu/admission-ma/).

The Master of Arts in Women, Gender, & Sexuality Studies requires 30 credit hours of coursework and a written comprehensive exam. At least 50% of coursework for the master's degree must be taken at the 700 level or above.

Core Courses (9)

WGSS 800 History of Women, Gender and Sexuality Studies (offered every fall)
WGSS 801 Feminist Theory (offered every fall)
WGSS 802 Feminist Methodologies (offered every spring)

Elective Theory (3)

1 course selected by the student and advisor which provides theoretic support for the student’s research

Elective Methods (3)

1 course selected by the student and advisor which provides methodological support for the student’s research

Elective Courses (15)

Five graduate level courses selected by the student and advisor with at least 50% of content related to gender and/or sexuality

MA Exam

In the last semester of course enrollment, students will complete a written comprehensive exam based on MA program content. A committee of three faculty members evaluates the exam upon completion.

Handbook

Further details about meeting the degree requirements can be found in the WGSS Graduate Student Handbook (https://wgss.ku.edu/sites/wgss.ku.edu/files/docs/WGSS%20Graduate%20StudentHandbook.pdf).

Doctor of Philosophy in Women, Gender, and Sexuality Studies

Why study women, gender and sexuality studies?

WGSS was built out of the dual goals of examining inequalities resulting from gender, race, sexual orientation and class using an interdisciplinary lens, and translating this research into meaningful, tangible knowledge that contributes to the betterment of communities. Our interdisciplinary faculty members are engaged in research that examines many of the cutting edge issues vexing contemporary times, both domestically and globally, such as discrimination, violence, human trafficking, health and inequality, and migration, to name a few. The common thread throughout these different areas of research is the focus on investigating the factors that create and contribute to vulnerability across time and geography.

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- Strong writing and researching abilities.
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An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.
Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

The Women, Gender, & Sexuality Studies PhD program accepts applications for fall admission only. All applications and admissions materials must be received by the deadline listed on the department's website (http://wgss.ku.edu/admission-phd/) to be considered for admission for the following fall semester.

Application Materials

Applicants should upload the supporting application documents listed below to the online application (https://gradapply.ku.edu/apply/). There is no need to send copies of application materials directly to the Women, Gender, & Sexuality Studies department.

- Copy of official transcripts (http://graduate.ku.edu/transcripts/) from all colleges or universities attended
- Resume or CV
- Statement of purpose (no longer than two pages, single spaced)
- Writing sample (no longer than 30 pages)
- Three letters of recommendation

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Contact

Visit the Department of Women, Gender, & Sexuality Studies website for detailed information about PhD admissions requirements (https://wgss.ku.edu/admission-phd/).

Ph.D. Degree Requirements

The Ph.D. program requires completion of core and elective courses and demonstration of depth in a chosen concentration or track. Students must complete a minimum of 12 credit hours of core courses in WGSS, 15 credit hours of elective courses in WGSS, and 18 credit hours of coursework in an approved concentration or track as outlined below. The Research Skills and Responsible Scholarship requirement is satisfied by WGSS 802, WGSS 803, WGSS 804, and theory and methods coursework. All coursework within WGSS and within the concentration should be selected in consultation with a faculty advisor.

WGSS Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WGSS 800</td>
<td>History of Women, Gender and Sexuality Studies</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 801</td>
<td>Feminist Theory</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 802</td>
<td>Feminist Methodologies</td>
<td>3</td>
</tr>
<tr>
<td>WGSS 803</td>
<td>Feminist Pedagogy</td>
<td>1.5</td>
</tr>
<tr>
<td>WGSS 804</td>
<td>Professionalization Seminar in Women, Gender, and Sexuality Studies</td>
<td>1.5</td>
</tr>
<tr>
<td>Five elective courses within WGSS selected in consultation with faculty advisor</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>WGSS 999</td>
<td>Doctoral Dissertation</td>
<td>1-12</td>
</tr>
</tbody>
</table>

Approved Concentrations

Concentrations are approved in African and African-American Studies, American Studies, Anthropology, Classics (Greek and Roman Studies), Communication Studies, English, Film and Media Studies, History, History of Art, Political Science, Psychology, Sociology, Theatre, Indigenous Studies, and Museum Studies. Students who wish to pursue an alternative concentration may do so with approval from their faculty advisor and the Director of Graduate Studies.

Concentration Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory</td>
<td>Course</td>
<td>3</td>
</tr>
<tr>
<td>Methods</td>
<td>Course</td>
<td>3</td>
</tr>
<tr>
<td>Fields</td>
<td>Course</td>
<td>3</td>
</tr>
<tr>
<td>Three</td>
<td>Elective Courses</td>
<td>9</td>
</tr>
</tbody>
</table>

Qualifying Exam

Students will take a qualifying exam after completing (or enrolling in enough hours to complete) 30 credit hours of coursework, typically in their fourth semester of the program. The exam is administered by instructors of WGSS 800, WGSS 801, and WGSS 802. Students who successfully pass this exam will be awarded the MA degree in WGSS. The committee will also weigh the quality of the performance on the exam to determine if the student will be approved to continue on to the Ph.D. Awarding of the MA degree does not guarantee approval to continue to the Ph.D.

Comprehensive Oral Exam

After completion of all required coursework (or in the final semester of coursework), students will take a comprehensive oral examination, the centerpieces of which are a portfolio of all major written work (exams, papers, syllabi), three annotated bibliographies, and a dissertation prospectus.

Dissertation

After passing the comprehensive oral examination, students will write a dissertation approved by a departmental dissertation committee and pass a final oral defense of the dissertation to complete the doctoral degree.

Additional Information

Additional information about course and degree requirements for the Women, Gender, & Sexuality Studies doctoral program is located in the department's graduate student handbook (http://wgss.ku.edu/sites/wgss.ku.edu/files/docs WGSS%20Graduate%20Student Handbook.pdf).

Graduate Certificate in Women, Gender, and Sexuality Studies

Why study women, gender, and sexuality studies?

WGSS was built out of the dual goals of examining inequalities resulting from gender, race, sexual orientation and class using an interdisciplinary lens, and translating this research into meaningful, tangible knowledge that contributes to the betterment of communities. Our interdisciplinary faculty members are engaged in research that examines many of the cutting edge issues vexing contemporary times, both domestically and
globally, such as discrimination, violence, human trafficking, health and inequality, and migration, to name a few. The common thread throughout these different areas of research is the focus on investigating the factors that create and contribute to vulnerability across time and geography.

Women, Gender, and Sexuality Studies is one aspect of feminism, one where academic discussion and learning go on. WGSS students learn about the ways in which people’s roles in society have been constructed and the ways in which these roles have changed and continue to change. WGSS courses will make you informed about, and sensitive to issues of gender in relation to education, lifestyle, social roles and status, sexuality, legal status and equity. You will face these issues at work; WGSS courses will help you to deal with them in an informed, responsible, and just manner.

What will women, gender, & sexuality studies give me?

• Awareness of the issues facing women, men, and non-binary people -- and the world -- today.
• Knowledge of many different academic fields.
• Critical thinking and problem-solving skills.
• Strong writing and researching abilities.
• A solid base on which to enter the workforce, pursue further education and have an impact in the world.
• Graduates of WGSS go on to do many different things, and the possibilities are endless.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Any applicant seeking to pursue a graduate certificate in Women, Gender, & Sexuality Studies must submit an application at https://gradapply.ku.edu/apply. Applications are accepted on a rolling basis.

New Applicants

Applicants who are not already enrolled in a KU graduate program should include the following materials in their application to the certificate program.

• Statement of purpose (no longer than one page, single spaced)
• Copy of official transcripts (http://graduate.ku.edu/transcripts/) from all colleges and universities attended
• Two letters of recommendation

Graduate Certificate Requirements

The Graduate Certificate in Women, Gender, and Sexuality Studies requires completion of 12 credit hours of graduate work, including:

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<tbody>
<tr>
<td>WGSS 800</td>
<td>History of Women, Gender and Sexuality Studies</td>
<td>6</td>
</tr>
<tr>
<td>WGSS 801</td>
<td>Feminist Theory</td>
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<tr>
<td>WGSS 802</td>
<td>Feminist Methodologies</td>
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Certificate students must complete two of the following three core courses:

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<td>WGSS 802</td>
<td>Feminist Methodologies</td>
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</tbody>
</table>

Certificate students must also complete two electives chosen from the department’s list of recommended graduate courses or courses approved by the department’s Director of Graduate Studies.

Total Hours 12

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Current KU Graduate Students

Applicants already in a KU graduate program must be in good standing with their home department to be eligible for admission the certificate program. Current KU graduate students must provide the following materials in their online application.

• Statement of purpose (no longer than one page, single spaced)
• Letter of support from home academic department
• Current KU advising report

Contact

Visit the Department of Women, Gender, & Sexuality Studies website for detailed information about graduate certificate admissions requirements (https://wgss.ku.edu/graduate-certificate-admission/).
--Arts (in CLAS)

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

Film and Media Studies (p. 1906)
- Bachelor of Arts and Bachelor of General Studies in Film and Media Studies (p. 1912)
- Minor in Film and Media Studies (p. 1918)
- Undergraduate Certificate in Media Cultures (p. 1918)
- Master of Arts in Film and Media Studies (p. 1918)
- Doctor of Philosophy in Film and Media Studies (p. 1919)
- Graduate Certificate in Film and Media Studies (p. 1920)

Theatre and Dance (p. 1921)
- Bachelor of Fine Arts in Dance (p. 1929)
- Bachelor of Arts in Dance (p. 1931)
- Bachelor of Arts and Bachelor of General Studies in Theatre (p. 1933)
- Bachelor of Fine Arts in Theatre Design (p. 1939)
- Minor in Dance (p. 1941)
- Minor in Theatre (p. 1942)
- Master of Arts in Theatre (p. 1942)
- Master of Fine Arts in Theatre Design/Scenography Concentration (p. 1943)
- Doctor of Philosophy in Theatre (p. 1944)

Visual Art (p. 1945)
- Bachelor of Fine Arts in Visual Art (p. 1956)
- Bachelor of Fine Arts in History of Art (p. 1961)
- Bachelor of Arts in Visual Art (p. 1964)
- Bachelor of Art Education in Visual Art Education (p. 1969)
- Minor in Visual Art (p. 1971)
- Master of Fine Arts in Visual Art (p. 1972)
- Master of Arts in Visual Art Education (p. 1973)

Introduction

The School of the Arts in the College of Liberal Arts and Sciences is composed of 3 departments:
- Film and Media Studies (p. 1906),
- Theatre and Dance (p. 1921), and
- Visual Art (p. 1945).

The school acquaints students with the arts as an important field of a liberal culture, either as members of a discriminating public or as trained practitioners. It prepares students for careers in dance, film and media, theatre, and visual art and promotes scholarship and research in the arts. It offers curricula for teachers of art in public schools and institutions of higher education.

The school makes a substantial contribution to the cultural life of the campus, community, and state by providing a center for the best of theatre and dance performance and the exhibition of works of art and film.

Undergraduate Degree Requirements

Undergraduate Degree Programs
- The degree of Bachelor of Arts (B.A.) is granted with majors in dance, film and media studies, theatre, and visual art.
- The degree of Bachelor of Fine Arts (B.F.A.) is granted with majors in dance, history of art, theatre design, and visual art.
- The degree of Bachelor of General Studies (B.G.S.) is granted with majors in film and media studies and theatre.
- The Bachelor of Art Education (B.A.E.) offers a major in art education.

Requirements for Graduation

All undergraduate degrees from the University of Kansas require completion of the KU Core Curriculum. In addition to the KU Core, students must satisfy the degree specific and major requirements of the degree they are pursuing.

Degrees from the School of the Arts are conferred on candidates who have satisfactorily completed a minimum of 120 credit hours for the B.A., B.G.S., and B.F.A. degrees, including required subjects. The B.A.E. degree requires additional hours in student teaching, internship, and graduate credit for Kansas licensure and therefore requires a minimum of 139 hours.

45 credit hours must be in junior/senior-level courses, numbered 300 and above. 2.0 grade-point averages in KU courses and in junior/senior hours in the major are required for graduation. 4 hours of the total in each case except B.A.E. degrees may be in physical education activity courses. Art appreciation courses are not accepted toward art history requirements for students majoring in any field of art or design. HA 100 and HA 300 are not accepted toward any requirement for students majoring in any field of art or design.

Remedial Courses

Remedial courses listed in the catalog and Schedule of Classes are numbered below 100. Such courses include, but are not limited to MATH 2. Such courses do not count toward graduation in the School of the Arts and may not be counted as distribution courses.

Facilities

Art and Design Building

View a slide show in the School of the Arts brochure.

The 130,000-square-foot Art and Design Building houses all major art and design programs, including studios and offices. The building houses the 2,100-square-foot Art and Design Gallery (https://art.ku.edu/edgar-heap-birds-family-gallery/); this space features new exhibitions every 2
weeks and serves as an important component of the teaching mission. Each major program offers all students spacious work areas and a range of equipment, from traditional to the newest digital technology. Students have access to multiphase computer labs with the most commonly used current software for photography, animation, CAD, 3-D, video production, desktop publishing, scanning, illustration, large- and medium-format plotters, and color and black-and-white laser printers. Unique satellite computer areas are dedicated to textiles, metalsmithing and jewelry, expanded media, and printmaking. Students have access to a traditional **Photography Laboratory**, including a dark room for black-and-white photography, a digital processing lab, dedicated spaces for project photography, and an equipment checkout facility. The 6,400-square-foot **Common Shop** includes a range of woodworking equipment, a plastic vacuum former, metalworking equipment, and classroom space. All labs and the shop have technical support staff.

There are 3 large, well-equipped **painting studios**. The **print studios** consist of 8,000 square feet of workspaces and a dedicated computer lab for serigraphy, lithography, and intaglio. The intaglio studio has 5 presses and a separate acid room. The lithography studio has 3 presses and various sizes of stones. The serigraphy studio has 12 printing stations, a separate wash-out room, and a large exposure unit, available for a variety of photo-based processes. The **sculpture studio** is divided into 5 general work areas with appropriate equipment: woodworking, metal fabrication, foundry, an open courtyard, and individual studios. The foundry contains equipment necessary for casting with a variety of kilns, 3 gas-fired furnaces, and an overhead crane. There is an induction furnace with a lift-swing unit for bronze and a tilt box unit for iron and steel.

The 3,800-square-foot **metalsmithing and jewelry studio** has 8 rooms with separate areas for soldering, metalsmithing, plating/electro-forming, a finishing room, casting, gas and TIG welding, enameling, and a student-operated supply store. Matrix GemVision computer software is available for students to develop 3-dimensional jewelry models. The **ceramics area** includes 5,300 square feet of studio space in the Art and Design building as well as separate west campus Chamney barn facilities. Kilns include salt, soda, cross-draft wood, anagama wood-fired, raku, an electric test kiln, and several kinds of gas and electric kilns. The **textile design area** has separate weaving, screen-printing, sewing, and dye areas. The weaving studios are equipped with 4-, 8-, and 16-harness floor looms and two 16-harness AVL compu-dobby looms. The weaving area includes traditional machines, sergers, and a computer-aided embroidery machine. The textile Mac computer lab offers numerous software applications specific to weaving and surface design including jacquard weaving CAD software.

**Murphy Hall**

**Murphy Hall** houses all major theatre programs and facilities ([http://theatre.ku.edu/facilities/](http://theatre.ku.edu/facilities/)) for University Theatre ([http://www.kutheatre.com/](http://www.kutheatre.com/)) productions. **Crafton-Preyer Theatre** is a large proscenium theatre seating 1,181. It is equipped with a full-stage turntable, a hydraulic orchestra pit elevator, cutting-edge lighting and sound control equipment, and a recently renovated counterweight line system. **William Inge Memorial Theatre** is a 50-foot by 50-foot black box theatre with flexible seating for approximately 120. It is also equipped with excellent lighting and sound control equipment. Well-equipped shops for scenery, costume, and props construction, as well as a lighting maintenance laboratory serve the production areas. **Crafton-Preyer** is also used as **Stage Too**! The audience is built onto the large stage of the theatre for a more intimate setting. **4 main studios** are used as rehearsal halls and classrooms. The **Thomas Gorton Music and Dance Library** is in Murphy Hall.

### Summerfield Hall

The Film and Media Studies facilities are located in Summerfield Hall and right in the center of campus with easy access to parking and the KU bus system. Our facilities reside on the 1st, 2nd and 4th floors and provide over 14,000 sq/ft of production and studio space. Students have access to a state of the art sound recording studio, soundstage, animation studio, computer lab, and production classroom.

### Robinson Center

The dance department is housed in **Robinson Center**, which contains 3 large, well equipped dance studios. One of the studios converts into the **Elizabeth Sherbon Theatre**, an informal, black box theatre. Dance students have performance opportunities ([https://theatredance.ku.edu/](https://theatredance.ku.edu/)) with the University Dance Company, New Dance, and in School of Music and Department of Theatre productions. The **Thomas Gorton Music and Dance Library** is in Murphy Hall.

### Spencer Museum of Art

The **Helen Foresman Spencer Museum of Art** ([http://www.spencerart.ku.edu/](http://www.spencerart.ku.edu/)) is regarded as one of the most innovative university museums and has long been considered one of the top teaching museums in the country. 5 galleries display selections from the permanent collection of more than 36,000 works of art. Areas of special strength include medieval art; European and American paintings, sculpture, and prints; photography; Japanese Edo-period paintings and prints; 20th-century Chinese paintings; and an ethnographic collection that includes 10,000 Native American, African, Latin American, and Australian works. Spencer Museum sponsors exhibitions, lectures, films, workshops, and activities that support curricular instruction in the arts. The also museum houses the Kress Foundation Department of Art History and the **Murphy Art and Architecture Library**, with more than 170,000 volumes and 600 current journals documenting the visual arts, design, and architecture from all cultures, from antiquity to the present.

### Lied Center

The **Lied Center of Kansas** ([http://www.lied.ku.edu/](http://www.lied.ku.edu/)) is a multipurpose performing arts facility with a 2,000-seat performing arts hall. It offers outstanding presentations of music, dance, and theatre, as well as lectures by artists and scholars. The Lied Center is a major regional presenter and provider of performing arts. The Department of Visual Art, **Spencer Museum of Art**, **Thomas Gorton Music and Dance Library**, and the **Lied Center present active visiting artist programs**.

### Undergraduate Programs

- The Department of Theatre and Dance (p. 1921) offers the Bachelor of Fine Arts degree and the Bachelor of Arts in Dance degree.
- The departments of Film and Media Studies (p. 1906) and Theatre and Dance (p. 1921) offer Bachelor of Arts and Bachelor of General Studies degrees.
- The Department of Visual Art (p. 1945) offers the Bachelor of Fine Arts degree, the Bachelor of Arts degree, and the Bachelor of Art Education degree.
- The program leading to the Bachelor of Fine Arts degree in theatre design is offered cooperatively by the School of the Arts and the Department of Theatre and Dance (p. 1921).
Courses for Nonmajors
Students in other KU schools may enroll in dance, film and media studies, theatre, and visual art courses for credit, subject to the availability of instructional time and the completion of necessary prerequisites. Qualifications are determined by course instructors.

Minors in dance, film and media studies, theatre, and visual art are offered for students in other disciplines.

University Honors Program
The school encourages qualified undergraduates to participate in the University Honors Program (http://www.honors.ku.edu/).

Art Exhibitions
A number of exhibitions are sponsored by the Department of Visual Art. These are shown in department galleries and the Kansas Union. Each year, there are exhibitions of work by students in the school, representing the disciplines of art and design.

Performances
The University Dance Company (https://rockchalkcentral.ku.edu/organization/universitydancecompany/) performs a varied repertoire of ballet, modern, and jazz dance. It presents 2 major programs on campus each year as well as numerous presentations on tour.

The University Theatre (http://www.kutheatre.com/) gives students a chance to act in, direct, design, and crew theatre productions. Each year, the University Theatre mounts about 8 fully staged productions. Students gain experience in children’s theatre, musicals, operas, and a range of classical and contemporary plays.

Graduate Programs
The School of the Arts is part of the College of Liberal Arts and Sciences (called the College or CLAS). The College is KU’s largest academic unit with more than 50 departments and programs. Graduate programs in the liberal arts and sciences include disciplines in the arts, humanities, social and behavioral sciences, and natural and mathematical sciences, as well as many interdisciplinary degree programs where often disciplines come together to offer students a unique graduate experience. Each graduate program’s page contains program-specific information about admission, course curriculum, and advising.

The College’s participation in graduate education reflects a long and distinguished commitment to higher learning and research across the liberal arts and sciences. The College takes full advantage of KU’s role as an international research institution to ensure that the knowledge imparted to students is current and that they learn the skills of inquiry and critical evaluation. Graduate students are central to the research and teaching missions of the College. They are also the next generation of scholars, artists, and skilled professionals who will make contributions to our communities and production of knowledge for many years to come.

School of the Arts Graduate Degrees
The School of the Arts offers graduate programs in 3 departments. The Master of Arts (M.A.) degree can be earned in film and media studies, theatre, and visual art education. The Master of Fine Arts degree is offered in visual art and in theatre design with a concentration in scenography. For students whose academic and professional goals can best be achieved through investigations at the interface of 2 or more disciplines, the School of the Arts offers master’s degree programs in interdisciplinary studies.

The School of the Arts offers the Doctor of Philosophy degree in film and media studies and theatre, and a Graduate Certificate in film and media studies.

Art Exhibitions
A number of exhibitions are sponsored by the Department of Visual Art. These are shown in department galleries and the Kansas Union. Each year, there are exhibitions of work by students in the school, representing the disciplines of art and design.

Performances
The University Dance Company performs a varied repertoire of ballet, modern, and jazz dance. It presents 2 major programs on campus each year as well as numerous presentations on tour.

The University Theatre gives students a chance to act in, direct, design, and crew theatre productions. Each year, the University Theatre mounts about 8 fully staged productions. Students gain experience in children’s theatre, musicals, operas, and a range of classical and contemporary plays.

Ceremonies
At the end of each Spring semester, the College holds a master’s hooding ceremony for master’s graduates in the College and Graduate Studies organizes the annual campus-wide doctoral hooding ceremony. The School of the Arts also hosts a ceremony for SOTA graduates. University Commencement information is available in the KU Commencement section of the KU website.

Attendance at these ceremonies is optional. Please consult the Graduate Studies (http://graduate.ku.edu/) and COGA website (http://coga.ku.edu/) for more information.

The School of the Arts (http://sota.ku.edu/) is home to three departments: theatre and dance, film and media studies, and visual art. It is housed within the College of Liberal Arts and Sciences, the broadest and most diverse academic unit on campus.

Students in the School of the Arts create, perform, and interpret works of art that contribute to our culture and history. As part of the College, students have access to ideas across the spectrum of arts, humanities, sciences and mathematics, social and behavioral sciences, and international studies. This partnership offers fresh possibilities for collaboration, paving the way for innovations and ideas.

Students interested in pursuing an undergraduate major or minor in the School of the Arts should contact College Advising and Student Services at 785-864-3500 for assistance in advising.

Graduate Advising & Mentoring Overview
Advising of graduate students is primarily conducted within the graduate programs by program staff members and the individual faculty members who act as mentors and advisors.

A faculty member in the academic unit, typically with the title of Director of Graduate Studies (DGS), has primary responsibility for the regular
assessment of students’ progress towards degree, as well as for the development and oversight of broad scale graduate initiatives. In many units, the DGS has primary oversight of department graduate committees and processes related to recruitment, admissions, new program development or program changes, graduate student annual evaluations, and graduate student petitions. Students are encouraged to work with the DGS regarding course selections and individual program requirements to ensure that all program milestones are reached as expected by the academic unit.

The majority of academic units in the College also receive advising support from a professional staff member called their graduate program coordinator. CLAS graduate program coordinators (https://coga.ku.edu/people/staff/) are team members of the College Office of Graduate Affairs (COGA) that are assigned to a specific CLAS unit(s) to advise graduate students and faculty on policies and processes related to graduate education at KU. Students are encouraged to work closely with their graduate program coordinator to ensure that all University and College requirements are met as expected. Graduate program coordinators also work closely with faculty in their assigned academic units(s), the COGA office, and other campus partners to collaborate on key initiatives related to graduate education and to connect students to services and opportunities to facilitate successful progression throughout their graduate career. Students in units without an assigned graduate program coordinator from COGA should contact the DGS regarding University and College policies and procedures.

Mentoring Best Practices

Graduate mentors, including a student’s graduate advisor(s), others at the university, and external professionals, provide professional and general insights, advice, and assistance to graduate students. Good graduate mentoring makes a vital contribution to the academic and professional success of individual students, advances the disciplines represented in the College, and contributes to the mission of the College as a whole. A positive mentoring relationship depends on the cooperation of both mentor and mentee; both should therefore work together in creating appropriate expectations for their mentoring relationship and in implementing those expectations in practice. (See here (https://www.ithinkwell.com.au/for-research-supervisors/) and here (https://coga.ku.edu/mentoring-and-advising/) for help with this.) With this in mind, here are best practices for graduate mentors and mentees in the College:

Mentors:

1. Graduate mentors should conscientiously supervise, encourage, and support students in their academic endeavors and assist them in securing research support.
2. Graduate mentors should respond effectively, respectfully, and in a timely manner to requests for guidance and support from mentees.
3. Graduate mentors should advise students concerning professional ethics, encourage the practice of research and publication consistent with ethical standards, and help students avoid ethically questionable situations.
4. Graduate mentors should strive to enhance the educational value of teaching and research assistantships of the students under their supervision. To do so they should provide discipline-specific guidance for new and experienced GTA sand GRAs.
5. Graduate mentors should be objective in the evaluation of research and academic performance and communicate that evaluation fully and honestly to their students. Graduate mentors should report accurately on the competence of students to other professionals who require such evaluations.
6. When engaged in teaching, research, or supervision, graduate mentors should recognize the power they hold and should avoid engaging in conduct that exploits or demeans students or that could be construed as an abuse of that power.
7. Graduate mentors should not permit personal animosities or intellectual differences with colleagues to impede student access to those colleagues or interfere with students’ research or progress toward a degree.
8. Graduate mentors should aid and advise graduate students in seeking professional employment inside and outside of academia, taking into account the current state of the job market and the particular situation of the student. This includes directing students towards appropriate resources (see for example here (http://cogaprofessional.ku.edu/getting-started-0/) and advising students about career opportunities and implications associated with their participation in particular research projects or degree programs.
9. Graduate mentors should be sensitive to the specific challenges faced by international students and students who identify as members of one or more underrepresented group. This may include directing students towards appropriate resources, including the following: Office of Multicultural Affairs (https://oma.ku.edu/), International Support Services (https://iss.ku.edu/), Office of Diversity & Equity (http://diversity.ku.edu/), Emily Taylor Center (https://emilytaylorcenter.ku.edu/), Center for Sexuality & Gender Diversity (https://sgd.ku.edu/), Support Services for Undocumented Students (https://undocumented.ku.edu/), as well as DEI resources in the College (https://college.ku.edu/dei/).

Mentees:

1. Graduate students should be open and willing to discuss their professional goals, aspirations, and areas where they need guidance with their mentor.
2. Graduate students should be open to guidance and criticism from their mentors.
3. Graduate students should respond effectively, respectfully, and in a timely manner to communication and guidance from mentors.
4. Graduate students should come to scheduled meetings prepared and on time. Templates are available here (https://www.ithinkwell.com.au/resources/meeting-agenda/) for students to prepare for meetings.
5. Graduate students are strongly encouraged to establish and maintain multiple mentoring relationships or develop a network of mentors that can provide support and guidance throughout their graduate career and beyond. Graduate students are encouraged to include, as part of this network, colleagues or interfere with students’ research or progress toward a degree.
6. Graduate students are strongly encouraged to take advantage of resources across campus to develop short-term and long-term academic, research, and other professional goals and be willing to discuss these with their mentor.

Change of Advisor

Graduate mentoring relationships can break down. If so, the formation of new mentoring relationships should be encouraged without prejudice. (For more information about what to do when a mentoring relationship breaks down, see Chapter 6 of the University of Michigan’s How to

All departments in the College are required to have a policy in place to govern the process of switching advisors. Please see your department’s graduate student handbook or consult with the Director of Graduate Studies for more information.

Students seeking information on specific policy or procedures should review the relevant content in the KU Policy Library (http://policy.ku.edu/) as well as the College and Graduate Studies (p. 2408) sections and the relevant Department or Program section of the online catalog. The College Office of Graduate Affairs (http://coga.ku.edu/), 102 Strong Hall, coga@ku.edu, is also available for assistance.

Students who have completed all degree requirements and are preparing to graduate should refer to the graduation checklists available on the COGA website (http://coga.ku.edu). Graduating students are also welcome to schedule a Graduation Appointment with the College Office of Graduate Affairs.

**Undergraduate University Regulations**

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

**Academic Integrity**

The College of Liberal Arts and Sciences strictly enforces KU and College policies on academic misconduct. Academic integrity requires honest performance of academic responsibilities by students. These include preparation of assignments, reports and research papers, taking examinations, completing administrative requirements, and a sincere and conscientious effort by students to abide by the policies set forth by instructors.

**Academic Standing**

**Good Standing**

Students with a KU cumulative GPA of a 2.00 or higher are in good academic standing.

**Notice**

Students who fall below a 2.00 KU cumulative GPA for the first time will be placed on notice. During the notice semester students are required to participate in all programming. Students failing to return to good academic standing at the end of the notice semester will be placed on probation. Students will only receive one notice semester.

Students who have previously returned to good academic standing will be placed on probation should their KU cumulative GPA fall below a 2.00.

**Probation**

Students on probation must meet their required KU Term GPA (see chart below) every semester until their KU cumulative GPA reaches or exceeds a 2.00. Students are allowed to continue on probation provided they meet their KU term GPA every fall and spring semester until their KU cumulative GPA reaches or exceeds a 2.00. While on probation students are required to participate in all programming. The required KU term GPA increases to a 2.50 after attempting 45 or more hours at KU to help students on probation return to good academic standing before they are at risk of being unable to raise their KU cumulative GPA in time for graduation. Failure to meet the required KU Term GPA during a fall or spring semester will result in academic dismissal.

**Academic Dismissal**

Students on probation who fail to meet their probation requirements during a fall or spring semester will be academically dismissed and are not allowed to continue in the College of Liberal & Sciences until they meet their readmission after dismissal requirements. Students are not dismissed at the end of summer.

**Readmission after Dismissal**

Students can be readmitted back to KU after a first and a second dismissal but they must complete their readmission requirement. If all requirements for the KU Core 1 - 5 goals are completed, no coursework is required. Students returning after an academic dismissal will be readmitted on probation and must meet their required term GPA requirements to avoid another dismissal.

**Terms for Readmission after Dismissal**

First Dismissal - Sit out one fall or spring semester; complete at least one 3 credit hour course that transfers to KU to meet KU Core 1-5 Goals; earn a 2.50 in all courses taken since dismissal.

Second Dismissal - Sit out one academic year; complete at least one 3 credit hour course that transfers to KU to meet KU Core 1-5 Goals; earn a 2.50 in all courses taken since dismissal.

Third Dismissal - a third dismissal is final.

**Change of School**

Students with a KU cumulative GPA of 2.00 or higher (or in their first semester) can fill out a Change of School Form requesting to be admitted to the College of Liberal Arts and Sciences and/or School of the Arts, from a KU professional school, through the last day of class for the current semester. Requests made after that will be for admission in the upcoming semester. This process is for active KU students. Students not admitted to KU follow the University’s admission policy.

Students with a KU cumulative GPA of less than a 2.00 will be evaluated according to the College’s academic standing policy and may not be admissible based on past academic performance at KU. Students who have been dismissed from another KU School will need to submit a change of school request one week or earlier prior to classes starting. Non-dismissed students may request to change schools through the 20th day of the current semester; after that date requests will be considered for the next semester.

- Change of school requests will not be reviewed until current semester grades are posted.
- Students admitted to the College on probation will need to meet the College’s academic probation requirements during the semester they are admitted or face an academic dismissal.
- The College reserves the right to deny admission to students who have had consecutive semesters of failing grades (or multiple
semester withdrawals) regardless of their KU cumulative GPA in previous semesters.

- Students dismissed from another school at KU and are found to be inadmissible to the College can follow our readmission after dismissal policy to return to KU for a future semester.
- Students admitted to the College via a Change of School request will go by the requirement term of their original matriculation to the University of Kansas. A student may petition the College of Liberal Arts & Sciences to request to change to the term requirements based on the term they requested entry into the College. This should be considered in consultation with their academic advisor, and a petition should be submitted to College Advising & Student Services.

To change from one school to another, a student must submit a Change of School form in the dean's office of the school they plan to enter or in College Advising & Student Services (https://collegeadvising.ku.edu/) if they plan to enter the College. Deadlines are included on the form. See the school's requirements for admission.

Students applying for admission to the College from other schools in the university must meet the same minimum grade-point average requirements in KU attempted course work as continuing College students. Consult College Advising & Student Services, Strong Hall, 1450 Jayhawk Blvd., Room 109, Lawrence, KS 66045-7518, 785-864-3500.

**Credit/No Credit**

A Credit/No Credit option is available to all degree-seeking undergraduates. A student may enroll in 1 course a semester under the option, if the course is not in their major or minor. To exercise the option, the student must fill out the online form via the Registrar's website during the fifth and sixth weeks of the semester (or the third week of summer session and 8-week courses). See the Academic Calendar (http://registrar.ku.edu/calendar/) for current dates for electing this option. After the close of the option period, the choice cannot be changed. Under the option, a grade of Credit is recorded for grades of A, B, or C; No Credit is recorded for grades of D or F. Courses graded Credit or No Credit do not count in computing the grade-point average. Courses graded Credit are included in the total hours counted toward graduation. Courses graded No Credit do not count toward graduation. For more information, visit the KU Policy Library (http://policy.ku.edu/).

**Warning:** Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

The university-established timeline for exercising this option is strictly enforced.

**Enrollment**

See the Enrollment Guide (http://www.registrar.ku.edu/enrollment/) for complete enrollment information.

**New and Readmitted Student Enrollment**

Immediately before the beginning of classes each term, an enrollment session is scheduled for new students. New students admitted for summer or fall term have an additional option of enrolling in fall courses during one of several summer orientation sessions. Invitations to orientation are sent automatically to newly admitted and readmitted students who applied for the spring, summer, or fall terms (except non-degree-seeking students). Readmitted students may attend a special abbreviated orientation session, may enroll during continuing enrollment, or may attend the enrollment sessions immediately before the start of the semester. Readmitted students whose readmission applications are completed by a designated date also may enroll during continuing enrollment, after meeting with an advisor. All students must preregister for orientation and enrollment sessions.

International students must complete the required check-in processes before enrollment and are encouraged to attend International Student Orientation, which includes advising and enrollment sessions.

**Continuing Enrollment**

This enrollment allows students who are currently enrolled during one term to enroll for the next term. Spring-enrolled students enroll in April for the following summer session or fall semester or both. Fall-enrolled students enroll in October or November for the following spring semester.

**Late Enrollment**

Each semester, the Academic Calendar (http://registrar.ku.edu/calendar/) announces dates for late enrollment and the last day to submit a Petition to Late Enroll. Petitions are evaluated based on past academic performance. A student may enroll in a course or change class sections after the semester has been in session for 4 weeks only if the course has met fewer than 25 percent of the class sessions. For most classes, the faculty have established earlier dates for beginning class attendance and participation. A fee is assessed for late enrollment.

**Grading**

The letters A, B, C, D, S (satisfactory), and Credit indicate passing work. The letters F and U (unsatisfactory) and No Credit indicate that the quality of work was such that, to obtain credit, the student must repeat regular course work. P represents satisfactory progress (an interim grade pending completion of a subsequent term's course work). See the KU Policy Library (http://policy.ku.edu/) for more information.

**Graduation with Honors**

Undergraduates may earn honors upon graduation in 3 ways. The student may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program (http://www.honors.ku.edu/). It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student's transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

**Graduation with Distinction or Highest Distinction**

The top 10 percent of each year's graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction.

Students must have completed at least 60 hours graded A through F in residence at KU (including the hours in which they are enrolled during the semester of graduation). Awards of distinction and highest distinction are based solely on the grade-point average determined by KU residence credit hours unless the overall grade-point average (including transfer hours) is lower than the residence grade-point average. In this case, the award is determined by the overall grade-point average. Students who rank in the upper 10 percent of their graduating class graduate with...
distinction. The upper third of those awarded distinction graduate with highest distinction.

Potential candidates are determined in mid-April and invited to a recognition ceremony during Commencement weekend in May. Final designation is determined in mid-July.

Graduation with Departmental Honors

Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental honors is awarded in recognition of exceptional performance in the major, completion of a program of independent research or an alternative project, and a strong overall academic record.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on undergraduate studies and advising), the College requires the following for graduation with departmental honors:

1. Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s). Copies of the intent form should be returned to College Advising and Student Services.

2. At the end of the final undergraduate semester, the candidate must have achieved a grade-point average of at least 3.5 in the major, and some departments may also require an additional overall minimum GPA. This includes work completed at other institutions, as well as at KU. No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.

3. Each candidate’s departmental honors work must include independent research or an acceptable alternative project. The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

Petitions

A department or program may petition to award graduation with departmental honors to deserving students who, for good reason, do not meet every College and departmental requirement. Send petitions to the committee on undergraduate studies and advising, College Advising & Student Services (https://collegeadvising.ku.edu/).

Late Completion of Honors Requirement

Requirements for graduation with honors may be completed after the date on which certifications are requested from departments, and in some cases, requirements, if not needed for graduation, may be completed after a student has graduated. However, the Incomplete policy does apply and grades would lapse at the time of graduation. When a candidate finishes all requirements, departments must notify College Advising & Student Services (https://collegeadvising.ku.edu/) in writing.

Honor Roll

Undergraduates with grade-point averages of 3.5 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

Honors Program

The University Honors Program (http://www.honors.ku.edu/) provides opportunities for outstanding and creative undergraduates in all schools at KU to develop their full potential during their undergraduate years. See Honors in this section of the online catalog for further information.

Incompletes

The letter I indicates incomplete work, such as may be completed without re-enrollment in the course. The letter I should not be used when a definite grade can be assigned for the work done. It is not given for the work of a student in any course except to indicate that some part of the work has, for reasons beyond the student’s control, not been done, while the rest has been satisfactorily completed. At the time an I is reported on the electronic roster, the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed 1 calendar year, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule automatically converts to a grade of F or U, or the lapse grade assigned by the course instructor, and appears on the student’s record.

Extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable, prior to the expiration of the Incomplete. After the I grade is converted to a grade of F or U, the grade may only be changed in accordance with USRR Article II, Section 3. (http://policy.ku.edu/governance/USRR/)

Maximum and Minimum Undergraduate Semester Enrollment

No undergraduate may enroll for more than 20 hours a semester except by permission of the Director of College Advising & Student Services. Summer enrollment is limited to 10 hours. Permission is not considered unless the student has demonstrated high levels of academic ability in previous semesters.

Prerequisites and Co-requisites

Students are advised to enroll according to prerequisites and co-requisites noted in individual course descriptions. These prerequisites are enforced in a variety of ways including blocking enrollment, administrative drops without notice, etc.

Required Undergraduate Work in Residence

Junior/Senior Hours Required for Graduation

KU requires all students pursuing bachelor’s degrees to complete a minimum of 45 credit hours at the junior/senior level (courses numbered
Additionally, students are responsible for understanding the requirements well as the requirements of the College outlined in this catalog section. (catalog.ku.edu/graduate-studies/) include the university requirements for graduate study at KU outlined (in the College and Graduate Studies sections of the online catalog). It is the students' responsibility to comply with all requirements that are unique to individual graduate programs outlined in the graduate handbooks of individual academic units and the Departments & Programs (https://catalog.ku.edu/graduate-studies/) sections of the online catalog.

In general, the student is subject to the regulations in place at the time of matriculation as a degree-seeking student. If degree requirements change, the student may opt to follow the new requirements or to continue under the regulations in place at the time of admission. Any student readmitted 10 years or more after his or her initial term as a degree-seeking student must fulfill the requirements in effect on the date of readmission to the graduate program.

Information presented on this page is limited to the most frequently consulted policies and key milestones in the graduate career. Students should also consult the academic unit's handbook, Graduate Studies and College sections of the KU Policy Library, and the Graduate Studies and University of Kansas Regulations sections of the online catalog.

**Degree Requirements**

Requirements for the completion of master's and doctoral degrees in the College are governed by department- or program-specific policy, College policies and procedures, Graduate Studies policies, and the University Senate Rules and Regulations.

**Master’s Degree Requirements**

**Coursework**

At least 50% of required coursework for a master’s program must be numbered 700 or above. Specific coursework requirements for the Master’s degree are established and tracked by the department or program. The College then verifies that completed coursework meets all College and University requirements for master's students. Please consult with your advisor, the academic unit’s graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

**Thesis**

Master’s students complete either a thesis or an equivalent enrollment in research, capstone/portfolio, independent investigation, or seminar. Students earning a master’s thesis degree must have completed at least 1 hour of thesis enrollment. General rules for the preparation of a thesis are available on the Graduate Studies website (https://graduate.ku.edu/electronic-thesis-and-dissertation/).

**Final Examination**

A final general examination or thesis defense in the major subject is required for MA and MS degrees. The examination, which may be oral, written, or both, is held during the semester of the student’s final enrollment in coursework and, in the case of thesis students, when the thesis has been substantially completed. All master's exams must be approved by the College in advance of the scheduled exam date.

See also Master’s Degree Requirements (https://catalog.ku.edu/graduate-studies/#programstext) and M.A. and M.S. Degrees (https://catalog.ku.edu/graduate-studies/#programstext) in the Graduate Studies section of the online catalog.
Doctor of Philosophy Degree Requirements

Coursework

Coursework requirements for the doctoral degree are established and tracked by the department or program. The College then verifies that completed coursework meets all College and University requirements for doctoral students. Please consult with your advisor, the academic unit's graduate handbook, and the relevant Departments & Programs section of the online catalog for further information on specific courses or course sequences required for the degree.

Research Skills and Responsible Scholarship

Graduate Studies requires that all doctoral students meet the Research Skills and Responsible Scholarship requirement before proceeding to the Comprehensive Exam. Specific requirements are determined by each department or program in consultation with Graduate Studies. Information on these requirements is contained in the department or program's approved research skills requirement plan. Consult with your advisor and the Departments & Programs section of the online catalog for further information.

Enrollment Requirement

Prior to the comprehensive oral exam, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by the Full-Time Enrollment for Graduate Students policy in the Graduate Studies section of the KU Policy Library
- At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Please see the Engagement and Enrollment in Doctoral Programs policy in the Graduate Studies section (https://catalog.ku.edu/graduate-studies/#programstext) of the online catalog and the KU Policy Library (https://policy.ku.edu/) for more information about this requirement.

Comprehensive Oral Examination

The comprehensive oral examination covers the major field and any additional content for which the academic unit wishes to hold the student responsible. The examination is expected to be broader than a mere defense of the dissertation proposal. Exams must be approved by the College in advance of the scheduled exam date. Refer to the Graduate Studies section (https://catalog.ku.edu/graduate-studies/) of the online catalog for further information on the regulations governing the final oral examination, including committee composition and attendance regulations.

Guidelines for preparing and submitting the final copies of the dissertation are available on the KU Libraries' ETD website (https://guides.lib.ku.edu/etd).

Enrollment

Full-time, Half-Time and Part-Time Enrollment

There are multiple definitions for what constitutes full-time enrollment for graduate students at KU, including variations for doctoral candidates enrolled in dissertation hours, students with GTA/GRA/GA appointments, and active duty military. Please see the Full-Time Enrollment policy in the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for the definitions of full-time, half-time, and part-time enrollment.

Maximum enrollment for graduate students in the College of Liberal Arts & Sciences, except in rare instances, is 16 hours in Fall or Spring semester and 9 hours in the summer session.

At a minimum, all graduate students must be continuously enrolled in the Fall and Spring semesters while completing the requirements for fulfillment of their degree. Please consult the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for other enrollment regulations.

Continuous Enrollment for Master's Students

The College requires that all master's students who have completed the required coursework for their degrees must be continuously enrolled in the Fall and Spring semesters until all remaining requirements for the degree, including the thesis when applicable, are completed. No enrollment is required during the summer session unless it is the semester during which the student will graduate, in which case enrollment is required. Certain academic units have additional rules governing summer enrollment.

Post-Comprehensive Enrollment for Doctoral Students

After passing the Comprehensive Oral Exam, doctoral candidates must be continuously enrolled. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester (Fall and Spring). At least one of these hours each semester must be in dissertation or approved dissertation-equivalent coursework.

Upon completion of the 18-hour requirement, a student's level of enrollment should reflect, as accurately as possible, the faculty time he or she utilizes. This may be as little as one dissertation (or approved equivalent) hour per semester.

In addition, Graduate Studies requires a period of at least 1 month to elapse between the comprehensive oral exam and the final exam. Students that have completed all degree requirements before completing 18 hours are still required to continue enrollment until this 1-month requirement has been met.

Special enrollment requirements apply to those with GTA/GRA/GA appointments. Please consult the Graduate Studies (p. 2408) section of the online catalog and the KU Policy Library (http://policy.ku.edu/).
Lapses in Enrollment
Generally, no student is allowed to enroll in full term courses with an established meeting time after the first 4 weeks of a semester or the first 2 weeks of a summer session. Non-standard dated courses, or "short courses," as well as research or independent study courses with a "by appointment only" meeting time have different deadlines. Students should consult the academic calendar (https://registrar.ku.edu/calendar/) and short courses listing (https://registrar.ku.edu/short-courses/) for deadlines.

The student may elect to Voluntarily Discontinue from the program, and must inform the department or program in writing of this decision. The department will submit the necessary forms to the College. This option requires the student to seek re-admission to the program if they choose to return at a future date. They also remain eligible to seek admission to another department or program in the College.

The student may also petition for a Leave of Absence of up to one calendar year. If granted, the Leave of Absence maintains the student's place in the program. Leave of Absence petitions must be submitted by the department or program and provide evidence of the department or program's endorsement of the student's petition. Students interested in this option should begin by consulting with their advisor.

The time spent on Leave of Absence does not count against the student's time to degree, and therefore does not shorten the time available to complete their degree requirements. Similarly, if a student that has elected to Voluntarily Discontinue subsequently returns to the program, the time that has elapsed since his or her discontinuance does not count against the time to degree.

Students who fail to enroll without completing the Voluntary Discontinuance process or without being granted a Leave of Absence are reviewed by the College Office of Graduate Affairs and the students' academic units for possible dismissal. Any time that accrues during these lapses of enrollment in which the student does not occupy any approved enrollment category (i.e., Enrolled, Voluntarily Discontinued, or Leave of Absence) is counted against the time to degree.

International students seeking a Leave of Absence must consult with the International Support Services office prior to any change in enrollment status to determine how the change may affect their legal status.

Please see Graduate Studies policies governing Leave of Absence and Voluntary Discontinuance in the Graduate Studies (p. 2408) section of the online catalog and in the KU Policy Library (http://policy.ku.edu/).

Dual Enrollments
Students enrolled in two schools or working on two degrees at the same time must complete the work for both degrees. Courses may not be counted toward both degrees, except in the joint degree programs that have been established (e.g., M.P.A./J.D., M.A. in Economics/J.D., M.B.A./M.A. in Area Studies, etc.). Please refer to the Combined Degrees information in the Graduate Studies (p. 2408) section of the online catalog for a complete list of approved joint degree programs.

Examinations
Students must be enrolled during the semester in which they complete their oral comprehensive or final examinations. Additionally, no graduate student will be allowed to take oral comprehensive or final examinations, or to go forward with a thesis or dissertation defense, if a waiting grade (WG) placeholder or an incomplete (I) grade is listed on the student's transcript.

University Regulations on Grading
Article II of the University Senate Rules and Regulations provides detailed information on regulations governing the grading of graduate coursework. Students should also consult the Graduate Studies (p. 2408) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for more information on the Grading Policy.

The following are of particular relevance for graduate students in the College:

**Passing Grades for Graduate Coursework**
Only courses graded C or above are considered passing and may be counted for graduate credit. Courses graded C-, D or F may not be used to fulfill degree requirements.

**Incomplete (I) and Waiting Grades (WG)**
Incomplete (I) grades are used to note, temporarily, that a student's work has been satisfactory to date, but that they have been unable to complete a portion of the required course work during that semester due to circumstances beyond their control. Incomplete work must be completed within the time period prescribed by the course instructor, at which point a permanent grade will be assigned. After one calendar year from the original grade due date, an Incomplete (I) grade will automatically convert to a grade of F or U, or the lapsed grade assigned by the course instructor.

The I grade is not appropriate for enrollments in thesis, dissertation, or research hours or the first semester of a two semester sequence.

Waiting Grades (WG) are placeholders and should only be used in rare instances when, for reasons beyond his or her control, an instructor is not able to assign a course grade by the deadline. WG should not be used to delay evaluation of thesis or dissertation hour enrollments. This practice often leads to difficulties with timely graduation processing. WG is also not appropriate for students who are unable to submit their work by the grade deadline. In these cases an Incomplete may be more appropriate. Instructors should follow their unit's internal guidelines for use of Incompletes.

In accordance with USR 2.2.3.4, any incomplete (I) or waiting grade (WG) on the student's transcript must be resolved before the College will preapprove the doctoral oral comprehensive exam. Additionally, the College will not approve an application for graduation if a waiting grade (WG) or an incomplete (I) grade remains on the student's transcript.

**Credit/No Credit (CR/NC)**
The University establishes a time period each term during which students may elect a Credit/No Credit grading option for an individual course. Graduate students may elect the CR/NC option only for those courses that do not fulfill a degree requirement. Degree requirements include those courses used to fulfill the Research Skills and Responsible Scholarship requirement. CR/NC is elected via the Registrar’s electronic form (https://registrar.ku.edu/credit-no-credit/). Students should consult with their advisor prior to electing the CR/NC option.
College-Specific Grading Policy

A-F Plus/Minus (+/-) Grades
Plus/minus (+/-) grades may be used in the College. The plus or minus sign describes intermediate levels of performance between a maximum of A and a minimum of F. Intermediate grades are calculated as 0.3 units above or below the corresponding letter grade.

Participation (P) Grades
Use of the Participation (P) grade is restricted in the College. It is only approved for a limited number of courses for which special permission has been sought. When permission is granted, P is only used to indicate participation in thesis, dissertation, or research enrollments (related to thesis or dissertation), or in the first semester enrollment of a two-semester sequence course. In any semester when there is evidence about performance available, the instructor may elect to assign a letter grade of A, B, C, D, or F. A letter grade (A, B, C, D, or F) must be assigned in the last semester of enrollment to characterize the quality of the final product.

If a department or program has a course for which the P grading system may be more appropriate than the A-F or S/U grading system, it must seek special approval from the College.

Grading of Thesis and Dissertation Hours (and Approved Equivalents)
The SP/LP/NP grading scale is restricted to thesis and dissertation hours, as well as those research courses approved by Graduate Studies as equivalents. It is the preferred scale for the grading of these courses in the College and is applied in the following manner:

- SP - Satisfactory Progress. Progress is consistent with the goals for the semester as agreed upon with the advisor; supports timely completion of the degree.
- LP - Limited Progress. Progress is less than what was agreed upon with the advisor; may cause delays in timely degree completion. Academic probation may be warranted.
- NP - No Progress. The student has provided no evidence of progress on the thesis or dissertation work, or work completed was insufficient to move the thesis or dissertation project forward. Probation is strongly encouraged and dismissal may be warranted.

To be eligible for graduation, the final semester of dissertation/thesis enrollment must be graded SP.

The College strongly encourages the use of the SP/LP/NP grading scale for thesis and dissertation courses. However, programs may elect to use any A-F scale. In no case is the S/U scale to be used for thesis or dissertation hours or their equivalents. Per Graduate Studies policy, no more than 6 credit hours graded S/U may count toward a graduate degree.

College-specific Admission Policy

Admission Deadlines
For all graduate programs in the College of Liberal Arts & Sciences, no deadlines for the submission of applications for graduate study may fall on a weekend or on a University-observed holiday.

During calendar years when an established admission deadline falls during one of these times CLAS graduate programs must either:

- Allow the online application to remain open and applications to be accepted through the end of the first business day following the established deadline; or,
- Adjust the department’s established deadline for those years.

Probation and Dismissal Guidelines in the College

To be in good standing, a student must maintain a 3.0 cumulative grade-point average and be making satisfactory progress toward the degree, as determined by Graduate Studies’ Good Academic Standing policy and the department or program’s internal guidelines. The Good Academic Standing policy may be found in the Graduate Studies (p. 2408) section of the online catalog and the KU Policy Library. (http://policy.ku.edu/)

Probation Due to GPA
In any semester, a student whose cumulative GPA has fallen below a 3.0 is automatically placed on academic probation for the following semester (Fall or Spring). Students are notified by the College of their probationary status. The student has one semester (not including the summer term) in which to raise the cumulative GPA to a 3.0 or the College will dismiss the student. Refer to the Graduate Studies’ Academic Probation policy for more details. Departments may petition the College for the student to be granted a one-semester extension of the probation.

If a student’s cumulative GPA falls below a 2.5 as a result of the second or a subsequent semester of enrollment, the College will dismiss the student without eligibility for probation. Students whose GPA falls below 2.5 in the first semester of enrollment are eligible for probation with department recommendation. In the absence of this recommendation, the College will dismiss the student.

Probation Due to Unsatisfactory Progress
Upon recommendation of the department or program, a student may be placed on probation for failing to make satisfactory progress toward the degree. This may include, but is not limited to, failed exams or failure to make adequate and timely progress on the dissertation or thesis. See the Good Academic Standing policy in the Graduate Studies (p. 2408) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for more information on what constitutes satisfactory progress.

Dismissal
It is the academic unit’s responsibility to ensure that students who are not demonstrating academic achievement sufficient to meet the requirements of a College graduate degree or who are failing to make timely progress to the degree are dismissed from their programs. This typically occurs when a student fails to meet the terms of the probationary period. Academic dismissal should occur immediately following a student’s failure to meet the terms of the probationary period. If dismissal occurs during the semester, the dismissal is effective immediately and the student is administratively withdrawn from coursework. The department or program will notify the student in writing of the reasons for their dismissal. This will be followed by a letter from the College confirming the student’s dismissal from graduate study at KU.

A student who has been dismissed from a graduate program at KU is not eligible for readmission to graduate study in any department or program at the University of Kansas. A student may petition for an exception. The petition must be approved by the department to which the student intends to apply, the graduate division of the
College, and the Dean of Graduate Studies. Such petitions are rarely approved.

Time Limits

The University and the College have established time limits governing various stages of the graduate student career.

Maximum Time to Count Required Course Work

Courses completed at the University of Kansas, or transfer credits from another university, are valid for a period of 10 years. Courses that were completed more than 10 years before the scheduling of the final defense may not be used to fulfill graduate degree requirements in the College of Liberal Arts and Sciences.

With the endorsement of their graduate programs, students may petition the College to accept out-of-date course work to fulfill the requirements for their graduate degrees, provided they are able to justify why this course work meets the current standards of scholarship in the discipline.

Maximum Time to Submit Thesis or Dissertation

The College requires that students make all final revisions and complete the electronic submission of the final version of the thesis or dissertation manuscript to UMI within 6 months of the date of final presentation and/or defense of the thesis or dissertation work. Until the final manuscript of a thesis or dissertation is submitted, the student must be enrolled in accordance with enrollment policy. Graduate students in the College who do not submit the final manuscript within the 6-month time limit must enroll in 3 hours a semester until the thesis or dissertation is completed and submitted.

Maximum Time to Complete the Degree

Graduate Studies has established time limits on master’s and doctoral degree completion. Please see Graduate Studies policies on Engagement and Enrollment in Doctoral Programs and Master’s Program Time Constraints in the Graduate Studies (p. 2408) sections of the online catalog and in the KU Policy Library (http://policy.ku.edu/) for full details.

Master’s degree students have a total of seven calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, in which to complete the work for a master’s degree.

Doctoral degree students have a total of 8 calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, to complete the Ph.D. This includes students who enter with a master’s degree from an institution other than KU and bachelor’s degree holders who bypass the master’s and are admitted directly to a Ph.D. program.

Students who complete a master’s and doctoral degree within the same academic unit at KU have a maximum of 10 years to complete both degrees.

A time limit extension may be granted by the College. All extension petitions require the department to prepare and submit a Graduate Degree Completion Agreement, which must then be approved by a designated subcommittee of the Committee on Graduate Studies. Per Graduate Studies policy, extensions may be granted for up to 1 year. However, additional time may be requested in the Completion Agreement. If a Completion Agreement with a timeline greater than one year is approved, the department must submit a renewal petition annually after the first year until the Completion Agreement has ended.

Renewal petitions must indicate the student’s progress on the Completion Agreement and will receive expedited review.

Academic units may set their own, more rigorous time limits. Consult with your advisor and review your academic unit’s handbook and the relevant Departments and Programs section of the online catalog for program-specific information, requirements, and restrictions.

Academic and Research Integrity

The College of Liberal Arts and Sciences strictly enforces KU and College policies on academic and scholarly misconduct. Academic integrity requires honest performance of academic and research responsibilities by students. These include, but are not limited to, ethical preparation of assignments, reports, and research papers; completion of examinations; ethical treatment of human and animal subjects; execution of administrative requirements; and a sincere and conscientious effort by students to abide by the policies set forth by instructors and research advisors.

Graduation

All graduate students must be enrolled the semester they complete all degree requirements.

Graduate Studies establishes an early deadline for degree completion for each semester and summer session, usually occurring at the end of the first 2 weeks of a semester or the end of the first week of summer session. If the student was enrolled the previous semester and meets all degree requirements including the submission of all required documentation by the early deadline, they are not required to enroll for that semester.

The final Graduate Application for Graduation Deadline is set by the Registrar for each semester. Please consult the official Academic Calendar for specific dates. To be eligible for graduation, an application for degree must be submitted and all degree requirements met by this deadline. This includes the submission of all required documentation to the College Office of Graduate Affairs. See the Graduation section of the COGA (https://coga.ku.edu/graduation/preparing-to-graduate/) website for more information.

Undergraduate Graduation with Honors

Undergraduates may earn honors upon graduation in 3 ways. The student may graduate with distinction or highest distinction, earn departmental honors in the major, or complete the University Honors Program (http://www.honors.ku.edu/). It is possible to earn honors in 1 of these areas, any combination of them, or all 3. The award of honors is noted on the student’s transcript and in the Commencement program. Distinction and highest distinction are noted on the diploma.

Graduation with Distinction or Highest Distinction

The top 10 percent of each year's graduating class is designated as graduating with distinction. Of these, the top one-third is designated as graduating with highest distinction. To be eligible, students must have completed at least 60 credit hours, graded A through F, in residence at KU (including the hours in which they are enrolled during the semester of graduation). Awards of distinction and highest distinction are based solely on the grade-point average determined by KU residence credit hours unless the overall grade-point average (including transfer hours) is...
lower than the residence grade-point average. In this case, the award is determined by the overall grade-point average.

**Graduation with Departmental Honors**
Most departments and programs allow qualified majors to work toward graduation with departmental honors. Graduation with departmental honors is awarded in recognition of exceptional performance in the major and completion of a program of independent research or an alternative project.

In addition to the requirements of individual departments and programs (which must be approved by the College committee on Undergraduate Studies and Advising - CUSA), the College requires the following for graduation with departmental honors:

1. **Candidates must declare the intention to work for departmental honors with the appropriate departmental honors coordinator(s) no later than the time of enrollment for the final undergraduate semester, but sooner if required by the department(s).** The intent form should be submitted to College Advising & Student Services.

2. **At the end of the final undergraduate semester, the candidate must have achieved a grade-point average of at least 3.5 in the major, including work completed at other institutions, as well as at KU.** No minimum grade-point average is required to declare candidacy for graduation with departmental honors unless specified by the department.

3. **Each candidate's departmental honors work must include independent research or an acceptable alternative project.** The results of research are presented in a form appropriate to the requirements of the major department. Equivalents to the independent research component are established by approved departmental honors programs. In courses meeting the independent research requirement, the candidate must earn a grade of B or higher. Successful completion of all departmental honors requirements must be certified to the departmental honors coordinator(s) by a panel composed of at least three members of the College faculty who have read the report of the independent research and heard the oral presentation, where required.

**Petitions**
A department or program may petition to award graduation with departmental honors to deserving students who, for good reason, do not meet every College requirement. Petitions for exceptions should be submitted to the Committee on Undergraduate Studies and Advising (CUSA), via College Advising & Student Services (http://collegeadvising.ku.edu/).

**Late Completion of Honors Requirement**
Requirements for graduation with honors may be completed after the date on which certifications are requested from departments. In fact, requirements—for example, the completion of an honors thesis for which the credit hours are not needed to graduate—may be completed after a student has graduated. When a candidate finishes all requirements, departments must notify College Advising & Student Services (https://collegeadvising.ku.edu/) in writing.

University Honors Program
The University Honors Program (http://www.honors.ku.edu/) provides opportunities for outstanding and creative undergraduate students in all schools at KU to develop their full potential during their undergraduate years. The Honors Program brings talented students together in honors classes and seminars to benefit from mutual interests and association. It brings students and faculty members together in a teaching and research environment that ensures high academic achievement and standards. The program also coordinates merit-based scholarship opportunities for qualified students, including KU awards such as the University Scholars Program, and Undergraduate Research Awards. The Honors Student Association and the Honors Ambassador Program provide opportunities for student leadership.

In general, honors classes are small, oriented to discussion, and taught by full-time members of the faculty. Most honors courses fulfill requirements and deal with introductory fundamentals and principles, but they are likely to do so in more depth than their non-honors equivalents. Honors courses are distinguished by the energetic atmosphere and critical thinking generated by the students in them and the faculty members who teach them.

Honors students are interested in expanding their knowledge and take a broad range of liberal arts and sciences courses. This is true of students in the professional schools (architecture, engineering, business, etc.) as well as students in the College of Liberal Arts and Sciences. Honors program advisors typically recommend that students explore their interests through the broad curriculum choices KU has to offer.

A first-year, semester-long tutorial experience provides an introduction to an academic area of study in an informal setting that allows students to get to know one another and the instructor. The tutorial explores the research methods of a discipline and acquaints the student with the research resources at KU. Honors advising is personalized in meetings with honors staff, faculty fellows, and specially selected advisors from across the university. The program’s advising committee facilitates early and frequent contact with academic advisors in the students’ areas of interest. Honors students benefit from priority enrollment, which provides flexibility in planning one’s academic curriculum.

The program does not require a minimum number of honors courses a semester. However, students in the program quickly discover that honors courses engage the intellect, hold the interest, and create the enthusiasm for learning they seek at a university. Students in the professional schools are particularly encouraged to seek out honors course opportunities early, while their curricula still have breadth and flexibility.

Honors students are strongly encouraged to include research, study abroad experiences, internships, and community service in their academic programs. Consult Honors Program staff about applying these activities toward completion of honors requirements.

**Admission**
Students with strong high school curricula and excellent academic records are encouraged to apply to the University Honors Program. Admission is highly competitive. Although no ACT/SAT composite score or high school grade-point average guarantees that a student will or will not be admitted to the University Honors Program, this year’s average ACT composite for accepted students is a 32.4, and the average unweighted GPA for an accepted student is 3.96. Applications are evaluated on the basis of high school curriculum, grades, an essay, activities, and standardized test scores. Applications from first- and second-year students currently attending KU, as well as incoming transfer students, are evaluated on the basis of college course work, an essay, and college activities. Review of applications begins in October and continues through April. Send inquiries to the University Honors Program, 1506 Engel Road, Lawrence,
Completion of the Program

Students graduate from the program by completing 8 honors units and the first-year, semester-long tutorial. The 8 units must be completed as follows:

1. 6 honors courses (may include graduate-level courses numbered 700 and above).
2. 1 out-of-classroom experience such as study abroad, departmental honors, documented research experience, approved and documented internship experience, or approved and documented community service.
3. The eighth unit may be from either category 1 or category 2. Students also must maintain a minimum 3.25 grade-point average.

Nunemaker Center

This unique building, with its modern architectural design, is the home of the Honors Program, near the Daisy Hill residence halls at 15th Street and Engel Road. The Honors Program is home to several faculty fellows who serve the program and bring additional resources to the program to complement the full-time staff. Faculty fellows are available for advising, consultation about majors and careers, guiding research projects, and work with the Honors Council to develop programmatic initiatives.

Students are encouraged to take advantage of the spaces available at Nunemaker, including several classrooms and study areas, a kitchen, comfortable lounges that include 2 fireplaces, and wireless Internet access. Nunemaker also serves as a gallery for undergraduate art. The center is open days and evenings.

View Honors (http://catalog.dept.ku.edu/201314/schools/clas/honors/) courses in the online catalog.

Graduate Awards

The College of Liberal Arts and Sciences offers several awards to recognize outstanding graduate students, faculty service, teaching excellence, and exemplary advising. Below, you will find a brief description of each award. More specific information about eligibility and the call for nominations each year can be found on the College’s website under Awards & Opportunities (https://coga.ku.edu/awards-funding/).

Graduate Student Awards

Chancellor's Doctoral Fellowship

Each year selected doctoral programs award a Chancellor’s Doctoral Fellowship to an incoming doctoral student of exceptional promise. Fellows receive five years of fellowship support for their doctoral work, including a $25,000 stipend plus resident rate tuition and required fees.

Dean's Doctoral Fellowship

Each year selected doctoral programs in the College award a Dean’s Doctoral Fellowship to an incoming doctoral student of exceptional promise. Fellows receive up to five years of fellowship support for their doctoral work, including a stipend ranging from $20,000-22,000 plus resident rate tuition and required fees. Fellows must submit an application for external funding to be eligible for a fifth year of support.

Outstanding Thesis/Research Project Award

The Committee on Graduate Studies in the College has established this award for students receiving a master’s degree. The bi-annual award carries a $500 stipend, and either a thesis or research project awardee is selected in each cycle. Students are nominated for the award by their advisors.

Graduate Faculty Awards

Byron A. Alexander/John C. Wright Graduate Mentor Awards

Graduate students (current or those who have graduated since May of the calendar year prior to the award deadline) may nominate any tenured or tenure-track faculty member in the College of Liberal Arts and Sciences who has served as an outstanding mentor. The award amounts are up to $1,000.

Career Achievement Teaching Award

This annual award recognizes a retired faculty member in the College of Liberal Arts and Sciences who has made a significant contribution to the teaching of College students at either the undergraduate or graduate level and who has distinguished him/herself through excellence in teaching. The award amount is $1,000.

Film and Media Studies Courses

FMS 100. Introduction to Film and Media. 3 Credits. HL H

An introduction to analyzing and thinking critically about film and other media. Students will learn to read and interpret the basic signs, syntaxes, and structures of cinematic language. Through direct analysis of selected films, television, and new media, students will evaluate and construct evidentiary arguments about the aesthetic strategies creators use to make meaning for audiences. In addition, this course will familiarize students with the historical and industrial dimensions of film and media, as well as the influence technology has on their development into the twenty-first century.

FMS 177. First Year Seminar: ______. 3 Credits. U

A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Film and Media Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

FMS 200. Film and Media Aesthetics. 3 Credits. HL H

An introduction to film and media aesthetics, including basic film/media theories and their practical applications. Students will be introduced to the concepts of time, space, composition, movement, editing, light, color, and sound. A key feature of the course will be a practical emphasis on learning how to see creatively by applying elements of design, camera lens and sound recording principles. Examples of these aspects of film and associated media will be examined and discussed in depth. Should be taken before or concurrently with FMS 275.

FMS 204. Study Abroad Topics in: ______. 1-6 Credits. H

This course is designed for the study of special topics in Film at the freshman/sophomore level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

FMS 273. Basic Screenwriting. 3 Credits. H
An introduction to the craft and principles of screenwriting, from inspiration to writing a complete first act. Emphasis on factors relevant to the creation of a treatment and a screenplay. Prerequisite: Consent of instructor.

FMS 275. Basic Video Production. 4 Credits. H
Theory and practice of video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. Lecture-laboratory. Prerequisite: FMS 100, completion of or concurrent enrollment in FMS 200.

FMS 301. Undergraduate Professional Development Seminar. 1 Credit. H
Provides an overview of opportunities for professional development in Film and Media Studies, and helps students plan goals for their education through an understanding of professional practices. The course also covers practical exercises in professional development, including writing resumes, finding internships and entry-level work, and other aspects of establishing a career in Film and Media Studies. Graded on a satisfactory/unsatisfactory basis. Prerequisite: FMS 275 or equivalent. Open to FMS Majors only.

FMS 302. Undergraduate Studies Seminar in: ____. 1-6 Credits. H
Course organized any given semester to examine a particular studies topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

FMS 303. Undergraduate Production Seminar in: ____. 1-3 Credits. H
Course organized any given semester to study a particular production topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

FMS 304. Study Abroad Topics in: ____. 1-6 Credits. H
This course is designed for the study of special topics in Film at the junior/senior level. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

FMS 307. Undergraduate Film/Media Internship. 1-6 Credits. H
Supervised study with an approved film/media company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Prerequisite: Consent of instructor and at least seven hours credit in the department.

FMS 310. History of the Silent Film. 3 Credits. H
A survey of the artistic, economic and sociological development of the narrative cinema with emphasis on the American studio system, German Expressionism, and Soviet Expressive Realism. Analysis of selected films.

FMS 311. History of the American Sound Film. 3 Credits. HL H
A study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television. Analysis of selected films.

FMS 312. History of the International Sound Film to 1950. 3 Credits. H

FMS 313. History of the International Sound Film Post 1950. 3 Credits. H
A survey of the artistic, economic, and sociological development of the international sound film from 1950 to the present. Emphasis on Free Cinema, New Wave, and other emerging post-war cinemas.

FMS 314. History of African-American Images in Film. 3 Credits. HL H
A history and critical assessment of the diverse images of African-Americans in American cinema and the impact of those images on American society. Screenings of feature and independent films, including those by African-Americans.

FMS 315. Survey of Japanese Film. 3 Credits. NW H
This course surveys the major developments in and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, Survey of Japanese Film introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this institution shapes gender, class, ethnic, and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions students critically examine how Japanese cinema as an institution both responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 315.)

FMS 316. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Credits. H
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. Other themes in common are financing issues, such as co-production agreements, film production under the regional trade pact Mercosur and issues of circulation, distribution and marketing of national films. Most films will be feature length narrative, but a few documentaries will be shown. May be taken as FMS 716, but with additional requirements.

FMS 318. Anti-war Film. 3 Credits. H
An overview and exploration of the history of anti-war film and media themes to show how attitudes regarding war and political policy can be affected by positive and negative depictions of conflict. Course includes analysis of selected films.

FMS 322. Soviet and Post-Soviet Russian Cinema. 3 Credits. H
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences) and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. (Same as SLAV 322.)

FMS 323. War and Memory in Asian Film. 3 Credits. H
This course explores how the film industries of key East Asian nations have constructed, imagined, debated, and commemorated their experiences of the major wars fought during the 20th century (i.e. The Greater East Asian War, the Chinese Civil War, the Korean War, and the Vietnam War). We will examine the intersection of various historical, political, cultural, and economic factors with the production of mainstream commercial film to consider how individual and collective memories of wars in Asia have transformed over time in different contexts. Films are
particularly useful for examining how the cultural memory of wars survives and is conveyed from one era to another with each new generation reinventing and superimposing new layers of memory on the original phenomenon from a range of multiple perspectives. A central goal of this course is to provide students with various historical perspectives, cultural contexts, and analytical methods to develop your ability to apply visual literacy and critical thinking skills to contemporary Asian films about the major wars of the last century.

FMS 330. Cinematic Rome. 3 Credits. H
A study of cinematic representations of daily life, diversity, urban landscape, and social and political issues in modern and contemporary Rome as presented in different genres. Taught in English. (Same as ITAL 330.)

FMS 331. Mafia Movies. 3 Credits. H
This course investigates representations of the Italian mafia in Italian and American cinema since the 1960s, placing emphasis on conventions of the gangster genre and its evolution. We will examine films in relation to their socio-historical contexts and special attention will be dedicated to Italian films that deglamorize the Italian mafia and champion the anti-mafia struggle. Taught in English. (Same as ITAL 331.)

FMS 345. New Media and Society. 3 Credits. H
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in research-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key research skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level.

FMS 350. Indigenous Film and Media. 3 Credits. H
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum—including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered at the 300 and 700 level with additional assignments at the 700 level. Not available to students with credit in FMS 750 or ISP 755. (Same as ISP 355.)

FMS 355. Storytelling with Digital Media. 3 Credits. HL H
In this course, students will utilize digital tools and platforms to create online and mobile stories based on the theories and histories of interactive storytelling discussed in class. Through a survey of digital storytelling examples and concepts, students will create interactive projects to add to their portfolio and learn how to think critically and write analytically about digital media.

FMS 373. Intermediate Screenwriting. 3 Credits. H
Emphasis on writing a full-length screenplay. Explores genre, character, dialogue, and the development of a personal writing style. Prerequisite: FMS 273 (students will be selected based on writing samples).

FMS 374. Animation. 3 Credits. H
A survey that combines animation history, theory, and production by examining animated works of all kinds and exploring various styles utilizing both hands-on techniques and digital animation programs. Lecture-laboratory.

FMS 375. Intermediate Video Production. 3 Credits. H
Theory and practice of longer-form video production with emphasis on scripting, talent coordination and editing in preproduction, production and postproduction. Lecture-laboratory. Prerequisite: FMS 275.

FMS 376. Cinematography. 3 Credits. H
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. Prerequisite: FMS 275.

FMS 377. Post-Production. 3 Credits. H
Students become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: FMS 275.

FMS 380. American Popular Culture of: ______. 3 Credits. HL H
An interdisciplinary examination of popular cultural forms and their relationships with the social, political and economic dynamics of America, with emphasis on film, media, music, literature (including magazines and newspapers) and the graphic arts. The decade or other specific topic to be studied changes as needs and resources develop. May be repeated for credit for different decades or topics.

FMS 410. US Diversity in Visual Culture. 3 Credits. H
This course examines the way in which diversity in the United States, including race, class, gender, and sexuality, are represented through visual culture, historically and in the present. The study of visual culture analyzes the way in which visual images communicate systems of beliefs, contribute to identity formation, and have an influence on our thinking about diversity. Course looks at United States visual objects (i.e., film, television, photography, art, advertisements, and theatre as well as visual practices, i.e., in public and private spaces.

FMS 425. Ethics in Storytelling. 3 Credits. H
This course considers the ethics of telling stories with film and media. Using a framework of rhetorical criticism and postmodern ethics, the students will evaluate the ethical and social responsibility challenges of fiction and non-fiction writing, films, television and online projects from a variety of fields: anthropology, sociology, journalism, political rhetoric and documentary filmmaking. Through readings, case studies and application, students will explore the fundamentals of rhetorical ethics, and the questions raised my new and emerging forms of storytelling.

FMS 474. Videogame Theory and Design. 3 Credits. H
This course surveys the history and aesthetics of videogames and then provides a deep dive into the theory, design principles and techniques of game development on the Unity platform. Through assignments geared toward critical design, students gain the skills necessary for game-building in the areas of visual, narrative, game, level and sound design that comprise a typical development team. Although no prior coding experience is necessary, students may benefit from prior knowledge of C#, 3D modeling, or animation.

FMS 475. Advanced Video Production. 3 Credits. H
Special projects in video production, using both studio and remote locations. Prerequisite: FMS 375.

FMS 477. Sound Design. 3 Credits. H
Students will study and produce film and video work with an emphasis on sound design theory and practice. Course projects consist of several short works in response to readings and screenings, which include a survey of sound in cinema, internet and radio. Students will also become
conversant with related equipment, software and techniques. Prerequisite: FMS 275.

FMS 478. Experimental Production. 3 Credits. H
Students will produce experimental film and video projects, including installation art and performance art pieces, in both collaborative and a collaborative production modes. Practical production aspects of historical experimental works will be studied, with emphasis on creation of works inspired by these earlier artists and their work. Unorthodox video and film production concepts and modes will also be studied and used in the creation of original works. The incorporation of experimental elements in the creation of mainstream works, and the creation of such projects, will also be a key area of study and experimentation. By pushing their individual creative limits, students will gain an appreciation for the experimental film and video genre, as well as an expansion of their production skills. Prerequisite: FMS 275.

FMS 479. Documentary Production. 3 Credits. H
This is a hands-on production course in which students will research, plan and produce short-form non-fiction documentaries. The class is dedicated to training young professionals in the principles, skills, techniques, habits and practices of documentary production. We will focus also on the aesthetics of our craft and the documentary form. The objective is to ground students in the fundamental skills of good non-fiction storytelling-conceptualization, research, story structure, theme development, writing, producing and directing. The goal is the production of several short-form compositions (videos) where storytelling is employed to communicate a concept or idea effectively. Students will form into teams to research, develop and produce a course-long short-form documentary. Prerequisite: FMS 275.

FMS 480. Music Video Production. 3 Credits. H
This course will cover elements of the history, aesthetics, and business of music video and music video production. Students will view and discuss many different types of music videos, and will learn how to classify and critique these videos in a professional manner. Students will gain familiarity with the genres, themes, forms, and iconography of music video; an understanding of the place of music video in media culture; an exploration of the ideological, cultural, and historical contexts of music video; and an ability to create or assist in the creation of professional-quality music videos. Prerequisite: FMS 275.

FMS 498. Honors Seminar. 2-6 Credits. H
Study may be directed toward either (a) reading for integration of knowledge and insight in film and media, or (b) original research (i.e., investigation of a specific problem in film and media). Six hours maximum credit. Prerequisite: Consent of Departmental Honors Coordinator.

FMS 499. Directed Study in Film. 1-6 Credits. H
Investigation of a special topic or project selected by the student with advice, approval, and supervision by an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. A maximum of six hours credit may be counted toward a degree. Prerequisite: At least seven hours credit in the department and consent of instructor.

FMS 530. Film and Media Theory. 3 Credits. H
Comprehensive examination of most significant theories and theorists of film. Organized around specific questions, e.g., what qualities make film art unique, and how is film related to other visual and literary arts? Class discussion, individual projects. Prerequisite: FMS 100 or equivalent (determined by instructor).

FMS 543. Contemporary Japanese Film. 3 Credits. NW H
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 543.) Prerequisite: Junior status.

FMS 544. African Film. 3 Credits. W
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as AAAS 555.)

FMS 585. Capstone in Film and Media Studies. 4 Credits. H
This course integrates the knowledge and skills acquired across the curriculum of Film & Media Studies including academic studies, but also production and other related disciplines to enable the student to demonstrate achievement through the production of a major creative research project. Prerequisite: Must be admitted to the Film and Media Studies B.A. or B.G.S. degree. Must have completed one FMS production course.

FMS 592. Documentary Film and Video. 3 Credits. H
An historical and theoretical survey of that major genre of film and video typically termed “documentary.” The course will trace the main historical developments from documentary’s beginnings through contemporary innovations. Prerequisite: FMS 100 and FMS 310, FMS 311, or consent of instructor.

FMS 593. Experimental Film and Video. 3 Credits. H
A history of experimental film and video through an examination of major artists, movements, theories, and films/tapes. Prerequisite: FMS 100 and FMS 310, or consent of instructor.

FMS 620. International Women Filmmakers. 3 Credits. H
This course examines films made by women around the world. Mainstream and independent fiction, documentary, and experimental works will be screened and discussed. The objectives of the course are: 1) to learn the variety of films made by women and the conditions of their production, distribution and reception. 2) to interrogate the idea of women’s cinema as ‘counter-cinema’. We will acquire tools for analyzing films in terms of economic, aesthetic, cultural, and political circumstance by women of different countries, classes, races, ethnicities, genders, and sexual preferences.

FMS 673. Problems in Basic Screenwriting. 3 Credits. U
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structure of a full-length, three-act screenplay. In addition to the class sessions taught with FMS 273 Basic Screenwriting, separate consultations and specific research assignments for graduate students in FMS 673 are also required.

FMS 675. Problems in Basic Video Production. 3 Credits. U
Theory and practice of single-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. In addition to the class sessions taught with FMS 275 Basic Video Production, separate consultations and specific research assignments for graduate students in FMS 675 are also required. Lecture-laboratory.

FMS 702. Graduate Seminar in: ______. 1-3 Credits.
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

FMS 704. Study Abroad Topics in: ______. 1-6 Credits.
This course is designed for the study of special topics in Film. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

FMS 707. Film/Media Internship. 3-12 Credits.
Study with an approved film or media company. Emphasis may be in one or all of the following areas: acting, directing, or promotion management. No more than six hours may be applied to an M.A. degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor.

FMS 715. Survey of Japanese Film. 3 Credits.
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions students will examine how Japanese cinema, as an institution, responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 715.)

FMS 716. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Credits.
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. In addition to the lecture sessions taught in tandem with FMS 316, additional research component, lecture presentation, and class meeting are also required.

FMS 718. Anti-war Films. 3 Credits.
An overview and exploration of the history of the portrayal of anti-war film and media themes to show how anti-war attitudes and political policy can be affected by positive and negative depictions of conflict. Analysis of selected films. FMS 318 and FMS 718 will meet concurrently, though separate consultations and specific research assignments for FMS 718 are also required.

FMS 722. Soviet and Post-Soviet Russian Cinema. 3 Credits.
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences) and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. Not open to students with credit in SLAV 322/FMS 322. (Same as SLAV 723.) Prerequisite: Graduate standing or instructor permission.

FMS 743. Contemporary Japanese Film. 3 Credits.
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 743.)

FMS 745. New Media and Society. 3 Credits.
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in production-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key digital skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level.

FMS 750. Indigenous Film and Media. 3 Credits.
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum-including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered at the 300 and 700 level with additional assignments at the 700 level. Not available to students with credit in FMS 350 or ISP 355. (Same as EALC 750.)

FMS 773. Problems in Intermediate Screenwriting. 3 Credits.
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structuring of a full-length, three act screenplay. In addition to the class sessions taught with FMS 373 Intermediate Screenwriting, separate consultations and specific research assignments for graduate students in FMS 773 are also required.

FMS 775. Problems in Intermediate Video Production. 3 Credits.
Theory and practice of multiple-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation, and audio. In addition to the class sessions taught with FMS 375 Intermediate Video Production, separate consultations and specific research assignments for graduate students in FMS 775 are also required. Lecture-laboratory.

FMS 776. Problems in Cinematography. 3 Credits.
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. FMS 776 meets concurrently with FMS 376; students enrolled in the graduate-level course will have separate consultations and specific research assignments. Lecture-laboratory. Prerequisite: Consent of instructor and FMS 675.

FMS 777. Post-Production. 3 Credits.
Students will become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: Consent of instructor.

FMS 800. Introduction to Graduate Study in Film/Media. 3 Credits.
Major emphasis is placed upon the principles of research, bibliographical data, and research methods useful in film and television. The course should be taken at the beginning of the graduate student's program.

FMS 801. Professional Development Seminar. 1 Credits.
Preparation and training for faculty careers in film and related fields, including research skills and methods, responsible scholarship, teaching, and service. Other topics vary from semester to semester. May be repeated for credit.
FMS 811. Development of the American Sound Film. 3 Credits.
Intensive study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television.

FMS 813. Development of the International Sound Film. 3 Credits.
Intensive study of the artistic, economic, and sociological development of the international sound film with emphasis on the cinemas of England, France, Italy, Germany, Sweden, and Eastern Europe.

FMS 814. Development of African-American Images in Film. 3 Credits.
A history and critical assessment of the development of diverse images of African-Americans in American cinema and the impact of those images of African society. Screenings of feature and independent films, including those by African-Americans. In addition to the lecture/screening sessions taught in tandem with FMS 314, a separate discussion section and specific research assignments for graduate students enrolled in FMS 814 are also required.

FMS 862. Survey of Film and Media History. 3 Credits.
This seminar will be primarily international in scope and will concentrate on the following: technological and production issues relating to the transition in 1927-1931 of silent to sound film; the constructions of national identity, including those of recently emerging cultures; a comparison and contrast of the censorial agencies in America and abroad; and current revisionist perspectives on received film and media history.

FMS 863. Survey of Documentary and Experimental Film and Media. 3 Credits.
Surveys the important historical and theoretical issues pertinent to both the documentary and experimental approaches as expressed in film, video and new technologies. Includes major documentary and experimental genres, directors, national schools, artistic movements, and landmark works. Screenings reflect a chronology from origins to present-day.

FMS 865. Film and Media Theory. 3 Credits.
This seminar is a comprehensive survey of the major classical and contemporary film and media theories and theorists, such as Munsterberg, Eisenstein, Bazin, and Adorno. The course includes film and media theory since the 1970s, moving through structuralism and into the post-structuralism, modernism, postmodernism, and beyond. Within these broad paradigms some of the theories examined in depth are cinesemiotics, Marxism, cinematic apparatus, feminist film theory, reception theory, new media and virtual reality.

FMS 875. Problems in Advanced Video Production. 3 Credits.
Special projects in video production, using both studio and remote locations. In addition to the class sessions taught with FMS 475 Advanced Video Production, separate consultations and specific research assignments for graduate students in FMS 875 are also required. Prerequisite: FMS 775 or consent of instructor.

FMS 880. Development of American Popular Culture in the: 3 Credits.
Intensive interdisciplinary examination of popular culture forms and their relationships with the social, political, and economic dynamics of America in a specific decade, with emphasis on film, broadcasting, theatre, music literature (including magazines and newspapers), and the graphic arts. Decade to be studied changes as resources and needs develop.

FMS 888. Special Problems in Film History and Criticism. 1-4 Credits.

FMS 895. Intensive Film Project Seminar. 1-4 Credits.

The student plans and executes an intensive special project which requires the professional skills of investigation and performance appropriate to radio, television and/or film. May be repeated for credit up to a maximum of six credit hours. (This seminar is to the special project program what "thesis" is to the traditional program.)

FMS 897. Practicum in Film. 1-3 Credits.
Various approaches to the illustration of principles of production in film and/or video through the supervision of laboratory exercises and subsequent evaluation by the Theatre and Film graduate faculty.

FMS 898. Investigation and Conference (for Master's Students). 1-8 Credits.
Directed research and experimentation in film or media. Limited to eight hours credit toward the Master's degree.

FMS 899. Master's Thesis. 1-6 Credits.
FMS 902. Film Seminar in: 3 Credits.
A graduate seminar devoted to selected historical, theoretical, or critical issues. Prerequisite: Consent of instructor.

FMS 998. Investigation and Conference (for Doctoral Students). 1-8 Credits.

FMS 999. Doctoral Dissertation. 1-12 Credits.

Theatre and Dance Courses

DANC 100. Introduction to the Dance Major. 1 Credits. H
This is a 6 week online course designed to identify what is unique about the KU Dance experience, and to introduce students to the requirements for a BA or BFA degree. The course examines issues of academic integrity, informs students about academic support available to them, familiarizes students with the expectations of a dance major and suggests career opportunities for dance majors. Students complete five modules: Getting Started, Programs and Degrees, Academic Integrity and Support, Expectations and Career Pathways to provide a foundation for academic success in the major.

DANC 101. Ballet I. 2 Credits.
Classical and modern approaches to the language of ballet for beginners. May be repeated for credit. Does not count toward the dance major requirements.

DANC 103. Modern Contemporary I. 2 Credits.
Dance technique for beginners with precedents in the movement vocabularies of Isadora Duncan, Martha Graham, Doris Humphreys, Merce Cunningham, and the seminal choreographers of modern dance. May be repeated for credit. Does not count toward the dance major requirements.

DANC 105. Jazz I. 2 Credits.
Dance technique for beginners based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Does not count toward the dance major requirements.

DANC 150. Choreography I. 2 Credits. H
The introductory-level course in a series of four composition courses (DANC 150, 250, 350 and 550). Includes basic exploration of improvisation: movement studies for solo figure, movement themes for duet, trio, and larger groups; and dances for non-traditional performing spaces both indoors and outdoors. Students will learn fundamental ingredients of dance (space, time, weight, and energy flow) and how to organize them into short compositional forms such as ABA, verse/refrain, or narrative. Prerequisite: Consent of instructor.

DANC 177. First Year Seminar: 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Dance. Course is designed to meet the critical
thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

DANC 210. Rhythms and Structures of Music. 3 Credits. H
An introduction to the analysis and use of rhythms and the compositional forms of music for dance.

DANC 211. Ballet II. 2 Credits.
Classical and modern approaches to ballet technique for low intermediate dancers. May be repeated for credit. Counts toward the B.A. in Dance and Dance Minor requirements. Prerequisite: DANC 101 or consent of instructor.

DANC 213. Modern Contemporary II. 2 Credits.
Dance technique for low intermediate dancers with precedents in the movement vocabularies of classical modernists and contemporary choreographers of dance. May be repeated for credit. Counts toward the B.A. and the Minor in dance requirements. Prerequisite: DANC 103 or permission of instructor.

DANC 215. Jazz II. 2 Credits.
Dance technique for experienced beginners based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Counts toward the B.A. and Minor in dance requirements. Prerequisite: DANC 105 or consent of instructor.

DANC 250. Choreography II. 2 Credits. H
The intermediate course in a series of four composition courses (DANC 150, DANC 250, DANC 350 and DANC 550.) Includes more complex exploration of improvisation; movement studies for solo figure, movement themes for duet, trio, and larger groups; and dances for non-traditional performing spaces both indoors and outdoors. Students will further develop the ingredients of dance (space, time, weight, and energy flow) and how to organize them into studies including compositional forms such as ABA, verse/refrain, or narrative. Prerequisite: DANC 150 or consent of instructor.

DANC 260. Musical Theatre Dance. 3 Credits.
This course focuses on the dance and movement vocabulary uniquely associated with musical theatre productions, as well as a variety of popular dance styles from the 1920s to the present. Performance techniques for the stage are emphasized.

DANC 290. Sophomore Review. 0 Credits. H
The Sophomore Review of all majors in the BA program in Dance provides an assessment of student progress in the degree. Transfer students to the BA program participate in the year following their admission to KU. The review process consists of: verification that students are making academic progress; Students should have an overall GPA of 2.0; a self-evaluation composed of written responses to a series of questions about their own artistic, technical and discipline-specific academic progress in the program; a faculty evaluation comprised of written feedback on each student's artistic, technical and discipline-specific academic progress in the program; and participation in at least one speedback session prior to the end of the second year. Speedback is a feedback process modeled on the speed dating format. All majors sit with faculty members for 5-minute intervals to receive individual feedback. Students engage with professors with whom they have been in technique class or rehearsal for the current year. There are no prerequisites for entry into the course. The completion of the course will be a prerequisite for enrollment in DANC 550 Senior Project.

DANC 307. Pointe and Pas de Deux. 2 Credits.
An introduction to pointe and classical partnering work for the intermediate/advanced female ballet dancer, with equal emphasis on pointe technique and style, and on classical repertory for couples. May be repeated for credit. Prerequisite: Consent of instructor.

DANC 308. Pas de Deux. 1 Credits.
The exploration of classical ballet partnering (pas de deux) including supported poses, lifts, turns, and their coordination between the partners. For men only. Women enroll in Pointe and Pas Deux, DANC 307. May be repeated for credit. Prerequisite: Consent of instructor.

DANC 311. Ballet III. 3 Credits. H
Advanced level technique in classical and modern approaches to the language of ballet. May be repeated for credit. Prerequisite: Instructor consent.

DANC 313. Modern/Contemporary III. 3 Credits. H
Dance technique for intermediate/advanced dancers with precedents in the movement vocabularies of classical modernists and contemporary choreographers of dance. May be repeated for credit. Counts toward the B.A., B.F.A., and the Minor in dance requirements. Prerequisite: Consent of instructor.

DANC 315. Jazz III. 3 Credits. H
Dance technique for intermediate dancers based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for variable credit. Prerequisite: DANC 105 or consent of instructor.

DANC 317. Hip Hop Fundamentals. 3 Credits.
Basic fundamentals of hip-hop dance. Students will learn basic steps for choreography and freestyle based on all urban street styles. They will learn the origins and history of the hip hop movement and all urban street styles through lectures and class participation.

DANC 319. Tap Fundamentals. 3 Credits. SC H
Introduces the principles of tap dance including rhythm, clarity of sound, syncopation and weight shift. Emphasis is placed on proper execution of basic tap technique, step knowledge, weight distribution, and the development of basic rhythm and syncopation skills. The course will be based on "stomp tap" and "rhythm tap". working with/without the music to make clear patterned sounds.

DANC 320. University Dance Company. 0-1 Credits.
A dance repertory, performance and production class. Emphasis is on the development of skills for performing and/or producing dance concerts. Admission by audition only. May be repeated for credit.

DANC 330. Approaches to World Dance. 3 Credits. HL H
This course examines dance forms from throughout the world and how they relate to the times and cultures in which they evolved. Dance forms such as African, East Indian classical, European court dance, ballet, modern, and jazz will be studied through readings, master classes, live performances, videotapes, and films. Prerequisite: 200-level English course.

DANC 334. Introduction to African Dance Theatre. 2 Credits. NW U
An introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary will be supplemented by lectures on the "text" of performance. (Same as AAAS 334 and THR 334.)

DANC 350. Choreography III. 3 Credits. H
The advanced course in a series of four composition courses (DANC 150, DANC 250, DANC 350 and DANC 550.) Includes in-depth development of improvisation: movement studies for solo figure, movement themes for duet, trio, and larger groups; and dances for non-traditional performing spaces both indoors and outdoors. Students will develop increasingly complex studies of dance (space, time, weight, and energy flow) including...
compositional forms such as ABA, verse/refrain, or narrative. Prerequisite: DANC 250 or consent of instructor.

DANC 375. Anatomy and Injury Prevention. 3 Credits. H Basic concepts of neuromuscular and skeletal education through the use of specific imagery (ideokinesis). Based on the work of Mabel Todd, Lulu Sweigard, and Irmgard Barteneiff, the emphasis is on body connectedness and dynamic alignment. The aim is to realize full movement potential in the most efficient way through intrinsic body awareness. Injury prevention is addressed by introducing principles of conditioning (strength, flexibility, endurance) and factors leading to injury such as muscular imbalances or postural deviations.

DANC 411. Ballet IV. 3 Credits. H Advanced level technique in classical and modern approaches to the language of ballet. Prerequisite: Consent of instructor.

DANC 413. Modern Contemporary IV. 3 Credits. H Dance technique for advanced dancers with precedents in the movement vocabularies of classical modernists and contemporary choreographers of dance. May be repeated for credit. Counts toward the B.A., B.F.A., and the Minor in dance requirements. Prerequisite: Consent of instructor.

DANC 417. Hip Hop II. 3 Credits. SC H Intermediate/advanced hip hop dance. Students will learn intermediate/advanced hip hop skills, combinations, and choreography. Greater focus will be placed on intermediate/advanced steps, isolations, and body control. Prerequisite: Hip Hop Fundamentals or permission of instructor.

DANC 419. Tap II. 3 Credits. SC H Intermediate/advanced tap dance. A continuation of the principles introduced in Tap Fundamentals including rhythm, clarity of sound, syncopation and weight shift. Proper execution of intermediate/advanced tap technique including step knowledge, weight distribution, and the development of rhythm and syncopation skills is emphasized. Prerequisite: Tap Fundamentals or permission of instructor.

DANC 420. Introduction to Videography and Website Design for Dance. 3 Credits. H This is a hands-on course exploring digital video technology for dance. Students are introduced to video and website production as well as the time management skills necessary to engage the multi-faceted project that is dance video. We will cover video techniques for recording dance; video editing; collaborating with national and international sites and artists; and self-promotion and marketing strategies with video and websites. The final project will be the creation of a video website for each student. No previous video editing experience is required. Prerequisite: Basic computer literacy.

DANC 440. Introduction to Classical East Indian Dance. 3 Credits. W Classical East Indian dance has an extensive movement vocabulary that emphasizes the coordination of rhythmic foot patterns with intricate hand gestures. Students will learn the mudras (hand gestures) and their significance and integration within each dance. Readings will include excerpts from the Natya Sastra and other treatises of East Indian dance and culture.

DANC 460. Dance History: Research and Reconstruction. 3 Credits. HL H Through research and reconstruction, students will examine major topics in dance history, such as the meaning and function of dance in pre-industrial societies, communal and court dance in Europe from the 14th to the 19th centuries, and the transformation and development of dance as a theatre art in the modern world. Texts by dance historians and treatises by dancing masters will be supplemented by readings from fields, such as anthropology, philosophy, art history, and literature, that indicate the different ways of approaching the history of dance.

DANC 475. Career Preparation in the Arts. 3 Credits. H Designed to provide an overview of key areas in career preparation in the arts, including resume writing, audition skills, professional speaking, grant writing and development, publicity and marketing strategies, developing relationships with presenters and funders, and audience education. Through readings, class discussion, guest lectures with professionals, and projects based on real-life scenarios, students develop tools to further their careers in the arts. This focused study also provides individuals with the direction and means to employ their training in the field of performing arts administration and management at many different levels. This course prepares students for their entry into the professional arts marketplace.

DANC 490. Introduction to Flamenco Dance Technique. 3 Credits. Using the basic compas (rhythmic structures) of Flamenco, we will explore the different components of flamenco dance technique: floreo (spiralizing fingers), brazeo (arm movements), palmas (rhythmic hand-clapping), marajeo (marking, or movement through space), vuetlas (turns) and zapateada (footwork). We will cultivate an awareness of flamenco's unique posture, learn the structure of the different rhythmic forms and introduce the possibilities for personal expression and improvisation.

DANC 498. Directed Study in: ____. 1-3 Credits. Investigation of a special topic or project in aesthetics, dance history, movement analysis, production, or a creative project. A maximum of six hours may be counted toward graduation. Prerequisite: At least seven hours of credit in dance courses.

DANC 520. Pedagogy. 3 Credits. H Methods and materials designed to address the needs of teaching artists across genres of dance (ballet, modern/contemporary, jazz, creative movement) among children, adults and special populations. Lessons are prepared and tested in the classroom among peers. Prerequisite: Consent of Instructor.

DANC 530. Practicum in: ____. 1 Credits. Supervised experience in teaching beginning level dance technique in the styles of ballet, jazz, or modern dance. Different approaches are analyzed, discussed, and tested in the studio. Prerequisite: Intermediate level of dance technique in the style of the practicum.

DANC 540. Field Experience in Dance Teaching. 3 Credits. Teaching ballet, modern, or jazz dance technique to children or adults with faculty supervision in an academic or community program. Prerequisite: Consent of Instructor.

DANC 550. Senior Project. 3 Credits. In-depth research project in dance theory or history, or choreography project involving the complete development and presentation of a dance idea. Prerequisite: Performance option: DANC 320, DANC 350, DANC 290 (for BA students only) and permission of the dance division. Research option: DANC 340, DANC 370, DANC 375, DANC 460, DANC 462, DANC 290 (for BA students only) and permission of the dance division.

DANC 580. Special Topics in Dance: ____. 3 Credits. A study of current developments in dance with an emphasis on performance or research. May be repeated for credit. Prerequisite: Junior or senior standing or consent of instructor.

DANC 898. Directed Study in: ____. 1-3 Credits. Directed study in some aspect of aesthetics, dance history, movement analysis, production, or an advanced creative project. Prerequisite: Consent of instructor.
Theatre and Dance Courses

THR 100. Introduction to the Theatre. 3 Credits. HL H
Designed to help students by means of experience with theatre as well as study about it to achieve an understanding of its cultural role in contemporary society, to develop a sensitive and informed appreciation of its art, and to make it an integral part of their cultural lives. Lectures, discussion groups, special interest groups, theatre attendance.

THR 101. Theatre Practicum I. 1 Credits. H
One crew assignment in a University Theatre & Dance production qualifies for 1 credit hour. May be repeated for credit.

THR 105. Improvisation. 3 Credits. H
Designed to free the beginning actor, develop creativity and imagination. Fundamentals of improvisation technique and skills through physical work, deep listening and focus. Ensemble building emphasized with exercises and games, the work will progress to sketch writing and performance.

THR 106. Acting I. 3 Credits. HL H
Fundamental techniques in acting. Practice in character creation, body language, and effective stage speech.

THR 111. Make-Up. 1 Credits. H
The techniques in application of make-up for specific characterizations, both straight and character. Study of the structure of the face and hands for stage make-up. Should be taken concurrently with THR 106, if possible.

THR 116. Scenographic Techniques. 3 Credits. H
Emphasis on drafting, model building, and presentational techniques for the theatrical designer or art director. Some work in computer drafting for the designer-technician. Lecture and laboratory periods.

THR 120. Public Speaking as Performance. 3 Credits. H
This course offers a unique approach to public speaking grounded in theatre practice and performance studies. A combination of speech assignments and theatre exercises teaches students to integrate body and mind while speaking across social, cultural, and disciplinary boundaries.

THR 177. First Year Seminar: ______. 3 Credits. HT
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in Theatre. May not contribute to major requirements in theatre. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

THR 201. Theatre Practicum II. 1 Credits. H
One crew assignment in a University Theatre & Dance production qualifies for 1 credit hour. May be repeated for credit. Prerequisite: THR 101.

THR 204. Study Abroad Topics in: ______. 1-6 Credits. H
This course is designed for the study of special topics in Theatre at the freshman/sophomore level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

THR 206. Acting II. 3 Credits. H
The study of roles and scenes from plays. Practice in character analysis, creation of roles, rehearsal of scenes, and ensemble work. Prerequisite: THR 106.

THR 210. Musical Performance for the Actor I. 3 Credits. H
Beginning Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance.

THR 212. Beginning Voice and Speech for Actors. 3 Credits. H
A foundation course; introduction to phonetics; training in Standard American Stage Speech; articulation skills; resonance and voice placement.

THR 213. Movement I: The Acting Instrument. 3 Credits. H
A foundational course in discovering ease and efficient use of the body in a performance context, developing non-verbal communication and partnering skills, and establishing the connection of movement to voice production. Trains actors in proper warm-up technique, alignment and balance, physical safety, and basic tumbling skills.

THR 215. Approaching Design. 3 Credits. HL H
Conceptualization and visualization of the elements involved in creative design for theatre, dance, television, and film.

THR 216. Scenic Production. 2 Credits. H
Introduction to the planning, construction, and mounting of scenery for theatre, television, and film. Concentration on the technical organization of scenic production. Lecture, discussion, and laboratory periods.

THR 220. Costume Production. 2 Credits. H
Introduction to techniques of costume construction, including study of fabrics, color, fundamentals of pattern making, and draping of costumes for theatre, television, and film. Concentration on the technical organization of costume production. Lecture, discussion, and laboratory periods.

THR 224. Lighting Production. 2 Credits. H
Introduction to the planning and execution of lighting for theatre, television, and film. Concentration organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

THR 301. Theatre Practicum III. 1 Credits. H
One crew assignment in a University Theatre & Dance production qualifies for 1 credit hour. May be repeated for credit. Prerequisite: THR 201.

THR 302. Undergraduate Seminar in: ______. 3 Credits. H
Course organized any given semester to study a particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

THR 304. Study Abroad Topics in: ______. 1-6 Credits. H
This course is designed for the study of special topics in Theatre at the junior/senior level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

THR 306. Acting III. 3 Credits. H
Advanced projects in acting. Character and scene analysis, scoring the role, rehearsal, and performance. Prerequisite: THR 206.

THR 307. Undergraduate Theatre Internship. 1-3 Credits. H
Supervised study with an approved theater company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Prerequisite: Consent of instructor and at least seven hours credit in the department.

THR 308. Script Analysis. 3 Credits. H
This course provides knowledge and methods enabling students to conduct in-depth study of dramatic scripts. Emphasis is given to the analysis skills appropriate to practitioners of stage and screen arts.

THR 310. Musical Performance for the Actor II. 3 Credits. H
THR 313. Movement II: Physical Characterization. 3 Credits. H
The study of diverse physical acting techniques, and an investigation into creating a character through manipulation of the acting instrument. Actor training in performance neutrality, mask work, age, and gender distinctions. Prerequisite: THR 213 and permission of instructor.

THR 316. Beginning Scene Design. 3 Credits. H
Study of scenic design process with beginning problems in textual analysis, style, historical research, and preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 116 and THR 215, or permission of instructor.

THR 320. Beginning Costume Design. 3 Credits. H
Study of the costume design process with beginning problems in textual analysis, style, historical research, and preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 215.

THR 324. Beginning Lighting Design. 3 Credits. H
Study of the lighting design process with beginning problems in textual analysis, style, historical research, with preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 116 and THR 215, or permission of instructor.

THR 326. African Theatre and Drama. 3 Credits. NW H/W
A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as AAAS 355.)

THR 327. African-American Theatre and Drama. 3 Credits. H
A historical study of Black Theatre in the U.S.A. from its African genesis to its contemporary Americanness. Epochs in African-American dramaturgy will be critically examined. (Same as AAAS 356.)

THR 334. Introduction to African Dance Theatre. 2 Credits. NW U
An introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary will be supplemented by lectures on the "text" of performance. (Same as AAAS 334 and DANC 334.)

THR 345. Theatre and Genocide. 3 Credits. H
This seminar focuses on theatre art production under extreme situations. Do artists have a moral obligation to bear witness to genocide and war? Lectures, historical and theoretical readings, play texts, dance performance, and films provide students with a context within which to explore such issues as: the function of the performing arts under duress; the artist's role under and in response to atrocity; and how art aids us to explore the human condition. Class discussion, readings, and individual projects. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in JWSH 645 or THR 645. (Same as JWSH 345.)

THR 380. Popular Culture: ______. 3 Credits. HL H
Interdisciplinary examination of popular culture oriented around a specific genre or theme. Objects of study may include popular forms of live performance such as musicals or vaudeville, as well as media-based performances (radio, television, film, internet). Specific topic to be studied changes as needs and resources develop. May be repeated for credit for different topics.

THR 401. Stage Management and Assistant Direction. 1 Credits. H
Majors are assigned to stage manage or assistant direct a University Theatre production, or to take related workshops in stage management or assistant directing. May be repeated for credit

THR 406. Audition Techniques. 3 Credits. H
This course prepares students for all types of audition experiences. It includes study in techniques of prepared auditions, cold readings, interviews, and the musical audition for actors. Emphasis is placed upon developing resumes and photo portfolios as well as concentrated study in professional contracts, unions, and agent acquisition. Prerequisite: THR 206.

THR 407. Advanced Acting Special Topic: ______. 3 Credits.
This course is designed for the study of special topics in performance techniques involving advanced skills for the actor at the junior/senior level. Specific topic to be studied changes as needs and resources develop. May be repeated for credit for different topics. Prerequisite: THR 306. Theatre major or minor students.

THR 410. Musical Performance for the Actor III. 3 Credits. H
Advanced Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance. Prerequisite: THR 106, THR 210, and THR 310.

THR 413. Stage Combat Skills. 3 Credits. U
Study of the illusion of violence in a dramatic context and the special skills necessary for creating believable and safe stage fights. Actor training in armed and unarmed combat, including one or more of the following: rapier and dagger, broadsword, and quarter staff. Prerequisite: THR 313 and permission of instructor.

THR 429. Postcolonial Theatre and Drama. 3 Credits. NW H
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre within theatre by exploring how the "colonial project" has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as AAAS 429.)

THR 498. Honors Directed Study in Theatre. 3 Credits. H
Individual creation of an original product that integrates theatre knowledge and skills. Selected in advance with advice, approval, and supervision by an instructor. Prerequisite: Consent of instructor, senior level status, and 3.5 GPA in Theatre and 3.25 GPA overall at the time of enrollment.

THR 499. Directed Study in Theatre. 3 Credits. H
Individual creation of an original product that integrates theatre knowledge and skills. Selected in advance with advice, approval, and supervision by an instructor. Prerequisite: Consent of instructor and junior or senior level status.

THR 506. Acting for the Camera. 3 Credits. H
A study of acting techniques appropriate to the requirements of the camera. Emphasis is placed on developing audition skills necessary to compete for roles in dramatic features, corporate videos, and commercials. Actors acquire skills essential to the transition from stage to camera. Prerequisite: Permission of instructor.

THR 508. Fundamentals of Directing. 3 Credits. H
Offered as an initial approach to play directing, this course introduces students to practical and theoretical aspects of the craft of stage directing. Prerequisite: THR 308.

THR 512. A Vocal Approach to the Classics. 3 Credits. H
This is an advanced voice and speech course for actors aiming to further increase their command over tone, rhythm, pacing, and diction. Their
range and power will be extended. Through discovery of the demands of a variety of classical texts, the actor will be challenged both in verse and in prose to develop the skills necessary to fully interpret that material. Prerequisite: THR 212.

**THR 516. Scenic Painting Techniques. 3 Credits. H**
Study of painting equipment, tools, pigments, binders, and vehicles, and their relationship to the surfaces to be painted. Instruction in basic painting techniques. Prerequisite: THR 116 and THR 215.

**THR 517. Computer-Aided Design. 3 Credits. U**
Study of new media in theatre and film/video production, primarily computer technologies and methods for the theatrical designer or art director. Emphasis on computer 3-D modeling and color rendering. Prerequisite: THR 116, THR 215, or permission of instructor.

**THR 518. Scenography and the Classic Script. 3 Credits. H**
Holistic production design, including lighting, scenery, and costumes, for classic theatre scripts. Contrasts historical styles of production with styles for contemporary spaces and audiences. Projects tailored to the needs and level of the students. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in THR 720. Prerequisite: Consent of instructor.

**THR 520. History of Period Style I. 3 Credits. H**
A survey of Western style from ancient Egypt to the Restoration. Focus is placed on developing a comprehensive understanding of the stylistic relationships between art, architecture, clothing, decor, manners, and social and political history. Prerequisite: Nine hours in theatre/design/technical courses or consent of instructor.

**THR 521. History of Period Style II. 3 Credits. H**
Continuation of THR 520, from the Restoration to the present day. Prerequisite: Nine hours in theatre/design/technical courses or consent of instructor.

**THR 525. History of Theatre. 3 Credits. H**
Study of developments in world theatre and drama from the ancient world to the eighteenth century. Prerequisite: THR 308.

**THR 526. History of Theatre II. 3 Credits. H**
Study of developments in world theatre and drama since the eighteenth century. Prerequisite: THR 308.

**THR 528. History of U.S. Theatre and Drama. 3 Credits. H**
Historical approach to the development of theatre and performing arts in the United States. Prerequisite: THR 308.

**THR 560. Collaborative Production. 3 Credits. H**
Seniors collaborate as a theatre company to create an original production that integrates several of the following areas: improvisation, playwriting, acting, directing, dramaturgy, design, technical production, and stage management. Collaboration of group project approved in advance with advice, approval, and supervision by at least one instructor. Prerequisite: Senior level and consent of at least one instructor.

**THR 599. Special Topics in Scenography. 1-6 Credits. U**
Individual studio activity. Course content to be determined by the student under the supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: Permission of instructor.

**THR 603. Theatre for Young Audiences. 3 Credits. U**
A survey of theories, history, literature, criticism, production methods, and audience research about theatre performed by adults for children and adolescents. Emphasis is on child development and community outreach. Prerequisite: THR 308 or consent of instructor.

**THR 617. Computer-Aided Design II. 3 Credits. U**
Continuation of THR 517. Emphasis on computer-generated images as scenic media in production situations. Prerequisite: THR 517, or permission of instructor.

**THR 618. Scenography and the Musical Theatre. 3 Credits. H**
Holistic production design, including lighting, scenery, and costumes, for musical theatre, opera, and dance. Examines development and changes in design styles in the evolution of musical theatre, opera, and dance and the special requirements of these forms. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 820. Prerequisite: Consent of instructor.

**THR 619. Scenography and the Contemporary Script. 3 Credits. H**
Holistic production design, including lighting, scenery, and costumes, for contemporary scripts. Examines contemporary episodic scripts written for the stage that are based on a filmic structure, the special problems of these kinds of scripts, and the respective problems of designing for theatre and film. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 821. Prerequisite: Consent of instructor.

**THR 620. Scenography and the Experimental Production. 3 Credits. H**
Holistic production design, including lighting, scenery, and costumes, for experimental scripts/scenarios. Examines experimental approaches to a variety of script/scenarios, including mixed-media production. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 822. Prerequisite: Consent of instructor.

**THR 626. Myth and the Dramatist. 3 Credits. U**
This seminar critically explores myths in dramatic literature from ancient times to contemporary times, using select authors from different cultures. Analysis of the works will be based on both conventional and post-structuralist theories and specific emphasis will be on myths that have been adapted cross-culturally and/or in different time perspectives.

**THR 645. Theatre and Genocide. 3 Credits.**
This seminar focuses on theatre art production under extreme situations. Do artists have a moral obligation to bear witness to genocide and war? Lectures, historical and theoretical readings, play texts, dance performance, and films provide students with a context within which to explore such issues as: the function of the performing arts under duress; the artist's role under and in response to atrocity; and how art aids us to explore the human condition. Class discussion, readings, and individual projects. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to student with credit in JWSH 345 or THR 345. (Same as JWSH 645.) Prerequisite: Graduate standing or consent of instructor.

**THR 702. Graduate Seminar in: _____. 3 Credits.**
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.
THR 703. Directed Readings in Theatre. 1-3 Credits.
Research reading and presentation of reports on specific subjects related to the students major area of specialization. May be repeated up to a total of six credits on petition. Required of all MFA Scenography students.

THR 704. Study Abroad Topics in: ______. 1-6 Credits.
This course is designed for the study of special topics in Theatre. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

THR 707. Theatre Internship. 3-12 Credits.
Study with an approved theatre company. Emphasis may be in one or all of the following areas: acting, directing, stage management, technical theatre, promotion management. No more than six hours may be applied to an M.A. degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor.

THR 710. The Art of Directing. 3 Credits.
Offered as an advanced course in play directing. Theory is combined with practical application to explore the craft of directing using a variety of styles in classic and contemporary theatre. Lecture and laboratory periods.

THR 715. Problems and Techniques of Direction. 3 Credits.
Practical experience in directing.

THR 719. M.F.A. Production Seminar. 3 Credits.
To be taken by M.F.A. candidates during those semesters in which they are assigned to design one or more elements in a production to be mounted on one of our stages. Weekly critique and discussion of solutions to practical design problems from conception through execution. May be repeated for a total of no more than six hours credit. Prerequisite: Consent of instructor.

THR 720. Scenography and the Classic Script. 3 Credits.
Holistic production design, including lighting, scenery, and costumes, for classic theatre scripts. Contrasts historical styles of production with styles for contemporary spaces and audiences. Projects tailored to the needs and level of the students. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in THR 518. Prerequisite: Consent of the instructor.

THR 721. Scenography and the Modern Script. 3 Credits.
Holistic production design, including lighting, scenery, and costumes, for modern theatre scripts. Examines modern styles of production. Projects tailored to the needs and level of the students. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in THR 519. Prerequisite: Consent of instructor.

THR 725. Russian Theatre and Drama from Stanislavski and Chekhov to the Present. 3 Credits.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as SLAV 762.)

THR 800. Introduction to Graduate Study in Theatre. 3 Credits.
Major emphasis is placed upon the principles of research, bibliographical data, and research methods useful in theatre and performance studies. The course should be taken at the beginning of the graduate student's program.

THR 801. Professional Development Seminar. 1-3 Credits.
Preparation for faculty careers in theatre and related fields, including issues of research, teaching, and service. At least three hours per semester will be devoted to training in responsible scholarship. May be repeated for credit.

THR 815. Advanced Play Production. 1-3 Credits.
Individually supervised advanced directing of theatre pieces for public presentation. In special cases, credit may be given for musical direction, dramaturgy, choreography, or stage management.

THR 817. Theory of Acting and Directing. 3 Credits.
Readings, lectures, discussions and papers on acting and directing theory; is concerned with the divergence between presentational and representational acting methods and the emergence of directing art.

THR 819. Advanced M.F.A. Production Seminar. 3 Credits.
Continuation of THR 719, but production design assignments will be more complex and larger in scope. May be repeated for maximum of six hours credit. Prerequisite: Six hours of THR 719 and consent of instructor.

THR 820. Scenography and the Musical Theatre. 3 Credits.
Holistic production design, including lighting, scenery, and costumes, for musical theatre, opera, and dance. Examines developments and changes in design styles in the evolution of musical theatre, opera, and dance and the special requirements of these forms. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 618. Prerequisite: Consent of instructor.

THR 821. Scenography and the Contemporary Script. 3 Credits.
Holistic production design, including lighting, scenery, and costumes, for contemporary scripts. Examines contemporary episodic scripts written for the stage that are based on a filmic structure, the special problems of these kinds of scripts, and the respective problems of designing for theatre and film. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 619. Prerequisite: Consent of instructor.

THR 898. Investigation and Conference (for Master's Students). 1-8 Credits.
Directed research and experimentation in theatre. Limited to eight hours credit toward the Master's degree.

THR 899. Master's Thesis. 1-6 Credits.

THR 901. Theatre Seminar in: ______. 3 Credits.
A graduate seminar devoted to selected historical, theoretical, or critical issues in theatre. Prerequisite: Consent of instructor.

THR 914. Theories of Race and Performance. 3 Credits.
Theories of Race and Performance is an inter-textual graduate course that explores interdisciplinary scholarship on race and performance. It seeks to translate these theories into practical application in various visual, audio and performance texts in popular culture. The course is divided into modules aimed at gaining an understanding of the shifting meaning of race over time and its relationship to ethnicity, gender, sexuality, class, nation, and power. How do we perform our identities? How is race constructed and maintained through performance? To begin to answer these questions, we will examine the ways in which racial identities are created through performance.

THR 917. Dramatic Theory I. 3 Credits.
Advanced study in the history of critical theory relating to dramatic literature, theatre, and performance.

THR 922. Theatre Historiography. 3 Credits.
This course focuses on the advanced study of research methods, subjects, interpretative paradigms, theoretical frameworks, and philosophies of history employed in contemporary approaches to writing and teaching theatre history.

THR 998. Investigation and Conference (for Doctoral Students). 1-8 Credits.

THR 999. Doctoral Dissertation. 1-12 Credits.

Visual Art Courses

ART 101. Drawing I. 3 Credits. H
Introductory study of Drawing with emphasis on tools, techniques and observational development. Studio class includes intensive in-class exercises, lectures, images, and assignments. Students develop a formal fine arts vocabulary and gain verbal and written skills in critical analysis through individual and group critiques. Six hours scheduled studio activity and approximately six hours outside work weekly. Prerequisite: Must be a major or minor in the Department of Visual Art or receive instructor permission.

ART 102. Drawing II. 3 Credits. H
Continuation of ART 101: Drawing I. Prerequisite: ART 101 or instructor permission.

ART 103. Art Concepts and Practice. 3 Credits. H
A companion course to ART 104. Lecture and studio experiences across disciplines emphasizing conceptual fundamentals, technical/skill development, visual sensibility, critical thinking and professional topics in art. Prerequisite: Must be a major or minor in the Department of Visual Art or receive instructor permission.

ART 104. Art Principles and Practice. 3 Credits. H
A companion course to ART 103. Lecture and studio experiences across disciplines emphasizing conceptual fundamentals, technical/skill development, visual sensibility, critical thinking and professional topics in art. Prerequisite: Must be a major or minor in the Department of Visual Art or receive instructor permission.

ART 105. Visual Art Seminar. 1 Credits.
An introduction to campus and community resources for students interested in Visual Arts. Resources in the Department, the University and the larger community will be discussed and explored.

ART 120. Fundamentals of Painting. 3 Credits.
Open to all university students. An exploration of basic technical and expressive possibilities in painting. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 121. Fundamentals of Printmaking. 3 Credits.
Open to all university students. An exploration of basic technical and expressive possibilities in printmaking, including woodcut, etching, lithography and silk screen; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 122. Fundamentals of Sculpture. 3 Credits.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in three-dimensional form and space, including sculpture, modeling, carving, and construction; materials include wood, stone, clay, metal; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 123. Fundamentals of Expanded Media. 3 Credits. U
Open to all university students. An exploration of basic technical and expressive possibilities in Expanded Media, including Installation, Performance, Video and other Digital technologies; may include field trips, films, and/or visiting lecturers. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 131. Fundamentals of Ceramics. 3 Credits.
Open to all university students. An introduction to ceramic techniques and conceptual development. The course will investigate historical and contemporary ceramic art, develop skills in wheel throwing, hand-building, glazing, clay-mixing, and firing. Through practice and research, students will build an integrated understanding of ceramics as a continuum of cultural expression. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 132. Fundamentals of Metalsmithing/Jewelry. 3 Credits.
Open to all university students. A comprehensive study of the field of jewelry and metalsmithing with an emphasis on the tools, processes, and techniques used in the design and fabrication of objects from metals such as aluminum, brass, copper, bronze, sterling and related materials. Studio experience will include lectures, slide presentations, demonstrations, visiting artist, and student projects. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 133. Fundamentals of Fibers. 3 Credits. U
Open to all university students. Studio exploration of fibers as an art form and means of personal expression. A variety of dyeing, construction, and surface embellishment techniques will be introduced. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 177. First Year Seminar: ______. 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ART 300. Special Topics in Visual Art: ______. 3 Credits.
Course to be offered in related areas of research, mixed media or interdisciplinary exploration. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. This course is offered at the 300 and 500 levels, with ART 500 serving as a continuation of study in the topic area. Prerequisite: ART 101, ART 102, ART 103, or ART 104; or permission of instructor.

ART 375. Directed Readings in Visual Art. 1-3 Credits. U
Directed reading in specific areas of visual art. May be repeated for credit in subsequent semesters. Prerequisite: Permission of instructor.

ART 395. Study Abroad Topics in: ______. 1-6 Credits. H
This course is designed for the study of special topics in Visual Art. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. Open to all students.

ART 500. Advanced Special Topics in Visual Art: ______. 3 Credits.
Course to be offered in related areas of research, mixed media or interdisciplinary exploration. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. This course is offered at the 300 and 500 levels, with ART 500 serving as a continuation of study in the topic area. Prerequisite: ART 101, ART 102, ART 103, or ART 104; and ART 300 (same topic), or permission of instructor.

ART 540. Professional Activities Seminar. 3 Credits.
Comprehensive development of skills and strategies needed to pursue a career as a professional studio artist. Prerequisite: Twenty-four hours of departmental electives or permission of instructor.

**ART 575. Advanced Directed Reading in Visual Art. 1-3 Credits.**
Directed reading in specific areas of visual art. May be repeated for credit in subsequent semesters. Prerequisite: Permission of instructor.

**ART 590. Internship in Visual Art. 1-3 Credits.**
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded according to the written recommendation provided by the internship supervisor to the faculty advisor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ART 101, ART 102, ART 103, or ART 104; and permission of instructor.

**ART 595. Advanced Study Abroad Topics in: _____ 1-6 Credits.**
This course is designed for the study of special topics in Visual Art at the senior/graduate level. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. Open to seniors and graduate level students.

**ART 599. Individual Studies in Visual Art. 1-6 Credits.**
Individual studio activity. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 101, ART 102, ART 103, or ART 104; and twelve hours of Visual Art courses; and permission of instructor.

**ART 650. Senior Seminar I. 3 Credits.**
This course explores issues and themes in creative practice while critically examining works of visual art and culture; capstone experience. Concurrent enrollment in at least one upper level Visual Art studio course is required. Typically taken during a student's final two semesters. Prerequisite: 30 hours of departmental electives and instructor permission. Corequisite: Any 300 level or above Visual Art studio course.

**ART 660. Senior Seminar II. 3 Credits.**
Continuation of ART 650; capstone experience. Participation in BFA exhibition required. Concurrent enrollment in at least one upper level Visual Art studio course is required. Prerequisite: ART 650 and instructor permission. Corequisite: Any 300 level or above Visual Art studio course.

**ART 695. Directed Study I. 3 Credits.**
Individual studio activity under direction of faculty advisor; capstone experience. Prerequisite: Thirty hours of departmental electives, consent of department, and permission of instructor.

**ART 696. Directed Study II. 3 Credits.**
Continuation of ART 695; capstone experience. May be repeated for credit in subsequent semesters. Prerequisite: ART 695.

**ART 801. Directed Study III. 2-5 Credits.**
Individual studio activity under the direction of faculty member. May be repeated for credit in subsequent semesters. Prerequisite: Permission of graduate director and enrollment in the Visual Art MFA program.

**ART 802. Directed Study IV. 2-5 Credits.**
Continuation of Directed Study III. Prerequisite: Enrollment in the Visual Art MFA Program.

**ART 803. Directed Study V. 2-5 Credits.**
Continuation of Directed Study IV. Prerequisite: Enrollment in the Visual Art MFA Program.

**ART 805. Graduate Studio. 1-3 Credits.**
Individual graduate studio research in visual art. Course content to be determined by the student under the supervision of a graduate faculty member. May be repeated for credit. Prerequisite: Graduate standing in The School of The Arts and permission of the instructor.

**ART 861. Directed Reading in Visual Art. 1-3 Credits.**
Research reading and presentation of reports on specific subjects related to the student's major area of specialization. Prerequisite: Enrollment in the MFA Program in the Department of Visual Art.

**ART 877. Graduate Seminar. 3 Credits.**
The graduate seminar emphasizes professional preparation for contemporary artists focusing on writing skills, oral presentations, critiques of individual creative research/artwork, critical thinking about and visual analysis of current art forms and contemporary approaches to the teaching of studio art. Prerequisite: Admission to the Graduate Program in Visual Art.

**ART 898. Special Topics: Studio Theory and Criticism. 3 Credits.**
Lecture, discussion, and supervised research in current topics related to contemporary studio theory and criticism. May be repeated for credit as topics vary. This course will be counted as a graduate level academic elective in course and credit distribution.

**ART 906. Graduate Studio. 1-3 Credits.**
Individual graduate studio research in visual art. Course content to be determined by the student under the supervision of a graduate faculty member. May be repeated for credit. Prerequisite: ART 805 and permission of the instructor.

**ART 950. Thesis in Visual Art. 1-6 Credits.**
Original research in visual art culminating in a thesis exhibition. May be repeated for credit. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Thirty-six credit hours of graduate credit and permission of the graduate review committee.

**Visual Art Courses**

**CER 208. Ceramics I. 3 Credits.**
The development of form and surface through the use of handbuilding and wheel thrown techniques. Stoneware and Raku are explored.

**CER 300. Special Topics in Ceramics: _____ 1-4 Credits.**
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 131 or CER 208; or permission of instructor.

**CER 301. Concepts and Methods: Wheel Throwing. 3 Credits.**
Intermediate ceramics course focusing on the potters' wheel as a tool. Coursework focuses on throwing skills and three-dimensional design concepts related to the functional ceramic vessel, wheel thrown sculpture, and creative problem-solving. Technical information supports an understanding of forming, surface development, glazing, and firing. Prerequisite: ART 131 or CER 208.

**CER 302. Concepts & Methods: Hand Building. 3 Credits.**
Intermediate ceramics course using hand-building techniques and processes supported by design and idea development. Techniques will include press molding, slab construction and coil-building, color and surface development through glazing and firing. Emphasis is placed on creative expression and communication of personal ideas. Prerequisite: ART 131 or CER 208.

**CER 402. Mold Making and Slip Casting. 3 Credits.**
Intermediate ceramics course focusing on the production of plaster molds and the slipcasting process. Students will make molds and prototypes, produce porcelain casting slip, and develop strategies in casting as well
as consider the use of the slipcasting technique as a conceptual tool. Undergraduate students who wish to take this for a second/continuing semester should enroll in CER 502. Prerequisite: ART 131 or CER 208.

CER 403. Advanced Topics in Ceramics. 3 Credits.
Advanced ceramics course using traditional and non-traditional approaches to ceramic art-making. Topics may include: wood firing, ephemeral art, large-scale sculpture, and/or digital technologies. This course can be repeated if topic varies. If same topic is repeated, students should enroll in CER 503. Prerequisite: CER 301 or CER 302 or permission of instructor.

CER 500. Advanced Special Topics Ceramics: ______. 1-4 Credits. U
Course to be offered in an area of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. This course is offered at the 300 and 500 levels, with CER 500 serving as a continuation of study in the topic area. Prerequisite: ART 101, ART 102, ART 103, or ART 104; and CER 300 (same topic), or permission of instructor.

CER 502. Advanced Mold Making and Slip Casting. 3 Credits.
Advanced ceramics course focusing on the production of plaster molds and the slipcasting process. Students will make molds and prototypes, produce porcelain casting slip, and develop strategies in casting as well as consider the use of the slip-casting technique as a conceptual tool. Prerequisite: ART 131 or CER 208, and CER 402. Graduate students may enroll without prerequisites by instructor permission.

CER 503. Advanced Topics in Ceramics. 3 Credits.
Advanced ceramics course using traditional and non-traditional approaches to ceramic art-making. Topics may include: wood firing, ephemeral art, large-scale sculpture, and/or digital technologies. This course is intended as a continuation for a specific topic course in CER 403. Graduate students should enroll in CER 503 with no prerequisite required. Prerequisite: CER 301 or CER 302, CER 403, or permission of instructor.

CER 504. Kilns. 3 Credits.
The principles in kiln design, including up-draft, down-draft, cross-draft, and electric kilns, and burner technology. Prerequisite: ART 131, or CER 208, or CER 301, or permission of instructor.

CER 505. Clay and Glaze Formulation. 3 Credits.
Formulation of the various clay bodies and glazes associated with ceramics. Prerequisite: ART 131, or CER 208, or CER 301, or permission of instructor.

CER 510. History of Ceramics. 3 Credits.
This course examines historical ceramics across the globe. Emphasis will be placed on the development and transmission of design, materials, and technique across various traditions. This course number is intended for undergraduate students. Graduate students should enroll in CER 710 History of Ceramics. Prerequisite: CER 131 or CER 208, or permission of instructor.

CER 515. Advanced Ceramics I. 3-6 Credits.
Development of individual direction in ceramics based on experience, research, and skills acquired in previous courses; capstone experience. May be repeated for credit. Prerequisite: CER 301 and CER 402.

CER 520. Advanced Ceramics II. 3-6 Credits. U
Continuation of CER 515; capstone experience. May be repeated for credit. Prerequisite: CER 515.

CER 590. Internship in Ceramics. 1-3 Credits. U
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded according to the written recommendation provided by the internship supervisor to the faculty advisor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses; and permission of instructor.

CER 599. Individual Studies in Ceramics. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Ceramics courses or permission of instructor.

CER 710. History of Ceramics. 3 Credits.
This course examines historical ceramics across the globe. Emphasis will be placed on the development and transmission of design, materials, and technique across various traditions. This course is for Graduate students. Undergraduate students should enroll in CER 510 History of Ceramics.

CER 715. Ceramics. 2-6 Credits.
Individual research. Prerequisite: CER 515 or equivalent.

CER 815. Ceramics. 2-6 Credits.
Continuation of CER 805.

Visual Art Courses

DRWG 203. Drawing III. 3 Credits.
Advanced problems in drawing. Prerequisite: ART 102.

DRWG 213. Life Drawing I. 3 Credits.
Figure drawing. Prerequisite: ART 102 and ART 103 or ART 104.

DRWG 300. Special Topics in Drawing: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

DRWG 304. Drawing IV. 3 Credits.
Continuation of DRWG 203. Prerequisite: DRWG 203.

DRWG 314. Life Drawing II. 3 Credits.
Continuation of DRWG 213. Prerequisite: DRWG 213.

DRWG 318. Life Drawing II, Honors. 3 Credits.
Figure drawing, a continuation of DRWG 213. Prerequisite: DRWG 213; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

DRWG 500. Advanced Special Topics in Drawing: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Drawing courses, or permission of instructor.

DRWG 515. Life Drawing III. 3 Credits.
Continuation of DRWG 515. Prerequisite: DRWG 514.

DRWG 516. Life Drawing IV. 3 Credits.
Continuation of DRWG 515. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 515.

DRWG 518. Life Drawing III, Honors. 3 Credits.
Figure drawing, a continuation of DRWG 314 or DRWG 318. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 314 or DRWG 318; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

**DRWG 519. Life Drawing IV, Honors. 3 Credits.**
Figure drawing, a continuation of DRWG 515 or DRWG 518. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 515 or DRWG 518; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

**DRWG 599. Individual Studies in Drawing. 1-6 Credits. U**
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Drawing courses, or permission of instructor.

**DRWG 817. Life Drawing V. 3 Credits.**
Individual research in figure drawing. Prerequisite: DRWG 516.

**DRWG 918. Life Drawing VI. 3 Credits.**
Continuation of DRWG 817. Prerequisite: DRWG 817.

**Visual Art Courses**

**EXM 274. Expanded Media. 3 Credits. U**
Beginning course to introduce the fundamental concepts, strategies, and technologies that comprise the Expanded Media area of the Department of Visual Art: Installation, Performance, and Digital Image. Emphasis is placed on forming ideas and strategies, and creating artwork that considers the core connections within Expanded Media: time, space, the body, the viewer, and society at large. Computer-based technologies and time-based media that are inherent to Expanded Media practice support studio assignments. Coursework includes the investigation and discussion of historic precedents and the development of an appropriate critical dialogue with which to discuss their work. Prerequisite: ART 102, ART 103, and ART 104.

**EXM 300. Special Topics in Expanded Media: _____ . 3 Credits. U**
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

**EXM 301. The Digital Image I. 3 Credits.**
Introduction to various still digital processes and skills that encourage the use of digital imagery within a variety of other media. Focus on content issues as they relate to development of artwork incorporating digital imagery. Prerequisite: ART 102, ART 103 or ART 104 or permission of instructor.

**EXM 302. Performance Art I. 3 Credits. U**
An introduction to the understanding and production of performance art. Students gain proficiency in conceptualization and production of performance time-based art in an Interdisciplinary art-making environment. Prerequisite: ART 102, ART 103 or ART 104; or permission of instructor.

**EXM 304. Digital Photography I. 3 Credits.**
This course explores Digital Photography as a tool and resource with a wide range of expressive and creative interests. Digital processes such as image capturing, editing, and printing will be the main focus. Issues pertaining the circulation and distribution of digital imagery in contemporary culture will be addressed. DSLRs, Point and Shoot Cameras, and Camera Phones will be used. Prerequisite: ART 101, ART 103, or ART 104; and any introductory art studio, or permission of instructor. This course is offered at the 300 and 500 levels, with the 500 level serving as a continuation of study in the topic area.

**EXM 307. Installation Art I. 3 Credits. U**
This course is an exploration of art making with an emphasis on space, site, installation, and the viewer's experience surrounding art making. Students will research, discuss, and produce temporary art installations using a variety of mediums in an atmosphere of interdisciplinary and experimentation. Major topics include time/space specifically: the collaboration process; body-space dynamics, and art-making as part of a social/cultural dynamic. Prerequisite: ART 101, ART 103, or ART 104, or permission of instructor.

**EXM 326. Video and Time-Based Media I. 3 Credits. U**
An introduction to the understanding and production of video and time-based art. Students gain proficiency in conceptualization and production of video and time-based art in an interdisciplinary art-making environment. Prerequisite: EXM 274.

**EXM 500. Advanced Special Topics in Expanded Media: _____ . 3 Credits. U**
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103 or ART 104; 12 hours of courses in Visual Art, or permission of instructor.

**EXM 501. The Digital Image II. 3 Credits.**
Continuation of EXM 301, The Digital Image I. May be repeated for credit. Prerequisite: EXM 301.

**EXM 504. Digital Photography II. 3 Credits.**
This course will explore Digital Photography as a tool and resource with a wide range of expressive and creative interests. Students will explore how digital photographs are ‘captured’, edited, printed, and distributed in contemporary culture. DSLRs, Point and Shoot Cameras, and Camera Phones will be used. Advanced techniques in Picture Editing, File Management, Printing, Digital Delivery, and Studio Photography of Artwork will be explored. May be repeated for credit. Prerequisite: EXM 304.

**EXM 526. Video and Time-Based Media II. 3 Credits. U**
Continuation of EXM 326. Prerequisite: EXM 326.

**EXM 535. Intermediate Expanded Media. 3 Credits.**
Continuation of Expanded Media studio research. Prerequisite: Two (200- and/or 300-level) Expanded Media courses.

**EXM 536. Intermediate Expanded Media, Honors. 3 Credits.**
Continuation of Expanded Media studio research. Prerequisite: Two (200- and/or 300-level) Expanded Media courses; membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department.

**EXM 537. Advanced Expanded Media. 3 Credits.**
Continuation of EXM 535. May be repeated for credit. Prerequisite: EXM 535 or EXM 536.

**EXM 538. Advanced Expanded Media, Honors. 3 Credits.**
Continuation of EXM 536. May be repeated for credit. Prerequisite: EXM 535 or EXM 536; membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department.

**EXM 543. Graduate: The Digital Image. 3 Credits.**
Advanced work focusing on content issues as they relate to development of artwork incorporating digital imagery. Prerequisite: Permission of instructor.

**EXM 546. Graduate Expanded Media V. 3 Credits.**
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor.

**EXM 573. Performance Art II. 3 Credits. U**
Continuation of EXM 302. Prerequisite: EXM 302.

**EXM 577. Installation Art II. 3 Credits. U**
Continuation of EXM 307. Prerequisite: EXM 307.

**EXM 578. Installation Art II, Honors. 3 Credits. U**
Continuation of EXM 307. Prerequisite: EXM 307; and membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department.

**EXM 599. Individual Studies in Expanded Media. 1-6 Credits. U**
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Expanded Media courses, of permission of instructor.

**EXM 846. Graduate Expanded Media VI. 3 Credits.**
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor.

**EXM 946. Graduate Expanded Media VII. 3 Credits.**
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor.

**Visual Art Courses**

**METL 300. Special Topics in Metalsmithing: _____ 3 Credits. U**
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

**METL 301. Introduction to Casting for Jewelry. 3 Credits.**
Introduction to casting and mold making processes used for jewelry and small sculpture. Students explore various methods and materials for creating models for casting in bronze or silver including wax carving, wax modeling, and the use of natural and synthetic materials as models. Models are cast using centrifugal and vacuum casting processes. Basic mold making in clay and silicone are also explored. Prerequisite: ART 132 or permission of instructor.

**METL 360. Holloware. 3 Credits.**
Problems related to specific smithing techniques such as raising, stretching, shell structures and seam fabrications. Metal manipulation on a large scale. Prerequisite: Six hours of metalsmithing or consent of the instructor.

**METL 362. Metalsmithing. 3-6 Credits. H**
Intermediate metalworking with an emphasis on the refinement of design and techniques. Processes may include soldering and fabrication, mechanisms, and surface embellishment. Prerequisite: Six hours of metalsmithing or consent of the instructor.

**METL 363. Intermediate Jewelry. 3 Credits.**
Lectures and demonstrations on traditional techniques of jewelry construction and embellishment, such as stone setting, chasing, repoussé, and die forming. Prerequisite: Six hours of metalsmithing or consent of the instructor.

**METL 364. Enameling. 3-6 Credits.**
Introduction to enameling as applied to jewelry design and metalsmithing objects. Exploration of major enameling techniques such as wet packing, cloisonné, champlevé, basse-taille, and limoges. Prerequisite: Six hours of metalsmithing or consent of instructor.

**METL 500. Advanced Special Topics in Metalsmithing: _____ 3 Credits. U**
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

**METL 503. Gemology. 3 Credits. H**
Students study the optical and physical characteristics of gemstones in order to identify them using gemological instruments. This laboratory and discussion class explores related topics including the principles of optics that support this methodology, history and geographical distribution of gemstones, gemstone cutting and pearl farming, the history of DeBeers and the development of the world demand for diamond, quality analysis of diamond, colored gemstones and pearls, including the history of diamond grading, the development and identification of synthetics, imitations and laboratory enhancements as well as the use of gemstones in designing jewelry. Prerequisite: ART 132.

**METL 504. A History of Jewelry. 3 Credits. H**
This course explores the history from Sumeria to the 21st century of the use of metals and gemstones in the creation of decorative art for personal adornment. Students explore the evolution of the role of jewelry in ancient culture and modern society and survey individuals whose ideas and work influenced generations of goldsmiths and jewelers around the globe. The class studies primitive tools and modern manufacturing techniques, the history of gemstone cutting and setting and the origin and development of gemstones as symbols. Prerequisite: ART 132.

**METL 505. Digital Jewelry Design I. 3 Credits. H**
Matrix is a 3-D CAD program based on Rhino developed by Rhino, specifically for jewelry design. The goal of this course is to instruct beginners in the Matrix design program. Students learn to transform their 2-D designs from their sketchbooks into 3-D models in Matrix, which can be milled in wax, and cast in metal. Students also learn how to render their 3-D Matrix models to appear as if they were a finished object. The class time is structured as a combination of instructor-led tutorials and working labs. Prerequisite: ART 132.

**METL 506. Digital Jewelry Design II. 3 Credits. H**
The second semester of Matrix increases the operating and design skills building on the knowledge of DG I. The focus of the class is producing wax models on the Revo Digital Mill.Digi II covers the advanced modeling skills including T-spline and Rhino. Students also learn how to make a customized tool path for Revo C mill program and how to solve milling problems. Students also learn how to convert Rhino files to produce a 3D printed for outsourcing to other 3D modeling programs. Prerequisite: ART 132, METL 301, METL 505.

**METL 515. Advanced Metals I. 3-6 Credits. H**
Development of individual direction in Metalsmithing/Jewelry based on experience, research and skills acquired in preceding courses. This course serves as a capstone experience. General BFA students, non-majors or minors may enroll in this course with consent of the instructor. Students who are off track in sequence may be eligible to enroll in this
course with consent of the instructor. Prerequisite: METL 360, METL 362, METL 363 & METL 364 or consent of the instructor.

**METL 520. Advanced Metals II. 3-6 Credits.**
Continuation of METL 515 with emphasis on individual design aesthetic through intensive designing, rendering, and model making that leads to a professional and unified body of Metalsmithing/Jewelry work. This course requires a final presentation of a complete portfolio including resume, renderings and photographs of the finished work. This is a capstone course. Prerequisite: METL 515.

**METL 590. Internship in Metalsmithing/Jewelry. 1-3 Credits.**
U Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded according to the written recommendation provided by the internship supervisor to the faculty advisor. Grade on a satisfactory/unsatisfactory basis. Prerequisite: ART 102, and ART 103, and ART 104; and fifteen hours of Visual Art Courses; and permission of instructor.

**METL 715. Metals/Jewelry. 2-6 Credits.**
Individual research. Prerequisite: Graduate standing.

**METL 815. Metals/Jewelry. 2-6 Credits.**
Continuation of METL 715.

**Visual Art Courses**

**PNTG 263. Painting I. 3 Credits.**
Basic problems in painting. Prerequisite: ART 102, and ART 103 or ART 104.

**PNTG 300. Special Topics in Painting: _____ 3 Credits.**
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Painting courses, or permission of instructor.

**PNTG 337. Watercolor. 3 Credits.**
Sessions deal with the preparation of watercolor paints and equipment, but the main emphasis is placed on relational concepts affecting tone, structure, and unity in work. While the students are expected to explore some of the traditional approaches to watercolor, they also are encouraged to work with new and innovative ones. Prerequisite: ART 120 or permission of instructor.

**PNTG 338. Landscape Painting. 3 Credits.**
An introduction to landscape painting. Considerable work is done out-of-doors. Emphasis is placed upon experiencing the environment and the development of individual approach. May be repeated for credit. Prerequisite: PNTG 263 and permission of instructor.

**PNTG 364. Painting II. 3 Credits.**
Continuation of PNTG 263. Prerequisite: PNTG 263.

**PNTG 366. Painting IV. 3 Credits.**
Continuation of PNTG 364. Prerequisite: PNTG 364.

**PNTG 369. Painting III. Honors. 3 Credits.**
A continuation of art practice in landscape painting. Considerable work is done out-of-doors. Emphasis is placed upon experiencing the environment and the development of individual approach. May be repeated for credit. Prerequisite: PNTG 338.

**PNTG 555. Painting III. 3 Credits.**
Continuation of PNTG 364. Prerequisite: PNTG 364.

**PNTG 566. Painting IV. 3 Credits.**
Continuation of PNTG 555. May be repeated for credit. Prerequisite: PNTG 555.

**PNTG 567. Painting III, Honors. 3 Credits.**
Continuation of PNTG 364 or PNTG 368. Prerequisite: PNTG 364 or PNTG 368; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

**PNTG 569. Painting IV, Honors. 3 Credits.**
Continuation of PNTG 555 or PNTG 556. Prerequisite: PNTG 556 or PNTG 558; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

**PNTG 599. Individual Studies in Painting. 1-6 Credits.**
U Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Painting courses, or permission of instructor.

**PNTG 667. Painting V. 3 Credits.**
Continuation of PNTG 566. Prerequisite: PNTG 566.

**PNTG 668. Painting VI. 3 Credits.**
Continuation of PNTG 667. May be repeated for credit in subsequent semesters. Prerequisite: PNTG 667.

**PNTG 869. Painting VII. 3 Credits.**
Individual research in painting. Prerequisite: PNTG 668.

**PNTG 970. Painting VIII. 3 Credits.**
Continuation of PNTG 869. Prerequisite: PNTG 869.

**Visual Art Courses**

**PRNT 223. Intaglio I. 3 Credits.**
Introduction to intaglio. Prerequisite: ART 102, and ART 103 or ART 104.

**PRNT 233. Lithography I. 3 Credits.**
Introduction to lithography. Prerequisite: ART 102, and ART 103 or ART 104.

**PRNT 243. Serigraphy I. 3 Credits.**
Introduction to serigraphy. Prerequisite: ART 102, and ART 103 or ART 104.
PRNT 300. Special Topics in Printmaking: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

PRNT 324. Intaglio II. 3 Credits.
Continuation of PRNT 223. Prerequisite: PRNT 223, or permission of instructor.

PRNT 328. Intaglio II, Honors. 3 Credits.
Continuation of PRNT 223. Prerequisite: PRNT 223; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PRNT 334. Lithography II. 3 Credits.
Continuation of PRNT 233. Prerequisite: PRNT 233 or permission of instructor.

PRNT 338. Lithography II, Honors. 3 Credits.
Continuation of PRNT 233. Prerequisite: PRNT 233; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PRNT 344. Serigraphy II. 3 Credits.
Continuation of PRNT 243. Prerequisite: PRNT 243 or permission of instructor.

PRNT 349. Serigraphy II, Honors. 3 Credits.
Continuation of PRNT 243. Prerequisite: PRNT 243; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PRNT 500. Advanced Special Topics in Printmaking: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor.

PRNT 523. Printmaking III A (Intaglio). 3 Credits.
Prerequisite: PRNT 324 or permission of instructor.

PRNT 524. Printmaking III B (Lithography). 3 Credits.
Prerequisite: PRNT 334 or permission of instructor.

PRNT 525. Printmaking III C (Serigraphy). 3 Credits.
Prerequisite: PRNT 344 or permission of instructor.

PRNT 526. Printmaking IV A (Intaglio). 3 Credits.
Prerequisite: PRNT 523 or permission of instructor.

PRNT 527. Printmaking IV B (Lithography). 3 Credits.
Prerequisite: PRNT 524 or permission of instructor.

PRNT 528. Printmaking IV C (Serigraphy). 3 Credits.
Prerequisite: PRNT 525 or permission of instructor.

PRNT 599. Individual Studies in Printmaking. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor.

PRNT 662. Printmaking V. 3 Credits.
Individual research in printmaking. Prerequisite: PRNT 526 or PRNT 527 or PRNT 528.

PRNT 663. Printmaking VI. 3 Credits.

Extension of PRNT 662. Prerequisite: PRNT 662.

PRNT 802. Special Problems in Printmaking. 3 Credits.
Individual research in printmaking; course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: PRNT 579 and permission of instructor.

PRNT 827. Printmaking VII. 3 Credits.
Continuation of PRNT 663. Prerequisite: PRNT 663.

PRNT 903. Special Problems in Printmaking. 3 Credits.
Individual research in printmaking; course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: PRNT 802 and permission of instructor.

PRNT 928. Printmaking VIII. 3 Credits.
Continuation of PRNT 827. Prerequisite: PRNT 827.

Visual Art Courses

SCUL 253. Sculpture I. 3 Credits.
Introduction to sculpture. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor.

SCUL 300. Special Topics in Sculpture: ______. 3 Credits.
Course to be offered in an area of studio activity of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

SCUL 330. Sculpture Intercepting the Waste Stream. 3 Credits. N
An introductory course using engaged learning to exploring the genre of ecological art practice (eco-art.) Class focuses on the waste stream particularly as it affects the Kansas River. Through remediation events, students build works of art from trash, in turn auctioned for environmental efforts. Creative attention is focused on ecological imbalance. (Same as EVRN 330.) Prerequisite: Visual Art major or minor, or instructor permission.

SCUL 349. Metal and Glass Casting. 3 Credits.
A course in foundry techniques as related to sculpture. Both traditional and experimental procedures for casting bronze, aluminum, and iron sculpture are explored. This course is taught at the 300 and 500 levels, with additional assignments at the 500 level.

SCUL 353. The Figure 3D: Modeling and Molding. 3 Credits. H
Sculpting a figure is radically different form drawing one! You will develop a more comprehensive understanding of the human form while creating art addressing contemporary aesthetic concerns. Prerequisite: Visual Art major or minor, or instructor permission.

SCUL 354. Sculpture II. 3 Credits.
Continuation of SCUL 253. Prerequisite: SCUL 253.

SCUL 355. Sculpture III. 3 Credits.
Continuation of SCUL 354. Prerequisite: SCUL 354.

SCUL 356. Public Art. 3 Credits. H
Students in this class investigate the nature of contemporary public art as well as creating their own artworks. Public Art covers a wide spectrum of art making from interventions, to street art, to murals and on to monumental sculpture. This class also covers how to present for commissions, budgeting, and legal liability. Previous work created in this class has won national awards. Prerequisite: Visual Art major or minor, or instructor permission.

SCUL 358. Sculpture II, Honors. 3 Credits.
Continuation of SCUL 253. Prerequisite: SCUL 253; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

SCUL 359. Sculpture III, Honors. 3 Credits.
Continuation of SCUL 354 or SCUL 358. Prerequisite: SCUL 354 or SCUL 358; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

SCUL 360. Build Smart. 3 Credits. H
An introductory woodworking course that emphasizes planning, fabricating, and assembly techniques. Material handling and best practice building methods are introduced and reinforced through a series of individual woodworking projects that expose the student to the properties of wood, as well as, hand and machine woodworking tools. Significant out of class work required. Prerequisite: Visual Art major or minor, or instructor permission.

SCUL 362. Art and Ecology: Inhabiting the Ecosphere. 3 Credits. N
An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as EVRN 362.) Prerequisite: Visual Art major or minor, or instructor permission.

SCUL 500. Advanced Special Topics in Sculpture: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Sculpture courses, or permission of instructor.

SCUL 549. Metal and Glass Casting. 3 Credits. U
A course in foundry techniques as related to sculpture. Both traditional and experimental procedures for casting bronze, aluminum, and iron sculpture are explored. May be repeated for credit. This course is taught at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: SCUL 253.

SCUL 556. Sculpture IV. 3 Credits.
Continuation of SCUL 355. May be repeated for credit. Prerequisite: SCUL 355.

SCUL 558. Sculpture IV, Honors. 3 Credits.
Continuation of SCUL 355 or SCUL 359. May be repeated for credit. Prerequisite: SCUL 355 or SCUL 359; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

SCUL 599. Individual Studies in Sculpture. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Sculpture courses, or permission of instructor.

SCUL 630. Sculpture Intercepting the Waste Stream. 3 Credits. N
An introductory course using engaged learning to exploring the genre of ecological art practice (eco-art). Class focuses on the waste stream particularly as it affects the Kansas River. Through remediation events, students build works of art from trash, in turn auctioned for environmental efforts. Creative attention is focused on ecological imbalance. (Same as EVRN 630.) Prerequisite: Graduate standing or permission of instructor.

SCUL 653. The Figure 3D: Modeling and Molding. 3 Credits. H
Sculpting a figure is radically different form drawing one! Students will develop a more comprehensive understanding of the human form while creating art addressing contemporary aesthetic concerns. Prerequisite: Graduate standing or permission of instructor.

SCUL 656. Public Art. 3 Credits. H
Students in this class investigate the nature of contemporary public art as well as creating their own artworks. Public Art covers a wide spectrum of art making from interventions, to street art, to murals and on to monumental sculpture. This class also covers how to present for commissions, budgeting, and legal liability. Previous work created in this class has won national awards. Prerequisite: Graduate standing or permission of instructor.

SCUL 657. Sculpture V. 3 Credits.
Continuation of SCUL 556. Prerequisite: SCUL 556.

SCUL 658. Sculpture VI. 3 Credits.
Continuation of SCUL 657. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 657.

SCUL 660. Build Smart. 3 Credits. H
This course is an introductory woodworking course that emphasizes planning, fabricating, and assembly techniques. Material handling and best practice building methods are introduced and reinforced through a series of individual woodworking projects that expose the student to the properties of wood, as well as, hand and machine woodworking tools. Significant out of class work required. Non Visual Art students require permission number from Department. Prerequisite: Graduate standing or permission of instructor.

SCUL 662. Art and Ecology: Inhabiting the Ecosphere. 3 Credits. N
An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as EVRN 662.) Prerequisite: Graduate standing or permission of instructor.

SCUL 804. Special Problems in Sculpture. 3 Credits.
Individual research in sculpture: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 559 and permission of instructor.

SCUL 859. Sculpture VII. 3 Credits.
Individual research in sculpture. Prerequisite: SCUL 658.

SCUL 905. Special Problems in Sculpture. 3 Credits.
Individual research in sculpture: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 804 and permission of instructor.

SCUL 960. Sculpture VIII. 3 Credits.
Continuation of SCUL 859. Prerequisite: SCUL 859.

Visual Art Courses

TD 300. Special Topics in Textiles/Fibers: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor.
TD 313. Fiber Forms. 3 Credits.
Studio exploration of fibers as an art form. Techniques include feltmaking, papermaking, basketry, and dyeing. Prerequisite: ART 101, and ART 133.

TD 314. Introduction to Weaving. 3 Credits. U
Application of art and design principles to four-harness loom structures. Emphasis on the use of color and texture in loom controlled and weaver controlled techniques. Prerequisite: ART 101, and ART 133.

TD 315. Textile Handprinting and Resist Processes. 3 Credits. U
Fundamentals of resist and dye techniques on textiles: batik, tie-dye, discharge, and direct application. Prerequisite: ART 101, and ART 133.

TD 316. Screenprinting Textiles. 3 Credits.
Design problems in textile printing with emphasis on screenprinting and photo techniques. Prerequisite: ART 101, and ART 133.

TD 401. Weave Structures. 3 Credits. U
Continuation of TD 314. Research and analysis of multiple-harness weave structures. Weave drafts. Design problems to develop the use of color, form, and surface in simple and compound weaves. Prerequisite: TD 314.

TD 402. Techniques in Weaving. 3 Credits. U
Development of individual art and design concepts in relation to woven structures and/or forms. Emphasis on weaver-controlled techniques used to create images and composition. Prerequisite: TD 314.

TD 403. Intermediate Textile Printing. 3 Credits.
Individual problems in textile printing and dyeing processes. Prerequisite: TD 316.

TD 404. Surface Design. 3 Credits.
Textile pattern design for art and/or industry. Prerequisite: Twelve hours in Visual Art or Design, or permission of the instructor.

TD 500. Advanced Special Topics in Textiles/Fibers: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Textiles/Fibers courses, or permission of instructor.

TD 504. History of Textiles, Lecture. 3 Credits.
Study of historical textiles, their design development, and the techniques employed. Prerequisite: Junior standing in department or permission of instructor.

TD 506. Advanced Fiber Forms. 1-6 Credits. U
Directed study of three-dimensional and off-loom methods and techniques. May be repeated for credit. Prerequisite: TD 313.

TD 514. Advanced Techniques in Weaving. 1-6 Credits. U
Directed study of advanced loom-controlled and weaver-controlled methods. May be repeated for credit. Prerequisite: TD 401 or TD 402, or permission of instructor.

TD 515. Advanced Textiles/Fibers I. 3-6 Credits.
Development of individual direction in textiles based on experience, research, and skills acquired in preceding courses; capstone experience. Prerequisite: Twenty-four credits in Textiles/Fibers and consent of instructor.

TD 520. Advanced Textiles/Fibers II. 3-6 Credits.
Continuation of TD 515, capstone experience. Prerequisite: TD 515.

TD 590. Internship in Textiles/Fibers. 1-3 Credits. U
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded according to the written recommendation provided by the internship supervisor to the faculty advisor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses.

TD 599. Individual Studies in Textiles/Fibers. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Textiles/Fibers courses, or permission of instructor.

TD 715. Textile Design in Weaving, Printing, and Dyeing. 2-6 Credits.
Individual research. Prerequisite: Graduate standing.

TD 815. Textile Design in Weaving, Printing, and Dyeing. 2-6 Credits.
Continuation of TD 715.

Visual Art Courses

VAE 300. Special Topics in Visual Art Education: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor.

VAE 320. Instruction and Curriculum I. 3 Credits.
This methods course provides an overview of the professional practices of K-12 art educators. Course content deals with the art education program, K-12, in relationship to the rest of the curriculum. This encompasses goals, objective sequence, courses offered at various levels, finance, staffing and administration. Prerequisite: Junior standing or consent of the instructor.

VAE 341. Instructional Strategies in Art for Elementary Classroom Teachers. 2 Credits.
Child growth and development in art. Materials as they relate to a sequential art education curriculum in the elementary school. Prerequisite: Admission to the School of Education or the education division of the graduate school.

VAE 395. Community Collaborations in Art Education. 3 Credits. U

A focused examination of existing community organizations, models, and resources alongside collaborative strategies for working with these entities to achieve common goals for art education. Students in this class will learn of collaborative community models, explore entrepreneurial and other educational initiatives that contribute to the general purpose of art education, and recognize the role of families and other community members in contributing to the arts.

VAE 410. Instruction and Curriculum II. 3 Credits.
This methods course provides an overview of the professional practices of K-12 art educators. Course content deals with the art education program, K-12, in relationship to the rest of the curriculum. This encompasses goals, objective sequence, courses offered at various levels, finance, staffing and administration. Prerequisite: Junior standing or consent of the instructor.

VAE 420. Artistic Media and Processes in Art Education. 3 Credits.

Building on course content in VAE 320, this course concentrates on instructional strategies and presentation models in art education. Students
examine and explore the media appropriate to teaching art in various settings and levels as well as how art program budgets are derived and impact overall curriculum development. Prerequisite: VAE 320 or permission of instructor.

VAE 497. Independent Study. 1-3 Credits.
Only one enrollment permitted each semester; a maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor.

VAE 500. Student Teaching. 9 Credits.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Individual activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: Admission to the student teaching program; and ART 102, ART 103, and ART 104; and twelve hours of Visual Art Education courses, or permission of instructor.

VAE 520. Instructional Technology in Art Education. 3 Credits.
This course addresses technology that is pertinent to professional art educators. Students use technology to develop a professional portfolio and technology-related resources for teaching art in PreK-12 schools and community settings.

VAE 596. Practicum in Teaching Art. 2 Credits.
A supervised art teaching practicum in which students will learn to employ different teaching strategies with children pre-school through high school in the school or museum setting. Prerequisite: VAE 320, VAE 410, VAE 795 or consent of instructor.

VAE 598. Special Course: ____. 1-5 Credits.
A special course of study to meet current needs of education students; primarily for undergraduates.

VAE 599. Community Based Project in Art Education. 1-6 Credits. U
Individual activity and project that serves as an alternate capstone experience to VAE 500 (Student Teaching). Will involve the development of an independent, community-based arts education project developed by the student under the supervision of a VAE faculty member. Prerequisite: Forty credits of Visual Art, fifteen credits of Visual Art Education Courses, and permission of the instructor.

VAE 680. Internship in Teaching Art. 5-16 Credits.
A supervised internship experience leading to initial art teacher certification. The student assumes the total professional role as a teacher of art in an approved school setting.

VAE 800. Visual Art Education Curriculum Development. 1-3 Credits.
A study of research, resources, and media as they relate to learning goals in a sequential art curriculum for use by teachers. The amount of credit reflects the extent of the curriculum being developed and the amount of work involved in the development process.

VAE 890. Preparation for the M.A. Examination. 1 Credits.
An independent reading course in preparation for the M.A. Examination. The grade will be an S or U, as determined by the performance on the examination. The examination will be evaluated separately. Prerequisite: Permission of the instructor.

VAE 897. Independent Study. 1-4 Credits.
Prerequisite: Consent of advisor and instructor.

VAE 898. Master’s Project. 1-4 Credits.

VAE 899. Master’s Thesis. 1-6 Credits.
should ask a faculty member to serve as their advisor and should notify the Graduate Academic Advisor of the faculty member identified. The faculty advisor will work closely with the student to develop a coherent plan of study and select courses ahead of each term in preparation for their thesis or dissertation. Graduate students will meet with their advisor at least once a year to evaluate their course performance and timely progress toward the degree.

Non-Degree Seeking

Students who are interested in enrolling in graduate level coursework in the Department of Film and Media Studies without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department’s Non-Degree Seeking page for more information.

Courses

FMS 100. Introduction to Film and Media. 3 Credits. HL
An introduction to analyzing and thinking critically about film and other media. Students will learn to read and interpret the basic signs, syntaxes, and structures of cinematic language. Through direct analysis of selected films, television, and new media, students will evaluate and construct evidentiary arguments about the aesthetic strategies creators use to make meaning for audiences. In addition, this course will familiarize students with the historical and industrial dimensions of film and media, as well as the influence technology has on their development into the twenty-first century.

FMS 177. First Year Seminar: _____ 3 Credits. U
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Film and Media Studies. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

FMS 200. Film and Media Aesthetics. 3 Credits. HL
An introduction to film and media aesthetics, including basic film/media theories and their practical applications. Students will be introduced to the concepts of time, space, composition, movement, editing, light, color, and sound. A key feature of the course will be a practical emphasis on learning how to see creatively by applying elements of design, camera lens and sound recording principles. Examples of these aspects of film and associated media will be examined and discussed in depth. Should be taken before or concurrently with FMS 275.

FMS 204. Study Abroad Topics in: _____ 1-6 Credits. H
This course is designed for the study of special topics in Film at the freshman/sophomore level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Prerequisite: Consent of instructor and at least seven hours credit in the department.

FMS 273. Basic Screenwriting. 3 Credits. H
An introduction to the craft and principles of screenwriting, from inspiration to writing a complete first act. Emphasis on factors relevant to the creation of a treatment and a screenplay. Prerequisite: Consent of instructor.

FMS 275. Basic Video Production. 4 Credits. H
Theory and practice of video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. Lecture-laboratory. Prerequisite: FMS 100, completion of or concurrent enrollment in FMS 200.

FMS 301. Undergraduate Professional Development Seminar. 1 Credits. H
Provides an overview of opportunities for professional development in Film and Media Studies, and helps students plan goals for their education through an understanding of professional practices. The course also covers practical exercises in professional development, including writing resumes, finding internships and entry-level work, and other aspects of establishing a career in Film and Media Studies. Graded on a satisfactory/unsatisfactory basis. Prerequisite: FMS 275 or equivalent. Open to FMS Majors only.

FMS 302. Undergraduate Studies Seminar in: _____. 1-3 Credits. H
Course organized any given semester to examine a particular studies topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

FMS 303. Undergraduate Production Seminar in: _____. 1-3 Credits. H
Course organized any given semester to study a particular production topic or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

FMS 304. Study Abroad Topics in: _____. 1-6 Credits. H
This course is designed for the study of special topics in Film at the junior/senior level. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

FMS 307. Undergraduate Film/Media Internship. 1-6 Credits. H
Supervised study with an approved film/media company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Prerequisite: Consent of instructor and at least seven hours credit in the department.

FMS 310. History of the Silent Film. 3 Credits. H
A survey of the artistic, economic and sociological development of the narrative cinema with emphasis on the American studio system, German Expressionism, and Soviet Expressive Realism. Analysis of selected films.

FMS 311. History of the American Sound Film. 3 Credits. HL
A study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television. Analysis of selected films.

FMS 312. History of the International Sound Film to 1950. 3 Credits. H

FMS 313. History of the International Sound Film Post 1950. 3 Credits. H
A survey of the artistic, economic, and sociological development of the international sound film from 1950 to the present. Emphasis on Free Cinema, New Wave, and other emerging post-war cinemas.

FMS 314. History of African-American Images in Film. 3 Credits. HL
A history and critical assessment of the diverse images of African-Americans in American cinema and the impact of those images on American society. Screenings of feature and independent films, including those by African-Americans.

FMS 315. Survey of Japanese Film. 3 Credits. NW
This course surveys the major developments in and critical approaches to twentieth-century Japanese film. Focusing mostly on narrative films, Survey of Japanese Film introduces students to basic methodological issues in Japanese film history, especially questions of narrative, genre, stardom, and authorship. We examine Japanese cinema as an institution located within specific contexts focusing on the ways in which this
institution shapes gender, class, ethnic, and national identities. This course examines how patterns of distribution, exhibition, and reception have influenced film aesthetics and film style over the last century. Through secondary readings, lectures, and discussions, students critically examine how Japanese cinema as an institution both responds to and intervenes in the social, cultural, and political history of twentieth-century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 315.)

FMS 316. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Credits. H
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. Other themes in common are financing issues, such as co-production agreements, film production under the regional trade pact Mercosur and issues of circulation, distribution and marketing of national films. Most films will be feature length narrative, but a few documentaries will be shown. May be taken as FMS 716, but with additional requirements.

FMS 318. Anti-war Film. 3 Credits. H
An overview and exploration of the history of anti-war film and media themes to show how attitudes regarding war and political policy can be affected by positive and negative depictions of conflict. Course includes analysis of selected films.

FMS 322. Soviet and Post-Soviet Russian Cinema. 3 Credits. H
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences) and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. (Same as SLAV 322.)

FMS 323. War and Memory in Asian Film. 3 Credits. H
This course explores how the film industries of key East Asian nations have constructed, reimagined, debated, and commemorated their experiences of the major wars fought during the 20th century (i.e. The Great East Asian War, the Chinese Civil War, the Korean War, and the Vietnam War). We will examine the intersection of various historical, political, cultural, and economic factors with the production of mainstream commercial film to consider how individual and collective memories of wars in Asia have transformed over time in different contexts. Films are particularly useful for examining how the cultural memory of wars survives and is conveyed from one era to another with each new generation inventing and superimposing new layers of memory on the original phenomenon from a range of multiple perspectives. A central goal of this course is to provide students with various historical perspectives, cultural contexts, and analytical methods to develop your ability to apply visual literacy and critical thinking skills to contemporary Asian films about the major wars of the last century.

FMS 330. Cinematic Rome. 3 Credits. H
A study of cinematic representations of daily life, diversity, urban landscape, and social and political issues in modern and contemporary Rome as presented in different genres. Taught in English. (Same as ITAL 330.)

FMS 331. Mafia Movies. 3 Credits. H
This course investigates representations of the Italian mafia in Italian and American cinema since the 1960s, placing emphasis on conventions of the gangster genre and its evolution. We will examine films in relation to their socio-historical contexts and special attention will be dedicated to Italian films that de glamorize the Italian mafia and champion the anti-mafia struggle. Taught in English. (Same as ITAL 331.)

FMS 345. New Media and Society. 3 Credits. H
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in research-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key research skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level.

FMS 350. Indigenous Film and Media. 3 Credits. H
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum-including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools necessary for an examination of the wide range of practices that lend themselves to Indigenous media sovereignty. This course is offered at the 300 and 700 level with additional assignments at the 700 level. Not available to students with credit in FMS 750 or ISP 755. (Same as ISP 355.)

FMS 355. Storytelling with Digital Media. 3 Credits. HL H
In this course, students will utilize digital tools and platforms to create online and mobile stories based on the theories and histories of interactive storytelling discussed in class. Through a survey of digital storytelling examples and concepts, students will create interactive projects to add to their portfolio and learn how to think critically and write analytically about digital media.

FMS 373. Intermediate Screenwriting. 3 Credits. H
Emphasis on writing a full-length screenplay. Explores genre, character, dialogue, and the development of a personal writing style. Prerequisite: FMS 273 (students will be selected based on writing samples).

FMS 374. Animation. 3 Credits. H
A survey that combines animation history, theory, and production by examining animated works of all kinds and exploring various styles using both hands-on techniques and digital animation programs. Lecture-laboratory.

FMS 375. Intermediate Video Production. 3 Credits. H
Theory and practice of longer-form video production with emphasis on scripting, talent coordination and editing in preproduction, production and postproduction. Lecture-laboratory. Prerequisite: FMS 275.

FMS 376. Cinematography. 3 Credits. H
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. Prerequisite: FMS 275.

FMS 377. Post-Production. 3 Credits. H
Students become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is
offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: FMS 275.

**FMS 380. American Popular Culture of: _____ 3 Credits. HL H**
An interdisciplinary examination of popular cultural forms and their relationships with the social, political and economic dynamics of America, with emphasis on film, media, music, literature (including magazines and newspapers) and the graphic arts. The decade or other specific topic to be studied changes as needs and resources develop. May be repeated for credit for different decades or topics.

**FMS 410. US Diversity in Visual Culture. 3 Credits. H**
This course examines the way in which diversity in the United States, including race, class, gender, and sexuality, are represented through visual culture, historically and in the present. The study of visual culture analyzes the way in which visual images communicate systems of beliefs, contribute to identity formation, and have an influence on our thinking about diversity. Course looks at United States visual objects (i.e., film, television, photography, art, advertisements, and theatre as well as visual practices, i.e., in public and private spaces.

**FMS 425. Ethics in Storytelling. 3 Credits. H**
This course considers the ethics of telling stories with film and media. Using a framework of rhetorical criticism and postmodern ethics, the students will evaluate the ethical and social responsibility challenges of fiction and non-fiction writing, films, television and online projects from a variety of fields: anthropology, sociology, journalism, political rhetoric and documentary filmmaking. Through readings, case studies and application, students will explore the fundamentals of rhetorical ethics, and the questions raised my new and emerging forms of storytelling.

**FMS 474. Videogame Theory and Design. 3 Credits. H**
This course surveys the history and aesthetics of videogames and then provides a deep dive into the theory, design principles and techniques of game development on the Unity platform. Through assignments geared toward critical design, students gain the skills necessary for game-building in the areas of visual, narrative, game, level and sound design that comprise a typical development team. Although no prior coding experience is necessary, students may benefit from prior knowledge of C#, 3D modeling, or animation.

**FMS 475. Advanced Video Production. 3 Credits. H**
Special projects in video production, using both studio and remote locations. Prerequisite: FMS 375.

**FMS 477. Sound Design. 3 Credits. H**
Students will study and produce film and video work with an emphasis on sound design theory and practice. Course projects consist of several short works in response to readings and screenings, which include a survey of sound in cinema, internet and radio. Students will also become conversant with related equipment, software and techniques. Prerequisite: FMS 275.

**FMS 478. Experimental Production. 3 Credits. H**
Students will produce experimental film and video projects, including installation art and performance art pieces, in both collaborative and a collaborative production modes. Practical production aspects of historical experimental works will be studied, with emphasis on creation of works inspired by these earlier artists and their work. Unorthodox video and film production concepts and modes will also be studied and used in the creation of original works. The incorporation of experimental elements in the creation of mainstream works, and the creation of such projects, will also be a key area of study and experimentation. By pushing their individual creative limits, students will gain an appreciation for the experimental film and video genre, as well as an expansion of their production skills. Prerequisite: FMS 275.

**FMS 479. Documentary Production. 3 Credits. H**
This is a hands-on production course in which students will research, plan and produce short-form non-fiction documentaries. The class is dedicated to training young professionals in the principles, skills, techniques, habits and practices of documentary production. We will focus also on the aesthetics of our craft and the documentary form. The objective is to ground students in the fundamental skills of good non-fiction storytelling-conceptualization, research, story structure, theme development, writing, producing and directing. The goal is the production of several short-form compositions (videos) where storytelling is employed to communicate a concept or idea effectively. Students will form into teams to research, develop and produce a course-long short-form documentary. Prerequisite: FMS 275.

**FMS 480. Music Video Production. 3 Credits. H**
This course will cover elements of the history, aesthetics, and business of music video and music video production. Students will view and discuss many different types of music videos, and will learn how to classify and critique these videos in a professional manner. Students will gain familiarity with the genres, themes, forms, and iconography of music video; an understanding of the place of music video in media culture; an exploration of the ideological, cultural, and historical contexts of music video; and an ability to create or assist in the creation of professional-quality music videos. Prerequisite: FMS 275.

**FMS 498. Honors Seminar. 2-6 Credits. H**
Study may be directed toward either (a) reading for integration of knowledge and insight in film and media, or (b) original research (i.e., investigation of a specific problem in film and media). Six hours maximum credit. Prerequisite: Consent of Departmental Honors Coordinator.

**FMS 499. Directed Study in Film. 1-6 Credits. H**
Investigation of a special topic or project selected by the student with advice, approval, and supervision by an instructor. Such study may take the form of directed reading or special research. Individual reports and conferences. A maximum of six hours credit may be counted toward a degree. Prerequisite: At least seven hours credit in the department and consent of instructor.

**FMS 530. Film and Media Theory. 3 Credits. H**
Comprehensive examination of most significant theories and theorists of film. Organized around specific questions, e.g., what qualities make film art unique, and how is film related to other visual and literary arts? Class discussion, individual projects. Prerequisite: FMS 100 or equivalent (determined by instructor).

**FMS 543. Contemporary Japanese Film. 3 Credits. NW H**
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We survey recent industrial and stylistic trends as well as key critical debates. Class discussion, reports, and individual research papers. The course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 543.) Prerequisite: Junior status.

**FMS 544. African Film. 3 Credits. W**
A critical study of Africa and its peoples as depicted in films. The aesthetic, cultural, economic, political, historical, and ideological aspects of African films are examined. (Same as AAAS 555.)

**FMS 585. Capstone in Film and Media Studies. 4 Credits. H**
This course integrates the knowledge and skills acquired across the curriculum of Film & Media Studies including academic studies, but also production and other related disciplines to enable the student to demonstrate achievement through the production of a major creative
research project. Prerequisite: Must be admitted to the Film and Media Studies B.A. or B.G.S. degree. Must have completed one FMS production course.

**FMS 592. Documentary Film and Video. 3 Credits. H**
An historical and theoretical survey of that major genre of film and video typically termed "documentary." The course will trace the main historical developments from documentary's beginnings through contemporary innovations. Prerequisite: FMS 100 and FMS 310, FMS 311, or consent of instructor.

**FMS 593. Experimental Film and Video. 3 Credits. H**
A history of experimental film and video through an examination of major artists, movements, theories, and films/tapes. Prerequisite: FMS 100 and FMS 310, or consent of instructor.

**FMS 620. International Women Filmmakers. 3 Credits. H**
This course examines films made by women around the world. Mainstream and independent fiction, documentary, and experimental works will be screened and discussed. The objectives of the course are: 1) to learn the variety of films made by women and the conditions of their production, distribution, reception. 2) to interrogate the idea of women's cinema as 'counter-cinema'. We will acquire tools for analyzing films in terms of economic, aesthetic, cultural, and political circumstance by women of different countries, classes, races, ethnicities, genders, and sexual preferences.

**FMS 673. Problems in Basic Screenwriting. 3 Credits. U**
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structure of a full-length, three-act screenplay. In addition to the class sessions taught with FMS 273 Basic Screenwriting, separate consultations and specific research assignments for graduate students in FMS 673 are also required.

**FMS 675. Problems in Basic Video Production. 3 Credits. U**
Theory and practice of single-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation and audio. In addition to the class sessions taught with FMS 275 Basic Video Production, separate consultations and specific research assignments for graduate students in FMS 675 are also required. Lecture-laboratory.

**FMS 702. Graduate Seminar in: _____ 1-3 Credits.**
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

**FMS 704. Study Abroad Topics in: _____ 1-6 Credits.**
This course is designed for the study of special topics in Film. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

**FMS 707. Film/Media Internship. 3-12 Credits.**
Study with an approved film or media company. Emphasis may be in one or all of the following areas: acting, directing, or promotion management. No more than six hours may be applied to an M.A. degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor.

**FMS 715. Survey of Japanese Film. 3 Credits.**
This course surveys the major developments in patterns of distribution, exhibition, and reception and their influence on film aesthetics in twentieth century Japanese film. Through secondary readings, lectures, and discussions students will examine how Japanese cinema, as an institution, responds to and intervenes in the social, cultural, and political history of twentieth century Japan. The course is offered at the 300 and 700 levels, with additional assignments at the 700 level. (Same as EALC 715.)

**FMS 716. Cinemas of the Southern Cone: Argentina, Chile, and Uruguay. 3 Credits.**
This course will examine the cinemas of three neighboring South American countries to find similar themes and some differences between them historically, politically, and culturally. Themes will include: gender and nation, political repression during dictatorship, globalization and the cinema, youth culture in the Southern Cone, and representations of race and ethnicity, immigration and identity in contemporary cinema. In addition to the lecture sessions taught in tandem with FMS 316, additional research component, lecture presentation, and class meeting are also required.

**FMS 718. Anti-war Films. 3 Credits.**
An overview and exploration of the history of the portrayal of anti-war film and media themes to show how anti-war attitudes and political policy can be affected by positive and negative depictions of conflict. Analysis of selected films. FMS 318 and FMS 718 will meet concurrently, though separate consultations and specific research assignments for FMS 718 are also required.

**FMS 722. Soviet and Post-Soviet Russian Cinema. 3 Credits.**
A comprehensive introduction to Soviet cinema and its legacies in post-Soviet Russia. The course will examine what distinguished Soviet film industry from those in other countries and the ways in which it impacted the development of cinema worldwide. Films are analyzed both as artistic works (with attention to formal qualities, cinematic styles, and influences) and as documents that provide insight into the socio-political contexts of the times when they were made. We will also discuss influential contributions by Soviet filmmakers to our understanding of what makes film unique as an art form. The course is offered at the undergraduate and graduate level, with additional assignments at the graduate level. Not open to students with credit in SLAV 322/FMS 322. (Same as SLAV 723.)
Prerequisite: Graduate standing or instructor permission.

**FMS 743. Contemporary Japanese Film. 3 Credits.**
Seminar on the major developments in the contemporary (1980-present) Japanese film industry examining how filmmaking practices and film criticism have been influenced by such issues as transnationalism, postcolonialism, critical race theory, postmodernism, and new media. We will survey recent industrial and stylistic trends as well as key critical debates. Class includes discussion, reports, and individual research papers. This course is offered at the 500 and 700 levels, with additional assignments at the 700 level. (Same as EALC 743.)

**FMS 745. New Media and Society. 3 Credits.**
Students will be introduced to major themes and debates in digital media studies and apply critical approaches for understanding new media practices, technologies, and theories. In addition to readings and lectures, students will engage in a variety of digital activities and participate in production-oriented projects. By the end of this course students will gain a foundational understanding of historical and emerging relationships between new media (internet, cell phones, digital games, etc.) and society, acquire key digital skills, and experience a variety of new media texts and services. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level.

**FMS 750. Indigenous Film and Media. 3 Credits.**
This course offers a survey of global Indigenous cultures, theory and aesthetics in cinema and digital media. It establishes an Indigenous media optics by examining media practices across a broad contemporary spectrum-including music videos and social media platforms, podcasting and video games. As the course moves geographically, students learn how media practices in diverse communities situate identity and experience in related but unique contexts. Through weekly readings, screenings and design workshops, students build the critical tools.
FMS 773. Problems in Intermediate Screenwriting. 3 Credits.
The principles of screenwriting are developed through scene writing and analysis culminating in the writing and structuring of a full-length, three act screenplay. In addition to the class sessions taught with FMS 373 Intermediate Screenwriting, separate consultations and specific research assignments for graduate students in FMS 773 are also required.

FMS 775. Problems in Intermediate Video Production. 3 Credits.
Theory and practice of multiple-camera video production with emphasis on preproduction planning, scripting, directing, lighting, camera operation, and audio. In addition to the class sessions taught with FMS 375 Intermediate Video Production, separate consultations and specific research assignments for graduate students in FMS 775 are also required. Lecture-laboratory.

FMS 776. Problems in Cinematography. 3 Credits.
Theory and practice of cinematography, with emphasis on creation of film, video, and digital imagery. FMS 776 meets concurrently with FMS 376; students enrolled in the graduate-level course will have separate consultations and specific research assignments. Lecture-laboratory. Prerequisite: Consent of instructor and FMS 675.

FMS 777. Post-Production. 3 Credits.
Students will become familiar with techniques and processes in film and video post-production including, but not limited to, editing, sound, post-production management, marketing, and distribution. This course is offered at the 300 and 700 levels, with additional assignments at the 700 level. Prerequisite: Consent of instructor.

FMS 800. Introduction to Graduate Study in Film/Media. 3 Credits.
Major emphasis is placed upon the principles of research, bibliographical data, and research methods useful in film and television. The course should be taken at the beginning of the graduate student's program.

FMS 801. Professional Development Seminar. 1 Credits.
Preparation and training for faculty careers in film and related fields, including research skills and methods, responsible scholarship, teaching, and service. Other topics vary from semester to semester. May be repeated for credit.

FMS 811. Development of the American Sound Film. 3 Credits.
Intensive study of the artistic, economic, and sociological development of the American sound film with emphasis on the studio system, major directors, genres, and the impact of television.

FMS 813. Development of the International Sound Film. 3 Credits.
Intensive study of the artistic, economic, and sociological development of the international sound film with emphasis on the cinemas of England, France, Italy, Germany, Sweden, and Eastern Europe.

FMS 814. Development of African-American Images in Film. 3 Credits.
A history and critical assessment of the development of diverse images of African-Americans in American cinema and the impact of those images of American society. Screenings of feature and independent films, including those by African-Americans. In addition to the lecture/screening sessions taught in tandem with FMS 314, a separate discussion section and specific research assignments for graduate students enrolled in FMS 814 are also required.

FMS 862. Survey of Film and Media History. 3 Credits.
This seminar will be primarily international in scope and will concentrate on the following: technological and production issues relating to the transition in 1927-1931 of silent to sound film; the constructions of national identity, including those of recently emerging cultures; a comparison and contrast of the censorial agencies in America and abroad; and current revisionist perspectives on received film and media history.

FMS 863. Survey of Documentary and Experimental Film and Media. 3 Credits.
Surveys the important historical and theoretical issues pertinent to both the documentary and experimental approaches as expressed in film, video and new technologies. Includes major documentary and experimental genres, directors, national schools, artistic movements, and landmark works. Screenings reflect a chronology from origins to present-day.

FMS 865. Film and Media Theory. 3 Credits.
This seminar is a comprehensive survey of the major classical and contemporary film and media theories and theorists, such as Munsterberg, Eisenstein, Bazin, and Adorno. The course includes film and media theory since the 1970s, moving through structuralism and into the posts: -structuralism, -modernism, -colonialism, and beyond. Within these broad paradigms some of the theories examined in depth are cinesemiotics, Marxism, cinematic apparatus, feminist film theory, reception theory, new media and virtual reality.

FMS 875. Problems in Advanced Video Production. 3 Credits.
Special projects in video production, using both studio and remote locations. In addition to the class sessions taught with FMS 475 Advanced Video Production, separate consultations and specific research assignments for graduate students in FMS 875 are also required. Prerequisite: FMS 775 or consent of instructor.

FMS 880. Development of American Popular Culture in the: _____ 3 Credits.
Intensive interdisciplinary examination of popular culture forms and their relationships with the social, political, and economic dynamics of America in a specific decade, with emphasis on film, broadcasting, theatre, music literature (including magazines and newspapers), and the graphic arts. Decade to be studied changes as resources and needs develop.

FMS 888. Special Problems in Film History and Criticism. 1-4 Credits.

FMS 895. Intensive Film Project Seminar. 1-4 Credits.
The student plans and executes an intensive special project which requires the professional skills of investigation and performance appropriate to radio, television and/or film. May be repeated for credit up to a maximum of six credit hours. (This seminar is to the special project program what “thesis” is to the traditional program.)

FMS 897. Practicum in Film. 1-3 Credits.
Various approaches to the illustration of principles of production in film and/or video through the supervision of laboratory exercises and subsequent evaluation by the Theatre and Film graduate faculty.

FMS 898. Investigation and Conference (for Master's Students). 1-8 Credits.
Directed research and experimentation in film or media. Limited to eight hours credit toward the Master's degree.

FMS 899. Master's Thesis. 1-6 Credits.

FMS 902. Film Seminar in: ______. 3 Credits.
A graduate seminar devoted to selected historical, theoretical, or critical issues. Prerequisite: Consent of instructor.
FMS 998. Investigation and Conference (for Doctoral Students). 1-8 Credits.
FMS 999. Doctoral Dissertation. 1-12 Credits.

Bachelor of Arts and Bachelor of General Studies in Film and Media Studies

Why study film and media?
The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Admission to the College of Liberal Arts and Sciences
Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

The FMS major does not require an application, however, if a student decides to add the FMS major or change their major from an area of study outside of the School of the Arts, they will need to submit a Change of School form before the major can be added to their degree plan.

Film and Media Studies Programs
The film and media studies department is housed in Summerfield wherein students will gain experience in film/video production in newly renovated studio spaces. B.A. and B.G.S. requirements are quite different, so it is important to check with a department advisor. The B.A. in film and media studies introduces students to the overall field of film and media studies and prepares them for graduate study. The B.G.S. in film and media studies prepares students broadly in film/video production.

Requirements for the Culture & Studies Emphasis

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 100</td>
<td>Introduction to Film and Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 200</td>
<td>Film and Media Aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of: _____</td>
<td>3</td>
</tr>
<tr>
<td>FMS 530</td>
<td>Film and Media Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Majors must complete each of the following areas:

Cultural Studies (choose one of the following) 3
- FMS 315 Survey of Japanese Film
- FMS 316 Cinemas of the Southern Cone: Argentina, Chile, and Uruguay

Anti-war Film 3
- FMS 318

Indigenous Film and Media 3
- FMS 350

International Women Filmmakers 3
- FMS 620

New Media and Society 3
- FMS 345

Storytelling with Digital Media 3
- FMS 355

Videogame Theory and Design 3
- FMS 474

Documentary Film and Video 3
- FMS 592

Experimental Film and Video 3
- FMS 593

Basic Screenwriting 3-4
- FMS 273

Basic Video Production 3
- FMS 275

Animation 3
- FMS 374

History of the Silent Film 3
- FMS 310

History of the American Sound Film 3
- FMS 311

History of the International Sound Film to 1950 3
- FMS 312

History of the International Sound Film Post 1950 3
- FMS 313

History of African-American Images in Film 3
- FMS 314

Capstone 4
- FMS 585

Film and Media Electives
Satisfied by 6 hours from courses in the Film & Media Studies department (any course with an FMS prefix) 6

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 40-41 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major, of which 8 must be at the junior/senior (300+) level.
Major Junior/Senior Hours
Satisfied by a minimum of 25 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Graduation Plan
With careful planning and commitment to a full-time course load, you can graduate in 4 years. For details please consult the department.

Requirements for the Production Emphasis

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 100</td>
<td>Introduction to Film and Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 200</td>
<td>Film and Media Aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of: _____</td>
<td>3</td>
</tr>
<tr>
<td>FMS 530</td>
<td>Film and Media Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Majors must complete each of the following:

Video Production 4
- FMS 275 Basic Video Production
- FMS 345 New Media and Society
- FMS 350 Indigenous Film and Media
- FMS 355 Storytelling with Digital Media

Media 3
- FMS 310 History of the Silent Film
- FMS 311 History of the American Sound Film
- FMS 312 History of the International Sound Film to 1950
- FMS 313 History of the International Sound Film Post 1950
- FMS 314 History of African-American Images in Film

History 3
- FMS 310 History of the Silent Film
- FMS 311 History of the American Sound Film
- FMS 312 History of the International Sound Film to 1950
- FMS 313 History of the International Sound Film Post 1950
- FMS 314 History of African-American Images in Film

Documentary or Experimental 3
- FMS 592 Documentary Film and Video
- FMS 593 Experimental Film and Video

Production 6
- FMS 273 Basic Screenwriting
- FMS 303 Undergraduate Production Seminar in: _____
- FMS 373 Intermediate Screenwriting
- FMS 374 Animation
- FMS 375 Intermediate Video Production
- FMS 376 Cinematography
- FMS 377 Post-Production
- FMS 474 Videogame Theory and Design
- FMS 475 Advanced Video Production
- FMS 477 Sound Design
- FMS 478 Experimental Production
- FMS 479 Documentary Production
- FMS 480 Music Video Production

Capstone
- FMS 585 Capstone in Film and Media Studies 4

Film and Media Studies Electives
Satisfied by 6 hours elected from courses in the Film & Media Studies 6 department (any course with an FMS prefix).

Major Hours & Major GPA
While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

Major Hours
Satisfied by 41 hours of major courses.

Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major, of which 8 must be at the junior/senior (300+) level.

Major Junior/Senior Hours
Satisfied by a minimum of 22 hours from junior/senior courses (300+) in the major.

Major Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Sample 4-year plans for the BA degree in Film & Media Studies with the following concentrations can be found here: Culture and Studies (p. 1914) and Production (p. 1915), or by using the left-side navigation.

Sample 4-year plans for the BGS degree in Film & Media Studies with the following concentrations can be found here: Culture and Studies (p. 1916) and Production (p. 1917), or by using the left-side navigation.

Departmental Honors
An undergraduate interested in honors in film and media studies must present a written declaration of intention to the department’s honors coordinator as early as possible in the junior or senior year. The following are required:

1. A grade-point average at the time of declaration and at graduation of at least 3.5 in film and media studies courses.
2. Six hours in FMS 498 Honors Seminar. Enrollment in this course must be approved by the honors coordinator. Students in the honors seminar work under the direction of one instructor for each semester. The instructor conducts an examination at the end of each semester’s work and assigns a grade. Credit only is given to students who complete the work assigned for any semester but do not complete the requirements for honors. Students may change area of interest or instructor at the beginning of a semester with the consent of the honors coordinator.
3. Satisfactory performance in a final oral examination given approximately one month before graduation.


### BA in Film & Media Studies with concentration in Culture and Studies

Below is a sample 4-year plan for students pursuing the BA in Film and Media Studies with a Culture and Studies concentration. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>3</td>
<td>FMS 200 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)¹</td>
<td>3</td>
<td>FMS 380 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)¹</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>UNIV 101</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
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</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS Elective (1 of 2)</td>
<td>3</td>
<td>FMS 301 (online)</td>
<td>1</td>
</tr>
<tr>
<td>FMS 273, 275, or 374 (FMS Production)</td>
<td>3</td>
<td>FMS 310, 311, 312, 313, or 314 (FMS History)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>FMS 315, 316, 318, 350, or 620 (FMS Culture and Studies)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)⁵</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁴</td>
<td>3</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
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</table>

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS Elective (2 of 2)</td>
<td>3</td>
<td>FMS 310, 311, 312, 313, or 314 (FMS History II)</td>
<td>3</td>
</tr>
<tr>
<td>FMS 345, 355, or 474 (FMS Media)</td>
<td>3</td>
<td>FMS 530</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (BAQR)²</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics⁵</td>
<td>3</td>
</tr>
<tr>
<td>BA Laboratory/Field Experience</td>
<td>1</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁴</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td>16</td>
<td></td>
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</table>

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 592 or 593³</td>
<td>3</td>
<td>FMS 585 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁴</td>
<td>3</td>
<td></td>
<td></td>
</tr>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁴</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁴</td>
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<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours⁴</td>
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<td></td>
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<tr>
<td><strong>Total Hours 120</strong></td>
<td>15</td>
<td>13</td>
<td></td>
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</tbody>
</table>

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¹ The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

² BA in Film & Media Studies with concentration in Culture and Studies

³ Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

⁴ The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

⁵ Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

⁶ For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

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Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

Please note:

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

- FMS Elective can be any Film (FMS-coded) course (Production or Culture and Studies)
- FMS 380, FMS 302, and FMS 303 are topics courses meaning they can be repeated for credit as long as the topic differs.
• FMS 273 Basic Screenwriting offered in the Fall only (satisfies Production requirement).
• FMS Options for KU Core Goal 4.1 and Goal 4.2. See FMS Advisor for more details.
• FMS 275 and FMS 585 are in the process of being upgraded to 4 credit hours.
• FMS 301 will be discontinued across FA22-SP23 Academic Year.

**BA in Film & Media Studies with concentration in Production**

Below is a sample 4-year plan for students pursuing the BA in Film and Media Studies with a production concentration. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 100 (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>FMS 200 (Goal 3 Arts and Humanities)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
<td>FMS 380</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS Elective (1 of 2)</td>
<td>3</td>
<td>FMS Intermediate Production (1 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>FMS 310, 311, 312, 313, or 314 (FMS History)</td>
<td>3</td>
</tr>
<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1 Goal 2.2 Communication</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>4th Semester Language, or 1st Semester of Another Language, unless req for mjr (BA Second Language)</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td>16</td>
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</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS Elective (2 of 2)</td>
<td>3</td>
<td>FMS Intermediate Production (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>FMS 345, 350, or 355 (FMS Media)</td>
<td>3</td>
<td>FMS 530</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (BAQR)</td>
<td>3 Goal 4.2 Global Awareness</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
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</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 593 or 592</td>
<td>3</td>
<td>FMS 585 (Goal 6 Integration and Creativity)</td>
<td>4</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours 120

1 The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2 FMS Intermediate Production Offerings: FMS 273, FMS 303, FMS 373, FMS 374, FMS 375, FMS 376, FMS 474, FMS 478, FMS 477, FMS 478, FMS 479, FMS 480
3 Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
4 FMS Options for Goal 4.2 // Some language study satisfies Goal 4.2 as well
5 FMS Options for Goal 4.1 // Some language study satisfies Goal 4.1 as well
6 FMS 425 Ethics in Storytelling satisfies KU Core Goal 5
7 FMS 593 Experimental Film and Video offered in FALL ONLY, and FMS 592 Documentary Film and Video offered in SPRING ONLY
8 This sample plan assumes all FMS Electives/Intermediate Production selections will be 300-level or above.
9 Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
10 For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific
BGS in Film & Media Studies with concentration in Culture and Studies

Below is a sample 4-year plan for students pursuing the BGS in Film & Media Studies with concentration in culture and studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 100 (Goal 1.1 Critical Thinking)</td>
<td>3 FMS 200 (Goal 3 Arts and Humanities)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3 FMS 380</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3 Goal 1.2 Quantitative Literacy</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 273, 375, or 374 (FMS Production)</td>
<td>3 FMS 301 (online)</td>
<td>1</td>
</tr>
<tr>
<td>FMS Elective (1 of 2)</td>
<td>3 FMS 310, 311, 312, 313, or 314 (FMS History I)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3 FMS Culture and Studies¹</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3 Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS Elective (2 of 2)</td>
<td>3 FMS 310, 311, 312, 313, or 314 (FMS History II)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 345, 355, or 474 (FMS Media)</td>
<td>3 FMS 530</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness⁴</td>
<td>3 Goal 5 Social Responsibility and Ethics⁵</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours⁷</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Total Hours 120**

¹ FMS Culture and Studies Offerings: FMS 315, FMS 316, FMS 318, FMS 350, FMS 620
² FMS Options for Goal 4.1 (Contact FMS Advisor for more information)
³ Media Requirement classes not on set rotation.
⁴ FMS Options available for Goal 4.2 (Contact FMS Advisor for more information)
⁵ FMS 425 Ethics in Storytelling satisfies KU Core Goal 5
⁶ FMS 593 Experimental Film and Video offered in FALL ONLY and FMS 592 offered in SPRING ONLY.
⁷ Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
⁸ Please note that the Bachelor of General Studies degree requires completion of the requirements of a single BGS major AND a secondary field of academic study (a second major, two certificates, or minor). This sample plan is based on the completion of a minor. If a second major is selected instead, elective hours on plan will be needed for these additional major requirements.

- The FMS department recommends no more than two production classes a semester.
- FMS Elective can be any Film (FMS-coded) course (Production or Culture and Studies)
- FMS 380, FMS 302, FMS 303 are all topics courses meaning they can be repeated for credit as long as topic differs.
- Screenwriting Sequence: FMS 273 Basic Screenwriting offered in the Fall and FMS 373 Intermediate Screenwriting in the Spring. FMS 273 is the pre-req for FMS 373

Please note that the Bachelor of General Studies degree requires completion of the requirements of a single BGS major AND a secondary field of academic study (a second major, two certificates, or minor). This sample plan is based on the completion of a minor. If a second major is selected instead, elective hours on plan will be needed for these additional major requirements.

- FMS Elective can be any 300+ Film (FMS-coded) course (Production or Culture and Studies).
- FMS 380, FMS 302, and FMS 303 are all topics courses meaning they can be repeated for credit as long as the topic differs.
BGS in Film & Media Studies in Production

Below is a sample 4-year plan for students pursuing the BGS in Film and Media Studies, Production concentration. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 100 (Goal 1.1 Critical Thinking, Major Requirement)</td>
<td>3</td>
<td>FMS 200 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2))</td>
<td>3</td>
<td>FMS 380 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 275 (Major Requirement)</td>
<td>4</td>
<td>FMS 301 (online)</td>
<td>1</td>
</tr>
<tr>
<td>FMS Elective (1 of 2)</td>
<td>3</td>
<td>FMS Intermediate Production (1 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>FMS 310, 311, 312, 313, or 314 (FMS History)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>2</td>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS Elective (2 of 2)</td>
<td>3</td>
<td>FMS Intermediate Production (2 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>FMS 345, 350, or 355 (FMS Media)</td>
<td>3</td>
<td>FMS 530 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 5 Social Responsibility &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 593 or 592</td>
<td>3</td>
<td>FMS 585 (Goal 6, BGS Career (BGSC),Major Requirement)</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td><strong>Total Hours 120</strong></td>
<td><strong>15</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

1. FMS Intermediate Production Offerings: FMS 273, FMS 303, FMS 373, FMS 374, FMS 375, FMS 376, FMS 474, FMS 478, FMS 479, FMS 480
2. FMS Options for Goal 4.1 (Contact FMS advisor for more information)
3. FMS 425 Ethics in Storytelling satisfies KU Core Goal 5
4. FMS Options for Goal 4.2 (Contact FMS advisor for more information)
5. FMS 593 offered FALL ONLY and FMS 592 offered SPRING ONLY
6. This sample plan assumes all FMS Electives/Intermediate Production selections will be 300-level or above.
7. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
8. Please note that the Bachelor of General Studies degree requires completion of the requirements of a single BGS major AND a secondary field of academic study (a second major, two certificates, or minor). This sample plan is based on the completion of a minor. If a second major is selected instead, elective hours on plan will be these additional major requirements.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

- The FMS Department recommends no more than two production classes per semester.
- FMS Elective can by any 300+ Film (FMS-coded) course (Production or Culture and Studies)
- FMS 380, FMS 303, and FMS 302 are all topics courses meaning they can be repeated for credit as long as the topic differs.
• Screenwriting Sequence: FMS 273 Basic Screenwriting offered in the Fall and FMS 373 Intermediate Screenwriting in the Spring. FMS 273 is the pre-req for FMS 373.

**Minor in Film and Media Studies**

**Why study film and media?**

The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

**Requirements for the Minor**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students selecting this minor must complete the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMS 100</td>
<td>Introduction to Film and Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 200</td>
<td>Film and Media Aesthetics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 12 hours from the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 302</td>
<td>Undergraduate Studies Seminar in: ______</td>
<td>1-3</td>
</tr>
<tr>
<td>FMS 304</td>
<td>Study Abroad Topics in: ______</td>
<td>1-6</td>
</tr>
<tr>
<td>FMS 310</td>
<td>History of the Silent Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 311</td>
<td>History of the American Sound Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 312</td>
<td>History of the International Sound Film to 1950</td>
<td>3</td>
</tr>
<tr>
<td>FMS 313</td>
<td>History of the International Sound Film Post 1950</td>
<td>3</td>
</tr>
<tr>
<td>FMS 314</td>
<td>History of African-American Images in Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 315</td>
<td>Survey of Japanese Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 316</td>
<td>Cinemas of the Southern Cone: Argentina, Chile, and Uruguay</td>
<td>3</td>
</tr>
<tr>
<td>FMS 318</td>
<td>Anti-war Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 322</td>
<td>Soviet and Post-Soviet Russian Cinema</td>
<td>3</td>
</tr>
<tr>
<td>FMS 323</td>
<td>War and Memory in Asian Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 345</td>
<td>New Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>FMS 355</td>
<td>Storytelling with Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 380</td>
<td>American Popular Culture of: ______</td>
<td>3</td>
</tr>
<tr>
<td>FMS 410</td>
<td>US Diversity in Visual Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMS 425</td>
<td>Ethics in Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>FMS 530</td>
<td>Film and Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>FMS 543</td>
<td>Contemporary Japanese Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 544</td>
<td>African Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 592</td>
<td>Documentary Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>FMS 593</td>
<td>Experimental Film and Video</td>
<td>3</td>
</tr>
<tr>
<td>FMS 620</td>
<td>International Women Filmmakers</td>
<td>3</td>
</tr>
</tbody>
</table>

**Minor Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Please note, FMS Production coursework is reserved for FMS Majors.

**Undergraduate Certificate in Media Cultures**

The Undergraduate Certificate in Film & Media studies offers an examination of media strategies for analysis and storytelling in contemporary culture. The certificate is structured around five courses that integrate theory and application, designed for non-residential, non-traditional, and professional students. These courses offer a global perspective through an analytical, ethical and creative framework for evaluating media in a diversity of contexts.

To be awarded the certificate, students must successfully complete four of the following five courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 200</td>
<td>Film and Media Aesthetics</td>
<td>3</td>
</tr>
<tr>
<td>FMS 323</td>
<td>War and Memory in Asian Film</td>
<td>3</td>
</tr>
<tr>
<td>FMS 355</td>
<td>Storytelling with Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 410</td>
<td>US Diversity in Visual Culture</td>
<td>3</td>
</tr>
<tr>
<td>FMS 425</td>
<td>Ethics in Storytelling</td>
<td>3</td>
</tr>
</tbody>
</table>

**Master of Arts in Film and Media Studies**

**Why study film and media?**

The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

The affiliation of the Department with the College of Liberal Arts and Sciences (http://clas.ku.edu/) and the School of the Arts (http://sota.ku.edu/) reflects a liberal arts perspective towards the study of film and media as well as hands-on production elements. We see film and media as ways of ordering, clarifying, and understanding human experience.

We are humanists, sharing the general goal of discovering and putting into communicable form hypotheses about human beings and the world as they interact with it. We are scholars and practitioners, and our work includes the creation of film and media, teaching, and scholarship. As a result we serve our disciplines, the University, and the surrounding community in our capacities as teachers, scholars, and artists.

Discover how film and media can change your life. In KU Film and Media Studies you’ll find a community that shares your passion for film and media and is dedicated to helping you succeed in today’s changing media landscape. You’ll find your place here within the School of the Arts’ creative community.

The M.A. degree is an academic degrees but students are also expected to complete courses in film and video production. All M.A. students in Film and Media Studies must write a thesis as the culmination of their degree.
Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admissions

A full list of application materials and deadlines is available on The Department of Film and Media Studies admission pages (https://film.ku.edu/admission/#Graduate%20Admission). The Department of Film and Media Studies does not admit new students for the Spring or Summer terms.

The completed application should be submitted online (https://gradapply.ku.edu/apply/).

Contact Information

University of Kansas
Department of Film and Media Studies
1300 Sunnyside Ave Ste 230
Lawrence, KS 66045
Phone: 785-864-1340
Email: film@ku.edu

M.A. Degree Requirements

The Master of Arts in film and media is an academic degree, but students are expected to complete 3 hours in film and video production. All M.A. students must write a thesis as the culmination of the degree.

To be admitted, a student ordinarily is expected to have a Graduate Record Examination score of at least 160 (verbal), 144 (quantitative), and 4.5 analytical writing.

To complete the M.A., the student must sustain a grade-point average of 3.0 or higher through 33 graduate credit hours.

Requirements for the M.A. in Film and Media Studies

A total of 30 hours is required. Students will complete 9 credits of Film and Media Studies Core, 3 credits of Production courses, 3 credits of FMS 902, 3 credits of Film and Media electives, 6 credits of non-FMS electives related to their chosen thesis topic and 6 credits of thesis hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 800</td>
<td>Introduction to Graduate Study in Film/Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 862</td>
<td>Survey of Film and Media History</td>
<td>3</td>
</tr>
<tr>
<td>FMS 865</td>
<td>Film and Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>FMS 902</td>
<td>Film Seminar in: _____</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Production. One graduate level (600 or above) FMS production class in consultation with an advisor.</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 9 hours of courses including: 3 credits of FMS graduate level course at the 600 level or above, 6 credits of non-FMS electives at the 500 level or above.

Thesis hours

| FMS 899 | Master’s Thesis | 6 |

All courses should be selected in consultation with the advisor.

Doctor of Philosophy in Film and Media Studies

Why study film and media?

The Department of Film and Media Studies unites the inquiry of the academic with the practice and technique of the artist. Scholars and filmmakers work and study together in an environment of mutual encouragement and collegiality.

The affiliation of the Department with the College of Liberal Arts and Sciences (http://clas.ku.edu/) and the School of the Arts (http://sota.ku.edu/) reflects a liberal arts perspective towards the study of film and media as well as hands-on production elements. We see film and media as ways of ordering, clarifying, and understanding human experience.

We are humanists, sharing the general goal of discovering and putting into communicable form hypotheses about human beings and the world as they interact with it. We are scholars and practitioners, and our work includes the creation of film and media, teaching, and scholarship. As a result we serve our disciplines, the University, and the surrounding community in our capacities as teachers, scholars, and artists.

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Admission to Graduate Studies

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Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

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The completed application should be submitted online (https://gradapply.ku.edu/).
Ph.D. Degree Requirements

Film and Media Studies Core Requirements
18 hours of core courses are required. Doctoral students in film and media studies must take a core of courses aimed at strengthening methodological, historical, and theoretical grounding. 1 graduate-level production course is required, and 1 course in FMS 902 Film Seminar is mandatory.

Film and Media Studies Professional Development Requirement
6 hours of FMS 801 are required. This will be satisfied by attending the FMS colloquia throughout the semester. (1 day per week each semester)

Film and Media Studies Elective Requirements
9 hours of electives are required. Elective courses focus on the academic study of history, international cinema, popular culture, and digital media, among other areas. These courses are selected with a graduate advisor to reflect the student's special interest. The advisor may increase the number of hours, depending on the student's academic needs.

Film and Media Studies Production Requirements
3 hours of production courses are required. Production courses give students an understanding of the production process in making film, video, or animation pieces. On graduation, doctoral students can perform as competent artisans in addition to research scholars. Production courses are selected with a graduate advisor to reflect the student's specific interest. The advisor may increase the number of hours, depending on the student's academic needs.

Secondary Field Requirements
9 hours of secondary field courses at the graduate level from outside the Department of Film and Media Studies are chosen to assist the student in writing the dissertation. They are related to the student's proposed area of specialization. Examples include English; History; Women, Gender, and Sexuality Studies; American Studies; Education; and Social Welfare.

Additionally, students will select their second Research Skills and Responsible Scholarship from their secondary field.

Research Skills and Responsible Scholarship (RSRS) Requirements
KU requires all doctoral students to meet the Research Skills requirement before proceeding to comprehensive exams. Compliance with this policy requires all graduate students to receive training in responsible scholarship pertinent to the field of research and obtain research skills pertinent to the doctoral level of research in their field(s).

Research Skills requirements may be satisfied by:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>FMS 902</td>
<td>Film Seminar in: ______ (with the topic of &quot;Research Methods and Applications of New Media&quot; or &quot;Visual Methods&quot;)</td>
<td>3</td>
</tr>
</tbody>
</table>

An additional RSRS course outside of the department, approved by the Director of Graduate Study, preferably from the student's secondary field

Comprehensive Examination
2 publishable papers are due at the time of the examination. The examination includes written responses to questions in history, theory, and area of specialization, followed by an oral examination.

Dissertation
Students who have completed the comprehensive exam are required to enroll in accordance with the post-comprehensive enrollment policy. (https://coga.ku.edu/progress-to-degree/enrollment/post-comprehensive-enrollment/) The finished dissertation must constitute a palpable contribution to knowledge in the candidate’s chosen field. After its completion, an oral defense must be held no less than 4 weeks before the graduation deadline. The exam committee must meet Doctoral Student Oral Exam Committee composition requirements (https://policy.ku.edu/graduate-studies/oral-exam-committee-composition/).

Ph.D. in Film and Media Studies Program of Study

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMS 800</td>
<td>Introduction to Graduate Study in Film/Media</td>
<td>3</td>
</tr>
<tr>
<td>FMS 801</td>
<td>Professional Development Seminar (repeated for 6 credits)</td>
<td>6</td>
</tr>
<tr>
<td>FMS 862</td>
<td>Survey of Film and Media History</td>
<td>3</td>
</tr>
<tr>
<td>FMS 865</td>
<td>Film and Media Theory</td>
<td>3</td>
</tr>
<tr>
<td>FMS 902</td>
<td>Film Seminar in: ______</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 9 hours of Film and Media Electives in consultation with advisor (Refer to the catalog for courses)

Production
3

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>FMS 673</td>
<td>Problems in Basic Screenwriting</td>
<td></td>
</tr>
<tr>
<td>FMS 675</td>
<td>Problems in Basic Video Production</td>
<td></td>
</tr>
<tr>
<td>FMS 702</td>
<td>Graduate Seminar in: ______</td>
<td></td>
</tr>
<tr>
<td>FMS 773</td>
<td>Problems in Intermediate Screenwriting</td>
<td></td>
</tr>
<tr>
<td>FMS 895</td>
<td>Intensive Film Project Seminar</td>
<td></td>
</tr>
<tr>
<td>FMS 897</td>
<td>Practicum in Film</td>
<td></td>
</tr>
</tbody>
</table>

Select 9 hours of secondary field courses in consultation with advisor (Refer to the catalog for courses)

Graduate Certificate in Film and Media Studies
The Graduate Certificate in Film and Media Studies (https://film.ku.edu/gc-overview/) provides a concentration in core film and media theory and history courses. This certificate is designed for graduate students whose research includes analysis of media text and technologies, and provides training in methodologies and a basic familiarity with critical and
to engage in all aspects of production onstage and backstage. Students have opportunities to continue study year-round working with union actors, choreographers, directors, and designers with our critically acclaimed Kansas Repertory Theatre (KRT) and the Summer Dance Intensive, in partnership with the Lawrence Arts Center.

Internationally Recognized Faculty Scholars and Artists

The faculty of the Department of Theatre and Dance is creative artists and researchers working in the areas of theatre stagecraft, choreography, performance, design, dramatic literature, dramaturgy, and pedagogy, as well as the historical, literary, and cultural study of theatre, dance, and performance. Our faculty includes award-winning teachers, scholars, and artists working in professional theatre and dance, authoring books and establishing nationally and internationally recognized research and outreach programs.

Support for Students

The Department of Theatre and Dance offers students financial aid in the form of dozens of scholarships, awards, and teaching assistantships each year to graduate and undergraduate students. Friends of the Theatre (FROTH), a community group dedicated to supporting the mission of the University Theatre, provides a fantastic support network for our student shows and curricular enrichment opportunities. Donors to the Dance Division endow support for guest choreographer residencies each semester and special opportunity funds. Once students graduate our program, they join an extensive network of theatre and dance alumni and Professional Advisory Board members that work in all aspects of academe, the entertainment industry, and non-profit organizations.

Undergraduate Degrees

Dance

The BFA in Dance focuses on advanced technical training and preparation for a career in professional performance. An audition is required for entry in the BFA program. The BA in Dance provides rigorous studio training in a liberal arts environment, and allows students to double major in other disciplines. The BA in Dance does NOT require an audition for entry. Instead, students must complete an evaluation at the end of their sophomore year to complete the degree program.

Degrees offered:

• B.A.
• B.F.A.
• Minor in Dance

Performance

The Performance concentration prepares theatre majors for a career as a professional actor. Through small-class studio courses and department productions, our program provides talented performing artists with a solid foundation in acting, movement, voice and speech, improvisation, and musical theatre. Both the Bachelor of Arts (B.A.) and Bachelor of General Studies (B.G.S.) require 40 hours. The primary distinctions between the B.A. and the B.G.S. degree are the foreign language requirement (required of the B.A. but not the B.G.S.) and 18 hours junior/senior concentration or minor (required for the B.G.S but not the B.A.).

Degrees offered:

• B.A.
Master's and Doctoral Degrees in Theatre Studies

The master's and doctoral programs in Theatre and Dance combine rigorous study of theory, criticism, and history with production work in a collegial atmosphere. MA students admitted are usually coming directly from a four-year college experience with minimal professional experience and intense academic study. Doctoral students can expect to develop expertise in current methodologies, such as those derived from or applicable to contemporary historiography, semiotics, post-structuralism, performance studies, post-modernism and cultural studies. Production practice areas include but are not limited to Acting, Directing, Dance, and Dramaturgy. The research of our faculty ranks us in the top ten among a selection of major institutions in the 2015 Faculty Productivity Index by Academic Analytics. The department is an organizational member of the Association for Theatre in Higher Education and home to the prestigious Journal of Dramatic Theory and Criticism.

Degrees offered:

- M.A. or Ph.D.

Departmental Funding

The Department recognizes that financial support during the graduate years is crucial to student success. Through a combination of university awards, departmental teaching assistantships, tuition assistance, student employment, fellowships, and travel grants, we are able to provide almost all of our students with some level of support. Graduate Students in the department may be supported in their careers by a limited number of departmental teaching assistantships, typically awarded to M.F.A and Ph.D. students. More information regarding funding is available on the Graduate Financial Aid (https://theatredance.ku.edu/graduate-financial-aid/) portion of the department website.

Advising

During the first year of enrollment, students must meet with the Director of Graduate Studies once per semester. Returning students will meet one time during the year with the Director of Graduate Studies to determine progress to degree. Advising of students is also conducted by individual faculty members who act as mentor and advisers of students who have interest in their specialty research areas.

Non-Degree Seeking

Students who are interested in enrolling in graduate level coursework in the Department of Theatre and Dance without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department's Non-Degree Seeking page for more information.

Courses

DANC 100. Introduction to the Dance Major. 1 Credits. H
This is a 6 week online course designed to identify what is unique about the KU Dance experience, and to introduce students to the requirements for a BA or BFA degree. The course examines issues of academic integrity, informs students about academic support available to them, familiarizes students with the expectations of a dance major and suggests career opportunities for dance majors. Students complete five modules: Getting Started, Programs and Degrees, Academic Integrity and Support, Expectations and Career Pathways to provide a foundation for academic success in the major.

DANC 101. Ballet I. 2 Credits.
Classical and modern approaches to the language of ballet for beginners. May be repeated for credit. Does not count toward the dance major requirements.

**DANC 103. Modern Contemporary I. 2 Credits.**
Dance technique for beginners with precedents in the movement vocabularies of Isadora Duncan, Martha Graham, Doris Humphrey, Merce Cunningham, and the seminal choreographers of modern dance. May be repeated for credit. Does not count toward the dance major requirements.

**DANC 105. Jazz I. 2 Credits.**
Dance technique for beginners based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Does not count toward the dance major requirements.

**DANC 150. Choreography I. 2 Credits. H**
The introductory-level course in a series of four composition courses (DANC 150, 250, 350 and 550). Includes basic exploration of improvisation: movement studies for solo figure, movement themes for duet, trio, and larger groups; and dances for non-traditional performing spaces both indoors and outdoors. Students will learn fundamental ingredients of dance (space, time, weight, and energy flow) and how to organize them into short compositional forms such as ABA, verse/refrain, or narrative. Prerequisite: Consent of instructor.

**DANC 177. First Year Seminar: _____ 3 Credits. U**
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Dance. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

**DANC 210. Rhythms and Structures of Music. 3 Credits. H**
An introduction to the analysis and use of rhythms and the compositional forms of music for dance.

**DANC 211. Ballet II. 2 Credits.**
Classical and modern approaches to ballet technique for low intermediate dancers. May be repeated for credit. Counts toward the B.A. and Dance Minor requirements. Prerequisite: DANC 101 or consent of instructor.

**DANC 213. Modern Contemporary II. 2 Credits.**
Dance technique for low intermediate dancers with precedents in the movement vocabularies of classical modernists and contemporary choreographers of dance. May be repeated for credit. Counts toward the B.A. and the Minor in dance requirements. Prerequisite: DANC 103 or permission of instructor.

**DANC 215. Jazz II. 2 Credits.**
Dance technique for experienced beginners based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for credit. Counts toward the B.A. and Minor in dance requirements. Prerequisite: DANC 105 or consent of instructor.

**DANC 250. Choreography II. 2 Credits. H**
The intermediate course in a series of four composition courses (DANC 150, DANC 250, DANC 350 and DANC 550.) Includes more complex exploration of improvisation: movement studies for solo figure, movement themes for duet, trio, and larger groups; and dances for non-traditional performing spaces both indoors and outdoors. Students will further develop the ingredients of dance (space, time, weight, and energy flow) and how to organize them into studies including compositional forms such as ABA, verse/refrain, or narrative. Prerequisite: DANC 150 or consent of instructor.

**DANC 260. Musical Theatre Dance. 3 Credits.**
This course focuses on the dance and movement vocabulary uniquely associated with musical theatre productions, as well as a variety of popular dance styles from the 1920s to the present. Performance techniques for the stage are emphasized.

**DANC 290. Sophomore Review. 0 Credits. H**
The Sophomore Review of all majors in the BA program in Dance provides an assessment of student progress in the degree. Transfer students to the BA program participate in the year following their admission to KU. The review process consists of: verification that students are making academic progress: Students should have an overall GPA of 2.0; a self-evaluation composed of written responses to a series of questions about their own artistic, technical and discipline-specific academic progress in the program; a faculty evaluation comprised of written feedback on each student's artistic, technical and discipline-specific academic progress in the program; and participation in at least one speedback session prior to the end of the second year. Speedback is a feedback process modeled on the speed dating format. All majors sit with faculty members for 5-minute intervals to receive individual feedback.

Students engage with professors with whom they have been in technique class or rehearsal for the current year. There are no prerequisites for entry into the course. The completion of the course will be a prerequisite for enrollment in DANC 550 Senior Project.

**DANC 307. Pointe and Pas de Deux. 2 Credits.**
An introduction to pointe and classical partnering work for the intermediate/advanced female ballet dancer, with equal emphasis on pointe technique and style, and on classical repertory for couples. May be repeated for credit. Prerequisite: Consent of instructor.

**DANC 308. Pas de Deux. 1 Credits.**
The exploration of classical ballet partnering (pas de deux) including supported poses, lifts, turns, and their coordination between the partners. For men only. Women enroll in Pointe and Pas de Deux, DANC 307. May be repeated for credit. Prerequisite: Consent of instructor.

**DANC 311. Ballet III. 3 Credits. H**
Advanced level technique in classical and modern approaches to the language of ballet. May be repeated for credit. Prerequisite: Instructor consent.

**DANC 313. Modern/Contemporary III. 3 Credits. H**
Dance technique for intermediate/advanced dancers with precedents in the movement vocabularies of classical modernists and contemporary choreographers of dance. May be repeated for credit. Counts toward the B.A., B.F.A., and the Minor in dance requirements. Prerequisite: Consent of instructor.

**DANC 315. Jazz III. 3 Credits. H**
Dance technique for intermediate dancers based on elements of Latino, African, popular and classical jazz dance forms. May be repeated for variable credit. Prerequisite: DANC 105 or consent of instructor.

**DANC 317. Hip Hop Fundamentals. 3 Credits.**
Basic fundamentals of hip-hop dance. Students will learn basic steps for choreography and freestyle based on all urban street styles. They will learn the origins and history of the hip hop movement and all urban street styles through lectures and class participation.

**DANC 319. Tap Fundamentals. 3 Credits. SC H**
Introduces the principles of tap dance including rhythm, clarity of sound, syncopation and weight shift. Emphasis is placed on proper execution of basic tap technique, step knowledge, weight distribution, and the development of basic rhythm and syncopation skills. The course will be based on "stomp tap" and "rhythm tap", working with/without the music to make clear patterned sounds.
DANC 320. **University Dance Company.** 0-1 Credits.
A dance repertory, performance and production class. Emphasis is on the development of skills for performing and/or producing dance concerts. Admission by audition only. May be repeated for credit.

DANC 330. **Approaches to World Dance.** 3 Credits. HL H
This course examines dance forms from throughout the world and how they relate to the times and cultures in which they evolved. Dance forms such as African, East Indian classical, European court dance, ballet, modern, and jazz will be studied through readings, master classes, live performances, videotapes, and films. Prerequisite: 200-level English course.

DANC 334. **Introduction to African Dance Theatre.** 2 Credits. NW U
An introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary will be supplemented by lectures on the "text" of performance. (Same as AAAS 334 and THR 334.)

DANC 350. **Choreography III.** 3 Credits. H
The advanced course in a series of four composition courses (DANC 150, DANC 250, DANC 350 and DANC 550.) Includes in-depth development of improvisation: movement studies for solo figure, movement themes for duet, trio, and larger groups; and dances for non-traditional performing spaces both indoors and outdoors. Students will develop increasingly complex studies of dance (space, time, weight, and energy flow) including compositional forms such as ABA, verse/refrain, or narrative. Prerequisite: DANC 250 or consent of instructor.

DANC 357. **Anatomy and Injury Prevention.** 3 Credits. H
Basic concepts of neuromuscular and skeletal education through the use of specific imagery (ideokinesis). Based on the work of Mabel Todd, Lulu Sweigard, and Irmgard Bartenieff, the emphasis is on body connectedness and dynamic alignment. The aim is to realize full movement potential in the most efficient way through intrinsic body awareness. Injury prevention is addressed by introducing principles of conditioning (strength, flexibility, endurance) and factors leading to injury such as muscular imbalances or postural deviations.

DANC 411. **Ballet IV.** 3 Credits. H
Advanced level technique in classical and modern approaches to the language of ballet. Prerequisite: Consent of instructor.

DANC 413. **Modern Contemporary IV.** 3 Credits. H
Dance technique for advanced dancers with precedents in the movement vocabularies of classical modernists and contemporary choreographers of dance. May be repeated for credit. Counts toward the B.A., B.F.A., and the Minor in dance requirements. Prerequisite: Consent of instructor.

DANC 417. **Hip Hop II.** 3 Credits. SC H
Intermediate/advanced hip hop dance. Students will learn intermediate/advanced hip hop skills, combinations, and choreography. Greater focus will be placed on intermediate/advanced steps, isolations, and body control. Prerequisite: Hip Hop Fundamentals or permission of instructor.

DANC 419. **Tap II.** 3 Credits. SC H
Intermediate/advanced tap dance. A continuation of the principles introduced in Tap Fundamentals including rhythm, clarity of sound, syncopation and weight shift. Proper execution of intermediate/advanced tap technique including step knowledge, weight distribution, and the development of rhythm and syncopation skills is emphasized. Prerequisite: Tap Fundamentals or permission of instructor.

DANC 420. **Introduction to Videography and Website Design for Dance.** 3 Credits. H
This is a hands-on course exploring digital video technology for dance. Students are introduced to video and website production as well as the time management skills necessary to engage the multi-faceted project that is dance video. We will cover video techniques for recording dance; video editing; collaborating with national and international sites and artists; and self-promotion and marketing strategies with video and websites. The final project will be the creation of a video website for each student. No previous video editing experience is required. Prerequisite: Basic computer literacy.

DANC 440. **Introduction to Classical East Indian Dance.** 3 Credits. W
Classical East Indian dance has an extensive movement vocabulary that emphasizes the coordination of rhythmic foot patterns with intricate hand gestures. Students will learn the mudras (hand gestures) and their significance and integration within each dance. Readings will include excerpts from the Natya Sastra and other treatises of East Indian dance and culture.

DANC 460. **Dance History: Research and Reconstruction.** 3 Credits. HL H
Through research and reconstruction, students will examine major topics in dance history, such as the meaning and function of dance in pre-industrial societies, communal and court dance in Europe from the 14th to the 19th centuries, and the transformation and development of dance as a theatre art in the modern world. Texts by dance historians and treatises by dancing masters will be supplemented by readings from fields, such as anthropology, philosophy, art history, and literature, that indicate the different ways of approaching the history of dance.

DANC 475. **Career Preparation in the Arts.** 3 Credits. H
Designed to provide an overview of key areas in career preparation in the arts, including resume writing, audition skills, professional speaking, grant writing and development, publicity and marketing strategies, developing relationships with presenters and funders, and audience education. Through readings, class discussion, guest lectures with professionals, and projects based on real-life scenarios, students develop tools to further their careers in the arts. This focused study also provides individuals with the direction and means to employ their training in the field of performing arts administration and management at many different levels. This course prepares students for their entry into the professional arts marketplace.

DANC 490. **Introduction to Flamenco Dance Technique.** 3 Credits.
Using the basic compas (rhythmic structures) of Flamenco, we will explore the different components of flamenco dance technique: floreo (spiral fingers), brazeo (arm movements), palmas (rhythmic hand-clapping), marcaraje (marking, or movement through space), vueltas (turns) and zapateado (footwork). We will cultivate an awareness of flamenco’s unique posture, learn the structure of the different rhythmic forms and introduce the possibilities for personal expression and improvisation.

DANC 498. **Directed Study in:** 1-3 Credits.
Investigation of a special topic or project in aesthetics, dance history, movement analysis, production, or a creative project. A maximum of six hours may be counted toward graduation. Prerequisite: At least seven hours of credit in dance courses.

DANC 520. **Pedagogy.** 3 Credits.
Methods and materials designed to address the needs of teaching artists across genres of dance (ballet, modern/contemporary, jazz, creative movement) among children, adults and special populations. Lessons are prepared and tested in the classroom among peers. Prerequisite: Consent of Instructor.

DANC 530. **Practicum in:** 1 Credits.
Supervised experience in teaching beginning level dance technique in the styles of ballet, jazz, or modern dance. Different approaches are analyzed, discussed, and tested in the studio. Prerequisite: Intermediate level of dance technique in the style of the practicum.

DANC 540. Field Experience in Dance Teaching. 3 Credits.
Teaching ballet, modern, or jazz dance technique to children or adults with faculty supervision in an academic or community program. Prerequisite: Consent of instructor.

DANC 550. Senior Project. 3 Credits.
In-depth research project in dance theory or history, or choreography project involving the complete development and presentation of a dance idea. Prerequisite: Performance option: DANC 320, DANC 350, DANC 290 (for BA students only) and permission of the dance division. Research option: DANC 340, DANC 370, DANC 375, DANC 460, DANC 462, DANC 290 (for BA students only) and permission of the dance division.

DANC 580. Special Topics in Dance: ______. 3 Credits.
A study of current developments in dance with an emphasis on performance or research. May be repeated for credit. Prerequisite: Junior or senior standing or consent of instructor.

DANC 898. Directed Study in: ______. 1-3 Credits.
Directed study in some aspect of aesthetics, dance history, movement analysis, production, or an advanced creative project. Prerequisite: Consent of instructor.

Courses

THR 100. Introduction to the Theatre. 3 Credits. HL H
Designed to help students by means of experience with theatre as well as study about it to achieve an understanding of its cultural role in contemporary society, to develop a sensitive and informed appreciation of its art, and to make it an integral part of their cultural lives. Lectures, discussion groups, special interest groups, theatre attendance.

THR 101. Theatre Practicum I. 1 Credits. H
One crew assignment in a University Theatre & Dance production qualifies for 1 credit hour. May be repeated for credit.

THR 105. Improvisation. 3 Credits. H
Designed to free the beginning actor, develop creativity and imagination. Fundamentals of improvisation technique and skills through physical work, deep listening and focus. Ensemble building emphasized with exercises and games, the work will progress to sketch writing and performance.

THR 106. Acting I. 3 Credits. HL H
Fundamental techniques in acting. Practice in character creation, body language, and effective stage speech.

THR 111. Make-Up. 1 Credits. H
The techniques in application of make-up for specific characterizations, both straight and character. Study of the structure of the face and hands for stage make-up. Should be taken concurrently with THR 106, if possible.

THR 116. Scenographic Techniques. 3 Credits. H
Emphasis on drafting, model building, and presentational techniques for the theatrical designer or art director. Some work in computer drafting for the designer-technician. Lecture and laboratory periods.

THR 120. Public Speaking as Performance. 3 Credits. H
This course offers a unique approach to public speaking grounded in theatre practice and performance studies. A combination of speech assignments and theatre exercises teaches students to integrate body and mind while speaking across social, cultural, and disciplinary boundaries.

THR 177. First Year Seminar: ______. 3 Credits. HT
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in Theatre. May not contribute to major requirements in theatre. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

THR 201. Theatre Practicum II. 1 Credits. H
One crew assignment in a University Theatre & Dance production qualifies for 1 credit hour. May be repeated for credit. Prerequisite: THR 101.

THR 204. Study Abroad Topics in: ______. 1-6 Credits. H
This course is designed for the study of special topics in Theatre at the freshman/sophomore level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

THR 206. Acting II. 3 Credits. H
The study of roles and scenes from plays. Practice in character analysis, creation of roles, rehearsal of scenes, and ensemble work. Prerequisite: THR 106.

THR 210. Musical Performance for the Actor I. 3 Credits. H
Beginning Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance.

THR 212. Beginning Voice and Speech for Actors. 3 Credits. H
A foundation course; introduction to phonetics; training in Standard American Stage Speech; articulation skills; resonance and voice placement.

THR 213. Movement I: The Acting Instrument. 3 Credits. H
A foundational course in discovering ease and efficient use of the body in a performance context, developing non-verbal communication and partnering skills, and establishing the connection of movement to voice production. Trains actors in proper warm-up technique, alignment and balance, physical safety, and basic tumbling skills.

THR 215. Approaching Design. 3 Credits. HL H
Conceptualization and visualization of the elements involved in creative design for theatre, dance, television, and film.

THR 216. Scenic Production. 2 Credits. H
Introduction to the planning, construction, and mounting of scenery for theatre, television, and film. Concentration on the technical organization of scenic production. Lecture, discussion, and laboratory periods.

THR 220. Costume Production. 2 Credits. H
Introduction to techniques of costume construction, including study of fabrics, color, fundamentals of pattern making, and draping of costumes for theatre, television, and film. Concentration on the technical organization of costume production. Lecture, discussion, and laboratory periods.

THR 224. Lighting Production. 2 Credits. H
Introduction to the planning and execution of lighting for theatre, television, and film. Concentration organized any given semester to study particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

THR 301. Theatre Practicum III. 1 Credits. H
One crew assignment in a University Theatre & Dance production qualifies for 1 credit hour. May be repeated for credit. Prerequisite: THR 201.

THR 302. Undergraduate Seminar in: ______. 3 Credits. H
Course organized any given semester to study a particular subject matter or to take advantage of special competence by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

THR 304. Study Abroad Topics in: ______. 1-6 Credits. H
This course is designed for the study of special topics in Theatre at the junior/senior level. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

THR 306. Acting III. 3 Credits. H
Advanced projects in acting. Character and scene analysis, scoring the role, rehearsal, and performance. Prerequisite: THR 206.

THR 307. Undergraduate Theatre Internship. 1-3 Credits. H
Supervised study with an approved theater company or project. May be repeated for credit. No more than six hours may be applied to the B.A. or B.G.S. degrees. Prerequisite: Consent of instructor and at least seven hours credit in the department.

THR 308. Script Analysis. 3 Credits. H
This course provides knowledge and methods enabling students to conduct in-depth study of dramatic scripts. Emphasis is given to the analysis skills appropriate to practitioners of stage and screen arts.

THR 310. Musical Performance for the Actor II. 3 Credits. H

THR 313. Movement II: Physical Characterization. 3 Credits. H
The study of diverse physical acting techniques, and an investigation into creating a character through manipulation of the acting instrument. Actor training in performance neutrality, mask work, age, and gender distinctions. Prerequisite: THR 213 and permission of instructor.

THR 316. Beginning Scene Design. 3 Credits. H
Study of scenic design process with beginning problems in textual analysis, style, historical research, and preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 116 and THR 215, or permission of instructor.

THR 317. Beginning Lighting Design. 3 Credits. H
Study of the lighting design process with beginning problems in textual analysis, style, historical research, with preliminary and finished methods of design presentation. Concentration on developing fundamental design skills and awareness. Prerequisite: THR 116 and THR 215, or permission of instructor.

THR 320. African Theatre and Drama. 3 Credits. NW H/W
A study of the origin and development of continental African theatre and its affinity to the Levant. Traditional, colonial and contemporary dramatic theories and experiments will be examined in play selections. (Same as AAAS 355.)

THR 327. African-American Theatre and Drama. 3 Credits. H
A historical study of Black Theatre in the U.S.A. from its African genesis to its contemporary Americanness. Epochs in African-American dramaturgy will be critically examined. (Same as AAAS 356.)

THR 334. Introduction to African Dance Theatre. 2 Credits. NW U
An introduction to the general techniques of non-verbal theatrical conventions in African cultures. Practical training in movement vocabulary will be supplemented by lectures on the "text" of performance. (Same as AAAS 334 and DANC 334.)

THR 335. Theatre and Genocide. 3 Credits. H
This seminar focuses on theatre art production under extreme situations. Do artists have a moral obligation to bear witness to genocide and war? Lectures, historical and theoretical readings, play texts, dance performance, and films provide students with a context within which to explore such issues as: the function of the performing arts under duress; the artist's role under and in response to atrocity; and how art aids us to explore the human condition. Class discussion, readings, and individual projects. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to students with credit in JWSH 645 or THR 645. (Same as JWSH 345.)

THR 380. Popular Culture: ______. 3 Credits. HL H
Interdisciplinary examination of popular culture oriented around a specific genre or theme. Objects of study may include popular forms of live performance such as musicals or vaudeville, as well as media-based performances (radio, television, film, internet). Specific topic to be studied changes as needs and resources develop. May be repeated for credit for different topics.

THR 401. Stage Management and Assistant Direction. 1 Credits. H
Majors are assigned to stage manage or assistant direct a University Theatre production, or to take related workshops in stage management or assistant directing. May be repeated for credit.

THR 406. Audition Techniques. 3 Credits. H
This course prepares students for all types of audition experiences. It includes study in techniques of prepared auditions, cold readings, interviews, and the musical audition for actors. Emphasis is placed upon developing resumes and photo portfolios as well as concentrated study in professional contracts, unions, and agent acquisition. Prerequisite: THR 206.

THR 407. Advanced Acting Special Topic: ______. 3 Credits.
This course is designed for the study of special topics in performance techniques involving advanced skills for the actor at the junior/senior level. Specific topic to be studied changes as needs and resources develop. May be repeated for credit for different topics. Prerequisite: THR 306. Theatre major or minor students.

THR 410. Musical Performance for the Actor III. 3 Credits. H
Advanced Studies in Musical Theatre Performance: practical application of voice, acting and movement techniques for musical theatre, solo and group performance. Prerequisite: THR 106, THR 210, and THR 310.

THR 413. Stage Combat Skills. 3 Credits. U
Study of the illusion of violence in a dramatic context and the special skills necessary for creating believable and safe stage fights. Actor training in armed and unarmed combat, including one or more of the following: rapier and dagger, broadsword, and quarter staff. Prerequisite: THR 313 and permission of instructor.

THR 429. Postcolonial Theatre and Drama. 3 Credits. NW H
The course develops an understanding of the postcolonial concept and its different manifestations in theatre and drama across nations and cultures. It approaches postcolonialism as a way of reading theatre, and as a genre.
within theatre by exploring how the "colonial project" has reconfigured the concept, content, and context of theatre in both colonized and colonizing cultures. In addition to the study of postcolonial playwrights and their works, the course is also an introduction to postcolonial theory and its critics. (Same as AAAS 429.)

THR 498. Honors Directed Study in Theatre. 3 Credits. H
Individual creation of an original product that integrates theatre knowledge and skills. Selected in advance with advice, approval, and supervision by an instructor. Prerequisite: Consent of instructor, senior level status, and 3.5 GPA in Theatre and 3.25 GPA overall at the time of enrollment.

THR 499. Directed Study in Theatre. 3 Credits. H
Individual creation of an original product that integrates theatre knowledge and skills. Selected in advance with advice, approval, and supervision by an instructor. Prerequisite: Consent of instructor or junior or senior level status.

THR 506. Acting for the Camera. 3 Credits. H
A study of acting techniques appropriate to the requirements of the camera. Emphasis is placed on developing audition skills necessary to compete for roles in dramatic features, corporate videos, and commercials. Actors acquire skills essential to the transition from stage to camera. Prerequisite: Permission of instructor.

THR 508. Fundamentals of Directing. 3 Credits. H
Offered as an initial approach to play directing, this course introduces students to practical and theoretical aspects of the craft of stage directing. Prerequisite: THR 308.

THR 512. A Vocal Approach to the Classics. 3 Credits. H
This is an advanced voice and speech course for actors aiming to further increase their command over tone, rhythm, pacing, and diction. Their range and power will be extended. Through discovery of the demands of a variety of classical texts, the actor will be challenged both in verse and in prose to develop the skills necessary to fully interpret that material. Prerequisite: THR 212.

THR 516. Scenic Painting Techniques. 3 Credits. H
Study of painting equipment, tools, pigments, binders, and vehicles, and their relationship to the surfaces to be painted. Instruction in basic painting techniques. Prerequisite: THR 116 and THR 215.

THR 517. Computer-Aided Design. 3 Credits. U
Study of new media in theatre and film/video production, primarily computer technologies and methods for the theatrical designer or art director. Emphasis on computer 3-D modeling and color rendering. Prerequisite: THR 116, THR 215, or permission of instructor.

THR 518. Scenography and the Classic Script. 3 Credits. H
Holistic production design, including lighting, scenery, and costumes, for classic theatre scripts. Contrasts historical styles of production with styles for contemporary spaces and audiences. Projects tailored to the needs and level of the students. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in THR 720. Prerequisite: Consent of instructor.

THR 519. Scenography and the Modern Script. 3 Credits. H
Holistic production design, including lighting, scenery, and costumes, for modern theatre scripts. Examines modern styles of production. Projects tailored to the needs and level of the students. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in THR 721. Prerequisite: Consent of instructor.

THR 520. History of Period Style I. 3 Credits. H
A survey of Western style from ancient Egypt to the Restoration. Focus is placed on developing a comprehensive understanding of the stylistic relationships between art, architecture, clothing, decor, manners, and social and political history. Prerequisite: Nine hours in theatre/design/technical courses or consent of instructor.

THR 521. History of Period Style II. 3 Credits. H
Continuation of THR 520, from the Restoration to the present day. Prerequisite: Nine hours in theatre/design/technical courses or consent of instructor.

THR 525. History of Theatre. 3 Credits. H
Study of developments in world theatre and drama from the ancient world to the eighteenth century. Prerequisite: THR 308.

THR 526. History of Theatre II. 3 Credits. H
Study of developments in world theatre and drama since the eighteenth century. Prerequisite: THR 308.

THR 528. History of U.S. Theatre and Drama. 3 Credits. H
Historical approach to the development of theatre and performing arts in the United States. Prerequisite: THR 308.

THR 560. Collaborative Production. 3 Credits. H
Seniors collaborate as a theatre company to create an original production that integrates several of the following areas: improvisation, playwriting, acting, directing, dramaturgy, design, technical production, and stage management. Collaboration of group project approved in advance with advice, approval, and supervision by at least one instructor. Prerequisite: Senior level and consent of at least one instructor.

THR 599. Special Topics in Scenography. 1-6 Credits. U
Individual studio activity. Course content to be determined by the student under the supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: Permission of instructor.

THR 603. Theatre for Young Audiences. 3 Credits. U
A survey of theories, history, literature, criticism, production methods, and audience research about theatre performed by adults for children and adolescents. Emphasis is on child development and community outreach. Prerequisite: THR 308 or consent of instructor.

THR 617. Computer-Aided Design II. 3 Credits. U
Continuation of THR 517. Emphasis on computer-generated images as scenic media in production situations. Prerequisite: THR 517, or permission of instructor.

THR 618. Scenography and the Musical Theatre. 3 Credits. H
Holistic production design, including lighting, scenery, and costumes, for musical theatre, opera, and dance. Examines development and changes in design styles in the evolution of musical theatre, opera, and dance and the special requirements of these forms. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 820. Prerequisite: Consent of instructor.

THR 619. Scenography and the Contemporary Script. 3 Credits. H
Holistic production design, including lighting, scenery, and costumes, for contemporary scripts. Examines contemporary episodic scripts written for the stage that are based on a filmic structure, the special problems of these kinds of scripts, and the respective problems of designing for theatre and film. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 821. Prerequisite: Consent of instructor.

THR 620. Scenography and the Experimental Production. 3 Credits. H
Holistic production design, including lighting, scenery, and costumes, for experimental scripts/scenarios. Examines experimental approaches to
THR 626. Myth and the Dramatist. 3 Credits. U
This seminar critically explores myths in dramatic literature from ancient to contemporary times, using select authors from different cultures. Analysis of the works will be based on both conventional and post-structuralist theories and specific emphasis will be on myths that have been adapted cross-culturally and/or in different time perspectives.

THR 645. Theatre and Genocide. 3 Credits.
This seminar focuses on theatre art production under extreme situations. Do artists have a moral obligation to bear witness to genocide and war? Lectures, historical and theoretical readings, play texts, dance performance, and films provide students with a context within which to explore such issues as: the function of the performing arts under duress; the artist's role under and in response to atrocity; and how art aids us to explore the human condition. Class discussion, readings, and individual projects. This course is offered at the 300 and 600 level with additional assignments at the 600 level. Not open to student with credit in JWSH 345 or THR 345. (Same as JWSH 645.) Prerequisite: Graduate standing or consent of instructor.

THR 702. Graduate Seminar in: _____ 3 Credits.
Course organized any given semester to study particular subject matter or to take advantage of special competency by an individual faculty member. Topics change as needs and resources develop. Class discussion, readings, and individual projects.

THR 703. Directed Readings in Theatre. 1-3 Credits.
Research reading and presentation of reports on specific subjects related to the students major area of specialization. May be repeated up to a total of six credits on petition. Required of all MFA Scenography students.

THR 704. Study Abroad Topics in: _____ 1-6 Credits.
This course is designed for the study of special topics in Theatre. Credit for coursework must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies.

THR 707. Theatre Internship. 3-12 Credits.
Study with an approved theatre company. Emphasis may be in one or all of the following areas: acting, directing, stage management, technical theatre, promotion management. No more than six hours may be applied to an M.A. degree. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Consent of instructor.

THR 711. Problems and Techniques of Direction. 3 Credits.
Practical experience in directing.

THR 719. M.F.A. Production Seminar. 3 Credits.
To be taken by M.F.A. candidates during those semesters in which they are assigned to design one or more elements in a production to be mounted on one of our stages. Weekly critique and discussion of solutions to practical design problems from conception through execution. May be repeated for a total of no more than six hours credit. Prerequisite: Consent of instructor.

THR 720. Scenography and the Classic Script. 3 Credits.
Holistic production design, including lighting, scenery, and costumes, for classic theatre scripts. Examines contemporary styles of production with styles for modern theatre scripts. Examines modern styles of production. Projects tailored to the needs and level of the students. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in THR 518. Prerequisite: Consent of the instructor.

THR 721. Scenography and the Modern Script. 3 Credits.
Holistic production design, including lighting, scenery, and costumes, for contemporary spaces and audiences. Projects tailored to the needs and level of the students. This course is offered at the 500 and 700 level with additional assignments at the 700 level. Not open to students with credit in THR 519. Prerequisite: Consent of instructor.

THR 725. Russian Theatre and Drama from Stanislavski and Chekhov to the Present. 3 Credits.
A study of the development of Russian theatre and dramatic literature from 1898 to the present. Lectures and readings in English. (Same as SLAV 762.)

THR 800. Introduction to Graduate Study in Theatre. 3 Credits.
Preparation for faculty careers in theatre and related fields, including issues of research, teaching, and service. At least three hours per semester will be devoted to training in responsible scholarship. May be repeated for credit.

THR 815. Advanced Play Production. 1-3 Credits.
Individually supervised advanced directing of theatre pieces for public presentation. In special cases, credit may be given for musical direction, dramaturgy, choreography, or stage management.

THR 817. Theory of Acting and Directing. 3 Credits.
Readings, lectures, discussions and papers on acting and directing theory; is concerned with the divergence between presentational and representational acting methods and the emergence of directing art.

THR 819. Advanced M.F.A. Production Seminar. 3 Credits.
Continuation of THR 719, but production design assignments will be more complex and larger in scope. May be repeated for maximum of six hours credit. Prerequisite: Six hours of THR 719 and consent of instructor.

THR 820. Scenography and the Musical Theatre. 3 Credits.
Holistic production design, including lighting, scenery, and costumes, for musical theatre, opera, and dance. Examines developments and changes in design styles in the evolution of musical theatre, opera, and dance and the special requirements of these forms. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 618. Prerequisite: Consent of instructor.

THR 821. Scenography and the Contemporary Script. 3 Credits.
Holistic production design, including lighting, scenery, and costumes, for contemporary scripts. Examines contemporary episodic scripts written for the stage that are based on a filmic structure, the special problems of these kinds of scripts, and the respective problems of designing for theatre and film. Projects tailored to the needs and level of the students. This course is offered at the 600 and 800 level with additional assignments at the 800 level. Not open to students with credit in THR 618. Prerequisite: Consent of instructor.
A BFA in dance focuses on technical training and preparation for a career in professional performance. An audition is required for entry in the BFA program. For information regarding the audition process, please see the Department of Theatre and Dance's website (https://theatredance.ku.edu/admission-audition/) or email KUDance@ku.edu (kudance@ku.edu).

**Bachelor of Fine Arts in Dance**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.isss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Bachelor of Fine Arts in Dance Degree Requirements**

The B.F.A. requires an audition for entry; however, students enrolled in the B.A. program may audition at the end of each academic year. In order to be considered for a scholarship or entry directly into the B.F.A. program, incoming students MUST audition in person or online via Acceptd (https://app.getacceptd.com/kudance/).

The curriculum leading to the B.F.A. focuses on technique, choreography, and performance. It prepares students for professional careers or further academic study in dance. Entrance into the B.F.A. program is provisional during the first year. After evaluation of the year’s work and approval by the faculty, a student is fully accepted into the B.F.A. program.

B.F.A. majors receive integrated training in ballet, modern, and jazz dance technique. They also take courses in choreography, dance theory, history, dance science, and pedagogy. Other B.F.A. courses include flamenco, performing arts administration, classical East Indian dance, conditioning and injury prevention for dancers, and musical theatre dance. Students must complete a senior project in performance and/or choreography.

B.F.A. majors have a variety of performance opportunities as members of the University Dance Company (https://rockchalkcentral.ku.edu/organization/universitydancecompany/). A total of 120 credit hours is required.

**Code** | **Title** | **Hours**
--- | --- | ---
**General Education Requirements** |  | 30
In addition to degree and major requirements, all students must complete the KU Core: students may fulfill both KU Core and Major requirements by taking following: GOAL 4 Learning Outcome 2 - DANC 230, 330, 440, or 490. GOAL 6 - DANC 550.
**Introduction to the Dance Major** |  | 1
DANC 100 | Introduction to the Dance Major
**Dance Technique** |  | 33
Majors must complete 33 hours of Dance technique. Majors must have at least 6 hours of Ballet at the 300 level or higher, 6 hours of Modern at the 300 level or higher, and 3 hours of Jazz at the 300 level or higher. Courses may be repeated for credit.
**Ballet** |  | 6
6 hours of Ballet technique at the 300 level or higher.
DANC 311 | Ballet III
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DANC 411</td>
<td>Ballet IV</td>
<td>6</td>
</tr>
<tr>
<td>Modern/Contemporary</td>
<td>6 hours of Modern/Contemporary technique at the 300 level or higher</td>
<td></td>
</tr>
<tr>
<td>DANC 313</td>
<td>Modern/Contemporary III</td>
<td></td>
</tr>
<tr>
<td>DANC 413</td>
<td>Modern Contemporary IV</td>
<td></td>
</tr>
<tr>
<td>Jazz</td>
<td>3 hours of Jazz technique at the 300 level or higher</td>
<td></td>
</tr>
<tr>
<td>DANC 315</td>
<td>Jazz III</td>
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**Modern/Contemporary**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DANC 307</td>
<td>Pointe and Pas de Deux</td>
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</tr>
<tr>
<td>DANC 308</td>
<td>Pas de Deux</td>
<td></td>
</tr>
<tr>
<td>DANC 311</td>
<td>Ballet III</td>
<td></td>
</tr>
<tr>
<td>DANC 313</td>
<td>Modern/Contemporary III</td>
<td></td>
</tr>
<tr>
<td>DANC 315</td>
<td>Jazz III</td>
<td></td>
</tr>
<tr>
<td>DANC 411</td>
<td>Ballet IV</td>
<td></td>
</tr>
<tr>
<td>DANC 417</td>
<td>Hip Hop II</td>
<td></td>
</tr>
<tr>
<td>DANC 419</td>
<td>Tap II</td>
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**University Dance Company**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>DANC 320</td>
<td>University Dance Company</td>
<td>4</td>
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</tbody>
</table>

Majors must complete four semesters of University Dance Company. May be repeated for credit.

**Dance Composition**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DANC 150</td>
<td>Choreography I</td>
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</tr>
<tr>
<td>DANC 250</td>
<td>Choreography II</td>
<td></td>
</tr>
<tr>
<td>DANC 350</td>
<td>Choreography III</td>
<td></td>
</tr>
<tr>
<td>DANC 550</td>
<td>Senior Project</td>
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</table>

**Dance Studies**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DANC 210</td>
<td>Rhythms and Structures of Music</td>
<td></td>
</tr>
<tr>
<td>DANC 330</td>
<td>Approaches to World Dance</td>
<td></td>
</tr>
<tr>
<td>DANC 375</td>
<td>Anatomy and Injury Prevention</td>
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</table>

**Dance Pedagogy:** Choose from DANC 520, or DANC 540

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>DANC 520</td>
<td>Pedagogy</td>
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<tr>
<td>or DANC 540</td>
<td>Field Experience in Dance Teaching</td>
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</table>

**Dance Electives**

Choose four courses from those listed below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DANC 260</td>
<td>Musical Theatre Dance</td>
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<tr>
<td>DANC 317</td>
<td>Hip Hop Fundamentals</td>
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<tr>
<td>DANC 319</td>
<td>Tap Fundamentals</td>
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<tr>
<td>DANC 334</td>
<td>Introduction to African Dance Theatre</td>
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<tr>
<td>DANC 420</td>
<td>Introduction to Videography and Website Design</td>
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<tr>
<td>DANC 440</td>
<td>Introduction to Classical East Indian Dance</td>
<td></td>
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<tr>
<td>DANC 460</td>
<td>Dance History: Research and Reconstruction</td>
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<tr>
<td>DANC 475</td>
<td>Career Preparation in the Arts</td>
<td></td>
</tr>
<tr>
<td>DANC 490</td>
<td>Introduction to Flamenco Dance Technique</td>
<td></td>
</tr>
<tr>
<td>DANC 498</td>
<td>Directed Study in:</td>
<td></td>
</tr>
<tr>
<td>DANC 520</td>
<td>Pedagogy</td>
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<tr>
<td>DANC 530</td>
<td>Practicum in:</td>
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**Dance Composition**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>DANC 540</td>
<td>Field Experience in Dance Teaching</td>
<td></td>
</tr>
<tr>
<td>DANC 580</td>
<td>Special Topics in Dance: _____</td>
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</table>

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 72 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BFA in Dance. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website. (http://kucore.ku.edu/courses/)

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>DANC 100</td>
<td>1</td>
<td>Danc 210 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Dance Technique (Modern 1 of 2), Major Requirement</td>
<td></td>
<td>3 DANC 210 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Dance Technique (Elective 1 of 6), Major Requirement</td>
<td></td>
<td>3 DANC 150 (Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3 DANC 320 (1 of 4, Major Requirement)</td>
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<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
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<tr>
<td>Goal 3 Social Science</td>
<td>3 Goal 1.2 Quantitative Literacy</td>
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**Sophomore**

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tbody>
<tr>
<td>Dance Technique (Ballet 2 of 2), Major Requirement</td>
<td>3</td>
<td>Dance Technique (Jazz), Major Requirement</td>
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<tr>
<td>Dance Technique (Elective 2 of 6), Major Requirement</td>
<td>3</td>
<td>Dance Technique (Modern 2 of 2), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>DANC 250 (Major Requirement)</td>
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<td>DANC 350 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>DANC 320 (2 of 4, Major Requirement)</td>
<td>1</td>
<td>Dance General Elective (2 of 4), Major Requirement</td>
<td>3</td>
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<tr>
<td>Dance General Elective (1 of 4), Major Requirement</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
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<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>3</td>
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**Freshman**

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<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance Technique (Modern 1 of 2), Major Requirement</td>
<td>3</td>
<td>Dance Technique (Modern 2 of 2), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Dance Technique (Elective 1 of 6), Major Requirement</td>
<td>3</td>
<td>Dance Technique (Jazz), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td>DANC 320 (1 of 4, Major Requirement)</td>
<td>1</td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication (2 of 2))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance Technique (Ballet 2 of 2), Major Requirement</td>
<td>3</td>
<td>Dance Technique (Jazz), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Dance Technique (Elective 2 of 6), Major Requirement</td>
<td>3</td>
<td>Dance Technique (Modern 2 of 2), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>DANC 250 (Major Requirement)</td>
<td>2</td>
<td>DANC 350 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>DANC 320 (2 of 4, Major Requirement)</td>
<td>1</td>
<td>Dance General Elective (2 of 4), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Dance General Elective (1 of 4), Major Requirement</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
</tbody>
</table>
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance Technique (Elective 3 of 6), Major Requirement</td>
<td>3</td>
<td>DANC 375 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Dance General Elective (3 of 4)</td>
<td>3</td>
<td>Dance Technique (Elective 4 of 6), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>DANC 320 (3 of 4, Major Requirement)</td>
<td>1</td>
<td>DANC 320 (4 of 4, Major Requirement)</td>
<td>1</td>
</tr>
<tr>
<td>200+ ENGL Course (DANC 330 pre-req)</td>
<td>3</td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 330 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
<td>DANC 550 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Dance Technique (Elective 5 of 6), Major Requirement</td>
<td>3</td>
<td>DANC 520 or 540 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Dance General Elective (4 of 4), Major Requirement</td>
<td>3</td>
<td>Dance Technique (Elective 6 of 6), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 120**

1. Technique placement determined by Dance Department faculty. If student begins technique coursework at 200-level, degree plan will alter significantly.
2. See Catalogue for full list of approved Dance Technique Electives.
3. Choreography classes sequenced/not offered every semester. See Dance Course Rotation (https://theatredance.ku.edu/course-rotations/) for more details.
4. See Catalogue for full list of approved Dance General Electives.
5. DANC 490 Introduction to Flamenco Dance Technique satisfies Goal 3 Arts and Humanities.
6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, secondary area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Bachelor of Arts in Dance**

**Bachelor of Arts in Dance**

A BA in dance offers comprehensive technical training built on a solid liberal arts foundation, allowing students to double-major or pursue graduate study in a wide number of fields. The BA does NOT require an audition for entry. Instead, students must complete an evaluation at the end of their sophomore year to complete the degree program.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Bachelor of Arts in Dance Degree Requirements**

The B.A. in Dance at the University of Kansas does not require an audition. Instead, all students must pass a technical and academic evaluation at the end of their sophomore year. However, to be considered for a scholarship, a prospective or transfer student must audition. The B.A. in dance offers comprehensive technical training, built on a solid liberal arts foundation, which allows students to double-major or to pursue graduate study in any number of fields.

The curriculum leading to the B.A. in dance offers integrated training in ballet, modern, and jazz dance techniques, as well as courses in classical Indian dance, African dance and flamenco dance techniques, musical theatre dance, dance improvisation and composition, video for dance, history and philosophy of dance, music for dance, creative dance for children, dance production, career preparation in the arts and independent study options. The program prepares students for professional careers in dance or for further academic study. The senior project may involve research in any of the above areas or choreography
Bachelor of Arts in Dance Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Completion of the KU Core (See KU Core)</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Completion of the College BA degree specific requirements (see College BA requirements)</td>
<td>15-25</td>
</tr>
<tr>
<td></td>
<td>Completion of Dance Major requirements</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Introduction to the Dance Major</td>
<td>1</td>
</tr>
<tr>
<td>DANC 100</td>
<td>Introduction to the Dance Major</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dance Technique</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Majors must complete 18 hours of Dance technique. Majors must have at least 6 hours of Ballet at the 200 level or higher, 6 hours of Modern at the 200 level or higher, and 3 hours of Jazz at the 200 level or higher. Courses may be repeated for credit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ballet</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>6 hours of Ballet technique at the 200 level or above.</td>
<td></td>
</tr>
<tr>
<td>DANC 211</td>
<td>Ballet II</td>
<td></td>
</tr>
<tr>
<td>DANC 311</td>
<td>Ballet III</td>
<td></td>
</tr>
<tr>
<td>DANC 411</td>
<td>Ballet IV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modern/Contemporary</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>6 hours of Modern/Contemporary technique at the 200 level or above.</td>
<td></td>
</tr>
<tr>
<td>DANC 213</td>
<td>Modern Contemporary II</td>
<td></td>
</tr>
<tr>
<td>DANC 313</td>
<td>Modern/Contemporary III</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jazz</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3 hours of Jazz technique at the 200 level or above</td>
<td></td>
</tr>
<tr>
<td>DANC 215</td>
<td>Jazz II</td>
<td></td>
</tr>
<tr>
<td>DANC 315</td>
<td>Jazz III</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technique Elective</td>
<td>3</td>
</tr>
<tr>
<td>DANC 211</td>
<td>Ballet II</td>
<td></td>
</tr>
<tr>
<td>DANC 213</td>
<td>Modern Contemporary II</td>
<td></td>
</tr>
<tr>
<td>DANC 215</td>
<td>Jazz II</td>
<td></td>
</tr>
<tr>
<td>DANC 307</td>
<td>Pointe and Pas de Deux</td>
<td></td>
</tr>
<tr>
<td>DANC 308</td>
<td>Pas de Deux</td>
<td></td>
</tr>
<tr>
<td>DANC 311</td>
<td>Ballet III</td>
<td></td>
</tr>
<tr>
<td>DANC 313</td>
<td>Modern/Contemporary III</td>
<td></td>
</tr>
<tr>
<td>DANC 315</td>
<td>Jazz III</td>
<td></td>
</tr>
<tr>
<td>DANC 411</td>
<td>Ballet IV</td>
<td></td>
</tr>
<tr>
<td>DANC 417</td>
<td>Hip Hop II</td>
<td></td>
</tr>
<tr>
<td>DANC 419</td>
<td>Tap II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University Dance Company</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Satisfied by two semesters of University Dance Company. Repeatable for credit.</td>
<td></td>
</tr>
<tr>
<td>DANC 320</td>
<td>University Dance Company</td>
<td></td>
</tr>
<tr>
<td>DANC 320</td>
<td>University Dance Company</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dance Composition</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Majors must complete courses as specified in each of the following areas.</td>
<td></td>
</tr>
<tr>
<td>DANC 150</td>
<td>Choreography I</td>
<td></td>
</tr>
<tr>
<td>DANC 250</td>
<td>Choreography II</td>
<td></td>
</tr>
<tr>
<td>DANC 350</td>
<td>Choreography III</td>
<td></td>
</tr>
<tr>
<td>DANC 550</td>
<td>Senior Project</td>
<td></td>
</tr>
</tbody>
</table>

Dance Studies

Majors must complete courses as specified in each of the following areas.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 330</td>
<td>Approaches to World Dance</td>
</tr>
<tr>
<td>DANC 375</td>
<td>Anatomy and Injury Prevention</td>
</tr>
<tr>
<td>DANC 520</td>
<td>Pedagogy</td>
</tr>
<tr>
<td>DANC 540</td>
<td>Field Experience in Dance Teaching</td>
</tr>
</tbody>
</table>

Dance Electives

Students must select 9 hours from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 177</td>
<td>First Year Seminar: _______</td>
</tr>
<tr>
<td>DANC 210</td>
<td>Rhythms and Structures of Music</td>
</tr>
<tr>
<td>DANC 260</td>
<td>Musical Theatre Dance</td>
</tr>
<tr>
<td>DANC 317</td>
<td>Hip Hop Fundamentals</td>
</tr>
<tr>
<td>DANC 319</td>
<td>Tap Fundamentals</td>
</tr>
<tr>
<td>DANC 334</td>
<td>Introduction to African Dance Theatre</td>
</tr>
<tr>
<td>DANC 420</td>
<td>Introduction to Videography and Website Design for Dance</td>
</tr>
<tr>
<td>DANC 440</td>
<td>Introduction to Classical East Indian Dance</td>
</tr>
<tr>
<td>DANC 460</td>
<td>Dance History: Research and Reconstruction</td>
</tr>
<tr>
<td>DANC 475</td>
<td>Career Preparation in the Arts</td>
</tr>
<tr>
<td>DANC 490</td>
<td>Introduction to Flamenco Dance Technique</td>
</tr>
<tr>
<td>DANC 498</td>
<td>Directed Study in: _______</td>
</tr>
<tr>
<td>DANC 520</td>
<td>Pedagogy</td>
</tr>
<tr>
<td>DANC 530</td>
<td>Practicum in: _______</td>
</tr>
<tr>
<td>DANC 540</td>
<td>Field Experience in Dance Teaching</td>
</tr>
<tr>
<td>DANC 580</td>
<td>Special Topics in Dance: ______</td>
</tr>
</tbody>
</table>

Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 49 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 15 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BA in Dance. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
## Bachelor of Arts and Bachelor of General Studies in Theatre

Theatre B.A. and B.G.S. students work intensively on acquiring theatre skills and knowledge in classrooms, studios, and laboratories. Undergraduates pursuing the B.A. or B.G.S. may choose from two emphases: Theatre, Culture, and Society or Performance.

The Performance concentration prepares theatre majors toward a career as a professional performer. Through small-class studio courses and department productions, our program provides talented performing...
artists with a basic foundation in acting, movement, voice and speech, improvisation, and musical theatre.

The Theatre, Culture and Society concentration prepares students for careers that require critical, analytical, and historical foundations in the liberal arts, while providing courses in acting, directing and design as well as participation in University Theatre production. Our program provides emerging scholars with basic knowledge and research tools for understanding the social and cultural significance of theatre and performance.

Both the Bachelor of Arts (B.A.) and Bachelor of General Studies (B.G.S.) in Theatre require 40 hours. The primary distinctions between the B.A. and the B.G.S. degree are the foreign language requirement (required of the B.A. but not the B.G.S.) and 18 hours junior/senior concentration or minor (required for the B.G.S but not the B.A.).

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

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Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

There are no major admission requirements for the B.A. or B.G.S. in Theatre.

Students considering a theatre major should enroll in THR 106 and THR 101 and complete all 100- and 200-level courses in the first 2 years of study. It is imperative that theatre students earn practicum credit (THR 101, THR 201, THR 301) early in their careers at KU.

Requirements for the B.A. and B.G.S. Major

Both the B.A. and B.G.S. require 40 hours. The distinction between the B.G.S. degree and the B.A. degree is found in College of Liberal Arts and Sciences requirements.

Theatre, Culture, and Society Emphasis

The following 40 hours are required: (40 hours)

### Code | Title | Hours
--- | --- | ---
THR 101 | Theatre Practicum I | 1
THR 106 | Acting I | 3
THR 201 | Theatre Practicum II | 1
THR 206 | Acting II | 3
THR 212 | Beginning Voice and Speech for Actors | 3
THR 213 | Movement I: The Acting Instrument | 3
THR 215 | Approaching Design | 3
THR 308 | Script Analysis | 3
or instructor at the beginning of a semester with the consent of the honors coordinator.

**BA in Theatre with concentration in Performance**

Below is a sample 4-year plan for students pursuing the BA in Theatre with a concentration in Performance. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 101 (Major Requirement)</td>
<td>1 THR 212 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR 106 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3 THR 215 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3 THR 216, 220, or 224 (Theatre Production I, Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5 2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
</tbody>
</table>

### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 213 (Major Requirement)</td>
<td>3 THR 206 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR 216, 220, or 224 (Theatre Production II, Major Requirement)</td>
<td>2 THR 308 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3 THR 201 (Major Requirement)</td>
<td>1</td>
</tr>
<tr>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1 Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3 Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3 4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 301 or 401 (Major Requirement)</td>
<td>1 THR 525, 526, or 528 (History of Theatre II, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR 525, 526, or 528 (History of Theatre I, Major Requirement)</td>
<td>3 300+ Theatre Elective (1 of 3), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3 Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
</tbody>
</table>

**Departmental Honors**

An undergraduate interested in honors in theatre must present a written declaration of intention to the department’s honors coordinator as early as possible in the junior or senior year. The following are required:

1. A grade-point average at the time of declaration and at graduation of at least 3.5 in theatre courses.
2. 3-6 hours of THR 498 Honors Seminar. Enrollment in this course must be approved by the honors coordinator. Students in the honors seminar work under the direction of one instructor for each semester. The instructor conducts an examination at the end of each semester’s work and assigns a grade. Credit only is given to students who complete the work assigned for any semester but do not complete the requirements for honors. Students may change area of interest or instructor at the beginning of a semester with the consent of the honors coordinator.
### BA in Theatre with concentration in Theatre, Culture & Society

Below is a sample 4-year plan for students pursuing the BA in Theatre with a concentration in Theatre, Culture, and Society. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 101 (Theatre Practicum I, Major Requirement)</td>
<td>1</td>
<td>THR 216, 220, or 224 (Theatre Production I, Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>THR 106 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
<td>THR Elective (Theatre, Culture, &amp; Society) Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 201 (Major Requirement)</td>
<td>1</td>
<td>THR 308 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR 120 (Goal 2.2 Oral Communication)</td>
<td>3</td>
<td>THR 216, 220, or 224 (Theatre Production II, Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>THR 215 (Major Requirement)</td>
<td>3</td>
<td>THR Elective (Theatre, Culture, &amp; Society) Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1</td>
</tr>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language (BA Second Language)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 525, 526, or 528 (History of Theatre I, Major Requirement)</td>
<td>3</td>
<td>THR 525, 526, or 528 (Two Req), Major Requirement</td>
<td>3</td>
</tr>
<tr>
<td>THR 301 or 401 (Major Requirement)</td>
<td>1</td>
<td>THR 300+ Elective (Theatre, Culture, &amp; Society), Major Requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

Please note:

- All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

- The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Goal 4.1 US Diversity**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Elective/Degree/Junior-Senior Hours</th>
</tr>
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<tbody>
<tr>
<td>3</td>
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</tbody>
</table>

**Second Area of Study**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Elective/Degree/Junior-Senior Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 120**

1. Complete online Crewing Application form to enroll in THR 101, THR 201, THR 301. Crewing Application (https://www.kutheatre.com/crewing/) can be found on the Theatre website.

2. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

3. Four credit hours of Theatre Production coursework required for the THR performance major.

4. Prerequisite for History of Theatre coursework andTHR 508 Fundamentals of Directing

5. See Catalogue for full list of approved Theatre Performance electives.


7. THR 560 Collaborative Production, THR 307 Undergraduate Theatre Internship, and THR 499 Directed Study in Theatre all satisfy KU Core Goal 6.

8. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

9. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in Theatre with concentration in Performance

Below is a sample 4-year plan for students pursuing the BGS in Theatre with a concentration in Performance. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 101 (Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>THR 106 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>THR 216, 220, or 224 (Theatre Production I, Major Requirements)</td>
<td>2</td>
<td>Goal 2.1 Written Communication (2 of 2)</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 15**

2. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
3. Prerequisite for History of Theatre coursework and THR 508 Fundamentals of Directing
4. Eighteen hours of THR electives are required. Satisfied by: Successful completion of 6 courses (18 hours) of THR 210 or any 300-level or above Theatre course.
5. THR 560 Collaborative Production, THR 307 Undergraduate Theatre Internship, and THR 499 Directed Study in Theatre all satisfy KU Core Goal 6.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.
7. Hour requirements (incl. 45 Jr/Sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

### Sophomore

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 216, 220, or 224 (Theatre Production II, Major Requirement)</td>
<td>3</td>
<td>THR 308 (Major Requirement)</td>
</tr>
<tr>
<td>THR 213 (Major Requirement)</td>
<td>3</td>
<td>THR 206 (Major Requirement)</td>
</tr>
<tr>
<td>THR 201 (Major Requirement)</td>
<td>1</td>
<td>Goal 3 Social Science</td>
</tr>
<tr>
<td>Goal 2.2 Communication</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>1</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
</tr>
</tbody>
</table>

**Total Hours 18**

### Junior

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 525, 526, or 528 (History of Theatre I, Major Requirement)</td>
<td>3</td>
<td>THR 525, 526, or 528 (History of Theatre II, Major Requirement)</td>
</tr>
<tr>
<td>THR 301 or 401 (Major Requirement)</td>
<td>1</td>
<td>300+ Theatre Elective (1 of 3), Major Requirement</td>
</tr>
</tbody>
</table>

**Total Hours 13**
<table>
<thead>
<tr>
<th>Senior</th>
<th>Junior-Sr Hours</th>
<th>Second Area of Study/ Elective/Degree</th>
<th>Hours Spring</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
| 300+ Theatre Elective (2 of 3) | 3 300+ Theatre Elective (3 of 3) | 3  | 3  
| Goal 5 Social Responsibility & Ethics | 3 Goal 6 Integration & Creativity | 3  | 3  
| Second Area of Study/ Elective/Degree | 3 3  | 3  
| Second Area of Study/ Elective/Degree | 3 3  | 3  
| Second Area of Study/ Elective/Degree | 3 3  | 1  

<table>
<thead>
<tr>
<th>Total Hours 120</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Complete online Crewing Application (<a href="https://www.kutheatre.com/crewing/">https://www.kutheatre.com/crewing/</a>) form to enroll in THR 101, THR 201, THR 301.</td>
</tr>
<tr>
<td>2 Prerequisite for History of Theatre Coursework and THR 508 Fundamentals of Directing:</td>
</tr>
<tr>
<td>3 See Catalogue for full list of approved THR Performance electives. Nine hours of theatre elective required for the THR Performance major.</td>
</tr>
<tr>
<td>4 THR 560 Collaborative Production and THR 307 Undergraduate Theatre Internship satisfy BGS Career Prep requirement.</td>
</tr>
<tr>
<td>5 THR 560 Collaborative Production, THR 307 Undergraduate Theatre Internship, and THR 499 Directed Study in Theatre all satisfy KU Core Goal 6.</td>
</tr>
<tr>
<td>6 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.</td>
</tr>
</tbody>
</table>

**Please note:**

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Senior Hours 120

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 525, 526, or 528 (History of Theatre II, Major Requirement)</td>
<td>3</td>
<td>THR 525, 526, or 528 (History of Theatre II, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR 301 or 401 (Major Requirement)</td>
<td>1</td>
<td>THR Theatre, Culture, &amp; Society Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR Theatre, Culture, &amp; Society Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Goal 4.1 U.S. Diversity</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Senior</td>
<td>16</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 120

2. Prerequisite for History of Theatre Coursework and THR 508 Fundamentals of Directing
3. Eighteen hours of THR electives are required. Satisfied by: Successful completion of 6 courses (18 hours) of THR 210 or any 300-level or above Theatre course.
4. THR 560 Collaborative Production and THR 307 Undergraduate Theatre Internship satisfy BGS Career Prep requirement.
5. THR 560 Collaborative Production, THR 307 Undergraduate Theatre Internship, and THR 499 Directed Study in Theatre all satisfy KU Core Goal 6.
6. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Bachelor of Fine Arts in Theatre Design**

The Bachelor of Fine Arts (B.F.A.) in Theatre Design is intended as a general preparation for the professional designer of scenery, costumes or lighting in theatre and/or film or as preparation for graduate studies. Students learn through small-class studio courses, laboratories, and involvement in productions in the University Theatre. Students in the B.F.A. Theatre Design program take 69 hours in Theatre, Visual Art, and Art History in addition to the KU Core and electives.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**B.F.A. in Theatre Design Degree Requirements**

The program leading to the B.F.A. degree in theatre design is offered cooperatively by the School of the Arts and the Department of Theatre. It requires 6 hours of foundational coursework, 63 additional hours in...
the major, and completion of the KU Core, as well as additional general electives, for a total of 120 hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Foundations: Art and Design</strong></td>
<td></td>
</tr>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 102</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Core Theatre Courses</strong></td>
<td>30</td>
</tr>
<tr>
<td>THR 100</td>
<td>Introduction to the Theatre or THR 106</td>
<td>Acting I</td>
</tr>
<tr>
<td>THR 215</td>
<td>Approaching Design</td>
<td></td>
</tr>
<tr>
<td>THR 220</td>
<td>Costume Production</td>
<td></td>
</tr>
<tr>
<td>THR 224</td>
<td>Lighting Production</td>
<td></td>
</tr>
<tr>
<td>THR 308</td>
<td>Script Analysis</td>
<td></td>
</tr>
<tr>
<td>THR 508</td>
<td>Fundamentals of Directing</td>
<td></td>
</tr>
<tr>
<td>THR 520</td>
<td>History of Period Style I</td>
<td></td>
</tr>
<tr>
<td>THR 521</td>
<td>History of Period Style II</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Theatre History Courses. Choose two of the following:</strong></td>
<td>6</td>
</tr>
<tr>
<td>THR 525</td>
<td>History of Theatre</td>
<td></td>
</tr>
<tr>
<td>THR 526</td>
<td>History of Theatre II</td>
<td></td>
</tr>
<tr>
<td>THR 528</td>
<td>History of U.S. Theatre and Drama</td>
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<tr>
<td></td>
<td><strong>Theatre Design Concentration</strong></td>
<td></td>
</tr>
<tr>
<td>THR 116</td>
<td>Scenographic Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THR 316</td>
<td>Beginning Scene Design</td>
<td>3</td>
</tr>
<tr>
<td>THR 320</td>
<td>Beginning Costume Design</td>
<td>3</td>
</tr>
<tr>
<td>THR 324</td>
<td>Beginning Lighting Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Theatre design electives from an approved list</strong></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>History of Art:</strong></td>
<td></td>
</tr>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td>3</td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>History of art of architecture electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Education Courses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Completion of the KU Core</td>
<td></td>
</tr>
</tbody>
</table>

**General Electives**

- Additional credit hours of general electives are needed to meet the minimum total hours required for graduation.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 69 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 27 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (https://degreeprogress.ku.edu/gpa/).

Below is a sample 4-year plan for students pursuing the BFA in Theatre Design. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 106 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR 215 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ART 101 (Major Foundation Course)</td>
<td>2</td>
</tr>
<tr>
<td>THR 216, 220, or 224 (Theatre Production I, Major Requirement)</td>
<td>2</td>
</tr>
<tr>
<td>HA 150 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.1 Written Communication (1 of 2)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 216, 220, or 224 (Theatre Production II)</td>
<td>2</td>
</tr>
<tr>
<td>THR 316, 320, or 324 (Beginning Design I)</td>
<td>3</td>
</tr>
<tr>
<td>THR 116</td>
<td>3</td>
</tr>
<tr>
<td>THR 308 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>History of Art Elective (1 of 2), Major Requirements</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 520 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR History Elective 1 of 2 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>THR 324 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Final Hours**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>14</td>
</tr>
</tbody>
</table>

**Second Area of Study/Elective/Degree/Junior-Senior Hours**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>
Senior
Fall

THR Design Elective (Major Requirement)2
Goal 5 Social Responsibility & Ethics
Second Area of Study/Elective/Degree/Junior-Senior Hours³
Second Area of Study/Elective/Degree/Junior-Senior Hours³
Second Area of Study/Elective/Degree/Junior-Senior Hours³

Spring

THR Design Elective (Major Requirement)2
Goal 6 Integration & Creativity
Second Area of Study/Elective/Degree/Junior-Senior Hours³
Second Area of Study/Elective/Degree/Junior-Senior Hours³
Second Area of Study/Elective/Degree/Junior-Senior Hours³


Total Hours 120

1 Alternative: THR 100 Introduction to the Theatre – Also satisfies Core Goal 3 Arts and Humanities
2 THR 116 only offered in the Fall
3 Beginning Theatre Design Courses offered on rotation. Check with Theater Advisor for more details.
4 Pre-Requisite for THR 508 and History of Theatre coursework
5 See Catalogue for full list of approved Theatre Design Electives
6 History of Period Style offered every other year. Check with Theatre Advisor for more details.
7 THR 508 only offered in the Fall
8 THR 560 Collaborative Production, THR 307 Undergraduate Theatre Internship, and THR 499 Directed Study in Theatre all satisfy KU Core Goal 6.
9 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Minor in Dance

Dance Minor

The dance minor is designed to balance creative and technical aspects of dance with historical, cultural and theoretical studies. Our students are expected to attain and/or maintain the intermediate to high intermediate level in one area of dance technique, to think and write critically about dance, and to develop an understanding of the larger field of professional dance. The 20-credit hour minor allows students with an interest in dance to advance their study while pursuing a major in another discipline.

Requirements for the Minor in Dance

Open to all KU students

Dance Minor Course Requirements

Students selecting this minor must complete the following requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 150</td>
<td>Choreography I</td>
<td>3</td>
</tr>
<tr>
<td>DANC 250</td>
<td>Choreography II</td>
<td>3</td>
</tr>
<tr>
<td>DANC 210</td>
<td>Rhythms and Structures of Music</td>
<td>3</td>
</tr>
<tr>
<td>DANC 260</td>
<td>Musical Theatre Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 334</td>
<td>Introduction to African Dance Theatre</td>
<td>3</td>
</tr>
<tr>
<td>DANC 317</td>
<td>Hip Hop Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>DANC 319</td>
<td>Tap Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>DANC 330</td>
<td>Approaches to World Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 375</td>
<td>Anatomy and Injury Prevention</td>
<td>3</td>
</tr>
<tr>
<td>DANC 420</td>
<td>Introduction to Videography and Website Design for Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 440</td>
<td>Introduction to Classical East Indian Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANC 460</td>
<td>Dance History: Research and Reconstruction</td>
<td>3</td>
</tr>
<tr>
<td>DANC 475</td>
<td>Career Preparation in the Arts</td>
<td>3</td>
</tr>
<tr>
<td>DANC 490</td>
<td>Introduction to Flamenco Dance Technique</td>
<td>3</td>
</tr>
<tr>
<td>DANC 498</td>
<td>Directed Study in: ____</td>
<td>3</td>
</tr>
<tr>
<td>DANC 520</td>
<td>Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td>DANC 540</td>
<td>Field Experience in Dance Teaching</td>
<td>3</td>
</tr>
<tr>
<td>DANC 580</td>
<td>Special Topics in Dance: ____</td>
<td>3</td>
</tr>
</tbody>
</table>

Dance Minor Required Electives

Satisfied by 12 hours from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANC 500</td>
<td>Pedagogy</td>
</tr>
<tr>
<td>DANC 500</td>
<td>Field Experience in Dance Teaching</td>
</tr>
<tr>
<td>DANC 580</td>
<td>Special Topics in Dance: ____</td>
</tr>
</tbody>
</table>

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours

Satisfied by 20 hours of minor courses.

Minor Hours in Residence

Satisfied by a minimum of 9 junior/senior hours of KU resident credit in the minor.
Minor in Theatre

Minor Junior/Senior Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Minor in Theatre

The Department of Theatre and Dance welcomes non-majors who wish to learn about acting, drama, design, theatre history, and technical theatre through the completion of a minor. Students minoring in theatre are welcome to audition for department productions and serve on backstage technical crews if they are enrolled in THR 101, THR 201, THR 301, or THR 401.

Requirements for the Minor

A minimum of 18 hours is required for the minor; 12 hours must be numbered 300 and above.

Theatre Minor Course Requirements

Minors must complete each of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 101</td>
<td>Theatre Practicum I</td>
<td>1</td>
</tr>
<tr>
<td>THR 106</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THR 216</td>
<td>Scenic Production</td>
<td>2</td>
</tr>
<tr>
<td>or THR 220</td>
<td>Costume Production</td>
<td></td>
</tr>
<tr>
<td>or THR 224</td>
<td>Lighting Production</td>
<td></td>
</tr>
<tr>
<td>THR 308</td>
<td>Script Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Theatre Required Electives

Satisfied by 3 courses (9 hours) of any 300 Level or above Theatre course:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/ Cumulative GPA Calculator (https://degreeprogress.ku.edu/gpa/).

Master of Arts in Theatre

The Master of Arts in Theatre Studies helps students to begin developing a broad, comparative grasp of the major methods, approaches and protocols currently used in both the study and practice of theatre and performance. Special emphasis is placed on (1) an analytic understanding of theatre history and similar genres of performance, (2) the ability to critically engage the practical protocols, past and present, that have been influential in the creation and study of theatrical art and performance, and (3) the capacity to understand socio-cultural contexts that influence theatre scholarship and practice.

The M.A. helps to prepare students for leadership roles in a wide array of community, regional, and national arts organizations. The M.A. degree also provides students with a strong foundation to transition to a doctoral program.

Please visit the Department of Theatre and Dance's Graduate Resource page for more information.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admissions

Our holistic application evaluations are based on several criteria: grades, the strength of recommendation letters, written or portfolio samples, previous experience and the fit of your interests with our program. A full list of application materials and deadlines is available on The Department of Theatre and Dance’s admission pages (https://theatredance.ku.edu/ma-phd-admissions/). The Department of Theatre and Dance does not admit new students for the Spring or Summer terms.

The completed application should be submitted online.

Contact Information

Graduate Program Coordinator
University of Kansas
Department of Theatre & Dance
356 Murphy Hall
1530 Naismith Drive
Lawrence, KS 66045
Phone: 785-864-3511
Email: kuthr@ku.edu

M.A. Degree Requirements

The Master of Arts in Theatre is an academic degree, but students are expected to complete 6 hours in theatrical production. All M.A. students must write a thesis as the culmination of the degree. At least 50% of the coursework required for the MA degree must be taken at the 700 level or above.
To complete the M.A., the student must sustain a grade-point average of 3.0 or higher through 33 graduate credit hours. Up to 6 hours of additional courses in a foreign language or research skills may be required by your advisor.

**Requirements for the M.A. in Theatre**

A total of 33 hours is required.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 800</td>
<td>Introduction to Graduate Study in Theatre</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>In consultation with an advisor, students choose from among departmental courses in theatre history, dramatic literature, theory, and criticism</td>
<td>6</td>
</tr>
<tr>
<td>Production</td>
<td>- Select two courses in either directing, scenography, dance, or dramaturgy:</td>
<td>6</td>
</tr>
<tr>
<td>A. Directing</td>
<td>THR 710</td>
<td>The Art of Directing</td>
</tr>
<tr>
<td></td>
<td>THR 715</td>
<td>Problems and Techniques of Direction</td>
</tr>
<tr>
<td></td>
<td>THR 815</td>
<td>Advanced Play Production</td>
</tr>
<tr>
<td>B. Scenography</td>
<td>THR 516</td>
<td>Scenic Painting Techniques</td>
</tr>
<tr>
<td></td>
<td>THR 517</td>
<td>Computer-Aided Design</td>
</tr>
<tr>
<td></td>
<td>THR 720</td>
<td>Scenography and the Classic Script</td>
</tr>
<tr>
<td></td>
<td>THR 721</td>
<td>Scenography and the Modern Script</td>
</tr>
<tr>
<td></td>
<td>THR 820</td>
<td>Scenography and the Musical Theatre</td>
</tr>
<tr>
<td></td>
<td>THR 821</td>
<td>Scenography and the Contemporary Script</td>
</tr>
<tr>
<td></td>
<td>THR 822</td>
<td>Scenography and the Experimental Production</td>
</tr>
<tr>
<td>C. Dramaturgy or Dance</td>
<td>THR 702</td>
<td>Graduate Seminar in: _______</td>
</tr>
</tbody>
</table>

**General Theatre Studies**

Select 15 hours of courses from graduate offerings in theatre history, dramatic literature, history and criticism; of these 15 hours, up to 6 may be graduate courses from other areas such as film and media studies; child psychology; American studies; African and African-American studies; women, gender, and sexuality studies; developmental psychology; English; and pertinent offerings from language and culture programs.

**Completion of the Degree**

An oral examination structured around a thesis based on scholarly and/or creative research:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>THR 899</td>
<td>Master's Thesis</td>
<td>3</td>
</tr>
</tbody>
</table>

All courses should be selected in consultation with the graduate advisor.

**Master of Fine Arts in Theatre Design-Scenography Concentration**

The M.F.A. in Scenography is a three-year integrated program of study leading to a Master of Fine Arts degree, the terminal degree for professionals working in design for theatre, dance, film, and television. Scenography classes take an engaged, practice-based approach to theatre design to prepare students in areas of technical production such as costume, lighting, and set design. Our core curriculum provides students with the tools that they need to develop a portfolio in a wide variety of theatrical and performance genres. Students will execute realized designs in both the large Crafton-Preyer proscenium stage, the William Inge Memorial theatre (black box) as well as studio and site specific spaces. Students learn new technologies in theatre, lighting and costume design, including new innovations in Virtual Realities.

Please visit the Department of Theatre and Dance's Graduate Resource page for more information.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admissions**

Our holistic application evaluations are based on several criteria: grades, the strength of recommendation letters, written or portfolio samples, previous experience and the fit of your interests with our program. A full list of application materials and deadlines is available on The Department of Theatre and Dance’s admission pages (https://theatredance.ku.edu/mfa-scenography-admissions/). The Department of Theatre and Dance does not admit new students for the Spring or Summer terms.

The completed application should be submitted online.

**Contact Information**

Graduate Program Coordinator
University of Kansas
Department of Theatre & Dance
356 Murphy Hall
1530 Naismith Drive
Lawrence, KS 66045
Phone: 785-864-3511
Email: kuthr@ku.edu

**M.F.A. in Theatre Design with a Concentration in Scenography Degree Requirements**

Scenography classes are at the core of the curriculum. While in the program, students will design at least 4 realized productions in the University Theatre program. They will do at least 1 lighting, 1 costume and 1 scenic design, and preferably a combination of 2 or all design areas for 1 production. Design assignments, made by the scenography faculty, will be based on the students’ experience and interests (i.e., a student with little experience in lighting design will be given a less challenging project in the smaller theatre).

Students work with the KU Theatre's professional staff in the realization of their designs. Successful scenography students at the University of Kansas have come from a variety of backgrounds, including theatre, art and design, illustration and architecture. Students with deficiencies in
Doctor of Philosophy in Theatre

The purpose of the Ph.D. in Theatre is to develop leaders in the areas of both studies and practice. The curriculum requires an intense exposure to critical theory, history and historiography, and the craft and art of performance. We offer practice opportunities for doctoral students in directing, acting, and dramaturgy in order to help doctoral students prepare for work as scholar artists. Our graduates have excellent placement in higher education, non-profit organizations, and various posts in the entertainment industry as professional artists and administrators. Recent and former students from the M.A. and Ph.D. programs work or have worked across a wide array of academic and artistic settings, including Junkyard Dog Productions, The Ohio State University system, Chapman College, Washburn University, CBS, Disney Productions, University of Costa Rica, University of Minnesota (Morehead), Southern Illinois University, University of Georgia, Texas Christian University, University of Minnesota (Duluth), University of Arizona, California State University (Fresno), Southern Utah University, Bismarck State College, SUNY-Buffalo, Columbus State University, University of Kansas, Benedictine College, Wayne State College (Nebraska), and Converse College.

Please visit the Department of Theatre and Dance’s Graduate Resource page for more information.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of

Graduate Admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admissions

Our holistic application evaluations are based on several criteria: grades, the strength of recommendation letters, written or portfolio samples, previous experience and the fit of your interests with our program. A full list of application materials and deadlines is available on The Department of Theatre and Dance’s admission pages (https://theatredance.ku.edu/ma-phd-admissions/). The Department of Theatre and Dance does not admit new students for the Spring or Summer terms.

The completed application should be submitted online (https://gradapply.ku.edu/apply/).

Contact Information

Graduate Program Coordinator
University of Kansas
Department of Theatre & Dance
356 Murphy Hall
1530 Naismith Drive
Lawrence, KS 66045-3140
Phone: 785-864-3511
Email: kuthr@ku.edu

Ph.D. Degree Requirements

The Ph.D. is an academic degree, but students must demonstrate competence in at least one production area. Normally the Ph.D. requires 60 hours not including Research Skills and Responsible Scholarship requirements. All courses must be chosen in consultation with an advisor.

Core Requirements

12 hours of core courses in Theatre are required.

THR 800 is required in the first semester.

9 credit hours of graduate level courses selected in consultation with an advisor. Students choose from departmental courses in theatre history, performance studies, dramatic literature, theory, and criticism. Students must take only departmental courses their first semester of graduate study.

Elective Requirements

9 hours of electives are required. Elective courses focus on the academic study of theatre/performance history, theory, and related methodologies. Courses are selected with a graduate advisor to reflect the student’s special interest. These may include courses outside the Department with prior approval of the advisor and Director of Graduate Study.

Secondary Field Requirements

Students choose 9 hours at the graduate level from outside the department to assist them in writing the dissertation. Courses are related
to the student’s proposed specialization. (See examples of departments with applicable coursework under Elective Requirements.)

Production Courses

6 hours of production courses are required. To become competent artists as well as developing research scholars, students choose a sequence of graduate courses in either scenography, directing, dance, or dramaturgy.

Research Skills and Responsible Scholarship

The Department of Theatre Doctoral Research Skills and Responsible Scholarship requirements are met by fulfilling the following:

- THR 800 Introduction to Graduate Study in Theatre (3 credit hours in first semester),
- 3 credit hours of THR 801 Professional Development Seminar,
- THR 999 Doctoral Dissertation,
- If required by faculty advisor for dissertation topic, reading ability in a foreign language or proficiency in an alternative language skill pertinent to the specialty (e.g., computer languages, American sign language). Reading ability or alternative-language proficiency can be demonstrated by: (1) completing with a grade of B or better two college semesters of the language; or (2) completing with a B or better a course in reading comprehension; or (3) submitting a letter from a qualified faculty member attesting to student’s language proficiency.

Comprehensive Examination

The comprehensive examination is an essential element of the doctoral program, providing an opportunity for students to focus and consolidate the diverse strands of their graduate course work, to demonstrate competence for teaching in particular subject areas, and to establish a strong foundation for moving on to the dissertation. It consists of 4 parts:

1. A written examination, which covers 4 or 5 areas of expertise. Ordinarily, each area corresponds to a member of the student’s committee.
2. Submission of 1 publishable paper of article length (5,000 to 8,000 words) that demonstrates the student’s ability to research and write original scholarship at a level appropriate to the field. Publishable papers may be revised versions of papers submitted in KU courses. Publishable papers must be submitted on the first day of the written examination.
3. Submission of a dissertation prospectus 2 weeks before the oral exam.
4. An oral examination, given 2 to 4 weeks after the written examination. The oral examination lasts about 90 minutes and may revisit material covered in the written examination, the publishable papers, dissertation prospectus and/or other material as deemed appropriate by the committee.

While preparing for the examination, students must enroll in THR 998 Investigation and Conference (for Doctoral Students). This course may be taken twice for a total of 6 credit hours.

Dissertation

Upon successful completion of the comprehensive oral exam and dissertation prospectus, students adhere to Doctoral Candidacy policy (http://policy.ku.edu/graduate-studies/doctoral-candidacy/) until they are ready to defend their dissertation. The candidate must present a dissertation showing the planning, conduct, and results of original research and scholarly creativity. The dissertation itself should be an evident product of the candidate’s growth and attainment of the ability to identify significant problems; organize, analyze, and communicate scholarly results; and bring to bear on a useful area of interest a variety of research skills and scholarly or creative processes. Further details about the committee requirements and scheduling process can be found in the department’s Graduate Handbook. (https://theatredance.ku.edu/graduate-resources/)

Department of Visual Art

Welcome to Visual Art

The Department of Visual Art (http://art.ku.edu/) at KU functions as a creative laboratory where students, mentored by a faculty of internationally recognized artists, explore a broad range of media and disciplines.

Housed in a major university, the department encourages the development of a unique artistic voice through critical inquiry and research. Students have the additional opportunity to pursue interdisciplinary and collaborative work across the School of the Arts, as well as the University at large. The University of Kansas is the school of choice for ambitious art students throughout the region. The Department of Visual Art provides students with the technical skill and cultural awareness essential to the careers of professional artists, scholars, teachers or administrators. Seminars on specialized topics, a strong visiting artist schedule, trips to major cities, and study abroad possibilities all enrich students studying Visual Art at the University of Kansas.

The University of Kansas is a member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of those organizations.

Facilities

Visual Art students have access to excellent facilities and close mentoring from the Visual Art faculty. Coursework includes practice, discussion and critiques with faculty, advisors, and visiting artists. Cross discipline investigations are strongly encouraged and many courses are team-taught. Exhibition and installation spaces are readily available throughout the community of Lawrence. Kansas City with its rich history in the visual arts is just a short drive away.

Chalmers Hall, a 130,000 square foot mega structure, houses a full range of studio facilities including THE COMMON SHOP (http://art.ku.edu/common-shop/) — a fabrication shop with two full time technical assistants ready to assist students. The well-equipped SCULPTURE FACILITIES (http://art.ku.edu/sculpture/) include a foundry, metalshop, and woodworking studio. The EXPANDED MEDIA FACILITIES (https://art.ku.edu/expanded-media/) include digital imaging facilities as well as sound and projection equipment, upgraded annually as those technologies evolve. The PRINTMAKING FACILITIES (https://art.ku.edu/printmaking/) include space for intaglio, lithography, and serigraphy studios, as well as large format presses and equipment for papermaking and book arts. The CERAMICS FACILITIES (https://art.ku.edu/ceramics/) include gas and electric kilns, and a separate complex for wood-fired kilns. The METALSMITHING/JEWELRY FACILITIES (https://art.ku.edu/metalsmithingjewelry/) offer casting, soldering, enameling equipment, a digital mill, and 3-D printer. The TEXTILES/FIBERS FACILITIES (https://art.ku.edu/textilesfibers/) include floor looms, printing and dyeing labs, multiple sewing machines, and a computer lab.
The PAINTING FACILITIES (https://art.ku.edu/paintingdrawing/) include three enormous group studios equipped with easels. The Department of Visual Art places great emphasis on drawing and maintains four large drawing studios. The department also offers individual workspace for upper level majors. The ART & DESIGN GALLERY (http://art.ku.edu/art-design-gallery/) presents student, faculty, visiting artist and thematic exhibitions.

Highly Qualified Faculty Scholars and Artists
The faculty of the Department of Visual Art is comprised of internationally recognized artists and scholars with interests that span a broad range of media and disciplines. Dedicated to educating the next generation of artists, award-winning teachers prioritize mentorship, offering students individual attention and small class sizes.

Most courses in Visual Art are studio, practice-based courses. Studio classes are typically capped at 15-20 students. All areas have classes that are open to non-majors. Three-credit courses normally meet in class for six hours weekly for 15 weeks of fall and spring semester; another nine hours of work is expected outside class. Studio areas are open and accessible.

Undergraduate Programs

Undergraduate Degrees
The department offers undergraduate degree programs leading to a Bachelor of Arts in Visual Art, a Bachelor of Fine Arts in Visual Art, a Bachelor of Fine Arts in History of Art, a Bachelor of Art Education, and a Visual Art minor.

All our degrees allow students to design an academic experience tailored to their interests and goals. By choosing and combining courses from across a variety of studio areas, students direct their own educational path. The degree provides an immersive academic experience in which students master the fundamentals of the form. Through advanced coursework, students explore the nuances of artistic avenues that best complement their professional and creative goals. The degrees prepare students for careers as teachers or administrators in a variety of settings including public schools, arts agencies, art museums, community centers and other venues.

Visual Art (https://art.ku.edu/degrees/) (Drawing, Painting, Expanded Media, Sculpture, and Printmaking)
Ceramics (https://art.ku.edu/degrees/)
Metalsmithing / Jewelry (https://art.ku.edu/degrees/)
Textiles / Fibers (https://art.ku.edu/degrees/)
Combined Art History / Visual Art (https://art.ku.edu/degrees/)
Visual Art Education (https://art.ku.edu/degrees/)
Visual Art Minor

Advanced Placement in Art and Design
Students who score 3, 4, or 5 on the CEEB Advanced Placement Examination may receive up to 3 credit hours in art studio electives. Advanced placement credit does not exempt students from foundations requirements.

Advising
Students admitted to work toward B.F.A., B.A., or B.A.E. degrees are advised by the academic advisor in Visual Art in combination with faculty members in their chosen concentration. Check sheets describing each program in complete detail are available from the Visual Art main office, 300 Chalmers Hall, or online (http://art.ku.edu/). History of Art, information is available from the Kress Foundation Department of Art History (http://www2.ku.edu/%7Ekuarthis/). Students are encouraged to seek advice from any faculty member in a specific area of interest.

Students are expected to spend time outside of class working in the studio. For each credit hour in class another three hours of work will be expected outside of class time. It is normally expected that for 3 credit hours of studio a student will spend 9-15 hours per week working and studying for the entire 16 weeks during the semester.

Graduate Programs
The Department of Visual Art offers graduate programs leading to the Master of Fine Arts degree in visual art. Concentrations include ceramics, drawing and painting, expanded media, fibers, metalsmithing and jewelry, printmaking, and sculpture. A Master of Arts degree in visual art education and graduate licensure in art education are also available through the Department of Visual Art.

Students who are interested in enrolling in graduate level coursework in the Department of Visual Art without formal admission to a graduate program at KU are encouraged to apply for graduate non-degree seeking student status. See the department's non-degree seeking program page for further details.

Courses

ART 101. Drawing I. 3 Credits. H
Introductory study of Drawing with emphasis on tools, techniques and observational development. Studio class includes intensive in-class exercises, lectures, images, and assignments. Students develop a formal fine art vocabulary and gain verbal and written skills in critical analysis through individual and group critiques. Six hours scheduled studio activity and approximately six hours outside work weekly. Prerequisite: Must be a major or minor in the Department of Visual Art or receive instructor permission.

ART 102. Drawing II. 3 Credits. H
Continuation of ART 101: Drawing I. Prerequisite: ART 101 or instructor permission.

ART 103. Art Concepts and Practice. 3 Credits. H
A companion course to ART 104. Lecture and studio experiences across disciplines emphasizing conceptual fundamentals, technical/skill development, visual sensibility, critical thinking and professional topics in art. Prerequisite: Must be a major or minor in the Department of Visual Art or receive instructor permission.

ART 104. Art Principles and Practice. 3 Credits. H
A companion course to ART 103. Lecture and studio experiences across disciplines emphasizing conceptual fundamentals, technical/skill development, visual sensibility, critical thinking and professional topics in art. Prerequisite: Must be a major or minor in the Department of Visual Art or receive instructor permission.

ART 105. Visual Art Seminar. 1 Credits.
An introduction to campus and community resources for students interested in Visual Arts. Resources in the Department, the University and the larger community will be discussed and explored.

ART 120. Fundamentals of Painting. 3 Credits.
Open to all University students. An exploration of basic technical and expressive possibilities in painting. Six hours scheduled studio activity and approximately six hours outside work weekly.
ART 121. Fundamentals of Printmaking. 3 Credits.
Open to all university students. An exploration of basic technical and expressive possibilities in printmaking, including woodcut, etching, lithography and silk screen; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 122. Fundamentals of Sculpture. 3 Credits.
Open to all university students. Specifically for students with limited or no previous experience. An exploration of basic technical and expressive possibilities in three-dimensional form and space, including sculpture, modeling, carving, and construction; materials include wood, stone, clay, metal; may include field trips, films, visiting lecturers. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 123. Fundamentals of Expanded Media. 3 Credits.
Open to all university students. An exploration of basic technical and expressive possibilities in Expanded Media, including Installation, Performance, Video and other Digital technologies; may include field trips, films, and/or visiting lecturers. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 131. Fundamentals of Ceramics. 3 Credits.
Open to all university students. An introduction to ceramic techniques and conceptual development. The course will investigate historical and contemporary ceramic art, develop skills in wheel throwing, hand-building, glazing, clay-mixing, and firing. Through practice and research, students will build an integrated understanding of ceramics as a continuum of cultural expression. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 132. Fundamentals of Metalsmithing/Jewelry. 3 Credits.
Open to all university students. A comprehensive study of the field of jewelry and metalsmithing with an emphasis on the tools, processes, and techniques used in the design and fabrication of objects from metals such as aluminum, brass, copper, bronze, sterling and related materials. Studio experience will include lectures, slide presentations, demonstrations, visiting artist, and student projects. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 133. Fundamentals of Fibers. 3 Credits.
Open to all university students. Studio exploration of fibers as an art form and means of personal expression. A variety of dyeing, construction, and surface embellishment techniques will be introduced. Six hours scheduled studio activity and approximately six hours outside work weekly.

ART 177. First Year Seminar: ______. 3 Credits.
A limited-enrollment, seminar course for first-time freshmen, addressing current issues in Art. Course is designed to meet the critical thinking learning outcome of the KU Core. First-Year Seminar topics are coordinated and approved by the Office of First-Year Experience. Prerequisite: First-time freshman status.

ART 300. Special Topics in Visual Art: ______. 3 Credits.
Course to be offered in related areas of research, mixed media or interdisciplinary exploration. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. This course is offered at the 300 and 500 levels, with ART 500 serving as a continuation of study in the topic area. Prerequisite: ART 101, ART 102, ART 103, or ART 104; or permission of instructor.

ART 375. Directed Readings in Visual Art. 1-3 Credits.
Directed reading in specific areas of visual art. May be repeated for credit in subsequent semesters. Prerequisite: Permission of instructor.

ART 395. Study Abroad Topics in: ______. 1-6 Credits.
This course is designed for the study of special topics in Visual Art. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. Open to all students.

ART 500. Advanced Special Topics in Visual Art: ______. 3 Credits.
Course to be offered in related areas of research, mixed media or interdisciplinary exploration. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. This course is offered at the 300 and 500 levels, with ART 500 serving as a continuation of study in the topic area. Prerequisite: ART 101, ART 102, ART 103, or ART 104; and ART 300 (same topic), or permission of instructor.

ART 540. Professional Activities Seminar. 3 Credits.
Comprehensive development of skills and strategies needed to pursue a career as a professional studio artist. Prerequisite: Twenty-four hours of departmental electives or permission of instructor.

ART 575. Advanced Directed Reading in Visual Art. 1-3 Credits.
Directed reading in specific areas of visual art. May be repeated for credit in subsequent semesters. Prerequisite: Permission of instructor.

ART 590. Internship in Visual Art. 1-3 Credits.
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded according to the written recommendation provided by the internship supervisor to the faculty advisor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ART 101, ART 102, ART 103, or ART 104; and permission of instructor.

ART 595. Advanced Study Abroad Topics in: ______. 1-6 Credits.
This course is designed for the study of special topics in Visual Art at the senior/graduate level. Credit for course work must be arranged through the Office of KU Study Abroad. May be repeated for credit if content varies. Open to seniors and graduate level students.

ART 599. Individual Studies in Visual Art. 1-6 Credits.
Individual studio activity. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 101, ART 102, ART 103, or ART 104; and twelve hours of Visual Art courses; and permission of instructor.

ART 650. Senior Seminar I. 3 Credits.
This course explores issues and themes in creative practice while critically examining works of visual art and culture; capstone experience. Concurrent enrollment in at least one upper level Visual Art studio course is required. Typically taken during a student's final two semesters. Prerequisite: 30 hours of departmental electives and instructor permission. Corequisite: Any 300 level or above Visual Art studio course.

ART 660. Senior Seminar II. 3 Credits.
Continuation of ART 650; capstone experience. Participation in BFA exhibition required. Concurrent enrollment in at least one upper level Visual Art studio course is required. Prerequisite: ART 650 and instructor permission. Corequisite: Any 300 level or above Visual Art studio course.

ART 695. Directed Study I. 3 Credits.
Individual studio activity under direction of faculty advisor; capstone experience. Prerequisite: Thirty hours of departmental electives, consent of department, and permission of instructor.

ART 696. Directed Study II. 3 Credits.
Continuation of ART 695; capstone experience. May be repeated for credit in subsequent semesters. Prerequisite: ART 695.

**ART 801. Directed Study III. 2-5 Credits.** Individual studio activity under the direction of faculty member. May be repeated for credit in subsequent semesters. Prerequisite: Permission of graduate director and enrollment in the Visual Art MFA program.

**ART 802. Directed Study IV. 2-5 Credits.** Continuation of Directed Study III. Prerequisite: Enrollment in the Visual Art MFA Program.

**ART 803. Directed Study V. 2-5 Credits.** Continuation of Directed Study IV. Prerequisite: Enrollment in the Visual Art MFA Program.

**ART 805. Graduate Studio. 1-3 Credits.** Individual graduate studio research in visual art. Course content to be determined by the student under the supervision of a graduate faculty member. May be repeated for credit. Prerequisite: Graduate standing in The School of The Arts and permission of the instructor.

**ART 861. Directed Reading in Visual Art. 1-3 Credits.** Research reading and presentation of reports on specific subjects related to the student's major area of specialization. Prerequisite: Enrollment in the MFA Program in the Department of Visual Art.

**ART 877. Graduate Seminar. 3 Credits.** The graduate seminar emphasizes professional preparation for contemporary artists focusing on writing skills, oral presentations, critiques of individual creative research/artwork, critical thinking about and visual analysis of current art forms and contemporary approaches to the teaching of studio art. Prerequisite: Admission to the Graduate Program in Visual Art.

**ART 898. Special Topics: Studio Theory and Criticism. 3 Credits.** Lecture, discussion, and supervised research in current topics related to contemporary studio theory and criticism. May be repeated for credit as topics vary. This course will be counted as a graduate level academic elective in course and credit distribution.

**ART 906. Graduate Studio. 1-3 Credits.** Individual graduate studio research in visual art. Course content to be determined by the student under the supervision of a graduate faculty member. May be repeated for credit. Prerequisite: ART 805 and permission of the instructor.

**ART 950. Thesis in Visual Art. 1-6 Credits.** Original research in visual art culminating in a thesis exhibition. May be repeated for credit. Graded on a satisfactory progress/limited progress/no progress basis. Prerequisite: Thirty-six credit hours of graduate credit and permission of the graduate review committee.

**Courses**

**CER 208. Ceramics I. 3 Credits.** The development of form and surface through the use of handbuilding and wheel thrown techniques. Stoneware and Raku are explored.

**CER 300. Special Topics in Ceramics: ______. 1-4 Credits.** Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 131 or CER 208; or permission of instructor.

**CER 301. Concepts and Methods: Wheel Throwing. 3 Credits.** Intermediate ceramics course focusing on the potters' wheel as a tool. Coursework focuses on throwing skills and three-dimensional design concepts related to the functional ceramic vessel, wheel thrown sculpture, and creative problem-solving. Technical information supports an understanding of forming, surface development, glazing, and firing. Prerequisite: ART 131 or CER 208.

**CER 302. Concepts & Methods: Hand Building. 3 Credits.** Intermediate ceramics course using hand-building techniques and processes supported by design and idea development. Techniques will include press molding, slab construction and coil-building, color and surface development through glazing and firing. Emphasis is placed on creative expression and communication of personal ideas. Prerequisite: ART 131 or CER 208.

**CER 402. Mold Making and Slip Casting. 3 Credits.** Intermediate ceramics course focusing on the production of plaster molds and the slipcasting process. Students will make molds and prototypes, produce porcelain casting slip, and develop strategies in casting as well as consider the use of the slipcasting technique as a conceptual tool. Undergraduate students who wish to take this for a second/continuing semester should enroll in CER 502. Prerequisite: ART 131 or CER 208.

**CER 403. Advanced Topics in Ceramics. 3 Credits.** Advanced ceramics course using traditional and non-traditional approaches to ceramic art-making. Topics may include: wood finging, ephemeral art, large-scale sculpture, and/or digital technologies. This course can be repeated if topic varies. If same topic is repeated, students should enroll in CER 503. Prerequisite: CER 301 or CER 302 or permission of instructor.

**CER 500. Advanced Special Topics Ceramics: ______. 1-4 Credits.** Course to be offered in an area of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. This course is offered at the 300 and 500 levels, with CER 500 serving as a continuation of study in the topic area. Prerequisite: ART 101, ART 102, ART 103, or ART 104; and CER 300 (same topic), or permission of instructor.

**CER 502. Advanced Mold Making and Slip Casting. 3 Credits.** Advanced ceramics course focusing on the production of plaster molds and the slipcasting process. Students will make molds and prototypes, produce porcelain casting slip, and develop strategies in casting as well as consider the use of the slip-casting technique as a conceptual tool. Prerequisite: ART 131 or CER 208, and CER 402. Graduate students may enroll without prerequisites by instructor permission.

**CER 503. Advanced Topics in Ceramics. 3 Credits.** Advanced ceramics course using traditional and non-traditional approaches to ceramic art-making. Topics may include: wood firing, ephemeral art, large-scale sculpture, and/or digital technologies. This course is intended as a continuation for a specific topic course in CER 403. Graduate students should enroll in CER 503 with no prerequisite required. Prerequisite: CER 301 or CER 302, CER 403, or permission of instructor.

**CER 504. Kilns. 3 Credits.** The principles in kiln design, including up-draft, down-draft, cross-draft, and electric kilns, and burner technology. Prerequisite: ART 131, or CER 208, or CER 301, or permission of instructor.

**CER 505. Clay and Glaze Formulation. 3 Credits.** Formulation of the various clay bodies and glazes associated with ceramics. Prerequisite: ART 131, or CER 208, or CER 301, or permission of instructor.

**CER 510. History of Ceramics. 3 Credits.**
This course examines historical ceramics across the globe. Emphasis will be placed on the development and transmission of design, materials, and technique across various traditions. This course number is intended for undergraduate students. Graduate students should enroll in CER 710 History of Ceramics. Prerequisite: CER 131 or CER 208, or permission of instructor.

CER 515. Advanced Ceramics I. 3-6 Credits.
Development of individual direction in ceramics based on experience, research, and skills acquired in previous courses; capstone experience. May be repeated for credit. Prerequisite: CER 301 and CER 402.

CER 520. Advanced Ceramics II. 3-6 Credits. U
Continuation of CER 515; capstone experience. May be repeated for credit. Prerequisite: CER 515.

CER 590. Internship in Ceramics. 1-3 Credits. U
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded according to the written recommendation provided by the internship supervisor to the faculty advisor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses; and permission of instructor.

CER 599. Individual Studies in Ceramics. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Ceramics courses or permission of instructor.

CER 710. History of Ceramics. 3 Credits.
This course examines historical ceramics across the globe. Emphasis will be placed on the development and transmission of design, materials, and technique across various traditions. This course is for Graduate students. Undergraduate students should enroll in CER 510 History of Ceramics.

CER 715. Ceramics. 2-6 Credits.
Individual research. Prerequisite: CER 515 or equivalent.

CER 815. Ceramics. 2-6 Credits.
Continuation of CER 805.

Courses
DRWG 203. Drawing III. 3 Credits.
Advanced problems in drawing. Prerequisite: ART 102.

DRWG 213. Life Drawing I. 3 Credits.
Figure drawing. Prerequisite: ART 102 and ART 103 or ART 104.

DRWG 300. Special Topics in Drawing: _______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

DRWG 304. Drawing IV. 3 Credits.
Continuation of DRWG 203. Prerequisite: DRWG 203.

DRWG 314. Life Drawing II. 3 Credits.
Continuation of DRWG 213. Prerequisite: DRWG 213.

DRWG 318. Life Drawing II, Honors. 3 Credits.
Figure drawing, a continuation of DRWG 213. Prerequisite: DRWG 213; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

DRWG 500. Advanced Special Topics in Drawing: _______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Drawing courses, or permission of instructor.

DRWG 515. Life Drawing III. 3 Credits.
Continuation of DRWG 314. Prerequisite: DRWG 314.

DRWG 516. Life Drawing IV. 3 Credits.
Continuation of DRWG 515. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 515.

DRWG 518. Life Drawing III, Honors. 3 Credits.
Figure drawing, a continuation of DRWG 314 or DRWG 318. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 314 or DRWG 318; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

DRWG 519. Life Drawing IV, Honors. 3 Credits.
Figure drawing, a continuation of DRWG 515 or DRWG 518. May be repeated for credit in subsequent semesters. Prerequisite: DRWG 515 or DRWG 518; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

DRWG 599. Individual Studies in Drawing. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Drawing courses, or permission of instructor.

DRWG 817. Life Drawing V. 3 Credits.
Individual research in figure drawing. Prerequisite: DRWG 516.

DRWG 918. Life Drawing VI. 3 Credits.
Continuation of DRWG 817. Prerequisite: DRWG 817.

Courses
EXM 274. Expanded Media. 3 Credits. U
Beginning course to introduce the fundamental concepts, strategies, and technologies that comprise the Expanded Media area of the Department of Visual Art: Installation, Performance, and Digital Image. Emphasis is placed on forming ideas and strategies, and creating artwork that considers the core connections within Expanded Media: time, space, the body, the viewer, and society at large. Computer-based technologies and time-based media that are inherent to Expanded Media practice support studio assignments. Coursework includes the investigation and discussion of historic precedents and the development of an appropriate critical dialogue with which to discuss their work. Prerequisite: ART 102, ART 103, and ART 104.

EXM 300. Special Topics in Expanded Media: _______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.
EXM 301. The Digital Image I. 3 Credits.
Introduction to various still digital processes and skills that encourage the use of digital imagery within a variety of other media. Focus on content issues as they relate to development of artwork incorporating digital imagery. Prerequisite: ART 102, ART 103 or ART 104 or permission of instructor.

EXM 302. Performance Art I. 3 Credits. U
An introduction to the understanding and production of performance art. Students gain proficiency in conceptualization and production of performance-based art in an interdisciplinary art-making environment. Prerequisite: ART 102, ART 103 or ART 104, or permission of instructor.

EXM 304. Digital Photography I. 3 Credits.
This course explores Digital Photography as a tool and resource with a wide range of expressive and creative interests. Digital processes such as image capturing, editing, and printing will be the main focus. Issues pertaining the circulation and distribution of digital imagery in contemporary culture will be addressed. DSLRs, Point and Shoot Cameras, and Camera Phones will be used. Prerequisite: ART 101, ART 103, or ART 104; and any introductory art studio, or permission of instructor. This course is offered at the 300 and 500 levels, with the 500 level serving as a continuation of study in the topic area.

EXM 307. Installation Art I. 3 Credits. U
This course is an exploration of art making with an emphasis on space, site, installation, and the viewer’s experience surrounding art making. Students will research, discuss, and produce temporary art installations using a variety of mediums in an atmosphere of interdisciplinarity and experimentation. Major topics include time/space specificity: the collaboration process; body/space dynamics, and art-making as part of a social/cultural dynamic. Prerequisite: ART 101, ART 103, or ART 104, or permission of instructor.

EXM 326. Video and Time-Based Media I. 3 Credits. U
An introduction to the understanding and production of video and time-based art. Students gain proficiency in conceptualization and production of video and time-based art in an interdisciplinary art-making environment. Prerequisite: EXM 274.

EXM 500. Advanced Special Topics in Expanded Media: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103 or ART 104; 12 hours of courses in Visual Art, or permission of instructor.

EXM 501. The Digital Image II. 3 Credits.
Continuation of EXM 301, The Digital Image I. May be repeated for credit. Prerequisite: EXM 301.

EXM 504. Digital Photography II. 3 Credits.
This course will explore Digital Photography as a tool and resource with a wide range of expressive and creative interests. Students will explore how digital photographs are ‘captured’, edited, printed, and distributed in contemporary culture. DSLRs, Point and Shoot Cameras, and Camera Phones will be used. Advanced techniques in Picture Editing, File Management, Printing, Digital Delivery, and Studio Photography of Artwork will be explored. May be repeated for credit. Prerequisite: EXM 304.

EXM 526. Video and Time-Based Media II. 3 Credits. U
Continuation of EXM 326. Prerequisite: EXM 326.

EXM 535. Intermediate Expanded Media. 3 Credits.
Continuation of Expanded Media studio research. Prerequisite: Two (200-and/or 300-level) Expanded Media courses.

EXM 536. Intermediate Expanded Media, Honors. 3 Credits.
Continuation of Expanded Media studio research. Prerequisite: Two (200-and/or 300-level) Expanded Media courses; membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department.

EXM 537. Advanced Expanded Media. 3 Credits.
Continuation of EXM 535. May be repeated for credit. Prerequisite: EXM 535 or EXM 536.

EXM 538. Advanced Expanded Media, Honors. 3 Credits.
Continuation of EXM 536. May be repeated for credit. Prerequisite: EXM 535 or EXM 536; membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department.

EXM 543. Graduate: The Digital Image. 3 Credits.
Advanced work focusing on content issues as they relate to development of artwork incorporating digital imagery. Prerequisite: Permission of instructor.

EXM 546. Graduate Expanded Media V. 3 Credits.
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor.

EXM 573. Performance Art II. 3 Credits. U
Continuation of EXM 302. Prerequisite: EXM 302.

EXM 577. Installation Art II. 3 Credits. U
Continuation of EXM 307. Prerequisite: EXM 307.

EXM 578. Installation Art II, Honors. 3 Credits. U
Continuation of EXM 307. Prerequisite: EXM 307; and membership in the University Honors Program or 3.25 minimum cumulative grade point average with permission of the department.

EXM 599. Individual Studies in Expanded Media. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Expanded Media courses, or permission of instructor.

EXM 846. Graduate Expanded Media VI. 3 Credits.
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor.

EXM 946. Graduate Expanded Media VII. 3 Credits.
Continuation of Expanded Media studio research. Prerequisite: Permission of instructor.

Courses

METL 300. Special Topics in Metalsmithing: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

METL 301. Introduction to Casting for Jewelry. 3 Credits.
Introduction to casting and mold making processes used for jewelry and small sculpture. Students explore various methods and materials for creating models for casting in bronze or silver including wax carving, wax modeling, and the use of natural and synthetic materials as models. Models are cast using centrifugal and vacuum casting processes. Basic
mold making in clay and silicone are also explored. Prerequisite: ART 132 or permission of instructor.

METL 360. Holloware. 3 Credits. H
Problems related to specific smithing techniques such as raising, stretching, shell structures and seam fabrications. Metal manipulation on a large scale. Prerequisite: Six hours of metalsmitching or consent of the instructor.

METL 362. Metalsmithing. 3-6 Credits. H
Intermediate metalworking with an emphasis on the refinement of design and techniques. Processes may include soldering and fabrication, mechanisms, and surface embellishment. Prerequisite: Six hours of metalsmithing or consent of the instructor.

METL 363. Intermediate Jewelry. 3 Credits.
Lectures and demonstrations on traditional techniques of jewelry construction and embellishment, such as stone setting, chasing, repoussé, and die forming. Prerequisite: Six hours of metalsmithing or consent of the instructor.

METL 364. Enameling. 3-6 Credits.
Introduction to enameling as applied to jewelry design and metalsmithing objects. Exploration of major enameling techniques such as wet packing, cloisonné, champlévè, basse-taille, and limoges. Prerequisite: Six hours of metalsmithing or consent of instructor.

METL 500. Advanced Special Topics in Metalsmithing: ______. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

METL 503. Gemology. 3 Credits. H
Students study the optical and physical characteristics of gemstones in order to identify them using gemological instruments. This laboratory and discussion class explores related topics including the principles of optics that support this methodology, history and geographical distribution of gemstones, gemstone cutting and pearl farming, the history of DeBeers and the development of the world demand for diamond, quality analysis of diamond, colored gemstones and pearls, including the history of diamond grading, the development and identification of synthetics, imitations and laboratory enhancements as well as the use of gemstones in designing jewelry. Prerequisite: ART 132.

METL 504. A History of Jewelry. 3 Credits. H
This course explores the history from Sumeria to the 21st century of the use of metals and gemstones in the creation of decorative art for personal adornment. Students explore the evolution of the role of jewelry in ancient culture and modern society and survey individuals whose ideas and work influenced generations of goldsmiths and jewelers around the globe. The class studies primitive tools and modern manufacturing techniques, the history of gemstone cutting and setting and the origin and development of gemstones as symbols. Prerequisite: ART 132.

METL 505. Digital Jewelry Design I. 3 Credits. H
Matrix is a 3-D CAD program based on Rhino developed by Rhino, specifically for jewelry design. The goal of this course is to instruct beginners in the Matrix design program. Students learn to transform their 2-D designs from their sketchbooks into 3-D models in Matrix, which can be milled in wax, and cast in metal. Students also learn how to render their 3-D Matrix models to appear as if they were a finished object. The class time is structured as a combination of instructor-led tutorials and working labs. Prerequisite: ART 132.

METL 506. Digital Jewelry Design II. 3 Credits. H
The second semester of Matrix increases the operating and design skills building on the knowledge of DG I. The focus of the class is producing wax models on the Revo Digital Mill.Digi II covers the advanced modeling skills including T-spline and Rhino. Students also learn how to make a customized tool path for Revo C mill program and how to solve milling problems. Students also learn how to convert Rhino files to produce a 3D print for outsourcing to other 3D modeling programs. Prerequisite: ART 132, METL 301, METL 505.

METL 515. Advanced Metals I. 3-6 Credits. H
Development of individual direction in Metalsmithing/Jewelry based on experience, research and skills acquired in preceding courses. This course serves as a capstone experience. General BFA students, non-majors or minors may enroll in this course with consent of the instructor. Students who are off track in sequence may be eligible to enroll in this course with consent of the instructor. Prerequisite: METL 360, METL 362, METL 363 & METL 364 or consent of the Instructor.

METL 520. Advanced Metals II. 3-6 Credits.
Continuation of METL 515 with emphasis on individual design aesthetic through intensive designing, rendering, and model making that leads to a professional and unified body of Metalsmithing/Jewelry work. This course requires a final presentation of a complete portfolio including resume, renderings and photographs of the finished work. This is a capstone course. Prerequisite: METL 515.

METL 590. Internship in Metalsmithing/Jewelry. 1-3 Credits. U
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded according to the written recommendation provided by the internship supervisor to the faculty advisor. Grade on a satisfactory/unsatisfactory basis. Prerequisite: ART 102, and ART 103, and ART 104; and fifteen hours of Visual Art Courses; and permission of instructor.

METL 599. Individual Studies in Metalsmithing/Jewelry. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Metalsmithing/Jewelry courses, or permission of instructor.

METL 715. Metals/Jewelry. 2-6 Credits.
Individual research. Prerequisite: Graduate standing.

METL 815. Metals/Jewelry. 2-6 Credits.
Continuation of METL 715.

Courses

PNTG 263. Painting I. 3 Credits.
Basic problems in painting. Prerequisite: ART 102, and ART 103 or ART 104.

PNTG 300. Special Topics in Painting: ______. 3 Credits.
Course to be offered in area of studio activity of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; or permission of instructor.

PNTG 337. Watercolor. 3 Credits.
Sessions deal with the preparation of watercolor paints and equipment, but the main emphasis is placed on relational concepts affecting tone, structure, and unity in work. While the students are expected to explore some of the traditional approaches to watercolor, they also are encouraged to work with new and innovative ones. Prerequisite: ART 120 or permission of instructor.

PNTG 338. Landscape Painting. 3 Credits.
An introduction to landscape painting. Considerable work is done out-of-doors. Emphasis is placed upon experiencing the environment and the development of individual approach. May be repeated for credit. Prerequisite: PNTG 263 and permission of instructor.

PNTG 364. Painting II. 3 Credits.
Continuation of PNTG 263. Prerequisite: PNTG 263.

PNTG 368. Painting II, Honors. 3 Credits.
Continuation of PNTG 263. Prerequisite: PNTG 263; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PNTG 500. Advanced Special Topics in Painting: _____. 3 Credits.
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Painting courses, or permission of instructor.

PNTG 538. Advanced Landscape Painting. 3 Credits.
A continuation of art practice in landscape painting. Considerable work is done out-of-doors. Emphasis is placed upon experiencing the environment and the development of individual approach. May be repeated for credit. Prerequisite: PNTG 338.

PNTG 565. Painting III. 3 Credits.
Continuation of PNTG 364. Prerequisite: PNTG 364.

PNTG 566. Painting IV. 3 Credits.
Continuation of PNTG 565. May be repeated for credit. Prerequisite: PNTG 565.

PNTG 567. Painting III, Honors. 3 Credits.
Continuation of PNTG 364 or PNTG 368. Prerequisite: PNTG 364 or PNTG 368; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PNTG 569. Painting IV, Honors. 3 Credits.
Continuation of PNTG 565 or PNTG 568. Prerequisite: PNTG 565 or PNTG 568; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PNTG 599. Individual Studies in Painting. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Painting courses, or permission of instructor.

PNTG 667. Painting V. 3 Credits.
Continuation of PNTG 566. Prerequisite: PNTG 566.

PNTG 668. Painting VI. 3 Credits.
Continuation of PNTG 667. May be repeated for credit in subsequent semesters. Prerequisite: PNTG 667.

PNTG 869. Painting VII. 3 Credits.
Individual research in painting. Prerequisite: PNTG 668.

PNTG 970. Painting VIII. 3 Credits.
Continuation of PNTG 869. Prerequisite: PNTG 869.

Courses

PRNT 223. Intaglio I. 3 Credits.
Introduction to intaglio. Prerequisite: ART 102, and ART 103 or ART 104.

PRNT 233. Lithography I. 3 Credits.
Introduction to lithography. Prerequisite: ART 102, and ART 103 or ART 104.

PRNT 243. Serigraphy I. 3 Credits.
Introduction to serigraphy. Prerequisite: ART 102, and ART 103 or ART 104.

PRNT 300. Special Topics in Printmaking: _____. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART102, ART 103, and ART 104; or permission of instructor.

PRNT 324. Intaglio II. 3 Credits.
Continuation of PRNT 223. Prerequisite: PRNT 223, or permission of instructor.

PRNT 328. Intaglio II, Honors. 3 Credits.
Continuation of PRNT 223. Prerequisite: PRNT 223; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PRNT 334. Lithography II. 3 Credits.
Continuation of PRNT 233. Prerequisite: PRNT 233 or permission of instructor.

PRNT 338. Lithography II, Honors. 3 Credits.
Continuation of PRNT 233. Prerequisite: PRNT 233; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PRNT 344. Serigraphy II. 3 Credits.
Continuation of PRNT 243. Prerequisite: PRNT 243 or permission of instructor.

PRNT 349. Serigraphy II, Honors. 3 Credits.
Continuation of PRNT 243. Prerequisite: PRNT 243; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

PRNT 500. Advanced Special Topics in Printmaking: _____. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor.

PRNT 523. Printmaking III A (Intaglio). 3 Credits.
Prerequisite: PRNT 324 or permission of instructor.

PRNT 524. Printmaking III B (Lithography). 3 Credits.
Prerequisite: PRNT 334 or permission of instructor.

PRNT 525. Printmaking III C (Serigraphy). 3 Credits.
Prerequisite: PRNT 344 or permission of instructor.

PRNT 526. Printmaking IV A (Intaglio). 3 Credits.
Prerequisite: PRNT 523 or permission of instructor.

PRNT 527. Printmaking IV B (Lithography). 3 Credits.
Prerequisite: PRNT 524 or permission of instructor.

**PRNT 528. Printmaking IV C (Serigraphy). 3 Credits.**  
Prerequisite: PRNT 525 or permission of instructor.

**PRNT 599. Individual Studies in Printmaking. 1-6 Credits.**  
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours may apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Printmaking courses, or permission of instructor.

**PRNT 662. Printmaking V. 3 Credits.**  
Individual research in printmaking. Prerequisite: PRNT 526 or PRNT 527 or PRNT 528.

**PRNT 663. Printmaking VI. 3 Credits.**  
Continuation of PRNT 662. Prerequisite: PRNT 662.

**PRNT 802. Special Problems in Printmaking. 3 Credits.**  
Individual research in printmaking: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: PRNT 579 and permission of instructor.

**PRNT 827. Printmaking VII. 3 Credits.**  
Continuation of PRNT 663. Prerequisite: PRNT 663.

**PRNT 903. Special Problems in Printmaking. 3 Credits.**  
Individual research in printmaking: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: PRNT 802 and permission of instructor.

**PRNT 928. Printmaking VIII. 3 Credits.**  
Continuation of PRNT 827. Prerequisite: PRNT 827.

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**Courses**

**SCUL 253. Sculpture I. 3 Credits.**  
Introduction to sculpture. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor.

**SCUL 300. Special Topics in Sculpture: _____ 3 Credits.**  
Course to be offered in an area of studio activity of specific interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor.

**SCUL 330. Sculpture Intercepting the Waste Stream. 3 Credits.**  
An introductory course using engaged learning to exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as EVRN 362.) Prerequisite: Visual Art major or minor, or instructor permission.

**SCUL 355. Sculpture III, Honors. 3 Credits.**  
Continuation of SCUL 354. Prerequisite: SCUL 354 or SCUL 358; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

**SCUL 356. Public Art. 3 Credits.**  
Students in this class investigate the nature of contemporary public art as well as creating their own artworks. Public Art covers a wide spectrum of art making from interventions, to street art, to murals and on to monumental sculpture. This class also covers how to present for commissions, budgeting, and legal liability. Previous work created in this class has won national awards. Prerequisite: Visual Art major or minor, or instructor permission.

**SCUL 358. Sculpture II, Honors. 3 Credits.**  
Continuation of SCUL 253. Prerequisite: SCUL 253; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

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**SCUL 360. Build Smart. 3 Credits.**  
An introductory woodworking course that emphasizes planning, fabricating, and assembly techniques. Material handling and best practice building methods are introduced and reinforced through a series of individual woodworking projects that expose the student to the properties of wood, as well as, hand and machine woodworking tools. Significant out of class work required. Prerequisite: Visual Art major or minor, or instructor permission.

**SCUL 362. Art and Ecology: Inhabiting the Ecosphere. 3 Credits.**  
An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as EVRN 362.) Prerequisite: Visual Art major or minor, or instructor permission.

**SCUL 500. Advanced Special Topics in Sculpture: _____ 3 Credits.**  
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Sculpture courses, or permission of instructor.

**SCUL 549. Metal and Glass Casting. 3 Credits.**  
A course in foundry techniques as related to sculpture. Both traditional and experimental procedures for casting bronze, aluminum, and iron sculpture are explored. May be repeated for credit. This course is taught at the 300 and 500 levels, with additional assignments at the 500-level. Prerequisite: SCUL 253.

**SCUL 556. Sculpture IV. 3 Credits.**  
Continuation of SCUL 355. May be repeated for credit. Prerequisite: SCUL 355.

**SCUL 558. Sculpture IV, Honors. 3 Credits.**  
Continuation of SCUL 355 or SCUL 359. May be repeated for credit. Prerequisite: SCUL 355 or SCUL 359; membership in the University Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.
Honors Program or 3.25 minimum cumulative grade-point average; and permission of the department.

SCUL 599. Individual Studies in Sculpture. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Sculpture courses, or permission of instructor.

SCUL 630. Sculpture Intercepting the Waste Stream. 3 Credits. N
An introductory course using engaged learning to exploring the genre of ecological art practice (eco-art.) Class focuses on the waste stream particularly as it affects the Kansas River. Through remediation events, students build works of art from trash, in turn auctioned for environmental efforts. Creative attention is focused on ecological imbalance. (Same as EVRN 630.) Prerequisite: Graduate standing or permission of instructor.

SCUL 653. The Figure 3D: Modeling and Molding. 3 Credits. H
Sculpting a figure is radically different form drawing one! Students will develop a more comprehensive understanding of the human form while creating art addressing contemporary aesthetic concerns. Prerequisite: Graduate standing or permission of instructor.

SCUL 656. Public Art. 3 Credits. H
Students in this class investigate the nature of contemporary public art as well as creating their own artworks. Public Art covers a wide spectrum of art making from interventions, to street art, to murals and on to monumental sculpture. This class also covers how to present for commissions, budgeting, and legal liability. Previous work created in this class has won national awards. Prerequisite: Graduate standing or permission of instructor.

SCUL 657. Sculpture V. 3 Credits.
Continuation of SCUL 556. Prerequisite: SCUL 556.

SCUL 658. Sculpture VI. 3 Credits.
Continuation of SCUL 657. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 657.

SCUL 660. Build Smart. 3 Credits. H
This course is an introductory woodworking course that emphasizes planning, fabricating, and assembly techniques. Material handling and best practice building methods are introduced and reinforced through a series of individual woodworking projects that expose the student to the properties of wood, as well as, hand and machine woodworking tools. Significant out of class work required. Non Visual Art students require permission number from Department. Prerequisite: Graduate standing or permission of instructor.

SCUL 662. Art and Ecology: Inhabiting the Ecosphere. 3 Credits. N
An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as EVRN 662.) Prerequisite: Graduate standing or permission of instructor.

SCUL 804. Special Problems in Sculpture. 3 Credits.
Individual research in sculpture: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 559 and permission of instructor.

SCUL 859. Sculpture VII. 3 Credits.
Individual research in sculpture. Prerequisite: SCUL 658.

SCUL 905. Special Problems in Sculpture. 3 Credits.
Individual research in sculpture: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 804 and permission of instructor.

SCUL 960. Sculpture VIII. 3 Credits.
Continuation of SCUL 859. Prerequisite: SCUL 859.

Courses

TD 300. Special Topics in Textiles/Fibers: _____. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor.

TD 313. Fiber Forms. 3 Credits.
Studio exploration of fibers as an art form. Techniques include feltmaking, papermaking, basketry, and dyeing. Prerequisite: ART 101, and ART 133.

TD 314. Introduction to Weaving. 3 Credits. U
Application of art and design principles to four-harness loom structures. Emphasis on the use of color and texture in loom controlled and weaver controlled techniques. Prerequisite: ART 101, and ART 133.

TD 315. Textile Handprinting and Resist Processes. 3 Credits. U
Fundamentals of resist and dye techniques on textiles: batik, tie-dye, discharge, and direct application. Prerequisite: ART 101, and ART 133.

TD 316. Screenprinting Textiles. 3 Credits.
Design problems in textile printing with emphasis on screenprinting and photo techniques. Prerequisite: ART 101, and ART 133.

TD 401. Weave Structures. 3 Credits. U
Continuation of TD 314. Research and analysis of multiple-harness weave structures. Weave drafts. Design problems to develop the use of color, form, and surface in simple and compound weaves. Prerequisite: TD 314.

TD 402. Techniques in Weaving. 3 Credits. U
Development of individual art and design concepts in relation to woven structures and/or forms. Emphasis on weaver-controlled techniques used to create images and composition. Prerequisite: TD 314.

TD 403. Intermediate Textile Printing. 3 Credits.
Individual problems in textile printing and dyeing processes. Prerequisite: TD 316.

TD 404. Surface Design. 3 Credits.
Textile pattern design for art and/or industry. Prerequisite: Twelve hours in Visual Art or Design, or permission of the instructor.

TD 500. Advanced Special Topics in Textiles/Fibers: _____. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Textiles/Fibers courses, or permission of instructor.

TD 504. Surface Design. 3 Credits.
Textile pattern design for art and/or industry. Prerequisite: Twelve hours in Visual Art or Design, or permission of the instructor.

TD 506. Advanced Fiber Forms. 1-6 Credits. U
Directed study of three-dimensional and off-loom methods and techniques. May be repeated for credit. Prerequisite: TD 313.

TD 514. Advanced Techniques in Weaving. 1-6 Credits. U

TD 530. Introduction to Textiles. 3 Credits.
An introductory course to developing an understanding of the history, techniques, and cultural contexts of textiles and fibers. Prerequisite: Twelve hours in Visual Art or Design, or permission of the instructor.

TD 531. Intermediate Textile Design. 3 Credits.
Development of personal design concepts in textile arts. Emphasis on application of art and design principles to textile structures. Prerequisite: TD 530.

TD 532. Advanced Techniques in Textiles. 3 Credits.
An advanced design course emphasizing development of personal design concepts in textile arts. Emphasis on application of art and design principles to textile structures, and creative development of textile design in relation to industrial design and fashion. Prerequisite: TD 531.

TD 533. Special Topics in Textiles. 1-6 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. May be repeated for credit. Prerequisite: Twelve hours in Visual Art or Design, or permission of the instructor.

TD 552. History of Textiles, Lecture. 3 Credits.
Study of historical textiles, their design development, and the techniques employed. Prerequisite: Junior standing in department or permission of instructor.

TD 554. History of Textiles, Seminar. 3 Credits.
Study of historical textiles, their design development, and the techniques employed. Prerequisite: Junior standing in department or permission of instructor.

TD 656. Public Art. 3 Credits. H
Students in this class investigate the nature of contemporary public art as well as creating their own artworks. Public Art covers a wide spectrum of art making from interventions, to street art, to murals and on to monumental sculpture. This class also covers how to present for commissions, budgeting, and legal liability. Previous work created in this class has won national awards. Prerequisite: Graduate standing or permission of instructor.

TD 657. Sculpture V. 3 Credits.
Continuation of SCUL 556. Prerequisite: SCUL 556.

TD 658. Sculpture VI. 3 Credits.
Continuation of SCUL 657. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 657.

TD 660. Build Smart. 3 Credits. H
This course is an introductory woodworking course that emphasizes planning, fabricating, and assembly techniques. Material handling and best practice building methods are introduced and reinforced through a series of individual woodworking projects that expose the student to the properties of wood, as well as, hand and machine woodworking tools. Significant out of class work required. Non Visual Art students require permission number from Department. Prerequisite: Graduate standing or permission of instructor.

TD 662. Art and Ecology: Inhabiting the Ecosphere. 3 Credits. N
An introductory course exploring the genre of ecological art practice (eco-art) through a series of engaged learning projects that focus on habitat, the waste stream and natural resources, local ecologies and interventionist creative strategies that focus attention on ecological imbalance. (Same as EVRN 662.) Prerequisite: Graduate standing or permission of instructor.

TD 804. Special Problems in Sculpture. 3 Credits.
Individual research in sculpture: course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters. Prerequisite: SCUL 559 and permission of instructor.

TD 859. Sculpture VII. 3 Credits.
Individual research in sculpture. Prerequisite: SCUL 658.
Directed study of advanced loom-controlled and weaver-controlled methods. May be repeated for credit. Prerequisite: TD 401 or TD 402, or permission of instructor.

TD 515. Advanced Textiles/Fibers I. 3-6 Credits.
Development of individual direction in textiles based on experience, research, and skills acquired in preceding courses; capstone experience. Prerequisite: Twenty-four credits in Textiles/Fibers and consent of instructor.

TD 520. Advanced Textiles/Fibers II. 3-6 Credits.
Continuation of TD 515, capstone experience. Prerequisite: TD 515.

TD 590. Internship in Textiles/Fibers. 1-3 Credits. U
Practical experience in the use of artistic skills in approved and supervised academic or professional settings. May be repeated for credit; no more than six hours may be applied to the B.A. or B.F.A. degree. Credit hours are graded according to the written recommendation provided by the internship supervisor to the faculty advisor. Graded on a satisfactory/unsatisfactory basis. Prerequisite: ART 102, ART 103, and ART 104; and fifteen hours of Visual Art courses.

TD 599. Individual Studies in Textiles/Fibers. 1-6 Credits. U
Individual studio activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: ART 102, ART 103, and ART 104; and twelve hours of Textiles/Fibers courses, or permission of instructor.

TD 715. Textile Design in Weaving, Printing, and Dyeing. 2-6 Credits.
Individual research. Prerequisite: Graduate standing.

TD 815. Textile Design in Weaving, Printing, and Dyeing. 2-6 Credits.
Continuation of TD 715.

Courses

VAE 300. Special Topics in Visual Art Education: ___. 3 Credits. U
Course to be offered in an area of special interest to individual faculty and qualified students. (This course is not regularly offered. The current Schedule of Classes should be consulted.) May be repeated for credit. Prerequisite: ART 102, ART 103, and ART 104, or permission of instructor.

VAE 320. Instruction and Curriculum I. 3 Credits.
This methods course provides an overview of the professional practices of K-12 art educators. Course content deals with the art education program, K-12, in relationship to the rest of the curriculum. This encompasses goals, objective sequence, courses offered at various levels, finance, staffing and administration. Prerequisite: Junior standing or consent of the instructor.

VAE 341. Instructional Strategies in Art for Elementary Classroom Teachers. 2 Credits.
Child growth and development in art. Materials as they relate to a sequential art education curriculum in the elementary school. Prerequisite: Admission to the School of Education or the education division of the graduate school.

VAE 395. Community Collaborations in Art Education. 3 Credits. U
A focused examination of existing community organizations, models, and resources alongside collaborative strategies for working with these entities to achieve common goals for art education. Students in this class will learn of collaborative community models, explore entrepreneurial and other educational initiatives that contribute to the general purpose of art education, and recognize the role of families and other community members in contributing to the arts.

VAE 410. Instruction and Curriculum II. 3 Credits.
This methods course provides an overview of the professional practices of K-12 art educators. Course content deals with the art education program, K-12, in relationship to the rest of the curriculum. This encompasses goals, objective sequence, courses offered at various levels, finance, staffing and administration. Prerequisite: Junior standing or consent of the instructor.

VAE 420. Artistic Media and Processes in Art Education. 3 Credits.
Building on course content in VAE 320, this course concentrates on instructional strategies and presentation models in art education. Students examine and explore the media appropriate to teaching art in various settings and levels as well as how art program budgets are derived and impact overall curriculum development. Prerequisite: VAE 320 or permission of instructor.

VAE 497. Independent Study. 1-3 Credits.
Only one enrollment permitted each semester; a maximum of four hours will apply toward the bachelor's degree. Prerequisite: Recommendation of advisor and consent of instructor.

VAE 500. Student Teaching. 9 Credits.
A supervised teaching experience in an approved school setting, with level and subject area to be selected according to the teaching field. Individual activity; capstone experience. Course content to be determined by the student under supervision of a faculty member. May be repeated for credit in subsequent semesters; a maximum of nine hours can apply toward the bachelor's degree. Prerequisite: Admission to the student teaching program; and ART 102, ART 103, and ART 104; and twelve hours of Visual Art Education courses, or permission of instructor.

VAE 520. Instructional Technology in Art Education. 3 Credits.
This course addresses technology that is pertinent to professional art educators. Students use technology to develop a professional portfolio and technology-related resources for teaching art in PreK-12 schools and community settings.

VAE 596. Practicum in Teaching Art. 2 Credits.
A supervised art teaching practicum in which students will learn to employ different teaching strategies with children pre-school through high school in the school or museum setting. Prerequisite: VAE 320, VAE 410, VAE 795 or consent of instructor.

VAE 598. Special Course: ____. 1-5 Credits.
A special course of study to meet current needs of education students; primarily for undergraduates.

VAE 599. Community Based Project in Art Education. 1-6 Credits. U
Individual activity and project that serves as an alternate capstone experience to VAE 500 (Student Teaching). Will involve the development of an independent, community-based arts education project developed by the student under the supervision of a VAE faculty member. Prerequisite: Forty credits of Visual Art, fifteen credits of Visual Art Education Courses, and permission of the instructor.

VAE 680. Internship in Teaching Art. 5-16 Credits.
A supervised internship experience leading to initial art teacher certification. The student assumes the total professional role as a teacher of art in an approved school setting.
VAE 800. Visual Art Education Curriculum Development. 1-3 Credits.
A study of research, resources, and media as they relate to learning goals in a sequential art curriculum for use by teachers. The amount of credit reflects the extent of the curriculum being developed and the amount of work involved in the development process.

VAE 890. Preparation for the M.A. Examination. 1 Credits.
An independent reading course in preparation for the M.A. Examination. The grade will be an S or U, as determined by the performance on the examination. The examination will be evaluated separately. Prerequisite: Permission of the instructor.

VAE 897. Independent Study. 1-4 Credits.
Prerequisite: Consent of advisor and instructor.

VAE 898. Master’s Project. 1-4 Credits.

VAE 899. Master’s Thesis. 1-6 Credits.

Bachelor of Fine Arts in Visual Art

Bachelor of Fine Arts in Visual Art

The Bachelor of Fine Arts in Visual Art is a four-year, 120 credit hour degree program. The first year is spent in foundations courses where students focus on the development of their creative and technical skills. After the foundation year, students can select to concentrate in several degree emphasis areas.

B.F.A. General (encompasses Drawing, Painting, Printmaking, Sculpture, and Expanded Media)

B.F.A. Ceramics

B.F.A. Metalsmithing/Jewelry

B.F.A. Textiles/Fibers

The intent is for students to explore a variety of mediums in order to determine how they would like to focus their advanced studies. In addition, fundamental concepts and strategies of artmaking are reinforced, even as new techniques and approaches from various disciplines are introduced.

In addition to completing the on-line application to KU Admissions, prospective students must submit a portfolio and responses to three essay questions to the Department of Visual Art in order to complete the application process and be for admission to the major in Visual Art.

First-Year Preparation

The first year foundations courses for the B.F.A., B.A., and B.A.E. degree include 13 hours of foundations studio, 6 hours of English, and 6 hours of Art History coursework.

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<thead>
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<tr>
<td>ART 101</td>
<td>Drawing I</td>
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<td>ART 102</td>
<td>Drawing II</td>
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<td>ART 103</td>
<td>Art Concepts and Practice</td>
<td>3</td>
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<td>ART 104</td>
<td>Art Principles and Practice</td>
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<td>ART 105</td>
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<td>ENGL 101</td>
<td>Composition</td>
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<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
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<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
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<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
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Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credit.transfer.ku.edu/) website.

Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Bachelor of Fine Arts in Visual Art Degree Requirements

The Department of Visual Art offers the B.F.A. in Visual Art, including the areas of Ceramics, Drawing, Expanded Media, Metalsmithing/Jewelry, Painting, Printmaking, Sculpture, and Textiles/Fibers. A total of 120 hours is required for the degree, including 45 junior/senior hours (courses numbered 300 or higher). 30 of these 45 junior/senior hours must be taken in residence at the University of Kansas. In addition to the 13-hour foundations requirement, a minimum of 48 hours in departmental courses is required, including 2 semesters of Senior Seminar.

The Department of Visual Art reserves the right to retain examples of student work and to use images of student work on internet websites and for university publication purposes.

B.F.A. Major Requirements

General Option

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<tr>
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<td>General Education Requirements</td>
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<td>Completion of KU Core Requirements (see KU Core)</td>
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<td>BFA-specific requirements</td>
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<td>Writing Requirement - ENGL101 and ENGL 102, or placement in and completion of ENGL 102/105 and an additional Goal 2, Outcome 1 course</td>
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<td>Foundations Studies</td>
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ART 101  Drawing I  3
  or BDS 103  Drawing for Design
ART 101 is a required course, BDS 103 accepted only for students transferring into the department
ART 102  Drawing II  3
ART 103  Art Concepts and Practice  3
  or BDS 101  Design Thinking and Making
ART 103 is a required course, BDS 101 only accepted for students transferring into the department
ART 104  Art Principles and Practice  3
  or BDS 102  Design Thinking and Making II
ART 104 is a required course, BDS 102 only accepted for students transferring into the department
ART 105  Visual Art Seminar  1

History of Art

HA 150  History of Western Art: Ancient Through Medieval Fall Only  3
  or HA 100  Introduction to Western Art History
HA 150 is a required course, HA 100 only accepted for students transferring into the department
HA 151  History of Western Art: Renaissance to Contemporary Spring Only  3

Non-Western History of Art  3

BFA General students must choose one of the following courses covering Art History from 1900-1945:

HA 340/540  Special Study in Asian Art Before 1900: ______
HA 344/544  Manga: Histories and Theories
HA 347/547  Ceramics of East Asia
HA 353/569  Modern and Contemporary African Art
HA 354/554  Japanese Prints
HA 361/571  Buddhist Art of Korea
HA 362/562  Ceramics of Korea
HA 363  Modern Korean Art and Culture
HA 367  Art and Culture of Japan
HA 368  Art and Culture of China
  or HA 468  Art and Culture of China, Honors
HA 377/677  African Design
HA 385/585  The Art of Buddhism
HA 388/588  Modern and Contemporary Visual Arts of Japan
HA 390/590  Special Study in African Art: ______
HA 391/591  Special Study in Asian Art: ______
HA 488  Chinese Painting, Honors
HA 545  Early Chinese Art
HA 546  Chinese Sculpture
HA 549  Chinese Painting
HA 586  Japanese Painting
HA 587  Japanese Sculpture

Art History 1900-1945  3

BFA General students must choose one of the following courses covering Art History from 1900-1945:

HA 343/543  Special Study in 20th/21st-Century Art: ______
HA 353/569  Modern and Contemporary African Art
HA 397/597  Special Study in Modern Art: ______
HA 566  Art From 1945 to the 1980s: Modernism to Post-Modernism
HA 567  Contemporary Art

Electives
  • Additional credit hours of general electives are needed to meet the minimum total hours required for graduation.

Major Requirements - General Option

The general option requires 48 major hours, including a minimum of 15 junior/senior hours in the major, a minimum of 15 major hours in residence, and a minimum 2.0 KU junior/senior grade-point average in the major.

Code Title Hours
Visual Art Core Courses  15

Select one course in 5 of the following areas:

Select one course in 5 of the following areas:

Painting

  ART 120  Fundamentals of Painting
  or any PNTG course

Printmaking

  ART 121  Fundamentals of Printmaking
  or any PRNT course

Sculpture

  ART 122  Fundamentals of Sculpture
  or any SCUL course

Expanded Media

  ART 123  Fundamentals of Expanded Media
  or any EXM course

Ceramics

  ART 131  Fundamentals of Ceramics
  or any CER course

Metalsmithing / Jewelry

  ART 132  Fundamentals of Metalsmithing/Jewelry
 Bachelor of Fine Arts in Visual Art

or any METL course
Textiles / Fibers
ART 133 Fundamentals of Fibers

Visual Art Studies (required)
3 additional DRWG credits required. Select one of the following drawing courses.
DRWG 203 Drawing III
or DRWG 211 Life Drawing I
or DRWG 3C Special Topics in Drawing: 

or any DRWG course beyond ART 102

Visual Art Required Electives
Satisfied by 12 hours selected from the Visual Art Department (ART, EXM, METL, PNTG, PRNT, SCUL, TD, VAE)

Studio Electives
Satisfied by 9 hours selected from Visual Art or Design courses

Senior Studio Requirements
Prerequisite: 30 hours of studio art courses.
ART 540 Professional Activities Seminar (this course is recommended in the third year)
ART 650 Senior Seminar I
ART 660 Senior Seminar II

Ceramics Option

<table>
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<td>History of Western Art: Ancient Through Medieval Fall Only</td>
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<tr>
<td>or HA 100</td>
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<td>HA 150</td>
<td>History of Western Art: Renaissance to Contemporary Spring Only</td>
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Non-Western History of Art

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<td>HA 340/540</td>
<td>Special Study in Asian Art Before 1900:</td>
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<tr>
<td>HA 344/544</td>
<td>Manga: Histories and Theories</td>
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<tr>
<td>HA 347/547</td>
<td>Ceramics of East Asia</td>
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</tr>
<tr>
<td>HA 353/569</td>
<td>Modern and Contemporary African Art</td>
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<tr>
<td>HA 354/554</td>
<td>Japanese Prints</td>
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<tr>
<td>HA 361/561</td>
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<td>HA 368</td>
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<tr>
<td>or HA 468</td>
<td>Art and Culture of China, Honors</td>
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<tr>
<td>HA 377/677</td>
<td>African Design</td>
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<tr>
<td>HA 385/585</td>
<td>The Art of Buddhism</td>
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<tr>
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<td>Modern and Contemporary Visual Arts of Japan</td>
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<tr>
<td>HA 391/591</td>
<td>Special Study in Asian Art:</td>
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<td>HA 488</td>
<td>Chinese Painting, Honors</td>
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<tr>
<td>HA 536</td>
<td>Islamic Art and Architecture in Africa</td>
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<td>HA 545</td>
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<tr>
<td>CER 510</td>
<td>History of Ceramics</td>
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</table>

Art History Elective (Upper Level) Select any 300+ level HA course

Electives Additional credit hours of general electives are needed to meet the minimum total hours required for graduation.

Major Requirements - Ceramics Option

The ceramics option requires 48 major hours, including a minimum of 24 junior/senior hours in the major, a minimum of 15 major hours in residence, and a minimum 2.0 KU junior/senior grade-point average in the major.

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<tr>
<td>ART 131</td>
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<td>CER 301</td>
<td>Concepts and Methods: Wheel Throwing</td>
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<td>CER 302</td>
<td>Concepts &amp; Methods: Hand Building</td>
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<td>CER 402</td>
<td>Mold Making and Slip Casting</td>
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<td>CER 403</td>
<td>Advanced Topics in Ceramics</td>
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<tr>
<td>CER 504</td>
<td>Kilns</td>
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<tr>
<td>CER 505</td>
<td>Clay and Glaze Formulation</td>
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<td>CER 515</td>
<td>Advanced Ceramics I</td>
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<td>CER 520</td>
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Studio Electives
Studio Elective in Visual Art or Design

Senior Studio Requirements
ART 540 Professional Activities Seminar

3
### Metallsmithing/Jewelry Option

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### Textiles/Fibers Option

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<tr>
<td>or BDS 101</td>
<td>Design Thinking and Making</td>
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</table>
ART 103 is a required course, BDS 101 is only accepted for students transferring into the department.

ART 104 is a required course, BDS 102 is only accepted for students transferring into the department.

ART 105 is a required course, BDS 102 is only accepted for students transferring into the department.

ART 104 is a required course, BDS 102 is only accepted for students transferring into the department.

ART 105 is a required course, BDS 102 is only accepted for students transferring into the department.

ART 101 is a required course, BDS 101 is only accepted for students transferring into the department.

ART 102 is a required course, BDS 101 is only accepted for students transferring into the department.

ART 103 is a required course, BDS 101 is only accepted for students transferring into the department.

History of Art

HA 150 History of Western Art: Ancient Through Medieval Fall Only 3
or HA 100 Introduction to Western Art History

HA 151 History of Western Art: Renaissance to Contemporary Spring Only 3

Non-Western History of Art

HA 166 The Visual Arts of East Asia 3
HA 340/540 Special Study in Asian Art Before 1900: _______ 3
HA 344/544 Manga: Histories and Theories 3
HA 347/547 Ceramics of East Asia 3
HA 353/569 Modern and Contemporary African Art 3
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HA 363 Modern Korean Art and Culture 3
HA 364/566 Art and Culture of China 3
or HA 468 Art and Culture of China, Honors 3
HA 377/677 African Design 3
HA 385/585 The Art of Buddhism 3
HA 388/588 Modern and Contemporary Visual Arts of Japan 3
HA 390/590 Special Study in African Art: _______ 3
HA 391/591 Special Study in Asian Art: _______ 3
HA 488 Chinese Painting, Honors 3
HA 536 Islamic Art and Architecture in Africa 3
HA 545 Early Chinese Art 3
HA 546 Chinese Sculpture 3
HA 549 Chinese Painting 3
HA 586 Japanese Painting 3
HA 587 Japanese Sculpture 3

Art History Elective (Upper Level) 3
Select from any 300+ HA course

TD 504 History of Textiles, Lecture 3

Major Requirements - Textiles/Fibers Option

The textiles/fibers option requires 48 major hours, including a minimum of 30 junior/senior hours in the major, a minimum of 15 major hours in residence, and a minimum 2.0 KU junior/senior grade-point average in the major.

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<td>TD 314</td>
<td>Introduction to Weaving</td>
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<td>TD 315</td>
<td>Textile Handprinting and Resist Processes</td>
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<td>TD 316</td>
<td>Screenprinting Textiles</td>
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<td>TD 520</td>
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Studio Electives

any Visual Art, Design, or applicable studio courses 12

Senior Studio Requirements

ART 540 Professional Activities Seminar 3
ART 650 Senior Seminar I 3
ART 660 Senior Seminar II 3

Below is a sample 4-year plan for students pursuing the BFA in Visual Art (General Option). To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website. (http://kucore.ku.edu/courses/)

Freshman

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<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BFA Writing I)</td>
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<td>First Year Seminar Goal 1.1 Critical Thinking</td>
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<td>Goal 2.2 Communication</td>
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<td>ART 101 (Goal 3 Arts and Humanities, Major Requirement)</td>
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<td>ART 102 (Major Requirement)</td>
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<td>ART 103 (Major Requirement FALL ONLY)</td>
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<td>ART 104 (Major Requirement SPRING ONLY)</td>
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<td>HA 151 (Major Requirement)</td>
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<tr>
<td>HA 150 (Goal 4.2 Global Awareness, Major Requirement)</td>
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Sophomore

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<td>Goal 3 Social Science</td>
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<td>Goal 3 Natural Science</td>
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<td>HA 1900-1945 Course (Major Requirement)</td>
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<td>HA Non-Western Art Elective (Major Requirement)</td>
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<td>Visual Art Core Course (Major Requirement)</td>
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Bachelor of Fine Arts in History of Art

The Bachelor of Fine Arts in History of Art

The BFA in History of Art is a four-year, 120 credit hour degree program combining a 30-hour concentration in the history of art with 30 hours of studio art training to serve students interested in both the history and the making of art.

History of Art B.F.A. majors learn how to investigate and analyze the aesthetic characteristics, meaning, and function of works of art, and to place works in historical, cultural, and stylistic contexts. Students gain a general knowledge of the monuments and principal artists of all major periods of the past, with an emphasis on the art of the 20th- and 21st-centuries and gain a sophisticated understanding of what can be learned about different cultures and time periods through the study of art.

First-Year Preparation

The first year foundations courses for the B.F.A., B.A., and B.A.E. degree include 13 hours of foundations studio, 6 hours of English, and 6 hours of Art History coursework.

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<thead>
<tr>
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English

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<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

History of Art

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td>3</td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
</tr>
</tbody>
</table>

Undergraduate Admission

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

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Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Bachelor of Fine Arts in History of Art

Degree Requirements

A major in the history of art is available to candidates for the B.F.A. degree. This major combines a 30-hour concentration in art history with 17 hours of studio training (beyond the 13 hours of foundation courses). A total of 120 hours is required for the degree, including 45 junior/senior hours (courses numbered 300 or higher). 30 of these 45 junior/senior hours must be taken in residence at the University of Kansas. The B.A. and B.G.S. degrees are offered by the College of Liberal Arts and Sciences.

Requirements for the B.F.A. Degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
</tr>
<tr>
<td>or HA 160</td>
<td>History of Western Art: Ancient Through Medieval, Honors</td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
</tr>
<tr>
<td>or HA 161</td>
<td>History of Western Art: Renaissance to Contemporary, Honors</td>
</tr>
<tr>
<td>HA 166</td>
<td>The Visual Arts of East Asia</td>
</tr>
</tbody>
</table>

Breadth Courses: Six courses total; a course or topic may fulfill only one requirement, either for geographical or chronological breadth.

2. Breadth Courses, Geographical Regions: complete one course in three out of four geographical regions.

A. Americas, Africa, Middle East

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 353/569</td>
<td>Modern and Contemporary African Art</td>
</tr>
<tr>
<td>HA 370/570</td>
<td>American Art</td>
</tr>
<tr>
<td>HA 377/677</td>
<td>African Design</td>
</tr>
<tr>
<td>HA 390/590</td>
<td>Special Study in African Art: _____</td>
</tr>
<tr>
<td>HA 396</td>
<td>Special Study in American Art: _____</td>
</tr>
</tbody>
</table>

B. Europe

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 311</td>
<td>The Art and Architecture of the British Isles</td>
</tr>
<tr>
<td>HA 322</td>
<td>European Architecture 300-1300</td>
</tr>
<tr>
<td>HA 325/525</td>
<td>Aegean Archaeology and Art</td>
</tr>
<tr>
<td>HA 326/526</td>
<td>Greek Archaeology and Art</td>
</tr>
<tr>
<td>HA 327/537</td>
<td>Roman Archaeology and Art</td>
</tr>
<tr>
<td>HA 330</td>
<td>Italian Renaissance Art</td>
</tr>
<tr>
<td>HA 331</td>
<td>Northern European Art from Van Eyck to Brueghel</td>
</tr>
<tr>
<td>HA 335/535</td>
<td>Renaissance Architecture in Italy</td>
</tr>
</tbody>
</table>

C. East Asia

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 340/540</td>
<td>Special Study in Asian Art Before 1900: _____</td>
</tr>
<tr>
<td>HA 344/544</td>
<td>Manga: Histories and Theories</td>
</tr>
<tr>
<td>HA 347/547</td>
<td>Ceramics of East Asia</td>
</tr>
<tr>
<td>HA 354/554</td>
<td>Japanese Prints</td>
</tr>
<tr>
<td>HA 361/561</td>
<td>Buddhist Art of Korea</td>
</tr>
<tr>
<td>HA 362/562</td>
<td>Ceramics of Korea</td>
</tr>
<tr>
<td>HA 363</td>
<td>Modern Korean Art and Culture</td>
</tr>
<tr>
<td>HA 367</td>
<td>Art and Culture of Japan</td>
</tr>
<tr>
<td>HA 368</td>
<td>Art and Culture of China, Honors</td>
</tr>
<tr>
<td>HA 385/585</td>
<td>The Art of Buddhism</td>
</tr>
<tr>
<td>HA 388/588</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
</tr>
<tr>
<td>HA 391/591</td>
<td>Special Study in Asian Art: _____</td>
</tr>
<tr>
<td>HA 488</td>
<td>Chinese Painting, Honors</td>
</tr>
<tr>
<td>HA 545</td>
<td>Early Chinese Art</td>
</tr>
<tr>
<td>HA 546</td>
<td>Chinese Sculpture</td>
</tr>
<tr>
<td>HA 549</td>
<td>Chinese Painting</td>
</tr>
<tr>
<td>HA 586</td>
<td>Japanese Painting</td>
</tr>
<tr>
<td>HA 587</td>
<td>Japanese Sculpture</td>
</tr>
</tbody>
</table>

D. Cross-regional

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 371/571</td>
<td>Modern Sculpture</td>
</tr>
<tr>
<td>HA 380/580</td>
<td>History of Photography</td>
</tr>
<tr>
<td>HA 566</td>
<td>Art From 1945 to the 1980s: Modernism to Post-Modernism</td>
</tr>
<tr>
<td>HA 567</td>
<td>Contemporary Art</td>
</tr>
</tbody>
</table>

3. Breadth Courses, Chronological Periods: complete one course in three out of four chronological periods.

A. Pre-1400

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 322</td>
<td>European Architecture 300-1300</td>
</tr>
<tr>
<td>HA 325/525</td>
<td>Aegean Archaeology and Art</td>
</tr>
<tr>
<td>HA 326/526</td>
<td>Greek Archaeology and Art</td>
</tr>
<tr>
<td>HA 327/537</td>
<td>Roman Archaeology and Art</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>HA 361/561</td>
<td>Buddhist Art of Korea</td>
</tr>
<tr>
<td>HA 392/592</td>
<td>Special Study in Ancient Art: _______</td>
</tr>
<tr>
<td>HA 393/593</td>
<td>Special Study in Medieval Art: _______</td>
</tr>
<tr>
<td>HA 506</td>
<td>Early Medieval and Romanesque Art</td>
</tr>
<tr>
<td>HA 507</td>
<td>Gothic Art</td>
</tr>
<tr>
<td>HA 510</td>
<td>Medieval Manuscripts and Early Printed Books</td>
</tr>
<tr>
<td>HA 527</td>
<td>Late Medieval Art in Italy</td>
</tr>
<tr>
<td>HA 529</td>
<td>Archaeology and Art of the Ancient Near East</td>
</tr>
<tr>
<td>HA 538</td>
<td>Pompeii and Herculanenum</td>
</tr>
<tr>
<td>HA 545</td>
<td>Early Chinese Art</td>
</tr>
<tr>
<td>HA 330</td>
<td>Italian Renaissance Art</td>
</tr>
<tr>
<td>HA 331</td>
<td>Northern European Art from Van Eyck to Brueghel</td>
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<td>HA 335/535</td>
<td>Renaissance Architecture in Italy</td>
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<td>Ceramics of East Asia</td>
</tr>
<tr>
<td>HA 354/554</td>
<td>Japanese Prints</td>
</tr>
<tr>
<td>HA 372</td>
<td>Baroque Art in Europe</td>
</tr>
<tr>
<td>HA 376/576</td>
<td>Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque</td>
</tr>
<tr>
<td>HA 394/594</td>
<td>Special Study in Renaissance Art: _______</td>
</tr>
<tr>
<td>HA 395/595</td>
<td>Special Study in Baroque Art: _______</td>
</tr>
<tr>
<td>HA 512</td>
<td>Humanism and Reform: 16th Century Northern European Art</td>
</tr>
<tr>
<td>HA 533</td>
<td>Rococo to Realism: Painting in Europe c. 1750-1848</td>
</tr>
<tr>
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</tr>
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</tr>
<tr>
<td>HA 533</td>
<td>Rococo to Realism: Painting in Europe c. 1750-1848</td>
</tr>
</tbody>
</table>

### B. 1400-1850

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 330</td>
<td>Italian Renaissance Art</td>
</tr>
<tr>
<td>HA 331</td>
<td>Northern European Art from Van Eyck to Brueghel</td>
</tr>
<tr>
<td>HA 335/535</td>
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<td>HA 394/594</td>
<td>Special Study in Renaissance Art: _______</td>
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</tr>
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<td>Humanism and Reform: 16th Century Northern European Art</td>
</tr>
<tr>
<td>HA 533</td>
<td>Rococo to Realism: Painting in Europe c. 1750-1848</td>
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</tbody>
</table>

### C. Post-1850

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 343/543</td>
<td>Special Study in 20th/21st-Century Art: _______</td>
</tr>
<tr>
<td>HA 344/544</td>
<td>Manga: Histories and Theories</td>
</tr>
<tr>
<td>HA 353/569</td>
<td>Modern and Contemporary African Art</td>
</tr>
<tr>
<td>HA 363</td>
<td>Modern Korean Art and Culture</td>
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<td>History of Photography</td>
</tr>
<tr>
<td>HA 388/588</td>
<td>Modern and Contemporary Visual Arts of Japan</td>
</tr>
<tr>
<td>HA 390/390</td>
<td>Special Study in African Art: _______</td>
</tr>
<tr>
<td>HA 534</td>
<td>Impressionism and Post-Impressionism: 1848-1900</td>
</tr>
<tr>
<td>HA 536</td>
<td>Islamic Art and Architecture in Africa</td>
</tr>
<tr>
<td>HA 564</td>
<td>European Art, 1900-1945</td>
</tr>
<tr>
<td>HA 566</td>
<td>Art From 1945 to the 1980s: Modernism to Post-Modernism</td>
</tr>
<tr>
<td>HA 567</td>
<td>Contemporary Art</td>
</tr>
<tr>
<td>HA 582</td>
<td>American Art 1860-1900: Gilded Age</td>
</tr>
<tr>
<td>HA 583</td>
<td>American Art 1900-1945: Rise of Modernism</td>
</tr>
</tbody>
</table>

### D. Cross-period

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA 311</td>
<td>The Art and Architecture of the British Isles</td>
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<tr>
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<td>Art and Culture of Japan</td>
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</tr>
<tr>
<td>HA 385/585</td>
<td>The Art of Buddhism</td>
</tr>
<tr>
<td>HA 488</td>
<td>Chinese Painting, Honors</td>
</tr>
<tr>
<td>HA 511</td>
<td>From Court to City: Northern Art</td>
</tr>
<tr>
<td>HA 528</td>
<td>The Spatial Arts of Urban Italy</td>
</tr>
<tr>
<td>HA 546</td>
<td>Chinese Sculpture</td>
</tr>
<tr>
<td>HA 549</td>
<td>Chinese Painting</td>
</tr>
<tr>
<td>HA 586</td>
<td>Japanese Painting</td>
</tr>
<tr>
<td>HA 587</td>
<td>Japanese Sculpture</td>
</tr>
</tbody>
</table>

### 4. Complete an art history course (3 hours) or studio course (3-6 hours) approved for Goal 6 in the KU Core. (The Goal 6 art history course may also fulfill one of the breadth requirements above, in which case an elective course should be taken for the final 3 required hours of art history. If a Goal 6 studio course is taken, an elective course should be taken for the final 3 required hours of art history.)

#### 5. Art history elective (0-3 hours; see number 4 above)

Electives in applicable studio courses: Satisfied by completing coursework with subject code (ART, CER, EXM, METL, PNTG, PRNT, SCUL, TD, VAE)

#### General Education Courses

Completion of KU Core Requirements. (see KU Core section of the catalog)

#### Liberal Arts and Sciences/Foundational Studies Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
</tr>
<tr>
<td>or BDS 103</td>
<td>Drawing for Design</td>
</tr>
<tr>
<td>ART 103</td>
<td>Art Concepts and Practice</td>
</tr>
<tr>
<td>or BDS 101</td>
<td>Design Thinking and Making</td>
</tr>
<tr>
<td>ART 104</td>
<td>Art Principles and Practice</td>
</tr>
<tr>
<td>or BDS 102</td>
<td>Design Thinking and Making II</td>
</tr>
<tr>
<td>ART 105</td>
<td>Visual Art Seminar</td>
</tr>
</tbody>
</table>

Writing Requirement – ENGL 101 and 102, or placement in and completion of ENGL 102/105 and an additional Goal 2 Outcome 1 course.

Foreign language: A fourth-level proficiency in one language, or third-level proficiency in one language and first-level proficiency in another.

Below is a sample 4-year plan for students pursuing the BFA in History of Art. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website. (http://kucore.ku.edu/courses/)
Bachelor of Arts in Visual Art

<table>
<thead>
<tr>
<th>Senior Hours</th>
<th>Elective/Degree/Junior-Second Area of Study/5</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ENGL 102 (Goal 2.1 Written Communication (2 of 2), BFA Writing 2)</td>
<td>3</td>
</tr>
<tr>
<td>HA 150 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication (1 of 2), BFA Writing 1))</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ 3 Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours 120</td>
<td></td>
</tr>
</tbody>
</table>

1. History of Art Breadth requires one course in 3 out of the 4 Geographical Regions and one course in 3 out of the 4 Chronological Periods for a total of 18 hours (6 courses). See Degree Requirements tab in the Catalog for course lists.

2. The department recommends that students take the HA or Studio Art course to satisfy Goal 6 in either the fall or spring semester of their fourth year. HA 698 and HA 550 fulfill a Goal 6 requirement.

3. A course may double count for a breadth requirement within the major and also for the Goal 6 requirement in the KU Core. If one course is taken to fulfill both requirements, an additional History of Art elective at the 300+ level is required.

4. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to completed 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Bachelor of Arts in Visual Art

### Bachelor of Arts in Visual Art

The Bachelor of Arts in Visual Art is a four-year, 120 credit hour degree program. The B.A. in Visual Art is a traditional liberal arts undergraduate degree, requiring 24 credit hours in Visual Art beyond the 1st year foundations courses, as opposed to the the more art intensive B.F.A. degree.

Students interested in pursuing a double major may find it easier to pair the B.A. with other undergraduate degrees. After taking the foundations courses, students take their remaining studio courses from the seven Visual Art studio areas: Ceramics, Expanded Media, Metalsmithing/Jewelry, Painting/Drawing, Printmaking, Sculpture, Textiles/Fibers, and Photomedia (in the Design Department).

In addition to completing the on-line application to KU Admissions, prospective students must submit a portfolio and responses to three essay questions to the Department of Visual Art in order to complete the application process and be for admission to the major in Visual Art.
First-Year Preparation

The first year foundations courses for the B.F.A., B.A., and B.A.E. degree include 13 hours of foundations studio, 6 hours of English, and 6 hours of Art History coursework.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 102</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 103</td>
<td>Art Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Art Principles and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 105</td>
<td>Visual Art Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
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<td>HA 150</td>
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<td>3</td>
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Undergraduate Admission

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Admission to the College of Liberal Arts and Sciences

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

Bachelor of Arts in Visual Art

A Bachelor of Arts degree is offered in visual art. A total of 120 hours is required for the degree, including 45 junior/senior hours (courses numbered 300 or higher). 30 of these 45 junior/senior hours must be taken in residence at the University of Kansas.

Completion of College BA degree specific requirements (see College BA requirements)

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
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<td></td>
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<tr>
<td>ART 105</td>
<td>Visual Art Seminar</td>
<td></td>
</tr>
<tr>
<td>Visual Art Major 35</td>
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</tbody>
</table>
| Visual Art Major Studies (Including a minimum of 15 junior/senior hours in the major, a minimum of 15 major hours in residence, and a minimum 2.0 KU junior/senior grade-point average in the major)
| Visual Art Concentration: (23 hours)
| Any Visual Art (ART, CER, EXM, METL, PNTG, PRNT, SCUL, TD, VAE) or approved studio course classes.
| ART 540  | Professional Activities Seminar            |       |
| History of Art: | (12 hours)                          |       |
| HA 150  | History of Western Art: Ancient Through Medieval |       |
| HA 151  | History of Western Art: Renaissance to Contemporary |       |
| HA elective (numbered 300 or higher) |       |
| HA elective (numbered 300 or higher) |       |

Total Hours 35

Below is a sample 4-year plan for students pursuing the BA in Visual Art. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>ART 101 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>ART 102 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ART 103 (Major Requirement FALL ONLY)</td>
<td>3</td>
<td>ART 104 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ART 105 (Major Requirement FALL ONLY)</td>
<td>1</td>
<td>HA 151 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>HA 150 (Goal 4.2 Global Awareness, Major Requirement)</td>
<td>3</td>
<td></td>
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</table>

Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Semester Language (BA Second Language)</td>
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<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>BA Quantitative Reasoning (QR)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
</tbody>
</table>
**BFA in Visual Art with concentration in Ceramics**

Below is a sample 4-year plan for students pursuing the BFA in Visual Art with a concentration in Ceramics. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Freshman

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BFA Writing I)</td>
<td>3 ENGL 102 (Goal 2.1 Written Communication/BFA Writing II)</td>
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</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3 ART 102 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>ART 101 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3 ART 104 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ART 103 (Major Requirement FALL ONLY)</td>
<td>3 HA 151 (Major Requirement SPRING ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ART 105 (Major Requirement FALL ONLY)</td>
<td>1 CER 208 (Major Requirement)</td>
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</tr>
<tr>
<td>HA 150 (Goal 4.2 Global Awareness, Major Requirement)</td>
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<td>3</td>
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### Sophomore

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3 Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3 HA 300+ Elective Course (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>HA Non-Western Art Elective (Major Requirement)</td>
<td>3 CER 402 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>CER 301 (Major Requirement)</td>
<td>3 CER 505 (Major Requirement)</td>
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</tr>
<tr>
<td>Studio Art Elective Course (Major Requirement)</td>
<td>3 Studio Art Elective Course (Major Requirement)</td>
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</tr>
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### Junior

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>ART 540 (Major Requirement)</td>
<td>3 Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art Course 300+ (Major Requirement)</td>
<td>3 ART 599 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
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</tr>
<tr>
<td>Studio Art Course 300+ (Major Requirement)</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
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### Senior

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 540 (Major Requirement)</td>
<td>3 Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art Course 300+ (Major Requirement)</td>
<td>3 ART 599 (Goal 6 Integration &amp; Creativity, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art Course 300+ (Major Requirement)</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

### Total Hours 120

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

4. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
### BFA in Visual Art with concentration in Metalsmithing/Jewelry

Below is a sample 4-year plan for students pursuing the BFA in Visual Art with a concentration in Metalsmithing/Jewelry. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication/BFA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication/BFA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>First Year Seminar Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>ART 101 (Goal 3 Arts and Humanities, Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Social Science</td>
<td>3</td>
<td>ART 104 (Major Requirement SPRING ONLY)</td>
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</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>METL 504 (Or HA 300+ Course (Major Requirement))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Oral Communication</td>
<td>3</td>
<td>METL 505 (Or Studio Art Elective Course (Major Requirement))</td>
<td>3</td>
</tr>
<tr>
<td>HA Non-Western Art Elective (Major Requirement)</td>
<td>1</td>
<td>HA 150 (Major Requirement)</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1.2 Quantitative Literacy</td>
<td>3</td>
<td>Goal 3 Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Goal 3 Natural Science</td>
<td>3</td>
<td>METL 504 (Or HA 300+ Course (Major Requirement))</td>
<td>3</td>
</tr>
<tr>
<td>Goal 2.2 Oral Communication</td>
<td>3</td>
<td>METL 505 (Or Studio Art Elective Course (Major Requirement))</td>
<td>3</td>
</tr>
<tr>
<td>HA Non-Western Art Elective (Major Requirement)</td>
<td>3</td>
<td>METL 301 (Major Requirement)</td>
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</tr>
</tbody>
</table>

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
<td>METL 360 (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td>METL 363 (Major Requirement)</td>
<td>3</td>
<td>METL 362 (Major Requirement)</td>
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<tr>
<td>METL 364 (Major Requirement)</td>
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<td>ART 540 (Major Requirement)</td>
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<tr>
<td>HA 300+ Course (Major Requirement)</td>
<td>3</td>
<td>METL 506 (Or Studio Art Elective Course (Major Requirement))</td>
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</tr>
</tbody>
</table>

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1 A list of possible courses for History of Art Non-Western can be found on the degree requirements tab.

2 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

### Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
BFA in Visual Art with concentration in Textile/Fibers

Below is a sample 4-year plan for students pursuing the BFA in Visual Art with a concentration in Textiles/Fibers. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

**Freshman**

**Fall**
- ENGL 101 (Goal 2.1 Written Communication/BFA Writing I) 3
- ENGL 102 (Goal 2.1 Written Communication/BFA Writing II) 3

**Senior**

**Fall**
- METL 515 (Goal 6 Integration & Creativity, Major Requirement) 3
- ART 650 (Major Requirement, pair with METL 515) 3
- Studio Art Elective Course (Major Requirement) 3

**Sophomore**

**Fall**
- Goal 1.2 Quantitative Literacy 3
- Goal 3 Natural Science 3
- HA Non-Western Art Elective (Major Requirement) 3
- TD 313 (Major Requirement) 3
- TD 316 (Major Requirement) 3

**Junior**

**Fall**
- Goal 4.1 US Diversity 3
- Goal 2.2 Oral Communication 3
- TD 401 (Major Requirement) 3
- Studio Art Elective Course (Major Requirement) 3
- Second Area of Study/ Elective/Degree/Junior-Senior Hours 3

**Senior**

**Fall**
- TD 515 (Goal 6 Integration & Creativity, Major Requirement) 3
- ART 650 (Major Requirement, pair with TD 515) 3
- Second Area of Study/ Elective/Degree/Junior-Senior Hours 3
- Second Area of Study/ Elective/Degree/Junior-Senior Hours 3
- Second Area of Study/ Elective/Degree/Junior-Senior Hours 3

Please note:

- A list of possible courses for History of Art Non-Western can be found on the degree requirements tab.
- METL 364 is only offered in the fall. METL 360 and METL 362 are only offered in the spring.
- Hour requirements (incl. 45 hr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 2

Total Hours 120

1 A list of possible courses for History of Art Non-Western can be found on the degree requirements tab.
2 Choose 2 Intermediate/Advanced weaving: TD 401, TD 402, TD 403, TD 404, TD 514
3 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Bachelor of Art Education in Visual Art Education**

**Why choose a degree in Visual Art Education?**

The BAE in Visual Art Education is an interdisciplinary degree that provides students with the knowledge, skills, and experience to become either licensed preK-12 art teachers to teach in a public/private school or qualified candidates for teaching in a community setting. To prepare for the art education profession, students complete a combination of coursework in visual art, education, and art education. The program culminates in either an internship in a community organization or a semester-long student teaching assignment in a school setting that gives a crucial background in what it means to be an art educator. Here artistic and intellectual training is balanced with professional preparation leading to careers in arts education.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission to KU must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the Office of International Student and Scholar Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the Major**

Students who wish to major in visual art education should seek admission to the School of the Arts at the time of application, and submit an art portfolio to the Department of Visual Art. Prospective students should contact the Department of Visual Art for information about portfolio requirements and academic advising.

In the first three semesters of study, art education majors complete the following prerequisite courses, which are required for admission into the VAE professional sequence:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
<td>3</td>
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<tr>
<td>ART 102</td>
<td>Drawing II</td>
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</tr>
<tr>
<td>ART 103</td>
<td>Art Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 104</td>
<td>Art Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>HA 150</td>
<td>History of Western Art: Ancient Through Medieval</td>
<td>3</td>
</tr>
<tr>
<td>HA 151</td>
<td>History of Western Art: Renaissance to Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (or higher)</td>
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</tr>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
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<tr>
<td>KU Core 2.1, 2nd unit</td>
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</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Admission to the VAE Professional Sequence**

VAE majors must apply for admission to the VAE Professional Sequence during their sophomore year, and transfer students bringing in over 45 hours of credit must apply during their first semester at KU. The application packet should be obtained from the VAE Professional Sequence Coordinator and submitted by the due date indicated in the packet. Before applying, students must satisfy the following requirements:

(1) Successfully complete all prerequisite courses, with a prerequisite GPA # 2.75 and no prerequisite grade below C. (2) Earn a cumulative GPA # 2.75.

**Requirements for the B.A.E. Degree**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>Visual Art Education Prerequisites</td>
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</tr>
<tr>
<td>KU Core Goal 1.1, Critical Thinking</td>
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<td></td>
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<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (KU Core Goal 1.2 Quantitative Literacy)</td>
<td>3</td>
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<tr>
<td>ENGL 101</td>
<td>Composition (KU Core Goal 2.1, 1st unit, Written Communication)</td>
<td>3</td>
</tr>
<tr>
<td>A 2nd unit chosen from any course that fulfills the KU Core Goal 2.1, Written Communication requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (KU Core Goal 2.2 Oral Communication)</td>
<td>3</td>
</tr>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>or BDS 103</td>
<td>Drawing for Design</td>
<td></td>
</tr>
<tr>
<td>ART 101 is a required course; BDS 103 accepted for students transferring into the program (KU Core Goal 3H, Arts &amp; Humanities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 102</td>
<td>Drawing II</td>
<td>3</td>
</tr>
</tbody>
</table>
### Bachelor of Art Education in Visual Art Education

**Area of Emphasis**

- **Artistic Media and Processes in Art Education**
  - ART 103 Art Concepts and Practice Fall Only 3
  - or BDS 101 Design Thinking and Making 3
  - ART 103 is a required course; BDS 101 accepted for students transferring into the program

- **Art Principles and Practice**
  - ART 104 Spring Only 3
  - or BDS 102 Design Thinking and Making II
  - ART 104 is a required course; BDS 102 accepted for students transferring into the program

- **History of Western Art: Ancient Through Medieval**
  - HA 150 (KU Core Goal 4.2, Global & Cultural Awareness) Fall Only 3
  - or HA 100 Introduction to Western Art History 3

**Visual Art Education Requirements**

- **Visual Art Seminar**
  - ART 105 Visual Art Seminar (ART 105 is required for incoming freshmen and transfer students with less than 30 credit hours at KU) 1

**Natural Science + Natural Science Lab.**

- Choose one of the following: 4-5
  - ASTR 191 Contemporary Astronomy & ASTR 196 and Contemporary Astronomy Laboratory
  - ATMO 105 Introductory Meteorology
  - BIOL 100 Principles of Biology & BIOL 102 and Principles of Biology Laboratory
  - CHEM 110 Introductory Chemistry
  - GEOG 104 Introduction to Physical Geography & GEOG 105 and Introductory Laboratory in Physical Geography
  - GEOG 140 Global Environment I: The Discovery of Environmental Change
  - GEOL 101 The Way The Earth Works & GEOL 103 and Geology Fundamentals Laboratory
  - PHSX 114 College Physics I
  - PHSX 111 Introductory Physics & PHSX 116 and Introductory Physics Laboratory

**Studio Art**

- **Ceramics**
  - Ceramics (ART 131 or any CER course) 3
  - Expanded Media (ART 123 or any EXM course) 3
  - Metalsmithing/Jewelry (ART 132 or any METL course) 3
  - Painting (PNTG 263 or any PNTG course) 3
  - Photography (any PHMD course or other photography course) 3
  - Printmaking (ART 121 or any PRNT course) 3
  - Sculpture (ART 122 or any SCUL course) 3
  - Textiles (ART 133 or any TD course) 3

**Area of Emphasis**

- **Study in any 1 studio area as designated by the Department of Visual Art, or in History of Art, or in a Design area. Must be taken at the 300 level or above. Emphasis is chosen in consultation with advisor.**

**History of Art**

- **Non-Western History of Art**
  - HA 166 The Visual Arts of East Asia 3
  - HA 340 Special Study in Asian Art Before 1900: _____
  - HA 353 Modern and Contemporary African Art 3
  - HA 354 Japanese Prints 3
  - HA 361 Buddhist Art of Korea 3

- **Modern and Contemporary Visual Arts of Japan**
  - HA 362 Ceramics of Korea
  - HA 363 Modern Korean Art and Culture
  - HA 367 Art and Culture of Japan
  - HA 368 Art and Culture of China
  - HA 376 Art in the Age of Rubens, Rembrandt and Vermeer: Northern Baroque

- **Modern and Contemporary Visual Arts of Japan**
  - HA 388 Modern and Contemporary Visual Arts of Japan
  - HA 390 Special Study in African Art: _____
  - HA 391 Special Study in Asian Art: _____
  - HA 536 Islamic Art and Architecture in Africa
  - HA 540 Special Study in Asian Art Before 1900: _____
  - HA 545 Early Chinese Art
  - HA 546 Chinese Sculpture
  - HA 549 Chinese Painting
  - HA 554 Japanese Prints
  - HA 561 Buddhist Art of Korea
  - HA 562 Ceramics of Korea
  - HA 585 The Art of Buddhism
  - HA 587 Japanese Sculpture
  - HA 588 Modern and Contemporary Visual Arts of Japan
  - HA 591 Special Study in Asian Art: _____
  - HA 677 African Design

**Contemporary (20th Century) History of Art**

- HA 343 Special Study in 20th/21st-Century Art: _____
- HA 353 Modern and Contemporary African Art
- HA 363 Modern Korean Art and Culture
- HA 380 History of Photography
- HA 397 Special Study in Modern Art: _____
- HA 543 Special Study in 20th/21st-Century Art: _____
- HA 566 Art From 1945 to the 1980s: Modernism to Post-Modernism
- HA 567 Contemporary Art
- HA 571 Modern Sculpture
- HA 580 History of Photography
- HA 588 Modern and Contemporary Visual Arts of Japan

**Code** | **Title** | **Hours**
---|---|---
C&T 235 | Cultural Diversity, Equity, and Inclusion in K-12 Schools (KU Core Goal 4.1 Human Diversity) | 3
ELPS 250 | Education and Society (KU Core Goal 5.1 Social Responsibility & Ethics) | 3
EPSY 306 | Development and Learning of the Adolescent (KU Core Goal 3S Social Science) | 3
EPSY 320 | Basics of Classroom Assessment | 1
EPSY 520 | Classroom Assessment | 2
SPED 326 | Teaching Exceptional Children and Youth in General Education | 3
C&T 359 | Literacy in the Content Areas | 1
VAE 320 | Instruction and Curriculum I | 3
VAE 395 | Community Collaborations in Art Education | 3
VAE 410 | Instruction and Curriculum II | 3
VAE 420 | Artistic Media and Processes in Art Education | 3
### Freshman

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 Written Communication 1 of 2)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 Written Communication 2 of 2)</td>
<td>3</td>
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<tr>
<td>MATH 101 (Goal 1.2 Quantitative Literacy)</td>
<td>3</td>
<td>MATH 105</td>
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<tr>
<td>HA 150 (Goal 4.2 Global Awareness 1, 2)</td>
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<td>HA 151 (History of Art 1, 3)</td>
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<tr>
<td>ART 101 (Goal 3 Arts and Humanities)</td>
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<td>ART 102</td>
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</tr>
<tr>
<td>ART 103 (Goal 3 Arts and Humanities)</td>
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<td>ART 104 (Goal 3 Arts and Humanities)</td>
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<tr>
<td>ART 105</td>
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### Sophomore

<table>
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<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Goal 1.1, Critical Thinking</td>
<td>3</td>
<td>VAE 320 (Art Education Course)</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 104 (Goal 3 Social Science)</td>
<td>3</td>
<td>COMS 130 (Goal 2.2 Communication)</td>
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<tr>
<td>ELPS 250 (Goal 5 Social Responsibility &amp; Ethics; Education Course)</td>
<td>3</td>
<td>Goal 3 Natural Science lecture + lab (from approved list)</td>
<td>4</td>
</tr>
<tr>
<td>Studio Art Course (1 of each studio area; 1st of 8)</td>
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<td>Studio Art Course (1 of each studio area; 3rd of 8)</td>
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<tr>
<td>Studio Art Course (1 of each studio area; 2nd of 8)</td>
<td>3</td>
<td></td>
<td>3</td>
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<tr>
<td>Non-Western History of Art (from approved list)</td>
<td>3</td>
<td></td>
<td>3</td>
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<td>Total</td>
<td>18</td>
<td>16</td>
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### Junior

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<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>VAE 410 (Art Education Course)</td>
<td>3</td>
<td>VAE 395 (Art Education Course)</td>
<td>3</td>
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<tr>
<td>C&amp;T 235 (Goal 4.1 US Diversity, Education Course)</td>
<td>3</td>
<td>Contemporary History of Art 300+ (from approved list)</td>
<td>3</td>
</tr>
<tr>
<td>EPSY 306 (Education Course)</td>
<td>3</td>
<td>SPED 326 (Education Course)</td>
<td>3</td>
</tr>
<tr>
<td>Studio Art Course (1 of each studio area; 5th of 8)</td>
<td>3</td>
<td>C&amp;T 359 (Education Course)</td>
<td>3</td>
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<tr>
<td>Area of Emphasis 300+ (Visual Art, Design or Art History; 1st of 3)</td>
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<td>Studio Art Course (1 of each studio area; 6th of 8)</td>
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<tr>
<td>Total</td>
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### Additional Non-Licensure Option Elective

**Students completing the BAE Degree without licensure may also need to take an additional elective at the junior/senior level (3) in any area in order to meet the University’s minimum junior/senior hour requirement for degree completion.**

Below is a sample 4-year plan for students pursuing the BAE in Visual Art Education. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

### Minor in Visual Art

The Department of Visual Art welcomes non-majors who wish to learn about the various areas within visual art through the completion of a minor. Visual Art minors are not required to submit a portfolio for admission.

Because studio courses are sequential, students are advised to declare a minor no later than the first semester of their junior year to allow for adequate time to complete the Visual Art minor.

The Visual Art minor is 18 hours or 6 courses, (12 hours at the JR/SR level). Students complete a foundations course, such as, ART 101 Drawing I, and an introductory concentration course out of the 8 art areas we offer (Drawing, Painting, Ceramics, Expanded Media, Metalsmithing/
Jewelry, Printmaking, Sculpture, or Textiles). Students are encouraged to concentrate in one art area to attain the proper number of JR/SR hours.

Requirements for the Minor
A minimum of 18 hours is required for the minor; 12 hours must be numbered 300 and above.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ART 101</td>
<td>Drawing I</td>
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<tr>
<td>or ART 103</td>
<td>Art Concepts and Practice</td>
<td></td>
</tr>
<tr>
<td>or ART 104</td>
<td>Art Principles and Practice</td>
<td></td>
</tr>
</tbody>
</table>

Visual Art Introduction Courses 3

1 course required in any of the following areas:

- Ceramics:
  - ART 131 Fundamentals of Ceramics (or any CER)
- Drawing:
  - ART 120 Fundamentals of Painting (or any DRWG)
- Expanded Media:
  - ART 123 Fundamentals of Expanded Media (or any EXM)
- Metals/Jewelry:
  - ART 132 Fundamentals of Metalsmithing/Jewelry (or any METL)
- Painting:
  - ART 120 Fundamentals of Painting (or any PNTG)
- Printmaking:
  - ART 121 Fundamentals of Printmaking
- Sculpture:
  - ART 122 Fundamentals of Sculpture (or any SCUL)
- Textiles/Fibers:
  - ART 133 Fundamentals of Fibers (or any TD)

Visual Art Courses 12

minimum 12 Jr/Sr. hours

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior (300+) Hours
Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

Minor Junior/Senior Graduation GPA
Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all departmental courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (https://degreeprogress.ku.edu/gpa/).

Master of Fine Arts in Visual Art
The Department of Visual Art offers graduate programs leading to the Master of Fine Arts degree in studio art. Concentrations include ceramics, drawing and painting, expanded media, metalsmithing and jewelry, printmaking, sculpture, and textiles and fibers. The MFA degree in the Department of Visual Art is a terminal professional studio degree. The program’s goals are to develop each student’s critical thinking and studio skills so that they have the necessary tools and experience to pursue a career as a studio artist and to otherwise participate in the creative community both on a regional and national level.

The University of Kansas is a member of the National Association of Schools of Art and Design (http://nasad.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of those organizations.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission - M.F.A.
To be admitted, students must have undergraduate backgrounds judged by the graduate faculty to be appropriate preparation for the specific specialization selected for graduate study. A strong preference exists for applicants whose undergraduate backgrounds are in visual art.

Departmental faculty selection and review committees evaluate each applicant’s transcripts, portfolios, and letters of recommendation to determine their qualifications for admission. The committees expect applicants to have the B.F.A. degree or equivalent experience. In general, committees expect applicants to present about 70 hours of undergraduate credit in studio or related professional courses including about 36 hours of studio credit in a major area and to have had a minimum of 9 hours of credit in art history. The department encourages full-time residence.

Application to the program is competitive, by permission of the Kansas Board of Regents application for admission to graduate programs in Visual Art may be refused if available instructional space does not allow for addition of more students. More information about materials and deadlines is available on the Department of Visual Art admissions page.

Submit your application and fee online.

Required Materials:

- Official transcript of all college and university coursework
- Statement of purpose
- 3 letters of recommendation
- Digital portfolio
- Printed image index
- Application form for financial aid
- International Students: Please refer to the international admissions requirements (https://gradapply.ku.edu/International-requirements/)
• Non-native English speakers must demonstrate proof of English proficiency. Please see Graduate policy on English Proficiency (https://gradapply.ku.edu/english-requirements/) for more information

**M.F.A. in Visual Art Degree Requirements**

**Concentrations in Ceramics, Drawing and Painting, Expanded Media, Fibers, Metalsmithing and Jewelry, Printmaking, and Sculpture**

The graduate program consists of 60 semester hours of graduate credit, including thesis exhibition, in courses approved by the graduate director and the graduate thesis committee. At least 50% of the coursework required for the degree must be taken at the 700 level or above. A student may concentrate in one or more specializations. When the student has completed 2 semesters, the faculty selection and review committee reviews the student’s work. The graduate director gives the student a written assessment of progress, signed by the committee. At the end of the third semester, the same committee conducts a thesis review that determines whether the student is prepared to begin thesis work, needs additional coursework, or is to be dropped from the program.

Upon approval by the review committee, the candidate begins work toward the thesis. Students not receiving approval may continue to work toward the next review unless denied by the committee. A student who is approved for thesis work may enroll in Thesis in Art. Before thesis enrollment, the student selects a graduate thesis committee consisting of 3 members of the graduate art faculty. The committee advises the student, conducts regularly scheduled reviews of the work, and determines whether the requirements for the thesis have been completed. The graduate director must approve the membership of the graduate thesis committee.

The final departmental requirements are

• A thesis exhibition of the student’s work,
• An oral examination, and
• A thesis folio of the exhibition.

The thesis folio includes a statement written by the candidate concerning the work and a visual record of the exhibition. The department reserves the option of selecting and retaining one example of each graduate student’s work. Upon enrolling, the student automatically accepts these requirements and conditions.

**Master of Arts in Visual Art Education**

The Visual Art Education M.A. Program includes advanced professional and scholarly study for art educators. Individuals with a baccalaureate degree in art education or in art-related fields, who wish to advance their knowledge and skills for teaching in the public schools or in other settings such as community arts organizations can apply. Excellent facilities, strong library holdings, and a faculty dedicated to both teaching and research assure students of a challenging and professional graduate preparation. Full time students in the VAE Graduate Program are eligible for competitive funding in the form of scholarships and a graduate teaching assistantship. Additional details may be found on the Visual Art Education website (https://art.ku.edu/visual-art-education/).

**Graduate Licensure Program in Art Education**

The VAE Graduate Licensure Program (GLP) combines graduate and undergraduate courses including a semester-long student teaching experience that help students obtain their initial teaching license (PreK-12). The GLP is for individuals who have completed baccalaureate degrees in studio art, design, art history, or other art-related fields. Students must apply and be admitted to the Visual Art M.A. Program to be eligible to obtain their teaching license. Graduate level courses taken as part of the GLP count towards completion of the M.A. degree.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

**Graduate Admission - M.A. Visual Art Education**

The Department of Visual Art Education has suspended matriculation for the M.A. program until further notice.

Application deadlines:

- December 1 - Spring admission
- May 1 - Fall admission

All applicants to graduate programs at KU must meet the minimum requirements listed in the Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/) policy. Visual Art Education M.A. applicants are also evaluated based on the following items:

• Past Visual Art, Visual Art Education, and Art History coursework completed at the undergraduate and/or graduate level.
• Three letters of recommendation from former or current instructors and/or those able to recommend the applicant on the basis of professional experience (e.g., principals, supervisors, or former employers). The letters of recommendation must address the applicant's potential to take initiative as a graduate student and ability to be a self-starter.
• Graduate Licensure applicants only: Praxis 1 test scores.
For more information on required materials for the Visual Art Education program, please visit the program website (https://art.ku.edu/visual-art-education/).

**M.A. Degree Requirements**

The Master of Arts Degree in Visual Art Education provides students with a broad knowledge of the history, philosophy, research methods, and current practices in the field. The program requires a minimum of 30 credit hours taken at the graduate level. At least 50% of coursework required for the master's degree must be taken at the 700 level or above. Students complete a balance of visual art education courses including VAE 800. The remainder of coursework is completed in related fields such as history of art, education, museum studies, psychology, etc. which becomes a student's emphasis. This emphasis, selected in consultation with a VAE faculty advisor, provides a broad, interdisciplinary preparation in art education.

**Thesis, Project, or Examination Options**

To integrate and apply coursework, students select from three options as their final academic activity: thesis, project, or examination. A thesis is an independent research investigation of a topic related to visual art education using quantitative, qualitative, historical or philosophical methods. The project option involves application of theory and principles of visual art education in an instructional setting. The final option, a written examination taken during the final semester of enrollment, requires students to demonstrate their knowledge of current issues in the field. Students selecting the examination option complete a total of 37 credit hours for the degree while the thesis and project options require a total of 30 credit hours.

Further details about degree requirements and the Visual Art Education M.A. Program can be found on the Department's website (https://art.ku.edu/visual-art-education/).
Public Affairs Administration (in CLAS)

Bachelor of Arts and Bachelor of General Studies in Law and Society (p. 1985)
Bachelor of Arts and Bachelor of General Studies in Public Administration (p. 1988)
Minor in Law and Society (p. 1991)
Minor in Public Administration (p. 1992)
Master of Public Administration (p. 1992)
Master of Urban Planning (p. 1994)
Accelerated Master of Urban Planning (p. 1995)
Accelerated Master of Urban Planning/BA in Environmental Studies (p. 1997)
Master of Urban Planning and Master of Arts in Geography (p. 2001)
Dual Master of Urban Planning and Master of Arts in American Studies (p. 2000)
Master of Public Administration and Juris Doctor (p. 2002)
Master of Public Administration and Master of Urban Planning (p. 2003)
Doctor of Philosophy in Public Administration (p. 2004)
Graduate Certificate in City and County Management (p. 2005)
Graduate Certificate in Law and Society (p. 2005)
Graduate Certificate in Performance Management (p. 2006)
Graduate Certificate in Public / Nonprofit Management (p. 2007)
Graduate Certificate in Public Policy (p. 2007)
Graduate Certificate in Urban Planning (p. 2008)

Accelerated Masters Degrees

KU undergraduate students majoring in Architecture or degrees within the College of Liberal Arts & Sciences can complete their M.U.P. degree in one additional year through an accelerated masters degree.

- Accelerated Master of Urban Planning (https://catalog.ku.edu/public-affairs-administration/amup/)
- Accelerated Master of Urban Planning/BA in Environmental Studies (https://catalog.ku.edu/public-affairs-administration/amup-ba-evrn/)

Graduate Programs

Master of Public Administration

With a unique combination of theoretically grounded course work and practical application, our master of public administration degree provides students with the knowledge and skills needed to lead, innovate, and problem-solve in public sector and non-profit settings. Our Edwin O. Stene M.P.A. program is one of the oldest and most respected programs in the United States, beginning with our local government leadership program founded in 1948. Since 1998, our tradition of excellence in educating students at the masters' level has been recognized by U.S. News & World Report with a #1 ranking in city management.

Master of Urban Planning

The master of urban planning is a graduate professional degree that prepares students for careers in urban planning. The M.U.P. degree is accredited by the Planning Accreditation Board. The program places strong emphasis on policy, planning and analysis in the context of urban or urbanizing environments. The program is geared toward meeting the need for planning policy on urban issues at any level of government — federal, state, regional, and local — or outside the governmental arena. M.U.P students specialize in at least one of the following areas: Housing and Development, Sustainable Land Use Planning, and Transportation.

Doctorate in Public Administration

The mission of the doctoral program in the KU School of Public Affairs and Administration is to provide advanced graduate education in theory and research in order to prepare students for academic and research careers in public administration, as well as professional careers in advanced practice of public administration.

Dual Degrees

The School of Public Affairs & Administration professional programs (M.P.A. & M.U.P.) have collaborations in place with other KU graduate
programs so that students can complete two master's degrees on a shorter timeline than earning both degrees separately.

The Dual J.D. / M.P.A. Degree is designed for law students who intend to practice in communities where they might be called on to perform legal services for the municipality and to students preparing for positions in city management.

The Dual M.P.A. / M.U.P. Degree is for students interested in learning about and leading cities into the future through critical planning, sustainability, and administrative skills.

The Dual M.U.P. / M.A. Geography Degree is designed for students interested in engaging in planning for the arts, cultural activities and facilities, and historic preservation within urban communities.

The Dual M.U.P./M.A. American Studies Degree is designed for students who intend to engage in planning for the arts, cultural activities and facilities, and historic preservation.

Accelerated Masters Degrees
KU undergraduate students majoring in Architecture or degrees within the College of Liberal Arts & Sciences can complete their M.U.P. degree in one additional year through an accelerated masters degree.

- Accelerated Master of Urban Planning
- Accelerated Master of Urban Planning/BA in Environmental Studies

Graduate Certificates
Graduate Certificates are a way to delve into specialized areas of public administration theory and practice. They are structured to provide a condensed version of the specific skills and knowledge to advance in particular professional fields. Certificates can be earned in conjunction with your graduate degree or as a stand-alone certification and may focus on a specialized area, including:

- City and County Management
- Law & Society
- Performance Management
- Public / Nonprofit Management
- Public Policy
- Urban Planning

Courses
LWS 330. Introduction to Law & Society. 3 Credits. S
Offers an introduction to the interdisciplinary field of law and society. Surveys the role of law in social processes and the influence of these processes on law, and introduces alternative theoretical perspectives on these processes.

LWS 332. Methods in Law and Society. 3 Credits. S
Studies the various methods used in law & society research and prepares students to be sophisticated readers of basic socio-legal research, capable of evaluating the quality of the research design and methods. Prepares students to participate as research assistants in original studies.

LWS 333. The Pursuit of Rights: Law, Democracy & Power. 3 Credits. S
Examines how law and legal norms, particularly rights, support social and political institutions yet also may be used to challenge these institutions and foster change. Particularly examines the role of law in supporting but also challenging hierarchies of race, ethnicity and gender. Surveys major studies of these processes both domestically and across the globe. Prerequisite: LWS 330 or permission of the instructor.

LWS 443. Theoretical Foundations of Law & Society. 3 Credits. S
This course examines classic texts from institutional, functional, and economic theories of law that have served as the basis for Law & Society research. It then considers the continued development of those classical theories to make sense of important current social and legal problems. Students will practice using theory to make sense of puzzling empirical patterns, and developing theoretical explanations of their own. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in LWS 643 or LWS 743. Prerequisite: LWS 330.

LWS 494. Topics in Law & Society: _____, 3 Credits. U
Study of selected topics in law and society. Course may be repeated for credit if content varies. Not open to students with credit in LWS 694 or LWS 794 if the topic is the same. Prerequisite: LWS 330.

LWS 691. Internship in Law & Society. 1-3 Credits. S
Designed to provide law & society students an applied learning experience in a relevant public, non-governmental, or nonprofit organization. Students are required to critically reflect on their experience through a variety of academic assignments throughout their internship experience. Prerequisite: LWS 330 and LWS 332, and permission of instructor.

LWS 699. Capstone in Law and Society. 3 Credits.
Integrates learning across the Law & Society curriculum with an applied, original research experience. Class topics rotate depending on faculty research agenda and current policy foci. Students gather and analyze data throughout the class, and present their final work to a variety of audiences. The product is an original research presentation that advances knowledge. Prerequisite: LWS 330 and LWS 332.

LWS 743. Theoretical Foundations of Law and Society. 3 Credits.
This course examines classic texts from institutional, functional, and economic theories of law that have served as the basis for Law & Society research. It then considers the continued development of those classical theories to make sense of important current social and legal problems. Students will practice using theory to make sense of puzzling empirical patterns, and developing theoretical explanations of their own. This course is offered at the 400 and 700 level with additional assignments.
at the 700 level. Not available to students with credit in LWS 443. Prerequisite: Graduate student standing or faculty approval.

LWS 794. Topics in Law & Society: ______. 3 Credits.
Study of selected topics in law and society. Course may be repeated for credit if content varies. Not open to students with credit in LWS 494 if topic is the same. Prerequisite: Graduate student standing or faculty approval.

Courses

PUAD 177. First Year Seminar: ______. 3 Credits. SF
A limited-enrollment, seminar course for first-time freshmen, organized around current issues in public administration. May not contribute to major requirements in public administration. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

PUAD 330. Introduction to Public Administration. 3 Credits. S
Introduction to administration, public policy and policy makings is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 330.) Prerequisite: POLS 110.

PUAD 331. Introduction to Public Administration, Honors. 3 Credits. S
Introduction to administration, public policy, and policy making, for honors students is the study of government workers, the organizations in which they work, how they are financed, and how government engages citizens to help form and maintain community. In various ways, the class sessions explore the three important issues of public administration: discretion, authority, and accountability. (Same as POLS 331.) Prerequisite: POLS 110.

PUAD 332. Quantitative Methods for Public Administration. 3 Credits. S
Focuses on building the quantitative analysis skills of students in public administration. Students learn basic and intermediate statistics, and methods of data analysis and interpretation. Students gain exposure to the uses of data in public organizational settings.

PUAD 333. Hard Choices in Public Administration: ______. 3 Credits. S
Focuses on some of America’s most vexing public policy challenges and emphasizes the political context of difficult choices. Course examines models of decision-making and the process of policy analysis. Students learn how to apply the tools of policy analysis to make policy judgments. Prerequisite: PUAD 330 or PUAD 331.

PUAD 401. Administration of Justice. 3 Credits. S
Examines the administration of justice and focuses on differential and discriminatory treatment in policing, criminal prosecutions, trials, sentencing, or imprisonment. Also considered are the basis and impact of racial profiling, harassment, arbitrary detention, and abusive treatment of members of racial and ethnic groups, immigrants, and/or other vulnerable groups by law enforcement, and disparate treatment by prosecutors and the courts. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 601 or PUAD 701.

PUAD 402. Diversity and Social Equity in Public Administration. 3 Credits. S
Analyzes diversity and leadership in public and private institutions along ethnic, racial, and gender lines and the challenges of the facilitation of open dialogue on diversity. Examines the political, historical, social, and economic reasons why Americans of different ethnic, racial, and gender groups hold divergent views about major public policy areas, as well as fundamental views about democratic participation. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 602 or PUAD 702. Prerequisite: PUAD 330 or PUAD 331.

PUAD 403. Foundations of the Nonprofit Sector. 3 Credits. H/S
This course provides an overview of the U.S. nonprofit sector, its history, scope, diversity and its positioning among and between the private and public sectors of the U.S. economy. The course explores the legal framework under which nonprofit organizations operate and are regulated. Economic, political, social, organizational and giving theories of the sector are reviewed in order to understand the sectors existence, roles and activities with particular attention to philanthropy and voluntarism. Distinct contributions to society as well as contemporary challenges faced by the sector are examined. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 603 or PUAD 703. Prerequisite: PUAD 330, or POLS 110, or MGMT 305, or a PUAD master's core course, or consent of instructor. Junior status or above is also required.

PUAD 404. Resource Development and Management in Nonprofit Organizations. 3 Credits. H
This course provides an overview of the broad range of activities relevant to acquisition, management and utilization of resources in nonprofit organizations. The course identifies the primary strategies through which resources are generated with emphases on grantwriting, fundraising, social entrepreneurship, and public/private partnerships. Development of organizational identity and management of public relations is examined in relation to resource and relationship development. Strategies for management of resources to ensure long-term benefit and sustainability are explored. Not available to students with credit in PUAD 604. Prerequisite: PUAD 403.

PUAD 405. Managing Nonprofit Relationships. 3 Credits. H
This course considers the set of relationships that nonprofit leaders must balance within the organization and beyond organizational boundaries. Both internal relationships (with staff, volunteers, and board members) and external relationships (with stakeholders, other organizations, and the community at large) are critical to mission accomplishment. This course provides students with the resources necessary to understand the challenges and opportunities related to building and maintaining these relationships. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in PUAD 605 or PUAD 705.

PUAD 406. Nonprofit Accountability: Public Needs and Public Values. 3 Credits. H
This course examines the role of the nonprofit sector in society by posing broad questions about why nonprofit organizations are held accountable, to whom they are accountable, and detailing how organizations can satisfy accountability demands. The course investigates the public role of the nonprofit sector in society, identifies the stakeholders that are integral to an organization’s mission, and describes and critiques the financial and evaluation tools that nonprofits can use to ensure their social viability. Not available to students with credit in PUAD 606. Prerequisite: PUAD 403.

PUAD 407. Introduction to Project Management. 3 Credits. H
An exploration of the technical aspects of project management and the human aspects of project leadership. The course integrates conceptual approaches with practical applications of knowledge and skill sets. The course addresses the Project Management Body of Knowledge (PMBOK— as created by the Project Management Institute) and project leadership competencies including leading, communicating, negotiating, problem
solving, and influencing. Not available to students with credit in PUAD 607.

**PUAD 408. Collaboration in Public Administration. 3 Credits. S**
Managers must work effectively across organizational and sector boundaries to solve problems and produce public value. This course considers the forces contributing to the need for collaborative governance, changing management tasks and competencies, and how to address key collaborative challenges. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 608 and PUAD 708.

**PUAD 431. Bureaucracy, Public Administration, and the Private Sector. 3 Credits. S**
Examines the problems posed by behaviors within and by bureaucracies. Provides students with a set of conceptual tools for understanding the organizational environment in which policy analysts ply their profession and the role of a manager within such organizations. Offers strategies for the policy professional seeking to navigate large bureaucracies. Readings and class discussions integrate theoretical analyses of organizations with detailed case studies. Prerequisite: PUAD 330 or PUAD 331.

**PUAD 432. Conducting the People's Business Ethically. 3 Credits. S**
Addresses the moral challenges facing leaders in the public and nonprofit sectors. Examines the values and virtues important to sustained ethical leadership, as well as strategies to build strong institutional cultures and support ethical practices in institutions. Considers moral and political theory by focusing on contemporary cases and issues. Students learn how to identify moral issues in public life and public management. There is a special focus on the integration of moral concerns into public discussion in a manner that contributes to good policy and does not polarize issues. This course considers moral and political theory by focusing on contemporary cases and issues.

**PUAD 433. Metropolitics and Macroproblems: The American City in Local and Global Context. 3 Credits. S**
An interdisciplinary study of American cities, focusing on the rapidly changing demographic, physical, political, social, and economic changes. Sunbelt cities, edge cities, the rustbelt cities, planned and unplanned suburban communities, as well as declining center cities and newly revitalized downtowns are considered. The role of immigration and migration in reshaping the urban environment, and the effects of globalization are also examined.

**PUAD 435. Generating, Allocating and Managing Public Resources. 3 Credits. U**
This course is devoted to topics in public budgeting, finance and financial management. These activities play a central role in public management. The intent of this course is to understand the role these activities play in local, state, and federal governments and to see how policy and management are shaped and influenced by budgets, financial reports, and tax policy.

**PUAD 436. Managing People in Public Organizations. 3 Credits. U**
Effective human resources management is one of the key goals of organizations in both the public and private sectors. This course focuses on human resources management in a public sector context with particular emphasis placed upon past, current, and future challenges in the field. The course covers topics such as the recruitment, selection, and compensation of public sector employees, as well as more contemporary issues such as diversity management and public sector personnel reform.

**PUAD 439. Concepts of Civil Society. 3 Credits. U**
Concepts of community, social capital, and civil capacity building, and their relations to effective community functioning, democratic politics, and administrative expertise. Not available to students with credit in PUAD 639.

**PUAD 441. Public Service Leadership. 3 Credits. U**
This course is based on the premise that leadership is not confined to the top tiers of organizations and that each individual can and should develop their leadership abilities. To that end, this course examines the concept of leadership through a variety of lenses-individual, environmental, and follower perspectives-in public, nonprofit and private contexts. Special emphasis will be placed on scholarly practice and perspectives of individual leadership assessment and development. This course is offered at the 400 and 700-level, with additional assignments at the 700 level. Not available to students with credit in PUAD 641 and PUAD 741.

**PUAD 494. Topics in Public Administration: _____ . 3 Credits. S**
An introductory study of selected topics in public affairs and administration. Course may be repeated for credit if content varies. Course may be offered in lecture or online format. Not open to students with credit in PUAD 694 if the topic is the same.

**PUAD 691. Internship in Public Service. 1-6 Credits. U**
Designed to provide public administration students an applied learning experience in either a public or nonprofit organization. Open to majors in Public Administration only. Prerequisite: One of the following: PUAD 330, 331, PUAD 332, PUAD 333, and consent of instructor required.

**PUAD 701. Administration of Justice. 3 Credits.**
Examines the administration of justice and focuses on differential and discriminatory treatment in policing, criminal prosecutions, trials, sentencing, or imprisonment. Also considered are the basis and impact of racial profiling, harassment, arbitrary detention, and abusive treatment of members of racial and ethnic groups, immigrants, and/or other vulnerable groups by law enforcement, and disparate treatment by prosecutors and the courts. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 401.

**PUAD 702. Diversity and Social Equity in Public Administration. 3 Credits.**
Analyzes diversity and leadership in public and private institutions along ethnic, racial, and gender lines and the challenges of the facilitation of open dialogue on diversity. Examines the political, historical, social, and economic reasons why Americans of different ethnic, racial, and gender groups hold divergent views about major public policy areas, as well as fundamental views about democratic participation. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 402.

**PUAD 703. Foundations of the Nonprofit Sector. 3 Credits.**
This course provides an overview of the U.S. nonprofit sector, its history, scope, diversity and its positioning among and between the private and public sectors of the U.S. economy. The course explores the legal framework under which nonprofit organizations operate and are regulated. Economic, political, social, organizational and giving theories of the sector are reviewed in order to understand the sectors existence, roles and activities with particular attention to philanthropy and voluntarism. Distinct contributions to society as well as contemporary challenges faced by the sector are examined. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 403.

**PUAD 705. Managing Nonprofit Relationships. 3 Credits.**
This course considers the set of relationships that nonprofit leaders must balance within the organization and beyond organizational boundaries.
Both internal relationships (with staff, volunteers, and board members) and external relationships (with stakeholders, other organizations, and the community at large) are critical to mission accomplishment. This course provides students with the resources necessary to understand the challenges and opportunities related to building and maintaining these relationships. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in PUAD 405.

**PUAD 708. Collaboration in Public Administration. 3 Credits.**
Managers must work effectively across organizational and sector boundaries to solve problems and produce public value. This course considers the forces contributing to the need for collaborative governance, changing management tasks and competencies, and how to address key collaborative challenges. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not available to students with credit in PUAD 408.

**PUAD 741. Public Service Leadership. 3 Credits.**
This course is based on the premise that leadership is not confined to the top tiers of organizations and that each individual can and should develop their leadership abilities. To that end, this course examines the concept of leadership through a variety of lenses-individual, environmental, and follower perspectives-in public, nonprofit and private contexts. Special emphasis will be placed on scholarly practice and perspectives of individual leadership assessment and development. This course is offered at the 400 and 700-level, with additional assignments at the 700-level. Not available to students with credit in PUAD 441.

**PUAD 824. Creating Good Public Policy. 3 Credits.**
This course is an introduction to policy making in the United States with the aim of providing students with the skills and knowledge necessary to make and communicate good decisions about public policy. Competing theoretical approaches will be used to understand the policy making process. The class will highlight interactions between residents, organized interest groups, governments, the economy, and the environment. It introduces basic approaches for stakeholder analysis and methods for developing evidence-based policies or programs. Students will discuss common obstacles to good policy-making and the tensions of making public policy in a political environment.

**PUAD 825. Urban Policy and Administration. 3 Credits.**
This course explores the development, implementation and evaluation of public policy in the local government context. It examines a variety of policy tools used to address urban problems and applies theories of the policy process, intergovernmental relations, and institutions to municipal governance. In so doing, the course examines a range of current substantive policy and administrative issues facing urban communities and governments. (Same as PUAD 825.)

**PUAD 828. Nonprofit Management and Policy. 3 Credits.**
This course focuses on the economic, social, and legal foundations of the nonprofit sector. Nonprofits are examined in the context of a three-sector economy, with emphasis on the ways in which nonprofits compensate for market failures and government failures. The course examines government-nonprofit relations in the modern welfare system and offers an in-depth examination of the health, education, and welfare functions as performed by nonprofits. This course also provides exposure to selected topics in nonprofit management such as grant writing, board relations, advocacy, fundraising and volunteer management.

**PUAD 834. Human Resource Management. 3 Credits.**
This course presents the context and practice of effective human resource management, with emphasis on the political, legal, historical, and ethical dimensions of public employment. This course considers the functions of workforce management, including: 1) planning of work and the allocation of labor to that work, 2) acquisition of employees and their competencies, knowledge, skills, and abilities, 3) development of employees to channel, improve and create new knowledge, skills, and abilities, and 4) maintaining the working relationship between employee and employer. Students will apply workforce management theories and techniques to contemporary organizational challenges and investigate the tensions inherent to balancing competing values (such as: responsiveness/ neutrality and efficiency/equity) and meeting conflicting demands of organizational stakeholders and society.

**PUAD 835. Managing Public Money. 3 Credits.**
This course covers essential financial management practices and the budgetary processes of the United States federal, state and local governments. It provides an overview of major revenue, spending, and debt financing policies.

**PUAD 836. Data Driven Decision-Making. 4 Credits.**
This integrated lecture and laboratory course introduces quantitative approaches to examine public management and public policy decisions. It covers concepts of research design, probability, and inferential statistics. The laboratory portion of the course uses data analytical tools to do applied problem solving.

**PUAD 837. Advanced Public Budgeting and Finance. 3 Credits.**
In this class, students examine the design and impacts of budgetary institutions and processes in-depth. Students are introduced to and apply various technical analyses for budgetary policymaking, such as forecasting, financial statement analysis, and cost analysis. Prerequisite: The successful completion of PUAD 835 with a grade of C of higher or instructor approval is needed to enroll.

**PUAD 839. Topics in Public Administration: _____ 3 Credits.**
Study of selected topics in public administration.

**PUAD 841. Context, Ethics and Legal Environment of Public Administration. 3 Credits.**
This course explores the environment in which public administrators work that both empowers and constrains what public administrators can do. Through discussion, cases, and classic readings, the course explores the accepted uses and procedures of the field. This includes the intellectual history, the political and legal context, the tensions between democracy and bureaucracy, and ethical decision making.

**PUAD 842. Law and Public Management. 3 Credits.**
This course introduces constitutional and administrative law issues that face public administrators, with a particular focus on the state and local level. Using legal reasoning as a decision-making tool, the context of often-competing administrative values-efficiency, effectiveness, and equity-will be considered. While administrators do not face constitutional issues every day, this course examines how constitutional values often play out in the day-to-day decision-making of public administrators.

**PUAD 845. Managing Public Organizations. 3 Credits.**
This class explores concepts and practices in organization behavior and management theory as they apply to public organizations. It covers dynamics associated with organizational structures, accountability, and culture and dynamics of risk in leadership, collaboration, and contracting. It emphasizes approaches to understanding the dynamics of individuals, groups, and teams within organizations.

**PUAD 849. Law, Courts, and Public Policy. 3 Credits.**
This course provides an overview of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights.
in the areas of employment, policing, welfare, prisons, and environmental policy. Prerequisite: Graduate standing or consent of instructor.

**PUAD 850. Intergovernmental Relations. 3 Credits.**
This course focuses on the fiscal and administrative relationships among the three levels of government - federal, state, and local - in the United States. A number of topics will be examined, including a history of intergovernmental relations, the political, constitutional, and legal foundations of the intergovernmental system, and intergovernmental fiscal policy. The impact of the intergovernmental system will be assessed from the perspective of specific areas and intergovernmental programs.

**PUAD 851. Infrastructure Management. 3 Credits.**
This course introduces students to infrastructure management from a local government perspective. Through a heavy reliance on guest speakers and site visits, it provides an overview of infrastructure development, financing, and maintenance. Throughout the course, students are taught to think in terms of systems and collaborative relationships.

**PUAD 853. Policy Analysis. 3 Credits.**
This course exposes students to the conceptual foundations and applied techniques associated with identifying, describing, and seeking solutions to public policy problems. Recognizing that it often occurs in a context where competing values and perspectives are often strongly held, students will learn the designs and methodologies to conduct policy analysis systematically and with minimal bias. Prerequisite: The completion of a graduate-level statistics class or instructor approval is required to enroll.

**PUAD 854. Innovation and Organizational Change. 3 Credits.**
This course will examine theories of innovation and organizational change as applied to public organizations. Particular emphasis will be placed on the concepts of innovation in bureaucratic organizations, on the process of successful change in organizations, and on leadership and employees' roles.

**PUAD 856. Management and Information Technology. 3 Credits.**
An introduction to the concepts of information policy and management of technology within governmental organizations. The course covers the effects of technology on government and society as well as information policy (privacy, security and access) and their importance to democracy. The course also includes a leadership perspective on planning, funding, and implementation of technology systems in governmental organizations as well as the role of Chief Information Officer.

**PUAD 857. Performance Management and Governance. 3 Credits.**
This course examines the practice and governance challenges of performance management and budgeting in the public sector. Topics covered in this course include: a) the governance context of performance measurement and management; b) the historical and theoretical foundation of performance measurement and management; c) the global trend of performance-oriented reforms; d) the practice and politics of performance measurement and management; and e) governance and ethical issues in managing for results. Prerequisite: The completion of a graduate-level statistics class or instructor approval is required to enroll.

**PUAD 858. Performance Audit. 3 Credits.**
This course examines the practice of performance audit at the national, state, and local levels. Topics covered in the course include: a) the concept of performance audit and the roles of auditors in performance management; b) performance audit systems and standards at the national, state and local levels; c) performance audit methodologies and techniques; d) the establishment of audit criteria; e) the concept and practice of risk and vulnerability analysis; f) the reporting and communication of performance audit results. Prerequisite: The completion of a graduate-level statistics class or instructor approval is required to enroll.

**PUAD 860. Governing Sustainable Communities. 3 Credits.**
This course examines the role that communities can play in advancing environmental, economic, and social sustainability. Although sustainability has traditionally been viewed as an international or national issue, the unit of action has been shifting downward. Cities, in particular, have been characterized as a key "battleground for sustainability." This is in part because an estimated 50 percent of the global population, including 84 percent of the U.S. population, lives in urban areas, and those numbers are only projected to increase. Moreover, local governments have authority over many decisions that are directly related to sustainability, including land use, transportation, housing, local food policy, energy efficiency, and the character of local economic development. In this class we examine these and related issues from a community-level and institutions perspective in order to assesses how social and governmental structures, priorities, pressures and constraints influence the prospect for urban sustainability. A particular focus is placed on understanding how local and regional governments implement and manage sustainability.

**PUAD 861. Data Analytics. 3 Credits.**
The course is an introduction to data analytics in public administration and policy analysis. It teaches basic programming in R and SAS, covers basic applications of data analytics such as regression analysis and machine learning, and teaches basic tools of data visualization, including GIS. The course also reviews the political, legal, organizational, and ethical challenges of data analytics usage and the professional responsibilities public administrators have in using these tools. Students are expected to be familiar with basic statistical analysis and have already taken MPA-level statistics or an equivalent course. This course satisfies an elective requirement for students who are completing the Performance Management certificate. Prerequisite: PUAD 836 or equivalent academic engagement that includes quantitative analysis up to multi-variate regression.

**PUAD 862. Emergency Management in the United States: Theory and Practice. 3 Credits.**
This course covers the history, context, and practice of emergency management, blending in the theory and concepts of intergovernmental relations and collaborative leadership methods that are essential to the practice. The course will cover emergency management, as practiced in the United States, the National Incident Management System (NIMS), and the intergovernmental relationships that must be cultivated among all branches of government, non-profits, and private sector entities to plan, mitigate, respond to and recover from all disasters both natural and manmade.

**PUAD 863. Program Evaluation. 3 Credits.**
In this course, students learn the designs and methods used to evaluate the performance of public programs, policies, and organizations. Evaluation is rooted in trying to understand cause and effect relationships in complex situations and correctly attributing impact to intervention. Emphasis is placed on approaches to measure social outcomes. Through a series of evaluation case studies, students will use evidence and empirical methods to assess whether public action achieves its desired outcomes. Prerequisite: The completion of a graduate-level statistics class or instructor approval is required to enroll.

**PUAD 892. Internship Experience in Local Government Administration. 1-3 Credits.**
This course is to supplement and enhance a part-time internship or current work experience in a local government or non-profit agency. It challenges students to examine their work experience to provide them
the knowledge, background, and skills needed to successfully lead and manage in a local government or non-profit organization. The course requires students to reflect, write, and discuss their part-time internship (or current work experience) and study how the experience relates to public administration theory, leadership, and management competencies. As this course focuses on local government management, all students are required to attend a professional conference designated by the instructor. Graded on a satisfactory/unsatisfactory basis.

**PUAD 893. Directed Readings. 1-3 Credits.**

Designed to meet the needs of advanced students whose study in public administration cannot be met with current course work.

**PUAD 894. Professional Development Seminar I: Public Administration Contemporary Issues & Competency Assessment. 3 Credits.**

This intensive seminar examines students' current experiences as full-time interns and considers workplace and community concerns within the context of contemporary issues. The transition from an academic to a professional work setting is emphasized in discussion and reflective assignments. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Open only to MPA students who are required to complete a full-time internship in their second year of study.

**PUAD 895. Professional Development Seminar II: Leading to Create a Culture for High Performance. 3 Credits.**

In this intensive week-long seminar students will examine what high performance means, how performance happens in an organization and the various principles of public leadership that most effectively guide organizational culture. The course is intended to stimulate thoughts and learnings about high-performance organizations, organizational values, and explores strategies that can create the type of culture that inspires and enables employees to excel. The seminar format provides an opportunity for introspection in individual beliefs and characteristics, group discussion for the exchange of diverse views, and classroom instruction to explore the latest thinking in public sector leadership. Ultimately, the seminar is designed to train and empower public administrators to live the Athenian oath in their organization and community.

**PUAD 897. Public Administration Contemporary Issues and Competency Assessment. 3 Credits.**

This course exposes students to the contemporary issues in public management and analysis of competencies for public management in four theme areas. Students will participate in discussions of issues and in three assessments of their preparation to lead public organizations. Students will complete the MPA Final Essay which focuses on integration of course and work experience in relation to the values theme of the MPA program. Graded on a satisfactory/unsatisfactory basis.

**PUAD 898. Leading to Create a Culture for High Performance. 3 Credits.**

In this intensive week-long seminar students will examine what high performance means, how performance happens in an organization and the various principles of public leadership that most effectively guide organizational culture. The course is intended to stimulate thoughts and learnings about high-performance organizations, organizational values, and explores strategies that can create the type of culture that inspires and enables employees to excel. The seminar format provides an opportunity for introspection in individual beliefs and characteristics, group discussion for the exchange of diverse views, and classroom instruction to explore the latest thinking in public sector leadership. Ultimately, the seminar is designed to train and empower public administrators to live the Athenian oath in their organization and community.

**PUAD 890. Research Seminar in Public Administration and Democracy. 3 Credits.**

This course focuses on the democratic context of public administration. Topics could include how democracy shapes the practice of public administration; the functioning of public administration in a constitutional democracy; issues relating to control and discretion of public administrators; citizenship and representative bureaucracy; theories of bureaucratic values such as equity, justice and efficiency, ethics and accountability; theories of institutions.

**PUAD 931. Research Seminar in Public Management. 3 Credits.**

This course, on the topic which increasingly is approached as an interdisciplinary field, focuses on the management of public and non-profit agencies. Topics could include: the nature of public agencies and the roles of public executives, managers, and professionals; distinctions between public, private, and non-profit agencies in America and internationally; creating and managing organizational networks; leadership; work motivation; and the ethics of decision-making.

**PUAD 932. Seminar in the Intellectual History of Public Administration. 3 Credits.**

This course will analyze the intellectual currents that undergird the theories and concepts in public administration. There are three primary perspectives cutting the topics. They are historical, cultural and analytical.

**PUAD 934. Research Methods in Public Administration. 3 Credits.**

The course examines issues of research and epistemology with an emphasis on connecting theory and research and doing research in field settings.

**PUAD 935. Advanced Quantitative Methods for Public Administration. 3 Credits.**

This seminar will assist students to develop a thorough competence in both theory and application of multivariate statistical models of the types that are commonly used to study questions of organization and policy in the public sector. These will include inference for the general linear regression model under a wide variety of specifications, as well as a consideration of path models and systems of simultaneous equations. The principal goal of this course is to strengthen the ability of doctoral students in public administration to work methodologically as independent scholars using relatively advanced designs and technique in their work.

**PUAD 936. Policy Analysis and Program Evaluation. 3 Credits.**

This course examines the theoretical foundations and analytical components of policy analysis and program evaluation, common tools for assessing alternative courses of public action and program effectiveness. This examination will include a review and critique of common quantitative and qualitative approaches, including cost-benefit analysis, cost-effectiveness analysis, and quasi-experimental design.

**PUAD 937. Qualitative Methods in Public Administration. 3 Credits.**

This course examines the concepts and practices of qualitative research. The focus will be on field research and the collection of "textual data" through observation, interviewing, and documents. The course will also examine the interpretation and analysis of qualitative data and how to present qualitative findings.

**PUAD 939. Topics in Public Administration: ______. 1-3 Credits.**

A study of selective topics in public administration. Course may be taken more than once.

**PUAD 943. Constitutional Foundations of Public Administration. 3 Credits.**

This course provides grounding in the constitutional premises of public administration including executive, legislative, and judicial powers, and federalism, and those issues associated with the development of
economics institutions and processes such as taxation, employment regulation, and commerce controls.

**PUAD 949. Law, Courts, and Public Policy. 3 Credits.**
This course provides an in-depth analysis of the role of law, litigation, and courts in the public policy process, with an emphasis on bureaucratic institutions. The course covers the main theories and empirical research on the policy effects of litigation and intervention, with a particular focus on civil rights in the areas of employment, policing, welfare, prisons, and environmental policy. As part of the course requirements, students will conduct original empirical research.

**PUAD 998. Directed Reading on Public Administration. 1-6 Credits.**
Designed to meet the needs of graduate students whose study in public administration cannot be met with present course. Prerequisite: consent of instructor.

**PUAD 999. Dissertation. 1-15 Credits.**
Enrollment for writing doctoral dissertations. Graded on a satisfactory progress/limited progress/no progress basis.

**Courses**

**SPAA 691. Internship Experience. 1-3 Credits. S**
Designed to provide students an applied learning experience in a relevant public, non-governmental, or nonprofit organization. Students are required to critically reflect on their experience through a variety of academic assignments throughout their internship experience. Prerequisite: Permission of academic unit.

**SPAA 692. Research Experience. 1-3 Credits. S**
Designed for advanced undergraduate students. Students enhance their research skills by working one-on-one with a faculty member on an independent scholarly project. Students are required to complete a final project or presentation, through advising and consultation with the designated faculty member. Prerequisite: Permission of academic unit.

**SPAA 693. Directed Readings. 1-3 Credits. S**
For advanced undergraduate students who wish to study a specific topic of interest that is not covered in the curriculum. Each student must complete a proposal outlining his or her topic request and submit to the Undergraduate Coordinator. Prerequisite: Permission of the academic unit.

**Courses**

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

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

**UBPL 407. Sustainability and the Future of Transportation. 3 Credits.**
This course examines the worldwide impact of how we travel, and how that is changing with the development of new technologies in transportation. Our study starts with an overview of different modes of transportation and their use across the globe, then moves into the environmental, economic, equity, and energy factors that influence the sustainability of our ways of travel. Once we examine our present reality, we then peer into the future and examine the potential of evolving developments in transportation, including electric vehicles, autonomous cars, shared mobility, and the COVID-19 pandemic. Topic areas include worldwide differences in the use of modes of transportation, spatial relations and interactions between transportation and land use, and how sustainability principles interact with policy, market forces, and personal behavior in transportation. Upon completion of the course, students will be able to 1) evaluate the sustainability of transportation proposals and developments, 2) develop transportation improvements that contribute to enhancing equity in transportation while mitigating environmental impacts and energy use, and 3) practice enhanced critical thinking, logic, reasoning, and professional communication abilities. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 707.

**UBPL 410. Housing Policy and Planning. 3 Credits.**
This course explores contemporary U.S. housing issues and introduces the various methods used by the public sector as it intervenes in housing markets. Governments at all levels employ many different approaches to achieve housing goals. This course will examine many of these approaches to help students understand what these housing programs are supposed to accomplish and how well they work. In all cases, the objective of the course is to educate planners so that they have a firm understanding of housing programs that exist and a grasp of the methods used to select housing strategies for implementation by the public sector. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 710.

**UBPL 420. Sustainable Land Use Policy and Planning. 3 Credits.**
This course introduces students to the issues that planners and decision makers face as they strive to promote sustainability, especially within the context of land use planning. Emphasis will be placed on the theoretical and policy considerations that guide the work of planners. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 720.

**UBPL 425. Environmental Planning Techniques. 3 Credits.**
An understanding of natural processes is an essential aspect of developing appropriate and effective environmental plans and policies, and creating context- and ecosystem-sensitive site designs. The course covers a variety of topics within environmental and sustainable land use planning. Each topic is examined with respect to the scope of the issues, the methods of analyzing and/or measuring those issues, and the ways those issues can be addressed to avoid or mitigate environmental problems. The main topics will include 1) soils, 2) water and land use, 3) urban ecology, wildlife habitats, and urban biodiversity, and 4) energy, climate change, and natural hazards. The primary purposes of this course are to: 1) Gain an overview of the range of environmental topics and challenges involved in sustainable land use planning; 2) Develop familiarity with common principles and datasets used in environmental planning analysis; and 3) Apply techniques of environmental analysis to build skills applicable in practice. This course is offered at the 400
and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 725.

**UBPL 450. Transportation Policy and Planning. 3 Credits.**
This course is designed to provide a broad overview of urban transportation. The role which transportation systems and networks play in facilitating the movement of people as motorists, cyclists, and pedestrians is explored. Methods through which transportation systems are planned for and evaluated are discussed as are major policy issues confronting decision makers within the field. Upon completion of this course, students will be able to 1) comprehend transportation plans and policy documents, 2) evaluate the broader impacts of transportation decisions, and 3) develop and evaluate transportation planning and policy interventions which address current and future issues. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 750.

**UBPL 480. Climate Change and Hazards Planning. 3 Credits.**
This course covers planning for climate change and disasters. Floods, heat waves, droughts, extreme storms, sea level rise, and the wide range of other climate-related hazards are (or soon will) impact virtually every aspect of the social, economic, and environmental systems on which we all depend. While the challenges of making our communities more sustainable and resilient are daunting, innovative plans, policies, programs, and projects are being developed and implemented all around the world. This course will cover four main topics: 1) the basic science and concepts of climate change and disasters, 2) learning from decades of knowledge about planning for natural hazards, 3) mitigating climate change by reducing greenhouse gas emissions, and 4) adapting to the impacts of climate change. Each topic will be addressed primarily at the local (city, county or regional) scale, with a primary focus on planning in the United States. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 780.

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

**UBPL 705. Urban Economic Theory and Analysis. 3 Credits.**
This course examines the economic forces which shape and affect cities. In the first part of the course, theories of location are considered. With the help of these theories our objectives are to understand why cities exist, why they are located where they are, the distribution of city sizes, the causes of regional and metropolitan growth and decline, and the spatial distribution of alternative activities within cities. Part two of this course introduces analysis methods which aid in the comprehension of local and regional economic characteristics and in decision-making concerning the distribution of resources within cities.

**UBPL 707. Sustainability and the Future of Transportation. 3 Credits.**
This course examines the worldwide impact of how we travel, and how that is changing with the development of new technologies in transportation. Our study starts with an overview of different modes of transportation and their use across the globe, then moves into the environmental, economic, equity, and energy factors that influence the sustainability of our ways of travel. Once we examine our present reality, we then peer into the future and examine the potential of evolving developments in transportation, including electric vehicles, autonomous cars, shared mobility, and the COVID-19 pandemic. Topic areas include worldwide differences in the use of modes of transportation, spatial relations and interactions between transportation and land use, and how sustainability principles interact with policy, market forces, and personal behavior in transportation. Upon completion of the course, students will be able to 1) evaluate the sustainability of transportation proposals and developments, 2) develop transportation improvements that contribute to enhancing equity in transportation while mitigating environmental impacts and energy use, and 3) practice enhanced critical thinking, logic, reasoning, and professional communication abilities. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 407.

**UBPL 710. Housing Policy and Planning. 3 Credits.**
This course explores contemporary U.S. housing issues and introduces the various methods used by the public sector as it intervenes in housing markets. Governments at all levels employ many different approaches to achieve housing goals. This course will examine many of these approaches to help students understand what these housing programs are supposed to accomplish and how well they work. In all cases, the objective of the course is to educate planners so that they have a firm understanding of housing programs that exist and a grasp of the methods used to select housing strategies for implementation by the public sector. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 410.

**UBPL 715. Community and Neighborhood Revitalization. 3 Credits.**
The course introduces students to a range of community development concepts and approaches in the context of urban change in the United States. In this context, this course helps students understand the various theories of neighborhood change, community development strategies, and a range of principles for developing neighborhood revitalization initiatives focusing on revitalization strategies for inner-city neighborhoods. In this course, community development interventions are understood as facilitating, strengthening, and improving less-advantaged communities.

**UBPL 716. Neighborhood Analysis and Evaluation. 3 Credits.**
This course explores social theories of Community, how those theories have influenced concepts for neighborhood development, and how to apply the idea of Community to local neighborhood planning and community development. It also teaches how to analyze neighborhood conditions to understand and describe neighborhoods and inform neighborhood improvement strategies. It explores ways to analyze and interpret quantitative indicators—demographic, economic, physical, and social conditions—which exist at the neighborhood level. It teaches students how to investigate and analyze opportunities, assets, and challenges confronting the neighborhood. It introduces students to community asset mapping.

**UBPL 720. Sustainable Land Use Policy and Planning. 3 Credits.**
This course introduces students to the issues that planners and decision makers face as they strive to promote sustainability, especially within the context of land use planning. Emphasis will be placed on the theoretical and policy considerations that guide the work of planners. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 420.

**UBPL 725. Environmental Planning Techniques. 3 Credits.**
An understanding of natural processes is an essential aspect of developing appropriate and effective environmental plans and policies, and creating context- and ecosystem-sensitive site designs. The course covers a variety of topics within environmental and sustainable land use planning. Each topic is examined with respect to the scope of the issues, the methods of analyzing and/or measuring those issues, and the ways those issues can be addressed to avoid or mitigate environmental problems. The main topics will include 1) soils, 2) water and land use, 3) urban ecology, wildlife habitats, and urban biodiversity, and 4) energy,
climate change, and natural hazards. The primary purposes of this course are to: 1) Gain an overview of the range of environmental topics and challenges involved in sustainable land use planning; 2) Develop familiarity with common principles and datasets used in environmental planning analysis; and 3) Apply techniques of environmental analysis to build skills applicable in practice. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 425.

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

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

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

**UBPL 741. Foundations of Compassionate Critical Thinking. 3 Credits.**
This course engages students with research methods (research design, inferential statistics, and survey methods) within the broad suite of relationship skills on which successful planning analysis and public service careers depend. These relationship skills are commonly referred to as ‘soft skills,’ in spite of the hard work they often require. By embedding ‘soft skills’ within ‘hard skills’ (quantitative methods), we will examine a variety of motivations for public service and planning through a consistent lens of advancing equity. We use compassion as a framework for integrating science and practice related to a) emotions, relationships, and self-care, b) reasoning and cognitive biases, c) networks of relationships, and d) broader social, economic, and political systems. We pay particular attention to countering racism, sexism, and other forms of exclusion and oppression which can be hidden within seemingly technical/rational research methods and analyses. Through the course, we consider how planners can use research and communication to help the public and decision makers in the near term, even as there is great uncertainty about the future.

**UBPL 742. Applied Data and Spatial Analysis. 3 Credits.**
Planners work with quantitative data, much of which are spatial in nature. They use quantitative information to address questions they encounter in planning and policymaking and make decisions. Planners gather, summarize, analyze, and present data they have collected themselves or have obtained from secondary sources. Planners may also review and assess quantitative analyses prepared by others. This course is designed to prepare students to critically review analyses prepared by others and conduct basic statistical analysis of data. It introduces students to key concepts and tools in quantitative analysis and research methods relevant to urban planning and policy. It prepares students to understand, interpret, and more importantly, critically assess quantitative data analyses and results they would encounter in urban planning and allied disciplines.

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

**UBPL 750. Transportation Policy and Planning. 3 Credits.**
The role which transportation systems and networks play in facilitating the movement of people as motorists, cyclists, and pedestrians is explored. Methods through which transportation systems are planned for and evaluated are discussed as part of major policy issues confronting decision makers within the field. Upon completion of this course, students will be able to 1) comprehend transportation plans and policy documents, 2) evaluate the broader impacts of transportation decisions, and 3) develop and evaluate transportation planning and policy interventions which address current and future issues. This course is offered at the 400 and 700 level with additional assignments at the 700 level. Not open to students with credit in UBPL 450.

**UBPL 756. Data Driving Transportation. 3 Credits.**
The transportation systems of the world are the product of many decisions, all of which are heavily influenced by the methods we use to study and create those systems. This course explores the research methods that can be employed in planning and analyzing transportation. Content areas include history and theory of transportation planning and modeling, traditional and recent advancements in transportation modeling, and analyzing land-use/transportation interaction, freight travel, public transportation, and non-automotive travel demand, including public transit and non-motorized modes. Upon completion of this course, students will be able to 1) practice advanced skills in descriptive, graphical, GIS, and quantitative analytical methods for transportation, 2) evaluate the impact of transportation investments using those methods and 3) apply enhanced critical thinking, logic, reasoning, and professional communication abilities.

**UBPL 758. Transportation for Livable Cities. 3 Credits.**
Transit use, walking, and cycling are becoming increasingly important in efforts to promote health, sustainability, social equity, and livability in cities. This course will introduce students to current practices associated with planning for and delivering public transit service and bicycle/pedestrian infrastructure. Upon completion of this course students will be able to 1) assess the ability of the transportation network to serve transit users, pedestrians, and cyclists; 2) identify how to introduce various modes of transportation; and 3) develop ideas to promote complete, safe, and equitable transportation networks.

**UBPL 763. Politics and Public Management. 3 Credits.**
Planners and public administrators operate within highly technical yet political environments. Planners and administrators often try to bring consensus, efficiency, effectiveness, and action-taking to communities,
but the very structure of our democracies promotes conflict and stalemate. 
Understanding how to manage power, structure, and agency in policy 
making will help planners and administrators become savvier as they 
balance their roles as advisors, educators, facilitators, advocates, 
managers, and leaders. The course includes theories of policy making 
and leadership. Students apply those theories to specific case studies 
associated with different policy areas (transportation, economic 
development, hazard mitigation, sustainability, historic preservation, 
etc.). Through research and case studies this class explores the trials, 
tribulations, and triumphs of planners and administrators as they seek to 
manage politics in their careers.

**UBPL 785. History and Theory of Planning. 3 Credits.**
The course serves as an introduction to the history of city planning and 
“how to plan” in general. Planners are particularly concerned with future 
consequences of current action. In looking to the future, knowing past 
history is a good place to start. Also, planning theorists have thought 
deeply about how best to plan and their thoughts and advice can serve 
planners and decision-makers well when they are facing unknowns.

**UBPL 802. Special Topics in Urban Planning: ______. 3 Credits.**
Study of selected topics in urban planning.

**UBPL 806. Thesis - Graduate Research. 1-6 Credits.**

Independent study and research related to the master’s thesis.
Prerequisite: Consent of instructor.

**Bachelor of Arts and Bachelor of General Studies in Law and Society**

Law and society is an interdisciplinary field that examines how law works 
in practice in public administration, courts, the non-profit sector, policy, 
policing, and the justice system. A degree in law and society provides a 
strong background in how law works in practice. Students learn about 
legal history and legal policy, how law shapes managerial processes, 
how it shapes government and the system of justice, and how it affects 
ordinary people in every walk of life. Students can complete an internship 
for credit towards their degree. Past internship placements include: 
Johnson County District Attorney’s Office, the City of Shawnee, Planned 
Parenthood, and Kansas City-area law firms.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college 
transcripts to the Office of Admissions. Unless they are college transfer 
students with at least 24 hours of credit, prospective students must send 
ACT or SAT scores to the Office of Admissions. Prospective first-year 
students should be aware that KU has qualified admission requirements 
that all new first-year students must meet to be admitted. Consult the 
Office of Admissions (http://admissions.ku.edu/) for application deadlines 
and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for 
information about international admissions.

Students considering transferring to KU may see how their college-
level course work will transfer on the Office of Admissions (http:// 
credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts 
and Sciences**

Admission to the College is a different process from admission to a 
major field. Some CLAS departments have admission requirements. 
See individual department/program sections for departmental admission 
requirements.

**B.A. or B.G.S. in Law & Society**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LWS 330</td>
<td>Introduction to Law &amp; Society</td>
<td>3</td>
</tr>
<tr>
<td>LWS 332</td>
<td>Methods in Law and Society</td>
<td>3</td>
</tr>
<tr>
<td>LWS 333</td>
<td>The Pursuit of Rights: Law, Democracy &amp; Power</td>
<td>3</td>
</tr>
<tr>
<td>LWS 443</td>
<td>Theoretical Foundations of Law &amp; Society</td>
<td>3</td>
</tr>
<tr>
<td>LWS 699</td>
<td>Capstone in Law and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

**Code**

**Title**

**Hours**

**Electives**

Complete 4 courses from the following:
**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**  
Satisfied by 27 hours of major courses.

**Major Hours in Residence**  
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**  
Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**  
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in Law and Society is available by using the left-side navigation, or by clicking here (p. 1986).

A sample 4-year plan for the BGS degree in Law and Society is available by using the left-side navigation, or by clicking here (p. 1987).

**BA in Law and Society**

Below is a sample 4-year plan for students pursuing the BA in Law and Society. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

The Law and Society major is only available at the KU Edwards Campus in Overland Park.

**Freshman**

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
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<tbody>
<tr>
<td>Goal 2.1 Written Communication/BA Writing I</td>
<td>3 Goal 2.1 Written Communication/BA Writing II</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Literacy)</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
</tr>
<tr>
<td>1st Semester Language (BA Language)</td>
<td>5 2nd Semester Language (BA Language)</td>
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<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Goal 2.2 Communication</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
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</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Language)</td>
<td>3 4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)</td>
</tr>
<tr>
<td>LWS 330 (Major Requirement + Goal 3 Social Science)</td>
<td>3 LWS 333 (Major Requirement)</td>
</tr>
<tr>
<td>LWS 332 (Major Requirement + Goal 1.1)</td>
<td>3 Goal 3 Natural Science</td>
</tr>
<tr>
<td>Goal 3 Arts and Humanities</td>
<td>3 BA Laboratory/Field Experience (LFE)</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3 PUAD 330 (recommended LWS elective - major requirement)</td>
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**Major Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AAAS 306</td>
<td>The Black Experience in the U.S. Since Emancipation</td>
</tr>
<tr>
<td>AAAS 322</td>
<td>Legal Issues and the African American</td>
</tr>
<tr>
<td>AAAS 437</td>
<td>Global Ethnic and Racial Relations</td>
</tr>
<tr>
<td>AAAS 511</td>
<td>The Civil Rights Movement</td>
</tr>
<tr>
<td>AAAS 611</td>
<td>History of the Black Power Movement</td>
</tr>
<tr>
<td>ABSC 343</td>
<td>Independent Living and People with Disabilities</td>
</tr>
<tr>
<td>ABSC 441</td>
<td>Ethical, Legal and Professional Issues in Applied Behavioral Science</td>
</tr>
<tr>
<td>AMS 320</td>
<td>Border Patrolled States</td>
</tr>
<tr>
<td>AMS 437</td>
<td>Global Ethnic and Racial Relations</td>
</tr>
<tr>
<td>ANTH 330</td>
<td>Forensic Anthropology</td>
</tr>
<tr>
<td>BBA 302</td>
<td>Legal Aspects of Business</td>
</tr>
<tr>
<td>BLAW 301</td>
<td>Legal Aspects of Business</td>
</tr>
<tr>
<td>EVRN 332</td>
<td>Environmental Law</td>
</tr>
<tr>
<td>LWS 494</td>
<td>Topics in Law &amp; Society: _____</td>
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<tr>
<td>LWS 691</td>
<td>Internship in Law &amp; Society</td>
</tr>
<tr>
<td>PSYC 465</td>
<td>Stereotyping and Prejudice Across Cultures</td>
</tr>
<tr>
<td>PSYC 492</td>
<td>Psychology and Social Issues</td>
</tr>
<tr>
<td>PSYC 566</td>
<td>Psychology and the Law</td>
</tr>
<tr>
<td>PUAD 330</td>
<td>Introduction to Public Administration</td>
</tr>
<tr>
<td>PUAD 333</td>
<td>Hard Choices in Public Administration: _____</td>
</tr>
<tr>
<td>PUAD 401</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>PUAD 402</td>
<td>Diversity and Social Equity in Public Administration</td>
</tr>
<tr>
<td>PUAD 432</td>
<td>Conducting the People’s Business Ethically</td>
</tr>
<tr>
<td>PUAD 433</td>
<td>Metropolitics and Macroproblems: The American City in Local and Global Context</td>
</tr>
<tr>
<td>PUAD 439</td>
<td>Concepts of Civil Society</td>
</tr>
<tr>
<td>PUAD 441</td>
<td>Public Service Leadership</td>
</tr>
<tr>
<td>SOC 304</td>
<td>Principles of Sociology</td>
</tr>
<tr>
<td>SOC 306</td>
<td>Principles of Social Problems</td>
</tr>
<tr>
<td>SOC 437</td>
<td>Global Ethnic and Racial Relations</td>
</tr>
<tr>
<td>SOC 461</td>
<td>Competing Perspectives on Crime and Deviance</td>
</tr>
<tr>
<td>SOC 343</td>
<td>American Racial and Ethnic Relations</td>
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<tr>
<td>SPAA 691</td>
<td>Internship Experience</td>
</tr>
<tr>
<td>SPAA 692</td>
<td>Research Experience</td>
</tr>
<tr>
<td>SPAA 693</td>
<td>Directed Readings</td>
</tr>
<tr>
<td>UBPL 200</td>
<td>Sustainability and Society</td>
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<tr>
<td>UBPL 300</td>
<td>Planning the Sustainable City</td>
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<tr>
<td>WGSS 327</td>
<td>Perspectives in Lesbian, Gay, Bisexual, and Transgender Studies</td>
</tr>
<tr>
<td>WGSS 563</td>
<td>Gender, Sexuality and the Law</td>
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<tr>
<td>WGSS 640</td>
<td>Politics of Reproductive Policy</td>
</tr>
<tr>
<td>WGSS 653</td>
<td>Gender, War, and Peace</td>
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**Major Core Hours**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>Gender, Sexuality and the Law</td>
</tr>
<tr>
<td>1987</td>
<td>Gender, War, and Peace</td>
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</table>

**BA in Law and Society**

Below is a sample 4-year plan for students pursuing the BA in Law and Society. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

The Law and Society major is only available at the KU Edwards Campus in Overland Park.
### Junior

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LWS 443 (Major Requirement)</td>
<td>3</td>
<td>LWS Elective 300+ (Major Requirement)</td>
<td>3</td>
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<tr>
<td></td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
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<tr>
<td></td>
<td>PUAD 332 (Recommended completion of PUAD 330, Goal 1.2, BA Quantitative Reasoning)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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### Senior

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<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>LWS Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>SPAA 691 (Goal 6 Integration &amp; Creativity, LWS elective req.)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LWS Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>LWS 699 (Major Requirement)</td>
<td>3</td>
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<tr>
<td></td>
<td>Goal 5 Social Responsibility and Ethics</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<tr>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

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### Total Hours 120-123

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
2. No more than 3 hours of SPAA 691 may count toward the major.
3. SPAA 691 Internship Experience is typically taken to fulfill KU Core Goal 6. If SPAA 691 is not taken for Goal 6, another Goal 6 course will need to be taken. This may require that an undeclared elective be used to fulfill a pre-requisite for a Goal 6 course.
4. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in Law and Society

Below is a sample 4-year plan for students pursuing the BGS in Law and Society. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

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### Freshman

<table>
<thead>
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<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Goal 2.1 Written Communication/BA Writing I</td>
<td>3</td>
<td>Goal 2.1 Written Communication/BA Writing II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
<td>Goal 1.2 Communication/BA Writing II</td>
<td>3</td>
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<tr>
<td></td>
<td>Goal 1.1 Critical Thinking</td>
<td>3</td>
<td>Goal 1.1 Written Communication/BA Writing II</td>
<td>3</td>
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<tr>
<td></td>
<td>POLS 110 (Goal 3 Social Science, recommended for major)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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<td></td>
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### Sophomore

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<tr>
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<th>Spring</th>
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<tbody>
<tr>
<td></td>
<td>LWS 330 (Major Requirement + Goal 3 Social Science)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>LWS 332 (Major Requirement + Goal 1.1)</td>
<td>3</td>
<td>LWS 333 (Major Requirement)</td>
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<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
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### Junior

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<td>3</td>
<td>LWS Elective 300+ (Major Requirement)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>Goal 4.1 US Diversity</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

|        | 15 | 15 |
Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 3 3
Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 3 3

Senior
Fall Hours Spring Hours
LWS Elective 300+ (Major Requirement) 3 SPAA 691 (Goal 6 Integration & Creativity, LWS elective reqt.) 3 3
LWS Elective 300+ (Major Requirement) 3 LWS 699 (Major Requirement) 3 3
Goal 5 Social Responsibility and Ethics 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 3 3
Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 3 3
BGS Career Course (BGSC) 3 Second Area of Study/ Elective/Degree/Junior-Senior Hours 3 3

Total Hours 120

1 Please note that the Bachelor of General Studies degree requires completion of a single BGS major AND a secondary field of academic study (a second major, co-major, or minor). This sample plan is based on the completion of a minor. If a second major is selected instead, elective hours on plan will be needed for these additional major requirements.

2 No more than 3 hours of SPAA 691 may count toward the major.

3 SPAA 691 Internship Experience is typically taken to fulfill KU Core Goal 6. If SPAA 691 is not taken for Goal 6, another Goal 6 course will need to be taken. This may require that an undesigned elective be used to fulfill a pre-requisite for a Goal 6 course.

4 Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Bachelor of Arts and Bachelor of General Studies in Public Administration**

The undergraduate major in public administration offers students the necessary knowledge and skills for planning, implementing, and evaluating public programs. Students learn to think critically and analytically about public policy and will also acquire skills that make them more effective citizens in their own communities. Students can complete an internship for credit towards their degree. Past internship placements include: Johnson County, Kauffman Center, Harvesters, Golf Course Superintendents Association of America, City of Roeland Park, YMCA, Governor’s Internship Program, Youth Volunteer Corps of Kansas City, America Reads and Army Corps of Engineers.

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admission to the College of Liberal Arts and Sciences**

Admission to the College is a different process from admission to a major field. Some CLAS departments have admission requirements. See individual department/program sections for departmental admission requirements.

**Requirements for the B.A. or B.G.S. Major**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Public Administration Required Courses</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete a course in each of the following areas:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PUAD 330 Introduction to Public Administration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or PUAD 331 Introduction to Public Administration, Honors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PUAD 332 Quantitative Methods for Public Administration (PSYC 210 or MATH 365 and their equivalents may be substituted for this course requirement but students would need to complete another jr/sr PUAD elective for the PUAD major.)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PUAD 333 Hard Choices in Public Administration: _____</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Public Administration Required Electives</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majors must complete 6 courses (18 hours) from the following:</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>LWS 330 Introduction to Law &amp; Society</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LWS 333 The Pursuit of Rights: Law, Democracy &amp; Power</td>
<td></td>
</tr>
</tbody>
</table>
**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**  
Satisfied by 27 hours of major courses.

**Major Hours in Residence**  
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**  
Satisfied by a minimum of 24 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**  
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

A sample 4-year plan for the BA degree in Public Administration is available by using the left-side navigation, or by clicking here (p. 1989).  
A sample 4-year plan for the BGS degree in Public Administration is available by using the left-side navigation, or by clicking here (p. 1990).

**BA in Public Administration**

Below is a sample 4-year plan for students pursuing the BA in Public Administration. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 (Goal 2.1 (2 crs req), BA Writing I)</td>
<td>3</td>
<td>ENGL 102 (Goal 2.1 (2 crs req), BA Writing II)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (Goal 1.2 Quantitative Reasoning)</td>
<td>3</td>
<td>Goal 1.2 Quantitative Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>1st Semester Language (BA Second Language)</td>
<td>5</td>
<td>2nd Semester Language (BA Second Language)</td>
<td>5</td>
</tr>
<tr>
<td>First Year Seminar (Goal 1.1 Critical Thinking)</td>
<td>3</td>
<td>Goal 2.2 Communication</td>
<td>3</td>
</tr>
<tr>
<td>POLS 110 (Goal 3 Social Science, Major Pre-requisite)</td>
<td>3</td>
<td>Goal 3 Arts and Humanities</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Semester Language (BA Second Language)</td>
<td>3</td>
<td>4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language)</td>
<td>3-5</td>
</tr>
<tr>
<td>PUAD 330 or 331 (Major Requirement)</td>
<td>3</td>
<td>Goal 3 Natural Science</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>BA Laboratory/Field Experience (LFE)</td>
<td>1-2</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>PUAD 332 (Major Requirement + Goal 2.1)</td>
<td>3</td>
</tr>
<tr>
<td>LA&amp;S 292 (Research Methods, or elective)</td>
<td>1</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>PUAD 401 or 402 (Goal 4.1 US Diversity, Major Elective)</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 333 (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>PUAD Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 432 (Goal 5 Social Responsibility &amp; Ethics, Major Elective)</td>
<td>3</td>
<td>Second Area of Study/Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>
### BGS in Public Administration

Below is a sample 4-year plan for students pursuing the BGS in Public Administration. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

The Public Administration major is only available at the Edwards campus.

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2.1 Written Communication/BA Writing I</td>
<td>3</td>
<td>Goal 2.1 Written Communication/BA Writing II</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
<td>Spring</td>
<td>15</td>
</tr>
</tbody>
</table>

1. The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.

2. Visit this website (https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/) for a list of courses that fulfill the BA Quantitative Reasoning requirement.

3. No more than 3 hours of SPAA 691 may count toward the major.

4. SPAA 691 Internship Experience is typically taken to fulfill KU Core Goal 6. If SPAA 691 is not taken for Goal 6, another Goal 6 course will need to be taken. This may require that an undesignated elective be used to fulfill a pre-requisite for a Goal 6 course.

5. Hour requirements (incl. 45 jr/sr hrs) are typically met through KU Core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.

6. For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

#### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 4.2 Global Awareness</td>
<td>3</td>
<td>PUAD 401 or 402 (Goal 4.1 US Diversity, Major Elective)</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 333 (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>PUAD Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 432 (Goal 5 Social Responsibility and Ethics, Major Elective)</td>
<td>3</td>
<td>SPAA 691 (Goal 6 Integration &amp; Creativity, Major Requirement, BGS Career Prep Course)</td>
<td>3</td>
</tr>
<tr>
<td>PUAD Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
<tr>
<td>PUAD Elective 300+ (Major Requirement)</td>
<td>3</td>
<td>Second Area of Study/ Elective/Degree/Junior-Senior Hours</td>
<td>3</td>
</tr>
</tbody>
</table>
Minor in Law and Society

The minor in law and society examines how law works in practice in public administration, courts, the non-profit sector, policy, policing and the justice system. A minor in law and society could help you pursue a career in nonprofit administration, social work, local and state government or urban planning, among many others.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LWS 330</td>
<td>Introduction to Law &amp; Society</td>
<td>3</td>
</tr>
<tr>
<td>LWS 333</td>
<td>The Pursuit of Rights: Law, Democracy &amp; Power</td>
<td>3</td>
</tr>
<tr>
<td>LWS 332</td>
<td>Methods in Law and Society</td>
<td>3</td>
</tr>
<tr>
<td>LWS 443</td>
<td>Theoretical Foundations of Law &amp; Society</td>
<td></td>
</tr>
</tbody>
</table>

Choose three of the following. Other relevant courses may be approved on an ad hoc basis.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LWS 332</td>
<td>Methods in Law and Society</td>
</tr>
<tr>
<td>LWS 494</td>
<td>Topics in Law &amp; Society: _____</td>
</tr>
<tr>
<td>LWS 691</td>
<td>Internship in Law &amp; Society</td>
</tr>
<tr>
<td>LWS 699</td>
<td>Capstone in Law and Society</td>
</tr>
</tbody>
</table>

Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

Minor Hours
Satisfied by 18 hours of minor courses.

Minor Hours in Residence
Satisfied by a minimum of 9 hours of KU resident credit in the minor.

Minor Junior/Senior Hours

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.
Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Minor in Public Administration

**Why study public affairs and administration?**

A public administration minor provides you with the necessary background to help manage teams, develop and implement programs, and set and follow a budget. These skills would be valued in careers with local, regional and state government offices and departments, as well as careers in business, the sciences or education.

### Requirements for the Minor

#### Public Administration Minor Core Courses

Minors must complete a course in each of the following areas:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 330</td>
<td>Introduction to Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>or PUAD 331</td>
<td>Introduction to Public Administration, Honors</td>
<td></td>
</tr>
<tr>
<td>PUAD 333</td>
<td>Hard Choices in Public Administration: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Public Administration Required Electives

Choose three of the following. Other relevant courses may be approved on an ad hoc basis.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LWS 330</td>
<td>Introduction to Law &amp; Society</td>
<td>12</td>
</tr>
<tr>
<td>LWS 333</td>
<td>The Pursuit of Rights: Law, Democracy &amp; Power</td>
<td></td>
</tr>
<tr>
<td>PUAD 332</td>
<td>Quantitative Methods for Public Administration</td>
<td></td>
</tr>
<tr>
<td>PUAD 401</td>
<td>Administration of Justice</td>
<td></td>
</tr>
<tr>
<td>PUAD 402</td>
<td>Diversity and Social Equity in Public Administration</td>
<td></td>
</tr>
<tr>
<td>PUAD 403</td>
<td>Foundations of the Nonprofit Sector</td>
<td></td>
</tr>
<tr>
<td>PUAD 404</td>
<td>Resource Development and Management in Nonprofit Organizations</td>
<td></td>
</tr>
<tr>
<td>PUAD 405</td>
<td>Managing Nonprofit Relationships</td>
<td></td>
</tr>
<tr>
<td>PUAD 406</td>
<td>Nonprofit Accountability: Public Needs and Public Values</td>
<td></td>
</tr>
<tr>
<td>PUAD 407</td>
<td>Introduction to Project Management</td>
<td></td>
</tr>
<tr>
<td>PUAD 408</td>
<td>Collaboration in Public Administration</td>
<td></td>
</tr>
<tr>
<td>PUAD 431</td>
<td>Bureaucracy, Public Administration, and the Private Sector</td>
<td></td>
</tr>
<tr>
<td>PUAD 432</td>
<td>Conducting the People’s Business Ethically</td>
<td></td>
</tr>
<tr>
<td>PUAD 433</td>
<td>Metropolitics and Macroproblems: The American City in Local and Global Context</td>
<td></td>
</tr>
<tr>
<td>PUAD 435</td>
<td>Generating, Allocating and Managing Public Resources</td>
<td></td>
</tr>
<tr>
<td>PUAD 436</td>
<td>Managing People in Public Organizations</td>
<td></td>
</tr>
<tr>
<td>PUAD 439</td>
<td>Concepts of Civil Society</td>
<td></td>
</tr>
<tr>
<td>PUAD 441</td>
<td>Public Service Leadership</td>
<td></td>
</tr>
<tr>
<td>PUAD 494</td>
<td>Topics in Public Administration: ____</td>
<td></td>
</tr>
<tr>
<td>SPAA 691</td>
<td>Internship Experience</td>
<td></td>
</tr>
<tr>
<td>SPAA 692</td>
<td>Research Experience</td>
<td></td>
</tr>
</tbody>
</table>

### Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 hours of KU resident credit in the minor.

**Minor Junior/Senior Hours**

Satisfied by a minimum of 18 hours from junior/senior courses (300+) in the minor.

**Minor Junior/Senior Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses (300+) in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

### Master of Public Administration

With a unique combination of theoretically grounded course work and practical application, our Master of Public Administration degree provides students with the knowledge and skills needed to lead, innovate, and problem-solve in public sector and non-profit settings.

Our Edwin O. Stene Master’s program is one of the oldest and most respected programs in the United States, beginning with our local government leadership program founded in 1948. Since 1998, our tradition of excellence in educating students at the masters’ level has been recognized by U.S. News and World Report with a #1 ranking in city management.

The MPA degree meets the needs of both full-time students who are looking to launch a career in public service as well as those who already have a career and are looking to accelerate it by pursuing a MPA degree part-time. The MPA degree may be obtained through course work offered at the Lawrence Campus, the KU Edwards Campus in Overland Park, Kansas, and as enrollment allows, the Topeka location.

### City Management Fellowship

MPA students specifically interested in city management are invited to apply to our 2-year City Management Fellowship program (https://kupa.ku.edu/). City management is the School of Public Affairs and Administration’s most recognized program and has been ranked the #1 program in the country by U.S. News and World Report since 1998.

Admission to the City Management Fellowship program is competitive - only a small cohort of Fellows is selected each year. Fellows receive all of the advantages of being in the largest KU MPA program and also benefit from:

- Designated scholarship awards
- Attendance to the International City/County Management Association (ICMA) annual meeting, supported by the School;
- Links to a large and welcoming professional network;
- Peer group learning and camaraderie;
• Additional experiential learning through part-time and full-time internships and other professional development opportunities.

The key distinctive feature of the Fellowship is its structure where the first year revolves around full-time intensive coursework and the second revolves around a full-time, paid internship.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

M.P.A. Admission

Please visit the M.P.A. Admissions page (https://kupa.ku.edu/) for complete admissions information.

For all applicants, a completed application includes:

1. Online Graduate Studies application (https://gradapply.ku.edu/apply/).
2. A nonrefundable application fee, submitted online with the application form.
3. 1 official transcript from the degree-granting college or university and any post-graduate college or university attended.
4. 3 letters of recommendation. If possible, at least 1 should be an academic reference.
5. A 3- to 5-page essay describing your background and career goals and clearly indicating how the M.P.A. degree fits into those goals and addressing any deficiencies in your academic preparation.
6. A current résumé.
7. A writing sample that is at least 5 pages long. It should be a well-cited work in which you critically analyze (not just summarize) an issue.
8. Non-native speakers of English must meet Graduate Studies English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Students who are interested in enrolling in master's level coursework in public administration without formal admission to the graduate program are encouraged to apply for graduate non-degree seeking student status.

Deadlines

To begin in the spring semester, applications must be received by November 1.

To begin in the fall semester, applications must be received by May 1.

To begin in the summer semester, applications must be received by February 1.

Applicants interested in the City Management Fellowship must apply by the February 1 deadline and be prepared to begin full-time coursework in the following Summer semester.

Campuses

Students can complete their M.P.A degree by taking classes at the main campus in Lawrence or the Edwards Campus in Overland Park. Each semester as enrollment permits, select M.P.A. courses may also be offered in Topeka.

MPA Degree Requirements

The MPA degree is awarded after successful completion of 43 credit hours of course work. This includes 16 credit hours of required core courses (5 courses) that all students complete, 12 credit hours toward one School of Public Affairs and Administration graduate certificate (https://kupa.ku.edu/graduate-certificates/) (4 courses), 12 hours of electives tailored to the student’s interests (4 courses), and an experiential learning requirement which can be completed as detailed below (1 course). In addition, all students must pass a written master's examination (final paper) to complete the requirements for the MPA degree. Once a student begins the program, all degree requirements must be completed within 7 years.

The MPA core provides students with knowledge and skills foundational to advanced educational and professional engagement in public affairs and administration fields. They provide an important underpinning for the MPA certificates and are transferable across a range of public service professions. The MPA core coursework includes the following courses (16 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 824</td>
<td>Creating Good Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 835</td>
<td>Managing Public Money</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 836</td>
<td>Data Driven Decision-Making</td>
<td>4</td>
</tr>
<tr>
<td>PUAD 841</td>
<td>Context, Ethics and Legal Environment of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 845</td>
<td>Managing Public Organizations</td>
<td>3</td>
</tr>
</tbody>
</table>

To complete the MPA program, students will also take the following courses OR complete the City Management Fellows MPA program:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 School of Public Affairs &amp; Administration graduate certificate</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>4 Electives of additional School of Public Affairs &amp; Administration course work or graduate course work outside the School chosen in consultation with the program advisor</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Completion of 1 of the following experiential learning options:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 898</td>
<td>Leading to Create a Culture for High Performance</td>
<td>3</td>
</tr>
<tr>
<td>or PUAD 892</td>
<td>Internship Experience in Local Government Administration</td>
<td></td>
</tr>
<tr>
<td>or PUAD 839</td>
<td>Topics in Public Administration:</td>
<td></td>
</tr>
</tbody>
</table>

Alternatively, students may apply to the City Management Fellowship program (http://kupa.ku.edu/city-management-fellowship-0/). Admission to this two-year fellowship is competitive—only a small cohort of fellows is selected each year. The key distinctive feature of the fellowship is its structure: the first year revolves around full-time, intensive coursework and the second year revolves around a full-time, paid internship. Students admitted to the City Management Fellowship program complete the following credits, which include the courses toward the City/County
Management graduate certificate (http://kupa.ku.edu/graduate-certificates/city-county-management/), to fulfill degree requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 851</td>
<td>Infrastructure Management</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 892</td>
<td>Internship Experience in Local Government Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 894</td>
<td>Professional Development Seminar I: Public Admin Contemporary Issues &amp; Competency Assessment</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 895</td>
<td>Professional Development Seminar II: Leading to Create a Culture for High Performance (PUAD 895 will count as the experiential learning course to fulfill that component of MPA degree requirements.)</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives of additional School of Public Affairs & Administration course work or graduate course work outside the School chosen in consultation with the program advisor. Within these courses, students must complete the requirements for the City/County Management graduate certificate.

Master of Urban Planning

Urban planning is a professional field that addresses the health, welfare, and sustainability of our cities, towns, regions, and natural and rural areas. Planners are problem-solvers. They deal with both short- and long-range planning projects at scales from small to large. Planners seek to enhance overall quality of life by addressing aspects of communities such as housing, land use, transportation, and responsible development that preserves the natural environment. The Master of Urban Planning is an accredited, professional degree that prepares students to excel in planning practice. It is the normal academic qualification for planning and planning-related positions. Graduates are prepared for careers in the public sector (local, state, national, international governments and agencies), private sector (consulting firms, development companies), and not-for-profits (housing authorities, nonprofits) helping make communities better places.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to Urban Planning

Complete information about applying to the Master of Urban Planning can be found on the program website (https://urbanplanning.ku.edu/overview/). The following materials are required of all applicants to the Master of Urban Planning. Incomplete applications will not be forwarded to the admissions committee for review.

- A completed graduate application (https://gradapply.ku.edu/apply/) submitted online;
- An application fee
- A statement of the applicant’s career goals and substantive interests in urban planning and rationale for undertaking graduate study in urban planning at KU;
- 1 official transcript from applicant’s undergraduate institution and any post-graduate institutions attended;
- 3 letters of recommendation from persons qualified to comment on the applicant’s academic abilities and probable success in graduate study;
- A current resume;
- Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Applications are considered on a rolling basis. The final application deadlines are July 1 for fall and December 1 for spring admission. International applicants must apply by June 1 for fall and November 1 for spring admission.

Students who are interested in enrolling in master’s level coursework in urban planning without formal admission to the graduate program are encouraged to apply for graduate non-degree seeking student status.

M.U.P. Degree Requirements

All students must complete 42 credit hours, which normally involves 4 semesters of full-time study.*

In addition to coursework, students must have the chance to synthesize and demonstrate what they have learned in their degree program. This can be done through either a Master’s final exam (non-thesis option) or a thesis. The Master’s final exam option is most common in the Urban Planning program as most graduates go on to become planning practitioners. Occasionally, students decide they would like to pursue an academic career or they would like to go deeply into one area of study and those students complete a thesis.

The required courses are

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 741</td>
<td>Foundations of Compassionate Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 742</td>
<td>Applied Data and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 763</td>
<td>Politics and Public Management</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 777</td>
<td>Equity, Justice, and American Cities</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 780</td>
<td>Climate Change and Hazards Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 785</td>
<td>History and Theory of Planning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>24</td>
</tr>
</tbody>
</table>

*An accelerated B.A.-M.U.P degree is also available. Please see the academic catalog (https://catalog.ku.edu/public-affairs-administration/ampu/) for more information.

Specializations

The curriculum requires each student to specialize in one of the following substantive areas:

- Housing and development planning
- Sustainable land use planning
- Transportation planning
The student should declare a specialization by the third semester of their course of study.

**Housing and Development Planning**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 710</td>
<td>Housing Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 715</td>
<td>Community and Neighborhood Revitalization</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 716</td>
<td>Neighborhood Analysis and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 764</td>
<td>Real Estate Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Other courses may be available with approval from a faculty advisor.

Total Hours 12

**Sustainable Land Use Planning**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 720</td>
<td>Sustainable Land Use Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 725</td>
<td>Environmental Planning Techniques</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 730</td>
<td>City and County Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 735</td>
<td>Site Planning and Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Other courses may be available with approval from a faculty advisor.

Total Hours 12

**Transportation Planning**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 707</td>
<td>Sustainability and the Future of Transportation</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 750</td>
<td>Transportation Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 756</td>
<td>Data Driving Transportation</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 758</td>
<td>Transportation for Livable Cities</td>
<td>3</td>
</tr>
</tbody>
</table>

Other courses may be available with approval from a faculty advisor.

Total Hours 12

**Free Electives**

Besides the specialization, students will take additional elective hours outside their specialization. Master's final exam (non-thesis) students must take 6 additional credit hours of elective courses. Thesis students must take 6 credit hours of UBPL 806. Any elective credits taken outside of Urban Planning require approval of a faculty advisor.

**Master's Final Exam Option (Non-thesis)**

The Master's final examination is the main culminating experience before students graduate. The examination provides a learning experience that encourages the student to synthesize the knowledge gained through course work and tests the student's competence as a generalist/specialist planner. The examination consists of the student responding to a scenario or case study in which they are asked to synthesize knowledge gained in their course work and apply it within a particular context.

**Thesis Option**

The thesis provides an opportunity for the student to apply individual research skills in the context of their interest. The thesis is a continuation of the student's course of study rather than a separate academic effort. The format, medium, and focus of the thesis varies with the problem addressed. Students must enroll in a minimum of 6 credit hours of UBPL 806. A student desiring to prepare a thesis must develop, with the assistance of a faculty advisor, a thesis proposal to be submitted to the faculty thesis committee no later than the first day of classes of the semester before the semester in which the student plans to graduate. The committee's approval is required before the student may pursue the thesis option. A final general examination on the thesis and course work is held.

**M.U.P. Curriculum**

A total of 48 semester hours is required. Students typically complete the degree within 2 years.

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 741</td>
<td>3</td>
<td>UBPL 705</td>
<td>3</td>
<td>UBPL 780</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 785</td>
<td>3</td>
<td>UBPL 736</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialization</td>
<td>6</td>
<td>Specialization</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>courses or electives</td>
<td>course or elective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 12 12 3

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 742</td>
<td>3</td>
<td>UBPL 763</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 777</td>
<td>3</td>
<td>Specialization</td>
<td>3</td>
</tr>
<tr>
<td>courses or electives</td>
<td>course or elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 9 6 3

**Accelerated Master of Urban Planning**

Only current KU undergraduate students in the College of Liberal Arts & Sciences (CLAS) are eligible to apply to the Accelerated Master of Urban Planning. If you are not a current undergraduate student at KU, please consider the Master of Urban Planning.

The Accelerated Master of Urban Planning combines a College of Liberal Arts & Sciences undergraduate major and the Master of Urban Planning and is designed for students who have a passion for problem solving and helping communities engage with their futures. It allows well-qualified students to earn a bachelor's and a master's degree in five years, rather than the six years it would take to earn each degree separately. This program combines in-depth training in the major of the student's choice with an accredited professional master's degree in urban planning. Graduates are prepared for careers in the public, private and not-for profit sectors helping make communities better places.

Any CLAS undergraduate major is good preparation for an urban planning career because the profession is so wide-ranging in the skills required. Planners can be specialists (transportation, sustainable land use, or housing and development) or generalists working on how all these systems work together to create great places. Planners can be technical experts working with numbers or communicators building relationships or both. Get the undergraduate degree you have always wanted, then the career you probably did not know existed, but is right and meaningful for you.

Careful course selection and steady progression through the undergraduate major is necessary to ensure all requirements for both degrees are completed within the 5-year time frame. All prospective
students should discuss their interest with the undergraduate advisor for
the major of their choice and the Urban Planning Program director as
soon as possible. A meeting with the Urban Planning Program director
should take place no later than the student’s junior year to discuss
possible admission to the accelerated master’s program.

The program maintains rolling admissions. Prospective students are
eligible to apply to the graduate program as early as the second semester
of their sophomore year or at any time during their junior year, but rolling
admissions allows for applications at any time. The following requirements
must be met by this time:

• On track to complete all requirements for a B.A., B.S., or B.G.S.
degree in the CLAS degree of their choice from KU by the second
semester of the senior year.

Students pursuing the accelerated master’s degree are also strongly
ecouraged to take the following as preparatory courses* for the master’s
curriculum:

UBPL 200: Sustainability and Society – sophomore year
UBPL 300: Planning the Sustainable City – junior year

*In some cases, it may be possible for these courses to substitute for
major electives. Consult with your undergraduate advisor to determine if
this is an option for your major.

Applicants must complete an application for graduate study online (https://
gradapply.ku.edu/apply/). The following information should be gathered in
advance and uploaded with the application:

• Statement of interest that succinctly summarizes the students’
interests, education, their long-term career goals, and how the
accelerated degree program will help them achieve those goals;
• A copy of the student’s advising report
• The names of three persons qualified to comment on the applicant’s
academic abilities and probable success in graduate study. These
individuals will be asked to provide a letter of recommendation. At
least two should be faculty members who have had the student in
class.

Upon review of the application for admission, the Urban Planning
Program will notify the student of their eligibility to begin coursework in
the program. Final acceptance to the Master of Urban Planning graduate
program will be contingent upon the following:

• Successful completion of all requirements for the bachelor’s degree;
• Grades of B or above in all urban planning graduate-level coursework

Any student who does not meet this minimum grade requirement may
continue in the program but must repeat any graduate course for which
they did not earn a B or above. Students may also elect to earn only the
bachelor’s degree and re-apply to the graduate program at a later time.

Prior to Conferral of the Bachelor’s Degree

Students must be approved to begin coursework toward the master’s
before completing any 500 level or above coursework in Urban Planning
that is to count toward the master’s degree. Once approved, the student
must complete the following 18 credit hours of Urban Planning courses
while still an undergraduate student:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Credit hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 785</td>
<td>History and Theory of Planning</td>
<td>3</td>
</tr>
<tr>
<td>Techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 741</td>
<td>Foundations of Compassionate Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>Specialization (select 2 courses) See below for more information</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Introductory course in specialization of choosing
Introductory course in another specialization of choosing
Methods course in the specialization of choosing

Note: Students must choose one specialization, but early on, they
may not be sure of which one of the three specializations to choose.
It is common for students to take two different introductory courses to
try out the specializations and make a decision. The Methods course
in the student’s chosen specialization can be taken at a later time if
the student is undecided on a specialization as an undergraduate.

Total Hours 18

Specialization

The curriculum requires each student to specialize in one of the following
substantial areas:

• Housing and development planning,
• Sustainable land use planning, or
• Transportation planning.

A specialization consists of four courses in that specialization: an
introductory course, a methods course, an implementation course, and a
supplementary course.

The student should declare a specialization no later than the final
semester of undergraduate study and complete two of the following
courses, as indicated above, prior to conferral of the bachelor’s degree:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialization Introductory Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBPL 710</td>
<td>Housing Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 750</td>
<td>Transportation Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 765</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Specialization Methods Courses</td>
<td>For Housing and Development</td>
<td></td>
</tr>
<tr>
<td>UBPL 764</td>
<td>Real Estate Development</td>
<td>3</td>
</tr>
<tr>
<td>or UBPL 715</td>
<td>Community and Neighborhood Revitalization</td>
<td></td>
</tr>
<tr>
<td>For Sustainable Land Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBPL 735</td>
<td>Site Planning and Design</td>
<td>3</td>
</tr>
<tr>
<td>or UBPL 738</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBPL 756</td>
<td>Data Driving Transportation</td>
<td>3</td>
</tr>
</tbody>
</table>

After Conferral of the Bachelor’s Degree

After the bachelor’s degree has been conferred, the student will complete
a total of 24 post-baccalaureate graduate credit hours, consisting of the
following:
Comprehensive Exam. The examination provides a learning experience for students in the Accelerated Master's program. To successfully pass the Comprehensive Exam, students must complete a series of courses and electives.

### Specialization Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 742</td>
<td>Applied Data and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 763</td>
<td>Politics and Public Management</td>
<td>3</td>
</tr>
</tbody>
</table>

### Core Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>See below for more information.</td>
<td></td>
</tr>
</tbody>
</table>

### Progression Requirements

Each student's progress will be monitored at various points during the program:

- Upon approval to begin coursework toward the accelerated masters, the student will meet with the UBPL Program Director to plan the graduate UBPL courses to be taken for elective undergraduate credit. Students should continue to work closely with their undergraduate advisor to ensure all requirements for the undergraduate degree(s) are met.
- In the final spring semester of undergraduate study (Year 4), the student will meet with the UBPL Program Director to review the student's performance in UBPL courses. The student must earn a grade of "B" or better in these courses to be eligible for regular admission to the Master of Urban Planning degree.
- Following completion and award of the undergraduate degree (end of Year 4), the admitted student will again meet with the UBPL Program Director to review the course plan for the fifth year of study and update as needed. The student's performance in the graduate-level courses taken as an undergraduate will be evaluated. To continue in the track, students must earn a combined minimum GPA of 3.25 for these courses. At this time, the student will meet with a faculty advisor who is overseeing that specialization to ensure the course plan is on track.
- For those students who do not meet the minimum GPA requirement of 3.25 in the first semester of Year 5 an alternative plan of study to address the student's deficiencies may be developed, at the program's sole discretion. Students may also be dismissed from the program.
- If the baccalaureate degree is not completed at the end of Year 4, the student will not be permitted to enroll in courses for graduate credit toward the MUP degree until the baccalaureate degree has been conferred.

Students are encouraged to complete all requirements for the master's degree within one year of receiving the bachelor's degree to take full advantage of the accelerated format. If unforeseen circumstances prevent the timely completion of the master's degree, the student should consult with their graduate advisor to develop an alternative plan for completion.

### Accelerated Master of Urban Planning/BA in Environmental Studies

Only current KU undergraduate students are eligible to apply to the Accelerated Master of Urban Planning/B.A. in Environmental Studies program. If you are not a current undergraduate student at KU, please review the admission requirements the Master of Urban Planning.

The Accelerated Master of Urban Planning/B.A. in Environmental Studies is designed for students who have a passion for sustaining both our natural and built environments. It allows well-qualified students to

### Comprehensive Exam

Students in the Accelerated Master's must successfully pass a comprehensive exam. The examination provides a learning experience that encourages the student to synthesize the knowledge gained through course work and tests the student's competence as a generalist/specialist planner. The examination consists of the student responding to a scenario or case study in which they are asked to synthesize knowledge gained in their course work and apply it within a particular context.
Accelerated Master of Urban Planning

1998

The names of three persons qualified to comment on the applicant’s academic abilities and probable success in graduate study. These individuals will be asked to provide a letter of recommendation. At least two should be faculty members who have had the student in class.

Applicants must complete an application for graduate study online (https://gradapply.ku.edu/apply/). The following information should be gathered in advance and uploaded with the application:

- Statement of interest that succinctly summarizes the students’ interests, education, their long term career goals, and how the accelerated degree program will help them achieve those goals;
- A copy of the student’s advising report
- The names of three persons qualified to comment on the applicant’s academic abilities and probable success in graduate study. These individuals will be asked to provide a letter of recommendation. At least two should be faculty members who have had the student in class.

Upon review of the application for admission, the Urban Planning Program will notify the student of his or her eligibility to begin coursework in the program. Final acceptance to the Master of Urban Planning graduate program will be contingent upon the following:

- Successful completion of all requirements for the bachelor’s degree;
- Grades of B or above in all Urban Planning graduate-level coursework taken in year 4

Any student who does not meet this minimum grade requirement may continue in the program but must repeat any graduate course for which they did not earn a B or above. Students should still aim to complete all requirements by the end of year 5. Students may also elect to earn only the bachelor’s degree and re-apply to the graduate program at a later time.

This accelerated program uses a carefully planned combination of pre-requisite coursework, graduate-level courses taken for both undergraduate and graduate credit in Year 4, and graduate credit courses taken in Year 5. The student must be approved to begin coursework toward the master’s prior to enrolling in any classes that are to count for both undergraduate and graduate credit. Please see the Sample Academic Plan for more information.

**Requirements for the Bachelor’s Degree**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 140</td>
<td>Global Environment I: The Discovery of Environmental Change</td>
<td>5</td>
</tr>
<tr>
<td>or EVRN 144</td>
<td>Global Environment I: Discovery of Environmental Change, Honors</td>
<td></td>
</tr>
<tr>
<td>EVRN 142</td>
<td>Global Environment II: The Ecology of Human Civilization</td>
<td>5</td>
</tr>
<tr>
<td>or EVRN 145</td>
<td>Global Environment II: The Ecology of Human Civilization, Honors</td>
<td></td>
</tr>
<tr>
<td>Research Methods. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON/EVRN 550</td>
<td>Environmental Economics</td>
<td></td>
</tr>
<tr>
<td>EVRN 410</td>
<td>Environmental Applications of Geographic Information Systems</td>
<td></td>
</tr>
<tr>
<td>EVRN 510</td>
<td>Advanced Environmental Applications in Geospatial Techniques</td>
<td></td>
</tr>
<tr>
<td>GEOL 351</td>
<td>Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>Statistics. Satisfied by one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td></td>
</tr>
<tr>
<td>GEOG 316</td>
<td>Methods of Analyzing Geographical Data</td>
<td></td>
</tr>
<tr>
<td>BIOL 570</td>
<td>Introduction to Biostatistics</td>
<td></td>
</tr>
</tbody>
</table>

**Environmental Studies Core Knowledge and Skills**

Majors must complete each of the following:

| EVRN 320 | Environmental Policy Analysis | 3     |
| EVRN 332 | Environmental Law | 3     |
| EVRN 460 | Field Ecology | 3     |
| EVRN 615 | Capstone Project | 3     |

**Environmental Studies Required Electives/Options**

| UBPL 736 | Planning Law and Institutions | 3     |
| UBPL 738 |                                     | 3     |

Complete two of the following courses:

- UBPL 710 | Housing Policy and Planning |       |
- UBPL 730 | City and County Planning |       |
- UBPL 750 | Transportation Policy and Planning |       |
- UBPL 765 |

Students should seek guidance from their advisor and refer to the degree plan for the specific enrollment sequence.

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**

Satisfied by 40 hours of major courses.

**Major Hours in Residence**

Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**
Satisfied by a minimum of 30 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

**Requirements for the Master's Degree**
During the Senior Year (Year 4), the student must take the following Urban Planning graduate coursework, in addition to the Major Requirements noted above:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 741</td>
<td>Foundations of Compassionate Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 785</td>
<td>History and Theory of Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 742</td>
<td>Applied Data and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

In Year 5, after the conferral of the undergraduate degree, the student will complete a total of 24 post-baccalaureate graduate credit hours, consisting of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 763</td>
<td>Politics and Public Management</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 850</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>UBPL Elective or Specialization Courses</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

Students in the accelerated masters must successfully pass a comprehensive exam. The examination provides a learning experience that encourages the student to synthesize the knowledge gained through course work and tests the student’s competence as a generalist/specialist planner. The examination consists of the student responding to a scenario or case study in which one is asked to synthesize knowledge gained in one's course work and apply it within a particular context. No academic credit is given for the examination.

**Progression Requirements**
Each student's progress will be monitored at various points during the program:

1. Upon pre-admission acceptance to the accelerated masters, the student will meet with the UBPL Chair to plan the final year of undergraduate courses, graduate UBPL courses to be taken for elective undergraduate credit, and to outline the schedule of courses.

1. In the final spring semester of undergraduate study (Year 4), the student will meet with the UBPL Chair to review the student's performance in UBPL courses. The student must earn a grade of “B” or better in these courses to be eligible for regular admission to the Master of Urban Planning degree.

1. Following completion and award of the undergraduate degree (end of Spring Semester Year 4), the admitted student will again meet with the UBPL Chair to review the course plan for the fifth year of study and update as needed. The student’s performance in the graduate-level courses taken as an undergraduate will be evaluated.

   To continue in the track, students must earn a combined minimum GPA of 3.25 for these courses. At this time, the student will select a specialization area within the planning degree, and will meet with a faculty advisor who is overseeing that specialization to ensure the course plan is accurate.

   1. For those students who do not meet the minimum GPA requirement of 3.25 in the first semester of Year 5 an alternative plan of study to address the student’s deficiencies may be developed, at the department’s sole discretion. Students may also be dismissed from the program.

   1. If the baccalaureate degree is not completed at the end of Year 4, the student will not be permitted to enroll in courses for graduate credit toward the MUP degree until the baccalaureate degree has been conferred.

Students should complete all requirements for the master's degree within one year of receiving the bachelor's degree. If unforeseen circumstances prevent the timely completion of the master's degree, the student must consult with their graduate advisor to develop an alternative plan for completion.

**GPA Calculator**

http://clas.ku.edu/undergrad/tools/gpa/

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
## Elective/ Possible Minor Course

<table>
<thead>
<tr>
<th>Course</th>
<th>3 Elective/ Possible Minor Course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVRN 460 (Major Req.)</td>
<td>3</td>
<td>EVRN 615 (Major Req.)</td>
<td>3</td>
<td>UBPL 780</td>
</tr>
<tr>
<td>UBPL 740 (new course)</td>
<td>3</td>
<td>UBPL 705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBPL 785</td>
<td>3</td>
<td>UBPL 736</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVRN Undergrad Elective</td>
<td>3</td>
<td>UBPL 720</td>
<td></td>
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</tbody>
</table>

### Year 5

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 742</td>
<td>3</td>
<td>UBPL 763</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 777</td>
<td>3</td>
<td>UBPL Elective or Specialization Course</td>
<td>3</td>
</tr>
<tr>
<td>UBPL Elective or Specialization Course</td>
<td>3</td>
<td>UBPL Elective or Specialization Course</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 146-147**

1. If MATH 365 is not selected, one of the electives in the plan must be switched to a BA Quantitative requirement.

## Dual Master of Urban Planning and Master of Arts in American Studies

### Dual Master of Urban Planning and Master of Arts in American Studies

This program combines the two-year Master of Urban Planning degree and the two-year Master of Arts degree in American Studies into a two and half year program. This program is designed for students interested in careers in policy planning and research involving the arts, social planning, cultural activities and facilities, and historic preservation.

## Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

## Admission to the Dual M.A./M.U.P.

Students seeking admission to the dual degree must meet the admission requirements for both programs. Please see the American Studies (https://americanstudies.ku.edu/admission/) and Urban Planning (https://urbanplanning.ku.edu/application/) websites for their respective admission requirements.

Eligibility criteria for admission follow Graduate Studies’ admission policy (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/). To be considered for admission, a student must hold a bachelor’s degree.

Non-native speakers of English must meet Graduate Studies’ English proficiency requirements (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

## M.U.P. Degree Requirements

The M.U.P. portion of the dual degree requires 36 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 741</td>
<td>Foundations of Compassionate Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 742</td>
<td>Applied Data and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 763</td>
<td>Politics and Public Management</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 777</td>
<td>Equity, Justice, and American Cities</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 780</td>
<td>Climate Change and Hazards Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 785</td>
<td>History and Theory of Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

### Elective Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**Total Hours 146-147**

## M.A. in American Studies Degree Requirements

The American Studies M.A. portion of the dual degree requires 24 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 801</td>
<td>Introduction to American Studies</td>
<td>3</td>
</tr>
<tr>
<td>AMS 802</td>
<td>Theorizing America</td>
<td>3</td>
</tr>
<tr>
<td>AMS 803</td>
<td>Research Methods in American Studies</td>
<td>3</td>
</tr>
</tbody>
</table>
Graduate admission. These may be found in the Policies and procedures of Graduate Studies govern the process of admitted as either a degree-seeking or non-degree seeking student. An applicant seeking to pursue graduate study in the College may be faculty/more about our Environmental Policy, Borders and Border Conflicts, and more. Learn emphasis on Place, Economic Geography, Health and Diaspora, and have expertise in Human and Cultural Studies with a particular several areas of the discipline. Our faculty are integral to graduate studies preparation for a career or further study. The student takes courses in The Master of Arts in Geography program develops a concentration in better places.

not-for profits (housing authorities, nonprofits) helping make communities agencies), private sector (consulting firms, development companies), and the public sector (local, state, national, international governments and planning-related positions. Graduates are prepared for careers in planning practice. It is the normal academic qualification for planning

Urban planning is a professional field that addresses the health, welfare, and sustainability of our cities, towns, regions, natural, and rural areas. Planners are problem-solvers. They deal with both short- and long-range planning projects at scales from small to large. Planners seek to enhance overall quality of life by addressing aspects of communities such as housing, land use, transportation, and responsible development that preserves the natural environment. The Master of Urban Planning is an accredited, professional degree that prepares students to excel in planning practice. It is the normal academic qualification for planning and planning-related positions. Graduates are prepared for careers in the public sector (local, state, national, international governments and agencies), private sector (consulting firms, development companies), and not-for profits (housing authorities, nonprofits) helping make communities better places.

The Master of Arts in Geography program develops a concentration in preparation for a career or further study. The student takes courses in several areas of the discipline. Our faculty are integral to graduate studies and have expertise in Human and Cultural Studies with a particular emphasis on Place, Economic Geography, Health and Diaspora, Environmental Policy, Borders and Border Conflicts, and more. Learn more about our faculty (http://geog.ku.edu/faculty/) (https://geog.ku.edu/ faculty/) on our website.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

### Graduate Admission

#### Dual Degree application for Master of Arts in Geography and Master of Urban Planning

Admission details, including required application materials for the M.A. in Geography (https://geog.ku.edu/admission/) and Master of Urban Planning (https://urbanplanning.ku.edu/application/), can be found on their respective web pages. Entering students should submit separate applications to each program.

Applicants without prior training in Geography are welcome but are required to improve their basic knowledge of the broad divisions of geography: systematic, methodological, and regional. Courses taken to remedy deficiencies may not count toward graduate degrees.

Submit your graduate application online (https://gradapply.ku.edu/apply/).

### M.U.P. Degree Requirements

The M.U.P. portion of the dual degree requires 36 credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 741</td>
<td>Foundations of Compassionate Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 742</td>
<td>Applied Data and Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 763</td>
<td>Politics and Public Management</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 777</td>
<td>Equity, Justice, and American Cities</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 780</td>
<td>Climate Change and Hazards Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 785</td>
<td>History and Theory of Planning</td>
<td>3</td>
</tr>
<tr>
<td>Specialization Courses in Urban Planning</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>36</strong></td>
<td></td>
</tr>
</tbody>
</table>

### M.A. in Geography Degree Requirements

The M.A. in Geography portion of the dual degree requires a minimum of 30 credit hours. A maximum of 6 credits of 500 and 600 level courses may be included in the program. If a 500 or 600 level course is taken to fulfill the required Techniques/Research Methods course, those credits will not count toward this maximum.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 805</td>
<td>Perspectives in Geography</td>
<td>2</td>
</tr>
<tr>
<td>Attend the Department's New Graduate Student Orientation (non-credit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 980</td>
<td>Seminar in Geography: _____ (Colloquium must be taken for 1 credit hour each during the first two semesters of residence)</td>
<td>2</td>
</tr>
<tr>
<td>Responsible Scholarship (non-credit 8-hour session at start of Spring semester)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 899</td>
<td>Master's Thesis (The Chair of the Master's thesis committee must come from the Department of Geography. At least one thesis committee member must come from the Urban Planning Program.)</td>
<td>6</td>
</tr>
</tbody>
</table>
For all applicants, a completed application includes:
https://kupa.ku.edu/
and J.D. separately. Please visit the online catalog. Studies degrees, which may be found in the Graduate Studies section of requirements. Special admissions requirements pertain to Interdisciplinary catalog for information regarding program-specific admissions criteria and please consult the (Graduate admission. These may be found in the Policies and procedures of Graduate Studies govern the process of admitted as either a degree-seeking or non-degree seeking student. An applicant seeking to pursue graduate study in the College may be
M.P.A. program offered by the School of Law (42 required and 36 elective) and 37 credit hours in the School of Public Affairs and Administration (19 required and 18 elective). Students pursuing the dual degree should plan to enroll in course work for 2, and in some instances 3, summers.

The MPA degree is awarded after successful completion of credits required and the final written examination. The College of Liberal Arts and Sciences requires a minimum 3.0 cumulative GPA. Only courses completed with a grade of C or higher will count toward the MPA degree. Please see the current Law School Catalog (https://catalog.ku.edu/law/jd/#requirementstext) and School of Law Dual Degree page (http://law.ku.edu/publicadministration/) for details and degree requirements.

MPA Degree Requirements
The Master of Public Administration (MPA) degree is awarded after successful completion of 43 credit hours of course work. This includes 19 hours (6 courses) of required core courses (including the student’s choice of an experiential learning course to serve as a final reflective course) that all students complete, 18 hours (6 courses) tailored to the student’s interests and/or track (fellow or MPA track), and 6 hours (2 courses) from the School of Law. Once a student begins the program, all degree requirements must be completed within 7 years.

MPA track students will complete the required core courses and select a graduate certificate within the School of Public Affairs & Administration to complete 6 electives (18 hours) to complete the program. Graduate certificates only require 12 credits, so there is additional flexibility in elective content for MPA track students.

Core Course Work
The MPA core course work includes the following courses (19 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 824</td>
<td>Creating Good Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 835</td>
<td>Managing Public Money</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 836</td>
<td>Data Driven Decision-Making</td>
<td>4</td>
</tr>
<tr>
<td>PUAD 841</td>
<td>Context, Ethics and Legal Environment of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 845</td>
<td>Managing Public Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 898 or PUAD 895</td>
<td>Leading to Create a Culture for High Performance</td>
<td>3</td>
</tr>
</tbody>
</table>

Track Course Work
Students may either apply for the MPA track or the City/County Management Fellows track to complete course work toward the MPA degree.

Admission to Graduate Studies
An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

M.P.A./JD Dual Degree Admission
Applicants for the M.P.A./JD dual degree program will apply for the M.P.A. and J.D. separately. Please visit the M.P.A. Admissions page (https://kupa.ku.edu/) for complete M.P.A. application and admission information.

For all applicants, a completed application includes:
1. Online Graduate Studies application. (https://gradapply.ku.edu/apply/)
2. A nonrefundable application fee, submitted online with the application form.
3. 1 official transcript from the degree-granting college or university and any post-graduate college or university attended.
4. 4 letters of recommendation. If possible, at least 1 should be an academic reference.
5. A 3- to 5-page essay describing your background and career goals and clearly indicating how the M.P.A. degree fits into those goals and addressing any deficiencies in your academic preparation.
6. A current résumé.
7. A writing sample that is at least 5 pages long. It should be a well-cited work in which you critically analyze (not just summarize) an issue.
8. Non-native speakers of English must meet Graduate Studies English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Deadlines
Application deadlines are February 1, May 1 and November 1.

J.D./MPA Dual Degree Program
Students must complete 115 total credit hours: 78 credit hours in the School of Law (42 required and 36 elective) and 37 credit hours in the School of Public Affairs and Administration (19 required and 18 elective). Students pursuing the dual degree should plan to enroll in course work for 2, and in some instances 3, summers.

The dual degree program is designed for the student who intends to combine career preparation in law and public administration. Examples of career objectives for this degree are the practice of law in communities (for example, a city attorney, who may be called upon to perform legal services for a municipality) and for city managers (who may need to deal with legal questions and interact with legal professionals). The program combines into 4 years the normal 3-year M.P.A. program offered by the School of Law (http://www.law.ku.edu/) and the 2-year M.P.A. program offered by the School of Public Affairs and Administration (https://kupa.ku.edu/).

Master of Public Administration and Juris Doctor

M.P.A./J.D. Dual Degree Program
The dual degree program is designed for the student who intends to combine career preparation in law and public administration. Examples of career objectives for this degree are the practice of law in communities (for example, a city attorney, who may be called upon to perform legal services for a municipality) and for city managers (who may need to deal with legal questions and interact with legal professionals). The program combines into 4 years the normal 3-year M.P.A. program offered by the School of Law (http://www.law.ku.edu/) and the 2-year M.P.A. program offered by the School of Public Affairs and Administration (https://kupa.ku.edu/).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 512</td>
<td>Advanced Cartography and Geovisualization</td>
<td>3-4</td>
</tr>
<tr>
<td>GEOG 526</td>
<td>Remote Sensing of Environment I</td>
<td></td>
</tr>
<tr>
<td>GEOG 528</td>
<td>Spatial Databases</td>
<td></td>
</tr>
<tr>
<td>GEOG 558</td>
<td>Spatial Data Analysis</td>
<td></td>
</tr>
<tr>
<td>GEOG 716</td>
<td>Advanced Geostatistics</td>
<td></td>
</tr>
<tr>
<td>GEOG 875</td>
<td>Qualitative Research Methods</td>
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Total Hours 30-31

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
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<tbody>
<tr>
<td>GEOG 875</td>
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<tr>
<td>GEOG 716</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEOG 558</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEOG 528</td>
<td></td>
<td>3</td>
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<tr>
<td>GEOG 526</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>GEOG 512</td>
<td></td>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 824</td>
<td>Creating Good Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 835</td>
<td>Managing Public Money</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 836</td>
<td>Data Driven Decision-Making</td>
<td>4</td>
</tr>
<tr>
<td>PUAD 841</td>
<td>Context, Ethics and Legal Environment of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 845</td>
<td>Managing Public Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 898 or PUAD 895</td>
<td>Leading to Create a Culture for High Performance</td>
<td>3</td>
</tr>
</tbody>
</table>
MPA track students will select a graduate certificate within the School of Public Affairs & Administration and additional elective coursework totaling 18 credit hours to complete the program. Graduate certificates only require 12 credits, so there is additional flexibility in elective content for MPA track students. Please see here for a list of SPAA Graduate Certificates (https://kupa.ku.edu/graduate-certificates/).

City/County Management Fellows will take the following courses to complete City/County Management graduate certificate (https://kupa.ku.edu/graduate-certificates/) within their dual degree program:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 825</td>
<td>Urban Policy and Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 834</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 837</td>
<td>Advanced Public Budgeting and Finance</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 851</td>
<td>Infrastructure Management</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 892</td>
<td>Internship Experience in Local Government</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 894</td>
<td>Professional Development Seminar I: Public Admin</td>
<td>3</td>
</tr>
</tbody>
</table>

Final Exam
All students must pass a written master's examination (final paper) to complete the requirements for the MPA degree.

Master of Public Administration and Master of Urban Planning

M.P.A./M.U.P. Combined Program

This program is designed for the student with career goals that center on assuming administrative and management responsibilities in urban planning and urban affairs. It combines into 3 years (excluding the 1-year internship required for the M.P.A. City and County Management Fellows curriculum) the normal course work required for the 2-year Master of Urban Planning (https://kupa.ku.edu/) degree and the 2-year Master of Public Administration (https://kupa.ku.edu/) degree. The program offers students experience not only in public policy management, but also in management with particular expertise in urban problem resolution.

A student must meet admission requirements of both programs. The M.P.A./M.U.P. dual degree program is open to those who have earned baccalaureate degrees and whose undergraduate academic records indicate that they have the capacity to complete these graduate programs.

Contact the School of Public Affairs and Administration (https://kupa.ku.edu/) for more information.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

M.P.A./M.U.P. Admission

Please visit the School of Public Affairs & Administration M.P.A. / M.U.P. dual degree page (https://kupa.ku.edu/) for complete admissions information.

For all applicants, a completed application includes:

1. Online Graduate Studies application. (https://gradapply.ku.edu/apply/)
2. A nonrefundable application fee, submitted online with the application form.
3. 1 official transcript from the degree-granting college or university and any post-graduate college or university attended.
4. 3 letters of recommendation. If possible, at least 1 should be an academic reference.
5. A 3 to 5 page describing your background and career goals and clearly indicating how the M.P.A./M.U.P. dual degree fits into those goals and addressing any deficiencies in your academic preparation.
6. A current résumé.
7. A writing sample that is at least 5 pages long. It should be a well-cited work in which you critically analyze (not just summarize) an issue.
8. Non-native speakers of English must meet Graduate Studies English proficiency requirements (https://gradapply.ku.edu/english-requirements/).

Deadlines

Application deadlines are February 1 and May 1.

This program combines into 72 credit hours the normal course work required for the Master of Urban Planning (42 credit hours) and the Master of Public Administration (43 credit hours) by requiring 36 credit hours from each program. A student pursuing the degrees separately would require four years of course work. The dual degree requires three years of full-time enrollment to complete, including summers. Admission to the dual degree is only available for Summer and Fall semesters. Students in the dual degree program will not be eligible for the Urban Planning graduate certificate in addition to the credentials earned for the dual degree, but may pursue another School of Public Affairs & Administration graduate certificate as elective scheduling concurrent to required MPA and MUP course work allows.

MPA Course Requirements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 824</td>
<td>Creating Good Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 835</td>
<td>Managing Public Money</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 841</td>
<td>Context, Ethics and Legal Environment of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 845</td>
<td>Managing Public Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 898</td>
<td>Leading to Create a Culture for High Performance</td>
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</tbody>
</table>

Total Hours 36

MUP Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td>3</td>
</tr>
</tbody>
</table>
Doctor of Philosophy in Public Administration

Why study public affairs and administration?

The Public Administration doctoral program provides advanced graduate education in theory and research in order to prepare students for academic and research careers in public administration, as well as professional careers in advanced practice of public administration.

For additional doctoral program data, please view the doctoral program profiles (http://graduate.ku.edu/current-program-profiles/) on the Graduate Studies website (click on "Public Affairs and Administration" under "College of Liberal Arts and Sciences").

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

PhD Admission

Please visit our website (http://kupa.ku.edu/overview-PhD/) for complete admissions information.

Ph.D. Degree Requirements

The PhD requires a minimum of 75 credit hours, including 66 credit hours of courses and 9 or more hours of dissertation credit. Students may count up to 30 hours of credit earned toward an MPA degree, or equivalent, toward the required 66 hours. Students who enter the doctoral program without having earned an MPA or its equivalent must complete all MPA core courses in SPAA or the comparable 900-level doctoral courses, except they may choose to take either PUAD 835 Managing Public Money or PUAD 837 Advanced Public Budgeting and Finance.

The requirements for the Ph.D. are based on formal course work and independent study in several fields:

- Foundations of public administration
- Specialization field within public administration

 Foundations of Public Administration

4 of the 5 courses listed below are required of all doctoral students.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 930</td>
<td>Research Seminar in Public Administration and Democracy</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 931</td>
<td>Research Seminar in Public Management</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 932</td>
<td>Seminar in the Intellectual History of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 943</td>
<td>Constitutional Foundations of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>or PUAD 949</td>
<td>Law, Courts, and Public Policy</td>
<td></td>
</tr>
</tbody>
</table>

Substitutions require the approval of the coordinator of doctoral studies.

Public Administration Specialization

In consultation with the coordinator of doctoral studies, each student must develop and declare a public administration specialization of at least 3 courses, which may be satisfied in part by credit for directed readings. Common specializations include public management and organization theory, budgeting and finance, human resources management, public policy analysis and evaluation, public values and ethics, public law and administration, and urban policy/politics. Other areas of specialization may be created in consultation with faculty.

Cognate Fields

The Ph.D. degree requires a cognate field in addition to the public administration specialization. The cognate field is a subfield similar to a "minor" and courses typically are taken outside the School. Examples include economics, political science, education, or a policy specialization (e.g., environmental policy or transportation policy.) The cognate field's sequence of 3 courses requires the approval of the coordinator of doctoral studies and does not require a comprehensive examination.

Methods

The doctorate emphasizes the development of research skills. It requires PUAD 934 Research Methods in Public Administration, with the prerequisite PUAD 836 or its equivalent, and PUAD 935 Advanced Quantitative Methods for Public Administration. Students also are encouraged to take PUAD 937 Qualitative Methods in Public Administration. Substitutions require the approval of the coordinator of doctoral studies. The methods requirement satisfies the Office of Graduate Studies' Research Skills and Responsible Scholarship requirement. These requirements are the minimum, and students are encouraged to develop advanced skills in research methods and analysis.

Examinations and Dissertation

After the completion of the required coursework, the student must pass two Written Comprehensive Examinations: one in the area of Foundations of Public Administration, and the other in the student's Specialization. If the student receives a grade of unsatisfactory on either Written Comprehensive Examination, the Examination may be repeated once at which time the student will be required to retake the entire Examination.
Under no circumstances may the student seek to fulfill the requirement to pass a Written Comprehensive Examination in a specialization area other than the area in which he or she failed to pass the Examination on the first attempt. Failure to pass either Written Comprehensive Examination within two attempts shall constitute failure to satisfy a requirement for the PhD degree, and shall result in dismissal from the program.

After passing both written exams, to become a PhD candidate the student must then pass a Comprehensive Oral Examination that includes a defense of the dissertation research proposal.

After passing the Comprehensive Oral Examination, the doctoral candidate must write a dissertation and must pass a final oral defense of the dissertation in order to receive the PhD degree.

Graduate Certificate in City and County Management

Local government is increasingly being described as the level of government “where things get done!” This certificate is designed for those who are interested in a career in local government organizations (cities and counties) or in non-profit or private sector organizations that collaborate or serve local governments. It offers broad coverage of the leadership and management skills that local government professionals need as well as more in-depth instruction on key issues facing modern communities.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission

The School of Public Affairs & Administration (SPAA) accepts students on a rolling admissions basis. Students may apply to be admitted for either the fall, summer or spring semesters. Applicants for the certificate are required to meet the following program requirements:

• An undergraduate degree with a GPA of 3.0 (if the undergraduate degree was awarded in the last three years);
• at least three years of managerial experience or be already admitted to any graduate programs of KU or already have a graduate management or leadership degree from an accredited institution; and
• the University requirement that Non-native speakers of English meet Graduate Studies English proficiency (https://gradapply.ku.edu/english-requirements/).

Current graduate students who wish to earn a graduate certificate credential in any of the SPAA certificates must submit a graduate application for the specific certificate program (https://gradapply.ku.edu/apply/) no later than enrollment in the final course that will count toward the certificate.

Individuals who are not already enrolled as KU graduate students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply/) for admission into the certificate program and submit an application fee along with the following materials:

• A current resume.
• A statement of interest in the graduate certificate program. This 1-2 page narrative should summarize your education, employment history, career goals, and how this certificate will bolster your professional aspirations.
• Official transcripts of baccalaureate degree/s and any post-baccalaureate course work.

The admissions committee may request additional materials if needed to assess an applicant’s ability to be successful in the coursework.

Certificate Requirements

The certificate is comprised of 4 courses for a total of 12 graduate credit hours. Other courses may be substituted with approval of the MPA Faculty Director. Students who wish to pursue both the City and County Management and Public and Nonprofit Management graduate certificates must seek approval from the MPA Faculty Director. PUAD 834 will count toward both certificates, but the student must take one additional elective to meet the 12 credit-hour completion requirement for each. Otherwise, Student pursuing more than one SPAA certificate may use a maximum of one course to count towards both certificates.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 825</td>
<td>Urban Policy and Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 834</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 837</td>
<td>Advanced Public Budgeting and Finance</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 702</td>
<td>Diversity and Social Equity in Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 853</td>
<td>Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or PUAD 863</td>
<td>Program Evaluation</td>
<td></td>
</tr>
<tr>
<td>UBPL 730</td>
<td>City and County Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate Certificate in Law & Society

Through the completion of this certificate, students will gain in-depth knowledge of how law intersects with and influences the practice of public administration and public policy-making and implementation. Students will learn how public administrators can work more effectively with knowledge of legal history and legal policy, how law shapes managerial processes, how it shapes government and the system of justice, and how it affects ordinary people in every walk of life. The knowledge gained through the courses in the Law and Society certificate will prepare students for work in a variety of settings, including criminal justice organizations, non-profits, policy think tanks, political institutions, and public administrative agencies of all kinds. While all students are welcome to apply, this graduate certificate’s course work is only offered at the Edwards Campus.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of
Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission

The School of Public Affairs & Administration (SPAA) accepts students on a rolling admissions basis. Students may apply to be admitted for either the fall, summer or spring semesters. Applicants for the certificate are required to meet the following program requirements:

- An undergraduate degree with a GPA of 3.0 (if the undergraduate degree was awarded in the last three years);
- at least three years of managerial experience or be already admitted to any graduate programs of KU or already have a graduate management or leadership degree from an accredited institution; and
- the University requirement that Non-native speakers of English meet Graduate Studies English proficiency (https://gradapply.ku.edu/english-requirements/).

Current graduate students who wish to earn a graduate certificate credential in any of the SPAA certificates must submit a graduate application for the specific certificate program (https://gradapply.ku.edu/apply/) no later than enrollment in the final course that will count toward the certificate.

Individuals who are not already enrolled as KU graduate students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply/) for admission into the certificate program and submit an application fee along with the following materials:

- A current resume.
- A statement of interest in the graduate certificate program. This 1-2 page narrative should summarize your education, employment history, career goals, and how this certificate will bolster your professional aspirations.
- Official transcripts of baccalaureate degree/s and any post-baccalaureate course work.

The admissions committee may request additional materials if needed to assess an applicant’s ability to be successful in the coursework.

Certificate Requirements

The certificate requires 4 courses for a total of 12 graduate credit hours. Other courses may be substituted with the approval of the MPA Faculty Director. Student pursuing more than one SPAA certificate may use a maximum of one course to count towards both certificates.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
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<tr>
<td>PUAD 842</td>
<td>Law and Public Management</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 849</td>
<td>Law, Courts, and Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 701</td>
<td>Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 702</td>
<td>Diversity and Social Equity in Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>LWS 743</td>
<td>Theoretical Foundations of Law and Society</td>
<td>3</td>
</tr>
<tr>
<td>LWS 794</td>
<td>Topics in Law &amp; Society: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate Certificate in Performance Management

Effectiveness, efficiency, public accountability, and the better alignment of resources and managerial actions with organizational mission are key goals of public and nonprofit management. This certificate is designed for those individuals who wish to develop skill sets in managing performance and in fostering innovative changes to deliver greater value to the public. Managerial strategies, organizational change management, governance thinking, and quantitative analysis are emphasized in the coursework.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission

The School of Public Affairs & Administration (SPAA) accepts students on a rolling admissions basis. Students may apply to be admitted for either the fall, summer or spring semesters. Applicants for the certificate are required to meet the following program requirements:

- An undergraduate degree with a GPA of 3.0 (if the undergraduate degree was awarded in the last three years);
- at least three years of managerial experience or be already admitted to any graduate programs of KU or already have a graduate management or leadership degree from an accredited institution; and
- the University requirement that Non-native speakers of English meet Graduate Studies English proficiency (https://gradapply.ku.edu/english-requirements/).

Current graduate students who wish to earn a graduate certificate credential in any of the SPAA certificates must submit a graduate application for the specific certificate program (https://gradapply.ku.edu/apply/) no later than enrollment in the final course that will count toward the certificate.

Individuals who are not already enrolled as KU graduate students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply/) for admission into the certificate program and submit an application fee along with the following materials:

- A current resume.
- A statement of interest in the graduate certificate program. This 1-2 page narrative should summarize your education, employment history, career goals, and how this certificate will bolster your professional aspirations.
- Official transcripts of baccalaureate degree/s and any post-baccalaureate course work.

The admissions committee may request additional materials if needed to assess an applicant’s ability to be successful in the coursework.
Certificate Requirements

The certificate requires 4 courses for a total of 12 graduate credit hours. Other courses may be substituted with the approval of the MPA Faculty Director. Student pursuing more than one SPAA certificate may use a maximum of one course to count towards both certificates.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 857</td>
<td>Performance Management and Governance</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The 3 elective courses must be selected from the following:</td>
<td></td>
</tr>
<tr>
<td>PUAD 854</td>
<td>Innovation and Organizational Change</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 858</td>
<td>Performance Audit</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 861</td>
<td>Data Analytics</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 853</td>
<td>Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>or PUAD 863</td>
<td>Program Evaluation</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 15

Graduate Certificate in Public / Nonprofit Management

This certificate aims to enhance graduates’ ability to manage and lead public and nonprofit organizations ethically and effectively. It establishes effective human resource management as a core foundation, with emphasis on the political, legal, and ethical dimensions of public service employment. Through study of management theories and techniques, students will gain understanding of contemporary organizational challenges and the tensions inherent to competing values and develop the leadership skills necessary to guide public organizations through change. Through their choice of electives, students may tailor this certificate to focus more specifically on the nonprofit or public sector.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

The School of Public Affairs & Administration (SPAA) accepts students on a rolling admissions basis. Students may apply to be admitted for either the fall, summer or spring semesters. Applicants for the certificate are required to meet the following program requirements:

- An undergraduate degree with a GPA of 3.0 (if the undergraduate degree was awarded in the last three years);
- at least three years of managerial experience or be already admitted to any graduate programs of KU or already have a graduate management or leadership degree from an accredited institution; and
- the University requirement that Non-native speakers of English meet Graduate Studies English proficiency (https://gradapply.ku.edu/english-requirements/).

Current graduate students who wish to earn a graduate certificate credential in any of the SPAA certificates must submit a graduate application for the specific certificate program (https://gradapply.ku.edu/apply/) no later than enrollment in the final course that will count toward the certificate.

Individuals who are not already enrolled as KU graduate students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply) for admission into the certificate program and submit an application fee along with the following materials:

- A current resume.
- A statement of interest in the graduate certificate program. This 1-2 page narrative should summarize your education, employment history, career goals, and how this certificate will bolster your professional aspirations.
- Official transcripts of baccalaureate degree/s and any post-baccalaureate course work.

The admissions committee may request additional materials if needed to assess an applicant’s ability to be successful in the coursework.

Certificate Requirements

The certificate requires 4 courses for a total of 12 graduate credit hours. Other courses may be substituted with the approval of the MPA Faculty Director. Students who wish to pursue both the City and County Management and Public and Nonprofit Management graduate certificates must seek approval from the MPA Faculty Director. PUAD 834 will count toward both certificates, but the student must take one additional elective to meet the 12 credit-hour completion requirement for each. Otherwise, Student pursuing more than one SPAA certificate may use a maximum of one course to count towards both certificates.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course:PUAD 834</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The 3 elective courses must be selected from the following:</td>
<td></td>
</tr>
<tr>
<td>PUAD 703</td>
<td>Foundations of the Nonprofit Sector</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 708</td>
<td>Collaboration in Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 741</td>
<td>Public Service Leadership</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 828</td>
<td>Nonprofit Management and Policy</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 842</td>
<td>Law and Public Management</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 854</td>
<td>Innovation and Organizational Change</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 857</td>
<td>Performance Management and Governance</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate Certificate in Public Policy

Public policy shapes the behavior of individuals, organizations, and corporations and affects almost every aspect of society. The ability to develop “good” public policy requires both a strong analytical base and political astuteness. The required courses in the certificate establish a contextual and analytical foundation, equipping students with the ability to both prospectively assess and retrospectively evaluate public initiatives. Electives enable additional exploration of particular policy areas.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of
Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

The School of Public Affairs & Administration (SPAA) accepts students on a rolling admissions basis. Students may apply to be admitted for either the fall, summer or spring semesters. Applicants for the certificate are required to meet the following program requirements:

- An undergraduate degree with a GPA of 3.0 (if the undergraduate degree was awarded in the last three years);
- at least three years of managerial experience or be already admitted to any graduate programs of KU or already have a graduate management or leadership degree from an accredited institution; and
- the University requirement that Non-native speakers of English meet Graduate Studies English proficiency (https://gradapply.ku.edu/english-requirements/).

Current graduate students who wish to earn a graduate certificate credential in any of the SPAA certificates must submit a graduate application for the specific certificate program (https://gradapply.ku.edu/apply/) no later than enrollment in the final course that will count toward the certificate.

Individuals who are not already enrolled as KU graduate students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply) for admission into the certificate program and submit an application fee along with the following materials:

- A current resume.
- A statement of interest in the graduate certificate program. This 1-2 page narrative should summarize your education, employment history, career goals, and how this certificate will bolster your professional aspirations.
- Official transcripts of baccalaureate degree/s and any post-baccalaureate course work.

The admissions committee may request additional materials if needed to assess an applicant’s ability to be successful in the coursework.

Certificate Requirements

The certificate requires 4 courses for a total of 12 graduate credit hours. Other courses may be substituted with the approval of the MPA Faculty Director. Student pursuing more than one SPAA certificate may use a maximum of one course to count towards both certificates.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUAD 853</td>
<td>Policy Analysis</td>
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<tr>
<td>PUAD 863</td>
<td>Program Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 825</td>
<td>Urban Policy and Administration</td>
<td>3</td>
</tr>
<tr>
<td>PUAD 849</td>
<td>Law, Courts, and Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 710</td>
<td>Housing Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or UBPL 720 Sustainable Land Use Policy and Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate Certificate in Urban Planning

Through the completion of this certificate, students will gain an essential introduction to the field and practice of urban planning, which is about engaging communities for better futures and creating places where people can lead meaningful lives. Courses will provide a framework of the social, economic, and political environments within which planning policy is formed and carried out. The certificate is geared toward meeting the need for planning policy on urban issues at any level of government — federal, state, regional, and local — or outside the governmental arena. **While all students are welcome to apply, this graduate certificate’s course work is only offered at the Lawrence Campus.**

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

Please consult the Departments & Programs (p. 748) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

The School of Public Affairs & Administration (SPAA) accepts students on a rolling admissions basis. Students may apply to be admitted for either the fall, summer or spring semesters. Applicants for the certificate are required to meet the following program requirements:

- An undergraduate degree with a GPA of 3.0 (if the undergraduate degree was awarded in the last three years);
- at least three years of managerial experience or be already admitted to any graduate programs of KU or already have a graduate management or leadership degree from an accredited institution; and
- the University requirement that Non-native speakers of English meet Graduate Studies English proficiency (https://gradapply.ku.edu/english-requirements/).

Current graduate students who wish to earn a graduate certificate credential in any of the SPAA certificates must submit a graduate application for the specific certificate program (https://gradapply.ku.edu/apply/) no later than enrollment in the final course that will count toward the certificate.

Individuals who are not already enrolled as KU graduate students must complete an application to Graduate Studies (https://gradapply.ku.edu/apply) for admission into the certificate program and submit an application fee along with the following materials:

- A current resume.
- A statement of interest in the graduate certificate program. This 1-2 page narrative should summarize your education, employment history, career goals, and how this certificate will bolster your professional aspirations.
• Official transcripts of baccalaureate degree/s and any post-baccalaureate course work.

The admissions committee may request additional materials if needed to assess an applicant's ability to be successful in the coursework.

The certificate requires 4 courses for a total of 12 graduate credit hours. Other courses may be substituted with the approval of the MPA Faculty Director in consultation with the Urban Planning Director. Student pursuing more than one SPAA certificate may use a maximum of one course to count towards both certificates.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
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<tr>
<td>Required Courses:</td>
<td></td>
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<tr>
<td>UBPL 730</td>
<td>City and County Planning</td>
<td>3</td>
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<tr>
<td>UBPL 785</td>
<td>History and Theory of Planning</td>
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<tr>
<td>The 2 elective courses must be selected from the following:</td>
<td></td>
<td></td>
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<tr>
<td>UBPL 705</td>
<td>Urban Economic Theory and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 710</td>
<td>Housing Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 720</td>
<td>Sustainable Land Use Policy and Planning</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 736</td>
<td>Planning Law and Institutions</td>
<td>3</td>
</tr>
<tr>
<td>UBPL 750</td>
<td>Transportation Policy and Planning</td>
<td>3</td>
</tr>
</tbody>
</table>
Medical Center Campus Interdisciplinary Studies

The School of Nursing on the KU Medical Center campus offers interprofessional programs. Please see the specific catalog section for detailed information about the programs.

Master of Science in Health Informatics (p. 2012)
Health Informatics Graduate Certificate (p. 2015)
Health Professions Educator, Graduate Certificate (https://catalog.ku.edu/nursing/certificates/healthprofessionaleducator/)

Nursing (Graduate) Courses

IPHI 820. Program, Project, and Communication Planning. 2 Credits.
Strategies to promote program, project, and communication planning are presented and applied by the student. Communication strategies for informing, guiding, and persuading clients, health care providers, payers, and other stakeholders to advance program and project development are discussed. The use of evolving information technologies to improve program, project and communication planning is emphasized. Prerequisite: Corequisite: NRSG 880, or consent of instructor.

IPHI 850. Introduction to Health Informatics. 2 Credits.
This course provides a broad survey of health informatics focused on five themes: health informatics foundations; clinical decision support; human factors/organization factors; public health informatics and current issues in health informatics including best practices.

IPHI 851. Transforming Health Care through Use of Information Systems and Technology. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. The application of the information system development life cycle in the design, selection, and implementation of health information technology applications will be examined. Human computer interactions and emerging technologies will be explored for their impact on patient care and safety. The role of legal, regulatory, ethical and security issues will be discussed as they apply to clinical and consumer information technologies. Prerequisite: Consent of Instructor.

IPHI 852. Health Data Theory and Practice. 3-4 Credits.
Data science concepts and database theory as related to healthcare settings will be introduced. Simple database modeling, design, and manipulation will be explored using a database management system and a query language. Key data science methods, such as data wrangling and visualization, will be leveraged for decision making. Prerequisite: None.

IPHI 853. Abstraction and Modeling of Healthcare Information. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. The information system development life cycle process is presented with emphasis on determination and analysis of information system requirements and system design that meet the identified health care information requirements. Object-oriented techniques will be introduced, including Unified Modeling Language and Unified Modeling Methodology, to facilitate process analysis and design proposal development. Prerequisite: NRSG 820 and consent of instructor.

IPHI 854. Knowledge Management in Healthcare. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. Knowledge management is the creation, communication, and leveraging of a healthcare organization’s knowledge assets. Defining knowledge, describing the knowledge creation cycle, and the identification of the knowledge worker and his/her impact on the organization are discussed. Information technology and communities of practice are presented in a balanced approach supporting a systematic viewpoint of the knowledge management process. Knowledge management theory is enhanced with the performance of a knowledge audit and the development of knowledge management tools. (Same as NRSG 854.) Prerequisite: NRSG 820 and consent of instructor.

IPHI 856. Health Informatics Practicum. 1-3 Credits.
In collaboration with healthcare information faculty, preceptors, students design an experience to facilitate application of theories and research related to health care informatics. Emphasis is on the application of the information system development life cycle. Students analyze the leadership and technical behaviors of various informatics roles and negotiate an informatics project to be completed within the practicum. Prerequisite: All Specialty Core, Leadership Core, IPHI 853, Abstraction and Modeling of Health Care Information, IPHI 852, Health Data: Theory & Practice. Prerequisite or Co-requisite: IPHI 854, Knowledge Management in Healthcare, IPHI 851, Topics in Health Care Informatics, IPHI 860, Research Project in Nursing, or consent of instructor. LEC

IPHI 858. Health Informatics Practicum: Pharmacy. 4 Credits.
In collaboration with health informatics faculty and preceptors, students design an experience to facilitate application of theories and research related to health informatics in a pharmacy setting. Emphasis is on the application of the information system development life cycle. Students analyze the leadership and technical behaviors of various informatics roles and negotiate an informatics project to be completed within the practicum. This course is only open to students enrolled in the dual PharmD and MS in Health Informatics degree. Prerequisite: All leadership core courses, IPHI 852, IPHI 853. Prerequisite or Co-requisite: IPHI 851, IPHI 854, IPHI 860, or consent of instructor.

IPHI 860. Health Informatics Scholarly Project. 2 Credits.
This research or evidence-based project course is designed for students to apply knowledge from their coursework. Students will work with a faculty mentor on components of a research, quality improvement, or evidence-based practice project. The student will create a scholarly document. Prerequisite: A research course and two informatics courses, or consent of instructor.

IPHI 957. Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. The use of information systems including medical devices is paramount in achieving patient safety. Students will attain an inclusive understanding of how human factors and ergonomic principles can be used to improve patient safety in the design, implementation, and evaluation of information systems and medical devices. Additionally, health care professionals will acquire skills to appropriately apply error reduction strategies developed in high reliability organizations. Prerequisite: Consent of instructor.

IPHI 958. Knowledge Representation and Interoperability. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. The need to exchange clinical information consistently between health care providers, care settings, researchers and other requires syntactic and semantic interoperability. Requirements and approaches to meet interoperability will be explored. Standards for messaging, terminology, and knowledge representation will be investigated. Prerequisite: Consent of instructor.

Graduate Studies Medical Ctr Courses

GSMC 50. Science Special Studies. 0 Credits.
The aim of this course is to teach the methodologies and skills required for conducting biomedical science research, or practice in a clinical setting. The learning experience will be tailored to individual needs with personalized instruction for the opportunity to learn new skills and competencies, or exposure to new research developments or clinical practice. Progress of the student will be monitored through weekly laboratory meetings with members of the research lab or weekly contact with the student and/or clinical instructor in the clinical setting. Students will self-assess their progress and receive constructive feedback from appropriate individuals in the lab or clinical setting. Prerequisite: Permission of instructor in the Office of International Programs.

GSMC 99. Postdoctoral Studies. 0 Credits.
Postdoctoral Studies

GSMC 501. Foundations of Interprofessional Collaboration I: Introduction to Interprofessional Collaboration. 0 Credits.
This course will introduce interprofessional students to the basic concepts of interprofessional collaboration including values and ethics, roles and responsibilities of healthcare team members, and interprofessional communication tools using the evidence-based national curriculum of TeamSTEPPS.

GSMC 502. Foundations of Interprofessional Collaboration II: Application Interprofessional Collaboration. 0 Credits.
This course will provide interprofessional students' opportunities to apply key knowledge and skills gained in FIPC I, through role-plays and case-based learning. Students will apply their knowledge of roles and responsibilities of healthcare team members and interprofessional communication tools and continue learning with, from, and about students from other professions.

GSMC 503. Foundations of Interprofessional Collaboration III: Demonstration Interprofessional Collaboration. 0 Credits.
This course will provide interprofessional students' opportunities to demonstrate key knowledge and skills gained in FIPC I and II, through simulation. Students will demonstrate their interprofessional communication skills, including specific opportunities to utilize TeamSTEPPS tools. Students will also demonstrate their teamwork abilities by working with interprofessional students during the simulation.

GSMC 803. Introduction to Clinical Research. 1 Credits.
Course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantsmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of Instructor.

GSMC 840. CLINICAL OBSERVATION IN HEALTH CARE FOR BIOENGINEERS. 3 Credits.
This course requires a 6 hour time commitment each week over the semester. During each weekly session the student will observe various medical practitioners in specific health care environments. The course gives the bioengineer an opportunity to see the inside of medical practice and exposes students to medical questions and challenges that could provide opportunities for engineers to contribute to the improvement of medical practice. Each student must select a concentration for this course from a health care specialty depending on availability. Some specialty options might include: Orthopedic, Radiology, Cardiology, Physical Therapy, etc. Grading will be pass/fail based on participation and journal keeping. Prerequisite: Graduate engineering standing, Consent of instructor.

GSMC 850. Proteins and Metabolism. 2 Credits.
This course is the first of four lecture units in the first year curriculum of the Interdisciplinary Graduate Program in the Biomedical Sciences. It will cover basic principles of metabolism, protein structure and an introduction to nucleic acids. Prerequisite: Permission of instructor. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences. Students must co-enroll in GSMC 852 (Introduction to Biomedical Research).

GSMC 851. Molecular Genetics. 2 Credits.
This course is the second of four lecture units in the first year curriculum of the Interdisciplinary Graduate Program in the Biomedical Sciences. It will cover basic principles of molecular genetics, DNA replication, DNA repair, transcription and translation. Prerequisite: Permission of instructor. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences. Students must co-enroll in GSMC 852 (Introduction to Biomedical Research).

GSMC 852. Introduction to Biomedical Research I. 2 Credits.
This is the first semester of a one year series in the Interdisciplinary Graduate Program in the Biomedical Sciences. The course is composed of weekly meetings to discuss research problems, methods and current literature. The course will interface with the lectures and students will learn to critically evaluate our scientific knowledge base. The students will be introduced to the tools that are available to obtain and evaluate information. The students will be challenged to identify areas of our scientific knowledge that require further experimentation and clarification. Prerequisite: Permission of instructor. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences. Students must co-enroll in GSMC 850 (Proteins and Metabolism) and GSMC 851 (Molecular Genetics).

GSMC 853. Cellular Structure. 2 Credits.
This course is the third of four lecture units in the first year curriculum of the Interdisciplinary Graduate Program in the Biomedical Sciences. It will cover basic principles of cellular structure and function. Topics include the lipid bilayer, membrane proteins, and cellular organelles. Prerequisite: Permission of instructor. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences. Students must co-enroll in GSMC 850 (Proteins and Metabolism) and GSMC 851 (Molecular Genetics).

GSMC 854. Cell Communication. 2 Credits.
This course is the fourth of four lecture units in the first year curriculum of the Interdisciplinary Graduate Program in the Biomedical Sciences. It will cover basic principles of cell communication. Topics include G-protein-coupled signaling, cellular cytoskeleton; cell cycle control; cell death; extracellular matrix; and cancer. Prerequisite: Permission of instructor. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences. Students must co-enroll in GSMC 850 (Proteins and Metabolism) and GSMC 851 (Molecular Genetics).

GSMC 855. Introduction to Biomedical Research II. 2 Credits.
This is the second semester of a one year series in the Interdisciplinary Graduate Program in the Biomedical Sciences. The course is composed of weekly meetings to discuss research problems, methods and current literature. The course will interface with the lectures and students will learn to critically evaluate our scientific knowledge base. The students will be introduced to the tools that are available to obtain and evaluate information. The students will be challenged to identify areas of our scientific knowledge that require further experimentation and clarification.
Prerequisite: Permission of instructor. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences. Students must co-enroll in GSMC 853 (Cellular Structure) and GSMC 854 (Cell Communication).

GSMC 856. Introduction to Research Ethics. 1 Credits.
The objective of this course is to introduce students to research ethics. Students will learn and discuss some of the following areas of ethics in research: 1) sources of errors in science, 2) Scientific Fraud, 3) plagiarism and misrepresentation, 4) conflicts of interest, and 5) confidentiality. Prerequisite: Permission of instructor. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences.

GSMC 857. Biographics. 1 Credits.
The objective of the course is to teach students how to organize and present data in a clear and concise manner at national meetings. Students are taught basic principles of organizing data for presentation and then learn through the actual presentation of data in simulated platform sessions held in the course. Videotapes are made of the presentations, and students are then given a constructive critique of their presentation by the instructor and fellow students. Prerequisite: Permission of instructors. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences.

GSMC 858. Introduction to Faculty Research. 1 Credits.
This course was created to provide students with sufficient introduction to the research conducted at KUMC. To facilitate this point, the course is designed as a seminar series. In each session of the series, three faculty members present a brief 20-minute overview of their research programs. The series will help students to select faculty for research rotations and ultimately help them determine which faculty member they will select as a research adviser for their doctoral research. Prerequisite: Permission of instructors. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences.

GSMC 859. Research Rotations. 1-4 Credits.
The course will introduce students to research methods, experimental design, and the types of biomedical research conducted at KUMC. The first research rotation begins halfway through the first semester; the second and third research rotations will occur in the second semester. It is designed to help students determine which faculty member they will select as a research adviser for their doctoral research. Prerequisite: Permission of instructors. Students must be admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences.

GSMC 860. Introduction to Molecular Medicine. 1 Credits.
Introduction to Molecular Medicine (1 credit hour/semester) is a two semester course, taught every fall and spring semester, primarily for first year MD-PhD students. This course is taught by the Director of the MD-PhD Program, with contributions from other faculty from the basic science and clinical departments. Through lectures, small group discussion, evaluation of primary literature, analysis of scientific data and presentations/discussions with current KUMC faculty, students will be introduced to the process of investigating the molecular and cellular derangements that underlie human disease. Order of topics mirror, to some extent, the subjects of the first-year modules. There will be particular emphasis on the diverse research methods and models systems used to investigate the molecular basis of disease and understanding how such investigations can be translated to answer clinically relevant questions. Students are evaluated by both group activity and individual preparation and participation. Prerequisite: Enrollment in the MD-PhD Program or Permission of Instructor.

GSMC 987. Experiential Learning in the Biomedical Sciences. 1-6 Credits.
Four to 16 weeks of experiential learning in a relevant biomedical setting outside of KUMC. Students must identify an outside learning experience and prepare a detailed outline of their activities. The outline must be approved by the instructor prior to enrollment. The goal of the class is to enable students to enhance their research opportunities by expanding their experiences. Examples of outside opportunities are: industry; clinical facilities; non-profit foundations; government programs (NIH, CDC, KBOR, KDHE). Prerequisite: Permission of Instructor, Mentor and Program.

Master of Science in Health Informatics

Professionals in applied Health Informatics have skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions. Graduates will be prepared for entry and mid-level positions with hospital or clinic informatics departments, electronic health record (EHR) vendors, public health organizations, and as consultants and/or staff in organizations that specialize in knowledge management. Graduates also have the skills to enter the growing field of health information exchange, which includes regional health information organizations and the emerging personal health records. In addition to a foundation in applied health informatics, special skills will be acquired in organizational change, project management and impact evaluation.

This is an interprofessional program administered by the Center for Health Informatics (http://www.kumc.edu/health-informatics.html), which is sponsored by the School of Nursing.

The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Master of Science in Health Informatics (https://www.kumc.edu/research/center-for-health-informatics/academics/master-of-science-in-health-informatics.html) website.

Admission requirements:

- A bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html).
- A current resume or curriculum vitae.
- A personal essay outlining the applicant’s reasons for wanting to pursue graduate education in health informatics, career objectives, and any other information that would help the admissions committee get to know the applicant.
- Three letters of recommendation preferably from employers, instructors, or other persons who can assess the applicant’s...
academic and professional potential. Letters are submitted per instructions provided for the online application process.

- A background check (https://www.kumc.edu/academic-and-student-affairs/student-resources/criminal-background-checks-for-students.html) is required during the admission process; it may affect the student's eligibility to enter the program.
- A graduate level statistics course (may be completed prior to admission or during the first semester of enrollment.)

After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

### International Students

Due to the number of required online courses for this degree, the Health Informatics Program at KUMC does not meet the U.S. student visa requirements at this time. Therefore, we are unable to accept individuals who are on student visas. If you received your university education outside of the U.S. or are in the U.S. on another type of visa, please contact HealthInformatics@kumc.edu for additional application requirements.

Admission requirements are subject to change. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

The Master's in Health Informatics curriculum is divided into three cores: informatics, leadership, and research along with a discipline-specific emphasis track. The student and advisor will work closely together to develop a plan of study that meets the career goals of the student.

### Degree requirements:

- Degree requirements can be completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 4 years of admission to the program.
- Completion of a minimum of 40 credit hours.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of a general examination (https://catalog.ku.edu/graduate-studies/kumc/#ThesisDefense) the semester the student will graduate.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.
- Successful completion of the **Health Informatics Core** (minimum 17 credit hours.) These courses provide the core knowledge and skills essential to the practice of health informatics.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2</td>
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<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 852</td>
<td>Health Data Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 853</td>
<td>Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
</tbody>
</table>

Successful completion of the **Leadership Core** (minimum 9 credit hours.)

This includes a minimum of one health policy course. Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>IPHI 854</td>
<td>Knowledge Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 856</td>
<td>Health Informatics Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Successful completion of the **Research Core** (minimum 5 credit hours.)

This component includes a research project that involves applying aspects of the research process to the student's area of health informatics practice.

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NRSG 754</td>
<td>Health Care Research</td>
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<tr>
<td>or HP&amp;M 819</td>
<td>Research for Health Care Leaders</td>
<td></td>
</tr>
<tr>
<td>IPHI 860</td>
<td>Health Informatics Scholarly Project</td>
<td>2</td>
</tr>
</tbody>
</table>

Successful completion of one **Discipline-Specific Emphasis Track** (minimum 9 credit hours.) The Discipline-Specific Track (Clinical, Health Policy and Management, Public Health, or Project Management) and the courses within the core are selected in consultation with the student's advisor based on the student's background and career goals.

#### Clinical Track (select 9 credit hours.) Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>NRSG 748</td>
<td>Theories for Practice and Research</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 755</td>
<td>Professionalism in Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 883</td>
<td>Complexity Science Approaches to Improve Organizational Effectiveness</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 891</td>
<td>Human Resources and Workforce Development</td>
<td>3</td>
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</table>

#### Health Policy and Management Track (select 9 credit hours).

Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP&amp;M 810</td>
<td>The Health Care System</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 822</td>
<td>Health Care Economics</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 825</td>
<td>Financial Concepts in Healthcare Management</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 846</td>
<td>Health Information Technology Management</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 850</td>
<td>Introduction to Operations</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 854</td>
<td>Human Resources and Workforce Development</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Public Health Track (select 9 credit hours). Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 809</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 815</td>
<td>Infectious Disease Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 818</td>
<td>Social and Behavioral Aspects of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 845</td>
<td>Health, Society, and Culture</td>
<td>3</td>
</tr>
</tbody>
</table>
Typical Plan of Study for Part-Time Students

Year 1

Fall
- Discipline-specific course: IPHI 850 (3 hours)
- Leadership Core course: Discipline-Specific course (2 hours)
- Leadership Core course (Leadership Core course 2 hours)

Spring
- Leadership Core course: IPHI 854 (3 hours)

Summer
- Leadership Core course (Leadership Core course 2 hours)

Year 2

Fall
- Leadership Core course: IPHI 852 (3 hours)

Spring
- Leadership Core course: IPHI 851 (3 hours)

Year 3

Fall
- IPHI 860 (2 hours)
- IPHI 853 (3 hours)

Spring
- IPHI 858 (4 hours)
- IPHI 957 (3 hours)
- NRSG 885 (2 hours)

Total Hours: 40

Dual Degree: Doctor of Pharmacy & Master of Science in Health Informatics

The dual PharmD/MS in health informatics (MSHI) degree program is designed particularly for those students intending to pursue opportunities in pharmacy informatics. The dual PharmD/MSHI students will concurrently enroll in both programs during years 2-4 of the PharmD program. During the last semester, the HI practicum will satisfy 1 of 9 required advanced pharmacy practice experiences (APPEs). A Health Informatics comprehensive oral examination occurs during the last semester of enrollment in the Dual Degree (P4 Year, Spring semester). Admission to this program is restricted to students currently in the PharmD program at KU.

Degree Requirements

P1 Year

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>P&amp;TX 630 Pharmacology I</td>
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P2 Year

<table>
<thead>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Spring</td>
<td>IPHI 850 Introduction to Health Informatics</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHCH 626 Biopharmaceutics and Drug Delivery</td>
<td>3</td>
</tr>
<tr>
<td>Summer</td>
<td>IPHI 854 Knowledge Management in Healthcare</td>
<td>3</td>
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</table>

P3 Year

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>IPHI 851 Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHPR 624 Pharmacoepidemiology and Public Health</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHPR 629 Research Design and Biostatistics</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PHPR 635 Problems in Pharmacy Practice (1 credit required)</td>
<td>1-5</td>
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</table>

P4 Year

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>IPHI 853 Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IPHI 820 Program, Project, and Communication Planning</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>NRSG 808 The Social Context for Health Care Policy</td>
<td>2</td>
</tr>
<tr>
<td>Spring</td>
<td>IPHI 858 Health Informatics Practicum: Pharmacy (20 hours/week for 8 weeks at pharmacy informatics (site(s))</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>IPHI 957 Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>NRSG 885 Evaluation and Analysis for Healthcare Effectiveness</td>
<td>2</td>
</tr>
</tbody>
</table>

TECHNICAL STANDARDS FOR ADMISSION

Center for Health Informatics

The Master of Science in Health Informatics degree and Graduate Certificate signify that the holder is prepared for entry into the practice of applied health informatics. Therefore, it follows that graduates must have the knowledge and skills necessary to function in a broad range of situations. The following abilities and expectations must be met by all students with or without accommodations admitted to the program.

1. Observation: Students must be able to observe: lectures, demonstrations, online written and recorded audio/visual material, online meetings, and research and practice situations. Observation necessitates the functional use of the senses of vision and hearing.

2. Communication: Applicants also must be able to communicate effectively and efficiently in English with other students, faculty, staff and mentors/preceptors. Communication includes not only speech, but also listening, reading, and writing. Effective communication includes the ability to comprehend conversation, presentations, assigned readings, and the ability to present information verbally and in writing.
3. **Motor:** A student must have sufficient motor function to attend classes, prepare assignments, use a computer keyboard, and make public presentations if required. Course requirements will also include field work in a variety of health organizations.

4. **Intellectual, conceptual, integrative, quantitative, and problem-solving abilities:** An applicant must be able to understand and learn factual information from readings and didactic presentations, gather information independently, analyze and synthesize learned material, and apply that information. In addition, an applicant must possess the ability to understand and work with measurements, carry out calculations and engage in reasoning, analysis and synthesis based on the calculations. An applicant must be able to draw on all these abilities to be an effective problem solver.

5. **Behavioral and social attributes:** Integrity, reliability, self-direction, motivation, and the ability to work with diverse groups are qualities necessary for effective preparation for and practice in this field. A student must have the emotional health required for the full use of his or her intellectual ability, exercise of sound judgment, and timely completion of all responsibilities attendant to the completion of academic responsibilities.

**NOTE:** Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.

## Health Informatics Certificate

Emerging technologies are fundamentally changing the way we manage and apply knowledge. In addition, healthcare organizations must meet the challenges of the HITECH Act and HIPAA, as well as regulatory influences. As a result, the need for trained healthcare informaticians has increased dramatically over the last few years. In order to appropriately select and use technology to improve healthcare and to meet the requirements of regulating bodies, health informatics professionals need training in the use of informatics concepts and methodologies.

The Health Informatics Certificate program meets this need by preparing students to:

1. Apply health informatics using theoretical, conceptual, and experiential knowledge base
2. Articulate a vision of health informatics in an organization in the context of interprofessional practice and complex healthcare delivery systems
3. Implement and evaluate information systems that support multi-professional clinical/administrative practice
4. Facilitate the delivery of evidence-based practice at point of care
5. Sit for national Nursing, medicine or graduate level certification exams, such as nursing or MD, as appropriate

The advantage of this certificate program is that it offers an interprofessional learning experience and is open to graduates in all fields. This is an interprofessional program administered by the Center for Health Informatics (http://www.kumc.edu/health-informatics.html), which is sponsored by the School of Nursing.

Approved as a Stackable Program: To encourage career and academic progression, students who have completed the Health Informatics Certificate may apply the courses towards the degree requirements for the Master of Science in Health Informatics.

The application process for the Health Informatics Certificate program is an online process. Detailed instructions on how to apply are posted on the Center for Health Informatics (https://www.kumc.edu/health-informatics.html) website. Students are admitted for the fall and spring semesters only. Applications for the fall semester must be received by April 1st and by September 1st for the spring semester.

### Admission Requirements:

- A bachelor's or master's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended are required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale.
- Applicants, who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://catalog.ku.edu/graduate-studies/kumc/#EnglishProficiencyRequirement).
- A background check (https://catalog.ku.edu/graduate-studies/kumc/#BackgroundCheck) is required during the admission process; it may affect the student's eligibility to enter the program.
- Three letters of recommendation from individuals who can assess your academic and professional background and potential for success in a graduate-level certificate program.
- A personal statement regarding applicant's career objectives and purpose.
- A current resume or curriculum vitae.
- A satisfactory phone or in-person interview.

Applicants will be assessed on the above criteria and selected applicants will in the judgment of the admissions committee, demonstrate the academic achievement, maturity, integrity, and motivation necessary for successful advancement. In addition, the committee looks for applicants who will contribute academic, nonacademic, and socioeconomic diversity to the class. The committee is interested in evidence of capacity for mature and independent scholarship.

After an applicant has been admitted, the program may defer an applicant's admission for one year after which time the applicant must submit a new application. Admission requirements are subject to change. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

### Certificate Program Information: (p. 2425)

Certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a certificate program.

The certificate program is not a means of entry into a graduate degree program. If students admitted to a certificate program are later admitted to
a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

Graduate credit from another institution may not be transferred to a certificate program.

The graduate certificate program focuses on the theory and application of informatics, computer technology, knowledge management, and evidence-based practice that supports healthcare informatics and clinical decision-making. The program culminates with a mentored practicum experience and project.

**Health Informatics Certificate**

**Certificate requirements:**

- Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.
- Enrollment in a minimum of one (1) credit hour the semester the program is completed. Graduate certificates may not be granted retroactively.
- Successful completion of a minimum of 17-18 credit hours.
- Successful completion of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 852</td>
<td>Health Data Theory and Practice (3 credits required)</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 853</td>
<td>Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 854</td>
<td>Knowledge Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 856</td>
<td>Health Informatics Practicum (Can be taken over 1-3 consecutive semesters. Students who are taking the PharmD program concurrent with the HI Certificate, will substitute IPHI 858 for this course.)</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 858</td>
<td>Health Informatics Practicum: Pharmacy (Required for PharmD students who are completing the HI Certificate concurrent with their PharmD program. All other HI Certificate students will be required to take IPHI 856.)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Hours 17-18**

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

**Healthcare Informatics Certificate**

Effective Fall 2019, the Healthcare Informatics Certificate will no longer be accepting applications. Please apply to the Health Informatics Certificate program listed above.

**Certificate requirements:**

- Certificate requirements are normally completed within two to three years of admission to the program although a maximum of four years is allowed
- Cumulative grade-point average (GPA) of at least a 3.0 for all graduate certificate coursework
- Students must be enrolled in a minimum of 1 credit during their graduation semester. Certificates may not be granted retroactively
- Successful completion of the following online courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 820</td>
<td>Program, Project, and Communication Planning</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
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<tr>
<td>IPHI 853</td>
<td>Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 854</td>
<td>Knowledge Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 856</td>
<td>Health Informatics Practicum</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Total Hours 17-20**

**Typical Plan of Study**

The Health Informatics Certificate program consists of 19 credit hours. The 3-credit hour practicum (IPHI 856) requires a total of 200 clock hours and may be taken only after the majority of coursework is complete. This practicum may be taken over 1-3 consecutive semesters and must include the last semester in the program.

PharmD students who are concurrently completing the Health Informatics Certificate program will take 2 credit hours of IPHI 858: Health Informatics Practicum for Pharmacy instead of IPHI 856.

**Full-Time Students**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 851</td>
<td>3 IPHI 850</td>
<td>2 IPHI 854</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>IPHI 853</td>
<td>3 IPHI 852</td>
<td>3 IPHI 856</td>
<td>3</td>
<td></td>
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</table>

**Total Hours 17**

Graduate credit from another institution may not be transferred to a graduate certificate program.
Part-Time Students

Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 851</td>
<td>3</td>
<td>IPHI 850</td>
<td>2</td>
<td>IPHI 854</td>
<td>3</td>
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<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 853</td>
<td>3</td>
<td>IPHI 852</td>
<td>3</td>
<td>IPHI 856</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5</td>
<td>1</td>
<td></td>
<td></td>
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</tbody>
</table>

Total Hours 17

TECHNICAL STANDARDS FOR ADMISSION

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Medicine (M.D. & Graduate Degrees)

Founded in 1905, the KU School of Medicine is proud of its rich legacy as Kansas’ only medical school. Our mission is to enhance the quality of life and serve our community through the discovery of knowledge, the education of health professionals and by improving the health of the public.

The School of Medicine integrates excellent education, scientific discovery, outstanding clinical programs and dedication to community service. In addition to its commitment to educating the physician workforce of tomorrow, the school is an emerging leader in biomedical research and the health of the public. Graduate programs are offered in the biomedical sciences, biostatistics, public health, health policy and management, and clinical research.

Admission and degree requirements vary by program and are listed in the individual program descriptions. Requirements and course descriptions are subject to change. In most cases, use the catalog of the year student entered program. Other years’ catalogs (http://catalog.ku.edu/archives/) -

Doctor of Medicine (p. 2127)

M.D.-Ph.D. Combined Degrees (p. 2018)

Anatomy and Cell Biology (p. 2019)

Biochemistry and Molecular Biology (p. 2025)

Biostatistics (p. 2030)

Cancer Biology (p. 2051)

Health Informatics (p. 2010)

History and Philosophy of Medicine (p. 2058)

Interdisciplinary Graduate Program in Biomedical Sciences (p. 2114)

Microbiology, Molecular Genetics, and Immunology (p. 2059)

Molecular and Integrative Physiology (p. 2065)

Neurosciences Program (p. 2118)

Pathology and Laboratory Medicine (p. 2072)

Pharmacology, Toxicology, and Therapeutics (p. 2079)

Population Health (p. 2090)

Masters and Ph.D. Programs

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are subject to change. In most cases, use the catalog of the year student entered program. Other years’ catalogs (http://catalog.ku.edu/archives/) are available. Click on the list of programs (p. 2018) link for a list of the programs offered.

**Department of Anatomy and Cell Biology**

The Anatomy and Cell Biology Graduate Program is designed to prepare the student for a career in independent research and/or teaching with concentrations in the following areas:

- Cell Biology
- Developmental Biology
- Neuroscience
- Renal Biology
- Reproductive Biology

The graduate program emphasizes acquiring the skills and knowledge required to perform and communicate the results of laboratory research. Individual research programs within the Department of Anatomy and Cell Biology are largely complementary and focus on understanding the biological processes that contribute to human health and disease. Experimental systems include the use of cell and tissue culture, as well as model systems such as *Drosophila melanogaster*, chameleon, frog, chick, zebrafish, rats, and transgenic mice.

In 2020, the Department of Anatomy and Cell Biology brought in nearly $7 million in grant funding from the National Institutes of Health, placing it at the top of all basic science departments within KUMC and 29th (out of 78) among all Anatomy and Cell Biology departments in the country. Faculty members and trainees also received funding from the National Science Foundation, American Heart Association, the Cystic Fibrosis Foundation, and various other agencies. Graduates of this program have obtained positions in industry, government, and consulting, as well as faculty positions at the college, university, and medical/graduate school level.

**Courses**

**ANAT 832.** Electron Microscopy Techniques. 3 Credits.

Basic methods in preparation of tissues and cells for ultrastructural studies; use of electron microscopy in specific research problems; interpretation of biological ultrastructure; reading assignments and discussion sessions. Prerequisite: ANAT 830, or consent of course instructor.

**ANAT 845.** Graduate Histology. 3 Credits.

This course will bridge student knowledge of systems/organisms with cellular histology and is designed as an accelerated introduction to histological techniques, microscopy/optics, and histology of normal and diseased tissues. Classes meet once a week and the format includes a 1 hour lecture on individual tissues within related organ systems followed by 1 hour of microscopic observation. (Same as NEUS 845.) Prerequisite: Completion of the IGPBS core curriculum or consent of instructor.

**ANAT 846.** Advanced Neuroscience. 5 Credits.

Team-taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as PHCL 846, PHSL 846, NURO 846, and NEUS 846.) Prerequisite: Permission of the course director.

**ANAT 847.** Developmental Neurobiology. 2 Credits.

Development of the nervous system from early induction to the development of learning and memory. Topics include: Induction; Cellular Differentiation; Axon Growth and Guidance; Target Selection; Cell Survival and Growth; Synapse Formation; Synapse Elimination; and Development of Behavior. (Same as NURO 847, PHSL 847 and NEUS 847.) Prerequisite: Advanced Neuroscience (ANAT 846; NURO 846; PHSL 846) or consent of instructor.

**ANAT 848.** Molecular Mechanisms of Neurological Disorders. 3 Credits.

An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer’s, Parkinson’s, Huntington’s, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxisomal disorders, Down’s syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as NURO 848, PHCL 848, PHSL 848, and NEUS 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor.

**ANAT 849.** Advanced Cell Biology. 2 Credits.

This course focuses on modern trends in cell biology and their role in disease processes. Topics include cellular organelles, cell diversity, and cellular processes. Each two hour class will consist of a one hour lecture followed by a journal club discussion of the previous week’s topic. Oral presentations of written assignments will allow students to integrate lecture material. By the end of the course, the learner will have acquired knowledge of the cellular mechanisms essential to organismal health, developed creative and critical thinking skills by integrating multiple aspects of cell biology to address a research problem, and honed their oral presentation and scientific writing skills. Prerequisite: Completion of the IGPBS core curriculum or consent of the instructor.

**ANAT 868.** Advanced Developmental Biology. 2 Credits.

This is an advanced graduate course which is designed for 2nd year graduate students who have some previous exposure to embryology / developmental biology at the undergraduate or graduate level. The class will focus on aspects of development that are currently at the leading edge of the field and will include a combination of lectures, discussion of late breaking papers, and seminars by outside speakers. Prerequisite: IGPBS Core Curriculum or consent of instructor.

**ANAT 869.** Grant Writing. 3 Credits.

All aspects of preparing grant applications are covered. This includes writing an actual grant application containing all the usual elements of grants - budgets, biosketches, resources, and scientific text. In addition, different funding agencies, building research teams, the review process, responding to reviewers, and resubmitting grants will be covered. (Same as HP&M 878 and NRSG 889.) Prerequisite: Appropriate research methods and statistics courses in student's current graduate program; and permission of the instructor. For students in the Outcomes Management and Research concentration, HP&M 821.

**ANAT 870.** Research Methods and Advanced Technologies in Biomedical Research. 1 Credits.

This course will introduce students to novel research techniques and their application across a variety of disciplines. The class will meet weekly and consist of monthly faculty lectures on current or developing techniques and student-led presentations and discussions occurring during non-lecture classes. Prerequisite: Completion of the IGPBS core curriculum or consent of instructor.

**ANAT 880.** Advanced Topics: ______. 1-5 Credits.
Special study allowing a student to pursue a particular subject through readings, laboratory work, and conferences with a faculty member. Prerequisite: Consent of instructor.

ANAT 885. Seminar. 1 Credits.
Research-oriented presentations in a seminar format by students, faculty, and guests.

ANAT 890. Graduate Research. 1-10 Credits.
Independent laboratory investigation approved by and under the supervision of the student's advisor, and in partial fulfillment of the requirements for the M.S. or Ph.D. degree. Prerequisite: Consent of advisor.

ANAT 899. Master's Thesis. 1-6 Credits.
Preparation of the formal thesis based upon independent research and in partial fulfillment of the requirements for the M.S. degree. Credits will be given only after the thesis has been accepted by the department. Prerequisite: Consent of advisor.

ANAT 900. Analysis of Scientific Papers. 1 Credits.
Research articles are analyzed and presented by the student with the guidance of an instructor. Assessment will be based on the quality and mechanics of the presentation and participation in group discussion. One or more articles may be discussed in each tutorial session. The research topics are chosen in accordance with the research interest of the student and at the discretion of the instructor.

ANAT 990. Doctoral Research. 1-12 Credits.
Original and independent laboratory investigation, approved by and conducted under the supervision of the students' advisor and advisory committee, in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Consent of advisor.

ANAT 999. Doctoral Dissertation. 1-12 Credits.
Preparation of the dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Credits will be given only after the dissertation has been accepted by the student's dissertation committee. Prerequisite: Consent of advisor.

Master of Science in Cell Biology and Anatomy

The Master of Science (M.S.) program in Anatomy and Cell Biology prepares the student for a career at the advanced technical level in academia, industry, or government. Graduating students may also find teaching positions at the secondary or junior college level. Incoming students may not directly enroll in the M.S. program; entry will only be granted by the Departmental Director of Graduate Education upon the recommendation of the student’s Research Advisory Committee.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:
- Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree is been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
- Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

Degree Requirements:
- Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Completion of a minimum of 30 credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of either a thesis defense or general examination (p. 2417) the semester the student will graduate.
- If thesis option is chosen, then enrollment in a minimum of one (1) credit hour of ANAT 899 Master's Thesis and successful thesis submission and publication (p. 2417) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
</tbody>
</table>
Typical Plan of Study

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td>1-3</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 857</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 858</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>10-13</strong></td>
<td><strong>7-10</strong></td>
<td><strong>2-7</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 885</td>
<td>1</td>
<td>ANAT 845</td>
<td>3</td>
<td>ANAT 890</td>
<td>1-3</td>
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<td>ANAT 890</td>
<td>1-6</td>
<td>ANAT 885</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. *Other years' catalogs*.

A M.S. in Anatomy and Cell Biology signifies that the holder is prepared for entry into a career at the advanced technical level in academia, industry, or government. Therefore, graduates must have the knowledge and skills to function in a broad variety of classroom and/or laboratory situations. In this manner, all students admitted into the Anatomy and Cell Biology M.S. program must meet the following abilities and expectations:

1. **Observation**: The candidate must be able to observe demonstrations and experiences in the basic sciences, including, but not limited to, biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the senses of vision and touch.

2. **Communication**: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.
3. **Motor:** Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities:** These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. **Behavioral and Social Attributes:** A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

### Doctor of Philosophy in Cell Biology and Anatomy

The Ph.D. program in Anatomy and Cell Biology prepares the student for a career in independent research and/or teaching. The Ph.D. is typically followed by postdoctoral training in a specific field of study. Graduates of this program have obtained positions in industry, government, and consulting, as well as faculty positions at the college, university, and medical/graduate school level.

Students who obtain a Ph.D. in Anatomy and Cell Biology are required to achieve the following expectations:

- Become knowledgeable in the areas of study included in the IGPBS (Interdisciplinary Graduate Program in the Biomedical Sciences) core curriculum.
- Obtain in-depth and up-to-date expertise in a specialized area of knowledge that is appropriate for the field of your dissertation research project.
- Make original and high quality contributions to the scientific literature in your chosen research field.
- Become familiar with the scientific literature through general and specialized journals in biological research, and to develop the ability to critically evaluate the original research in your own and related fields.
- Become skilled in organizing and communicating information in oral presentations, and to respond to critical questioning.
- Develop clarity, conciseness, and precision in writing, to aid in grant application writing, and publication of your original research results.
- Learn how to ask incisive scientific questions and gain experience in the design, performance, and interpretation of laboratory experiments and observations.
- Gain familiarity with the preparation and writing of grant applications.
- Prepare for the teaching as well as the research aspects of an academic career.
- Obtain instruction in research skills and responsible scholarship.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

### Admission requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
  - Research experience (beyond labs associated with lecture courses) is strongly suggested.
  - Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs are:

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

### Degree requirements:

- Degree requirements are normally completed within 5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
- Successful completion of GSMC 857 Biographics, GSMC 852 Introduction to Biomedical Research I and GSMC 855 Introduction
to Biomedical Research II (or equivalent) meets the Research Skills requirement.

- Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.

- Successful completion of the Residence Requirement (p. 2422) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.

- Successful completion of the Oral Comprehensive Examination (p. 2421). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

- Successful completion of the Post-Comprehensive Enrollment (p. 2422) requirement.

- Enrollment in a minimum of one (1) credit hour of ANAT 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.

- Successful completion of the Final Oral Examination (p. 2422) (dissertation defense).

- Successful Dissertation Submission and Publication (p. 2423) (according to Office of Graduate Studies policy.)

- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following Anatomy and Cell Biology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 845</td>
<td>Graduate Histology</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 885</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 890</td>
<td>Graduate Research</td>
<td>1-10</td>
</tr>
<tr>
<td>ANAT 900</td>
<td>Analysis of Scientific Papers</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 990</td>
<td>Doctoral Research</td>
<td>1-12</td>
</tr>
<tr>
<td>ANAT 999</td>
<td>Doctoral Dissertation</td>
<td>1-12</td>
</tr>
</tbody>
</table>

- Students must be continually enrolled in ANAT 885 Seminar and ANAT 900 Analysis of Scientific Papers each fall and spring semester beginning with fall semester of their second year. These two courses may be waived for one semester after the student has completed all departmental requirements other than the dissertation defense.

- Successful completion of a minimum of two (2) credit hours of elective coursework related to specialized interests. Electives are chosen in consultation with the student's advisor. Electives may be chosen from this list or students may select electives from courses offered by other departments.

- Successful completion of two hour-long presentations in the regular departmental seminar series (or an equivalent seminar approved by the graduate education director) are to be given in two separate semesters, not including the one in which the student defends.

- Gain teaching experience by assisting in selected courses that are chosen in consultation with the student’s advisor and the graduate education director.

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs...

### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>GSMC 859</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>1</td>
<td>GSMC 858</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 19-30**
### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 885</td>
<td>1</td>
<td>ANAT 845</td>
<td>3</td>
<td>ANAT 890</td>
<td>1-6</td>
</tr>
<tr>
<td>ANAT 890</td>
<td>1-6</td>
<td>ANAT 885</td>
<td>1</td>
<td>Oral Comprehensive Exam may be scheduled as early as this semester if approved by committee to proceed.</td>
<td></td>
</tr>
<tr>
<td>ANAT 900</td>
<td>1</td>
<td>ANAT 890</td>
<td>1-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form and schedule first meeting with Research Advisory Committee.</td>
<td>ANAT 900</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 3-8 | 6-11 | 1-6 |

### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 885</td>
<td>1</td>
<td>ANAT 885</td>
<td>1</td>
<td>ANAT 990</td>
<td>1-6</td>
</tr>
<tr>
<td>ANAT 890</td>
<td>1-6</td>
<td>ANAT 900</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANAT 900</td>
<td>1</td>
<td>ANAT 990</td>
<td>1-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Comprehensive Exam must be completed by December 31.</td>
<td>First hour-long seminar presented.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 3-8 | 3-8 | 1-6 |

### Year 4

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 885</td>
<td>1</td>
<td>ANAT 885</td>
<td>1</td>
<td>ANAT 990</td>
<td>1</td>
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<td>ANAT 900</td>
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</tr>
<tr>
<td>ANAT 990</td>
<td>1-6</td>
<td>ANAT 990</td>
<td>1-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 hour postcomp enrollment completed Summer Year 3 if Oral Comp passed Summer Year 2 - begin reduced enrollment Fall Year 4.</td>
<td>Second hour-long seminar presented.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 3-8 | 3-8 | 1 |

### Year 5

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 885</td>
<td>1</td>
<td>ANAT 885</td>
<td>1</td>
<td>ANAT 999</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 900</td>
<td>1</td>
<td>ANAT 900</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANAT 999</td>
<td>1</td>
<td>ANAT 999</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Final Oral Exam** (dissertation defense) may be scheduled as early as this semester if approved by committee to defend and graduate. ANAT 885 and ANAT 900 may be waived for one semester after the student has completed all departmental requirements other than the dissertation defense.

| Total Hours | 31-71 |

A Ph.D. in Anatomy and Cell Biology signifies that the holder is prepared for entry into a career in independent research and/or teaching. Therefore, graduates must have the knowledge and skills to function in a broad variety of classroom and/or laboratory situations. In this manner, all students admitted into the Anatomy and Cell Biology Ph.D. program must meet the following abilities and expectations:

1. **Observation:** The candidate must be able to observe demonstrations and experiences in the basic sciences, including, but not limited to, biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the senses of vision and touch.

2. **Communication:** A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. **Motor:** Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities:** These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. **Behavioral and Social Attributes:** A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment, and the prompt completion of all responsibilities attendant to the completion of research and
teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

**Department of Biochemistry and Molecular Biology**

The mission of the Department of Biochemistry and Molecular Biology is to provide:

- a dynamic research environment with programs in the disciplines of biochemistry and molecular biology.
- a superior educational experience for graduate students and medical students.
- a rich training environment for postdoctoral fellows.
- service to our institution and community.

Our areas of research strength include:

- Regulation of gene expression, emphasizing but not limited to transcription regulation.
- Protein folding and structure determination.
- Allosteric regulation of protein function.
- Signal transduction.

Our faculty members are associated with a variety of cross-disciplinary centers within the university.

Core services are available, which includes: a transgenic mouse facility; a biotechnology support center that offers DNA synthesis, sequencing, and microchip analysis; a state-of-the-art mass spectrometry facility (http://www.kumc.edu/mspc.html); in-house x-ray crystallographic equipment; and a variety of spectroscopy and calorimetry instruments, including advanced fluorescence equipment.

**Courses**

**BCHM 802. Biochemistry Seminar. 1 Credits.**
Weekly meetings.

**BCHM 808. Methods for Analyzing Biomolecules. 3 Credits.**
Application of physical techniques to the study of biological macromolecules in solution. Emphasis on utilization of data obtained from such studies in interpreting biological processes at the molecular level. Course will be taught in the spring. Prerequisite: Consent of instructor.

**BCHM 850. Topics in Biochemistry. 1-3 Credits.**
Selected topics in biochemistry with varying subject matter. Students should inquire before enrolling. Topics are in-depth studies of current research areas. The course may consist of formal lectures and/or directed readings and studies.

**BCHM 862. Biochemical Research-Literature Seminar. 1 Credits.**
Students and faculty meet once weekly to discuss the research of students or the current biochemical literature. The student is required to make one presentation. Prerequisite: Consent of instructor.

**BCHM 890. Research in Biochemistry. 1-15 Credits.**
Research for the M.S. degree or for Ph.D. students prior to completion of their comprehensive exam. RSH.

**BCHM 899. Master’s Thesis. 1-15 Credits.**
Restricted to the writing of the master's thesis.

**BCHM 922. Advanced Molecular Genetics. 3 Credits.**
An in-depth analysis of the structure and function of gene regulatory proteins and the mechanisms of gene transcription, and DNA replication and repair. Lectures and discussion of current literature. Prerequisite: consent of instructor. Course will be presented in the fall semester and will include several faculty leading discussions in their area of research interests.

**BCHM 923. Protein Structure and Function. 3 Credits.**
The relationship between protein structure, binding, and physiological function. Emphasis is on proteins as enzymes, structural components, and regulators. Course will be taught in the spring. Prerequisite: consent of instructor.

**BCHM 990. Doctoral Research. 1-15 Credits.**
Research for the doctoral degree.

**BCHM 999. Doctoral Dissertation. 1-15 Credits.**
Restricted to the writing of the doctoral dissertation.

**Master of Science in Biochemistry and Molecular Biology**

The M.S. in biochemistry and molecular biology normally leads to positions at the advanced technical level in academic research, industry, or government. It may lead to teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

**Admission requirements:**

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
• Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».

Degree requirements:
• Degree requirements are normally completed within 3 years of admission to the program although a maximum of 7 years is allowed.
• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
• Completion of a minimum of 30 credit hours.
• Successful completion of either a thesis defense or general examination (p. 2417) the semester the student will graduate. The option will be decided by the student’s advisor and must be approved by the departmental Graduate Committee.

If the thesis option is chosen, then enrollment in a minimum of one (1) credit hour of BCHM 899 Master’s Thesis is required and successful thesis submission and publication (p. 2417) (according to Office of Graduate Studies policy.)

If the general examination option is chosen, then enrollment in a minimum of one (1) credit hour the semester the student will graduate is required.

• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

• Successful completion of the following Biochemistry and Molecular Biology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCHM 862</td>
<td>Biochemical Research-Literature Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BCHM 890</td>
<td>Research in Biochemistry</td>
<td>1-6</td>
</tr>
<tr>
<td>BCHM 899</td>
<td>Master’s Thesis (if thesis option chosen)</td>
<td>1-6</td>
</tr>
</tbody>
</table>

• As determined in consultation with the student’s advisor, students who have not previously mastered undergraduate biochemistry will strengthen any areas of weakness by taking BCHM 850 Topics in Biochemistry.

• Successful completion of elective coursework as determined in consultation with the student’s advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».

Typical Plan of Study

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td>1-3</td>
<td></td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
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<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 857</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 858</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>10-13</td>
<td>7-10</td>
<td>2-7</td>
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</table>

Year 2

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCHM 850 (if required by advisor)</td>
<td>1-3</td>
<td>BCHM 862</td>
<td>1</td>
<td>BCHM 890</td>
<td>1-3</td>
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<tr>
<td>BCHM 862</td>
<td>1</td>
<td>BCHM 890</td>
<td>1-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCHM 890</td>
<td>1-6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td>3-10</td>
<td>2-7</td>
<td>1-3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year 3

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
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<td>BCHM 862</td>
<td>1</td>
<td>BCHM 899 or 890</td>
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</tr>
<tr>
<td>BCHM 899 or 890</td>
<td>1-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thesis defense or general examination may be scheduled as early as this semester if approved by committee to graduate.

| **Total Hours** | 2-7 | 1-6 |

Total Hours 9-33
TECHNICAL STANDARDS AND REQUIREMENTS FOR GRADUATE STUDIES IN THE DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

The M.S. degree signifies that the holder is prepared for entry into research in industrial or academic laboratory settings. To that end, graduates must have the knowledge and skills to function in a broad variety of laboratory settings.

Therefore all students admitted for graduate study in Biochemistry and Molecular Biology must meet the following abilities and expectations.

1. **Observation**: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. **Communication**: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. **Motor**: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to perform laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities**: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. **Behavioral and Social Attributes**: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student’s difficulties. At this review, the provisions for reasonable accommodation will be determined.

For further information, contact The Department of Biochemistry and Molecular Biology, University of Kansas School of Medicine, MSN 3030, 3901 Rainbow Blvd., Kansas City, Kansas 66160 (Phone: (913) 588-7005 Fax: (913) 588-8996 E-mail: lswint-kruse@kumc.edu

STUDENT POLICY ON INFECTIOUS DISEASE

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for admission to academic programs at the University of Kansas Medical Center. In such cases, the determination of eligibility for admission will be made on an individual basis in consultation with the applicant’s physician; the decision will take a number of factors into consideration, including the legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

Doctor of Philosophy in Biochemistry and Molecular Biology

The Ph.D. is required for careers in independent research in biochemistry and molecular biology. The Ph.D. most often is followed by one or more years of postdoctoral training in a specific area of research. Ph.D. degree holders in biochemistry and molecular biology may find positions in industry or government and, with some postdoctoral experience, may obtain faculty positions at the college or university level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
• Three letters of recommendation.
• Prerequisite coursework:
  • One year of general chemistry
  • One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  • One year of biological sciences
  • One semester of calculus
  • One semester of physics
• Research experience (beyond labs associated with lecture courses) is strongly suggested.
• Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.*

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree requirements:
• Degree requirements are normally completed within 5-6 years of admission to the program although a maximum of 8 years is allowed.
• Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.
• Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  • Successful completion of GSMC 857 Biographics, GSMC 852 Introduction to Biomedical Research I and GSMC 855 Introduction to Biomedical Research II (or equivalent) meets the Research Skills requirement.
  • Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
• Successful completion of the Residence Requirement (p. ) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
• Successful completion of the Oral Comprehensive Examination (p. 2421). This will comprise (i) a written grant proposal that conforms to the NIH R01 guidelines; and (ii) oral examination that centers around material in the written proposal, as well as broader aspects of biochemistry and molecular biology. The topic may be broadly related to the student’s research area, but hypotheses should be developed independently by the student. Students are expected to complete the Oral Comprehensive Exam by the end of year 2. Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.
• Successful completion of Post-Comprehensive Enrollment (p. 2422) requirement.
• Enrollment in a minimum of one (1) credit hour of BCHM 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.
• Successful completion of the Final Oral Examination (p. 2422) (dissertation defense.)
• Successful Dissertation Submission and Publication (p. 2423) (according to Office of Graduate Studies policy.)
• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

• As determined in consultation with the student’s advisor, students who have not previously mastered undergraduate biochemistry will strengthen any areas of weakness by taking BCHM 850 Topics in Biochemistry.
• Successful completion of the following Biochemistry core courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCHM 802</td>
<td>Biochemistry Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BCHM 808</td>
<td>Methods for Analyzing Biomolecules</td>
<td>3</td>
</tr>
<tr>
<td>BCHM 862</td>
<td>Biochemical Research-Literature Seminar</td>
<td>1</td>
</tr>
<tr>
<td>BCHM 890</td>
<td>Research in Biochemistry</td>
<td>1-15</td>
</tr>
<tr>
<td>BCHM 922</td>
<td>Advanced Molecular Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BCHM 923</td>
<td>Protein Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>BCHM 990</td>
<td>Doctoral Research</td>
<td>1-15</td>
</tr>
<tr>
<td>BCHM 999</td>
<td>Doctoral Dissertation</td>
<td>1-15</td>
</tr>
</tbody>
</table>

• Successful completion of additional elective coursework as determined in consultation with the student’s advisor. These electives may be substituted for a required course on a case-by-case basis. Suggested elective courses include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCHM 850</td>
<td>Topics in Biochemistry</td>
<td>1-3</td>
</tr>
<tr>
<td>ANAT 868</td>
<td>Advanced Developmental Biology</td>
<td>2</td>
</tr>
<tr>
<td>PATH 803</td>
<td>Stem Cell Biology</td>
<td>2</td>
</tr>
</tbody>
</table>

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate
Typical Plan of Study

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td>1-3</td>
<td></td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
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<tr>
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Total Hours 19-30

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<td>BCHM 808 (or take Spring Year 3)</td>
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<td>BCHM 990</td>
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Total Hours 51-138

TECHNICAL STANDARDS AND REQUIREMENTS FOR GRADUATE STUDIES IN THE DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Ph.D. degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. To that end, graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory.

Therefore all students admitted for graduate study in Biochemistry and Molecular Biology must meet the following abilities and expectations.

1. Observation: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. Communication: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction.
A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. **Motor:** Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to perform laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities:** These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. **Behavioral and Social Attributes:** A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student’s difficulties. At this review, the provisions for reasonable accommodation will be determined.

For further information, contact The Department of Biochemistry and Molecular Biology, University of Kansas School of Medicine, MSN 3030, 3901 Rainbow Blvd., Kansas City, Kansas 66160 (Phone: (913) 588-7005 Fax: (913) 588-9896 E-mail: lswint-kruse@kumc.edu

**STUDENT POLICY ON INFECTIOUS DISEASE**

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for admission to academic programs at the University of Kansas Medical Center. In such cases, the determination of eligibility for admission will be made on an individual basis in consultation with the applicant’s physician; the decision will take a number of factors into consideration, including the legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

**DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS**

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

**Department of Biostatistics**

The mission of the Department of Biostatistics & Data Science is to provide an infrastructure of biostatistical and informatics expertise to support and enhance the research, service and educational needs of the University of Kansas Medical Center and its affiliates. The global objectives of the department are as follows:

- To provide a leadership role in biostatistical and informatics research initiatives across the medical center.
- To provide the biostatistics and informatics cores for major initiatives.
- To ensure that researchers have ready access to biostatistical and informatics resources and support.
- To provide the infrastructure and expertise for centralized and project specific database development, management and analysis.
- To consolidate resources pertaining to biostatistics and informatics.

The innovative MS & PhD programs in Biostatistics and Applied Statistics & Analytics help meet the ever-increasing demand for statisticians and biostatisticians needed to take leadership roles in academia, government and industry. Faculty members are active researchers collaborating and consulting in research projects and initiatives at the Medical Center, in addition to pursuing their own research agendas and participating in curricular instruction. Expertise in the department includes linear, nonlinear, and longitudinal modeling; clinical trial and experimental design; survival analysis; categorical data analysis; robust statistics; psychometric methods; statistical ‘omics; bioinformatics; Bayesian methodology; data science; and machine learning.

**Courses**

**BIOS 704. Principles of Statistics in Public Health. 3 Credits.**

Introductory course concerning the concepts of statistical reasoning and the role of statistical principles as the scientific basis for public health research and practice. Prerequisite: Permission of instructor.

**BIOS 714. Fundamentals of Biostatistics I. 3 Credits.**

First-semester course of a two-semester introductory statistics course that provides an understanding of the proper application of statistical methods to scientific research with emphasis on the application of statistical methodology to public health practice and research. This course focuses on basic principles of statistical inference with emphasis on one or two sample methods for continuous and categorical data. This course fulfills the core biostatistics requirement. Prerequisite: Calculus or Permission of Instructor.

**BIOS 715. Introduction to Data Management using RedCap and SAS. 3 Credits.**

This course will cover the utilization of Redcap and SAS for data management. Data collection and management using Redcap will be covered. Data cleaning and preparation for analysis will be covered using SAS. In addition, some of the basic descriptive analysis procedures will be covered in SAS. Prerequisite: Corequisite: BIOS 704 or BIOS 714 or equivalent with permission of instructor.

**BIOS 717. Fundamentals of Biostatistics II. 3 Credits.**

Second level statistics course that provides an understanding of more advanced statistical methods to scientific research with an emphasis on the application of statistical methodology to public health practice, public health research, and clinical research. Special focus will be upon the utilization of regression methodology and computer applications of such methods.
BIOS 720. Analysis of Variance. 3 Credits.
Methods for designed experiments including one-way analysis of variance (ANOVA), two-way ANOVA, repeated measures ANOVA, and analysis of covariance are emphasized. Post-ANOVA tests, power and testing assumptions required in NOVA are discussed and applied. Outlier detection using robust estimators also are incorporated. Boxplots, histograms and scatterplots are used to display data. Prerequisite: PRE 710/711 or BIOS 714/717 or equivalent. Preferred: BIOS 715. Knowledge of statistical software, basic statistical plotting methods, p-values, two-sample t-test and simple linear regression is assumed.

BIOS 725. Applied Nonparametric Statistics. 3 Credits.
This course will study nonparametric methods in many situations as highlighted by the following topics: Students will learn how nonparametric methods provide exact p-values for tests, exact coverage probabilities for confidence intervals, exact experimentwise error rates for multiple comparison procedures, and exact coverage probabilities for confidence bands. This course will be using EXCEL and SAS to conduct various procedures. Prerequisite: BIOS 714 or equivalent with permission of instructor.

BIOS 730. Applied Linear Regression. 3 Credits.
Simple linear regression, multiple regression, logistic regression, nonlinear regression, neural networks, autocorrelation, interactions, and residual diagnostics. Applications of the methods will focus on health related data. Prerequisite: 1) BIOS 714 or the equivalent and 2) BIOS 717 or BIOS 720 or equivalent with permission of instructor.

BIOS 735. Categorical Data and Survival Analysis. 3 Credits.
An intermediate level statistics course that provides an understanding of the more advanced statistical methods to scientific research with emphasis on the application of statistical methodology to clinical research, public health practice, public health research and epidemiology. Prerequisite: BIOS 714, BIOS 715, and BIOS 717 or permission of the instructor.

BIOS 740. Applied Multivariate Methods. 3 Credits.
This course is an advanced statistical course for students who have had fundamental biostatistics and linear regression. Topics to be covered include Hotelling's T-squared test, MANOVA, principal components, factor analysis, discriminant analysis, canonical analysis, and cluster analysis. More advanced topics such as Multidimensional Scaling or Structural Equation Modeling might be introduced if time allows. Computers will be extensively used throughout the course, and students are suggested to be familiar with some statistical software before taking this course. Although students are allowed to use the software, they are comfortable with, SAS will be the primary statistical package used to demonstrate examples in this course. Prerequisite: Corequisite: BIOS 730 or equivalent with permission of instructor.

BIOS 799. Introduction to Statistical Genomics. 3 Credits.
This survey course will provide a high-level introduction of various statistical and bioinformatics methods involved in the study of biological systems. In particular, this course will provide an overview of the analytical aspects involved in: the study DNA, RNA, and DNA methylation data measured from both microarray and next-generation sequencing (NGS) technologies. During the last week of the summer semester, students will be required to participate in a group seminar session in which they will present the results from their assigned genomics analysis projects. Prerequisite: Corequisite: BIOS 714 and BIOS 717 or equivalent with permission of instructor; Experience with a higher level programming language is preferred.

BIOS 805. Professionalism, Ethics and Leadership in the Statistical Sciences. 3 Credits.
This web-based course addresses issues in professionalism, leadership and ethics that are specific to students training to become statisticians, biostatisticians, and data scientists. Topics include use of sound statistical methodology, common threats to valid inference, effective communication and collaboration with content-area experts, maintaining transparency and independence, reproducible research, the publishing process (including authorship guidelines, plagiarism, peer review, intellectual property, etc.), conflict of interest, data security, and properties of effective leaders, among others. Prerequisite: Department consent.

BIOS 806. Special Topics in Biostatistics. 1-3 Credits.
This course allows exploration of special topics that are not routinely a part of the curriculum. Prerequisite: Permission of the instructor.

BIOS 810. Clinical Trials. 3 Credits.
The design, implementations, analysis, and assessment of controlled clinical trials. Basic biostatistical concepts and models will be emphasized. Issues of current concern to trialists will be explored. Prerequisite: By permission of instructor.

BIOS 815. Introduction to Bioinformatics. 3 Credits.
Bioinformatics, an interdisciplinary field at the cross-section of biology, computer science, and statistics, has played a key role in enhancing our understanding of many areas of biology. The broad purpose of this course is to introduce students in the quantitative sciences to the field of bioinformatics and its practice. Topics include foundational concepts in molecular biology, biological databases, sequence alignment, BLAST, molecular phylogenetics, genomics, transcriptomics, proteomics, microbiomics, with treatment of the accompanying bioinformatic tools/methodologies that have been developed to analyze such data types. Over the semester, students will gain a familiarity with the essential concepts and theories underlying the practice of bioinformatics, different types of 'omic data, the technologies used to generate different 'omic data types, and databases and tools commonly used for bioinformatics analysis. Prerequisite: There are no formal prerequisites for this course. Previous graduate-level coursework in probability and statistics and molecular biology is helpful, but not necessary.

BIOS 820. SAS Programming I. 3 Credits.
This is a graduate level course preparing a student for the SAS base programming certification exam. We will cover the topics required for a student to pass the SAS base programming certification exam given by SAS. This end, topics we will study include, referencing files and setting options, creating list reports, understanding data step processing, creating and managing variables, reading and combining SAS data sets, do loops, arrays, and reading raw data from files. After the completion of the course the student should be able to create SAS programs to read data from external files, manipulate the data into variables to be used in an analysis, generate basic reports showing the results. Prerequisite: Permission of the Instructor.

BIOS 821. SAS Programming II. 3 Credits.
This is a graduate level course preparing a student for the SAS advanced programming certification exam. We will cover the topics required for a student to pass the SAS advanced programming certification exam given by SAS. To this end, topics we will study include array processing, use of data step views, using the data step to write SAS programs, efficient use of the sort procedure, introduction to the macro language in SAS, and accessing data using SAS PROC SQL. After the completion of the course the student should be able to create SAS programs to read data from external files, manipulate the data into variables to be used in an analysis, generate basic reports showing the results. Prerequisite: Corequisite:
BIOS 820 or equivalent (SAS Certified BASE programmer for SAS or at least one year of experience as a data analyst/programmer).

**BIOS 823. Introduction to Programming and Applied Statistics in R. 3 Credits.**
This course will provide students with the opportunity to learn advanced statistical programming. The development of new statistical or computational methods often implies the development of programming codes to support its application. Much of this type of development is currently carried out in the R (or S-Plus) language. Indeed much of the recent development of statistical genetics is based on the R programming language and environment. This course provides an introduction to programming in the R language and its applications to applied statistical problems. Prerequisite: Corequisite: Some previous exposure to computer programming. Some basic statistics at the Applied Regression or Applied Design level and permission of instructor.

**BIOS 825. Nonparametric Methods. 3 Credits.**
This course is an introduction to nonparametric statistical methods for data that do not satisfy the normality or other usual distributional assumptions. We will cover most of the popular nonparametric methods used for different scenarios, such as a single sample, two independent or related samples, three or more independent or related samples, goodness-of-fit tests, and measures of association. Power and sample size topics will also be covered. The course will cover the theoretical basis of the methods at an intermediate mathematical level, and will also present applications using real world data and statistical software. Prerequisite: Permission of instructor.

**BIOS 830. Experimental Design. 3 Credits.**
The emphasis of this course is on learning the basics of experimental design and the appropriate application and interpretation of statistical analysis of variance techniques. Prerequisite: Permission of instructor, BIOS 820 recommended.

**BIOS 833. Measurement for Statisticians. 3 Credits.**
This course aims to introduce the theory and applications of measurement and psychometrics to students in the statistical sciences. The goal is for students to master the concepts of measurement theory, classical/modern test theory, reliability and validity, factor analysis, structural equation modeling, item response theory, and differential item functioning. Prerequisite: Corequisite: BIOS 835, or by permission of instructor.

**BIOS 835. Categorical Data Analysis. 3 Credits.**
This course provides an understanding of both the mathematical theory and practical applications for the analysis of data for response measures that are ordinal or nominal categorical variables. This includes univariate analysis, contingency tables, and generalized linear models for categorical response measures. Regression techniques covered for categorical response variables, such as logistic regression and Poisson regression methods, will include those categorical and/or continuous explanatory variables, both with and without interaction effects. Prerequisite: By permission of instructor; BIOS 820 and BIOS 840 are recommended.

**BIOS 840. Linear Regression. 3 Credits.**
This course is an introduction to model building using regression techniques. We will cover many of the popular topics in Linear Regression including: simple linear regression, multiple regression, model selection and validation, diagnostics and remedial measures. Prerequisite: By permission of the instructor.

**BIOS 845. Survival Analysis. 3 Credits.**
This course provides an understanding of both the mathematical theory and practical applications for the analysis of time to event data with censoring. This includes univariate analysis, group comparisons, and regression techniques for survival analysis. Parametric and semi-parametric regression techniques covered will include those with categorical and/or continuous explanatory variables, both with and without interaction effects. Prerequisite: Corequisite: BIOS 820, 835, 840, and 871, or by permission of instructor.

**BIOS 850. Multivariate Statistics. 3 Credits.**
This course will introduce the theory and methods of applied multivariate analysis. As the field of multivariate analysis is very wide and well developed, the course will focus on those methods that are more frequently used in biostatistical applications. Some knowledge of basic matrix algebra is necessary and will be reviewed as the course progresses. Theoretical exercises and analysis of data sets will be assigned to the student. Emphasis will be on biostatistical applications. Prerequisite: Corequisite: BIOS 820, BIOS 830, and BIOS 840.

**BIOS 855. Statistical Methods in Genomics Research. 3 Credits.**
This survey course will provide a high-level introduction to various statistical and bioinformatics methods involved in the study of biological systems. In particular, this course will provide an overview of the analytical aspects involved in: the study DNA, RNA, and DNA methylation data measured from both microarray and next-generation sequencing (NGS) technologies. During the last week of the summer semester, students will be required to participate in a group seminar session in which they will present the results from their assigned genomics projects. Prerequisite: BIOS 820 OR experience programming in a higher level programming language; BIOS 840; OR by permission of the instructor.

**BIOS 860. Clinical Trial Design and Analysis. 3 Credits.**
This course, is intended for students interested in the statistical aspects of clinical trial research. This course will provide a comprehensive overview of the design and analysis of clinical trials, including: first-in-human studies (dose-finding, safety, proof of concept, Phase I), Phase II, Phase III, and Phase IV studies. Prerequisite: By permission of instructor. BIOS 820, BIOS 830, BIOS 840.

**BIOS 871. Mathematical Statistics. 3 Credits.**
This course introduces the fundamentals of probability theory, random variables, distribution and density functions, expectations, transformations of random variables, moment generating functions, convergence concepts, sampling distributions, and order statistics. Prerequisite: By permission of instructor.

**BIOS 872. Mathematical Statistics II. 3 Credits.**
This course introduces the fundamentals of statistical estimation and hypothesis testing, including point and interval estimation, likelihood and sufficiency principles, properties of estimators, loss functions, Bayesian analysis, and asymptotic convergence. Prerequisite: BIOS 871 or by permission of instructor.

**BIOS 880. Data Mining and Analytics. 3 Credits.**
Students will be introduced to common steps used in data mining, such as accessing and assaying prepared data; pattern discovery; predictive modeling using decision trees, regression, and neural networks; and model assessment methods. Prerequisite: Corequisite: BIOS 820, 830, 835, 840, and 871, or by permission of instructor. BIOS 821 and 850 recommended.

**BIOS 898. Collaborative Research Experience. 3 Credits.**
This course provides students with experience in collaborative research under the supervision of an experienced researcher. The student will spend one semester working under an investigator or faculty member, making independent contributions to a research project. Prerequisite: Corequisite: BIOS 820, 830, 835, 840, 871, and 872, or by permission of instructor.

**BIOS 899. MSCR Thesis. 3 Credits.**
This course involves preparation of a formal thesis based on the research conducted by a student working toward the MS in Clinical Research and directed by a faculty member in the Department of Biostatistics. After the thesis has been completed, the student will be given an oral examination of the research methods and content. Prerequisite: Corequisite: Department of Biostatistics approval.

BIOS 900. Linear Models. 3 Credits.
This course introduces the theory and methods of linear models for data analysis. The course includes the theory of general linear models including regression models, experimental design models, and variance component models. Least squares estimation, the Gauss-Markov theorem, and less than full rank hypotheses will be covered. Prerequisite: Corequisite: BIOS 871 and BIOS 872 or by permission of instructor; BIOS 820 recommended.

BIOS 902. Bayesian Statistics. 3 Credits.
This course introduces Bayesian theory and methods for data analysis. The course includes an overview of the Bayesian approach to statistical inference, performance of Bayesian procedures, Bayesian computational issues, model criticism, and model selection. Case studies from a variety of fields are incorporated into the course. Implementation of models using Markov chain Monte Carlo methods is emphasized. Prerequisite: Corequisite: BIOS 871 and BIOS 872 or by permissions of instructor; BIOS 820 recommended.

BIOS 905. Theory of Statistical Inference. 3 Credits.
This course covers advanced aspects of statistical inference. It is aimed at preparing Ph.D. BIOS students for the Ph.D. comprehensive exam and will emphasize advanced biostatistical ideas as well as problem solving techniques. Prerequisite: Corequisite: BIOS 871 and BIOS 872 or equivalent and permission of instructor.

BIOS 906. Advanced Special Topics in Biostatistics. 1-3 Credits.
This course allows exploration of special topics that are not routinely a part of the Biostatistics PhD curriculum. Prerequisite: Passing grade on the PhD Qualifying exam. Permission of the instructor.

BIOS 908. Advanced Clinical Trials. 3 Credits.
This course provides an introduction to recent innovations in clinical trial designs and analysis methods. Topics include concepts of controls, blinding, and randomization; common trial designs by phase of clinical development; sample size calculations; interim analysis; and adaptive clinical trials. Traditional frequentist and likelihood approaches to trial design and analysis will be covered in the first half of the course; the Bayesian approach (including adaptive clinical trial designs) will be emphasized in the second half of the course. Prerequisite: BIOS 860 and BIOS 902 or by permission of the instructor.

BIOS 910. Generalized Linear Models. 3 Credits.
This course on Generalized Linear Models (GLM) is designed for both the applied and theoretical statistician. In this course we introduce the theoretical foundations and key applications of generalized linear models. Prerequisite: BIOS 835, BIOS 840, and BIOS 900 or by permission of instructor.

BIOS 911. Nonlinear Models. 3 Credits.
This course will involve both theory and applications of nonlinear models, with emphasis in biological, medical, and pharmaceutical research. Applications to dose-response studies, bioassay studies and clinical pharmacokinetics and pharmacodynamics studies will be discussed. Nonlinear mixed effects models will also be examined, as well as criteria for optimal experimental designs based on nonlinear models. This course will cover the theoretical basis of the methods at an intermediate mathematical level, and will also present applications using real world data and statistical software. Prerequisite: BIOS 900 or equivalent and permission of instructor.

BIOS 915. Longitudinal Data Analysis. 3 Credits.
A longitudinal study is a research study that involves repeated observations of the same individuals and events over extended periods of time. It is typically a type of observational study, though may have design components. In medical settings these studies and related models are used to observe the developmental path of a disease or treatment through time. Often this is in the context of follow-up and long-term study of both progress and potential side-effects. As the study involves the same individuals (subject to drop-out) through several time points, statistical methods must employ random effects or "mixed models" incorporating various correlation structures. This is typically done using generalized estimating equations and marginal model approaches. Bayesian methods may also be appropriate here. Students will, after completing this course, be able to design and analyze longitudinal studies. The computer package to be employed is SAS. Prerequisite: BIOS 820, BIOS 830, BIOS 840, BIOS 871, BIOS 872, and BIOS 900 or by permission of instructor.

BIOS 920. Latent Variable Analysis. 3 Credits.
Latent variables refer to random variables whose realization values are not observable or cannot be measured without error, and their inferences rely on statistical models connecting latent and other observed variables. This course aims to introduce a family of such statistical models and their applications in biomedical and public health research. The course is designed as an elective course for students in the Biostatistics graduate program. We will use the statistical packages of M-plus, R, and/or SAS for the course. Prerequisite: BIOS 835 and BIOS 900, or by permission of instructor. Familiarity with vectors and matrices is strongly encouraged.

BIOS 999. Doctoral Dissertation. 1-9 Credits.
Preparation of the doctoral dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Credits will be given only after the dissertation has been accepted by the student's dissertation committee. Prerequisite: Successful completion of the Department of Biostatistics Ph.D. Comprehensive Exam and consent of advisor.

Courses

DATA 806. Special Topics in Data Science. 1-3 Credits.
This course allows exploration of special topics that are not routinely a part of the Applied Statistics & Analytics and Data Science curriculum. Prerequisite: Permission of instructor.

DATA 817. Introduction to Tableau. 1 Credits.
Under Tableau Desktop-I specialization, the student will discover what data visualization is, and how to use it use to better display and understand the information within a data set. Using Tableau, this course will examine the fundamental concepts of data visualization and explore the Tableau Desktop interface, identifying and applying the various tools Tableau has to offer. By the end of the course, students will be able to prepare and import data into Tableau and explain the relationship between data analytics and data visualization. This course is designed for learners who have never used Tableau before, those in need of a refresher, or those wanting to explore Tableau in more depth. No prior technical or analytical background is required. The course will guide students through the steps necessary to create visualization dashboard and story from the beginning based on data context, setting the stage for students to be ready for Desktop-I certification. Prerequisite: There are no formal prerequisites for this course. Prior experience generating plots, tables, graphs, etc. is helpful, but is not required.

DATA 819. Introduction to Python. 1 Credits.
This is a one credit hour introduction course to programming in Python. The fundamentals of Python programming, including: introduction to Python syntax, types, data structures, control of flow, functions, modules and packages, reading and writing files, and basic statistics will be covered throughout the course.

DATA 822. Introduction to SQL. 1 Credits.
This course prepares students to interact with most dialects of Structured Query Language (SQL). At the conclusion of the course, students will be prepared to interact with any major database, including PostgreSQL, MySQL, Oracle, among others. Topics covered relational databases, structure of data, Data Definition Language (DDL), Data Manipulation Language (DML), table joins, data summarization, and writing and interpreting SQL queries.

DATA 824. Data Visualization and Acquisition. 3 Credits.
Being a data scientist requires an integrated skill set that spans the domains of statistics, machine learning, and computer programming. It also demands a solid foundation in the principles of data visualization in order to create effective data presentations that convey the intended message. Put simply, data visualization describes any effort to assist an individual's understanding of the significance of data by placing it in a visual context. In this course, students will be introduced to principles of effective data visualization and tools commonly used for its implementation. Techniques and strategies for visualizing different types of data (e.g., numeric data, non-numeric data, spatial-temporal data, etc.), the use of space and color to visually encode data, interactive visualizations, acquiring and visualizing data from publicly available data repositories, data cleaning and standardizing, are examples of some of the topics this course will address. The focus in the treatment of these topics will be on breadth, rather than depth, and emphasis will be placed on integration and synthesis of concepts and their application to solving problems. Prerequisite: While there are no formal prerequisites for this course, students should have a basic familiarity with the R statistical programming language (STAT 823 highly recommended). Prior experience using statistical software (e.g., R) to generate plots, tables, graphs, etc. is helpful, but is not required.

DATA 881. Statistical Learning I. 3 Credits.
Statistical learning is a fundamental skill for data scientists. Data scientists are specialists in “drinking from the firehose” of big data, and statistical learning techniques are some of their key tools. This course focuses on applications of statistical learning to big data challenges through data mining and predictive modeling techniques that are in great demand. Students will be introduced to the basics of statistical/machine learning: supervised learning (e.g. linear model, nonlinear models, penalized methods, ensemble methods, etc.), unsupervised learning (e.g. K means clustering, nearest neighbors, hierarchical clustering, etc.), and missing data in machine learning. Throughout the course, we will learn how to be “informed doers”, who not only know how to apply methods but understand how those methods work. This understanding can be critical to getting good results from big data, so that the limitations of certain methods are properly understood. Prerequisite: STAT 820 or STAT 823, STAT 835, STAT 840, or by permission of instructor.

DATA 882. Statistical Learning II. 3 Credits.
Knowledge of how and when to apply more sophisticated statistical learning models to big data can make a data scientist an indispensable asset to a research team. In Statistical Learning 2, we will learn how to be “informed doers”. We will learn how many of the covered methods work, in addition to the proper situations to apply them. This is particularly important in this course, because these methods are applicable when simpler methods are inappropriate and rarely work well without significant tinkering. Data scientists with mastery of these methods are empowered to investigate questions that are far too complex to answer with the more general “workhorse” methods covered in the first unit of this series, Statistical Learning 1. We will cover many of the most important techniques in use today, including: mixture models, hidden Markov models, spline regression, support vector machines, advanced discriminant analysis methods, neural networks (including deep learning), and methods for handling highly complex computation, such as Hadoop. The course culminates with a short project that will pull together all the skills you have learned to demonstrate how they can be used for statistical decision support, which is a common task for data scientists. Prerequisite: DATA 881, or by permission of instructor.

Courses

STAT 655. Foundations of Mathematics for Data Science. 3 Credits.
Topics in single- and multiple-variable differential and integral calculus and linear algebra with applications in statistics and data science. Mathematical concepts including limits, derivatives, integrals, sequences, series, vectors, matrices, and optimization problems will be covered in the context of statistical applications. Prerequisite: College algebra or equivalent.

STAT 805. Professionalism, Ethics and Leadership in the Statistical Sciences. 3 Credits.
This web-based course addresses issues in professionalism, leadership and ethics that are specific to students training to become statisticians, biostatisticians, and data scientists. Topics include use of sound statistical methodology, common treats to valid inference, effective communication and collaboration with content-area experts, maintaining transparency and independence, reproducible research, the publishing process (including authorship guidelines, plagiarism, peer review, intellectual property, etc.), conflict of interest, data security, and properties of effective leaders, among others. Prerequisite: Permission of instructor.

STAT 806. Special Topics in Applied Statistics and Analytics. 1-3 Credits.
This course allows exploration of special topics that are not routinely a part of the Applied Statistics & Analytics curriculum. Prerequisite: Permission of instructor.

STAT 818. Introduction to R. 1 Credits.
This course will provide students with the opportunity to learn applied statistics using R statistical programming language.

STAT 820. SAS Programming I. 3 Credits.
This is a graduate level course preparing a student for the SAS base programming certification exam. We will cover the topics required for a student to pass the SAS base programming certification exam given by SAS. To this end, topics we will study will include, referencing files and setting options, creating list reports, understanding data step processing, creating and managing variables, reading and combining SAS data sets, do loops, arrays, and reading raw data from files. After the completion of the course the student should be able to create SAS programs to read data from external files, manipulate the data into variables to be used in an analysis, generate basic reports showing the results, be able to understand and explain results from univariate analyses using proc univariate. Prerequisite: Permission of Instructor.

STAT 821. SAS Programming II. 3 Credits.
This is a graduate level course preparing a student for the SAS advanced programming certification exam. We will cover the topics required for a student to pass the SAS advanced programming certification exam given by SAS. To this end, topics we will study include array processing, use of data step views, using the data step to write SAS programs, efficient use of the sort procedure, introduction to the macro language in SAS, and
accessing data using SAS PROC SQL. After the completion of the course, the student should be able to create SAS programs to read data from external files, manipulate the data into variable to be used in an analysis, generate basic reports showing the results. Prerequisites: STAT 820 or equivalent (SAS Certified BASE programmer for SAS or at least one year of experience as a data analyst/programmer).

STAT 823. Introduction to Programming and Applied Statistics in R. 3 Credits.
This course will provide students with the opportunity to learn advanced statistical programming. The development of new statistical or computational methods often implies the development of programming codes to support its application. Much of this type of development is currently carried out in the R (or S-Plus) language. Indeed much of the recent development of statistical genetics is based on the R programming language and environment. This course provides an introduction to programming in the R language and its applications to applied statistical problems. Prerequisites: Some previous exposure to computer programming. Some basic statistics at the Applied Regression or Applied Design level and permission of instructor.

STAT 825. Nonparametric Methods. 3 Credits.
This course is an introduction to nonparametric statistical methods for data that do not satisfy the normality or other usual distributional assumptions. We will cover most of the popular nonparametric methods used for different scenarios, such as a single sample, two independent or related samples, three or more independent or related samples, goodness-of-fit tests, and measures of association. Power and sample size topics will also be covered. The course will cover the theoretical basis of the methods at an intermediate mathematical level, and will also present applications using real world data and statistical software. Prerequisite: Permission of instructor.

STAT 830. Experimental Design. 3 Credits.
The emphasis of this course is on learning the basics of experimental design and the appropriate application and interpretation of statistical analysis of variance techniques. Prerequisite: Permission of instructor. STAT 820 or STAT 823 is recommended.

STAT 833. Measurement for Statisticians. 3 Credits.
This course aims to introduce the theory and applications of psychometrics to students in the statistical sciences. The goal is for students to master the concepts of measurement theory, classical/modern test theory, reliability and validity, factor analysis, structural equation modeling, item response theory, and differential item functioning. Prerequisites: Prerequisite: STAT 820 or STAT 823 Corequisite: STAT 835, or by permission of instructor.

STAT 835. Categorical Data Analysis. 3 Credits.
This course provides an understanding of both the mathematical theory and practical applications for the analysis of data for response measures that are ordinal or nominal categorical variables. This includes univariate analysis, contingency tables, and generalized linear models for categorical response measures. Regression techniques covered for categorical response variables, such as logistic regression and Poisson regression methods, will include those categorical and/or continuous explanatory variables, both with and without interaction effects. Prerequisites: Permission of instructor. STAT 820 or STAT 823 and STAT 840 are recommended.

STAT 840. Linear Regression. 3 Credits.
This course is an introduction to model building using regression techniques. We will cover many of the popular topics in linear regression including: simple linear regression, multiple linear regression, model selection and validation, diagnostics, and remedial measures. Prerequisite: Permission of Instructor.

STAT 845. Survival Analysis. 3 Credits.
This course provides an understanding of both the mathematical theory and practical applications for the analysis of time to event data with censoring. This includes univariate analysis, group comparisons, and regression techniques for survival analysis. Parametric and semi-parametric regression techniques covered will include those with categorical and/or continuous explanatory variables, both with and without interaction effects. Prerequisites: STAT 820 or STAT 823, 835, and 840 or by permission of instructor.

STAT 850. Multivariate Statistics. 3 Credits.
This course will introduce the theory and methods of applied multivariate analysis. Topics include multivariate model formulation, multivariate normal distribution, Hotelling's T-square, multivariate analysis of variance, repeated measures analysis of variance, growth curves, discriminant analysis, classification analysis, principal components analysis, and cluster analysis. Prerequisites: STAT 820 or STAT 823, and STAT 840, or by permission of the instructor.

STAT 855. Statistical Methods in Genomics Research. 3 Credits.
This survey course will provide a high-level introduction to various statistical and bioinformatics methods involved in the study of biological systems. In particular, this course will provide an overview of the analytical aspects involved in: the study DNA, RNA, and DNA methylation data measured from both microarray and next-generation sequencing (NGS) technologies. This course will be held in a block format with 4 hours of lectures a day for two weeks (one week in June and one week in July), with readings and homework assignments assigned throughout the summer semester. During the last week of the summer semester, students will be required to participate in a group seminar session in which they will present the results from their assigned genomics projects. Prerequisite: STAT 820 or STAT 823, and STAT 840, or by permission of the instructor.

STAT 871. Mathematical Statistics. 3 Credits.
This course introduces the fundamentals of probability theory, random variables, distribution and density functions, expectations, transformations of random variables, moment generating functions, convergence concepts, sampling distributions, and order statistics. Prerequisite: Permission of Instructor.

STAT 872. Mathematical Statistics II. 3 Credits.
This course introduces the fundamentals of statistical estimation and hypothesis testing, including point and interval estimation, likelihood and sufficiency principles, properties of estimators, loss functions, Bayesian analysis, and asymptotic convergence. Prerequisite: STAT 871 or by permission of instructor.

STAT 880. Data Mining and Analytics. 3 Credits.
Students will be introduced to common steps used in data mining, such as assessing and assaying prepared data; pattern discovery; predictive modeling using decision trees, regression, and neural networks; and model assessment methods. Prerequisites: STAT 820 or STAT 823, STAT 835, and STAT 840, or by permission of instructor. STAT 850 is recommended.

Master of Science in Biostatistics

The Biostatistics M.S. and Ph.D. programs were created to help meet the ever-increasing demand for biostatisticians to take leadership roles in careers as researchers and educators in academia, government, and industry. Faculty members are active researchers collaborating and
consulting in research projects and initiatives at the Medical Center, in addition to pursuing their own research agendas and participating in curricular instruction. Expertise in the Department includes linear, nonlinear, and longitudinal modeling; clinical trial and experimental design; survival analysis; categorical data analysis; robust statistics; psychometric methods; statistical 'omics; bioinformatics; Bayesian methodology; data science; and machine learning.

The Biostatistics MS program produces graduates that are prepared to function as biostatisticians or biostatistical consultants. Therefore, graduates gain an extensive understanding of biostatistical theory and practice and should be proficient in the application of statistical methods to one or more areas in the health sciences. At the completion of the M.S. degree in Biostatistics the graduate should be able to:

1. Demonstrate a broad knowledge and understanding of statistical theory and practice as applicable in the health sciences.
2. Function as a collaborator on a research team.
3. Take a leadership role in the design and implementation of a health science project.
4. Assume responsibility for the design and implementation of analyses for health science investigations.
5. Assist with the design and implementation of data management systems for large health science studies.
6. Prepare reports and publications resulting from health science investigations.
7. Serve as an advocate for good statistical design in health science investigations.

The application process for the M.S. in Biostatistics is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics & Data Science (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

Admission Requirements:

- A bachelor's degree in statistics, biostatistics, mathematics or applied mathematics from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement.
- A background check is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.
- Letter grade of B or better in Calculus I, II, & III (or the equivalent.)
- Successful completion of at least one of the following courses: linear algebra, differential equations, numerical analysis.
- Successful completion of a course in any computer programming language or demonstration of mastery via credentials or work experience.
- Research experience (beyond labs associated with lecture courses) is recommended, but not required.
- Contact information for three references who are familiar with the applicant's work and character and who have agreed to write letters of recommendation.
- A current resume or curriculum vitae.
- A personal statement regarding your interest in biostatistics and in biomedical research.
- A personal interview is required of all applicants who meet the minimum admissions standards. If travel to the area is impossible, a telephone or online interview may be substituted.

Applicants will be assessed based on these requirements.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs are available at the website.

The M.S. in Biostatistics degree program consists of 36 credit hours including collaborative research experience, annual evaluations, and the successful completion of the master's general examination. The course plan consists of 27 credit hours from required biostatistics core courses which includes 3 credit hours of Collaborative Research Experience. This requirement ensures the completion of a research component through collaborative effort within or external to the department. Students also complete 9 credit hours of elective coursework.

Degree requirements:

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed.
- Completion of a minimum of 36 credit hours.
- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.
- Enrollment in a minimum of one credit hour the semester the student will graduate.
- Successful completion of a general examination (https://catalog.ku.edu/graduate-studies/kumc/#ThesisDefense) the semester the student will graduate. The general examination is given upon completion of the following courses: BIOS 820, BIOS 830, BIOS 835, BIOS 840, BIOS 871 and BIOS 872. The examination has three purposes: to assess the student’s strengths and weaknesses; to determine whether the student should be awarded the M.S. degree; and, if it is a degree goal, to determine whether the student is prepared to continue into the Ph.D. program (p. 2040).
- Successful completion of the following Biostatistics courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 805</td>
<td>Professionalism, Ethics and Leadership in the Statistical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 820</td>
<td>SAS Programming I</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 830</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 835</td>
<td>Categorical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 840</td>
<td>Linear Regression</td>
<td>3</td>
</tr>
</tbody>
</table>
• Successful completion of a minimum of 9 credit hours of elective coursework. Specific courses are determined in consultation with the student's advisor.

• Successful completion of a minimum of 3 credit hours (maximum of 6) of elective coursework from courses offered by the department, including courses with the STAT or DATA prefix.

• Successful completion of a minimum of 3 credit hours (maximum of 6) of elective coursework from courses offered outside the department.

• Students may take up to 12 credit hours of equivalent coursework under the STAT prefix. Course equivalence should be determined in consultation with the student’s advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs are available online.

**Annual Evaluations:**

Students are evaluated each May by their graduate advisors and the director of the graduate program. These evaluations provide feedback to the student regarding the progress they are making in meeting program requirements, classroom performance, and research performance.

**Typical Plan of Study**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 820</td>
<td>3</td>
<td>BIOS 830</td>
<td>3</td>
<td>BIOS 805</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 840</td>
<td>3</td>
<td>BIOS 872</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>BIOS 871</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
<td></td>
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<tr>
<td>9</td>
<td>9</td>
<td>3</td>
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</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Hours</th>
<th>Fall</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 835</td>
<td>3</td>
<td>BIOS 898</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOS 900</td>
<td>3</td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td>General Exam may be scheduled beginning of the Spring semester if approved by advisor to proceed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td></td>
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</tr>
</tbody>
</table>

**Total Hours 36**

- Students may take up to 12 credit hours of equivalent coursework under the STAT prefix. Course equivalence should be determined in consultation with the student’s advisor.

- Successful completion of any elective coursework as determined in consultation with the student’s advisor. Any coursework under the STAT or DATA prefixes may be considered as internal elective credit.

Because the MS and PhD in Biostatistics degrees signify that the holder is prepared for entry into the practice of biostatistics research, it follows that graduates must have the knowledge and skills necessary to function in a broad range of academic and research situations. The Technical Standards include those physical, cognitive, and behavioral standards that are required for the satisfactory completion of all aspects of the curriculum and the development of professional attributes required by all students at graduation. Therefore, the following abilities and expectations must be met by all students with or without accommodations admitted to the MS and PhD programs:

1. **Observation.** A student must be able to observe and evaluate class demonstrations and field experiences relevant to the field of statistics. He or she must be able to read and comprehend text, numbers, tables and graphs, both in print and displayed electronically. Observation necessitates the functional use of the senses of vision and hearing.

2. **Communication.** A student must be able to communicate effectively and efficiently in English or oral, written, and electronic form with other students, faculty, staff, researchers, and the public. Effective communication includes: the ability to understand assigned readings, lectures, and technical and professional materials; the ability to analyze information; the ability to present results of such analyses verbally and in writing; the ability to independently prepare papers and presentations; and the ability to follow verbal and written instructions. Use of computers and other technology is imperative to this communication.

3. **Motor.** A student must have sufficient motor function to attend classes, prepare assignments, use electronic media, deliver lectures and make public presentations. Class requirements may also include field work in a variety of collaborative environments.

4. **Intellectual, conceptual, integrative and quantitative abilities.** A student must possess the ability to understand and read and understand documents written in English, to understand and work with measurements and calculations, and to engage in reasoning, analysis, synthesis and critical thinking. A student must be able to exercise sufficient judgment to recognize and correct performance deviations, and be able to draw on all the above mentioned abilities to be an effective problem solver, researcher, and communicator.

5. **Behavioral and social attributes.** A student must have the emotional health required for the full use of his or her intellectual ability. A student must be able to exercise sound judgment, and to act ethically and with integrity. He or she must develop mature, sensitive, and effective professional relationships with others. A student must be self-motivated, reliable and responsible to complete assigned tasks in a timely manner with no supervision. Students must be able to give attention to detail and have the flexibility to function in a research setting, including adapting to changes in time, place and structure of academic and research settings. The student must have the ability to work with diverse groups.

**NOTE:** Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.
Master of Science in Applied Statistics and Analytics

The Master of Science in Applied Statistics and Analytics is offered by the Department of Biostatistics & Data Science (p. 2030) located at the University of Kansas Medical Center (http://www.kumc.edu/). This program is offered 100% online through the University of Kansas-Edwards campus (http://edwardscampus.ku.edu/about-ku-edwards-campus/). Graduates are equipped with hands-on statistical computing skills and the statistical theory underlying the methods most in-demand in the work force, and should be proficient in the application of statistical methods within their field. Graduates of this program may choose from one of three areas of emphasis:

- **Analytics Emphasis** will provide graduates with experience working with and analyzing large datasets using several of the most common statistical software tools.
- **Statistics Emphasis** will provide hands-on statistical computing in the context of statistical methods commonly applied in industry and government agencies.
- **Data Science Emphasis** will provide students with skills in statistical and computational methods for the acquisition and analysis of Big Data.

Characteristics of Graduates

Upon completion of the MS in Applied Statistics and Analytics, the student should be prepared to immediately function as a statistician, analyst, and/or data scientist. Therefore the student must have an understanding of the statistical theory underlying the methods most in-demand in the work force, and should be proficient in the application of statistical methods within their field. Graduates of this program may choose from one of three areas of emphasis:

1. Demonstrate an understanding of statistical theory and practice.
2. Function as a collaborator on a project team.
3. Demonstrate proficiency in industry-standard statistical software.
4. Assume responsibility for the design and implementation of analyses for projects within his or her field.
5. Assist with the design and implementation of data management systems for projects within his or her field of application.
6. Prepare reports and publications resulting from said projects.
7. Effectively communicate the principles of statistics and analytics with his or her peers with varying statistical backgrounds.
8. Serve as an advocate for good statistical design and practice.

The application process for the M.S. in Applied Statistics and Analytics is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics & Data Science (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website. Students may be admitted to begin the fall, spring or summer semester.

Admission requirements:

- A bachelor's degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html).

- Average grade of B or better in calculus I and II (or equivalent) or completion of STAT 655: Foundations of Mathematics for Data Science with a grade of B or better.

- Successful completion of a course in any computer programming language, certification of completion of training in a programming language, or demonstrated work experience.

- Contact information for three references who are familiar with the applicant's work and character and who have agreed to write letters of recommendation.

- A personal statement describing your career goals and your interest in the program.

- A current resume or curriculum vitae listing scholarships/fellowships, awards and history of employment.

Graduate Record Examination (GRE) scores (or other graduate examination scores, such as the GMAT) are recommended, but not required. Applicants will be assessed based on these requirements.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs can be accessed on the University of Kansas-Edwards campus website.

The M.S. in Applied Statistics, Analytics and Data Science degree program consists of 30 credit hours. Students choose one or more emphasis area(s) from Analytics, Statistics, or Data Science. The program consists of a common foundation of 12 credit hours of statistics courses in addition to the 12 credit hours specific to the emphasis area and 6 credit hours of electives. A student can choose electives such that multiple emphasis areas can be completed if desired.

Degree requirements:

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed.

- Completion of a minimum of 30 credit hours.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- No more than two grades of C are allowed in courses required for the degree.

- Enrollment in a minimum of one credit hour the semester the student will graduate.

- Successful completion of a general examination (https://catalog.ku.edu/graduate-studies/kumc/#ThesisDefense) the semester the student will graduate. This is a comprehensive examination that is administered during the final semester of enrollment after successful completion of the required core coursework. The examination has
two purposes: 1) to assess the student’s strengths and weaknesses and 2) to determine whether the student should be awarded the MS degree. The examination is created and administered by a committee of at least three members of the Department Graduate Faculty. If this examination is failed, subject to committee approval, a second examination may be taken no sooner than three months later. The committee can recommend that the student leave the program following the semester in which the examination is taken. After two failures, no further examination is permitted and the student will not be awarded the degree.

• Successful completion of the following courses:

  • Foundation courses (minimum of 12 credit hours.)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 805</td>
<td>Professionalism, Ethics and Leadership in the Statistical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>STAT 835</td>
<td>Categorical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 840</td>
<td>Linear Regression</td>
<td>3</td>
</tr>
<tr>
<td>STAT 850</td>
<td>Multivariate Statistics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>12</strong></td>
</tr>
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</table>

  • Emphasis courses (minimum of 12 credit hours.)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Analytics Emphasis</strong></td>
<td></td>
</tr>
<tr>
<td>STAT 820</td>
<td>SAS Programming I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 823</td>
<td>Introduction to Programming and Applied Statistics in R</td>
<td>3</td>
</tr>
<tr>
<td>STAT 830</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>STAT 880</td>
<td>Data Mining and Analytics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Statistics Emphasis</strong></td>
<td></td>
</tr>
<tr>
<td>STAT 820</td>
<td>SAS Programming I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 825</td>
<td>Nonparametric Methods</td>
<td>3</td>
</tr>
<tr>
<td>STAT 830</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>STAT 871</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Data Science Emphasis</strong></td>
<td></td>
</tr>
<tr>
<td>STAT 823</td>
<td>Introduction to Programming and Applied Statistics in R</td>
<td>3</td>
</tr>
<tr>
<td>DATA 824</td>
<td>Data Visualization and Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>STAT 880</td>
<td>Data Mining and Analytics</td>
<td>3</td>
</tr>
<tr>
<td>DATA 881</td>
<td>Statistical Learning I</td>
<td>3</td>
</tr>
</tbody>
</table>

  • Elective courses (minimum of 6 credit hours.) Specific courses are determined in consultation with the student's advisor. Any course taken for elective credit external to the department must be approved by the department's curriculum committee for the master's programs.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs».

**Typical Plan of Study**

Students may choose to pursue one of three emphasis areas for the MS in Applied Statistics and Analytics degree. The emphasis areas were developed based on the knowledge and skillset demanded by the workforce.

- **Analytics Emphasis** will provide graduates with experience working with and analyzing large datasets using several of the most common statistical software tools.
- **Statistics Emphasis** will provide hands-on statistical computing in the context of statistical methods commonly applied in industry and government agencies.
- **Data Science Emphasis** will provide students with skills in statistical and computational methods for the acquisition and analysis of Big Data.

Below is the typical plan of study based on which emphasis is chosen.

**Analytics Emphasis for MS in Applied Statistics and Analytics**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STAT 820</td>
<td>3</td>
<td>STAT 835</td>
<td>3</td>
<td>STAT 805</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STAT 840</td>
<td>3</td>
<td>STAT 850</td>
<td>3</td>
<td>STAT 823</td>
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<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>3</td>
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</tr>
<tr>
<td></td>
<td>General</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Exam may</td>
<td>be scheduled</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>beginning of the</td>
<td>Spring semester</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>if approved</td>
<td>by advisor to</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>proceed.</td>
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<td><strong>6</strong></td>
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</tr>
</tbody>
</table>

**Total Hours 30**

**Statistics Emphasis for MS in Applied Statistics and Analytics**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STAT 820</td>
<td>3</td>
<td>STAT 835</td>
<td>3</td>
<td>STAT 805</td>
<td>3</td>
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<td></td>
<td>STAT 840</td>
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<td>STAT 850</td>
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<td></td>
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<td><strong>6</strong></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STAT 825</td>
<td>3</td>
<td>STAT 871</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td>Elective</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Annual Evaluations:**

Students are evaluated each May by their faculty advisor and Program Chair. These evaluations provide feedback to the student regarding the progress that they are making toward the degree.


Because the MS in Applied Statistics and Analytics degree signifies that the holder is prepared for entry into the practice of applied statistics research, it follows that graduates must have the knowledge and skills necessary to function in a broad range of academic and research situations. The Technical Standards include those physical, cognitive, and behavioral standards that are required for the satisfactory completion of all aspects of the curriculum and the development of professional attributes required by all students at graduation. Therefore, the following abilities and expectations must be met by all students with or without accommodations admitted to the MS program:

1. **Observation.** A student must be able to observe and evaluate class demonstrations and field experiences relevant to the field of statistics. He or she must be able to read and comprehend text, numbers, tables and graphs, both in print and displayed electronically. Observation necessitates the functional use of the senses of vision and hearing.

2. **Communication.** A student must be able to communicate effectively and efficiently in English in oral, written, and electronic form with other students, faculty, staff, researchers, and the public. Effective communication includes: the ability to understand assigned readings, lectures, and technical and professional materials; the ability to analyze information; the ability to present results of such analyses verbally and in writing; the ability to independently prepare papers and presentations; and the ability to follow verbal and written instructions. Use of computers and other technology is imperative to this communication.

3. **Motor.** A student must have sufficient motor function to attend classes, prepare assignments, use electronic media, deliver lectures and make public presentations. Class requirements may also include field work in a variety of collaborative environments.

4. **Intellectual, conceptual, integrative and quantitative abilities.** A student must possess the ability to understand and read and understand documents written in English, to understand and work with measurements and calculations, and to engage in reasoning, analysis, synthesis and critical thinking. A student must be able to exercise sufficient judgment to recognize and correct performance deviations, and be able to draw on all the above mentioned abilities to be an effective problem solver, researcher, and communicator.

5. **Behavioral and social attributes.** A student must have the emotional health required for the full use of his or her intellectual ability. A student must be able to exercise sound judgment, and to act ethically and with integrity. He or she must develop mature, sensitive, and effective professional relationships with others. A student must be self-motivated, reliable and responsible to complete assigned tasks in a timely manner with no supervision. Students must be able to give attention to detail and have the flexibility to function in a research setting, including adapting to changes in time, place and structure of academic and research settings. The student must have the ability to work with diverse groups.

**NOTE:** Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University's Office for Academic Accommodations.

### Doctor of Philosophy in Biostatistics

The Biostatistics M.S. and Ph.D. programs were created to help meet the ever-increasing demand for biostatisticians to take leadership roles in careers as researchers and educators in academia, government, and industry. Faculty members are active researchers collaborating and consulting in research projects and initiatives at the Medical Center, in addition to pursuing their own research agendas and participating in curricular instruction. Expertise in the Department includes linear, nonlinear, and longitudinal modeling; clinical trial and experimental design; survival analysis; categorical data analysis; robust statistics; psychometric methods; statistical ‘omics; bioinformatics; Bayesian methodology; data science; and machine learning.

The Ph.D. program produces biostatisticians who can develop biostatistical methodology that can be used to solve problems in public health and the biomedical sciences. In addition, graduates are prepared to apply biostatistical and epidemiology methodology for the design and analysis of public health and biomedical research investigations. Finally, graduates are well suited to function as collaborators or team leaders on research projects in the biomedical and public health sciences.
Admission Requirements:

In addition to the characteristics outlined in the M.S. program, graduates of the Ph.D. program in Biostatistics will have:

1. the ability to develop careers in academia, research institutes, government, and industry;
2. a broad understanding of current statistical methods and practices in the health sciences;
3. a solid theoretical training necessary for the development and study of new statistical methods;
4. the ability to assume all responsibilities of a statistician in collaborative health science research; in particular, the graduate will have experience in the design, data management, analysis, and interpretation of a variety of experimental and observational studies;
5. experience in writing reports and giving oral presentations describing health science studies.

The application process for the Ph.D. in Biostatistics is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics & Data Science (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website. Students are admitted for the fall semester only. Applications for the fall semester must be received by February 1st for consideration.

Admission Requirements:

• A master's degree in statistics, biostatistics, mathematics or applied mathematics from a regionally accredited institution or a terminal degree (M.D., Ph.D.) in another field with approval from the program. Students not meeting this criteria should apply to the M.S. program (p. 2035). Completion of degree is documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

• A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.

• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement.

• A background check is required during the admission process; it may affect the student's eligibility to enter the program.

• An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.

• A letter grade of B or better in Calculus I through III (or equivalent.)

• Successful completion of at least one of the following courses: linear algebra, differential equations, numerical analysis.

• Successful completion of a course in any computer programming language or demonstration of mastery via credentials or work experience.

• Research experience (beyond labs associated with lecture courses) is highly recommended, but not required.

• Contact information for three references who are familiar with the applicant's work and character and who have agreed to write letters of recommendation.

• A personal statement regarding your interest in biostatistics and in biomedical research.

• A current resume or curriculum vitae.

• A personal interview is required of all applicants who meet the minimum admissions standards. If travel to the area is impossible, a telephone or online interview may be substituted.

Applicants will be assessed based on these requirements.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs are available online.

The typical program consists of 63 credit hours including collaborative research experience, annual evaluations, graduate examinations, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty.

Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D. The typical course plan consisting of 63 credit hours is designed for students who have not previously completed a M.S. in biostatistics or directly relevant area. The course plan for a student who has previously completed a M.S. in biostatistics or directly relevant area is customized to account for master's-level courses already taken; therefore the total credit hours required will vary.

Degree requirements:

• Degree requirements are normally completed within 4 years of admission to the program although a maximum of 8 years is allowed.

• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

• Successful completion of the Qualifying Examination. The qualifying examination is given upon completion of the following courses (or equivalent): BIOS 820, BIOS 830, BIOS 835, BIOS 840, BIOS 871 and BIOS 872. The examination has two purposes 1) to assess the student’s strengths and weaknesses and 2) determine whether the student is sufficiently prepared to continue in the Ph.D. program.

• Successful completion of the University’s Research Skills and Responsible Scholarship (https://catalog.ku.edu/graduate-studies/kumc/#ResearchSkillsandResponsibleScholarship) requirement prior to the semester the Oral Comprehensive Examination is scheduled.

• Successful completion of BIOS 898 Collaborative Research Experience (or equivalent) meets the Research Skills requirement.

• Successful completion of BIOS 805 Professionalism, Ethics and Leadership in the Statistical Sciences and/or documented participation in the Biostatistics Graduate Students Association Seminar Series and completion of the KUMC Human Subjects Protection training module meets this requirement. Student must keep their certification current throughout their tenure in the Ph.D. program.

• Successful completion of the Residence Requirement (https://catalog.ku.edu/graduate-studies/kumc/#programtext) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
• Successful completion of the Oral Comprehensive Examination ([catalog.ku.edu/graduate-studies/kumc/#ComprehensiveOralExamination](https://catalog.ku.edu/graduate-studies/kumc/#ComprehensiveOralExamination)). The comprehensive examination is typically given when a doctoral aspirant has completed the major portion of the course work at a satisfactory level and met all other prerequisites to the comprehensive examination. The examination assesses the student’s strengths and weaknesses and determines whether the student should continue in the Ph.D. program. There is both a written component to the exam and a subsequent presentation and defense of a dissertation proposal. Students are recognized as formal candidates for the Ph.D. only after they have passed the comprehensive examination.

• Successful completion of Post-Comprehensive Enrollment ([catalog.ku.edu/graduate-studies/kumc/#PostComprehensiveEnrollment](https://catalog.ku.edu/graduate-studies/kumc/#PostComprehensiveEnrollment)) requirement.

• Enrollment in a minimum of one credit hour of dissertation BIOS 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.

• Successful completion of the Final Oral Examination ([catalog.ku.edu/graduate-studies/kumc/#FinalOralExamination](https://catalog.ku.edu/graduate-studies/kumc/#FinalOralExamination)) (dissertation defense.) The candidate must present a dissertation showing the planning, conduct, and results of original research and scholarly activity. The purpose of the dissertation is to encourage and ensure the development of broad intellectual capabilities as well as to demonstrate an intensive focus on a problem or research area. This work is carried out under the guidance of a dissertation advisor. When the completed dissertation has been accepted by the dissertation committee in final draft form and all other degree requirements have been satisfied the chair of the committee requests (at least 3 weeks before the date of the examination) Graduate Studies approval to proceed with the final oral examination.

• Successful Dissertation Submission and Publication ([catalog.ku.edu/graduate-studies/kumc/#DissertationSubmissionandPublication](https://catalog.ku.edu/graduate-studies/kumc/#DissertationSubmissionandPublication)) (according to Office of Graduate Studies policy.)

• Successful completion of the following Biostatistics courses (or equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 805</td>
<td>Professionalism, Ethics and Leadership in the Statistical Sciences</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 820</td>
<td>SAS Programming I</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 825</td>
<td>Nonparametric Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 830</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 835</td>
<td>Categorical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 840</td>
<td>Linear Regression</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 845</td>
<td>Survival Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 871</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 872</td>
<td>Mathematical Statistics II</td>
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</tr>
<tr>
<td>BIOS 898</td>
<td>Collaborative Research Experience</td>
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</tr>
<tr>
<td>BIOS 900</td>
<td>Linear Models</td>
<td>3</td>
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<td>BIOS 902</td>
<td>Bayesian Statistics</td>
<td>3</td>
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<td>BIOS 905</td>
<td>Theory of Statistical Inference</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 999</td>
<td>Doctoral Dissertation</td>
<td>1-6</td>
</tr>
</tbody>
</table>

• Students may take up to 12 credit hours of equivalent coursework under the STAT prefix. Course equivalence should be determined in consultation with the student’s advisor.

• Successful completion of any elective coursework as determined in consultation with the student’s advisor. Any coursework under the STAT or DATA prefixes may be considered as internal elective credit.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

### Annual Evaluations:

Students are evaluated each May by their graduate advisors and the director of the graduate program. These evaluations provide feedback to the student regarding the progress they are making in meeting program requirements, classroom performance, and research performance.

### Typical Plan of Study

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 820</td>
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<td>BIOS 830</td>
<td>3</td>
<td>BIOS 805</td>
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<tr>
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<td>BIOS 872</td>
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</tr>
<tr>
<td>BIOS 871</td>
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<td>Elective</td>
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<td>BIOS 805</td>
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</tbody>
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**Year 2**

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 835</td>
<td>3</td>
<td>BIOS 825</td>
<td>3</td>
<td>BIOS 905</td>
<td>3</td>
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<td>BIOS 898</td>
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<td>BIOS 845</td>
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<td>BIOS 905</td>
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</tr>
<tr>
<td>BIOS 900</td>
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<td>Elective</td>
<td>3</td>
<td>BIOS 905</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Qualifying Examination given in this semester.</td>
<td>9</td>
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<td>3</td>
</tr>
</tbody>
</table>

**Year 3**

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<td>BIOS 999</td>
<td>6-9</td>
<td>BIOS 999</td>
<td>3-6</td>
</tr>
<tr>
<td>Elective</td>
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</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td>Comprehensive Exam may be scheduled as early as this semester if approved by committee to proceed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>6-9</td>
<td>3-6</td>
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</tr>
</tbody>
</table>

**Year 4**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 999</td>
<td>1-6</td>
<td>BIOS 999</td>
<td>1-6</td>
</tr>
</tbody>
</table>
Final Oral Exam (dissertation defense) scheduled semester approved by committee to defend and graduate.

<table>
<thead>
<tr>
<th>1-6</th>
<th>1-6</th>
</tr>
</thead>
</table>

Total Hours: 62-78

- Students may take up to 12 credit hours of equivalent coursework under the STAT prefix. Course equivalence should be determined in consultation with the student’s advisor.
- Successful completion of any elective coursework as determined in consultation with the student’s advisor. Any coursework under the STAT or DATA prefixes may be considered as internal elective credit.

Because the MS and PhD in Biostatistics degrees signify that the holder is prepared for entry into the practice of biostatistics research, it follows that graduates must have the knowledge and skills necessary to function in a broad range of academic and research situations. The Technical Standards include those physical, cognitive, and behavioral standards that are required for the satisfactory completion of all aspects of the curriculum and the development of professional attributes required by all students at graduation. Therefore, the following abilities and expectations must be met by all students with or without accommodations admitted to the MS and PhD programs:

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2. **Communication.** A student must be able to communicate effectively and efficiently in English in oral, written, and electronic form with other students, faculty, staff, researchers, and the public. Effective communication includes: the ability to understand assigned readings, lectures, and technical and professional materials; the ability to analyze information; the ability to present results of such analyses verbally and in writing; the ability to independently prepare papers and presentations; and the ability to follow verbal and written instructions. Use of computers and technology is imperative to this communication.

3. **Motor.** A student must have sufficient motor function to attend classes, prepare assignments, use electronic media, deliver lectures and make public presentations. Class requirements may also include field work in a variety of collaborative environments.

4. **Intellectual, conceptual, integrative and quantitative abilities.** A student must possess the ability to understand and read and understand documents written in English, to understand and work with measurements and calculations, and to engage in reasoning, analysis, synthesis and critical thinking. A student must be able to exercise sufficient judgment to recognize and correct performance deviations, and be able to draw on all the above mentioned abilities to be an effective problem solver, researcher, and communicator.

5. **Behavioral and social attributes.** A student must have the emotional health required for the full use of his or her intellectual ability. A student must be able to exercise sound judgment, and to act ethically and with integrity. He or she must develop mature, sensitive, and effective professional relationships with others. A student must be self-motivated, reliable and responsible to complete assigned tasks in a timely manner with no supervision. Students must be able to give attention to detail and have the flexibility to function in a research setting, including adapting to changes in time, place and structure of academic and research settings. The student must have the ability to work with diverse groups.

**NOTE:** Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.

**Applied Data Science Graduate Certificate**

The Graduate Certificate in Applied Data Science teaches you how to extract, refine, analyze, and deliver data that has enormous values in today’s Big Data Boom. The program provides focused knowledge to equip students with skills in statistical and computational methods for acquisition and analysis of Big Data that allows them to make an immediate impact in their field and realize a more rewarding career.

Upon completion of the Graduate Certificate in Applied Data Science, the student should be prepared to apply many of the common statistical methods to complement his or her every day job duties. Therefore, the student must have a basic understanding of the statistical theory and practice and should be proficient in the application of common statistical methods to one or more areas application. At the completion of the Graduate Certificate in Applied Data Science, the student should be able to:

1. demonstrate knowledge and understanding of the practice of data science as applicable to his or her field.
2. function as a collaborator on a research team.
3. critically evaluate the literature where data science applications are used.
4. take a leadership role in the implementation of a research project.
5. prepare reports and publications resulting from research studies.
6. serve as an advocate for proper statistical design and interpretation of results in his or her field.

The application for the Graduate Certificate in Applied Data Science is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics & Data Science (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

**Admission requirements:**

- A bachelor's degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
- Average grade of B or better in calculus I and II (or equivalent) or completion of STAT 655: Foundations of Mathematics for Data Science with a grade of B or better.
- Successful completion of a course in any computer programming language or demonstration of mastery via credentials or work experience.
- Contact information for three references who are familiar with the applicant's work and character and who have agreed to write letters of recommendation.
- Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.

Admission requirements will be assessed based on these requirements.

Certificate Program Information: (http://catalog.ku.edu/graduate-studies/kumc/#certificatestext)

No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for all certificate students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

A minimum of 15 post-Bachelor's degree credit hours are required with a minimum GPA of 3.0 on a 4.0 scale. A typical full-time course plan is listed below for the Certificate in Applied Data Science. It consists of 15 credit hours of required coursework:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 820 or STAT 823</td>
<td>Introduction to Programming and Applied Statistics in R</td>
<td>3</td>
</tr>
<tr>
<td>STAT 840</td>
<td>Linear Regression</td>
<td>3</td>
</tr>
<tr>
<td>STAT 850</td>
<td>Multivariate Statistics</td>
<td>3</td>
</tr>
<tr>
<td>DATA 824</td>
<td>Data Visualization and Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>STAT 880</td>
<td>Data Mining and Analytics</td>
<td>3</td>
</tr>
<tr>
<td>or DATA 881</td>
<td>Statistical Learning I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 15

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs.

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
</table>
| STAT 820 or 823 | 3 STAT 850 | 3 DATA 824 | 3
| STAT 840        | 3 STAT 880 or DATA 881 | 3 |

Total 6 6 3

This typical Plan of Study shows the 15 credit hours of required courses to meet the requirement for completion of the Graduate Certificate in Applied Data Science program.

Because the Graduate Certificates in Biostatistics, Biostatistical Applications, Applied Statistics, and Applied Data Science signify that the holder is prepared for entry into the practice of biostatistics research, it follows that students awarded the Graduate Certificates must have the knowledge and skills necessary to function in a broad range of academic and research situations. The Technical Standards include those physical, cognitive, and behavioral standards that are required for the satisfactory completion of all aspects of the curriculum and the development of professional attributes required by all students upon completion of the Graduate Certificate. The following abilities and expectations must be met by all students with or without accommodations admitted to the Certificates:

1. **Observation.** A student must be able to observe and evaluate class demonstrations and field experiences relevant to the field of statistics. He or she must be able to read and comprehend text, numbers, tables and graphs, both in print and displayed electronically. Observation necessitates the functional use of the senses of vision and hearing.

2. **Communication.** A student must be able to communicate effectively and efficiently in English in oral, written, and electronic form with other students, faculty, staff, researchers, and the public. Effective communication includes: the ability to understand assigned readings,
lectures, and technical and professional materials; the ability to analyze information; the ability to present results of such analyses verbally and in writing; the ability to independently prepare papers and presentations; and the ability to follow verbal and written instructions. Use of computers and other technology is imperative to this communication.

3. **Motor.** A student must have sufficient motor function to attend classes, prepare assignments, use electronic media, and deliver lectures and public presentations. Class requirements may also include work in a variety of collaborative environments.

4. **Intellectual, conceptual, integrative and quantitative abilities.** A student must possess the ability to understand and read and understand documents written in English, to understand and work with measurements and calculations, and to engage in reasoning, analysis, synthesis and critical thinking. A student must be able to exercise sufficient judgment to recognize and correct performance deviations, and be able to draw on all the above mentioned abilities to be an effective problem solver, researcher and communicator.

5. **Behavioral and social attributes.** A student must have the emotional health required for the full use of his or her intellectual ability. A student must be able to exercise sound judgment, and to act ethically and with integrity. He or she must develop mature, sensitive and effective professional relationships with others. A student must be self-motivated, reliable and responsible to complete assigned tasks in a timely manner with no supervision. Students must be able to give attention to detail and have the flexibility to function in a research setting, including adapting to changes in time, place and structure of academic and research settings. The student must have the ability to work with diverse groups.

**NOTE:** Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.

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**Applied Statistics Graduate Certificate**

The Graduate Certificate in Applied Statistics teaches you how to "ask the data" the right questions and find the answers. The program provides focused knowledge in statistical theory with an emphasis on application that allows you to make an immediate impact in your field and realize a more rewarding career.

Upon completion of the Graduate Certificate in Applied Statistics, the student should be prepared to apply many of the common statistical methods to complement his or her every day job duties. Therefore, the student must have a basic understanding of the statistical theory and practice and should be proficient in the application of common statistical methods to one or more areas application. At the completion of the Graduate Certificate in Applied Statistics, the student should be able to:

1. demonstrate a basic knowledge and understanding of the statistical theory and practice as applicable to his or her field.
2. function as a collaborator on a research team.
3. critically evaluate the literature where statistical applications are used.
4. take a leadership role in the implementation of a research project.
5. prepare reports and publications resulting from research studies.
6. serve as an advocate for proper statistical design and interpretation of results in his or her field.

The application for the Applied Statistics Graduate Certificate is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics & Data Science (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

**Admission requirements:**

- A bachelor’s degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.
- Average grade of B or better in calculus I and II (or equivalent) or completion of STAT 655: Foundations of Mathematics for Data Science with a grade of B or better.
- Successful completion of a course in any computer programming language or demonstration of mastery via credentials or work experience.
- Contact information for three references who are familiar with the candidate’s work and character and who have agreed to write letters of recommendation.
- Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.

Applicants will be assessed based on these requirements. Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. [Other years’ catalogs](http://catalog.ku.edu/graduate-studies/kumc/howcertificates/text).

**Certificate Program Information:** (http://catalog.ku.edu/graduate-studies/kumc/howcertificates/text)

No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.
The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

A minimum of 15 post-Bachelor’s degree credit hours are required with a minimum GPA of 3.0 on a 4.0 scale. A typical full-time course plan is listed below for the Certificate in Applied Statistics. It requires 15 credit hours of required coursework:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 820</td>
<td>SAS Programming I or STAT 823 Introduction to Programming and Applied Statistics in R</td>
<td>15</td>
</tr>
<tr>
<td>STAT 840</td>
<td>Linear Regression</td>
<td></td>
</tr>
<tr>
<td>STAT 835</td>
<td>Categorical Data Analysis</td>
<td></td>
</tr>
<tr>
<td>STAT 850</td>
<td>Multivariate Statistics</td>
<td></td>
</tr>
<tr>
<td>STAT 830</td>
<td>Experimental Design</td>
<td></td>
</tr>
<tr>
<td>or STAT 880</td>
<td>Data Mining and Analytics</td>
<td></td>
</tr>
</tbody>
</table>

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 820 or 823</td>
<td>3 STAT 835</td>
<td>3 STAT 830 or 880</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 840</td>
<td>3 STAT 850</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 15

This typical Plan of Study shows the 15 credit hours of required courses to meet the requirement for completion of the Applied Statistics Graduate Certificate program.

Because the Graduate Certificates in Biostatistics, Biostatistical Applications, Applied Statistics, and Applied Data Science signify that the holder is prepared for entry into the practice of biostatistics research, it follows that students awarded the Graduate Certificates must have the knowledge and skills necessary to function in a broad range of academic and research situations. The Technical Standards include those physical, cognitive, and behavioral standards that are required for the satisfactory completion of all aspects of the curriculum and the development of professional attributes required by all students at upon completion of the Graduate Certificate. The following abilities and expectations must be met by all students with or without accommodations admitted to the Certificates:

1. **Observation.** A student must be able to observe and evaluate class demonstrations and field experiences relevant to the field of statistics. He or she must be able to read and comprehend text, numbers, tables and graphs, both in print and displayed electronically. Observation necessitates the functional use of the senses of vision and hearing.

2. **Communication.** A student must be able to communicate effectively and efficiently in English in oral, written, and electronic form with other students, faculty, staff, researchers and the public. Effective communication includes: the ability to understand assigned readings, lectures and technical and professional materials; the ability to analyze information; the ability to present results of such analyses verbally and in writing; the ability to independently prepare papers and presentations; and the ability to follow verbal and written instructions. Use of computers and other technology is imperative to this communication.

3. **Motor.** A student must have sufficient motor function to attend classes, prepare assignments, use electronic media and deliver lectures and public presentations. Class requirements may also include work in a variety of collaborative environments.

4. **Intellectual, conceptual, integrative and quantitative abilities.** A student must possess the ability to understand and read and understand documents written in English, to understand and work with measurements and calculations, and to engage in reasoning, analysis, synthesis and critical thinking. A student must be able to exercise sufficient judgment to recognize and correct performance deviations, and be able to draw on all the above mentioned abilities to be an effective problem solver, researcher and communicator.

5. **Behavioral and social attributes.** A student must have the emotional health required for the full use of his or her intellectual ability. A student must be able to exercise sound judgment, and to act ethically and with integrity. He or she must develop mature, sensitive and effective professional relationships with others. A student must be self-motivated, reliable and responsible to complete assigned tasks in a timely manner with no supervision. Students must be able to give attention to detail and have the flexibility to function in a research setting, including adapting to changes in time, place and structure of academic and research settings. The student must have the ability to work with diverse groups.

**NOTE:** Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.

**Biostatistical Applications Graduate Certificate**

The Graduate Certificate in Biostatistical Applications is awarded to those who have demonstrated specialized knowledge in a scientific field, but not
Admission Requirements:

1. becoming familiar with biostatistical methods in research, business and industry.
2. becoming excellent consumers of the literature where biostatistical applications are utilized.
3. applying many of the common biostatistical methods to compliment his or her every day job duties. Course work in this proposal is designed with this purpose in mind.

The application for the Biostatistical Applications Graduate Certificate is student should be able to:

1. demonstrate a basic knowledge and understanding of the applications of some of the more common biostatistical methods.
2. function as a collaborator on a research team.
3. critically evaluate the literature where biostatistical applications are used.
4. participate in the implementation of a research project.
5. serve as an advocate for proper biostatistical application and interpretation of results in his or her field.

The application for the Biostatistical Applications Graduate Certificate is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics & Data Science (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

Admission Requirements:

• A bachelor's degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

• A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.

• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html).

• A background check (https://www.kumc.edu/academic-and-student-affairs/student-resources/criminal-background-checks-for-students.html) is required during the admission process; it may affect the student's eligibility to enter the program.

• A letter grade of B or better in calculus I (or equivalent), or a quantitative GRE score in the 70th percentile or higher.

• A letter grade B or better in a graduate-level introductory statistics course (e.g., BIOS 717 Fundamentals of Biostatistics II or equivalent.)

Note: Students not meeting this requirement may fulfill the requirement with completion of BIOS 717.

• Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.

Applicants will be assessed based on these requirements.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

Certificate Program Information: (p. 2425)
No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

The Biostatistical Applications Graduate Certificate requirements vary depending on whether the certificate student is currently seeking a post-graduate degree at any of the KU campuses or not. The certificate program consists of a minimum of 12 credit hours of coursework in biostatistical applications.

Certificate requirements:

• Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.

• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.

• Enrollment in a minimum of one (1) credit hour the semester program is completed. Graduate certificates may not be granted retroactively.

• Completion of a minimum of 12 credit hours. Note: A prolonged plan of study will occur for students without the prerequisite graduate-level introductory statistics course prior to enrolling in the certificate program (see Admissions (http://catalog.ku.edu/medicine/biostatistics/statappgradcert/#admissiontext),)

• Current KU post-graduate students must complete four (4) courses from the following list:
Certificate students not currently seeking a KU post-graduate degree must complete the following two (2) courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 715</td>
<td>Introduction to Data Management using RedCap and SAS</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 720</td>
<td>Analysis of Variance</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 725</td>
<td>Applied Nonparametric Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 730</td>
<td>Applied Linear Regression</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 735</td>
<td>Categorical Data and Survival Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 740</td>
<td>Applied Multivariate Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 799</td>
<td>Introduction to Statistical Genomics</td>
<td>3</td>
</tr>
</tbody>
</table>

• Certificate students not currently seeking a KU post-graduate degree must complete two (2) elective courses from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 715</td>
<td>Introduction to Data Management using RedCap and SAS</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 725</td>
<td>Applied Nonparametric Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 730</td>
<td>Applied Linear Regression</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 735</td>
<td>Categorical Data and Survival Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 740</td>
<td>Applied Multivariate Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 799</td>
<td>Introduction to Statistical Genomics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 12

Because the Graduate Certificates in Biostatistics, Biostatistical Applications, Applied Statistics, and Applied Data Science signify that the holder is prepared for entry into the practice of biostatistics research, it follows that students awarded the Graduate Certificates must have the knowledge and skills necessary to function in a broad range of academic and research situations. The Technical Standards include those physical, cognitive and behavioral standards that are required for the satisfactory completion of all aspects of the curriculum and the development of professional attributes required by all students at the time of completion of the Graduate Certificate. The following abilities and expectations must be met by all students with or without accommodations admitted to the Certificates:

1. Observation. A student must be able to observe and evaluate class demonstrations and field experiences relevant to the field of statistics. He or she must be able to learn and comprehend text, numbers, tables and graphs, both in print and displayed electronically. Observation necessitates the functional use of the senses of vision and hearing.

2. Communication. A student must be able to communicate effectively and efficiently in English in oral, written, and electronic form with other students, faculty, staff, researchers, and the public. Effective communication includes: the ability to understand assigned readings, lectures, and technical and professional materials; the ability to analyze information; the ability to present results of such analyses verbally and in writing; the ability to independently prepare papers and presentations; and the ability to follow verbal and written instructions. Use of computers and other technology is imperative to this communication.

3. Motor. A student must have sufficient motor function to attend classes, prepare assignments, use electronic media, and deliver lectures and public presentations. Class requirements may also include work in a variety of collaborative environments.

4. Intellectual, conceptual, integrative and quantitative abilities. A student must possess the ability to understand and read and understand documents written in English, to understand and work with measurements and calculations, and to engage in reasoning, analysis, synthesis and critical thinking. A student must be able to exercise sufficient judgment to recognize and correct performance deviations, and be able to draw on all the above mentioned abilities to be an effective problem solver, researcher, and communicator.

5. Behavioral and social attributes. A student must have the emotional health required for the full use of his or her intellectual ability. A student must be able to exercise sound judgment, and to act ethically and with integrity. He or she must develop mature, sensitive, and effective professional relationships with others. A student must be self-motivated, reliable and responsible to complete assigned tasks in a timely manner with no supervision. Students must be able to give attention to detail and have the flexibility to function in a research setting, including adapting to changes in time, place and structure of academic and research settings. The student must have the ability to work with diverse groups.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodations do not place an undue burden on the University or impair the educational objectives of the University.

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs are available online at: [KU Graduate School](http://www.grad.ku.edu).
accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.

Biostatistics Graduate Certificate

The Biostatistics Graduate Certificate is awarded to those who have demonstrated specialized knowledge in a scientific field, but not to the level required by a postgraduate master’s degree. The certificate program requires individuals to acquire focused knowledge in statistical theory, with an emphasis on application.

Upon completion of the Graduate Certificate in Biostatistics, the student should be prepared to apply many of the common statistical methods to complement his or her every day job duties. Therefore the student must have a basic understanding of the statistical theory and practice and should be proficient in the application of common statistical methods to one or more areas application. At the completion of the Graduate Certificate in Biostatistics the student should be able to:

1. demonstrate a basic knowledge and understanding of the statistical theory and practice as applicable to his or her field.
2. function as a collaborator on a research team.
3. critically evaluate the literature where statistical applications are used.
4. participate in the design and implementation of a research project.
5. assume responsibility for the design and implementation of analyses for a research project.
6. serve as an advocate for proper statistical design and interpretation of results in his or her field.

The application for the Biostatistics Graduate Certificate is an online process. Detailed instructions on how to apply are posted on the Department of Biostatistics & Data Science (http://www.kumc.edu/school-of-medicine/department-of-biostatistics/biostatistics-graduate-program/prospective-students/admissions-procedure.html) website.

Admission Requirements:

- A bachelor's degree from a regionally accredited institution documented by submission of an official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html).
- A background check (https://www.kumc.edu/academic-and-student-affairs/student-resources/criminal-background-checks-for-students.html) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.
- Letter grade of B or better in calculus I – III (or equivalent.)
- Successful completion of at least one of the following courses: linear algebra, differential equations, numerical analysis.
- Successful completion of a course in any computer programming language or demonstration of mastery via credentials or work experience.
- Contact information for three references who are familiar with the applicant’s work and character and who have agreed to write letters of recommendation.
- Students currently enrolled in graduate programs at KUMC or KU must be in good standing (3.0 or higher GPA) and have a letter of approval from their current graduate program director and/or department chair indicating support to enroll in the certificate program.

Applicants will be assessed based on these requirements.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

Certificate Program Information: (p. 2425)

No student may work toward a graduate certificate without being accepted as a graduate certificate student in a specific graduate certificate program. Graduate certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

The Biostatistics Graduate Certificate program consists of a minimum of 15 credit hours of statistical coursework that is comprised of 9 credit hours of required coursework and 6 credit hours of elective coursework.

Certificate requirements:

- Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.
- Enrollment in a minimum of (1) credit hour the semester program is completed. Graduate certificates may not be granted retroactively.
- Completion of a minimum of 15 credit hours.
• Successful completion of the following Biostatistics courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 830</td>
<td>Experimental Design</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 840</td>
<td>Linear Regression</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 871</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

• Successful completion of two (2) elective courses from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 820</td>
<td>SAS Programming I</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 821</td>
<td>SAS Programming II</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 823</td>
<td>Introduction to Programming and Applied Statistics in R</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 825</td>
<td>Nonparametric Methods</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 833</td>
<td>Measurement for Statisticians</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 835</td>
<td>Categorical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 845</td>
<td>Survival Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 850</td>
<td>Multivariate Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 855</td>
<td>Statistical Methods in Genomics Research</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 872</td>
<td>Mathematical Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 880</td>
<td>Data Mining and Analytics</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs–.

**Typical Plan of Study**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIOS 840 (required course)</td>
<td>3</td>
<td>BIOS 830 (required course)</td>
<td>3</td>
<td>Choose elective courses from the following list:</td>
<td>BIOS 821 (elective course)</td>
</tr>
<tr>
<td></td>
<td>BIOS 871 (required course)</td>
<td>3</td>
<td>Choose elective courses from the following list:</td>
<td>BIOS 825 (elective course)</td>
<td>BIOS 823 (elective course)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Choose elective courses from the following list:</td>
<td>BIOS 820 (elective course)</td>
<td>BIOS 845 (elective course)</td>
<td>BIOS 833 (elective course)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOS 835 (elective course)</td>
<td>BIOS 872 (elective course)</td>
<td>BIOS 855 (elective course)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOS 850 (elective course)</td>
<td>BIOS 880 (elective course)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Hours 9</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This Plan of Study shows the 9 credit hours of required courses and shows which semester a specific elective is offered. In addition to the required courses, select two (2) elective courses for a minimum of 6 credit hours in order to meet the 15 credit hour minimum requirement for completion of the Biostatistics Graduate Certificate program.

Because the Graduate Certificates in Biostatistics, Biostatistical Applications, Applied Statistics, and Applied Data Science signify that the holder is prepared for entry into the practice of biostatistics research, it follows that students awarded the Graduate Certificates must have the knowledge and skills necessary to function in a broad range of academic and research situations. The Technical Standards include those physical, cognitive and behavioral standards that are required for the satisfactory completion of all aspects of the curriculum and the development of professional attributes required by all students at upon completion of the Graduate Certificate. The following abilities and expectations must be met by all students with or without accommodations admitted to the Certificates:

1. **Observation.** A student must be able to observe and evaluate class demonstrations and field experiences relevant to the field of statistics. He or she must be able to read and comprehend text, numbers, tables and graphs, both in print and displayed electronically. Observation necessitates the functional use of the senses of vision and hearing.

2. **Communication.** A student must be able to communicate effectively and efficiently in English in oral, written, and electronic form with other students, faculty, staff, researchers, and the public. Effective communication includes: the ability to understand assigned readings, lectures, and technical and professional materials; the ability to analyze information; the ability to present results of such analyses verbally and in writing; the ability to independently prepare papers and presentations; and the ability to follow verbal and written instructions. Use of computers and other technology is imperative to this communication.

3. **Motor.** A student must have sufficient motor function to attend classes, prepare assignments, use electronic media, and deliver lectures and public presentations. Class requirements may also include work in a variety of collaborative environments.

4. **Intellectual, conceptual, integrative and quantitative abilities.** A student must possess the ability to understand and read and understand documents written in English, to understand and work with measurements and calculations, and to engage in reasoning, analysis, synthesis and critical thinking. A student must be able to exercise sufficient judgment to recognize and correct performance deviations, and be able to draw on all the above mentioned abilities to be an effective problem solver, researcher, and communicator.

5. **Behavioral and social attributes.** A student must have the emotional health required for the full use of his or her intellectual ability. A student must be able to exercise sound judgment, and to act ethically and with integrity. He or she must develop mature, sensitive, and effective professional relationships with others. A student must be self-motivated, reliable and responsible to complete assigned tasks in a timely manner with no supervision. Students must be able to give attention to detail and have the flexibility to function in a research setting, including adapting to changes in time, place and structure of academic and research settings. The student must have the ability to work with diverse groups.

**NOTE:** Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the
safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.

Department of Cancer Biology

The Department of Cancer Biology is a recently developed basic science department in the School of Medicine at the University of Kansas Medical Center. The missions of our department are:

1. To build a strong team of basic researchers with a collaborative and translational mindset who will discover fundamental characteristics of cancer cells that can eventually lead to novel therapeutic and preventive approaches which reduce cancer incidence, morbidity and/or mortality;

2. To understand the molecular genetic and epigenetic, biochemical, cellular and physiologic bases of cancer etiology and progression;

3. To understand the interactions between tumor cells and the microenvironments in which they find themselves;

4. To educate the next generation of cancer researchers, clinicians and patients;

5. To apply, as quickly as possible, fundamental research discoveries to patient care.

Our department is funded by grants from the National Cancer Institute, National Institutes of Health, American Cancer Society, Susan G. Komen for the Cure, Department of Defense, V-Foundation, the National Foundation for Cancer Research and from generous donations from patients, family and friends of the KU Cancer Center.

The Department of Cancer Biology is the home department for multi-departmental and institutional MS and PhD graduate programs. Students can choose from any funded graduate faculty member whose lab is doing cancer research in the KU Cancer Center. Details regarding admission and degree requirements for the M.S. (p. 2056) and Ph.D. (p. 2052) programs can be found on their respective catalog pages.

Courses

CBIO 800. Mechanisms of Tumor Development and Progression: Colloquium Format. 3 Credits.

This 3 credit course is offered in the fall semester every year. This course examines the genetic alterations and cellular phenotypes involving cancer development in a practical manner. The course discusses the underlying molecular and biological principles that result from these genetic alterations and the methods/approaches to examine cancer phenotypes. By the end of the course, students should understand how cancer develops and how to design experiments to address different scientific hypotheses. In addition, students are expected to learn key points regarding how to prepare and give scientific presentation. The class will involve two 1.5-hour lecture per week: one consists of didactic lecture by a faculty member and the other is student-led journal club related to the lecture topic. Prerequisite: College level biology.

CBIO 820. Cellular and Molecular Mechanisms of Signal Transduction in Cancer: Colloquium. 2 Credits.

This elective course will be offered in the spring semester every year. This course will be full of discussions on the importance of targeting signaling pathways in cancer through didactic teaching following student led discussion on the topic. The course discusses the underlying responses on signaling mechanisms in different cancers. The major theme is an understanding of how cancer cells receive, transmit and respond to environmental signals. Topics will include different complexity in signal transduction in cancer. There will be a series of lectures on the topics of signal transduction, cell cycle regulation, apoptosis and cancer. Each topic series will be followed immediately by student presentations. The presentations will complement the lectures by providing an overview of a particular topic through the in depth examination of a current research publication.

CBIO 840. Tumor Microenvironment. 2 Credits.

This 2-credit course is offered every other year. This course is designed to achieve two goals. First, to learn about the role of tumor microenvironment in promoting tumor growth, metastasis and response to therapy. Emphasis is given to understand the complex nature of the tumor microenvironment and use examples from specific tumor types to illustrate how the various components of the microenvironment contribute to tumor progression. By the end of the course, students should understand the components of the tumor microenvironment and their effect on the clinical course of the cancer. In addition, they should be able to design experiments to tease out the importance of these components in tumor progression and response to therapy. Secondly, the course is designed to foster higher order thinking in learners, specifically pertaining to the development and application of new theories. The class will involve pre-work and in-class discussion for a total of 3 hours per week. Pre-work including podcast lectures, individual readiness assessment tests, and associated material will be made available to the students on Blackboard two weeks before each in-class session. Prerequisite: Permission of Instructor and College Level Biology.

CBIO 850. Cancer Center Seminar. 1 Credits.

Seminar series covering diverse topics in cancer research.

CBIO 860. Communicating Cancer Science. 1 Credits.

A weekly meeting where research presentations by pre-/post-doctoral fellows will be critiqued for content and presentation skills by peers and faculty.

CBIO 870. Analysis of Scientific Papers. 1 Credits.

Research articles are analyzed by the student with the guidance of an instructor in terms of quality of scientific content and mechanics of the presentation. One or more articles are discussed in each tutorial session. The research topics and the instructor are chosen in accordance with the research interest of the student.

CBIO 880. Advanced Topics in Cancer Research. 1-5 Credits.

Special study allowing a student to pursue a particular subject through readings, specialized laboratory work, writing, or conferences with a faculty member. Prerequisite: Consent of instructor.

CBIO 890. Master’s Research in Cancer Biology. 1-10 Credits.

This course is designated for research leading to the master's degree. Independent laboratory investigation approved by and under the supervision of the student's advisor, and in partial fulfillment of the requirements for the M.S. degree. Prerequisite: Consent of advisor.

CBIO 899. Master’s Thesis in Cancer Biology. 1-10 Credits.

This course is designated for thesis writing leading to a master's degree in Cancer Biology. The student prepares the formal thesis based upon independent research and in partial fulfillment of the requirements for the M.S. degree. The final defense of the thesis is scheduled only after the written thesis has been accepted by the student's thesis committee. Prerequisite: Consent of advisor.

CBIO 900. Carcinogenesis and Cancer Biology. 3 Credits.
This is a semester long course that presents a survey of core topics in cancer biology and builds upon core IGPBS courses. The survey includes topics of etiology, genetics, signaling, biochemistry, tumor progression, metastasis, major treatment modalities and overviews of major cancer types. Students are assessed based upon class participation, presentations and examinations. Prerequisite: Completion of GSMC 850, GSMC 851, GSMC 853 and GSMC 854 or the equivalent or permission of instructor.

CBIO 990. Research for Ph.D. in Cancer Biology. 1-15 Credits.
Original and independent laboratory investigation, approved by and conducted under the supervision of the student's advisor and advisory committee, in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Consent of advisor.

CBIO 999. Dissertation for Ph.D. in Cancer Biology. 1-10 Credits.
This course is designated for dissertation writing leading to a Ph.D. degree in Cancer Biology. The student prepares the formal dissertation based upon independent research and in partial fulfillment of the requirements for the Ph.D. degree. The final defense of the dissertation is scheduled only after the written dissertation has been accepted by the student's thesis committee. Prerequisite: Consent of advisor.

Doctor of Philosophy of Cancer Biology

The Ph.D. program in Cancer Biology (CBIO) prepares the student for a career in independent research and/or teaching. The Ph.D. is typically followed by postdoctoral training in a specific field of study. Graduates of this program will be prepared for positions in industry, government, and consulting, as well as faculty positions at the college, university, and medical/graduate school level. Students mentored by CBIO faculty currently hold positions in academia, biotechnology, pharmacology, government, and scientific writing.

Students that obtain a Ph.D. in Cancer Biology are required to achieve the following expectations:

- Become knowledgeable in the areas of study included in the IGPBS (p. 2114) (Interdisciplinary Graduate Program in the Biomedical Sciences) core curriculum;
- Obtain in-depth and up-to-date expertise in a specialized area of knowledge that is appropriate for the field of your dissertation research project;
- Make original, high quality and publishable contributions to the scientific literature in your chosen research field;
- Become familiar with the scientific literature through general and specialized journals in biological research, and to develop the ability to critically evaluate the original research in your own and related fields;
- Become skilled in organizing and communicating information in oral presentations, and to respond to critical questioning;
- Develop clarity, conciseness, and precision in writing, to aid in grant application writing and publication of your original research results;
- To learn how to ask incisive scientific questions and gain experience in the design, performance and interpretation of laboratory experiments and observations;
- To gain familiarity with the preparation and writing of grant applications. (It is expected that all CBIO students identify available fellowship opportunities and apply as appropriate.)
- To prepare for the teaching as well as the research aspects of an academic career.
- To obtain instruction in research skills and responsible scholarship.

The faculty in this program have diverse research interests ranging from genetics/genomics, signaling (including, regulatory RNA, cell cycle, hormonal regulation of cancers), tumor-host interactions in carcinogenesis and metastasis, tumor immunology, preclinical research, pharmacology and drug resistance. The curriculum is flexible enough to allow students to pursue areas of special interest while maintaining breadth and rigor of cancer biology knowledge.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (https://catalog.ku.edu/medicine/graduate-program-biomedical-sciences/) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpibs/how-to-apply.html.

Admission Requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html).
- A background check (https://catalog.ku.edu/graduate-studies/kumc/#BackgroundCheck) is required during the admission process; it may affect the student’s eligibility to enter the program.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, and research experience. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

The CBIO program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research
Degree requirements:

- Degree requirements are normally completed within 4 to 6 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of GSMC 857 Biographics, GSMC 852 Introduction to Biomedical Research I and GSMC 855 Introduction to Biomedical Research II (or equivalent) meets the Research Skills requirement.
  - Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p. 2421) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
- Successful completion of the Oral Comprehensive Examination (p. 2421). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination. For this examination, students must: exhibit the potential for original scientific thought; be familiar with the relevant literature and be able to identify significant research questions in their field; have a good understanding of the underlying principles of the experimental methodologies proposed; show an ability to critically analyze data and to anticipate experimental outcomes; and, have a good fund of knowledge of cancer biology and be proficient in the 2-3 core areas most closely related to their dissertation research.
- Successful completion of the Post-Comprehensive Enrollment (p. 2422) requirement.
- Enrollment in a minimum of one (1) credit hour of CBIO 999 Dissertation for Ph.D. in Cancer Biology the semester the student will defend dissertation and graduate.
- Successful completion of the Final Oral Examination (p. 2422) (dissertation defense). The dissertation should be comparable in scope to justify co-authorship on a rigorously peer-reviewed manuscript. Students qualifying for a CBIO PhD degree must have at least one accepted first-author peer-reviewed research publication at the time of defense and a second submitted first author publication. The Student’s Advisory Committee can petition the CBIO Director and Graduate Advisory Committee for a waiver of these requirements if the scope and impact of the first author published report is deemed of sufficient merit (such a waiver is expected to be an exception, not commonplace). The Student’s Advisory Committee can also petition the CBIO Director and Graduate Advisory Committee for a waiver if the student’s work is deemed of sufficient merit to warrant acceptance in a scientific journal, even if it has not yet been accepted at the time of the student’s dissertation defense.
- Successful Dissertation Submission and Publication (p. 2423) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (http://catalog.ku.edu/medicine/graduate-program-biomedical-sciences/) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>
- Successful completion of the following Cancer Biology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIO 800</td>
<td>Mechanisms of Tumor Development and Progression: Colloquium Format</td>
<td>3</td>
</tr>
<tr>
<td>CBIO 840</td>
<td>Tumor Microenvironment</td>
<td>2</td>
</tr>
<tr>
<td>CBIO 850</td>
<td>Cancer Center Seminar (Fall and Spring Years 2-3 and Fall Year 4)</td>
<td>1</td>
</tr>
<tr>
<td>CBIO 860</td>
<td>Communicating Cancer Science (Fall and Spring Years 2-3 and Fall Year 4)</td>
<td>1</td>
</tr>
<tr>
<td>CBIO 870</td>
<td>Analysis of Scientific Papers</td>
<td>1</td>
</tr>
<tr>
<td>CBIO 900</td>
<td>Carcinogenesis and Cancer Biology</td>
<td>3</td>
</tr>
<tr>
<td>CBIO 990</td>
<td>Research for Ph.D. in Cancer Biology</td>
<td>1-15</td>
</tr>
<tr>
<td>CBIO 999</td>
<td>Dissertation for Ph.D. in Cancer Biology</td>
<td>1-10</td>
</tr>
</tbody>
</table>
- Successful completion of PATH 913 Introduction to Grant Proposal Writing.
- Successful completion of a course in fundamentals of biostatistics and/or informatics approved by the student’s Academic Advisor and Graduate Director.
- Successful completion of advanced elective coursework as determined in consultation with the student’s advisor. Electives may be chosen from this list but are not limited to:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIO 820</td>
<td>Cellular and Molecular Mechanisms of Signal Transduction in Cancer: Colloquium</td>
<td>2</td>
</tr>
<tr>
<td>CBIO 880</td>
<td>Advanced Topics in Cancer Research</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Other Department courses:

- ANAT 845 | Graduate Histology                              | 3     |
- ANAT 868 | Advanced Developmental Biology                  | 2     |
- BCHM 808 | Methods for Analyzing Biomolecules              | 3     |
- BCHM 922 | Advanced Molecular Genetics                     | 3     |
- BCHM 923 | Protein Structure and Function                  | 3     |
- BIOS 714 | Fundamentals of Biostatistics I                | 3     |
- BIOS 717 | Fundamentals of Biostatistics II               | 3     |
- DN 884  | Diet, Physical Activity & Cancer                | 3     |
- MICR 805 | Teaching in Higher Education                    | 3     |
- MICR 808 | Immunology                                      | 3     |
- PATH 803 | Stem Cell Biology                               | 2     |
- PATH 804 | Selected Topics in Signal Transduction         | 1     |
PATH 806 Epigenetics 2
PHCL 761 General Principles of Pharmacology 1
PHCL 765 Chemotherapy 1
PHSL 843 Physiology of Disease 3

- Continued attendance at the KUCC seminar (minimum 75% required determined by sign-in) in both the Fall and Spring semesters after completing 5 semesters of CBIO 850 Cancer Center Seminar.
- Annual presentation and continued attendance at Communicating Cancer Science in both the Fall and Spring semesters after completing 5 semesters of CBIO 860 Communicating Cancer Science.
- Presentation at a regional/national/international meeting at least once prior to final dissertation defense.
- Annual participation and/or attendance at the KU Medical Center Student Research Forum.
- Annual participation and/or attendance at the KU Cancer Center Research Retreats.

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. *Other years' catalogs*.  

**Typical Plan of Study**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>Select course in Biostatistics or Informatics in consultation with the student’s advisor.</td>
<td>1-3</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
<td>2</td>
<td></td>
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</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
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<tr>
<td>GSMC 857</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>GSMC 858</td>
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<td>1</td>
<td></td>
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<tr>
<td></td>
<td><strong>10-13</strong></td>
<td><strong>7-10</strong></td>
<td><strong>2-7</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBIO 850</td>
<td>1</td>
<td>CBIO 800</td>
<td>3</td>
<td>CBIO 990</td>
<td>1-10</td>
</tr>
<tr>
<td>CBIO 860 (one presentation annually Fall or Spring)</td>
<td>1</td>
<td>CBIO 850</td>
<td>1 Elective</td>
<td>1-3</td>
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<th>Year 3</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<tr>
<td>CBIO 840</td>
<td>2</td>
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<td>2</td>
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<td>1-10</td>
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<td>(alternating years)</td>
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<td>CBIO 850</td>
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<tr>
<td>CBIO 860 (one presentation annually Fall or Spring)</td>
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<td>CBIO 860 (one presentation annually Fall or Spring)</td>
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<tr>
<td>CBIO 870</td>
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<td>CBIO 870</td>
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<td>1-10</td>
<td>CBIO 990</td>
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<td>Elective</td>
<td>1-3</td>
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<tr>
<td></td>
<td><strong>8-19</strong></td>
<td><strong>8-17</strong></td>
<td><strong>2-13</strong></td>
<td>Annual participation and/or attendance in KUMC Student Research Forum.</td>
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<tr>
<th>Year 4</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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<tr>
<td>CBIO 850</td>
<td>1</td>
<td>CBIO 990</td>
<td>1-10</td>
<td>CBIO 990 or 990</td>
<td>1-10</td>
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</tbody>
</table>

1 Oral Comprehensive Exam may be scheduled as early as this semester if approved by committee to proceed.

CBIO 900 3 CBIO 870 1
CBIO 990 1-10 CBIO 990 1-10
Elective 1-3 PATH 913 1

Annual participation and/or attendance in the KU Cancer Center Research Retreats.

Annual participation and/or attendance in the KU Cancer Center Research Retreats.

8-19 8-17 2-13

Annual participation and/or attendance in the KU Cancer Center Research Retreats.

Annual participation and/or attendance in the KU Cancer Center Research Retreats.

7-18 6-15 1-10

Annual participation and/or attendance in the KU Cancer Center Research Retreats.

7-18 6-15 1-10
| CBIO 860 (one presentation annually Fall or Spring) | 1 Continued attendance KUCC seminar. | Final Oral Exam (dissertation defense) may be scheduled as early as this semester if approved by committee to defend and graduate. |
| CBIO 870 | 1 Annual presentation (Fall or Spring) Communicating Cancer Science. |
| CBIO 990 | 1-10 Annual participation and/or attendance in KUMC Student Research Forum. |

Annual participation and/or attendance in the KU Cancer Center Research Retreats.

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<th>4-13</th>
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**Year 5**

<table>
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<tr>
<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>CBIO 999</td>
<td>1-10 CBIO 999</td>
<td>1-10</td>
<td></td>
</tr>
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</table>

Continued attendance KUCC seminar.

Annual presentation (Fall or Spring) Communicating Cancer Science.

Annual participation and/or attendance in the KU Cancer Center Research Retreats.

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<th>1-10</th>
<th>1-10</th>
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</table>

**Total Hours 59-175**

**TECHNICAL STANDARDS AND REQUIREMENTS FOR THE PH.D. IN CANCER BIOLOGY**

The Ph.D. degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. It follows that graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory. Therefore all students admitted must meet the following abilities and expectations.

1. **Observation:** The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. **Communication:** A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

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4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities:** The abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. **Behavioral and Social Attributes:** A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

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For further information, contact the Department of Cancer Biology, University of Kansas School of Medicine, 2003 Wahl Hall West, 3901 Rainbow Blvd., Kansas City, Kansas 66160 (Phone: (913) 945-7739 E-mail: cancerbiology@kumc.edu)

**STUDENT POLICY ON INFECTIOUS DISEASE**

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for academic program admission at the University of Kansas Medical Center. Determination of eligibility for admission in such cases will be made on an individual basis in consultation with the applicant’s physician, taking into consideration (among other factors), legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of their medical condition.
this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

**DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS**

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

### Master of Science in Cancer Biology

The Master of Science (M.S.) program in Cancer Biology prepares the student for a career at the advanced technical level in academia, industry, or government. Graduating students may also find teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website: [http://www.kumc.edu/igpbs/how-to-apply.html](http://www.kumc.edu/igpbs/how-to-apply.html).

**Admission Requirements:**

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the English Proficiency Requirement ([https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html](https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html)).

- A background check ([https://catalog.ku.edu/graduate-studies/kumc/#BackgroundCheck](https://catalog.ku.edu/graduate-studies/kumc/#BackgroundCheck)) is required during the admission process; it may affect the student’s eligibility to enter the program.

- Three letters of recommendation.

- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics

- Research experience (beyond labs associated with lecture courses) is strongly suggested.

Applicants will be assessed based on a combination of GPA, and research experience. Students not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. [Other years’ catalogs.](https://catalog.ku.edu/graduate-studies/)

The Master of Science (M.S.) program in Cancer Biology prepares the student for a career at the advanced technical level in academia, industry, or government.

**Degree requirements:**

- Degree requirements are normally completed within 3 years of admission to the program although a maximum of 7 years is allowed.

- Completion of a minimum of 30 credit hours.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Enrollment in a minimum of one (1) credit hour of CBIO 899 Master’s Thesis in Cancer Biology the semester the student will defend the thesis and graduate.

- Successful completion of the thesis defense (p. 2417) or general examination the semester the student will graduate. The thesis should be comparable in scope to justify co-authorship on a rigorously peer-reviewed manuscript. In general, CBIO students graduating with an MS degree should have justified co-authorship on at least one peer-reviewed publication (as determined by their thesis advisory committee).

- Successful Thesis Submission and Publication (p. 2417) (according to Office of Graduate Studies policy.)

- Successful completion of the following Cancer Biology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CBIO 800</td>
<td>Mechanisms of Tumor Development and Progression: Colloquium Format</td>
<td>3</td>
</tr>
<tr>
<td>CBIO 840</td>
<td>Tumor Microenvironment</td>
<td>2</td>
</tr>
<tr>
<td>CBIO 850</td>
<td>Cancer Center Seminar</td>
<td>1</td>
</tr>
<tr>
<td>CBIO 860</td>
<td>Communicating Cancer Science</td>
<td>1</td>
</tr>
<tr>
<td>CBIO 870</td>
<td>Analysis of Scientific Papers</td>
<td>1</td>
</tr>
<tr>
<td>CBIO 890</td>
<td>Master’s Research in Cancer Biology</td>
<td>1-10</td>
</tr>
<tr>
<td>CBIO 899</td>
<td>Master’s Thesis in Cancer Biology</td>
<td>1-10</td>
</tr>
<tr>
<td>CBIO 900</td>
<td>Carcinogenesis and Cancer Biology</td>
<td>3</td>
</tr>
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</table>

- Successful completion of **PATH 913 Introduction to Grant Proposal Writing.**
• Successful completion of advanced elective coursework as determined in consultation with the student's advisor. Electives may be chosen from this list but are not limited to:

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>CBIO 820</td>
<td>Cellular and Molecular Mechanisms of Signal Transduction in Cancer: Colloquium</td>
<td>2</td>
</tr>
<tr>
<td>CBIO 880</td>
<td>Advanced Topics in Cancer Research</td>
<td>1-5</td>
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Other Department courses

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<tr>
<td>ANAT 845</td>
<td>Graduate Histology</td>
<td>3</td>
</tr>
<tr>
<td>ANAT 868</td>
<td>Advanced Developmental Biology</td>
<td>2</td>
</tr>
<tr>
<td>BCHM 808</td>
<td>Methods for Analyzing Biomolecules</td>
<td>3</td>
</tr>
<tr>
<td>BCHM 922</td>
<td>Advanced Molecular Genetics</td>
<td>3</td>
</tr>
<tr>
<td>BCHM 923</td>
<td>Protein Structure and Function</td>
<td>3</td>
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<tr>
<td>BIOS 714</td>
<td>Fundamentals of Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td>BIOS 717</td>
<td>Fundamentals of Biostatistics II</td>
<td>3</td>
</tr>
<tr>
<td>DN 884</td>
<td>Diet, Physical Activity &amp; Cancer</td>
<td>3</td>
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<tr>
<td>MICR 805</td>
<td>Teaching in Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>MICR 808</td>
<td>Immunology</td>
<td>3</td>
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<tr>
<td>PATH 803</td>
<td>Stem Cell Biology</td>
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<tr>
<td>PATH 804</td>
<td>Selected Topics in Signal Transduction</td>
<td>1</td>
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<tr>
<td>PATH 806</td>
<td>Epigenetics</td>
<td>2</td>
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<tr>
<td>PHCL 761</td>
<td>General Principles of Pharmacology</td>
<td>1</td>
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<tr>
<td>PHCL 765</td>
<td>Chemotherapy</td>
<td>1</td>
</tr>
<tr>
<td>PHSL 843</td>
<td>Physiology of Disease</td>
<td>3</td>
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Course in fundamentals of biostatistics and/or informatics.

• Continued attendance at the KUCC seminar (minimum 75% required determined by sign-in) in both the Fall and Spring semesters after completing 5 semesters of CBIO 850 Cancer Center Seminar.

• Annual presentation and continued attendance at Communicating Cancer Science in both the Fall and Spring semesters after completing 5 semesters of CBIO 860 Communicating Cancer Science.

• Annual participation and/or attendance at the KU Cancer Center Research Retreats.

• Annual participation and/or attendance at the KU Medical Center Student Research Forum.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».  

### Typical Plan of Study

#### Year 1

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<thead>
<tr>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
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#### Year 2

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<th>Hours</th>
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<th>Hours</th>
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<tr>
<td>CBIO 900</td>
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<td>CBIO 800</td>
<td>3</td>
<td>CBIO 890</td>
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<tr>
<td>CBIO 850</td>
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#### Year 3

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<tr>
<td>CBIO 840</td>
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<td>CBIO 820</td>
<td>2</td>
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<td>8-19</td>
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<td>CBIO 899</td>
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</tbody>
</table>

Elective 1-3 Annual participation and/or attendance in KUMC Student Research Forum.
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**Department of History and Philosophy of Medicine**

**The Programs and Mission**

The Department of History and Philosophy of Medicine consists of four major units: the Academic Programs, the Clendening Library, the Clendening Museum, and the KU Medical Center Archives. The Department unites these programs in its mission to advance understanding and application of ethical, historical and social analysis of health, medicine and healing.

Using the combined resources of the department we strive to teach students and colleagues how historical and social factors influence health and health care; and we inform our teaching through scholarship in the history and philosophy of medicine that merits national recognition.

The Library, Archives, and Museum act as careful stewards of the extensive historical collections and promote their use and appreciation; while seeking to add some color to the often drab aesthetic of medical practice.

Finally, through our ethics programs we seek to deepen a moral appreciation of medicine’s role in healing through ethics education and
scholarship in the medical school and ethics consultation in the University of Kansas Hospital.

Explore our featured resources:

- University of Kansas Medical Center Archives (http://www.kumc.edu/school-of-medicine/history-and-philosophy-of-medicine/kumc-archives.html)

Although no graduate program is offered in this area, HPMD course work may be taken for graduate credit. Graduate level courses taught by History and Philosophy Medicine faculty are available through the Department of History and Philosophy of Medicine, and Department of Population Health on the medical center campus and the Department of History on the Lawrence campus.

Courses

H&PM 853. Responsible Conduct of Research. 1 Credits.
The purpose of this course is to engage research trainees in reading about, considering, and discussing the responsible conduct of science. The course is designed as an option for meeting current federal regulations, which require that all NIH training grants provide training in the responsible conduct of research. This course provides a concise overview of key subject areas in the responsible conduct of research. It is designed to make students aware of relevant guidelines, policies and codes relating to ethical research, as well as to provide the skills for identifying and resolving ethical conflicts that may arise in research. Cross-linked with PRVM 853.

Department of Microbiology, Molecular Genetics, and Immunology

The mission of the Department of Microbiology, Molecular Genetics and Immunology is to conduct high impact research that is relevant to human health and train the next generation of biomedical scientists and physicians who will advance our understanding of infection and immunity in ways that benefit humankind.

Our nationally recognized research programs, highly supported by NIH research funding (http://www.brimr.org/NIH_Awards/2010/NIH_Awards_2010.htm), cover a variety of topics within the following themes:

- microbial physiology and pathogenesis
- virology
- immunology and host defense

Funding also provides support for pre- and postdoctoral trainees and visiting scientists, as well as for hosting national and international researchers in the Microbiology seminar series.

Courses

MICR 801. Principles of Immunology. 1 Credits.
An introductory course in immunology; cells and tissues of the immune system; B and T cells and their receptors; major histocompatibility complex; antigen presentation; regulation of immune responses; immunity and vaccination. Prerequisite: IGPBS courses or permission of instructor.

MICR 802. Principles of Virology. 1 Credits.
An introductory course in virology; replication of RNA and DNA viruses; viral RNA processing and translation; reverse transcription; virus assembly; viral pathogenesis; viruses as vectors. Prerequisite: MICR 801 or permission of instructor.

MICR 803. Principles of Bacterial Genetics and Pathogenesis. 1 Credits.
An introductory course in bacteriology; cell structure and function; chromosome and plasmid replication; genetic engineering; bacteriophage; gene regulation; quorum sensing; antibiotics; protein secretion; bacterial pathogenesis. Prerequisite: MICR 801 & MICR 802 or permission of instructor.

MICR 804. Science Communication. 1 Credits.
MICR 804. Science Communication. This 1-credit course is designed for students pursuing a graduate degree (PhD or MS) in a biomedical field. This course seeks to provide students with not just experience, but training in science communication, including both oral presentations and written communication. The goal of the course is to equip students with techniques and experience communicating to fellow scientists and non-science audiences, thus better equipping students with key skills necessary for a future in science regardless of career path. Prerequisite: An introductory course in biology, genetics, chemistry or biochemistry.

MICR 805. Teaching in Higher Education. 3 Credits.
Theoretical and practical aspects of teaching in a graduate degree program with emphasis on program and curriculum design, student assessment, communicating learning expectations, selecting optimal teaching methods aligned with expectations, understanding diverse learning styles, apprenticeship teaching, developing as a teacher and applying contemporary educational theory to the classroom or research laboratory. Prerequisite: Any graduate degree or current enrollment in a graduate degree program or permission of instructor.

MICR 808. Immunology. 3 Credits.
Molecular and cellular aspects of immunity. Specific topics will include immunoglobulin and receptor structure/function, attributes of antigenicity, antigen-antibody reactions, immunocompetent cells, cellular interactions, soluble mediators of immune responses and normal and abnormal immune regulation. Prerequisite: Permission of course director.

MICR 809. Tumor Immunology. 3 Credits.
Immune system and tumor growth; tumor immunotherapy. Analysis and applications of experimental systems and discussion of contemporary as well as classical primary literature in the field. Collaborative learning and communication skills emphasized. Prerequisite: IGPBS core curriculum or equivalent, or permission of instructor.

MICR 810. Fundamentals of Immunology. 2 Credits.
Immune cells and soluble mediators of the innate and adaptive systems, antigen and pattern recognition, lymphocyte development and activation, immune effector mechanisms, mechanisms of immune-based diseases. Analysis and applications of experimental systems and discussion of contemporary as well as classical primary literature in
the field. Collaborative learning and communication skills emphasized. Prerequisite: Introductory course work in cell and molecular biology; biochemistry and genetics.

MICR 811. Molecular Genetics of Bacteria and Phages. 2 Credits. This 2-credit course is designed for students pursuing a graduate degree in a biomedical field. The goal of the course is to introduce the fundamental concepts of modern microbial genetics and to expose the students to commonly used experimental procedures in microbial and molecular genetics. Students will study both textbook and literature sources and will learn to apply research methods to understand the problems associated with the bacterial physiology and genetics. Active learning approaches in the classroom will require that students work collaboratively with others. Both written and oral communication will be emphasized as important learning outcomes in this course. Prerequisite: An introductory course in biology, genetics, chemistry or biochemistry.

MICR 812. Molecular Virology and Pathogenesis. 2 Credits. This Virology course is aimed at graduate students who are pursuing a graduate degree in a biomedical field. It provides a contemporary understanding of how viruses are built, how they infect and replicate in host cells, how they spread and evolve, how they interact with host cells, how they eventually cause diseases, and how infection of a host can be prevented. Prerequisite: Introductory course work in cell and molecular biology, biochemistry and genetics.

MICR 820. Bacterial Genetics and Pathogenesis. 3 Credits. Genetics of bacteria with emphasis on bacterial pathogens. Topics include: gene regulation, recombination, bacteriophages, transposons, genetic exchange, plasmids, genetics of virulence, bacterial adherence and colonization, immune evasion mechanisms, bacterial toxins, vaccines and antimicrobials, re-emerging bacterial diseases. Prerequisite: Introductory course work in cell and molecular biology, biochemistry and genetics.

 MICR 825. Virology. 3 Credits. Molecular biology of animal viruses. Aspects of various virus groups to be covered include structure, replication, and host cell responses. Lectures and student seminars. Prerequisite: Permission of the course director.

MICR 826. Oncogenesis Associated with Viral Infections. 3 Credits. The course is designed primarily for students pursuing a graduate degree in a biomedical field. The course will evaluate current understanding of the various mechanisms that mediate carcinogenesis that is linked to viral infections. It will also consider strategies of circumventing virus infections as a potential way of preventing the development of tumors. Prerequisites: Course MICR 812 or permission of instructor.

MICR 830. Seminar in Microbiology. 1 Credits. Reports on research and literature.

MICR 835. Research in Microbiology. 1-6 Credits. This course is specifically designed to provide supervised research experience in various laboratories in the department.

MICR 855. Host-Pathogen Interactions. 3 Credits. Concepts of host-pathogen interactions, with an emphasis on how pathogens interact with the innate immune system. Course is primary literature-based with a body system organized approach covering niche-specific immune factors and how pathogens circumvent these systems. Prerequisite: MICR 810 and one of two Fundamentals Courses (MICR 811 or 812) or permission of course director.

MICR 890. Master’s Research in Microbiology. 1-10 Credits. This course is designated for research leading to the master's degree.

MICR 899. Master's Thesis in Microbiology. 1-10 Credits. This course is designated for thesis writing leading to a master's degree in Microbiology.

MICR 930. Advanced Topics in Microbiology. 1-8 Credits. An advanced approach to selected topics in any of the major disciplines in microbiology. Readings and conferences, or advanced laboratory techniques.

MICR 990. Research for Ph.D. in Microbiology. 1-10 Credits. This course is restricted entirely to dissertation research.

MICR 999. Dissertation for Ph.D. in Microbiology. 1-10 Credits. Restricted to actual writing of dissertation.

Master of Science in Microbiology

M.S. degrees may be earned with a major emphasis in bacteriology, virology or immunology. M.S. program is designed to prepare for a diverse workforce of scientists, teachers and administrators who fill the broad science and engineering employment needs of the private and government sectors. It may also lead to teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:

• Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

• A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.

• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).

• A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.

• An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.

• Three letters of recommendation.

• Prerequisite coursework:
  • One year of general chemistry
  • One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  • One year of biological sciences
  • One semester of calculus
  • One semester of physics

• Research experience (beyond labs associated with lecture courses) is strongly suggested.

• Interview - the most qualified applicants will receive an invitation for an interview.
Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. *Other years' catalogs*.

**Degree Requirements:**
- Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.
- Completion of a minimum of 30 credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of either a thesis defense or general examination (p. 2417) the semester the student will graduate.
- If thesis option chosen, then enrollment in a minimum of one (1) credit hour of MICR 899 Master's Thesis in Microbiology and successful thesis submission and publication (p. 2417) (according to Office of Graduate Studies policy.)

Successful completion of the following Microbiology courses:
- Fundamentals of Immunology 2
- Molecular Genetics of Bacteria and Phages 2
- Molecular Virology and Pathogenesis 2
- Master's Research in Microbiology 1-10
- Master's Thesis in Microbiology (if thesis option chosen) 2

Successful completion of additional elective coursework as determined in consultation with the student's advisor or research committee. Electives may include the Microbiology courses listed below or courses from other departments.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. *Other years' catalogs*.

**Typical Plan of Study**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td></td>
<td>2 GSMC 853</td>
<td></td>
<td>2 GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 851</td>
<td></td>
<td>2 GSMC 854</td>
<td></td>
<td>2 May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>GSMC 852</td>
<td></td>
<td>2 GSMC 855</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 857</td>
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<td></td>
<td></td>
<td></td>
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</tr>
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<td>GSMC 858</td>
<td></td>
<td></td>
<td>1-4</td>
<td></td>
<td></td>
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<tr>
<td>GSMC 859</td>
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<tr>
<td></td>
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<td>2-7</td>
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<tr>
<td></td>
<td>19-30</td>
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**Total Hours 19-30**

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 810</td>
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<td>MICR 890</td>
<td>1-6</td>
<td>MICR 890</td>
<td>1-3</td>
</tr>
<tr>
<td>MICR 811</td>
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<td>MICR 812</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<td>MICR 890</td>
<td>1-6</td>
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<td></td>
<td>7-12</td>
<td></td>
<td>1-6</td>
<td></td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 899 or 890</td>
<td>1-6</td>
<td>MICR 899 or 890</td>
<td></td>
<td>1-6 MICR 899 or 890</td>
<td>1-3</td>
</tr>
<tr>
<td>MICR 899 if thesis option chosen, otherwise MICR 890</td>
<td>1-6</td>
<td>MICR 899 if thesis option chosen, otherwise MICR 890</td>
<td>1-6</td>
<td>MICR 899 if thesis option chosen, otherwise MICR 890</td>
<td>1-3</td>
</tr>
</tbody>
</table>
Thesis defense or general examination scheduled semester approved by committee to graduate.

Total Hours 12-36

TECHNICAL STANDARDS AND REQUIREMENTS FOR THE MICROBIOLOGY GRADUATE PROGRAM

The M.S. degree signifies that the holder is prepared for entry into research in industrial or academic laboratory settings. To that end, graduates must have the knowledge and skills to function in a broad variety of laboratory settings. Therefore all students admitted for graduate study must meet the following abilities and expectations.

1. Observation: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. Communication: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. Motor: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. Intellectual-Conceptual, Integrative, and Quantitative Abilities: The abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student's difficulties. At this review the provisions for reasonable accommodation will be determined.

For further information, contact the Microbiology Graduate Program, University of Kansas Medical Center, 3025 Wahl Hall West, 3901 Rainbow Blvd., Kansas City, Kansas 66160. Phone: (913) 588-7099; Fax: (913) 588-7295; E-mail: micrograd@kumc.edu.

STUDENT POLICY ON INFECTIOUS DISEASE

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for academic program admission at the University of Kansas Medical Center. Determination of eligibility for admission in such cases will be made on an individual basis in consultation with the applicant's physician, taking into consideration (among other factors), legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

Doctor of Philosophy in Microbiology

A Ph.D. is required for careers in independent academic research in microbiology and immunology. The Ph.D. degree is most often followed by two or more years of postdoctoral training in a specific area of research. Ph.D. graduates in microbiology, with appropriate postdoctoral experience, are ready to compete effectively for faculty positions at a college or university, senior level positions in biotech industry and government.

The faculty in this program have diverse research interests ranging from the molecular pathogenesis of infectious agents (bacteria and viruses) to the understanding of immune function. Students with undergraduate degrees in microbiology, biochemistry or other similar disciplines are encouraged to apply.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:

• Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
- Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree requirements:

- Degree requirements are normally completed within 5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of GSMC 857 Biographics, GSMC 852 Introduction to Biomedical Research I and GSMC 855 Introduction to Biomedical Research II (or equivalent) meets the Research Skills requirement.
  - Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
  - Successful completion of the Residence Requirement (p. ) prior to the semester the Oral Comprehensive Examination is scheduled.

The requirement is met by enrollment in full-time status a minimum of two semesters.

- Successful completion of the Oral Comprehensive Examination (p. 2421). After completing GSMC courses and two full semesters in the department, students start their comprehensive exam. The exam is an NIH F31 Fellowship style that provides maximum flexibility by allowing the topic to be on the student's research topic, closely related or off-topic. A pre-proposal allows the committee to provide guidance before submission of the final written comprehensive exam. Finally, there is an oral defense of the proposal. The goal is to accomplish all of this within five months. Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

- Successful completion of the Post-Comprehensive Enrollment (p. 2422) requirement.

- Enrollment in a minimum of one (1) credit hour of MICR 999 Dissertation for Ph.D. in Microbiology the semester the student will defend dissertation and graduate.

- Successful completion of the Final Oral Examination (p. 2422) (dissertation defense.) The doctoral candidate prepares a written dissertation detailing the results of their original research.

- Successful Dissertation Submission and Publication (p. 2423) (according to Office of Graduate Studies policy.)

- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research (Direct admits do not take this course.)</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following Microbiology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 810</td>
<td>Fundamentals of Immunology</td>
<td>2</td>
</tr>
<tr>
<td>MICR 811</td>
<td>Molecular Genetics of Bacteria and Phages</td>
<td>2</td>
</tr>
<tr>
<td>MICR 812</td>
<td>Molecular Virology and Pathogenesis</td>
<td>2</td>
</tr>
</tbody>
</table>

Take the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 830</td>
<td>Seminar in Microbiology</td>
<td>1</td>
</tr>
<tr>
<td>MICR 835</td>
<td>Research in Microbiology</td>
<td>1-6</td>
</tr>
<tr>
<td>MICR 990</td>
<td>Research for Ph.D. in Microbiology</td>
<td>1-10</td>
</tr>
<tr>
<td>MICR 999</td>
<td>Dissertation for Ph.D. in Microbiology</td>
<td>1-10</td>
</tr>
</tbody>
</table>

- Successful completion of two of the following elective courses; one must be an advanced course in the student's research area. Courses are selected in consultation with the student's advisor. One of these courses must be completed prior to scheduling the oral comprehensive exam.
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 808</td>
<td>Immunology (offered Spring only)</td>
<td>3</td>
</tr>
<tr>
<td>MICR 809</td>
<td>Tumor Immunology (offered Spring only)</td>
<td>3</td>
</tr>
<tr>
<td>MICR 820</td>
<td>Bacterial Genetics and Pathogenesis (offered Spring only)</td>
<td>3</td>
</tr>
<tr>
<td>MICR 825</td>
<td>Virology (offered Spring only)</td>
<td>3</td>
</tr>
<tr>
<td>MICR 826</td>
<td>Oncogenesis Associated with Viral Infections</td>
<td>3</td>
</tr>
<tr>
<td>MICR 855</td>
<td>Host-Pathogen Interactions</td>
<td>3</td>
</tr>
</tbody>
</table>

- Successful completion of additional elective coursework as determined in consultation with the student's advisor or research committee. Electives may include the Microbiology courses listed below or courses from other departments.

<table>
<thead>
<tr>
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<th>Title</th>
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</thead>
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<td>MICR 801</td>
<td>Principles of Immunology (offered Fall only)</td>
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</tr>
<tr>
<td>MICR 802</td>
<td>Principles of Virology (offered Fall only)</td>
<td>1</td>
</tr>
<tr>
<td>MICR 803</td>
<td>Principles of Bacterial Genetics and Pathogenesis (offered Fall only)</td>
<td>1</td>
</tr>
<tr>
<td>MICR 804</td>
<td>Science Communication</td>
<td>1</td>
</tr>
<tr>
<td>MICR 805</td>
<td>Teaching in Higher Education (offered Fall and Spring)</td>
<td>3</td>
</tr>
</tbody>
</table>

- Successful presentation of a literature seminar.
- Participation in the Work in Progress series (meets monthly.)

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>GSMC 850</td>
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<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td></td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 857</td>
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<tr>
<td>GSMC 858</td>
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<tr>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
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</table>

- Total Hours 19-30

#### Year 2

<table>
<thead>
<tr>
<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 810</td>
<td>2</td>
<td>MICR 830</td>
<td>1</td>
<td>MICR 835</td>
<td>3</td>
</tr>
<tr>
<td>MICR 811</td>
<td>2</td>
<td>MICR 835</td>
<td>1-6 Minimum enrollment required is 3 credit hours.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICR 812</td>
<td>2</td>
<td>Electives</td>
<td>1-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take two of these three courses: MICR 810, 811 and 812</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<tr>
<td>MICR 835</td>
<td>1-6</td>
<td>Electives</td>
<td>1-6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Minimum enrollment required is 6 credit hours.

- 9-19

#### Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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</thead>
<tbody>
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<td>MICR 830</td>
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<td>MICR 990</td>
<td>1-6</td>
<td>MICR 990</td>
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</tr>
<tr>
<td>MICR 835</td>
<td>1-6</td>
<td>Electives</td>
<td>1-6 Minimum enrollment required is 3 credit hours.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Electives

- Minimum enrollment required is 6 credit hours.

- 9-19

#### Year 4

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICR 990</td>
<td>6</td>
<td>MICR 990</td>
<td>1-6</td>
<td>MICR 990</td>
<td>1-3</td>
</tr>
</tbody>
</table>

- Minimum enrollment required is 6 credit hours.

- Oral Comprehensive Exam may be scheduled as early as this semester if approved by committee to proceed.

- 3-13

- 2-12

- 3
The candidate must be able to observe demonstrations of biology in animals, cultures, and microscopic studies. A candidate should be physically able to do laboratory techniques. A candidate must be able to communicate, to understand, and to observe lectures and laboratory instruction. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively in oral and written form with students, staff, and faculty.

1. Observation: The candidate must be able to observe demonstrations and experiments in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. Communication: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. Motor: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. Intellectual-Conceptual, Integrative, and Quantitative Abilities: The abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student’s difficulties. At this review the provisions for reasonable accommodation will be determined.

For further information, contact the Microbiology Graduate Program, University of Kansas Medical Center, 3025 Wahl Hall West, 3901 Rainbow Blvd., Kansas City, Kansas 66160. Phone: (913) 588-7099; Fax: (913) 588-7295; E-mail: micrograd@kumc.edu.

STUDENT POLICY ON INFECTIOUS DISEASE

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for academic program admission at the University of Kansas Medical Center. Determination of eligibility for admission in such cases will be made on an individual basis in consultation with the applicant’s physician, taking into consideration (among other factors), legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

Department of Molecular and Integrative Physiology

Research programs in the Department of Molecular and Integrative Physiology cover the range from analysis of genes to analysis of whole organisms and fall into three broad categories:

  - This area includes the investigation of physiology and pathophysiology in experimental models ranging from cellular
preparations to intact animals and humans. Current research is directed at studies of the microvascular system, cardiac system, hypoxia and oxygen transport in the respiratory system, metabolism within adipose, muscle and liver, and plasma membrane and fluid transport within the renal system. Research also encompasses various aspects of cancer biology including both in vitro and in vivo approaches.

- **Neuroscience** (http://www.kumc.edu/school-of-medicine/molecular-and-integrative-physiology/about-us/neuroscience.html)
  - This area includes the investigation of neural function in normal and disease states, and addresses problems at different levels ranging from the regulation of nervous system genes to central nervous system mechanisms controlling arm movement in the intact animal. Current research includes the study of development, transplantation, demyelinating diseases, recovery of function following peripheral and central nervous system injury and stroke, motor and cognitive defects associated with HIV, neurophysiological, behavioral and molecular measures of early development, central mechanisms of hearing, neurotransmitters and plasticity.

  - This area includes the investigation of the hypothalamic-pituitary-gonadal axis, as well as uterine and placental function. Current studies are directed at mechanisms of hormone action, cell motility, cell-cell communication, cell and tissue differentiation and growth, cytokines and growth factors, gene expression and control of enzyme regulation in ovary, testis, sperm, hypothalamic-pituitary axis, preimplantation embryo, trophoblast/placenta and uterus. Mammalian and invertebrate reproductive models including transgenic and gene knockout mice provide fundamental information related to cell biology, endocrinology, and developmental biology.

The common thread is that all programs endeavor to understand biological function in health and disease. Nearly all faculty members have served on national advisory committees to major funding agencies such as the National Institutes of Health and as reviewers and editors to major scientific publications. The program provides outstanding didactic instruction and laboratory experiences that enable students to become effective teachers and independent investigators. The department offers the Ph.D. degree, and the combined M.D./Ph.D. degrees in conjunction with the School of Medicine. An M.S. degree may be granted in appropriate circumstances.

**Courses**

**PHSL 784. Faculty Research Programs. 1 Credits.**
The new student will be introduced to the faculty research programs. Each faculty member will present his/her research interests using one or more of the following formats: laboratory demonstrations, computer simulations and lectures. The objectives are to assist the new student in selecting his/her area of dissertation research and acquainting the new student with the department research resources.

**PHSL 834. Reproductive Physiology. 5 Credits.**
All aspects of reproductive physiology including an in depth study of ovarian and testicular development/function, neuroendocrine development/function, implantation, placenta, puberty, pregnancy and fertility regulation are covered. Historical and current scientific literature will be used to support a graduate level text and didactic lectures. Prerequisite: a general endocrinology/physiology course, an equivalent course and/or consent of instructor.

**PHSL 835. Integrative Physiology of Exercise. 3 Credits.**
To understand how the major physiological systems of the body respond to exercise with an emphasis on integration and function. Historical and current scientific literature will be used to generate discussion and support didactic material. Fundamentals of exercise physiology will be covered, but a background in exercise physiology is not required. Prerequisite: a general physiology course, an equivalent course and/or consent of instructor.

**PHSL 838. Advanced Topics. 1-3 Credits.**
Special studies designed and arranged on an individual basis to allow a student to pursue a particular subject through reading, special laboratory work, and conferences with a senior staff member.

**PHSL 840. Advanced Genetic Analysis. 3 Credits.**
This course will focus on principles that underlie genetic analysis, including mutation, complementation, recombination, segregation, and regulation. The genetics of commonly used model organisms such as yeast, flies, worms and mice will be examined, classic genetic screens performed to study phage assembly, cell cycle regulation, sex determination and X-chromosome inactivation will be discussed and modern-day techniques used to study inheritance and gene function in various systems will be analyzed. Human genetic analysis will also be covered, including population genetics, techniques for gene mapping, inherited diseases, genetic testing and gene therapy. Through reading and discussion of scientific literature and problem-based homework and exams, students will learn how to evaluate and interpret genetic data as well as develop and design genetic strategies to solve current biological problems. Prerequisite: Completion of IGPBS Core Curriculum or equivalent, or permission of Course Director.

**PHSL 842. Comprehensive Human Physiology. 5 Credits.**
Advanced course on modern human physiology. The course focuses on organ systems of the human body including nervous, cardiovascular, endocrine, digestive, respiratory, reproductive and urinary systems. This course emphasizes the use of modern experimental approaches that take advantage of cellular and molecular technologies. Prerequisite: NONE

**PHSL 843. Physiology of Disease. 3 Credits.**
This course will cover physiological changes associated with representative diseases of major organ systems (endocrine, muscle, cardiovascular, respiratory, renal, gastrointestinal, immune, nervous, and reproductive). Example diseases to be covered include: diabetes, pituitary disorders, osteoporosis, obesity, non-alcoholic fatty liver disease, muscular dystrophy, hypertension, chronic obstructive pulmonary disease, asthma, glomerulonephritis, polycystic kidney disease, gastroesophageal reflux disease, inflammatory bowel diseases, rheumatoid arthritis, multiple sclerosis, infertility, endometriosis, and pregnancy complications. Class will include lectures, faculty-mentored student presentations, evaluations of research papers, and discussions. LEC Prerequisite: Comprehensive Human Physiology (PHSL 842), an equivalent course, or consent of Course Director.

**PHSL 844. Neurophysiology. 3 Credits.**
Somatosensory, motor and cognitive function of the brain will be discussed using a combination of lecture and student presentation formats. Current issues and evidence underlying accepted concepts and mechanisms will be emphasized. (Same as NEUS 844 and NURO 844.) Prerequisite: PHSL 846 or equivalent and consent of instructor.

**PHSL 846. Advanced Neuroscience. 5 Credits.**
Team-taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels.
Lectures and discussions will emphasize current issues in neuroscience research. (Same as ANAT 846, PHCL 846, NURO 846 and NEUS 846.) Prerequisite: Permission of the course director.

PHSL 847. Developmental Neurobiology. 2 Credits.
Development of the nervous system from early induction to the development of learning and memory. Topics include: Induction; Cellular Differentiation; Axon Growth and Guidance; Target Selection; Cell Survival and Growth; Synapse Formation; Synapse Elimination; and Development of Behavior. (Same as ANAT 847, NURO 847, and NEUS 847.) Prerequisite: Advanced Neuroscience (ANAT 846; NURO 846; PHSL 846) or consent of instructor.

PHSL 848. Molecular Mechanisms of Neurological Disorders. 3 Credits.
An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer's, Parkinson's, Huntington's, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxisomal disorders, Down's syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as ANAT 848, NURO 848, PHCL 848, and NEUS 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor.

PHSL 850. Research. 1-10 Credits.
Original laboratory investigation conducted under the supervision of a senior staff member.

PHSL 851. Seminar. 1 Credits.
Student participation (attendance and presentation) in weekly Departmental seminar series. The topics examined in these seminars are dictated by the interests of students and staff. Prerequisite: student must have passed their oral comprehensive exam.

PHSL 899. Master's Thesis. 1-5 Credits.
Preparation of the formal thesis based on library research or independent research and in partial fulfillment of the requirements for the master's degree. Credits will be given only after the thesis has been accepted by the student's thesis committee.

PHSL 999. Doctoral Dissertation. 1-10 Credits.
Preparation of the Dissertation based on original research and in partial fulfillment of the requirements for the Ph.D. degree. Credits will be given only after the dissertation has been accepted by the student's dissertation committee.

Master of Science in Molecular and Integrative Physiology

The Master of Science (M.S.) in Molecular and Integrative Physiology prepares the student for a career at the advanced technical level in academia, industry or government. It may also lead to teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:
- Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
  - Research experience (beyond labs associated with lecture courses) is strongly suggested.
  - Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs—.

Degree requirements:
- Degree requirements are normally completed within 3 years of admission to the program although a maximum of 7 years is allowed.
- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.
- Completion of a minimum of 30 credit hours.
- Enrollment in a minimum of one (1) credit hour of PHSL 899 Master's Thesis the semester the student will defend thesis and graduate.
- Successful completion of the thesis defense (p. 2417).
- Successful thesis submission and publication (p. 2417) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
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</table>
Typical Plan of Study

Year 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
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<tr>
<td>GSMC 857</td>
<td>Biographics</td>
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<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following Physiology courses:

  • Successful completion of elective coursework as determined in consultation with the student's advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs are subject to change.

Thesis defense scheduled semester approved by committee to defend and graduate.

Total Hours 13-50

TECHNICAL STANDARDS AND REQUIREMENTS FOR THE DEPARTMENT OF MOLECULAR AND INTEGRATIVE PHYSIOLOGY

The M.S. degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. It follows that graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory. Therefore all students admitted for graduate study must meet the following abilities and expectations.

1. Observation: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. Communication: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. Motor: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. Intellectual-Conceptual, Integrative, and Quantitative Abilities: The abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet these expectations will be reviewed and assessed by the Departmental Graduate Student Advisory Committee and KUMC Technical Support staff. At this review the provisions for reasonable accommodation will be determined.

For further information, contact Graduate Director, Department of Molecular and Integrative Physiology, G011 Wahl Hall East, Mail Stop 3043, University of Kansas Medical Center, 3901 Rainbow Blvd., Kansas City, Kansas 66160 Phone: (913) 588-7025.
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Doctor of Philosophy in Molecular and Integrative Physiology

The Ph.D. in Molecular and Integrative Physiology prepares the student for a career in independent research in the broad area of Physiology. The Ph.D. is most often followed by one or more years of postdoctoral training in a specific area of research. Acquisition of a Ph.D. in Molecular and Integrative Physiology allows the individual to pursue positions in industry or government and following postdoctoral experience opportunities are available at the college or university level.

Upon acceptance into the graduate program in Molecular and Integrative Physiology, the student will select a research track for their subsequent studies. Three different tracks are available to the student:

- Cellular & Integrative Physiology
- Neuroscience
- Reproduction & Development

Each track has specialized curriculum requirements that must be followed for degree completion.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
- Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree Requirements:

- Degree requirements are normally completed within 6 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
- Successful completion of GSMC 857 Biographics, GSMC 852 Introduction to Biomedical Research I and GSMC 855 Introduction to Biomedical Research II (or equivalent) meets the Research Skills requirement.
- Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.

- Successful completion of the Residence Requirement (p. ) (http://www.kumc.edu/Documents/graduate%20studies/Residence%20Requirement%20PhD%2016-Oct(0).pdf) by enrollment in full-time status a minimum of two semesters prior to the semester the Oral Comprehensive Examination is scheduled.

- Successful completion of the Oral Comprehensive Examination (p. 2421). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

- Successful completion of the Post-Comprehensive Enrollment (p. 2422) requirement.

- Enrollment in a minimum of one (1) credit hour of PHSL 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.

- Successful completion of the Final Oral Examination (p. 2422) (dissertation defense.)

- Successful Dissertation Submission and Publication (p. 2423) (according to Office of Graduate Studies policy.)

- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following core Physiology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSL 842</td>
<td>Comprehensive Human Physiology (or equivalent)</td>
<td>5</td>
</tr>
<tr>
<td>PHSL 843</td>
<td>Physiology of Disease</td>
<td>3</td>
</tr>
<tr>
<td>PHSL 850</td>
<td>Research</td>
<td>1-10</td>
</tr>
<tr>
<td>PHSL 851</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>PHSL 999</td>
<td>Doctoral Dissertation</td>
<td>1</td>
</tr>
</tbody>
</table>

- Successful completion of track-specific requirements. Choose from one of the three tracks: Cellular & Integrative Physiology, Neuroscience or Reproduction & Development in consultation with the student's advisor.

- **Cellular & Integrative Physiology**
  - Minimum of three (3) credit hours of electives. Choose from the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSL 835</td>
<td>Integrative Physiology of Exercise</td>
<td>3</td>
</tr>
</tbody>
</table>

or PHSL 838 Advanced Topics

or PHSL 840 Advanced Genetic Analysis

- or CBIO 800 Mechanisms of Tumor Development and Progression: Colloquium Format
- or CBIO 900 Carcinogenesis and Cancer Biology
- or other electives with approval by Graduate Director

- **Neuroscience**
  - Minimum of three (3) credit hours of electives. Choose from the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSL 844</td>
<td>Neurophysiology</td>
<td>3</td>
</tr>
</tbody>
</table>

or PHSL 846 Advanced Neuroscience

or PHSL 847 Developmental Neurobiology

or PHSL 848 Molecular Mechanisms of Neurological Disorders

or other electives with approval by Graduate Director

- **Reproduction & Development**
  - Minimum of three (3) credit hours of electives. Choose from the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSL 834</td>
<td>Reproductive Physiology</td>
<td>5</td>
</tr>
</tbody>
</table>

and other electives with approval by Graduate Director

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs—.

### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Spring</strong></td>
<td><strong>Summer</strong></td>
<td><strong>Total Hours</strong></td>
<td></td>
</tr>
<tr>
<td>GSMC 850</td>
<td>2 GSMC 853</td>
<td>2 GSMC 859</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>PHSL 851</td>
<td>2 PHSL 854</td>
<td>1-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 851</td>
<td>1 GSMC 859</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 852</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 855</td>
<td>1</td>
<td>1</td>
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<tr>
<td>GSMC 856</td>
<td>1</td>
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<td></td>
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<tr>
<td>GSMC 858</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 859</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total Hours     | 19-30          |

May take an elective course from the student's chosen degree program in consultation with the student's advisor.
It follows that graduates must have the knowledge and skills to function research and/or teaching in postgraduate training and faculty positions. The Ph.D. degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. Therefore all students admitted for graduate study must meet the following abilities and expectations.

1. **Observation:** The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. **Communication:** A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. **Motor:** Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities:** The abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. **Behavioral and Social Attributes:** A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet these expectations will be reviewed and assessed by the Departmental Graduate Student Advisory Committee and KUMC Technical Support staff. At this review the provisions for reasonable accommodation will be determined.

For further information, contact Graduate Director, Department of Molecular and Integrative Physiology, G011 Wahl Hall East, Mail Stop 3043, University of Kansas Medical Center, 3901 Rainbow Blvd., Kansas City, Kansas 66160 Phone: (913) 588-7025

### STUDENT POLICY ON INFECTIOUS DISEASE

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for academic program admission at the University of Kansas Medical Center. Determination of eligibility for admission in such cases will be made on an individual basis in consultation with the applicant’s physician, taking into consideration (among other factors), legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Departmental Graduate Student Advisory Committee of this fact and may be required to provide

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<td></td>
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</tr>
<tr>
<td>2</td>
<td>PHSL 842</td>
<td>5</td>
<td>PHSL 843</td>
<td>3</td>
<td>PHSL 850</td>
<td>1-6</td>
</tr>
<tr>
<td></td>
<td>PHSL 850</td>
<td>1-6</td>
<td>PHSL 850</td>
<td>1-6</td>
<td>Track-specific course when available</td>
<td>1-6</td>
</tr>
<tr>
<td></td>
<td>Track-specific course when available</td>
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<td></td>
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<tr>
<td>3</td>
<td>PHSL 850</td>
<td>1-6</td>
<td>PHSL 851</td>
<td>1</td>
<td>Track-specific course when available</td>
<td>1-6</td>
</tr>
<tr>
<td></td>
<td>Oral Comprehensive Exam</td>
<td>scheduled during this semester if approved by committee to proceed</td>
<td></td>
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</tr>
<tr>
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<tr>
<td>4</td>
<td>PHSL 850</td>
<td>1-6</td>
<td>PHSL 850</td>
<td>1-6</td>
<td>PHSL 850</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>PHSL 851</td>
<td>1</td>
<td>PHSL 851</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>PHSL 850</td>
<td>1-6</td>
<td>PHSL 850</td>
<td>1-6</td>
<td>PHSL 850</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>PHSL 851</td>
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<td>PHSL 851</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>PHSL 999</td>
<td>1</td>
<td>PHSL 999</td>
<td>1</td>
<td>PHSL 999</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Final Oral Exam (dissertation defense)</td>
<td>scheduled semester approved by committee to defend and graduate</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### TECHNICAL STANDARDS AND REQUIREMENTS FOR THE DEPARTMENT OF MOLECULAR AND INTEGRATIVE PHYSIOLOGY

The Ph.D. degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. It follows that graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory.
medical records for review by the Student Health Physician in order to determine eligibility for admission.

**DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS**

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

**Department of Pathology & Laboratory Medicine**

The Department of Pathology & Laboratory Medicine crosses the bridge between basic science and clinical practice and involves the study and diagnosis of disease. We emphasize innovative, service-oriented programs that encompass a full spectrum of medical practice. Our Mission is to provide excellent teaching, research, patient care and community service and to meet the health needs of Kansas and the community at large. Our Aim is to provide a supportive work environment so that each individual can excel and pursue avenues that lead to recognition within the medical community and benefit healthcare at large.

The Department provides vital patient services to the Hospital, Greater Kansas City Metropolitan Area and outlying medical facilities through our clinical laboratory (https://www.kumc.edu/school-of-medicine/academics/departments/pathology/divisions/laboratory-medicine.html) and anatomic (surgical) services (http://www.kumc.edu/school-of-medicine/pathology/anatomicsurgical-services.html). Faculty are board-accredited and the department provides a full spectrum of subspecialized expertise. The clinical laboratory processes over 3 million samples per year including the services of robotic automation and is accredited by the American Association of Blood Banks (AABB) (http://www.aabb.org/Pages/Homepage.aspx), College of American Pathologists (CAP) (https://www.cap.org/) and Foundation for the Accreditation of Cellular Therapy (FACT) (http://www.factwebsite.org/). The core laboratory reviews over 38,000 surgical pathology specimens per year, reflecting 9% year over year case growth; cytopathologists review 13,000 accessions per year, 2,500 bone marrow accessions are reviewed per year. The Department provides material to the University of Kansas Cancer Center’s Biospecimen Tissue Laboratory towards ongoing research and development of new and improved treatment modalities.

Basic Science research is conducted through our Division of Cancer & Developmental Biology (https://www.kumc.edu/school-of-medicine/academics/departments/pathology/divisions/cancer-and-developmental-biology.html) and includes cancer biology, developmental biology and cell differentiation, stem cell biology and microbial and viral pathogenesis. Our laboratories are supported by external funding from sources including the NIH (http://www.nih.gov/) as well as private resources; faculty and laboratories reside on both sides of the state line at the KUMC (http://www.kumc.edu/) and Stowers Institute (http://www.stowers.org/) campuses. Faculty numbers have increased dramatically since 2004, from 3 (2 at Stowers) in 2004 to 21 (4 at Stowers) in 2019.

The Department is committed to education (http://www.kumc.edu/school-of-medicine/pathology/education-programs.html) through its basic science research, medical and continuing medical education programs. Basic Science education is sponsored through our Graduate (http://www.kumc.edu/school-of-medicine/pathology/basic-science-graduate-program.html) and Postdoctoral programs and has grown commensurate with division laboratory expansion; there are currently 15 graduate students and 16 postdoctoral fellows enrolled in basic science programs and labs. Medical education is supported by our clinical and anatomic faculty and includes residency and postdoctoral hematopathology, surgical and cytopathology fellowships, post-sophomore fellowships, phase II elective rotations and phase I teaching services to the University of Kansas’ School of Medicine. Board accredited Continuing Medical Education is supported through a monthly Grand Rounds series that emphasizes current, applicable clinical and research topics; the department as well provides endowed subspecialty lectureships. Both our research and clinical/anatomic divisions provide regularly scheduled programs targeting cutting-edge basic science, subspecialized pathology topics and translational research, encouraging advancement of patient care.

Please refer to pages included in this catalog on both Master of Science and Doctor of Philosophy in Pathology for additional information regarding each program.

**Courses**

**PATH 803. Stem Cell Biology. 2 Credits.**

Current concepts in the study of stem cells and the clinical potential in modern disease treatment. Students will learn concepts of stem cells: origin, regulation of pluripotency, and differentiative potential; experimental isolation and manipulation; and clinical application of isolated stem cells. Current scientific literature will be used to highlight recent advances in stem cell biology. Special emphasis will be placed on the ethical and legal issues surrounding the use of stem cells of both adult and embryonic origin. Prerequisite: Course in cell biology; consent of instructor.

**PATH 804. Selected Topics in Signal Transduction. 1 Credits.**

A survey of the basic principles and contemporary literature of signal transduction pathways involved in cancer development and developmental biology. Faculty lecture and student presentations will address selected topics in cellular signal transduction. Student seminars will focus on the scientific content of the publication with emphasis on appropriate presentation of background information, experimental methods, results and potential future directions. Critical discussion of papers will be provided by participating students and faculty. Prerequisite: Course in Molecular Biology.

**PATH 805. Seminars in Pathology. 1 Credits.**

Presentation of Pathology Department graduate student research-in-progress. Students will conduct a one-hour seminar in which updates of their current research project(s) in pathology will be reported. The seminars are interactive and students are encouraged to participate in discussion of the presented work. Prerequisite: Completion of the IGPBS core curriculum and status as a second-year graduate student; consent of instructor.

**PATH 806. Epigenetics. 2 Credits.**

Current concepts in epigenetic regulation of transcription, including its involvement in disease. Current scientific literature will be used to examine recent advances in the role of epigenetic regulation in transcription and its impact on cellular processes, including growth, differentiation, development, and disease. Students will learn the fundamental concepts of epigenetic regulation and the role of the
epigenetic regulation in various gene expression systems. The role of epigenetics in long-range DNA interactions will also be studied, with an emphasis on enhancer, silencer, and locus control region function. Recent advances in the role of epigenetics in disease, including cancer will also be examined. The course will examine current experimental methods to study epigenetics and gene regulation. Prerequisite: Completion of the IGPBS core curriculum or equivalent; consent of instructor.

PATH 890. Research in Pathology. 1-10 Credits.
RSH. Replaces PATH 911 in prior catalogs. Enrollment for masters students and PhD students who have yet to successfully complete the oral comprehensive examination.

PATH 899. Master’s Thesis. 1-7 Credits.

PATH 912. Advanced Topics. 1-3 Credits.
Offered by arrangement. Prerequisite: Approval of the instructor and completion of the IGPBS core curriculum or its equivalent.

PATH 913. Introduction to Grant Proposal Writing. 1 Credits.
This course will teach the fundamentals of writing a grant proposal with an emphasis on NIH proposals. This course is open to any graduate students interested in applying for pre-doctoral fellowships, and especially to graduate students in the Department of Pathology who will be conducting their comprehensive qualifying exams in the upcoming year. This course involves a combination of didactic lectures, student coursework and discussion. This course will include different principal investigators from the Pathology Department as guest speakers. Topics will include different sources of funding, grant submission and post-submission review process. However, the core component of this course will involve teaching the basic framework and components of an NIH R01 application. This course is designed to give practical structural guidance in scientific writing at a professional level and does not give guidance on specific research projects. Prerequisite: IGPBS coursework or equivalent, permission of instructor.

PATH 990. Doctoral Research in Pathology. 1-10 Credits.
RSH for PhD candidates who have successfully completed the oral comprehensive examination. Prerequisite: PATH 890.

PATH 999. Doctoral Dissertation. 1-7 Credits.

Master of Science in Pathology

The Master of Science in Pathology provides comprehensive training in understanding the molecular basis of disease and the fundamental mechanisms of cell growth and differentiation. It prepares the student for either a career in advanced academia or lays the base for continued terminal education. It may also lead to teaching positions at the secondary or junior college level.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:
• Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
• A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor's degree.
• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
• A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.
• An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
• Three letters of recommendation.
• Prerequisite coursework:
  • One year of general chemistry
  • One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  • One year of biological sciences
  • One semester of calculus
  • One semester of physics
• Research experience (beyond labs associated with lecture courses) is strongly suggested.
• Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

Degree requirements:
• Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.
• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
• Completion of a minimum of 30 credit hours.
• Participation in faculty advisory committee meetings starting after 12 months in the program. Meetings at six-month intervals are recommended and required every 12 months with greater frequency as the student nears his/her thesis defense.
• Enrollment in a minimum of one (1) credit hour of PATH 899 Master’s Thesis the semester the student will defend and graduate.
• Successful completion of a thesis defense (p. 2417). The thesis defense may be undertaken after the student has completed all requisite and elective coursework and has met the University’s minimum credit hour requirement. The examination consists of both a final written submission of the student’s research project and related oral presentation. It should reflect the student’s current fund of knowledge, research skills and ability to progress in an industrial or education venue which may include pursuance of a terminal degree. It may be undertaken only after the student’s advisory committee has approved the student’s project and recommended the defense. The student is required to submit a final project for approval to his or
her mentor, thesis defense examination committee and director of Pathology's graduate program a minimum of four weeks in advance of the examination; only when the student has successfully completed this stage will the request for examination be submitted to Graduate Studies for approval to defend (must be at least three weeks in advance of the examination).

- Successful thesis submission and publication (p. 2417) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following Pathology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH 804</td>
<td>Selected Topics in Signal Transduction</td>
<td>1</td>
</tr>
<tr>
<td>PATH 805</td>
<td>Seminars in Pathology</td>
<td>1</td>
</tr>
<tr>
<td>PATH 890</td>
<td>Research in Pathology</td>
<td>1-10</td>
</tr>
<tr>
<td>PATH 899</td>
<td>Master's Thesis</td>
<td>1-7</td>
</tr>
</tbody>
</table>

- Successful completion of a minimum of one course (1-3 hours) of advanced graduate coursework in fields related to molecular and cellular biology and experimental pathology (student may pursue more coursework at discretion of schedule and approval of mentor). Specific courses determined in consultation with the student's mentor. Recommended courses include but are not limited to:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATH 803</td>
<td>Stem Cell Biology (Offered by Pathology)</td>
<td>2</td>
</tr>
<tr>
<td>PATH 806</td>
<td>Epigenetics</td>
<td>2</td>
</tr>
<tr>
<td>PATH 913</td>
<td>Introduction to Grant Proposal Writing</td>
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**Typical Plan of Study**

**Year 1**

<table>
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<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<td>GSMC 853</td>
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</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
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<tr>
<td>GSMC 852</td>
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**Total Hours 19-30**

**Year 2**

<table>
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<th>Hours</th>
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<td>PATH 890</td>
<td>(required)</td>
<td>1-10</td>
<td>PATH 912</td>
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**Year 3**

<table>
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<th>Fall</th>
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<th>Spring</th>
<th>Hours</th>
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</thead>
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<td>(required)</td>
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<tr>
<td>PATH 899 or 890</td>
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<td>PATH 899</td>
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<td>Electives</td>
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<td></td>
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</table>

**Thesis defense scheduled semester approved by committee to graduate. Enroll in PATH 899 semester to defend thesis.**

**Total Hours 13-58**

**TECHNICAL STANDARDS AND REQUIREMENTS FOR GRADUATE PROGRAMS IN PATHOLOGY & LABORATORY MEDICINE**

The Masters degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. It follows that graduates must have the knowledge and skills to function
in a broad variety of academic situations in the classroom and laboratory. Therefore all students admitted for graduate study must meet the following abilities and expectations.

1. Observation: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

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3. Motor: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. Intellectual-Conceptual, Integrative, and Quantitative Abilities: The abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

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For further information, contact either Soumen Paul, PhD, Pathology & Laboratory Medicine Graduate Program Director, spaul2@kumc.edu, Phone: 913.588.7236 or Tamara Osborn, Graduate Studies Program Coordinator, tosborn@kumc.edu, Phone: 913.945.7063, Fax: 913.588.7073.

**STUDENT POLICY ON INFECTIOUS DISEASE**

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for academic program admission at the University of Kansas Medical Center. Determination of eligibility for admission in such cases will be made on an individual basis in consultation with the applicant’s physician, taking into consideration (among other factors), legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

**DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS**

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook (http://www.kumc.edu/student-handbook.html). Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

**Doctor of Philosophy in Pathology**

The Department of Pathology and Laboratory Medicine offers a graduate program leading to the PhD degree including research opportunities with emphasis on developmental biology and cell differentiation, cancer biology, stem cell biology, microbial and viral pathogenesis, gene regulation and experimental pathology. This curriculum is designed for advanced research study in molecular and cellular biology and experimental pathology.

The course requirements of the Pathology Department Graduate Program are designed to provide maximum flexibility for the student’s specialized needs. Students enrolled in the program are required to take graduate coursework in fields related to molecular and experimental pathology and to choose electives from either Pathology or other Medical Center departments related to their major dissertation work. After passing the Comprehensive Examination, students will devote most of their time to laboratory experimentation and developing a research project. Substantial portions of the research efforts should result in published works in peer-reviewed scientific journals.

The Doctorate of Philosophy in Pathology and Laboratory Medicine provides comprehensive training in understanding the molecular basis of disease and the fundamental mechanisms of cell growth and differentiation. Subspecialized research interests in the arenas of cancer biology, stem cell biology, and microbial and viral pathogenesis are supported through required and elective coursework and laboratory activities. A Pathology PhD will afford the student the flexibility of tailoring a course of study towards specific research interests and goals, and prepare the student for a career in advanced academia or positions in industry.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

**Admission requirements:**

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been
conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
- Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs are available online.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the PhD.

**Degree requirements:**
- Degree requirements are normally completed within 5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):
  - Successful completion of GSMC 857 Biographics, GSMC 852 Introduction to Biomedical Research I and GSMC 855 Introduction to Biomedical Research II (or equivalent) meets the Research Skills requirement.

- Successful completion of GSMC 856 Introduction to Research Ethics or Stowers Research Integrity course (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p. 2417) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
- Participation in faculty advisory committee meetings starting after 12 months in the program. Meetings at six-month intervals are recommended and required every 12 months with greater frequency as the student nears his/her oral comprehensive examination and dissertation defense.
- Successful completion of the Oral Comprehensive Examination (p. 2421). The examination is expected to be undertaken after the student has completed all requisite and elective coursework and approximately half-way through the program (e.g., 30th month in a five-year program). The examination consists of both a written research proposal and oral presentation and is intended to delineate the student's current fund of knowledge, research skills and ability to progress to a terminal degree in the department. It may be undertaken only after the student’s advisory committee has approved the research proposal and recommended examination. The student will then submit a final version of the written research proposal for approval to his or her mentor, oral comprehensive examination committee and director of Pathology’s graduate program a minimum of three weeks in advance of the examination; only when the student has successfully completed this stage will the request for examination be submitted to Graduate Studies for approval to defend (must be at least two weeks in advance of the examination). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.
- Successful completion of the Post-Comprehensive Enrollment (p. 2422) requirement.
- Enrollment in a minimum of one (1) credit hour of PATH 999 Doctoral Dissertation the semester the student will defend dissertation and graduate.
- Successful completion of the Final Oral Examination (p. 2422) (dissertation defense). The student will undertake this examination only after a preliminary draft and presentation of dissertation project has been successfully completed and accepted by the student’s mentor and faculty advisory committee. A final draft is required to be submitted at least four weeks prior to defense and is to be presented to the student's mentor, dissertation defense committee and director of Pathology’s graduate program. Only when the student has successfully completed this stage will the request for examination be submitted to Graduate Studies for consideration (must be at least three weeks in advance of the examination).
- Successful Dissertation Submission and Publication (p. 2423) (according to Office of Graduate Studies policy).
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
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Successful completion of the following Pathology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PATH 804</td>
<td>Selected Topics in Signal Transduction</td>
<td>1</td>
</tr>
<tr>
<td>PATH 805</td>
<td>Seminars in Pathology</td>
<td>1</td>
</tr>
<tr>
<td>PATH 890</td>
<td>Research in Pathology</td>
<td>1-10</td>
</tr>
<tr>
<td>PATH 990</td>
<td>Doctoral Research in Pathology</td>
<td>1-10</td>
</tr>
<tr>
<td>PATH 999</td>
<td>Doctoral Dissertation</td>
<td>1-7</td>
</tr>
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</table>

Successful completion of a minimum of four (4) credit hours of advanced graduate coursework in fields related to molecular and cellular biology and experimental pathology. Specific courses determined in consultation with the student's advisor. Recommended courses include but are not limited to:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PATH 803</td>
<td>Stem Cell Biology</td>
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</tr>
<tr>
<td>PATH 806</td>
<td>Epigenetics</td>
<td>2</td>
</tr>
<tr>
<td>PATH 912</td>
<td>Advanced Topics</td>
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</tr>
<tr>
<td>PATH 913</td>
<td>Introduction to Grant Proposal Writing (or equivalent)</td>
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Other Department courses

<table>
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<td>ANAT 868</td>
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<tr>
<td>BCHM 922</td>
<td>Advanced Molecular Genetics</td>
<td>3</td>
</tr>
<tr>
<td>CBIO 900</td>
<td>Carcinogenesis and Cancer Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHS 384</td>
<td>Reproductive Physiology</td>
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Successful publication in a peer-reviewed scientific journal before completion of the degree. The journal and its impact factor is subject to the approval of the student's mentor.

Typical Plan of Study

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
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<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td>1-3</td>
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Year 2

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
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<th>Hours</th>
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Year 3

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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<td>PATH 805</td>
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<td>1-3 Elective coursework</td>
<td>1-3</td>
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</table>

Comprehensive Oral Examination may be taken during the third year with the approval and recommendation of the student's advisory committee (normally after the 30th month in the program.)

Total Hours 19-30

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours</th>
<th>Year 2</th>
<th>Hours</th>
<th>Year 3</th>
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<tbody>
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<td>Total Hours</td>
<td>7-10</td>
<td>Total Hours</td>
<td>2-7</td>
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</tbody>
</table>

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs are subject to change.
PROGRAMS IN PATHOLOGY & LABORATORY MEDICINE

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Department of Pharmacology, Toxicology, and Therapeutics

Pharmacology and Toxicology together form a discipline that examines the interactions of chemical substances with living systems. Pharmacology focuses on the properties of drugs, including their sites of action, processing by the human body, and therapeutic uses. Toxicology studies the adverse effects of chemicals such as environmental agents and synthetic compounds, including drugs and their metabolites, and the means to prevent or treat their effects. Because the study of chemicals requires an intimate knowledge of the biological systems affected, Pharmacology and Toxicology are by necessity an integrative discipline that studies the effects of chemicals at the molecular, cellular, organ, organismal, and population levels.

Faculty members in the Department of Pharmacology, Toxicology & Therapeutics at KUMC have diverse research interests. These research topics are essential for developing new drugs and are fundamental to determining the safety of all chemicals. Thus, our students obtain a broad educational background that prepares them for a career in research and scholarly work in a variety of settings, including academia, the pharmaceutical or biotechnology industries, or governmental agencies. Our department faculty has an excellent record of training students, and our graduates have become scientific leaders in academia, government and industry.

During the last five years, the Department faculty has undergone major changes with the addition of several tenure-track and research-track faculty, with a major focus in liver pathobiology and toxicology. This was facilitated in part by a Center of Biomedical Research Excellence (COBRE) grant from the National Institutes of Health, and has been accompanied by major new equipment purchases. The Department has been housed in state-of-the-art research space in the Hemenway Life Science Innovation Center. These resources provide an exciting environment that fosters personal and professional development in an atmosphere with ample opportunities for independent scholarship and strong collaborative activities.

Research opportunities are available for graduate students in the laboratories of faculty members throughout the department. Pharmacology faculty members have research interests in molecular and cellular neuropharmacology, neurotransoma, and the role of hormones and diet constituents on brain function. In addition, department faculty members study pharmacokinetics of drugs (absorption, distribution, biotransformation and excretion) and the biology and functional significance of drug transporters such as organic anion transporting polypeptides (OATPs), organic cation transporters (OCTs), and ATP binding cassette transporters. Our faculty members’ research interests in Toxicology include the toxicity of environmental chemicals, mechanisms of drug- and chemical-induced hepatotoxicity (necrosis, apoptosis, autophagy, inflammation, fibrosis) and liver regeneration. Furthermore, they study the pathogenesis of hepatocellular carcinoma, alcoholic hepatitis, steatohepatitis and cholestatic liver disease, and the role of nuclear receptors in these disease processes. Likewise, in Therapeutics, faculty members use metabolomics approaches to study herbal medicines’ ability to cause drug interactions with prescribed drugs. In addition, studies are being performed to understand which drugs enter the liver by specific transporters, and how genetics determine why the response to drugs can vary between individual patients (pharmacogenomics).

Courses

PHCL 761. General Principles of Pharmacology. 1 Credits.
General principles of pharmacology, including pharmacokinetics, pharmacodynamics, adverse effects, pharmacotherapeutics plus miscellaneous agents (antacids, cathartics, biologicals). Open to advanced B.S. students and graduate students in Nursing, Allied Health, and other health related programs. Independent study program with use of computer assisted instruction, textbooks, syllabi, consultation with staff and exams as primary teaching instruments. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an Incomplete grade. Prerequisite: An Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor.

PHCL 762. Pharmacology of the Autonomic Nervous System. 1 Credits.
General principles of the autonomic nervous system, cholinergics, muscarinics, nicotinics, neuromuscular blockers, beta adrenergics, alpha adrenergics, and miscellaneous ANS agents. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor.

PHCL 763. Cardiovascular-Renal Pharmacology. 1 Credits.
Antihypertensives, antiaarrhythmics, vasodilators, cardiac glycosides, serotonin, histamine, polypeptides, diuretics, antilipidemics. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor.

PHCL 764. Pharmacology of the Central Nervous System. 1 Credits.
General principles of the central nervous system, stimulants, hallucinogens, depressants (hypnotics and sedatives), general and local anesthesia, antiparkinson agents, tranquilizers, analgesics and anticonvulsants. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an Incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor.

PHCL 765. Chemotherapy. 1 Credits.
Principles of chemotherapy, sulfonamides, penicillins, aminoglycosides, anticancer and antifungal agents, antimarial agents, broad spectrum antibiotics, antiparasitic agents, and antiseptics. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an Incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor.

PHCL 766. Blood-Endocrine Pharmacology. 1 Credits.
General principles of endocrine function and use, thyroid drugs, insulin, sex hormones, oxytocics, adrenal steroids, antiinflammatory agents, blood drugs, anticoagulants and vitamins. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and
the instructor. In addition, the enrollment card must be stamped by the instructor.

**PHCL 787. Toxicology. 1 Credits.**
General principles of toxicology, clinical toxicology, solvents, metals, gases and dusts, corrosives, plant and animal toxins, pesticides, radiation, miscellaneous. Students are encouraged to complete this course the semester they enroll. If this course is not completed, students will receive an incomplete grade. Prerequisite: PHCL 761 and an Enrollment Permission Form must be signed by the student and the instructor. In addition, the enrollment card must be stamped by the instructor.

**PHCL 809. Seminar in Pharmacology. 1 Credits.**
Weekly meetings.

**PHCL 846. Advanced Neuroscience. 5 Credits.**
Team-taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as ANAT 846, PHSL 846, NURO 846 and NEUS 846.) Prerequisite: Permission of the course director.

**PHCL 848. Molecular Mechanisms of Neurological Disorders. 3 Credits.**
An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer's, Parkinson's, Huntington's, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxosomal disorders, Down's syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as ANAT 848, NURO 848, PHSL 848, and NEUS 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor.

**PHCL 875. Mitochondrial Biology (Form and function), Bioenergetics and Metabolism in human disease. 3 Credits.**
This course is designed to explore mitochondrial physiology from perspectives of research, diagnostics, and clinic, from molecule, to man, to population. The course is an interactive program which goes beyond the textbook to actively engage the learner in current state-of-the-art laboratory and clinical practice. Starting from a basic introduction to cellular bioenergetics, the course focuses on the mitochondrial oxidative phosphorylation system, plasticity of mitochondrial structure/microscopy, mtDNA genetics, maintenance and gene expression, biogenesis of the oxphos system, protein dynamics, and drug development. The diagnostic sessions will highlight existing and novel genetic and biochemical diagnostic approaches with a special focus on the development of biomarkers for disease. During the clinical sessions the learner will be introduced to the clinical presentation of mitochondrial disorders, the personal perspective of the patient, anamnesis, clinical guidelines, case reports, treatment options, trials, and the development of outcome measures. As part of the course participants are expected to develop a translational mini-project in pairs of which the results are presented on the final course day. Prerequisite: Successful completion of the Interdisciplinary Program in Biomedical Sciences or permission of the Instructor.

**PHCL 880. Essentials of Pharmacology. 4 Credits.**
Introduction to Pharmacology for Graduate Students. Autonomic, Cardiovascular and Renal, Endocrine, Neuro, Antivirals Pharmacology. Autocoids; Workshop; Historical and Contemporary Methods used to Elucidate Mechanisms of Drug Action. Prerequisite: Successful completion of the Interdisciplinary Program in Biomedical Sciences or permission of the Instructor.

**PHCL 890. Research in Pharmacology. 1-10 Credits.**
For graduate students beginning their research training.

**PHCL 898. Principles of Pharmacology. 1 Credits.**
Chemical fundamentals in structure, actions and metabolism of drugs and toxicants. Included are molecular features of drugs and toxicants, stereoisomerism, receptor theory, dose-response relationships, agonists and antagonists, absorption, pharmacokinetics and structure-activity relationships.

**PHCL 899. Thesis in Pharmacology. 1-10 Credits.**
For students in a master's program in pharmacology.

**PHCL 924. Clinical Pharmacology. 5 Credits.**
Designed to give practical and theoretical experience with drug trials in humans. Includes animal experimentation when warranted. Clinical principles of drug therapy will be emphasized.

**PHCL 939. Carcinogenesis and Cancer Biology. 3 Credits.**
Multidisciplinary approach. Cancer pathology. Mutagenesis, Genetics, Carcinogen metabolism. Signal Transduction, Apoptosis, Initiation and promotion. Tumor Immunology. Cell proliferation. Protooncogenes and suppressor genes. Hormonal carcinogenesis. Cancer epidemiology. Dietary and environmental causation and prevention. Cancer in various organ systems. (Same as PATH 939 and PTOX 939.) Prerequisite: Completion of one of the following: IGPBS modules 1-4 or equivalent or permission of instructor.

**PHCL 990. Research for Dissertation in Pharmacology. 1-10 Credits.**
Prerequisite: PHCL 890.

**PHCL 999. Dissertation in Pharmacology. 1-10 Credits.**
Prerequisite: Open to students of advanced standing enrolled in the doctoral program in Pharmacology.

**Courses**

**PHRM 910. Research in Pharmacology. 4 Credits.**
Selected research problems may be investigated under the direction of individual staff members. A description of current staff research projects is available from the department. Offered in modules I-XII. Prerequisite: Permission of department.

**PHRM 911. Readings in Pharmacology. 2-10 Credits.**
Selected topics for reading in advanced texts and original papers in pharmacology. A paper and Journal Club presentation of the selected topic are required. Offered in modules I-XII. Prerequisite: Permission of department.

**PHRM 914. Advanced Pharmacology. 4 Credits.**
Consultant rounds, poison control, immunopharmacology, and environmental health. Offered in modules II and III. Prerequisite: Consent of instructor.

**Courses**

**PTOX 830. Introduction to Clinical and Translational Cancer Research. 3 Credits.**
Instruct students in developmental steps used in translating a basic science experiment with clinical applications into a proof of concept application and human trial. Multidisciplinary approach; lectures from faculty in Pharmacology, KU Cancer Ctr, KUMCRI. Curriculum: Levels of evidence-clinical impact, Pre-Clinical modeling, In-Vitro studies & Animal models, Cancer Drug Development-pharmacokinetics & toxicity, Pre-Clinical Proof of Concept & FDA, Creating a Pilot Study, Biostatistics 101, Phases of Clinical Trials, Data Collection, Support Staff, Regulatory and DSMBs, IRB and HIPPA, Funding Study: Grants & Parma, Advertising
study & meeting accrual goals, Goals of Phase I study, Goals & Objectives of Phase II Efficacy study, Phase 3 Multicenter Study: Value of Numbers & Utilizing Cooperative Groups. Prerequisite: Completion of first 2 years of Med School or graduate school, or enrollment in MD/PhD program. Students no meeting one of these criteria will require permission from course instructor.

PTOX 887. Toxicologic Pathology. 4 Credits.
Introductory pathology course for graduate students preparing for a career in basic toxicology research. Topics to be presented and discussed include: cell injury, inflammation, repair and regeneration, immunopathology, neoplasia, tumor pathology, respiratory pathology, liver pathology, neuropathology, miscellaneous organ pathology, and lab animal clinical chemistry.

PTOX 889. Research in Toxicology. 1-10 Credits.
Introductory pathology course for planning on being research toxicologists. Topics to be presented and discussed: cell injury, inflammation, repair and regeneration, immunopath, neoplasia, tumor pathology, respiratory pathology, liver pathology, neuropathology, miscellaneous organ pathology, and lab animal clinical chemistry.

PTOX 898. Principles of Toxicology. 1 Credits.
Chemical fundamentals in structure, actions and metabolism of toxicants and drugs. Included are molecular features of toxicants and drugs, stereoisomerism, receptor theory, dose-response relationships, agonists and antagonists, absorption, pharmacokinetics, and structure-activity relationships.

PTOX 899. Thesis in Toxicology. 1-10 Credits.
For students in a master's program in toxicology.

PTOX 917. Disposition of Xenobiotics. 2 Credits.
Principles of absorption, biotransformation, and excretion of xenobiotics. Prerequisite: PHCL 888 or departmental permission.

PTOX 918. Toxicology. 4 Credits.
Selected topics in environmental, forensic, and industrial toxicology.

PTOX 939. Carcinogenesis and Cancer Biology. 3 Credits.

PTOX 940. Techniques in Industrial Toxicology. 2 Credits.
A unique course where students are exposed to and have practical experience in techniques used for risk-assessment of chemicals. The course is taught with extensive input by industrial toxicologists who use these techniques on a daily basis. This course is offered at a local industrial setting. Prerequisite: PHCL 888; PTOX 917, PTOX 918, and PTOX 938, or departmental permission.

PTOX 990. Research for Dissertation in Toxicology. 1-10 Credits.
Prerequisite: PTOX 889.

PTOX 999. Dissertation in Toxicology. 1-10 Credits.
Prerequisite: Open to students of advanced standing enrolled in the doctoral program in toxicology.

Master of Science in Pharmacology

Pharmacology and Toxicology both require an understanding of basic properties and actions of chemicals and the biological systems they affect. Pharmacology though, focuses more on the therapeutic actions of chemicals (particularly drugs) in the health sciences, the use of drugs as therapeutic agents in medicine or as tools in scientific research, and the development and regulation of pharmaceuticals. Pharmacologists perform many different duties including research and teaching in academic, nonprofit and industrial settings, and in consulting and public service.

The Master of Science (M.S.) in Pharmacology degree program provides an academic experience that emphasizes research skills and prepares students for a range of careers in varied employment settings or more advanced academic study. The M.S. curriculum provides a foundation of core concepts and skills through required coursework, but allows considerable flexibility for individualization through advanced electives and mentored research experiences.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:
- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
• Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs «.

**Degree Requirements:**

• Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.

• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

• Completion of a minimum of 30 credit hours.

• Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

• Successful completion of either a thesis defense or general examination (p. 2417) the semester the student will graduate.

• If thesis option chosen, then enrollment in a minimum of one (1) credit hour of PHCL 899 Thesis in Pharmacology and successful thesis submission and publication (p. 2417) (according to Office of Graduate Studies policy.)

• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

• Successful completion of the following Pharmacology courses:

<table>
<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PHCL 880</td>
<td>Essentials of Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PHCL 890</td>
<td>Research in Pharmacology</td>
<td>1-10</td>
</tr>
<tr>
<td>PHCL 898</td>
<td>Principles of Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>PHCL 899</td>
<td>Thesis in Pharmacology (if thesis option chosen)</td>
<td>10</td>
</tr>
</tbody>
</table>

• Successful completion of elective coursework as determined in consultation with the student’s advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs «.

**Typical Plan of Study**

**Year 1**

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td>1-3</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>GSMC 857</td>
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<tr>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
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</tr>
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</table>

Total Hours 19-30

**Year 2**

<table>
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<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCL 890</td>
<td>1-6</td>
<td>PHCL 890</td>
<td>1-6</td>
<td>PHCL 890</td>
</tr>
<tr>
<td>PHCL 898</td>
<td>1</td>
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</tr>
</tbody>
</table>

Total Hours 2-7

**Year 3**

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCL 899 or 890</td>
<td>1-6</td>
<td>PHCL 899 or 890</td>
<td>1-6</td>
<td>PHCL 899 or 890</td>
</tr>
<tr>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thesis defense or general examination scheduled semester approved by committee to graduate.

Total Hours 7-31

**TECHNICAL STANDARDS AND REQUIREMENTS FOR GRADUATE STUDIES IN THE DEPARTMENT OF PHARMACOLOGY, TOXICOLOGY AND THERAPEUTICS**

The M.S. degree signifies that the holder is prepared for entry into research in industrial or academic laboratory settings. To that end, graduates must have the knowledge and skills to function in a broad variety of laboratory settings. Therefore, all students admitted for graduate studies in Pharmacology and Toxicology must meet the following abilities and expectations.
1. **Observation**: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. **Communication**: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. **Motor**: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to perform laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities**: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. **Behavioral and Social Attributes**: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student’s difficulties. At this review, the provisions for reasonable accommodation will be determined.

For further information, contact The Department of Pharmacology, Toxicology and Therapeutics, University of Kansas School of Medicine, MS 1018, 3901 Rainbow Blvd., Kansas City, Kansas 66160; Phone: (913) 588-0028 E-mail: bhagenbuch@kumc.edu or (913) 588-7519 kmccarso@kumc.edu

**STUDENT POLICY ON INFECTIOUS DISEASE**

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for admission to academic programs at the University of Kansas Medical Center. In such cases, the determination of eligibility for admission will be made on an individual basis in consultation with the applicant’s physician; the decision will take a number of factors into consideration, including the legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

**DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS**

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

**Master of Science in Toxicology**

Pharmacology and Toxicology both require an understanding of basic properties and actions of chemicals and the biological systems they affect. Toxicology is, more specifically, the study of adverse effects of chemicals on living systems, the extent of damage they produce, the relationship between dose and effect, routes of exposure, and potential treatments. Toxicologists not only identify toxins, but also contribute to risk assessment, safety evaluation, and establishment of legal regulations. Toxicologists perform many different duties including research in academic, nonprofit and industrial settings, and in consulting and public service.

The Master of Science (M.S.) in Toxicology degree program provides an academic experience that emphasizes research skills and prepares students for a range of careers in varied employment settings or more advanced academic study. The M.S. curriculum provides a foundation of core concepts and skills through required coursework, but allows considerable flexibility for individualization through advanced electives and mentored research experiences.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

**Admission requirements:**

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
• Three letters of recommendation.
• Prerequisite coursework:
  • One year of general chemistry
  • One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  • One year of biological sciences
  • One semester of calculus
  • One semester of physics
• Research experience (beyond labs associated with lecture courses) is strongly suggested.
• Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

Degree Requirements:
• Degree requirements are normally completed within 3 years of admission to the degree program although a maximum of 7 years is allowed.
• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
• Completion of a minimum of 30 credit hours.
• Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
• Successful completion of either a thesis defense or general examination (p. 2417) the semester the student will graduate.

If thesis option chosen, then enrollment in a minimum of one (1) credit hour of PTOX 899 Thesis in Toxicology and successful thesis submission and publication (p. 2417) (according to Office of Graduate Studies policy.)

Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Successful completion of the following Toxicology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTOX 918</td>
<td>Toxicology</td>
<td>4</td>
</tr>
<tr>
<td>PTOX 889</td>
<td>Research in Toxicology</td>
<td>1-10</td>
</tr>
</tbody>
</table>

Successful completion of elective coursework as determined in consultation with the student’s advisor.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

**Typical Plan of Study**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td>1-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>PTOX 889</td>
</tr>
<tr>
<td>PTOX 898</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>PTOX 899 or 889</td>
</tr>
<tr>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
</tr>
</tbody>
</table>

Thesis defense or general examination scheduled semester approved by committee to graduate.

**Total Hours 19-30**

<table>
<thead>
<tr>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>PTOX 899 or 889</td>
</tr>
<tr>
<td>PHCL 899 if thesis option chosen, otherwise PHCL 890</td>
</tr>
</tbody>
</table>

**Total Hours 7-31**
TECHNICAL STANDARDS AND REQUIREMENTS FOR GRADUATE STUDIES IN THE DEPARTMENT OF PHARMACOLOGY, TOXICOLOGY AND THERAPEUTICS

The M.S. degree signifies that the holder is prepared for entry into research in industrial or academic laboratory settings. To that end, graduates must have the knowledge and skills to function in a broad variety of laboratory settings. Therefore, all students admitted for graduate studies in Pharmacology and Toxicology must meet the following abilities and expectations.

1. Observation: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. Communication: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. Motor: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to perform laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. Intellectual-Conceptual, Integrative, and Quantitative Abilities: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student's difficulties. At this review, the provisions for reasonable accommodation will be determined.

For further information, contact The Department of Pharmacology, Toxicology and Therapeutics, University of Kansas School of Medicine, MS 1018, 3901 Rainbow Blvd., Kansas City, Kansas 66160; Phone: (913) 588-0028 E-mail: bhagenbuch@kumc.edu or (913) 588-7519 kmccarso@kumc.edu

STUDENT POLICY ON INFECTIOUS DISEASE

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for admission to academic programs at the University of Kansas Medical Center. In such cases, the determination of eligibility for admission will be made on an individual basis in consultation with the applicant's physician; the decision will take a number of factors into consideration, including the legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/her or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

Doctor of Philosophy in Pharmacology

Pharmacology and Toxicology both require an understanding of basic properties and actions of chemicals and the biological systems they affect. Pharmacology, though, focuses more on the therapeutic actions of chemicals (particularly drugs) in the health sciences, the use of drugs as therapeutic agents in medicine or as tools in scientific research, and the development and regulation of pharmaceuticals. Pharmacologists perform many different duties including research and teaching in academic, nonprofit and industrial settings, and in consulting and public service.

The Doctor of Philosophy (Ph.D.) in Pharmacology degree program prepares students for careers as independent scientists in academia, industry, or government through a broad-based curriculum and development of strong research design and communication skills. The Ph.D. didactic curriculum consists of a core of required discipline-based coursework, but is significantly individualized through advanced electives, seminars, extensive mentored research experiences, and consultation with the student's selected advisory committee.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:

• Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.

Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
• A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
• Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
• A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
• An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895. GRE Scores NOT APPLICABLE TO THE IGPBS.
• Three letters of recommendation.
• Prerequisite coursework:
  • One year of general chemistry
  • One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  • One year of biological sciences
  • One semester of calculus
  • One semester of physics
• Research experience (beyond labs associated with lecture courses) is strongly suggested.
• Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree requirements:

• Degree requirements are normally completed within 6 years of admission to the program although a maximum of 8 years is allowed.
• Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.
• Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  • Successful completion of GSMD 857 Biographics, GSMD 852 Introduction to Biomedical Research I and GSMD 855 Introduction to Biomedical Research II (or equivalent) meets the Research Skills requirement.
  • Successful completion of GSMD 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
• Successful completion of the Residence Requirement (p. 2125) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
• Successful completion of the Oral Comprehensive Examination (p. 2421). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.
• Successful completion of the Post-Comprehensive Enrollment (p. 2422) requirement.
• Enrollment in a minimum of one (1) credit hour of PHCL 999 Dissertation in Pharmacology the semester the student will defend dissertation and graduate.
• Successful completion of the Final Oral Examination (p. 2422) (dissertation defense).
• Successful Dissertation Submission and Publication (p. 2423) (according to Office of Graduate Studies policy.)
• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMD 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMD 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMD 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMD 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMD 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMD 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMD 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMD 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMD 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMD 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

• Successful completion of the following Pharmacology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCL 880</td>
<td>Essentials of Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PHCL 890</td>
<td>Research in Pharmacology</td>
<td>1-10</td>
</tr>
<tr>
<td>PHCL 898</td>
<td>Principles of Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>PTOX 917</td>
<td>Disposition of Xenobiotics</td>
<td>2</td>
</tr>
<tr>
<td>PTOX 918</td>
<td>Toxicology</td>
<td>4</td>
</tr>
<tr>
<td>PHCL 990</td>
<td>Research for Dissertation in Pharmacology</td>
<td>1-10</td>
</tr>
<tr>
<td>PHCL 999</td>
<td>Dissertation in Pharmacology</td>
<td>1-10</td>
</tr>
</tbody>
</table>

• Successful completion of a minimum of two elective courses that are at least two (2) credit hours each in consultation with the student's advisor and dissertation committee. Additional elective coursework may be taken as determined in consultation with the student's advisor.

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs.
### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>2 GSMC 859</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>2</td>
<td></td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>May take an elective course from the student’s chosen degree program in consultation with the student’s advisor.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>GSMC 857</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
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<tr>
<td>GSMC 858</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
<td></td>
<td></td>
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</table>

**Total Hours 19-30**

#### Year 2

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCL 890</td>
<td>offered biannually in even years, alternates with PTOX 918</td>
<td>4 PHCL 890</td>
<td>1-6 PHCL 890</td>
<td>1-3</td>
</tr>
<tr>
<td>PTOX 917</td>
<td>offered biannually in even years, student may complete it in year 3</td>
<td>1-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHCL 898</td>
<td>1 PHCL 809 offered annually until semester of final defense</td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Year 3**

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCL 890</td>
<td>1-6</td>
<td>PHCL 890</td>
<td>1-6 PHCL 990</td>
<td>1-3</td>
</tr>
<tr>
<td>PTOX 918</td>
<td>offered biannually in odd years, alternates with PHCL 880</td>
<td>4 Electives</td>
<td>1-6</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
<td></td>
<td>1-6</td>
</tr>
<tr>
<td>Oral Comprehensive Exam scheduled as early as this semester if approved by committee to proceed.</td>
<td></td>
<td></td>
<td></td>
<td>6-16</td>
</tr>
</tbody>
</table>

**Year 4**

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCL 990</td>
<td>1-6</td>
<td>PHCL 990</td>
<td>1-6 PHCL 990</td>
<td>1-3</td>
</tr>
</tbody>
</table>

**Year 5**

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCL 999</td>
<td>1-6</td>
<td>PHCL 999</td>
<td></td>
<td>1-6</td>
</tr>
</tbody>
</table>

Final Oral Exam (dissertation defense) scheduled semester approved by committee to defend and graduate.

**Total Hours 25-81**

### TECHNICAL STANDARDS AND REQUIREMENTS FOR GRADUATE STUDIES IN THE DEPARTMENT OF PHARMACOLOGY, TOXICOLOGY AND THERAPEUTICS

The Ph.D. degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. As a consequence, graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory.

Therefore, all students admitted for graduate studies in Pharmacology and Toxicology must meet the following abilities and expectations.

1. **Observation**: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

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3. **Motor**: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to perform laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities**: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

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Doctor of Philosophy in Toxicology

Pharmacology and Toxicology both require an understanding of basic properties and actions of chemicals and the biological systems they affect. Toxicology is, more specifically, the study of adverse effects of chemicals on living systems, the extent of damage they produce, the relationship between dose and effect, routes of exposure, and potential treatments. Toxicologists not only identify toxins, but also contribute to risk assessment, safety evaluation, and establishment of legal regulations. Toxicologists perform many different duties including research in academic, nonprofit and industrial settings, and in consulting and public service.

The Doctor of Philosophy (Ph.D.) in Toxicology degree program prepares students for careers as independent scientists in academia, industry, or government through a broad-based curriculum and development of strong research design and communication skills. The Ph.D. didactic curriculum consists of a core of required discipline-based coursework, but is significantly individualized through advanced electives, seminars, extensive mentored research experiences, and consultation with the student’s selected advisory committee.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
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- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
  - Research experience (beyond labs associated with lecture courses) is strongly suggested.
  - Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs→.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.
Degree requirements:

- Degree requirements are normally completed within 6 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
  - Successful completion of GSCM 857 Biographics, GSCM 852 Introduction to Biomedical Research I and GSCM 855 Introduction to Biomedical Research II (or equivalent) meets the Research Skills requirement.
  - Successful completion of GSCM 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p.) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
- Successful completion of the Oral Comprehensive Examination (p. 2421). Students are recognized as formal doctoral candidates only after they have passed the comprehensive examination.
- Successful completion of the Post-Comprehensive Enrollment (p. 2422) requirement.
- Enrollment in a minimum of one (1) credit hour of PTOX 999 Dissertation in Toxicology the semester the student will defend dissertation and graduate.
- Successful completion of the Final Oral Examination (p. 2422) (dissertation defense.)
- Successful D (http://www.kumc.edu/Documents/graduate%20studies/Dissertation%20Submit%20and%20Pub%2016-Oct.pdf) submission and publication (p. 2423) (according to Office of Graduate Studies policy.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSCM 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSCM 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSCM 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSCM 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSCM 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSCM 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSCM 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSCM 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSCM 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSCM 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

- Successful completion of the following Toxicology courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PHCL 880</td>
<td>Essentials of Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PTOX 889</td>
<td>Research in Toxicology</td>
<td>1-10</td>
</tr>
<tr>
<td>PTOX 898</td>
<td>Principles of Toxicology</td>
<td>1</td>
</tr>
<tr>
<td>PTOX 917</td>
<td>Disposition of Xenobiotics</td>
<td>2</td>
</tr>
<tr>
<td>PTOX 918</td>
<td>Toxicology</td>
<td>4</td>
</tr>
<tr>
<td>PTOX 940</td>
<td>Techniques in Industrial Toxicology</td>
<td>2</td>
</tr>
<tr>
<td>PTOX 990</td>
<td>Research for Dissertation in Toxicology</td>
<td>1-10</td>
</tr>
<tr>
<td>PTOX 999</td>
<td>Dissertation in Toxicology</td>
<td>1-10</td>
</tr>
</tbody>
</table>

- Successful completion of a minimum of two elective courses that are at least two (2) credit hours each in consultation with the student’s advisor and dissertation committee. Additional elective coursework may be taken as determined in consultation with the student’s advisor.

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs:

Typical Plan of Study

Year 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSCM 850</td>
<td>2 GSCM 853</td>
<td>2 GSCM 859</td>
<td>1-4</td>
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<tr>
<td>GSCM 851</td>
<td>2 GSCM 854</td>
<td>2 May take</td>
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<tr>
<td></td>
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<td>an elective</td>
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<td>the student's</td>
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<tr>
<td></td>
<td></td>
<td>advisor.</td>
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- Total Hours 19-30

Year 2

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTOX 898</td>
<td>1 PTOX 889</td>
<td>1-6 PTOX 889</td>
<td>1-3</td>
</tr>
<tr>
<td>PHCL 880 offered</td>
<td>4 PTOX 917 offered</td>
<td>biannually in even</td>
<td>2</td>
</tr>
<tr>
<td>years, alternates</td>
<td></td>
<td>years</td>
<td></td>
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<tr>
<td>with PTOX 918</td>
<td></td>
<td>student may</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>complete it in year 3</td>
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</tr>
<tr>
<td>PTOX 889</td>
<td>1-6 PHCL 809</td>
<td>repeat annually until</td>
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<td>semester of final</td>
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- Year 3

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<tr>
<th>Year 3</th>
<th>Hours Spring</th>
<th>Hours Summer</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PTOX 889</td>
<td>1-6 PTOX 889</td>
<td>1-6 PTOX 990</td>
<td>1-3</td>
</tr>
<tr>
<td>PTOX 918 offered</td>
<td>4 PTOX 940 offered</td>
<td>biannually in odd</td>
<td>2</td>
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<tr>
<td>years, alternates</td>
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<td>years</td>
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<tr>
<td>with PHCL 880</td>
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<td>student may</td>
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<tr>
<td></td>
<td></td>
<td>complete it in year 2</td>
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</table>
Therefore, all students admitted for graduate studies in Pharmacology and in a broad variety of academic situations in the classroom and laboratory. As a consequence, graduates must have the knowledge and skills to function research and/or teaching in postgraduate training and faculty positions. As the Ph.D. degree signifies that the holder is prepared for entry into graduate.

<table>
<thead>
<tr>
<th>Electives</th>
<th>1-6 Electives</th>
<th>1-6</th>
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| Oral Comprehensive Exam | | |
| scheduled as early as this semester if approved by committee to proceed. | | |

<table>
<thead>
<tr>
<th>Year 4</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td>PTOX 990</td>
<td>1-6</td>
<td>PTOX 990</td>
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<tr>
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<th>Year 5</th>
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<tbody>
<tr>
<td>Fall</td>
<td>Hours</td>
<td>Spring</td>
</tr>
<tr>
<td>PTOX 999</td>
<td>1-6</td>
<td>PTOX 999</td>
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</tbody>
</table>

| Final Oral Exam (dissertation defense) | | |
| scheduled semester approved by committee to defend and graduate. | | |

<table>
<thead>
<tr>
<th>Total Hours</th>
<th>28-86</th>
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</table>

**TECHNICAL STANDARDS AND REQUIREMENTS FOR GRADUATE STUDIES IN THE DEPARTMENT OF PHARMACOLOGY, TOXICOLOGY AND THERAPEUTICS**

The Ph.D. degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. As a consequence, graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory.

Therefore, all students admitted for graduate studies in Pharmacology and Toxicology must meet the following abilities and expectations.

1. **Observation**: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. **Communication**: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. **Motor**: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to perform laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. **Intellectual-Conceptual, Integrative, and Quantitative Abilities**: These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. **Behavioral and Social Attributes**: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student’s difficulties. At this review, the provisions for reasonable accommodation will be determined.

For further information, contact The Department of Pharmacology, Toxicology and Therapeutics, University of Kansas School of Medicine, MS 1018, 3901 Rainbow Blvd., Kansas City, Kansas 66160; Phone: (913) 588-0028 E-mail: bhagenbuch@kumc.edu or (913) 588-7519 kmccarso@kumc.edu

**STUDENT POLICY ON INFECTIOUS DISEASE**

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for admission to academic programs at the University of Kansas Medical Center. In such cases, the determination of eligibility for admission will be made on an individual basis in consultation with the applicant’s physician; the decision will take a number of factors into consideration, including the legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease much advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

**DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS**

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

**Department of Population Health**

The Department of Population Health was formed on July 1, 2019, upon the merger of the Department of Preventive Medicine and Public Health and the Department of Health Policy and Management. Our department, with faculty on all three campuses of the Kansas University Medical
Center (Kansas City, Wichita and Salina), is focused on improving health and reducing health inequities for all people in Kansas. We think that the health of our communities is best served by integrating our efforts to improve public health with efforts to improve health systems, health policies, and health care delivery. We seek to understand the complex interplay of behavioral health and social determinants of health and identify the way these underlying determinants influence the delivery of health care services. We try to find ways in which health systems and health policies can better respond to the needs of the communities they serve.

TEACHING
Faculty and staff in the Department of Population Health are dedicated to offering degree programs to future public health practitioners, health service leaders and clinical researchers. The department provides the following degree programs:

- Master of Health Services Administration (http://www.kumc.edu/school-of-medicine/population-health/education/master-of-health-services-administration-(mhsa).html)
- Ph.D. in Health Policy Management (http://www.kumc.edu/school-of-medicine/population-health/education/phd-in-health-policy-and-management.html)
- Graduate Certificate Programs (https://edwardscampus.ku.edu/public-health/)
- Community Health Center Executive Fellowship (http://www.chcexecfellow.com/)

RESEARCH
Department of Population Health faculty reflect the multidisciplinary scope of health practices and represent a variety of academic disciplines. Current research includes:

- Tobacco Control
- Cancer Screening and Prevention
- Obesity
- Health Services Research
- Epidemiology

SERVICE
Through strong partnerships with community organizations, government agencies, health care systems and other stakeholders, our more than 90 faculty and staff seek to address some of the most critical threats to the health of our communities, including tobacco, obesity, cancer, and diabetes. Our diverse faculty bring expertise in psychology, sociology, epidemiology, economics, statistics, demography, anthropology, implementation science, public health, and health care delivery, allowing us to apply a multi-disciplinary approach to tackling health concerns, particularly those concerns that disproportionately affect rural, incarcerated, Native American, African American, and Latino communities. Learn more. (https://www.kumc.edu/school-of-medicine/academics/departments/population-health.html)

Courses

**HP&M 610. The Health Care System. 4 Credits.**
This course introduces students to the health care system of the United States. The course stresses the system's historical development, distinguishing features, financing, management, resources, and politics. Requirements include position papers, class discussions, examinations, and site visits to health care facilities

**HP&M 620. Women and Health Care. 3 Credits.**
A gender analysis of the organization of health care in the United States, using sociohistorical and sociological perspectives. Considers the health status and health care problems of women in relation to cultural aspects of medicine and health care; the roles of both informal and professional health care providers; the political economy of health care systems; and the relationship between gender and the state. (Same as SOC 617.) Prerequisite: HP&M 601 or permission of instructor.

**HP&M 810. The Health Care System. 3 Credits.**
The structure and function of the components of the U.S. healthcare system are introduced in the context of the history, values and social forces that influenced its development and evolution. Students gain exposure to the concepts and vocabulary associated with aspects of the system, including delivery (providers, institutions, services), resources (finance, payment, insurance), population and public health, and outcomes (cost, access, quality). Healthcare outcomes from consumer, clinical, and societal perspectives are explored. LEC

**HP&M 819. Research for Health Care Leaders. 3 Credits.**
Introduces epidemiology, survey research, and evaluation research. Examines quantitative and qualitative methods. Focuses on role of research in health policy and health management. Incorporates lecture, discussion, papers and presentations.

**HP&M 822. Health Care Economics. 3 Credits.**
This course introduces the core concepts from economics to healthcare with a focus on helping healthcare managers use economic tools in making sound decisions. The demand for healthcare products, the structure of insurance, and the supply of healthcare products are examined. Students will apply a variety of economic analyses to health policy and health system issues. LEC

**HP&M 825. Financial Concepts in Healthcare Management. 3 Credits.**
Introduces the financial and managerial accounting concepts used in health care. This includes financial statement analysis; cost accounting; budgeting; and capital project analysis. LEC

**HP&M 827. Financial Applications in Healthcare Management. 3 Credits.**
Applies economic and financial concepts to health care management, integrating operational, strategic, and financial planning. Students will analyze financial statement ratios; forecast revenue and expense; develop budgets; credit worthiness determination; break-even analysis and working capital management in a variety of healthcare settings including long-term care and public health. LEC Prerequisite: HP&M 825, Financial Concepts in Healthcare Management or permission of instructor.

**HP&M 830. Health Care Management. 3 Credits.**
This course introduces key concepts and skills for health care managers. Emphasizing self-discovery and professional development, the course examines how to become an informed employee, an effective team member, and a successful manager. Course topics include interpersonal skills, delegation, leadership, performance management, and organizational change. Learning methods include lectures, case
analyses, experiential exercises, and discussion. Prerequisite: HP&M 810 or permission of instructor.

**HP&M 831. Reimbursement and Fiscal Policy. 2 Credits.**
Reimbursement and fiscal policy practices impact the success and the economic well-being of healthcare institutions, payers and patients. This course develops the student's understanding of complex reimbursement methodologies from the perspective of providers and payers. Students will explore the strengths and weaknesses of the major methods of third party reimbursement, the types of managed care organizations and the payment methodologies employed. Students are also prepared to approach reimbursement policy issues both from the payer and the provider viewpoint. LEC

**HP&M 832. Governance and Health Law. 2 Credits.**
A survey course of the law as it affects governance, health care administration and health care generally. This course will develop the student's understanding of health law and its impact on many aspects of health care governance and administration. The student should be able to identify and understand various legal issues they may encounter and when to engage legal counsel's advice. Prerequisite: HP&M 810.

**HP&M 833. Ethics. 2 Credits.**
An introduction to the principles and concepts in the ethics of health services administration. The course will help students further develop their skills to recognize and analyze ethical dilemmas, and to explain, justify and evaluate the decisions they make in response to such dilemmas.

**HP&M 837. Health Policy. 3 Credits.**
This course examines the development, implementation, and evaluation of federal, state, and local health policy in the United States. Particular attention will be given to (1) the development of public institutions and policy goals; and (2) current policy problems such as cost controls, reimbursement, health services utilization, program assessment and evaluation, public health, and public/private investment and resource planning. Students will be expected to synthesize and integrate knowledge to apply theory and principles in ways consistent with professional practice as a health policy analyst. LEC

**HP&M 838. Rural Health Care. 3 Credits.**
Provides students with (a) an understanding of major issues in rural health and the rural environment in which health care providers and administrators provide service; (b) an understanding of the demographics, economics, services and challenges associated with the health care delivery systems in rural America and (c) an overview of federal and state health policy and its effect on rural health systems. Special emphasis will be placed on identifying, understanding, and addressing rural health challenges from administrative and policy perspectives. Prerequisite: None.

**HP&M 840. Organizational Foundations for Leading Change. 3 Credits.**
Self-discovery as a foundation for professional development while exploring the concepts of leader, manager, and follower is emphasized. Analysis and prediction of an organization's stages of development and its capacity for linear and social change are introduced through the lens of complexity science. Political, legal, ethical, and other issues that constrain and destabilize organizations and strategies to restore equilibrium are explored. (Same as NRSG 880.) LEC

**HP&M 842. Roles, Functions and Care Models. 2 Credits.**
This course examines the nature and characteristics of the healthcare workforce needed to deliver direct, indirect, and support services. Healthcare worker roles are analyzed through the lens of key organizational functions and care delivery modalities. Common care delivery models, such as primary, team, and patient-centered care approaches to organizing care delivery are explored in various clinical settings, including acute and long-term care and community and public health entities. Administrative challenges and opportunities for managing a diverse workforce are presented. LEC.

**HP&M 844. Communication for the Healthcare Executive. 2 Credits.**
This course focuses on attaining proficient communication skills to deliver high impact messages to stakeholders ranging from board members, to diverse communities of interest, to policymakers and regulators. Verbal and written skill development addresses executive presence to perform communication functions such as conducting an 'ask' from a policymaker or potential benefactor, using storytelling and data to shape critical messages to the media, and communicating value-driven memoranda to internal audiences. The use of emerging technologies to aid in communication effectiveness will also be presented. LEC

**HP&M 846. Health Information Technology Management. 3 Credits.**
This course covers fundamental concepts of health information technologies including information management, health care delivery and remote monitoring systems of interest to administrators in health services organizations. Types of systems, alignment with organizational strategy, selection and adoption, return on investment, security and privacy, and uses of healthcare information for clinical and strategic analysis and decision support will be covered. The course will also cover current U.S. health technology infrastructure, policy, organizations and issues regarding the latest technology applications. An introduction to health care analytics is also provided.

**HP&M 847. Business Intelligence in Healthcare. 2 Credits.**
An introduction into the data sources, technologies and processes leveraged by healthcare organizations to make more timely, informed and actionable business decisions. Students will learn fundamental terms and practices of data analytics and analysis, study real world examples of how data can inform decision making in healthcare and participate in case studies and in class presentations. Prerequisite: Permission of instructor.

**HP&M 848. Designing Health Care Organizations. 2 Credits.**
This class examines how design affects a broad range of health care organizations. It considers designs for jobs, processes, equipment, buildings, and organizations, and explores implications for safety, customer satisfaction, worker satisfaction, productivity, effectiveness, and profitability. Students analyze varied cases that approach design as a management decision-making process.

**HP&M 850. Introduction to Operations. 3 Credits.**
Examines performance of health care organizations, sources of variation, methods of measurement, and strategies for improving performance. Considers several approaches to performance improvement and examines tools widely used in operations management. Incorporates lecture, discussion, and fieldwork. (Same as NRSG 882.)

**HP&M 852. Strategic Marketing. 2 Credits.**
Provides students with a framework for executive-level, strategic market planning and analysis. Topics covered include: the strategic marketing organization; the impact of organizational culture on strategy development; environmental assignments and competitor analysis; market research; and the impact of the marketing fours (price, positioning, promotion, and product) in health care.

**HP&M 853. Strategic Management. 2 Credits.**
Explores internal and external analysis for health care organizations. Examines development, analysis, execution, and monitoring of strategies. Application of critical thinking skills to strategy. Lecture and discussion.
Prerequisite: Completion of HP&M Level I courses or permission of instructor.

HP&M 854. Human Resources and Workforce Development. 3 Credits.
The focus of this course is to understand the leadership functions of human resource management in organizations to create a competitive edge through employee empowerment. Core human resource concepts are introduced and applied to optimize human capital within a variety of healthcare settings, including compensation and benefits, employee recognition, and employee/labor relations. National, regional, and local strategies and workforce trends are discussed related to best practices for the selection, retention, and management as a healthcare employer of choice. (Same as NRS 981). LEC

HP&M 857. Evaluating Outcomes of Healthcare. 3 Credits.
This course will trace the development of the outcomes research movement and provide examples of methodologies, assessment instruments and issues that guide outcomes research. It will also review the methods for linking research findings with clinical practice (i.e., clinical practice guidelines). Obstacles to acceptance of practice guidelines will be discussed. Finally, the translation of outcomes research methodology into programs to improve health quality will be presented. Prerequisite: Permission of instructor.

HP&M 858. Organizational Behavior in Healthcare. 3 Credits.
Healthcare as a cultural and socio-behavioral system is presented. Using research and theory, students explore alternative perspectives on the nature of medicine and healing within comparative health systems, both U.S. and abroad. Students examine at an advanced level how healthcare organizational structures contribute to patient health outcomes and influence employee behaviors. The course reinforces the nature and characteristics of the health professions, particularly medicine and nursing perceptions, and the complex behavioral dynamics of health professionals with organizational leaders. LEC

HP&M 859. Professional Development. 2 Credits.
Prepares students for an initial professional job search, long term career planning and professional development. Explores personal assessment, professional networking, mentoring, resume' construction, job searches and interviewing. Reviews professional communication and other professionalism domains. Introduces foundational concepts of leadership and leadership development. Lectures, papers, interactive activities and discussion. Prerequisite: Permission of instructor.

HP&M 860. Graduate Internship in Healthcare Services Administration. 1-3 Credits.
Novice and experienced health services administrators function in applied settings. The internship is designed to meet the needs of individual students to advance their career functioning and set in motion a professional development plan. The inexperienced administrator will use the internship as a mid-curriculum opportunity to apply and synthesize in the practice setting knowledge, skills, and abilities. Students who come to the program with mid-level to advanced experience use the practicum to advance their career through exposure to additional experiences that extend their knowledge, skills, and abilities and demonstrates synthesis of program competencies. FLD

HP&M 861. Capstone Seminar. 2 Credits.
The knowledge, skills, and abilities learned throughout the program are validated in capstone experience. A case study approach will be used to synthesize and apply principles including, but not limited to, change theory and quality improvement, research and information technologies, strategy and communication tools, human resource management, financial and economic analysis, and advanced decision-making and management of organizational behavior. Students will present their cases to peers, faculty, and external reviewers for dialogue, critique, and a plan for professional skills development. IND.

HP&M 862. Research Practicum in Health Services Administration. 1-3 Credits.
A course to conduct a research project related to health services delivery, management or policy and to explore topics related to the research project. RSH Prerequisite: HP&M 819.

HP&M 863. Independent Study. 1-3 Credits.
This course is designed to meet the needs of students who have a special interest that cannot be met by existing courses. IND

HP&M 870. Research Inquiry: Defining and Supporting the Research Problem; Research Design and Analysis. 3 Credits.
Students select a problem area, critically review and analyze the research literature related to it and develop a research question(s) and working hypotheses. The analysis of the problem integrates field experiences with relevant literature, and translates ideas from the practice and/or policy setting into the context of scholarly inquiry. Students then build on a problem area of interest with potential benefit to the health care field and examine methodologies that would support a hypothesis or significant research question. The course guides students in translating their questions into a research design, using specific data sources, including overall strategy, measurement, study population and/or sample and analysis plan. Focus will be placed on critical analysis of design trade-offs and limitations. Prerequisite: Permission of the instructor.

HP&M 873. Statistical Applications Using Large Data Bases. 3 Credits.
The management of large data sets is a critical analytic skill for health policy and management research. This course exposes students to the various types and configurations of large data sets and provides hands-on analytic experience using an array of statistical techniques and procedures. Attention is placed on the criteria for designing and evaluating, including the trade-offs in selecting one plan over another. Students actually carry out an analysis plan for a variety of data types. Prerequisite: HP&M 819, or permission of the instructor.

HP&M 874. Statistics for Decision Making. 3 Credits.
Elementary statistical techniques to include descriptive statistics, probability, sampling, and statistical inference of means and proportions; advanced statistical techniques include multivariate analysis of qualitative and quantitative variables using multiple linear and logistic regression.

HP&M 875. Modeling in Health Services Research. 3 Credits.
Provides an opportunity for students to use a number of common analysis models in health services research. Emphasizes a conceptual understanding of appropriate modeling techniques and use of statistical software packages. The course focuses on application of methods to health services research questions, with emphasis on regression design and interpretation. Prerequisite: HP&M 874 or permission of the instructor.

HP&M 876. Medicare and Medicaid. 3 Credits.
Provides students with an in-depth understanding of the three publicly financed health programs that impact virtually all aspects of the American healthcare system: Medicare, Medicaid and Children's Health Insurance Programs (CHIP). Explores history and evolution of each program, plus specific operational issues such as eligibility, financing, management reporting, state/federal coordination, quality of care and outcomes management and influence of recent legislation. Prerequisite: Permission of the instructor.

HP&M 877. Women and Healthcare. 3 Credits.
A gender analysis of the organization of healthcare in the United States, using sociohistorical and sociological perspectives. Considers the health status and healthcare problems of women in relation to cultural aspects
of medicine and healthcare; the roles of both informal and professional healthcare providers; the political economy of healthcare systems; and the relationship between gender and state. Prerequisite: HP&M 810, or permission of instructor.

HP&M 878. Grant Writing. 3 Credits.
The course is designed to take the principles and mechanics learned in introductory epidemiology and biostatistics and apply them in the design of epidemiologic studies. The strategy and data collection for studies will be emphasized rather than the methods of statistical analysis. The student will learn how to develop a proposal/grant that addresses the entire array of concerns regarding such studies and propose a realistic, scientifically justified study. (Same as ANAT 869 and NRSG 889.) Prerequisite: HP&M 819 or HP&M 821, and NRSG 886.

HP&M 879. Comparative Healthcare Systems. 3 Credits.
Critical examination of the structure and function of healthcare systems in major, advanced, capitalist countries (e.g., Canada, Japan, United Kingdom, France, Germany, and Sweden) in comparison to each other and to the healthcare system of the United States. Patterns in control and financing will be studied in relation to issues of cost, quality, access, and in relation to cultural values. Special attention will be placed on comparative analysis of reform efforts. Prerequisite: HP&M 810 or permission of instructor.

HP&M 880. Health Care and Social Policies in Sweden. 3 Credits.
Sweden leads the world in major health outcomes despite spending significantly less than the U.S. This course provides students the opportunity to visit Sweden and see the operation of its health care and social welfare system firsthand. Learn about Swedish history and culture as you re-examine many commonly held assumptions about both the U.S. and Sweden. An intensive schedule of site visits and lectures in the Stockholm-Uppsala area, assigned readings, and a major paper.

HP&M 882. Health Services Research Using Public Payer Data. 3 Credits.
Several contemporary health reforms have rendered analyses of public payer data more feasible and valuable for population health, health services research, and quality improvement. The addition of an outpatient drug benefit to standard inpatient and outpatient service coverage for Medicare, for example, has stimulated a growth industry in comparative effectiveness research and expanded policy research across the health care system. Pending expansion of States’ Medicaid programs under the Affordable Care Act will undoubtedly create the largest public health care insurance program in the United States. The Centers for Medicare & Medicaid Services (CMS) have streamlined researchers’ access to national Medicare and Medicaid populations for health services and quality improvement projects through contracts with the Research Data Center at the University of Minnesota and the Chronic Condition Warehouse. In addition, Kansas Medicaid has invested in a Data Analytic Interface that offers ready access to our state’s employees, Medicaid beneficiaries, and private health insurance claims data for data analysis, cost effectiveness analysis, and cost benefit analysis. (SAME as PRVM 878).

HP&M 884. Clinical and Administrative Data Analysis. 3 Credits.
This course presents advanced techniques in statistical analysis and information management to help understand, process, and use health services data. The three broad areas of health services data will be used: clinical, program, and population-based. Ways in which these data can be used as both management and research tools will be discussed. Implications for improving patient care and delivery of health services will be emphasized. Labs will stress the use of both manipulative techniques such as merging, matching, sorting, and file construction, as well as focus on analysis, using univariate, bivariate, and multivariate techniques. Recent methodology related to outcomes, case-mix, and performance assessment will be presented, and their application to health services administration demonstrated.

HP&M 885. Instructional Methods in Health Services Education. 1 Credit.
An overview of pedagogical approaches and learning strategies for higher education courses in health policy and management. Content will include course organization, syllabus design, techniques for teaching in the classroom and online, learning styles, strategies for classroom management, and evaluation/grading methods. Prerequisite: HP&M 868 or permission of the instructor.

HP&M 886. Applied Health Services Research. 3 Credits.
Students in this course apply the full spectrum of the research process to a specific hypothesis or research question, drawn from practical health systems observations and/or supported by critical analysis of the health services research literature. Moving step by step through the research process, students work to develop a complete research plan and proposal suitable to investigate their chosen question. Group discussion and guest researchers provide elaboration for each stage of research plan development. Prerequisite: HP&M 872 and HP&M 873 or permission of the instructor.

HP&M 887. Practicum in Health Services Education. 2 Credits.
Application of the approaches and methods described in HP&M 885. Students will serve as a teaching assistant for one semester, working with a teaching mentor. In addition to assisting with the class, students will meet regularly with the mentor to critique and analyze content and classroom processes, plan and develop teaching activities, and evaluate learning and performance in the classroom. Prerequisite: HP&M 868 or permission of the instructor. HP&M 887 may be taken concurrently with HP&M 885.

HP&M 890. Topics in Health Policy and Management. 1-3 Credits.
This course allows exploration of special topics that are not routinely a part of the curriculum. Prerequisite: Consent of the instructor. IND

HP&M 901. Doctoral Seminar in Health Policy. 3 Credits.
Students will investigate, review, and critically analyze major concepts, theoretical and methodological approaches and sub-areas in the field of health policy research. The course will cover comparative health policy analyses as well as both micro and macro system perspectives. Prerequisite: Permission of the instructor.

HP&M 903. Doctoral Seminar in Quality and Safety. 3 Credits.
Students will critically review selected publications that address quality and safety in health care. Identification of major research questions and approaches to them will be stressed, and students will develop an interesting and tractable research question. Prerequisite: Admission to the PhD Program or permission of the instructor.

HP&M 904. Doctoral Seminar in Health Care Occupations and Culture. 3 Credits.
Examines the social, historical, and cultural forces shaping the organization and delivery of health care. Students will critically analyze concepts surrounding health, illness and wellness, healing, professional authority, and interprofessional and intraprofessional relationships. Explores the impact of organizational cultures on the health care system. Prerequisite: Admission to the PhD Program or permission of instructor.

HP&M 905. Doctoral Seminar in Social Determinants of Health. 3 Credits.
An advanced survey of theory and research in social determinants of health, giving primary attention to health differences by education, income, race/ethnicity, gender, and sexual orientation. Demographic, cross-cultural, social-psychological, and physiological aspects of physical and mental health will be considered. Prerequisite: Admission to PhD program or permission of instructor.

HP&M 906. Doctoral Seminar in Comparative Health Systems. 3 Credits.
Critical examination of the structure and function of health care systems in major, advanced, capitalist countries (e.g., Canada, United Kingdom, France, Germany, Netherlands, Sweden) in comparison to each other and to the health care system of the United States. Patterns in control and financing will be studied in relation to issues of cost, quality, access, and in relation to cultural values. Special attention will be placed on comparative analysis of strategies for reform and the results of recent reform efforts in the focal countries. Prerequisite: Admission to PhD program or permission of instructor.

HP&M 910. Health Services Research Methods. 3 Credits.
Examines the research process and the primary methodologies used in health services research. Explores basic methods in survey research, epidemiology, and evaluation. Focuses on quantitative methods and introduces qualitative methods. Lecture Prerequisite: Graduate level statistics; Acceptance to the PhD program or permission of instructor.

HP&M 912. Qualitative Health Research. 3 Credits.
Examines qualitative approaches to research, specifically in health care settings. Content includes qualitative research methodologies, including ethnography, interviews, focus groups, and content analysis through examples in the literature and hands-on exercises. Discusses when qualitative methods are appropriate to use, and how they can complement other research methods. Prerequisite: Permission of Instructor.

HP&M 990. Advanced Topics in Health Policy and Management. 1-3 Credits.
The course allows exploration of special topics that are not routinely a part of the curriculum. Prerequisite: Admission to a PhD program and consent of the instructor. IND.

HP&M 991. Individual Doctoral Readings. 1-3 Credits.
Individual study of special topics or problems by students working on a doctorate. Prerequisite: Admission to a PHD program and consent of the instructor.

HP&M 999. Dissertation. 1-12 Credits.

Courses

PRVM 429. Interdisciplinary Approaches to Neurodevelopmental Disabilities, Including Autism Spectrum Disorders. 3 Credits.
Topics in this course include an introduction to the Maternal and Child Health Bureau and related organizations, the history of neurodevelopmental disabilities (NDD), the genetics, identification, and prevention of developmental disabilities. Trainees obtain information about and participate in experiences related to neurodevelopmental and related disabilities and conditions individuals experience across the life course. The Life Course Perspective is defined by MCHB as the multidisciplinary approach to understanding the mental, physical, and social health of individuals, incorporating both life span and life stage concepts that determine an individual's health trajectory. Significant emphasis is on autism and related issues. Participants learn the different roles of interdisciplinary team members, their unique contributions, and the team process in screening, evaluation and planning intervention. Prerequisite: Permission of Instructor.

PRVM 431. Interdisc Leadership Approaches to Systems & Services for Indv with Autism, Neuro & Dev Disabilities. 3 Credits.
Topics in this course include information about the history and development of service systems in the United States including Maternal and Child Health and Title V programs. An overview of program administration, business planning, budget development and various grant sources provides participants with an understanding of service systems operations and funding streams. Program oversight, standards of care and evaluation, including needs assessment and government mandates for outcomes (GPRA), provide participants with information that enables them to explore agency director perspectives about barriers to providing effective services as well as systems barriers presented from a parent point of view. Discussions include how to make systems changes through consultation and technical assistance and information about adult learning styles and consumer empowerment. Other topics include the scientist/practitioner models of research, empirical validation of practices and community participatory action research. As an adjunct to the core course there are other didactic experiences required of all trainees including Center and community committee work, campus interdisciplinary forums, family immersion experiences and research presentations. These didactic experiences give faculty and trainees an opportunity to meet as a group, hear presentations, and discuss a variety of topics, including ethics, standards of care, and empirically validated practices. Prerequisite: Permission of Instructor.

PRVM 800. Principles of Epidemiology. 3 Credits.
Basic concepts of epidemiology and methods for identification of factors influencing health and disease in human populations. Considerations are centered on physical, biological, environmental, psycho-social and cultural factors in relation to infectious and non-infectious diseases; interactions between agent, host, and environmental factors as determinants of health and disease; the application of epidemiological approaches to health services; retrospective and prospective analysis of morbidity and mortality data.

PRVM 803. Introduction to Clinical Research. 3 Credits.
The course will provide a basic and broad overview to clinical research, as well as support tailored to each student’s specific project. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations; the recruitment of study participants; regulatory issues; defining measures and instruments; data collection, management, and analysis; and reporting of results via abstract, presentation, and/or manuscript. It is required that students have a research idea and mentor before enrolling. Faculty support and collaboration will be available up to 6 months after completion of the course for ongoing efforts to complete the project. Prerequisite: Consent of Instructor. No prior coursework is required. Students must have, or plan to begin, a quality improvement or retrospective research project.

PRVM 804. Community Health Assessment, Intervention, and Advocacy. 3 Credits.
To impact community health, students must be able to: define the problem(s) experienced by specific populations, identify stakeholders and building partnerships, co-design an intervention to address the
problem(s), incorporate cultural values of the affected stakeholders in the intervention, and advocate for various programs and policies to improve health. This course guides students through each element of the community health interventions process - from defining the problem to advocating for policy.

PRVM 805. Public Health Seminar. 1 Credit.
This course will focus on public health practice. Guest lectures from national, state, and local public health agencies will present problems and how these problems are being addressed. Topics are expected to vary somewhat from year to year, depending on the priorities of the agencies. However, topics might include such issues as smoking prevention, automobile accidents, foodborne outbreaks, cryptosporidium outbreaks, lead poisoning in children, asthma in children, sexuality transmitted diseases, diabetes, cancer control, nutrition, cardiovascular diseases, bioterrorism, legal issues and administration of public health. This course is the same as Public Health Grand Rounds.

PRVM 806. Special Topics. 1-4 Credits.
In-depth, individualized investigation of special problems in community health. Designed especially for students with limited background in community health. Prerequisite: Permission of instructor.

PRVM 808. Clinical and Translational Research Seminar. 1 Credit.
This seminar will present locally and nationally recognized clinicians and researchers to discuss various areas of clinical research. The course is designed to expose students to a variety of ongoing research and features speakers from a variety of disciplines including physicians, epidemiologists, biostatisticians, behavioral scientists, nursing faculty, nursing students, medical students, allied health faculty and others. Prerequisite: Permission of instructor.

PRVM 809. Introduction to Public Health. 3 Credits.
This course provides an introduction to the basic principles of public health practice, including an overview of the history, philosophy, and scope of public health in the United States and globally. It will provide an overview of the primary disciplines within public health: biostatistics, demography, environmental health sciences, epidemiology, global health, health policy and management, social and behavioral health, and the analytical tools employed to measure public health indicators. Prerequisite: None.

PRVM 810. Cardiovascular Disease Epidemiology. 3 Credits.
This will be a study of Cardiovascular Disease risk factors, expression, treatment, and prevention from a population-based standpoint. Participants will gain knowledge of cardiovascular disease prevalence, incidence, risk factors, outcomes, and prevention strategies. The goal of this course is to understand major aspects of cardiovascular epidemiology and current strategies for primary and secondary prevention of major cardiovascular diseases. Attention will be given to physiologic mechanisms leading to atherosclerosis; traditional and novel coronary heart disease risk factors; prevention methodologies for cardiovascular disease, and the role of lifestyle, dietary, and genetic factors in the development of cardiac and vascular diseases. The course will be evidence- and outcomes-based, with reference to landmark studies and major publications. Relevant historical breakthroughs and current controversies in CVD will be discussed using recent publications from the lay press and peer-reviewed journals. Emphasis will be placed on coronary artery disease and its clinical manifestations. Participants will learn to critically assess public health measures undertaken to recognize, manage, and treat atherosclerotic disease processes.

PRVM 811. Intro to Pharmaceutical Outcomes Research. 3 Credits.
Medications are involved in the treatment of nearly every chronic and acute disease. Pharmaceutical outcomes research is a broad field of research that strives to inform policies and interventions that optimize the safety, effectiveness, accessibility, and utilization of medications to improve patient outcomes. Pharmaceutical outcomes research spans pharmacoepidemiology, pharmacoepidemiology, pharmacovigilance, pharmaceutical policy evaluation, pharmacoepidemiology, and other medication-focused health services research disciplines. This course provides an overview of pharmaceutical outcomes research applications, with an emphasis on measuring medication use and outcomes; designing pharmaceutical outcomes research studies; and interpreting the pharmaceutical outcomes research literature. Prerequisite: PRVM 800 or permission of instructor.

PRVM 813. Chronic Disease Epidemiology. 3 Credits.
This course is required for students on the epidemiology concentration, but is open to other MPH students as well. It extends the methods and concepts of basic epidemiology to the prevention and control of major chronic diseases, as well as evaluating epidemiologic study designs and results from individual and multiple studies. Topics will include surveillance, risk factors, high risk populations, pathophysiology, and consequences. Students will also gain experience developing a proposal to conduct a screening, etiologic, or prevention study of selected chronic diseases. Prerequisite: PRVM 800 Principles of Epidemiology.

PRVM 814. Health Literacy. 3 Credits.
This is a graduate-level course designed to teach students about literacy and its implications on public health practice and research in the United States, with a focus on health literacy. Students will be introduced to the different types of literacy, including health, prose, quantitative, document, and computer, and how to evaluate them. In addition, students will learn how to lower literacy levels of health education materials for practical application. Cultural competency in literacy will also be discussed, with a focus on culturally competent health communication and education.

PRVM 815. Infectious Disease Epidemiology. 3 Credits.
This course emphasizes the underlying concepts of the epidemiologic approach as it relates to infectious diseases. Students will be introduced to principles and methods of disease surveillance and outbreak investigations using case studies. Essential concepts relating to vaccine efficacy and effectiveness in preventing infectious diseases, barriers to achieving adequate vaccine coverage, and how ongoing vaccine controversies relate to the scientific literature base will be covered. The evolving public health concerns of bioterrorism, antibiotic resistance, as well as new emerging pandemics such as novel coronavirus (COVID-19) will also be addressed. Characteristics of the agent, host, and environment that influence disease transmission will be examined in the context of control strategy identification. Instruction is primarily by online learning tools, with limited short lectures. Prerequisite: PRVM 800 Principles of Epidemiology.

PRVM 816. International Health. 3 Credits.
This course is divided into seven sections: 1) Global health introduction, 2) Health inequalities and the socio-economic context of disease, 3) Maternal and child health, the health of special populations, 4) The spread of infectious diseases, and HIV/AIDS, malaria, TB, 5) Globalizations and emerging infectious diseases, and nutrition, 6) Environmental health, and the health of effects of environmental change, 7) Global health payers and players, and global health priorities. Prerequisite: PRVM 800 Principles of Epidemiology or permission of the department/instructor.

PRVM 818. Social and Behavioral Aspects of Public Health. 3 Credits.
The course provides an overview of social and behavioral aspects of public health including the relevance of psychological and social factors for health, the principles of health behavior change, the application
of these principles in various health domains, and an introduction to health behavior and health promotion interventions. The course begins with the rationale for studying social and behavioral aspects of health and examines select social and behavioral factors (e.g., gender, socioeconomic status, race/ethnicity) as they relate to physical well-being. The course also focuses on well-established theories of health behavior and examines the role of psychological and social factors in specific health topics (e.g., obesity, cancer, cardiovascular disease, smoking). Prerequisite: None.

PRVM 819. An Introduction to Geographic Information Systems (GIS) for Health. 2 Credits.
This course will provide students with an overview of Geographical Information Systems (GIS) applied in the context of health (public health, allied health and health care). Students will be introduced to GIS and health applications used locally, nationally and internationally. They will learn about pertinent data, how to visualize the data, how to design maps that represent the data, how to use spatial data, how to geocode data, and how to prepare and analyze data. Real-life examples will be used throughout the course and students will gain hands-on experience using a GIS application. Students will also be kept abreast of any new GIS resources and trends or developments in GIS as relates to health. Prerequisite: Basic computer skills.

PRVM 821. Research Methods in Public Health. 3 Credits.
This is an introductory behavioral research methods course. Students will learn about research designs, hypothesis formation, measurement, sampling, ethical issues in research, and pragmatic and research issues with evaluating behavioral interventions. Students will also learn how to critically evaluate and develop behavioral randomized clinical trials. Prerequisite: None. Social and Behavioral Aspects of Health and an Introductory statistics course are recommended but not required.

PRVM 825. Child and Family Health. 3 Credits.
Family, maternal, and child health problems will be addressed. Topics will include prenatal care (maternal health and habits); fetal growth factors, well baby care (immunizations, nutrition, growth, development, behavior); developmental disabilities; adoption; adolescence; child abuse; family as a support system; long-term medical and social outcomes of chronic illness/disability in children. Subjects are covered through lecture, discussion and field visits under the supervision of a pediatrician. Prerequisite: Permission of instructor.

PRVM 826. Epidemiology for Advanced Nursing Practice. 3 Credits.
Epidemiology for Advanced Nursing Practice is a graduate level course designed to synthesize basic epidemiology with clinical nursing concepts. The course is a core course required for the Doctor of Nursing Practice degree in which basic concepts of epidemiology and methods for identification of factors influencing health and disease in human populations are discussed. Considerations are centered on: 1) Physical, biological psychosocial and cultural factors in relation to infectious and non-infectious diseases; 2) Interactions between agent, host, and environmental factors as determinants of health and disease; 3) Application of the epidemiologic approach to clinical nursing; and 4) Measures of disease occurrence and risk. Prerequisite: None.

PRVM 827. Public Health Administration. 3 Credits.
This course provides students with an overview of the core functions of public health: assessment, policy development, and assurance together with an introduction to the leadership and management skills necessary to provide leadership in public health. It uses both theoretical and practical material to develop basic administrative competencies necessary for practice in community and public health. Assignments are designed to provide practice in applying course materials.

PRVM 828. Designing Public Health Interventions. 3 Credits.
Framed within the context of the core public health functions, assessment, policy development, and assurance, this course provides students with an overview of the planning process within a community setting. This course will use both theoretical and practical material to develop basic competencies in planning, implementing, and evaluating health programs; however, the predominant focus will involve the planning process and operations of a public health program. Assignments are designed to provide practice in applying course materials.

PRVM 829. Interdisciplinary Approaches to Neurodevelopmental Disabilities, Including Autism Spectrum Disorders. 3 Credits.
Topics in this course include an introduction to the Maternal and Child Health Bureau and related organizations, the history of neurodevelopmental disabilities (NDD), the genetics, identification, and prevention of developmental disabilities. Trainees obtain information about and participate in experiences related to neurodevelopmental and related disabilities and conditions individuals experience across the life course. The Life Course Perspective is defined by MCHB as the multidisciplinary approach to understanding the mental, physical, and social health of individuals, incorporating both life span and life stage concepts that determine an individual's health trajectory. Significant emphasis is on autism and related issues. Participants learn the different roles of interdisciplinary team members, their unique contributions, and the team process in screening, evaluation and planning intervention. Prerequisite: Permission of Instructor.

PRVM 830. Environmental Health. 3 Credits.
This course will include discussion of some exposures and health effects of environmental contaminants and principles of prevention. Topics include outdoor and indoor air pollution, water and wastewater pollution, solid waste disposal, insect and rodent control, food protection, chemical and physical carcinogens, ionizing radiation, injury prevention, environmental epidemiology, active transportation, disasters, and occupational safety and health. A number of guest lecturers and field trips will be utilized.

PRVM 831. Interdisc Leadership Approaches to Systems & Services for Indy with Autism, Neuro & Dev Disabilities. 3 Credits.
Topics in this course include information about the history and development of service systems in the United States including Maternal and Child Health and Title V programs. An overview of program administration, business planning, budget development and various grant sources provides participants with an understanding of service systems and funding streams. Program oversight, standards of care and evaluation, including needs assessment and government mandates for outcomes (GPRA), provide participants with information that enables them to explore agency director perspectives about barriers to providing effective services as well as systems barriers presented from a parent point of view. Discussions include how to make systems changes through consultation and technical assistance and information about adult learning styles and consumer empowerment. Other topics include the scientist/practitioner models of research, empirical validation of practices and community participatory action research. As an adjunct to the core course there are other didactic experiences required of all trainees including Center and community committee work, campus interdisciplinary forums, family immersion experiences and research presentations. These didactic experiences give faculty and trainees an opportunity to meet as a group, hear presentations, and discuss a variety of topics, including ethics, standards of care, and empirically validated practices. Prerequisite: Permission of Instructor.

PRVM 835. Evaluation Methods in Public Health. 3 Credits.
Principles and procedures to evaluate health promotion and disease prevention programs. Includes data collection methods, instrument scale development, measurement, and evaluation designs. Case studies of disease prevention literature on evaluation will be analyzed. Prerequisite: Permission of instructor.

PRVM 836. Epidemiology in Aging. 3 Credits.
An overview of the aging process, review of current knowledge of epidemiology of selected diseases, such as dementia and osteoporosis, and falls that primarily affect aging individuals. Emphasis on epidemiologic designs, methods, and issues (e.g., low response rate and measurements) that are pertinent to research on aging individuals. Prerequisite: PRVM 800, BMTR 811/PRVM 804, or permission of instructor.

PRVM 841. Advanced Epidemiology I: Methods in Cross-Sectional and Case-Control Studies. 3 Credits.
This course will concentrate on concepts and application of various statistical techniques in the analysis of epidemiological data. Students will be oriented toward application of SAS in data analysis and interpretation of data from cross-sectional and case-control studies. Prerequisite: Principles of Epidemiology (PRVM 800), Fundamentals of Biostatistics I (BIOS 714), and Management of Public Health Data (PRVM 875) or BIOS 715 Introduction to Data Management using RedCap and SAS.

PRVM 842. Advanced Epidemiology II: Methods in Longitudinal Studies. 3 Credits.
This course will concentrate on concepts and application of various statistical techniques in the analysis of epidemiological data. Students will be oriented toward application of SAS in data analysis and interpretation of data from longitudinal studies and controlled clinical trials. Prerequisite: Principles of Epidemiology (PRVM 800), Fundamentals of Biostatistics I (BIOS 714), Advanced Epidemiology (PRVM 841), and Management of Public Health Data (PRVM 875) or Introduction to Data Management using RedCap and SAS (BIOS 715).

PRVM 845. Health, Society, and Culture. 3 Credits.
This three-credit graduate course will help prepare students to work effectively with diverse populations, enhance cross-cultural competence, and identify and use social and culturally-competent strategies in public health research and practice. Students in this course will become competent and versed in how culture intersects with health, social determinants of health, patient education and communication, and society. Key models for understanding how health, society, and culture relate will be discussed and linked to health communication and public health practice. In addition social issues that include racism, classism, gender discrimination, and poverty will be an integral part of the course.

PRVM 847. Seminar in American Indian Health Disparities. 1 Credits.
This is a graduate-level course designed to teach students about current research being done around the country to address health disparities faced by American Indian communities. Students will attend a weekly one-hour seminar on-line and will be given readings to accompany each lecture. Lectures will be done by faculty at various universities, as well as members of community organizations and/or tribes who are conducting research. Students may take the course multiple times; each seminar will be unique in terms of topics and accompanying readings, as well as lecturers. Some semesters may focus on a particular health topic for the full semester, e.g. - cancer or diabetes. This course is designed to be a seminar series that changes each time it is taught. Prerequisite: Permission of instructor.

PRVM 849. Qualitative Methods in Public Health. 3 Credits.
Qualitative research has diverged from its anthropology roots to become commonplace in marketing, business, clinical and public health settings. This course is designed to teach the basics of rigorous qualitative methodology as applied to research in public health, health services research, and health behavior. The course will equip students with a foundational understanding of theoretical underpinnings of qualitative research as well as hands-on experience with skills in study design, several methods of data collection, data analysis, and presenting results.

PRVM 851. Public Health Policy and Law. 3 Credits.
Public Health Policy and Law is about the legal and social justice framework for urgent public health issues. This course is designed to prepare public health leaders to live and work in a world of laws, and to play an active and effective role in policy making and analysis. Students will understand the source of national, state, and local statutes and regulations and understand the role of common law. Students will understand the policy process at the national, state, and local level, and develop skills analyzing legislation and influencing policy decisions. Students will understand the rule making process at the national and state level.

PRVM 853. Responsible Conduct of Research. 1 Credit.
The purpose of this course is to engage research trainees in reading about, considering, and discussing the responsible conduct of science. The course is designed as an option for meeting current federal regulations, which require that all NIH training grants provide training in the responsible conduct of research. This course provides a concise overview of key subject areas in the responsible conduct of research. It is designed to make students aware of relevant guidelines, policies and codes relating to ethical research, as well as to provide the skills for identifying and resolving ethical conflicts that may arise in research.

PRVM 855. Seminar in Women's Health. 3 Credits.
Seminar in Women's Health is a 3 credit elective, graduate level course focusing on gender issues that are relevant in treatment approaches to various health issues, the differing health status of minority women, the evolution of women's health to include the entire life span and areas other than reproduction, the changing implications of health care and policy and men in women's health. No prerequisite.

PRVM 856. Community-Based Participatory Research. 3 Credits.
This is a graduate-level course designed to teach students the basic methods of conducting and evaluating community-based participatory research (CBPR). Students will be introduced to the five phases of CBPR, including partnership formation and maintenance, community assessment and diagnosis, defining the issue, documentation and evaluation of partnerships, and feedback, interpretation, and evaluation of partnerships. In addition, students will learn how to find funding mechanisms and journals that are appropriate for CBPR, as well as some of the key factors in writing about CBPR. Students will be introduced to a variety of examples of well-done CBPR and will learn what makes it different from other types of research done in community settings. Prerequisite: Social and Behavioral Aspects of Public Health or permission of instructor.

PRVM 859. Tobacco and Public Health. 3 Credits.
This course will provide an overview of tobacco as a public health problem and tobacco politics. Students will learn about the pharmacology of nicotine, the mechanisms leading to tobacco addiction and biologic factors that affect pharmacology and tobacco use such as the menstrual cycle and comorbid illnesses such as depression and others. Public health approaches to preventing tobacco use initiation will be studied, including which initiatives are most effective. State-of-the-art methods to assist smokers to quit will be reviewed, including pharmacologic interventions, counseling by health professionals and education/motivation support. Barriers to obtaining services will be explored, such as educational needs among various types of health professionals, and access to care in rural areas or among clients with certain types of health insurance.
PRVM 861. Leadership in Public Health. 3 Credits.
This course is designed to enhance and develop leadership knowledge and skills vital to preparing students for public health 3.0 and the role of chief health strategist for their organization, community, regional, or state. Competency in principles of leadership, governance, management, collaboration, decision making, and negotiation will be achieved through leadership assessments, journal entries, case studies, and writing of a leadership self-reflection and action plan.

PRVM 862. Terrorism, Emergency Preparedness and Response. 3 Credits.
Through lectures, tabletop exercises, and invited speakers, the course content will include the following topics: terminology and core competencies, public health infrastructure, collaboration and communication, roles and responsibilities, psychological effects of terrorism, agricultural and zoonotic bioterrorism, law enforcement and public health, epidemiology of BT diseases (including agent specific lectures), burn injuries, risk communication, Strategic National Stockpile (SNS), National Incident Management System (NIMS), public health law as related to bioterrorism, and public health laboratory response related to bioterrorism.

PRVM 863. Health Disparities in Public Health. 3 Credits.
This course is designed to enhance students' understanding of the biopsychosocial factors that contribute to disparities in health and health care. This course will also review strategies developed to reduce health disparities. Prerequisite: PRVM 818 Social and Behavioral Aspects of Public Health is recommended.

PRVM 864. Global Public Health Impact of HIV/AIDS. 3 Credits.
Historically reviews the HIV pandemic to evaluate lessons learned in prevention and treatment of the disease and successes and failures of public policies to reduce the impact of HIV in various countries. Critically analyzes HIV prevention interventions (voluntary counseling and testing, prevention of mother-to-child transmission, promotion of safer sex practices, clean needle exchange, methadone or buprenorphine programs, treatment with antiretroviral therapy, pre- and post-exposure prophylaxis, vaccine and microbicide development) and challenges with their implementation.

PRVM 865. Ethical Issues in Public Health. 3 Credits.
Lectures and small group discussions explore public health ethics, social justice and autonomy as they relate to public health practice and health policy. Current issues in health policy are discussed including: the right to health and health care, bioterrorism, and health inequalities, poverty and power. Weekly small group discussions include cases on MCHP, obesity and "fat taxes," resource allocation, and disparities in infant mortality. Student evaluation is based on class participation, a small group project, and a final paper based upon a case study addressing ethical issues relevant to the student's area of public health specialization.

PRVM 866. Biomedical Informatics Driven Clinical Research. 3 Credits.
This course introduces students to biomedical informatics, clinical and administrative information systems and workflows, data warehousing and hypothesis generation using HERON and the i2b2 web client, programming using Structured Query Language (SQL), and developing a computable phenotype and research cohort for observational research or prospective trial eligibility based on secondary data sources centered on electronic health records. Students will also gain experience developing their cohort, an analytic ready database and files using SQLite and REDCap, conduct preliminary analysis, and prepare an abstract for submission to a clinical or informatics forum/conference. Prerequisite: PRVM 800 Principles of Epidemiology or BIOS 714 Fundamentals of Biostatistics I.

PRVM 869. Systematic Review. 3 Credits.
This course covers the methods of comprehensive syntheses of research evidence. Rigorous review methods will be highlighted, such as searching for potentially relevant articles; selecting primary articles using explicit, reproducible criteria; appraisal of studies; quantitative data synthesis; and, interpretation. The course uses the framework provided by the GRADE Working Group to evaluate certainty of estimates and present and interpret evidence. The focus of the course is on systematic reviews of interventions, which typically include randomized trials and non-randomized studies that evaluate therapeutic interventions and outcomes. This focus is to ensure that students understand and apply the fundamental processes to conduct a systematic review. The process can be applied to other review topics and study designs, which may be mentioned but not covered in the course. Students are required to conduct a systematic review of an intervention during the course. Students who wish to conduct reviews of other types of question will need to ensure they have methodological support in addition to what is provided within the course. Prerequisite: PRVM 800 Principles of Epidemiology; graduate level statistics course or permission of instructor.

PRVM 872. Grant Writing. 3 Credits.
This course combines instruction and practical exercises to move the participant step-by-step through all stages of planning research, identifying funding sources, and writing grant applications primarily to the National Institutes of Health (NIH). Upon completion of the course, the student will have developed a quality proposal and be able to demonstrate skills in preparing applications. These will include: developing fundable research ideas, identifying appropriate funding opportunities from the NIH, finding information on the Internet regarding applying for funds, developing application sections and crafting a quality grant application, complying with certification and assurances required on NIH applications, providing feedback to other class participants in small groups to act as internal grant reviewers, responding to reviewers, and building a budget.

PRVM 873. Scientific Writing. 2 Credits.
Includes the mechanics of how to write clearly, focusing on mechanics, structure, and style. Students will practice specific strategies for writing effectively, with in-depth attention paid to how ideas are distributed through well-written sentences and paragraphs. Also includes editing and revision of writing for publication and grant submission.

PRVM 875. Management of Public Health Data. 3 Credits.
A 3 credit hour graduate level course concerning basic computing skills necessary for any advanced epidemiologic or quantitative methods. This course covers basics of variable and dataset creation, building, maintenance and basic descriptive (not interpretive) analysis. The course is designed to be of use to students entering a variety of research, administrative and public health settings in public health, clinical and other fields. Software covered will include SAS, SPSS, Epi Info, REDCap, Microsoft-EXCEL and ACCESS. The course can stand alone, or prepare students for Biostatistics and Epidemiology courses. Public data presentations will be stressed to prepare students to communicate about data with the lay public.

PRVM 876. Health Services Research Using Public Payer Data. 3 Credits.
Several contemporary health reforms have rendered analyses of public payer data more feasible and valuable for population health, health services research, and quality improvement. The addition of an outpatient drug benefit to standard inpatient and outpatient service coverage for Medicare, for example, has stimulated a growth industry in comparative effectiveness research and expanded policy research across the health care system. Pending expansion of States' Medicaid programs under
the Affordable Care Act will undoubtedly create the largest public health care insurance program in the United States. The Centers for Medicare & Medicaid Services (CMS) have streamlined researchers' access to national Medicare and Medicaid populations for health services and quality improvement projects through contracts with the Research Data Center at the University of Minnesota and the Chronic Condition Warehouse. In addition, Kansas Medicaid has invested in a Data Analytic Interface that offers ready access to our state's employees, Medicaid beneficiaries, and private health insurance claims data for enterprise researchers including tremendous opportunities for state of the art, contemporary policy analyses. This is indeed an exciting and opportune time for students embarking on careers in health services, policy, and population health research. This course is designed to prepare students for real world analyses using standard public payer claims data.

PRVM 877. Health Communication. 3 Credits.
This course is focused on health education and promotion, especially designing and evaluating health communication programs for populations with shared risks, exposures or behaviors. Health communication theories and principles will be applied to selecting appropriate communication strategies and developing health communication plans. Students will develop an appreciation of the role of cultural context in designing health communication. Emphasis will be placed on written communication and oral presentation.

PRVM 878. Cost-effectiveness and Decision Analysis. 3 Credits.
This course examines techniques that are used in making clinical and management decisions when outcomes are uncertain. The course begins with a review of probabilistic decision making, then explores methods of analyzing choices with uncertain outcomes. Stressing the use of decision trees and sensitivity analysis. The course examines cost minimization analysis, cost effectiveness analysis, and cost benefit analysis. (Same as HP&M 872)

PRVM 879. Budgeting and Human Resource Management. 3 Credits.
This graduate-level course covers principles and skills for budgeting and human resource management within public health organizations. It focuses on non-profit and public settings. Budgeting topics include the principles and purposes of accounting, concepts related to finance, and financial strategic planning. Human resource management topics include job design and hiring, performance management, retention, compensation/benefits, legal issues, and termination. The focus of the course is twofold: 1) understanding the concepts behind budgeting and in gaining skills in interpreting and using financial information; 2) gaining skills in human resources management and resource development. The course is designed for people who are interested in public health administration, but should be useful to anyone with an interest in public health leadership in any setting.

PRVM 880. Seminar in American Indian Health. 3 Credits.
This is a graduate-level course designed to teach students about current issues in American Indian health, as well as provide a basic historic context for understanding these issues. Students will read current literature from the academic journals and will be exposed to research being done today in American Indian communities, some of which has not yet been published. In addition, students will gain an understanding of what health disparities exist in American Indian communities and some of the reasons why they exist, including access issues and other barriers to care, from both Western and Native points of view. Students will be exposed to some of the difficulties in conducting health research in Native communities and some of the more successful techniques to overcome barriers. Prerequisite: None.

PRVM 881. Public Health Internship. 1-3 Credits.
Students will complete a 192 hour internship in a community setting (12 hours/week for the 16 week semester) during PRVM 891 Public Health Internship. The internship is a service-learning experience for which students should consider the contribution their activities will make to the internship setting as well as activities that will be undertaken to meet the student's learning objectives. Prerequisite: Students may enroll in PRVM 891 Public Health Internship if they are within 2 semesters of graduation and have the permission of the KU-MPH program.

PRVM 883. Public Health Capstone. 1-3 Credits.
The public health capstone is a 192 hour (12 hours/week for the 16 week semester) culminating experience that requires students to synthesize and integrate knowledge and/or apply theories and principles learned to an area of public health. The capstone is meant to be taken at the end of the student's degree program, and is designed to give the student an opportunity to apply their skills to a variety of problems or issues in public health. The capstone should be primarily focused on addressing concentration specific competencies. While the exact activities and outcomes of the capstone will differ across concentrations all capstones, regardless of concentration, must include a written report and an oral defense. Prerequisite: PRVM 891 Public Health Internship; previous attendance at two MPH capstone defenses; last semester of enrollment and be within 12 credits of graduation; must be in good academic standing.

PRVM 889. Thesis. 1-3 Credits.
Preparation of a formal thesis based on the research conducted on a community health problem. After the thesis has been completed, the student will be given an oral examination on the research methods and content. Prerequisite: All MS-CR core and required courses completed or in progress in the student's final semester.

Master of Health Services Administration
The Master of Health Services Administration (MHSA) degree prepares students for leadership roles in the health care sector, including positions in hospitals, health care systems, long-term care facilities, clinics, insurance firms, health departments, and government agencies. The MHSA offers a systematic examination of the health care system, exposure to the impact of health policy and the policy process, a mastery of analytic methods, and a broad exposure to the practice of health care management. Classes are taught on the KUMC campus and offered in the late afternoon and evening.

The mission of the MHSA Program is to improve lives and communities in Kansas and beyond by preparing students to be outstanding health administration professionals and future leaders in the health care sector. To accomplish this mission, the program:

- recruits students with diverse backgrounds and perspectives, along with the ability to succeed;
- hires, values and respects faculty with varied backgrounds, who are committed to excellence in teaching, scholarship and service;
- designs and develops a competency-based curriculum that stresses lifelong learning;
- emphasizes interprofessional education through collaboration with learners and practitioners from multiple disciplines;
- stresses the practical application of knowledge; and
- enables graduates to be competitive in the marketplace.
The application is an on-line process. Detailed instructions on how to apply and application deadlines are posted on the MHSA website (http://www.kumc.edu/school-of-medicine/population-health/education/master-of-health-services-administration-(mhsa).html). Students are admitted for the fall semester only.

**Admission requirements:**

- Bachelor’s degree from a regionally accredited institution, documented by submission of official transcript(s). The bachelor’s degree must be attained prior to entering the program. Official transcripts from institutions attended post-baccalaureate are also required.
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement. (p. 2414)
- A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score not more than approximately five (5) years old sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895. An alternative graduate level examination score may be substituted on a case-by-case basis.
- A statement of goals/purpose. This brief essay should outline the applicant’s reasons for wanting to pursue graduate education in health administration and career objectives.
- Three letters of recommendation.
- Applicants must also have completed a prerequisite three (3) credit hour course in statistics.
- A personal interview is also required of all applicants who meet the minimum admissions standards. If travel to the area is impossible, a telephone or on-line interview may be substituted.

Applicants will be assessed based on these requirements. After an applicant has been admitted, the program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. To verify admissions requirements for past years, use the catalog of the year student entered the program. Other years' catalogs (http://catalog.ku.edu/archives/)».

The MHSA program is a 56 credit-hour graduate professional degree program and is accredited by the Commission on Accreditation of Healthcare Management Education (CAHME). (http://www.cahme.org/)

**Degree requirements:**

- Degree requirements are normally completed within two (2) years of admission to the program although a maximum of seven (7) years is allowed. Part-time students normally complete requirements within four to five (4-5) years of admission to the program.
- Cumulative grade-point average (GPA) of at least 3.0 for all program coursework.
- Completion of a minimum of 56 credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Successful completion of the following required courses (or equivalents):

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>HP&amp;M 810</td>
<td>The Health Care System</td>
<td>3</td>
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<td>HP&amp;M 819</td>
<td>Research for Health Care Leaders</td>
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<td>HP&amp;M 822</td>
<td>Health Care Economics</td>
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<td>HP&amp;M 825</td>
<td>Financial Concepts in Healthcare Management</td>
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<tr>
<td>HP&amp;M 827</td>
<td>Financial Applications in Healthcare</td>
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<td>HP&amp;M 830</td>
<td>Health Care Management</td>
<td>3</td>
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<tr>
<td>HP&amp;M 832</td>
<td>Governance and Health Law</td>
<td>2</td>
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<tr>
<td>HP&amp;M 833</td>
<td>Ethics</td>
<td>2</td>
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<tr>
<td>HP&amp;M 837</td>
<td>Health Policy</td>
<td>3</td>
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<tr>
<td>HP&amp;M 846</td>
<td>Health Information Technology Management</td>
<td>3</td>
</tr>
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<td>HP&amp;M 847</td>
<td>Business Intelligence in Healthcare</td>
<td>2</td>
</tr>
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<td>HP&amp;M 848</td>
<td>Designing Health Care Organizations</td>
<td>2</td>
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<tr>
<td>HP&amp;M 850</td>
<td>Introduction to Operations</td>
<td>3</td>
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<tr>
<td>HP&amp;M 852</td>
<td>Strategic Marketing</td>
<td>2</td>
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<td>HP&amp;M 853</td>
<td>Strategic Management</td>
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<tr>
<td>HP&amp;M 854</td>
<td>Human Resources and Workforce Development</td>
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<td>HP&amp;M 858</td>
<td>Organizational Behavior in Healthcare</td>
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<tr>
<td>HP&amp;M 859</td>
<td>Professional Development</td>
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<tr>
<td>HP&amp;M 860</td>
<td>Graduate Internship in Healthcare Services Administration</td>
<td>1</td>
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<tr>
<td>or HP&amp;M 862</td>
<td>Research Practicum in Health Services Administration</td>
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<tr>
<td>HP&amp;M 861</td>
<td>Capstone Seminar</td>
<td>2</td>
</tr>
<tr>
<td>BIOS 704</td>
<td>Principles of Statistics in Public Health</td>
<td>3</td>
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<tr>
<td>Electives - as determined in consultation with the student's advisor.</td>
<td>3</td>
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</table>

**Total Hours** 56

- Students are required to participate in the individualized competency review process.
- Students are required to participate in the campus-wide activities of the Center for Interprofessional Education (https://www.kumc.edu/research/center-for-interprofessional-practice-education-and-research.html). Specific activities are determined on an annual basis by the MHSA Program Director.

Although students complete an internship or practicum as part of the program, all students are encouraged to seek a post-graduation residency/fellowship.

Degree requirements and course descriptions are subject to change. Any courses taken as equivalents must be approved by the Program Director and the Office of Graduate Studies. In most cases, use the catalog of the year the student entered the program to determine requirements. Other years' catalogs».

**Typical Plan of Study**

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<td>Fall</td>
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<td>HP&amp;M 852</td>
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<td>HP&amp;M 822</td>
<td>3</td>
<td>HP&amp;M 832</td>
<td>2</td>
<td>HP&amp;M 860 or 862</td>
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</table>
Organizational Leadership. This program gives students the opportunity to acquire training in the convergent fields of nursing and health services administration. The program combines course work, allowing the two degrees to be completed in 8 semesters. Students must be admitted to each program to pursue the dual degree.

DPT/MHSA

The dual Doctor of Physical Therapy (DPT) and Master of Health Services Administration (MHSA) degree is offered through the School of Medicine’s Department of Population Health and the School of Health Professions’ Department of Physical Therapy. As the health care environment becomes more complex and competitive, administrative skills will be extremely important to individuals starting clinical careers in health care. By participating in this program, students can achieve both degrees in four years. Students must be admitted to each program to pursue the dual degree.

- Cumulative grade-point average (GPA) of at least a 3.0 for in both programs.
- Completion of the DPT degree prior to or at the same time as the awarding of the MHSA degree.
- Completion of a minimum of 39 MHSA credit hours.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Successful completion of 31 hours of the following MHSA courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HP&amp;M 810</td>
<td>The Health Care System</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 822</td>
<td>Health Care Economics</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 825</td>
<td>Financial Concepts in Healthcare Management</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 827</td>
<td>Financial Applications in Healthcare Management</td>
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<tr>
<td>HP&amp;M 832</td>
<td>Governance and Health Law</td>
<td>2</td>
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<td>HP&amp;M 833</td>
<td>Ethics</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 837</td>
<td>Health Policy</td>
<td>3</td>
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<tr>
<td>HP&amp;M 846</td>
<td>Health Information Technology Management</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 850</td>
<td>Introduction to Operations</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 858</td>
<td>Organizational Behavior in Healthcare</td>
<td>3</td>
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</table>

- Successful completion of 8 credit hours from the list below or approved alternate(s)

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<thead>
<tr>
<th>Code</th>
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<tr>
<td>HP&amp;M 830</td>
<td>Health Care Management</td>
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<tr>
<td>HP&amp;M 852</td>
<td>Strategic Marketing</td>
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<td>HP&amp;M 853</td>
<td>Strategic Management</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 854</td>
<td>Human Resources and Workforce Development</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 859</td>
<td>Professional Development</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 860</td>
<td>Graduate Internship in Healthcare Services</td>
<td>1-3</td>
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<td>HP&amp;M 862</td>
<td>Research Practicum in Health Services Administration</td>
<td>1-3</td>
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<tr>
<td>HP&amp;M 876</td>
<td>Medicare and Medicaid</td>
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<td>HP&amp;M 880</td>
<td>Health Care and Social Policies in Sweden</td>
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</tr>
<tr>
<td>PRVM 809</td>
<td>Introduction to Public Health</td>
<td>3</td>
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</table>

- NOTE: Any student who does not complete the DPT will need to take the 17 credits of the full MHSA program that were waived by virtue of being in the Dual Degree Program in order to earn an MHSA.

Dual /Joint degree Programs

The Department of Population Health offers 4 dual degrees and 1 joint degree in conjunction with the School of Medicine MD program and the School of Law, Nursing, and Health Professions. Please contact the MHSAS Program Manager or the respective schools for complete information.

MD/MHSA

The dual MD/MHSA program prepares students to enter careers as physician executives or to provide administrative support for their medical practice. As the health care environment becomes more complex and competitive, administrative skills can be extremely important to individuals starting careers in medicine or those seeking to enhance their current careers. The MHSA portion of the curriculum combines social science and business content in the context of health care and prepares students for management and executive positions in health care organizations. Students complete all requirements for the MD degree as specified by the School of Medicine. The MD program is described in the School of Medicine Catalog (p. 2127). The MD/MHSA can be completed in 5 years. Students must be admitted to each program to pursue the dual degree.

Students accepted into the dual MD/MHSA program complete the course of study described here (http://catalog.ku.edu/medicine/population-health/mhsa/Joint_MDMHSA2017Revised122320.pdf).

JD/MHSA

The dual JD/MHSA program combines into 4 years of full-time study the Juris Doctor (p. 736) (JD) degree offered by the School of Law (http://www.law.ku.edu/) and the Master of Health Services Administration (MHSA) degree offered by the Department of Population Health within the School of Medicine. The program offers students who plan to practice health law or health services management a thorough academic grounding in both disciplines. Students must be admitted to each program to pursue the dual degree.

Students accepted into the dual JD/MHSA program complete the course of study described here (http://catalog.ku.edu/medicine/population-health/mhsa/JDMHSA_dual_degree_curriculumDec2020.pdf).

MS in Nursing (Organizational Leadership)/MHSA

The dual Master of Science in Nursing (Organizational Leadership)/MHSA degree program combines the MHSA degree offered by the Department of Population Health within the School of Medicine and the School of Nursing’s Master of Science (p. 2265) degree with the specialization in Organizational Leadership. This program gives students the opportunity
BSHIM/MHSA

The joint Bachelor of Science in Health Information Management (p. 645) (BSHIM) and Master of Health Services Administration (MHSA) degree is offered through the School of Medicine's Department of Population Health in association with the School of Health Professions' Department of Health Information Management. By participating in this intensive, full-time bridge program, students can achieve both degrees in five years. Students pursuing the BSHIM/MHSA will be prepared to assume management and executive positions in health-related organizations and to bring their expertise in health information management to these positions.

Students accepted into the BSHIM/MHSA program complete the course of study described here (http://catalog.ku.edu/medicine/population-health/mhsa/Bridge_Curriculum_Revision_11-2020-final.docx).

The Graduate Certificate in Health Administration provides an introduction to the field of health administration. Students will obtain a basic understanding of the U.S. healthcare system and how it operates. This certificate is designed for those aspiring to leadership positions in healthcare, to those newly in healthcare leadership positions, and to those considering a Master of Health Services Administration (MHSA) degree (Master of Health Services Administration, KU School of Medicine Department of Population Health (kumc.edu) (https://www.kumc.edu/school-of-medicine/population-health/education/master-of-health-services-administration-mhsa.html)). If a student is subsequently admitted to the MHSA program, credits from a completed certificate may upon approval be used towards fulfillment of MHSA degree requirements. All certificate classes are accessible to distance learners.

The certificate will be comprised of four courses taken in the following order:

Summer HPM 810: The Healthcare System (3 credits, online)
The structure and function of the components of the U.S. healthcare system are introduced in the context of the history, values and social forces that influenced its development and evolution. Students gain exposure to the concepts and vocabulary associated with aspects of the system, including delivery (providers, institutions, services), resources (finance, payment, insurance), population and public health, and outcomes (cost, access, quality). Healthcare outcomes from consumer, clinical and societal perspectives are explored.

Fall HPM 825: Financial Concepts in Healthcare Management (3 credits, hybrid)
Introduces the financial and managerial accounting concepts used in health care. This includes financial statement analysis; cost accounting; budgeting; and capital project analysis.

Fall HPM 858: Health and Social Behavior (3 credits, hybrid)
Health care as a cultural and socio-behavioral system is presented. Using research and theory, students explore alternative perspectives on the nature of medicine and healing within comparative health systems, both U.S. and abroad. Students examine at an advanced level how healthcare organizational structures contribute to patient health outcomes and influence employee behaviors. The course reinforces the nature and characteristics of the health professions, particularly medicine and nursing perceptions, and the complex behavioral dynamics of health professionals with organizational leaders.

Spring HPM 822: Healthcare Economics (3 credits, online)
This course introduces the core concepts from economics to healthcare with a focus on helping health care managers use economic tools in making sound decisions. The demand for health care products, the structure of insurance, and the supply of health care products are examined. Students will apply a variety of economic analyses to health policy and health system issues.

CURRICULUM:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<td>HPM 810</td>
<td>The Health Care System</td>
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<td>HPM 825</td>
<td>Financial Concepts in Healthcare Management</td>
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<td>HPM 858</td>
<td>Organizational Behavior in Healthcare</td>
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<tr>
<td>HPM 822</td>
<td>Health Care Economics</td>
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Year 1

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<th>Hours</th>
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<td>3 HP&amp;M 825</td>
<td>3 HP&amp;M 822</td>
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<td>HPM 858</td>
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Total Hours 12

ADMISSIONS REQUIREMENTS:

- A completed application
- An undergraduate GPA of 3.0 (on a 4-point scale) from an accredited institution
- A letter of reference from a professional colleague or professor
- A personal statement about why the applicant wants to pursue the certificate
- Interview with an MHSA faculty member

Contact for More Information:

Nichole Evans, MHSA Program Manager
Department of Population Health
University of Kansas Medical Center
5001 Student Center– Mail Stop 3044
Kansas City, KS 66160
913.588.1934; nevans2@kumc.edu

Because the MHSA degree signifies that the holder is prepared for entry into the practice of health services administration, it follows that graduates must have the knowledge and skills necessary to function in a broad range of management and leadership situations. Therefore, the following abilities and expectations must be met by all students with or without accommodations admitted to the MHSA program.

1. Observation: A student must be able to observe class demonstrations and field experiences relevant to the field of health services administration. Observation necessitates the functional use of the senses of vision and hearing.

2. Communication: A student must be able to communicate effectively in oral and written form with other students, faculty, staff and preceptors. Effective communication includes the ability to understand assigned readings and lectures, the ability to analyze information, and the ability to present results of such analyses verbally and in writing.
3. **Motor:** A student must have sufficient motor function to attend classes, prepare assignments, and make public presentations. Class requirements may also include field work in a variety of health services organizations.

4. **Intellectual, conceptual, integrative and quantitative abilities:** A student must possess the ability to understand and work with measurements, carry out calculations, and engage in reasoning, analysis and synthesis. A student must be able to draw on all these abilities to be an effective problem solver.

5. **Behavioral and social attributes:** A student must have the emotional health required for the full use of his or her intellectual ability, exercise of sound judgment, and timely completion of a manager’s responsibilities. Integrity, reliability, self-direction, motivation, and ability to work with diverse groups are qualities necessary for effective practice in this field.

### Master of Public Health

The University of Kansas Master of Public Health program (KU-MPH) is a fully accredited, 42 credit hour graduate program with Epidemiology, Generalist and Public Health Practice concentrations. The program has been accredited by the Council on (https://ceph.org/) Education for Public Health (CEPH) since 1998 and is offered through the Department of Population Health at the University of Kansas Medical Center in Kansas City and the University of Kansas School of Medicine-Wichita in Wichita. KU-MPH is also the only fully accredited MPH program in the state to become member of the Association of Schools and Programs of Public Health (ASPHP).

Our program mission is: Healthy Communities

Our program vision is: To improve public health in Kansas, the Heartland, and the nation through excellence in education, discovery, and community engagement.

KU-MPH graduates serve in a wide variety of public health fields, including clinical medicine, research, health education.

The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Master of Public Health (https://www.kumc.edu/school-of-medicine/academics/departments/population-health/academics/master-of-public-health/admissions.html) website. Admission to the M.P.H. program is competitive. Students may apply in either Kansas City or Wichita and indicate their preference of campus choice as well as their choice for concentration on the application itself.

### Admission requirements:

- A bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414). (p. 2414)

- A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.

- Three letters of recommendation from employers, instructors, or other persons who can assess the applicant’s academic and professional potential. Letters are submitted per instructions provided for the online application process.

- A résumé or curriculum vitae. Demonstration of one or more years of responsible work experience in the health field or a degree in a recognized health profession or other evidence of training or experience that indicates adequate preparation for the M.P.H. curriculum is preferred.

- A personal written statement that describes the applicant’s career goals and motivation for seeking post-graduate training in public health.

- Responses to three short-answer questions that are part of the online application itself.

- One semester of college algebra or calculus is required to enter the Public Health Practice concentration.

- Completion of one semester of calculus is required to enter the Epidemiology concentration.

After an applicant has been admitted, the program may defer an applicant’s admission for one semester after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs are available on the program’s website.

The Master of Public Health program consists of at least 42 credit hours. Students complete credit hours in specified core courses in epidemiology, community health assessment and advocacy, environmental health, public health administration, leadership, management of public health data, and health communication. Additional degree requirements vary by the choice of concentration. The two concentrations are epidemiology or public health practice. All students complete a public health internship and capstone project as described below.

### Degree Requirements:

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 4 years of admission to the program.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Completion of a minimum of 42 hours.

- Successful completion of the following core courses (21 credit hours) regardless of concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 804</td>
<td>Community Health Assessment, Intervention, and Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 827</td>
<td>Public Health Administration</td>
<td>3</td>
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<tr>
<td>PRVM 830</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 861</td>
<td>Leadership in Public Health</td>
<td>3</td>
</tr>
</tbody>
</table>
Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs →.

Typical Plans of Study

These are examples of plans of study for the Kansas City and Wichita campuses. They are subject to change. The degree program may also be taken on a part-time basis. Check with the campus program director for more information.
Typical Plan of Study (Wichita campus)

MPH in Epidemiology

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
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<td>3</td>
</tr>
<tr>
<td>PRVM 830</td>
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<td>BIOS 714</td>
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<tr>
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Year 2

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<td>PRVM 841</td>
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<td>PRVM 891</td>
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MPH in Public Health Practice

Year 1

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<th>Spring</th>
<th>Hours</th>
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<td>3 PRVM 875</td>
<td>3</td>
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<tr>
<td>PRVM 804</td>
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<td>3 PRVM 827</td>
<td>3</td>
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<td>PRVM 830</td>
<td>3 PRVM 877</td>
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<td>PRVM 845</td>
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Year 2

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<th>Spring</th>
<th>Hours</th>
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<td>PRVM 879</td>
<td>3 PRVM 851</td>
<td>3 PRVM 827</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 891</td>
<td>1-3 PRVM 861</td>
<td>1-3 PRVM 893</td>
<td>1-3</td>
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MD/MPH

Year 1

<table>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 800</td>
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<td>3 PRVM 875</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 804</td>
<td>3 PRVM 835</td>
<td>3 PRVM 827</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 828</td>
<td>3 PRVM 851</td>
<td>3 PRVM 827</td>
<td>3</td>
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<tr>
<td>PRVM 830</td>
<td>3 PRVM 861</td>
<td>3 PRVM 827</td>
<td>3</td>
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<tr>
<td>PRVM 845</td>
<td>3 PRVM 875</td>
<td>3 PRVM 827</td>
<td>3</td>
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<tr>
<td>PRVM 879</td>
<td>3 PRVM 877</td>
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</tr>
<tr>
<td>Total Hours</td>
<td>38-42</td>
<td>38-42</td>
<td></td>
</tr>
</tbody>
</table>

Dual M.D.-M.P.H. Program

This is a five year program in which the medical student completes the requirements for the M.P.H. degree in one year. This can be accomplished either between the second and third, or between the third and fourth years of medical school. Students must complete all degree requirements for both the M.D. and the M.P.H. programs. They complete the M.P.H. concentration in Public Health Practice in three semesters, beginning in the summer (June), and proceeding through fall (August) and spring (January), and finishing by the end of May. Please contact the respective academic units offering the degree for more information. The M.D. degree (p. 2127) is offered by the School of Medicine.

Dual Ph.D. in Behavioral Psychology-M.P.H. Program

The Department of Applied Behavioral Science on the Lawrence campus offers a 72-credit-hour doctoral program in behavioral psychology (p. 1145). Students learn about an array of content areas and theoretical perspectives and achieve proficiency in behavioral analysis, developmental studies, or behavioral intervention. Both the departments of Applied Behavioral Science (http://www.absc.ku.edu/) and Population Health (http://www.kumc.edu/school-of-medicine/population-health.html) promote community/public health and development through collaborative research, teaching, and service.

The dual Ph.D./M.P.H. is ideal for students interested in prevention through community and public health. Students must apply for admission to the M.P.H. and Ph.D. programs separately. Applications are reviewed by the admissions committees of both programs. Students admitted to the joint program complete the 42-hour M.P.H. requirements as listed in the chart below in addition to the Ph.D. requirements. See the Doctor of Philosophy in Behavioral Psychology (p. 1145) section of this catalog for the Ph.D. degree requirements. Completion of ABSC 710, ABSC 875, and ABSC 876 also qualifies a student for a Graduate Certificate in Community Health and Development (p. 1148) offered by the Department of Applied Behavioral Science. Additional details about the certificate program may be found on their website (https://absc.ku.edu/ma-cert-chd/).

M.P.H. Course Requirements for the Ph.D. in Behavioral Psychology-M.P.H. Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 804</td>
<td>Community Health Assessment, Intervention, and Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 827</td>
<td>Public Health Administration</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 830</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 861</td>
<td>Leadership in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 875</td>
<td>Management of Public Health Data</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 877</td>
<td>Health Communication</td>
<td>3</td>
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</table>

Shared Ph.D. Courses satisfies requirements for the MPH Concentration in Social and Behavioral Health

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>ABSC 710</td>
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<td>3</td>
</tr>
<tr>
<td>ABSC 735</td>
<td>Within Subjects Research Methodology and Direct Observation</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 746</td>
<td>Introduction to Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 861</td>
<td>Principles of Behavior Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

MPH Elective
The Master of Public Health online Generalist concentration consists of at least 42 credit hours. Students complete credit hours in specified core courses in epidemiology, community health assessment and advocacy, environmental health, public health administration, leadership, management of public health data, and health communication. Additional degree requirements vary by the choice of concentration with only the Generalist concentration being available completely online. All students complete a public health internship and capstone project as described below.

Degree Requirements:

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 4 years of admission to the program.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
- Completion of a minimum of 42 hours.

• Successful completion of the following core courses (21 credit hours) regardless of concentration:

  Required Courses - 21 credit hours
  - PRVM 800 Principles of Epidemiology
  - PRVM 804 Community Health Assessment, Intervention and Advocacy
  - PRVM 827 Public Health Administration
  - PRVM 830 Environmental Health
  - PRVM 861 Leadership in Public Health
  - PRVM 875 Management of Public Health Data
  - PRVM 877 Health Communication

  Concentration Courses - 15 credit hours
  - PRVM 845 Health, Society and Culture
  - EVRN 721 Environmental Regulation and Policy
  - PFS 801 Interpersonal and Persuasive Communication Skills for Managers
  - PUAD 836 data-Driven Decision Making
  - PRVM 863 Program Evaluation

  Program requirement - 6 credit hours
  - PRVM 891 Internship

  PRVM 893 Capstone

The following abilities and expectations must be met by all students admitted to the Master of Public Health program:

OBSERVATION:

A student must be able to observe and analyze class demonstrations and field experiences relevant to the disciplines of public health. These disciplines include but are not limited to epidemiology, biometry, environmental health, health program management, and behavior science. Observation necessitates the functional use of the senses of vision and hearing.

COMMUNICATION:

A student must be able to communicate effectively in oral and written forms with other students, faculty, and preceptors. Use of computers and other technology is imperative to this communication. Effective communication includes the ability to understand assigned readings and lectures, the ability to analyze information, and the ability to present results of such analyses verbally and in writing.

MOTOR:

A student must have sufficient motor function to attend classes, prepare assignments, give public presentations, and participate in field experiences. Some field experiences in environmental health, for example, include activities at sites (e.g. waste treatment plants, water treatment facilities).

INTELLECTUAL-CONCEPTUAL, INTEGRATIVE, AND ANALYTIC ABILITIES:

Applicants must be able to read and understand documents written in English. A student must possess the ability to understand and work with measurements, carry out calculations, and engage in reasoning, analysis, and synthesis. Problem solving, the critical skill of public health, demands all of these intellectual abilities. In addition, a student should be able to comprehend three-dimensional relationships and understand spatial relationships of structures.

BEHAVIORAL AND SOCIAL ATTRIBUTES:

A student must possess the emotional maturity and stability required for full utilization of his/her intellectual abilities, the exercise of sound judgment, and the prompt completion of all responsibilities attendant upon responsible activity in the broad field of public health. Integrity, motivation, reliability, self-direction, and the ability to work in diverse groups are personal qualities, which are required for effective practice in the field. As a component of public health education, a student must demonstrate ethical behavior.

Individuals with disabilities are encouraged to apply to the program. Candidates who indicate that they cannot meet one or more of the expectations will be reviewed further with applicant and faculty input to determine what reasonable accommodations might be possible to facilitate successful completion of the MPH curriculum.

Master of Science in Clinical Research

The University of Kansas Master of Science in Clinical Research program (MS-CR) is a 33 credit hour graduate program with the student’s thesis
serving as their culminating project. The program is offered through the Department of Population Health at the University of Kansas Medical Center in Kansas City and the University of Kansas School of Medicine-Wichita in Wichita.

The MS-CR program provides students with formal training in clinical research, biostatistics, and epidemiology that will allow clinical scholars to enhance their current research skills. Graduates from the Master of Science in Clinical Research (MS-CR) program serve in a wide variety of fields, including clinical medicine, research, education, disease surveillance and academic settings. The University of Kansas MS-CR degree is designed to provide clinical scholars with a strong foundation in patient-oriented research principles and methods.

Admission and degree requirements are detailed in this section of the catalog. Other program information and application details may be found at our website.

The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Clinical Research program (https://www.kumc.edu/school-of-medicine/academics/departments/population-health/academics/master-of-science-in-clinical-research/admissions.html) website. Admission to the M.S. in Clinical Research degree program is competitive. Students may apply in either Kansas City or Wichita and should indicate their preference of campus on the application itself.

**Admission requirements:**

- A bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. are required to submit an evaluation of their academic credentials performed by one of the established companies providing this service for a fee. The MS-CR program will accept evaluations from the World Education Service (http://www.wes.org/) (WES) or Educational Credential Evaluators (http://www.ece.org/) (ECE) and other companies on a case by case basis. The evaluation must be course by course and include degree equivalency and grade point average. The evaluation should be sent directly from the company to the MS-CR program.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html). The Educational Commission for Foreign Medical Graduates (ECFMG) certificate is accepted in lieu of a TOEFL/IELTS score for applicants with a Medical Degree applying to this program.

- A background check (https://catalog.ku.edu/graduate-studies/kumc/#BackgroundCheck) is required during the admission process; it may affect the student’s eligibility to enter the program.

- Submission of official scores on the Graduate Record Examination (GRE) or other professional test scores (such as the Graduate Management Admission Test, Medical College Admission Test, Law School Aptitude Test) that are not more than five years old. Official copy of scores should be sent from the Educational Testing Service (ETS) to the University of Kansas Medical Center - ETS institutional code 6895. Applicants who have earned a doctoral degree in the United States are exempt from this requirement.

- Completion of at least one semester of calculus is required.

- Three letters of recommendation from employers, instructors, or other persons who can assess the applicant’s academic and professional potential. Letters are submitted per instructions provided for the online application process.

- A résumé or curriculum vitae. Demonstration of one or more years of responsible work experience in the health field or a degree in a recognized health profession or other evidence of training or experience that indicates adequate preparation for the M.S. in Clinical Research curriculum is preferred.

- A personal written statement that describes the applicant’s career goals and motivation for seeking post-graduate training in clinical research.

Applicants not meeting the above requirements may be eligible for provisional admission. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».

The M.S. in Clinical Research program consists of 33 credit hours. Students are required to complete eight core courses: epidemiology, two fundamentals of biostatistics courses, statistical computing (or data management), advanced epidemiologic methods, grant writing, responsible conduct of research, and clinical trials for a total of 22 credit hours of core courses; 8 additional credit hours consist of electives. The final three credit hours are devoted to the student’s thesis.

**Degree requirements:**

- Degree requirements are normally completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 5 years of admission to the program.

- Completion of a minimum of 33 credit hours.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Enrollment in PRVM 899 Thesis the semester the student defends their thesis.


- Successful thesis submission (https://catalog.ku.edu/graduate-studies/kumc/#ThesisSubmission) (according to Office of Graduate Studies policy.)

- Successful completion of the following core courses (22 credit hours):

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<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
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<tbody>
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<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
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<td>PRVM 841</td>
<td>Advanced Epidemiology I: Methods in Cross-Sectional and Case-Control Studies</td>
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<td>Systematic Review</td>
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<td>OR</td>
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<td>PRVM 872</td>
<td>Grant Writing</td>
<td>3</td>
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<tr>
<td>BIOS 714</td>
<td>Fundamentals of Biostatistics I</td>
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Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs ».

Typical Plan of Study - Kansas City campus

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<td>BIOS 717 (CORE)</td>
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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tr>
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Total Hours 33

Typical Plan of Study - Wichita campus

<table>
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<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<td>BIOS 717 (CORE)</td>
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<td>BIOS 810 (CORE)</td>
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<td>PRVM 875 (CORE)</td>
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<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tr>
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<td>PRVM 853 (CORE)</td>
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<tr>
<td></td>
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<td>9</td>
<td></td>
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<td>6</td>
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</tr>
</tbody>
</table>

Total Hours 33

* These are sample plans, and may be subject to change. Students should meet with their advisors once per semester to discuss course plans.

The following abilities and expectations must be met by all students admitted to the Master of Science in Clinical Research program:

**OBSERVATION:**
A student must be able to observe and analyze class demonstrations and field experiences relevant to the disciplines of clinical research. Observation necessitates the functional use of the senses of vision and hearing.

**COMMUNICATION:**
A student must be able to communicate effectively in oral and written form with other students, faculty, and preceptors. Use of computers and other technology is imperative to this communication. Effective communication includes the ability to understand assigned readings and lectures, the ability to analyze information, and the ability to present results of such analyses verbally and in writing.

**MOTOR:**
A student must have sufficient motor function to attend classes, prepare assignments, and give public presentations. Class requirements may also include field experiences in a variety of health settings.

**INTELLECTUAL-CONCEPTUAL, INTEGRATIVE, AND ANALYTIC ABILITIES:**
Applicants must be able to read and understand documents written in English. A student must possess the ability to understand and work with measurements, carry out calculations, and engage in reasoning, analysis, and synthesis. A student must be able to draw on all these abilities to be an effective problem solver. In addition, a student should be able to comprehend three-dimensional relationships and understand spatial relationships of structures.

**BEHAVIORAL AND SOCIAL ATTRIBUTES:**
A student must possess the emotional maturity and stability required for full utilization of his/her intellectual abilities, the exercise of sound judgment, and the prompt completion of all responsibilities attendant upon responsible activity in the broad field of public health. Integrity, motivation, reliability, self-direction, and the ability to work in diverse groups are personal qualities, which are required for effective practice in this field. As a component of clinical research education, a student must demonstrate ethical behavior.

Individuals with disabilities are encouraged to apply to the program. Candidates who indicate that they cannot meet one or more of the expectations will be reviewed further with applicant and faculty input to determine what reasonable accommodations might be possible to facilitate successful completion of the MS-CR curriculum.
Doctor of Philosophy in Health Policy and Management

Our PhD in Health Policy and Management prepares high-level health services researchers for careers in academic settings or in public and private organizations where advanced research, leadership and analytic skills are required.

Health services research is a multidisciplinary field that examines the uses, costs, quality, accessibility, delivery, organization, financing and health outcomes of healthcare systems in the U.S. and elsewhere. Health Services researchers investigate, compare and interpret the complexities of healthcare systems, including how social factors, financing systems, organizational structures and processes, health technologies, and individual and group behaviors affect access, cost and quality of care. Coursework is offered on the University of Kansas Medical Center campus and continuous, full-time enrollment in the program is preferred.

The application process is done online. Detailed instructions on how to apply and the application deadlines are posted on the Health Policy and Management website. (https://www.kumc.edu/school-of-medicine/academics/departments/population-health/academics/phd-in-health-policy-and-management.html)

Admission requirements:

- A master's degree in health services administration or a related field (e.g. public health, public administration, business, social sciences, biological sciences, nursing) from a regionally accredited institution and documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from all other institutions attended post-baccalaureate are also required.
- A cumulative grade-point average (GPA) of at least a 3.5 on a 4.0 scale for all post-baccalaureate course work. Students with degrees from outside the U.S. may be subject to transcript evaluation to determine that the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414) and additionally for this specific program, a minimum score of 50 on the TSE or SPEAK tests, a minimum iBT speaking score of 24, or a minimum IELTS speaking score of 8.
- A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score not more than approximately 5 years old sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional 6895.
- Successful completion of a graduate level statistics course. The need for additional foundational coursework (health delivery systems, health economics, health behavior/organizations, health policy) will be evaluated on an individualized basis during the admissions process.
- Three letters of recommendation from individuals who can assess your academic background and potential for success in a doctoral program.
- A personal statement regarding your career objectives and purpose.
- A current resume or curriculum vitae.
- A copy of the applicant's master's thesis, graduate-level research paper or other example of the applicant's scholarly research writing.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, students should refer to the catalog content of the year they entered the program. Other years' catalogs->.

The doctoral program is a post-master's, competency-based program in health services research consisting of 3 stages. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D. The program, including dissertation, is designed to be completed in a minimum of 4-5 academic years (see Degree Plan tab.) Students are expected to maintain continuous, full-time enrollment.

Stage 1 consists of basic courses in health policy, health systems, culture, occupations, health care management, and quantitative and qualitative research methods. A notable feature of this stage is that students begin to participate in the research process immediately upon beginning the program through a series of 1-credit-hour immersion courses, taken within the first 2 semesters along with other basic courses.

Stage 2 involves specialization in a specific substantive area of either policy or management-related research or a combination, as well as advanced statistical analysis and research methods. Students also complete a teaching seminar and practicum.

Stage 3 consists of the doctoral dissertation demonstrating the development, execution, and results of original research. Students work primarily with their dissertation advisor and doctoral committee at this stage in order to prepare and defend their dissertation proposal and to carry out and complete their dissertation research project. There are two options for the written dissertation, the traditional book format or a three publishable articles format. The written dissertation is formatted and published according to university guidelines.

Degree requirements:

- Degree requirements are normally completed within 4-5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
- Successful completion of the University’s Research Skills and Responsible Scholarship (https://catalog.ku.edu/graduate-studies/kumc/#ResearchSkillsandResponsibleScholarship) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
- Successful completion of the required sequence of health services research methods courses HP&M 870, HP&M 873, HP&M 875, HP&M 886, and HP&M 910 meets the Research Skills requirement.
- Successful completion of the research ethics modules within HP&M 870, HP&M 886, and HP&M 910 meets the Responsible Scholarship requirement.
- Successful completion of the KUMC Human Subjects Projection training module during the first semester of enrollment and maintenance of certification throughout tenure in the PhD Program.
• Successful completion of preliminary examinations in quantitative analysis, general health policy and management research, and a specialization area.

• Successful completion of the Residence Requirement (https://catalog.ku.edu/graduate-studies/kumc/#programstext) by enrollment in full-time status a minimum of two semesters prior to the semester the Oral Comprehensive Examination is scheduled.

• Successful completion of the Oral Comprehensive Examination (https://catalog.ku.edu/graduate-studies/kumc/#ComprehensiveOralExamination). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.

• Successful completion of the Residence Requirement (https://catalog.ku.edu/graduate-studies/kumc/#PostComprehensiveEnrollment) requirement.

• Enrollment in a minimum of one (1) credit of HP&M 999 the semester the student will defend dissertation and graduate.

• Successful completion of the Final Oral Examination (https://catalog.ku.edu/graduate-studies/kumc/#FinalOralExamination) (dissertation defense.)

• Successful Dissertation Submission and Publication (https://catalog.ku.edu/graduate-studies/kumc/#DissertationSubmissionandPublication) (according to Office of Graduate Studies policy.)

• Successful completion of the following Health Policy and Management core courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP&amp;M 870</td>
<td>Research Inquiry: Defining and Supporting the Research Problem; Research Design and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 873</td>
<td>Statistical Applications Using Large Data Bases</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 875</td>
<td>Modeling in Health Services Research</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 885</td>
<td>Instructional Methods in Health Services Education</td>
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</tr>
<tr>
<td>HP&amp;M 886</td>
<td>Applied Health Services Research</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 887</td>
<td>Practicum in Health Services Education</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 901</td>
<td>Doctoral Seminar in Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 903</td>
<td>Doctoral Seminar in Quality and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 904</td>
<td>Doctoral Seminar in Health Care Occupations and Culture</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 905</td>
<td>Doctoral Seminar in Social Determinants of Health Systems</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 906</td>
<td>Doctoral Seminar in Comparative Health Systems</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 910</td>
<td>Health Services Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 912</td>
<td>Qualitative Health Research</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 999</td>
<td>Dissertation</td>
<td>1-12</td>
</tr>
</tbody>
</table>

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs ».

### Typical Plan of Study

#### Year 1

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Hours</th>
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<tbody>
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<td>HP&amp;M 901</td>
<td>3</td>
<td>HP&amp;M 870</td>
<td>3 Optional Summer enrollment</td>
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</tr>
<tr>
<td>HP&amp;M 903</td>
<td>3</td>
<td>HP&amp;M 873</td>
<td>3</td>
<td></td>
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<tr>
<td>HP&amp;M 910</td>
<td>3</td>
<td>HP&amp;M 904</td>
<td>3</td>
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<tr>
<td>Attendance at the HP&amp;M Health Services Research Colloquium</td>
<td>Attendance at the HP&amp;M Health Services Research Colloquium</td>
<td>Attendance at the HP&amp;M Health Services Research Colloquium</td>
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</tbody>
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#### Year 2

<table>
<thead>
<tr>
<th></th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP&amp;M 875</td>
<td>3</td>
<td>HP&amp;M 906</td>
<td>3 Optional Summer enrollment</td>
<td></td>
</tr>
<tr>
<td>HP&amp;M 885</td>
<td>1</td>
<td>HP&amp;M 912</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HP&amp;M 887</td>
<td>2</td>
<td>Quantitative Methods Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HP&amp;M 905</td>
<td>3</td>
<td>Attendance at the HP&amp;M Health Services Research Colloquium</td>
<td>Attendance at the HP&amp;M Health Services Research Colloquium</td>
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#### Year 3

<table>
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<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP&amp;M 991 (Or other course in consultation with Advisor)</td>
<td>1-3 HP&amp;M 991 (Or other course in consultation with advisor)</td>
<td>1-3 HP&amp;M 999</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HP&amp;M 886</td>
<td>3</td>
<td>Attendance at the HP&amp;M Health Services Research Colloquium</td>
<td>Attendance at the HP&amp;M Health Services Research Colloquium</td>
<td>9</td>
</tr>
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</table>

• Successful completion of an additional three (3) credit hour quantitative course. Specific course must be approved by the student's advisor.

• Successful completion of a three (3) credit hour course in qualitative methods. Approved options for this requirement will be provided.

• Attendance at the HP&M Health Services Research Colloquium.

• Students must be enrolled in the fall and spring semesters following the completion of required coursework.
intellectual, conceptual, integrative and quantitative abilities: A student must possess the ability to understand and work with measurements and calculations, and to engage in reasoning, analysis, synthesis and critical thinking. A student must be able to exercise sufficient judgment to recognize and correct performance deviations, and be able to draw on all the above mentioned abilities to be an effective problem solver, researcher and teacher.

5. Behavioral and social attributes: A student must have the emotional health required for the full use of his or her intellectual ability. A student must be able to exercise sound judgment, and to act ethically and with integrity. A student must be self-motivated, reliable and responsible to complete assigned tasks in a timely manner with no supervision. Students must be able to give attention to detail and have the flexibility to function in a research setting, including adapting to changes in time, place and structure of academic and research settings. The student must have the ability to work with diverse groups.

## Essentials of Public Health Graduate Certificate

The Essentials of Public Health Graduate Certificate provides students with critical public health knowledge necessary for healthcare workers and public health practitioners to serve their populations. Students will gain knowledge in foundational public health skills including epidemiology, public health administration, environmental health and basic data management.

### Degree Requirements:

A minimum of 12 post-bachelor’s degree credit hours are required with a minimum GPA of 3.0 on a 4.0 scale. A typical full-time course plan is listed below for the Essentials of Public Health Practice Certificate. It requires 12 credit hours that consists of:

#### Required Courses (12 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
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<td>PRVM 827</td>
<td>Public Health Administration</td>
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<td>PRVM 830</td>
<td>Environmental Health</td>
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</tr>
<tr>
<td>PRVM 875</td>
<td>Management of Public Health Data</td>
<td>3</td>
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## Graduate Certificate in Epidemiology

The Certificate in Epidemiology provides students with both basic and advanced epidemiological knowledge. Students will complete courses in epidemiology, statistics and advanced epidemiology methods dedicated to case control, cohort and longitudinal studies.

A minimum of 12 post-bachelor’s degree credit hours are required with a minimum GPA of 3.0 on a 4.0 scale. A typical full-time course plan is listed below for the Certificate in Epidemiology. It requires 12 credit hours of required coursework:

#### Required Courses (12 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 875</td>
<td>Management of Public Health Data</td>
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</tr>
<tr>
<td>BIOS 820</td>
<td>SAS Programming I</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 841</td>
<td>Advanced Epidemiology I: Methods in Cross-Sectional and Case-Control Studies</td>
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</table>
Graduate Certificate in Health Administration

The Graduate Certificate in Health Administration provides a broad understanding of the U.S. health care system for those aspiring to healthcare leadership positions, to those newly in healthcare leadership positions, and to those considering applying to the MHSA program (https://www.kumc.edu/mhsa/). The certificate is accessible to distance learners and can be earned completely remotely.

The Graduate Certificate in Health Administration provides an introduction to the field of health administration. Students will obtain a basic understanding of the U.S. healthcare system and how it operates. This certificate is designed for those aspiring to leadership positions in healthcare, to those newly in healthcare leadership positions, and to those considering a Master of Health Services Administration (MHSA) degree (Master of Health Services Administration, KU School of Medicine Department of Population Health (kumc.edu) (https://www.kumc.edu/school-of-medicine/population-health/education/master-of-health-services-administration-(mhsa.html)). If a student is subsequently admitted to the MHSA program, credits from a completed certificate may upon approval be used towards fulfillment of MHSA degree requirements. All certificate classes are accessible to distance learners.

The certificate will be comprised of four courses taken in the following order:

**Summer** HPM 810: The Healthcare System (3 credits, online)
The structure and function of the components of the U.S. healthcare system are introduced in the context of the history, values and social forces that influenced its development and evolution. Students gain exposure to the concepts and vocabulary associated with aspects of the system, including delivery (providers, institutions, services), resources (finance, payment, insurance), population and public health, and outcomes (cost, access, quality). Healthcare outcomes from consumer, clinical and societal perspectives are explored.

**Fall** HPM 825: Financial Concepts in Healthcare Management (3 credits, hybrid)
Introduces the financial and managerial accounting concepts used in health care. This includes financial statement analysis; cost accounting; budgeting; and capital project analysis.

**Fall** HPM 858: Health and Social Behavior (3 credits, hybrid)
Health care as a cultural and socio-behavioral system is presented. Using research and theory, students explore alternative perspectives on the nature of medicine and healing within comparative health systems, both U.S. and abroad. Students examine at an advanced level how healthcare organizational structures contribute to patient health outcomes and influence employee behaviors. The course reinforces the nature and characteristics of the health professions, particularly medicine and nursing perceptions, and the complex behavioral dynamics of health professionals with organizational leaders.

**Spring** HP&M 822: Healthcare Economics (3 credits, online)
This course introduces the core concepts from economics to healthcare with a focus on helping health care managers use economic tools in making sound decisions. The demand for health care products, the structure of insurance, and the supply of health care products are examined. Students will apply a variety of economic analyses to health policy and health system issues.

### CURRICULUM:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HPM 810</td>
<td>The Health Care System</td>
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</tr>
<tr>
<td>HPM 825</td>
<td>Financial Concepts in Healthcare Management</td>
<td>3</td>
</tr>
<tr>
<td>HPM 858</td>
<td>Organizational Behavior in Healthcare</td>
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</tr>
<tr>
<td>HP&amp;M 822</td>
<td>Health Care Economics</td>
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<tr>
<th>Year 1</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Summer</td>
<td>Hours Fall</td>
<td>Hours Spring</td>
</tr>
<tr>
<td></td>
<td>Hours</td>
<td></td>
</tr>
<tr>
<td>HPM 810</td>
<td>3 HP&amp;M 825</td>
<td>3 HP&amp;M 822</td>
</tr>
<tr>
<td>HPM 858</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>12</td>
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</tbody>
</table>

**ADMISSIONS REQUIREMENTS:**

- A completed application
- An undergraduate GPA of 3.0 (on a 4-point scale) from an accredited institution
- A letter of reference from a professional colleague or professor
- A personal statement about why the applicant wants to pursue the certificate
- Interview with an MHSA faculty member

Contact for More Information:

Nichole Evans, MHSA Program Manager
Department of Population Health
University of Kansas Medical Center
5001 Student Center– Mail Stop 3044
Kansas City, KS 66160
913.588.1934; nevans2@kumc.edu

Graduate Certificate in Public Health Practice, Policy and Management

The Graduate Certificate in Public Health Practice, Policy and Management provides students with specialized public health knowledge required to succeed as practitioners. Students will gain knowledge in foundational public health skills as well as cultural competency, policy analysis and development, budget and human resource management, intervention design and program evaluation.

A minimum of 12 post-bachelor’s degree credit hours are required with a minimum GPA of 3.0 on a 4.0 scale. A typical part-time course plan is listed below for the Certificate in Public Health Practice, Policy and Management. It requires 12 credit hours of coursework that will be offered over two semesters:

### Required Courses (12 credit hours):

- HPM 810: The Health Care System
- HPM 858: Organizational Behavior in Healthcare
- HP&M 822: Health Care Economics

### Prerequisites:

- A minimum GPA of 3.0 on a 4.0 scale
- A letter of reference from a professional colleague or professor
- A personal statement about why the applicant wants to pursue the certificate
- Interview with an MHSA faculty member
Interdisciplinary Graduate Program in Biomedical Sciences

Graduate research at the University of Kansas Medical Center covers a rich and diverse range of topics in both basic and translational research. Basic research is geared toward understanding the basic biological systems that control life. By understanding these systems, rational treatments to treat disease can be devised. The discovery and refinement of these rational treatments is translational research. With such a range of research topics, it is often difficult to choose the best lab. The interdisciplinary program allows the student to make an informed choice of labs to enter. IGPBS students hear from every researcher who is able to take a new student into their lab during the Faculty Research Series. The student then selects 3 research rotations. At the end of the 3 rotations the student will choose the lab that is the best fit for their research goals. Once a lab is chosen, the student enters the chosen mentor’s department to complete the Ph.D.

The interdisciplinary program covers the first 2 semesters of graduate study. Students take a core group of courses that cover all aspects of cell biology, biochemistry, and cell signaling. Courses are both lecture based and discussion based. Students receive introductions to critical research techniques, work on problem sets, and critically evaluate our current knowledge base. In addition, students take courses in scientific ethics and scientific communication. Scientific communication covers graphic presentation of data and both written and oral communication.

At the end of the first year, students have built a considerable knowledge base and have skills in scientific communication, critical thinking, and problem solving. Students expand their knowledge base and skills by taking advanced courses in their chosen departments or programs. Our graduate program prepares students for successful careers in research.

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).

- A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
- Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs.

Typical Plan of Study

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tr>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2 GSMC 859</td>
</tr>
<tr>
<td>1-4</td>
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<table>
<thead>
<tr>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism 2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics 2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I 2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure 2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication 2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II 2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics 1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics 1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research 1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations 1-4</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>GSMC 858</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
GSMC 859

Total Hours 19-30

Beginning with the Fall semester of year two, the student enters the Ph.D. program their faculty mentor is associated with and completes the degree requirements listed in the catalog for that specific program.

TECHNICAL STANDARDS AND REQUIREMENTS FOR THE INTERDISCIPLINARY GRADUATE PROGRAM IN BIOMEDICAL SCIENCES

The Ph.D. degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. It follows that graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory. Therefore all students admitted for graduate study must meet the following abilities and expectations.

1. Observation: The candidate must be able to observe demonstrations and experiences in the basic sciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

2. Communication: A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

3. Motor: Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

4. Intellectual-Conceptual, Integrative, and Quantitative Abilities: The abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

5. Behavioral and Social Attributes: A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student’s difficulties. At this review the provisions for reasonable accommodation will be determined.

For further information, contact Interdisciplinary Graduate Program in Biomedical Sciences, University of Kansas School of Medicine, 1005 Dykes, 3901 Rainbow Blvd., Kansas City, Kansas 66160-7400 (Phone: (913) 588-2719 Fax: (913) 588-5242 E-mail: IGPBS@kumc.edu

STUDENT POLICY ON INFECTIOUS DISEASE

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for academic program admission at the University of Kansas Medical Center. Determination of eligibility for admission in such cases will be made on an individual basis in consultation with the applicant’s physician, taking into consideration (among other factors), legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

Master of Science in Health Informatics

Professionals in applied Health Informatics have skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions. Graduates will be prepared for entry and mid-level positions with hospital or clinic informatics departments, electronic health record (EHR) vendors, public health organizations, and as consultants and/or staff in organizations that specialize in knowledge management. Graduates also have the skills to enter the growing field of health information exchange, which includes regional health information organizations and the emerging personal health records. In addition to a foundation in applied health informatics, special skills will be acquired in organizational change, project management and impact evaluation.

This is an interprofessional program administered by the Center for Health Informatics (http://www.kumc.edu/health-informatics.html), which is sponsored by the School of Nursing.

The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Master of Science in Health Informatics (https://www.kumc.edu/research/center-for-health-informatics/academics/master-of-science-in-health-informatics.html) website.

Admission requirements:

- A bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are
also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html).
- A current resume or curriculum vitae.
- A personal essay outlining the applicant's reasons for wanting to pursue graduate education in health informatics, career objectives, and any other information that would help the admissions committee get to know the applicant.
- Three letters of recommendation preferably from employers, instructors, or other persons who can assess the applicant's academic and professional potential. Letters are submitted per instructions provided for the online application process.
- A background check (https://www.kumc.edu/academic-and-student-affairs/student-resources/criminal-background-checks-for-students.html) is required during the admission process; it may affect the student's eligibility to enter the program.
- A graduate level statistics course (may be completed prior to admission or during the first semester of enrollment.)

After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

International Students

Due to the number of required online courses for this degree, the Health Informatics Program at KUMC does not meet the U.S. student visa requirements at this time. Therefore, we are unable to accept individuals who are on student visas. If you received your university education outside of the U.S. or are in the U.S. on another type of visa, please contact HealthInformatics@kumc.edu for additional application requirements.

Admission requirements are subject to change. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

The Master's in Health Informatics curriculum is divided into three cores: informatics, leadership, and research along with a discipline-specific emphasis track. The student and advisor will work closely together to develop a plan of study that meets the career goals of the student.

Degree requirements:

- Degree requirements can be completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 4 years of admission to the program.
- Completion of a minimum of 40 credit hours.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

Successful completion of a general examination (https://catalog.ku.edu/graduate-studies/kumc/#ThesisDefense) the semester the student will graduate.

Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

Successful completion of the Health Informatics Core (minimum 17 credit hours.) These courses provide the core knowledge and skills essential to the practice of health informatics.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 852</td>
<td>Health Data Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 853</td>
<td>Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 854</td>
<td>Knowledge Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 856</td>
<td>Health Informatics Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Successful completion of the Leadership Core (minimum 9 credit hours.) This includes a minimum of one health policy course. Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 820</td>
<td>Program, Project, and Communication Planning</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 808</td>
<td>The Social Context for Health Care Policy</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 880</td>
<td>Organizational Foundations for Leading Change</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 885</td>
<td>Evaluation and Analysis for Healthcare Effectiveness</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 832</td>
<td>Governance and Health Law</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 833</td>
<td>Ethics</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 837</td>
<td>Health Policy</td>
<td>3</td>
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</tbody>
</table>

Successful completion of the Research Core (minimum 5 credit hours.) This component includes a research project that involves applying aspects of the research process to the student's area of health informatics practice.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 754</td>
<td>Health Care Research</td>
<td>3</td>
</tr>
<tr>
<td>or HP&amp;M 819</td>
<td>Research for Health Care Leaders</td>
<td></td>
</tr>
<tr>
<td>IPHI 860</td>
<td>Health Informatics Scholarly Project</td>
<td>2</td>
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</tbody>
</table>

Successful completion of one Discipline-Specific Emphasis Track (minimum 9 credit hours.) The Discipline-Specific Track (Clinical, Health Policy and Management, Public Health, or Project Management) and the courses within the core are selected in consultation with the student's advisor based on the student's background and career goals.

- Clinical Track (select 9 credit hours.) Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 748</td>
<td>Theories for Practice and Research</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 755</td>
<td>Professionalism in Advanced Nursing Practice</td>
<td>3</td>
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</tbody>
</table>
NRSG 883  Complexity Science Approaches to Improve Organizational Effectiveness 3
NRSG 891  Human Resources and Workforce Development 3

- **Health Policy and Management Track** (select 9 credit hours). Choose from:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HP&amp;M 810</td>
<td>The Health Care System</td>
<td>3</td>
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<tr>
<td>HP&amp;M 822</td>
<td>Health Economics</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 825</td>
<td>Financial Concepts in Healthcare Management</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 846</td>
<td>Health Information Technology Management</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 850</td>
<td>Introduction to Operations</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 854</td>
<td>Human Resources and Workforce Development</td>
<td>3</td>
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</table>

- **Public Health Track** (select 9 credit hours). Choose from:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 809</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 815</td>
<td>Infectious Disease Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 818</td>
<td>Social and Behavioral Aspects of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 845</td>
<td>Health, Society, and Culture</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 875</td>
<td>Management of Public Health Data</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 877</td>
<td>Health Communication</td>
<td>3</td>
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- **Project Management Track** (select 9 credit hours).
<table>
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<tr>
<td>PMGT 816</td>
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<tr>
<td>PMGT 817</td>
<td>Project Management Fundamentals II</td>
<td>3</td>
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<tr>
<td>PMGT 818</td>
<td>Project Management Fundamentals III</td>
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**Typical Plan of Study for Part-Time Students**

**Year 1**

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<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>3</td>
<td>IPHI 850</td>
<td>2</td>
<td>IPHI 854</td>
<td>3</td>
</tr>
<tr>
<td>Leadership Core course</td>
<td>2</td>
<td>Discipline-Specific course</td>
<td>3</td>
<td>Leadership Core course</td>
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Year 2

<table>
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<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>3</td>
<td>IPHI 852</td>
<td>3</td>
<td>NRSG 754</td>
<td>3</td>
</tr>
<tr>
<td>Leadership Core course</td>
<td>3</td>
<td>Discipline-Specific Core course</td>
<td>3</td>
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</table>

Year 3

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 860</td>
<td>2</td>
<td>IPHI 856</td>
<td>2</td>
<td>IPHI 856</td>
<td>1</td>
</tr>
</tbody>
</table>

**Degree Requirements**

**Code** | **Title** | **Hours**
|--------|----------|-------|
P1 Year
| Fall | P&TX 630 | Pharmacology I | 4 |

P2 Year
| Spring | IPHI 850 | Introduction to Health Informatics | 2 |
| PHCH 626 | Biopharmaceutics and Drug Delivery | 3 |
| Summer | IPHI 854 | Knowledge Management in Healthcare | 3 |

P3 Year
| Fall | IPHI 851 | Transforming Health Care through Use of Information Systems and Technology | 3 |
| PHPR 624 | Pharmacoepidemiology and Public Health | 2 |
| PHPR 629 | Research Design and Biostatistics | 2 |
| PHPR 635 | Problems in Pharmacy Practice (1 credit required) | 1-5 |
| Spring | NRSG 880 | Organizational Foundations for Leading Change | 3 |
| IPHI 852 | Health Data Theory and Practice (3 credits required) | 3-4 |
| PHPR 630 | Drug Information and Literature Evaluation | 1 |
| PHPR 635 | Problems in Pharmacy Practice (1 credit required) | 1-5 |

P4 Year
| Fall | IPHI 853 | Abstraction and Modeling of Healthcare Information | 3 |
| IPHI 820 | Program, Project, and Communication Planning | 2 |
| NRSG 808 | The Social Context for Health Care Policy | 2 |
| Spring | IPHI 858 | Health Informatics Practicum: Pharmacy (20 hours/week for 8 weeks at pharmacy informatics (site(s)) | 4 |
| IPHI 957 | Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety | 3 |

Total Hours 40

**Dual Degree: Doctor of Pharmacy & Master of Science in Health Informatics**

The dual PharmD/MS in health informatics (MSHI) degree program is designed particularly for those students intending to pursue opportunities in pharmacy informatics. The dual PharmD/MSHI students will concurrently enroll in both programs during years 2-4 of the PharmD program. During the last semester, the HI practicum will satisfy 1 of 9 required advanced pharmacy practice experiences (APPEs). A Health Informatics comprehensive oral examination occurs during the last semester of enrollment in the Dual Degree (P4 Year, Spring semester). Admission to this program is restricted to students currently in the PharmD program at KU.
NRSG 885 Evaluation and Analysis for Healthcare Effectiveness

TECHNICAL STANDARDS FOR ADMISSION

Center for Health Informatics

The Master of Science in Health Informatics degree and Graduate Certificate signify that the holder is prepared for entry into the practice of applied health informatics. Therefore, it follows that graduates must have the knowledge and skills necessary to function in a broad range of situations. The following abilities and expectations must be met by all students with or without accommodations admitted to the program.

1. Observation: Students must be able to observe: lectures, demonstrations, online written and recorded audio/visual material, online meetings, and research and practice situations. Observation necessitates the functional use of the senses of vision and hearing.

2. Communication: Applicants also must be able to communicate effectively and efficiently in English with other students, faculty, staff and mentors/preceptors. Communication includes not only speech, but also listening, reading, and writing. Effective communication includes the ability to comprehend conversation, presentations, assigned readings, and the ability to present information verbally and in writing.

3. Motor: A student must have sufficient motor function to attend classes, prepare assignments, use a computer keyboard, and make public presentations if required. Course requirements will also include field work in a variety of health organizations.

4. Intellectual, conceptual, integrative, quantitative, and problem-solving abilities: An applicant must be able to understand and learn factual information from readings and didactic presentations, gather information independently, analyze and synthesize learned material, and apply that information. In addition, an applicant must possess the ability to understand and work with measurements, carry out calculations and engage in reasoning, analysis and synthesis based on the calculations. An applicant must be able to draw on all these abilities to be an effective problem solver.

5. Behavioral and social attributes: Integrity, reliability, self-direction, motivation, and the ability to work with diverse groups are qualities necessary for effective preparation for and practice in this field. A student must have the emotional health required for the full use of his or her intellectual ability, exercise of sound judgment, and timely completion of all responsibilities attendant to the completion of academic responsibilities.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.

Neurosciences Program

The KU-L/KUMC bicampus Neuroscience Graduate Program (http://www.neuroscience.ku.edu/) is designed to prepare the student for a research and/or teaching career with concentrations in neuroscience. The program emphasizes research and the skills and knowledge required to perform and communicate the results of research. Modern neuroscience researchers/educators must be versed in a number of areas of neural research, spanning from molecular neuroscience to systems neuroscience. As such, the course of study in the program is broadly based; you are encouraged to enroll in courses offered by other programs or departments. The research opportunities in the program are widely varied and will accommodate many interests.

Nearly all Ph.D. students in the Neuroscience Graduate Program at the KU School of Medicine are admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences (IGPBS). After the initial year of course work, students choose a neuroscience research mentor and then join the laboratory of the mentor. Coursework for the Neuroscience Graduate Program is offered at the KU Medical Center campus in Kansas City, Kansas as well as the University of Kansas in Lawrence.

Several courses are taught on both campuses via videoconferencing. Comprehensive Exams for all students must be completed by the fall of the 3rd year in Graduate School. The program on the KUMC campus is directed by the KUMC Neuroscience Graduate Studies Committee consisting of the following faculty:

KUMC Graduate Studies Committee Members:
Douglas Wright, Ph.D. (Program Director)
Julie Christianson, Ph.D.
Erin Young, Ph.D.
Kyle Baumbauer, Ph.D.

Applications may be made online at: Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS) (http://www.kumc.edu/igpbs.html).

Inquiries related to the KUMC portion of the program may be directed to the Program Director:
Douglas Wright, Ph.D.
Professor, Department of Anatomy & Cell Biology
Director, Neuroscience Graduate Program, KUMC Campus
University of Kansas Medical Center
Kansas City, KS 66160
913-588-2713 (office)
913-588-2710 (fax)
dwright@kumc.edu

Courses

NEUS 799. Neuroscience Seminar Series. 2 Credits.
Presentations of research papers by faculty, post-doctoral research associates, and graduate students. All graduate students in the Neuroscience program participate in this seminar series throughout their period of training. Each student has to present a seminar once every semester. Presentations by students are evaluated by other graduate
students and faculty at the end of each seminar. (Same as NURO 799)  
Prerequisite: Graduate standing in the Neuroscience program.  

**NEUS 844. Neurophysiology. 3 Credits.**  
Somatosensory, motor and cognitive function of the brain will be discussed using a combination of lecture and student presentation formats. Current issues and evidence underlying accepted concepts and mechanisms will be emphasized. (Same as NURO 844 and PHSL 844.) Prerequisite: PHSL 846 or equivalent and consent of instructor.  

**NEUS 845. Graduate Histology. 3 Credits.**  
This course will bridge student knowledge of systems/organs with cellular histology and is designed as an accelerated introduction to histological techniques, microscopy/optics, and histology of normal and diseased tissues. Classes meet once a week and the format includes a 1 hour lecture on individual tissues within related organ systems followed by 1 hour of microscopic observation. Prerequisite: Completion of the IGPBS core curriculum or consent of instructor.  

**NEUS 846. Advanced Neuroscience. 5 Credits.**  
Team-taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as ANAT 846, PHCL 846, and PHSL 846.) Prerequisite: Permission of the course director.  

**NEUS 847. Developmental Neurobiology. 2 Credits.**  
Development of the nervous system from early induction to the development of learning and memory. Topics include: Induction; Cellular Differentiation; Axon Growth and Guidance; Target Selection; Cell Survival and Growth; Synapse Formation; Synapse Elimination; and Development of Behavior. (Same as ANAT 847 and PHSL 847.) Prerequisite: Advanced Neuroscience (ANAT 846; NURO 846; PHSL 846) or consent of instructor.  

**NEUS 848. Molecular Mechanisms of Neurological Disorders. 3 Credits.**  
An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer’s, Parkinson’s, Huntington’s, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxisomal disorders, Down’s syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as ANAT 848, PHCL 848, and PHSL 848.) Prerequisite: Advanced Neuroscience (ANAT 846, PHCL 846 or PHSL 846) or an equivalent course and consent of instructor.  

**NEUS 850. Sensory Biology. 3 Credits.**  
A variety of topics associated with sensory biology, including olfaction, vision, audition, equilibrium, and the visceral and somatic senses will be discussed relative to basic functions and in disease settings. Faculty will provide lectures throughout the semester and research article discussions will be woven into the content throughout the course. Prerequisite: Student must be admitted to the IGPBS program or equivalent.  

**NEUS 899. Neuroscience Master’s Thesis. 1-11 Credits.**  
Hours and credit for this course to be arranged with the mentor. Independent investigation of a research problem in neuroscience, but of limited scope. Prerequisite: Graduate standing in the Neuroscience program and consent of mentor/instructor.  

**NEUS 900. Scientific Papers in Neuroscience. 1 Credits.**  
Neuroscience research articles are analyzed by the student with the guidance of an instructor in terms of quality of scientific content and mechanics of the presentation. One or more articles are discussed in each tutorial session. The research topics and the instructor are chosen in accordance with the research interest of the students. Prerequisite: Graduate standing in the Neuroscience program post-oral comprehensive examination and consent of mentor/instructor.  

**NEUS 990. Research in Neuroscience. 1-9 Credits.**  
Original and independent investigation, approved by and conducted under the supervision of the students’ advisor and advisory committee, in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Consent of advisor.  

**NEUS 999. Neuroscience Doctoral Dissertation. 1-11 Credits.**  
Hours and credit for this course to be arranged with the mentor. Conduct of original investigation in neurosciences. Prerequisite: Graduate standing in the Neuroscience program post-oral comprehensive examination and consent of mentor/instructor.  

### Master of Science in Neurosciences  

The Neuroscience Master’s program is a bi-campus graduate program that incorporates neuroscience faculty at the KU main campus in Lawrence and the KU Medical Center (KUMC). Neuroscience graduate students that matriculate at KUMC participate in the integrated IGPBS graduate program their first year and have the option of taking selected courses on the main campus after their first year. Students on the Lawrence campus take neuroscience courses on the Lawrence campus, but also participate in courses offered on the KUMC campus. Students and faculty from both campuses participate regularly via the Neuroscience Seminar series, which is conducted by video conference.  

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website [http://www.kumc.edu/igpbs/how-to-apply.html](http://www.kumc.edu/igpbs/how-to-apply.html).  

### Admission requirements:  

- Bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required.  
- Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.  
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale for the bachelor’s degree.  
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).  
- A background check (p. 2415) is required during the admission process; it may affect the student’s eligibility to enter the program.  
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.  
- Three letters of recommendation.  
- Prerequisite coursework:  
  - One year of general chemistry  
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
• One year of biological sciences
• One semester of calculus
• One semester of physics
• Research experience (beyond labs associated with lecture courses) is strongly suggested.
• Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».

Degree Requirements:
• Degree requirements are normally completed within 3 years of admission to the program although a maximum of 7 years is allowed.
• Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.
• Completion of a minimum of 30 credit hours.
• Enrollment in a minimum of one (1) credit hour the semester the student will graduate.
• Successful completion of either a thesis defense or general examination (p. 2417) the semester the student will graduate.
• If thesis option is chosen, then enrollment in a minimum of one (1) credit hour of NEUS 899 Neuroscience Master’s Thesis and successful thesis submission and publication (p. 2417) (according to Office of Graduate Studies policy.)
• Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 858</td>
<td>Introduction to Faculty Research</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 859</td>
<td>Research Rotations</td>
<td>1-4</td>
</tr>
</tbody>
</table>

• Successful completion of the following Neuroscience courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUS 799</td>
<td>Neuroscience Seminar Series</td>
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</tr>
<tr>
<td>NEUS 900</td>
<td>Scientific Papers in Neuroscience</td>
<td>1</td>
</tr>
<tr>
<td>NEUS 990</td>
<td>Research in Neuroscience</td>
<td>1-9</td>
</tr>
<tr>
<td>NEUS 899</td>
<td>Neuroscience Master’s Thesis</td>
<td>1-11</td>
</tr>
</tbody>
</table>

• Optional elective course as determined in consultation with the student’s advisor

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years’ catalogs».

Typical Plan of Study

Year 1

<table>
<thead>
<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2 GSMC 853</td>
<td>2 GSMC 859</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2 GSMC 854</td>
<td>2 May take an elective course from the student’s chosen degree program in consultation with the student’s advisor.</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>2 GSMC 855</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>1 GSMC 859</td>
<td>1-4</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>GSMC 858</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>GSMC 859</td>
<td>1-4</td>
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</table>

Total Hours 19-30

Year 2

<table>
<thead>
<tr>
<th>Fall Hours</th>
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</thead>
<tbody>
<tr>
<td>NEUS 990</td>
<td>1-9 NEUS 990</td>
<td>1-9 NEUS 846 (elective)</td>
</tr>
<tr>
<td>NEUS 990</td>
<td>1-9</td>
<td>NEUS 990</td>
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</table>

Total Hours 19-30

Year 3

<table>
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<tr>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Summer Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUS 899 or 990</td>
<td>1-6 NEUS 899 or 990</td>
<td>1-6 NEUS 899 or 990</td>
</tr>
</tbody>
</table>

Thesis defense or general examination scheduled semester approved by committee to graduate. Enroll in NEUS 899 if thesis option chosen otherwise enroll in NEUS 990.

Total Hours 11-50
TECHNICAL STANDARDS AND REQUIREMENTS FOR THE MASTER OF SCIENCE IN NEUROSCIENCE

The MS degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. It follows that graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory. Therefore, all students admitted for graduate study must meet the following abilities and expectations:

- **Observation:** The candidate must be able to observe demonstrations and experiences in neurosciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

- **Communication:** A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with students, staff, and faculty.

- **Motor:** Candidates should have sufficient motor function to carry out lab techniques. A candidate should be physically able to do laboratory procedures and analyze data. Such actions require coordination of both gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

- **Intellectual-Conceptual, Integrative, and Quantitative Abilities:** The abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of scientists, requires all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures.

- **Behavioral and Social Attributes:** A candidate must possess the emotional health required for full utilization of his/her intellectual abilities, the exercise of good judgment and the prompt completion of all responsibilities attendant to the completion of research and teaching responsibilities. Integrity and motivation are personal qualities, which are required for success in science.

Disabled individuals are encouraged to apply. Applicants whose response indicates that they cannot meet the expectations will be reviewed by the Graduate Committee and Technical Support staff of KUMC to assess the extent of the student’s difficulties. At this review the provisions for reasonable accommodation will be determined.

For further information, contact the Neuroscience Graduate Program, University of Kansas School of Medicine, 3901 Rainbow Blvd., Kansas City, Kansas 66160 (Phone: (913) 588-2713 Fax: (913) 588-2710 E-mail: dwright@kumc.edu

STUDENT POLICY ON INFECTIOUS DISEASE

Due to the need to assure the health and safety of students, faculty, and staff, the fact that an applicant for admission has an infectious disease or is the carrier of an infectious disease may be a factor in determining eligibility for academic program admission at the University of Kansas Medical Center. Determination of eligibility for admission in such cases will be made on an individual basis in consultation with the applicant’s physician, taking into consideration (among other factors), legal requirements and the current best medical information available to determine whether the applicant could complete the normal course of study with reasonable accommodation and without risk to him/herself or to others. Therefore, applicants having an infectious disease or who are carriers of an infectious disease must advise the Graduate Committee of this fact and may be required to provide medical records for review by the Student Health Physician in order to determine eligibility for admission.

DRUG FREE WORKPLACE POLICY OF THE UNIVERSITY OF KANSAS

It is the policy of the University of Kansas that unlawful manufacture, distribution, dispensing, possession, or use of controlled substances or alcohol is prohibited in buildings, facilities, or grounds controlled by the University. Any student found to be illegally manufacturing, distributing, dispensing, possessing, or using controlled substances or alcohol at the University or any of its affiliated educational sites, shall be subject to disciplinary action in accordance with applicable policies as outlined in the Graduate Student Handbook. Students are reminded that illegal manufacture, distribution, dispensing, possession, or use of controlled substances may also subject individuals to criminal prosecution.

Doctor of Philosophy in Neurosciences

The KU-L/KUMC bicampus Neuroscience Graduate Program (http://www.neuroscience.ku.edu/) is designed to prepare the student for a research and/or teaching career with concentrations in neuroscience. The program emphasizes research and the skills and knowledge required to perform and communicate the results of research. Modern neuroscience researchers/educators must be versed in several areas of neurobiology research, spanning from molecular neuroscience to systems neuroscience. As such, the course of study in the program is broadly based; you are encouraged to enroll in courses offered by other programs or departments. The research opportunities in the program are widely varied and will accommodate many interests.

Nearly all Ph.D. students in the Neuroscience Graduate Program at the KU School of Medicine are admitted into the Interdisciplinary Graduate Program in the Biomedical Sciences (IGPBS; https://www.kumc.edu/igpbs.html). During the first year in the IGPBS program, students rotate through 3 laboratories to help them decide on their laboratory/mentor choice. After the initial year of course work in the IGPBS, students choose a neuroscience research mentor and then join the laboratory of the mentor. Coursework for the Neuroscience Graduate Program is offered at the KU Medical Center campus in Kansas City, Kansas as well as the University of Kansas in Lawrence. Several courses are taught on both campuses via videoconferencing. Comprehensive Exams for all students must be completed by the fall of the 3rd year in Graduate School. The program on the KUMC campus is directed by the KUMC Neuroscience Graduate Studies Committee consisting of the following faculty:

KUMC Graduate Studies Committee Members:

- Douglas Wright, Ph.D. (Program Director)
- Julie Christianson, Ph.D.
- Erin Young, Ph.D.
- Kyle Baumbauer, Ph.D.

Applications may be made online at: Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS) (http://www.kumc.edu/igpbs.html).
Inquires related to the KUMC portion of the program may be directed to the Program Director:

Douglas Wright, Ph.D.
Professor, Department of Anatomy & Cell Biology
Director, Neuroscience Graduate Program, KUMC Campus
University of Kansas Medical Center
Kansas City, KS 66160
913-588-2713 (office)
913-588-2710 (fax)
dwright@kumc.edu

The application process is an online process. Application to this graduate program is facilitated through the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS). (p. 2114) Detailed instructions on how to apply and the application deadlines are posted on the Interdisciplinary Graduate Program in Biomedical Sciences website http://www.kumc.edu/igpbs/how-to-apply.html.

Admission requirements:

- Bachelor's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least 3.0 on a 4.0 scale for the bachelor's degree.
- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (p. 2414).
- A background check (p. 2415) is required during the admission process; it may affect the student's eligibility to enter the program.
- An official copy of the Graduate Record Examination (GRE) score sent from Educational Testing Service (ETS) to University of Kansas Medical Center - ETS institutional code 6895 - GRE Scores NOT APPLICABLE TO THE IGPBS.
- Three letters of recommendation.
- Prerequisite coursework:
  - One year of general chemistry
  - One year of organic chemistry or one semester of organic chemistry and one semester of biochemistry
  - One year of biological sciences
  - One semester of calculus
  - One semester of physics
- Research experience (beyond labs associated with lecture courses) is strongly suggested.
- Interview - the most qualified applicants will receive an invitation for an interview.

Applicants will be assessed based on a combination of GPA, research experience, and interview. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

Admission requirements are subject to change. In most cases, use the catalog of the year student entered the program. Other years' catalogs.

The program consists of coursework, research experience, and the successful completion of a doctoral dissertation. Dissertation research culminates in a final dissertation examination consisting of an oral presentation by the candidate and an examination by the faculty. Relevant prior graduate work is taken into consideration in setting up individual programs of study leading to the Ph.D.

Degree Requirements:

- Degree requirements normally are completed within 5 years of admission to the program although a maximum of 8 years is allowed.
- Cumulative grade-point average (GPA) of at least 3.0 for all KU graduate coursework.
- Successful completion of the University's Research Skills and Responsible Scholarship (p. 2419) requirement prior to the semester the Oral Comprehensive Examination is scheduled.
- Successful completion of GSMC 857 Biographics, GSMC 852 Introduction to Biomedical Research I and GSMC 855 Introduction to Biomedical Research II (or equivalent) meets the Research Skills requirement.
- Successful completion of GSMC 856 Introduction to Research Ethics (or equivalent) meets the Responsible Scholarship requirement.
- Successful completion of the Residence Requirement (p. 2421) prior to the semester the Oral Comprehensive Examination is scheduled. The requirement is met by enrollment in full-time status a minimum of two semesters.
- Successful completion of the Oral Comprehensive Examination (p. 2421). Students are recognized as formal doctoral candidates after they have passed the comprehensive examination.
- Successful completion of Post-Comprehensive Enrollment (p. 2422) requirement.
- Enrollment in a minimum of one (1) credit hour of dissertation NEUS 999 Neuroscience Doctoral Dissertation the semester the student will defend dissertation and graduate.
- Successful completion of the Final Oral Examination (p. 2422) (dissertation defense.)
- Successful completion of the following Interdisciplinary Graduate Program in Biomedical Science (IGPBS (p. 2114)) courses (or their equivalent):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>Proteins and Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 851</td>
<td>Molecular Genetics</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 852</td>
<td>Introduction to Biomedical Research I</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 853</td>
<td>Cellular Structure</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 854</td>
<td>Cell Communication</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 855</td>
<td>Introduction to Biomedical Research II</td>
<td>2</td>
</tr>
<tr>
<td>GSMC 856</td>
<td>Introduction to Research Ethics</td>
<td>1</td>
</tr>
<tr>
<td>GSMC 857</td>
<td>Biographics</td>
<td>1</td>
</tr>
</tbody>
</table>
• Successful completion of the following Neuroscience courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUS 799</td>
<td>Neuroscience Seminar Series</td>
<td>2</td>
</tr>
<tr>
<td>NEUS 900</td>
<td>Scientific Papers in Neuroscience</td>
<td>1</td>
</tr>
<tr>
<td>NEUS 990</td>
<td>Research in Neuroscience</td>
<td>1-9</td>
</tr>
<tr>
<td>NEUS 999</td>
<td>Neuroscience Doctoral Dissertation</td>
<td>1-11</td>
</tr>
</tbody>
</table>

• Successful completion of neuroscience related elective coursework as determined in consultation with the student's advisor and the graduate director. Options include the courses listed below as well as several neuroscience courses offered on the Lawrence campus.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUS 844</td>
<td>Neuropathology</td>
<td>3</td>
</tr>
<tr>
<td>NEUS 846</td>
<td>Advanced Neuroscience</td>
<td>5</td>
</tr>
<tr>
<td>NEUS 847</td>
<td>Developmental Neurobiology</td>
<td>2</td>
</tr>
<tr>
<td>NEUS 848</td>
<td>Molecular Mechanisms of Neurological Disorders</td>
<td>3</td>
</tr>
<tr>
<td>NEUS 850</td>
<td>Sensory Biology</td>
<td>3</td>
</tr>
</tbody>
</table>

Students enrolled in the MD-PhD Physician Scientist Training Program should review the Degree Requirements (p. 2125) section of this catalog for that program.

Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog of the year student entered the program. Other years' catalogs».

**Typical Plan of Study**

**Year 1**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSMC 850</td>
<td>2</td>
<td>GSMC 853</td>
<td>2</td>
<td>GSMC 859</td>
<td>1-4</td>
<td></td>
</tr>
<tr>
<td>GSMC 851</td>
<td>2</td>
<td>GSMC 854</td>
<td>2</td>
<td>May take an elective course from the student's chosen degree program in consultation with the student's advisor.</td>
<td></td>
<td></td>
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<tr>
<td>GSMC 852</td>
<td>2</td>
<td>GSMC 855</td>
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<td>GSMC 856</td>
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<td>GSMC 859</td>
<td>1-4</td>
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<td>GSMC 859</td>
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</table>

Total Hours 19-30

**Year 2**

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<tr>
<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tr>
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<td>NEUS 799</td>
<td>2</td>
<td>NEUS 799</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>NEUS 846</td>
<td>5</td>
<td>NEUS 990</td>
<td>1-9</td>
<td>NEUS 990</td>
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<tr>
<td>NEUS 990</td>
<td>1-9</td>
<td>Oral Comprehensive Exam may be scheduled as early as this semester if approved by committee to proceed.</td>
<td></td>
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</table>

Year 3

<table>
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<th></th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<tbody>
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<td>NEUS 990</td>
<td>1-9</td>
<td>NEUS 990</td>
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Year 4

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Year 5

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Final Oral Exam (dissertation defense) scheduled semester approved by committee to defend and graduate.

Total Hours 23-125

**TECHNICAL STANDARDS AND REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY IN NEUROSCIENCE**

The PhD degree signifies that the holder is prepared for entry into research and/or teaching in postgraduate training and faculty positions. It follows that graduates must have the knowledge and skills to function in a broad variety of academic situations in the classroom and laboratory. Therefore, all students admitted for graduate study must meet the following abilities and expectations:

- **Observation:** The candidate must be able to observe demonstrations and experiences in neurosciences, including but not limited to biology demonstrations in animals, cultures, and microscopic studies of tissues in normal and pathologic states. A candidate must be able to observe and analyze experimental detail. Observation necessitates the functional use of the sense of vision and somatic sensation.

- **Communication:** A candidate should be able to communicate, to understand, and to observe lectures and laboratory instruction. A candidate must be able to communicate effectively in order to present and analyze research data. Communication includes not only...
The purpose of the MD-PhD dual degree program is to prepare highly qualified and motivated post-baccalaureate students for careers as physician scientists in academic medicine and biomedical research. To promote a close-knit group of students, MD-PhD training at the University of Kansas Medical Center includes small group interactions with the program directors and monthly interactions with fellow students at all phases of their training. A peer-mentoring program allows students to advise and guide each other on issues related to research and clinical training, personal life-work balance, and professional development. The program is conducted under the auspices of the Dean of Graduate Studies and the Executive Dean of the School of Medicine, with guidance from a MD-PhD Advisory Committee. On average, students spend about 7-8 years in the program; the variable period usually depends on the time needed to complete their research and dissertation.

Application for admission is through the MD-PhD Dual Degree Admissions Committee. The Program seeks highly motivated students with outstanding academic credentials and potential, a strong interest in research, and demonstrated research experience. There are no Kansas residency requirements for admission to the MD-PhD program and students with exceptional potential as physician scientists are recruited from around the country.

Applicants need to submit the following credentials: (Deadline October 15th for application through AMCAS, all needed items due October 30th)

- Standard AMCAS medical application with “MD-PhD Combined-Degree Program” selected. Designate The University of Kansas School of Medicine as a recipient. Prepare an addendum and submit it to the Program address (email if possible) only if you wish to make additional or clarifying comments to those already expressed in the three essays in your AMCAS application: [1] Personal Statement. [2] Why are you interested in an MD-PhD Program? [3] Describe your research experience(s) to date, including location and time frame for each, and your research mentor(s).
- MCAT scores will be included in your AMCAS application, otherwise have official copy sent to the MD-PhD Program. Submit GRE scores if taken (not a requirement). Contact the Program if you have any questions.
- Download and complete Information for MD/PhD Physician Scientist Program at University of Kansas Medical Center form (http://www.kumc.edu/Documents/md-phd/MD-PhD%20Information%20Form.pdf) using the link provided. Please submit the form via email if at all possible to jfletcher@kumc.edu.
- At least three (3) Letters of Recommendation (Please download through AMCAS):
  a. One must be written by the applicant’s mentor from the prior research experience(s) and give some indication about the applicant’s potential for research.
  b. One must be written by a faculty member, other than the research mentor with whom the applicant studied in a science course.
  c. A letter from any other person selected by the applicant.
Admission requirements are subject to change. In most cases, use the catalog of the year the student entered the program. Other years' catalogs are available for details on the application and admission processes.

For additional information please see: http://www.kumc.edu/md-phd-program/application-and-admission.html.

Matriculation in this program begins with two years of a basic medical science curriculum (p. 2128). Students are assigned a clinical preceptor, who meets with the assigned student on a regular basis throughout the first two years of medical school. Students also take a required course PAON 920 Molecular Medicine: Approaches & Ethics offered by the MD-PhD program during the fall and spring semesters of the first year of medical courses. This course is designed to introduce students to cutting edge scientific concepts and research directly related to topics covered in the medical school curriculum.

Introductory laboratory research rotations are typically performed in the summer before and the summer after the first year of medical courses. In addition, the summer after the first year of medical courses, students will be enrolled in an online course, Principles of Statistics in Public Health. During the second year of medical courses, the student devotes time to selecting a research mentor (if not already done so by this time) and begins to develop ideas for the dissertation research problem. During the spring semester of the second year of medical courses - the MD-PhD program offers a required grant preparation seminar (1h/week) that will familiarize the students with NIH pre-doctoral fellowship application components as well as the submission processes. Students complete the second year by taking Step1 of the United States Medical Licensing Examination (USMLE).

Years three through five (or six) of the MD-PhD Program focus primarily on the research problem and the selected graduate curriculum. The number of years in this phase are dependent on individual progress with the required research.

During the first year in the graduate phase (year 3 of the program) the student fulfills the responsible research and ethics requirement for the Ph.D degree. Once completed, the student will be eligible to take the Oral Comprehensive Examination. For more details, refer to the degree requirements section in this catalog for the Ph.D programs available in the School of Medicine (p. 2018) or KU Lawrence Bioengineering (p. 422).

During the first or second year in the graduate phase (years 3 or 4 of the program) the student takes BIOS 799 Introduction to Statistical Genomics, or a comparable course with permission of the Program Director.

- The application fee for our program comes directly to us. Please make out your check for $50.00 to: KUMC MD-PhD Program and send it to the Program address. You will not be required to pay the medical application fee that is listed on the MD only information.
- Email your current CV to jfletcher@kumc.edu.

Interviews

- Selected applicants will be invited for interviews in Kansas City. The interviews are usually held mid January. During the interview, applicants meet with members of the MD-PhD Admissions Committee, MD-PhD and Graduate Program Directors, students currently in the program, and research faculty.
- The Program will cover each selected applicant’s basic travel expenses for interviews; details will be provided at the time of the invitation to interview. A student invited to interview but with exceptional circumstances and unable to participate on those dates may be given an alternative date and considered for admission by the Admissions Committee on an individual case basis.

For any time throughout the course of study, if a student is not meeting the requirements of the MD-PhD program, or of the specific degrees – their tenure in the program will be reviewed by appropriate personnel and action may be taken. Continued advancement in the program is dependent on a student successfully meeting the requirements of the MD-PhD program and those of their current phase (MD or graduate) of study.

Degree requirements and course descriptions are subject to change. In most cases, use the catalog of the year the student entered the program. Other years’ catalogs are available for details on the application and admission processes.

If Accepted Into the Program:

Students accepted into the MD-PhD Dual Degree program are admitted into the M.D. Program in the School of Medicine and as a Ph.D. student in one of the graduate programs offered through Graduate Studies. The student must provide an official transcript indicating receipt of a Baccalaureate degree from a fully accredited institution by the time of matriculation into the program (and if applicable, transcripts for any post-baccalaureate studies/degrees).

Admission requirements are subject to change. In most cases, use the catalog of the year the student entered the program. Other years’ catalogs are available for details on the application and admission processes.

- MD-PhD students must meet the MD degree requirements of the School of Medicine as outlined in their section of this online catalog and the Ph.D degree requirements as outlined by their PhD department and minimum Graduate Studies requirements also outlined in their respective sections (p. 2018) of this online catalog.
- For MD-PhD students, the first two years of the MD curriculum are considered the equivalent of the Interdisciplinary Graduate Program in Biomedical Science (IGPBS) (p. 2114) curriculum. Successful completion of the IGPBS curriculum (or its equivalent) is a degree requirement for each of the basic science Ph.D. programs.
- PAON 920 Molecular Medicine: Approaches & Ethics (meets once/week the fall and spring semester of the first year of the medical phase)
- Principles of Statistics in Public Health (online course offered in the summer between the first and second years of the medical phase)
- Grant preparation seminar (meets once/week the spring semester of the second year of the medical phase)
- Research skills and responsible conduct of research will be met prior to taking the oral qualifying exam by the following coursework:
  - Research skills: 1) Biostatistics learning activities (first year of medical phase) and 2) PAON 920 Molecular Medicine: Approaches & Ethics (fall semester, first year of medical phase)
  - Responsible conduct of research can be met via one of the following courses: 1) GSMA 856 Introduction to Research Ethics (fall semester, first year of graduate phase), 2) Stower’s Research Integrity Course (spring semester, first year of graduate phase), or 3) an institutional-approved Department-sponsored responsible conduct of research course (fall or spring semester of first year of graduate phase) with permission of the Program Director. For details contact the Program office.
- BIOS 799 Introduction to Statistical Genomics (or a comparable course with permission of the Program Director): taken during the first or second year of the graduate phase
- Research skills and responsible conduct of research training will also be required in the final year of the graduate phase, in consultation with the Program Director.

Matriculation in this program begins with two years of a basic medical science curriculum (p. 2128). Students are assigned a clinical preceptor, who meets with the assigned student on a regular basis throughout the first two years of medical school. Students also take a required course PAON 920 Molecular Medicine: Approaches & Ethics offered by the MD-PhD program during the fall and spring semesters of the first year of medical courses. This course is designed to introduce students to cutting edge scientific concepts and research directly related to topics covered in the medical school curriculum.

Introductory laboratory research rotations are typically performed in the summer before and the summer after the first year of medical courses. In addition, the summer after the first year of medical courses, students will be enrolled in an online course, Principles of Statistics in Public Health. During the second year of medical courses, the student devotes time to selecting a research mentor (if not already done so by this time) and begins to develop ideas for the dissertation research problem. During the spring semester of the second year of medical courses - the MD-PhD program offers a required grant preparation seminar (1h/week) that will familiarize the students with NIH pre-doctoral fellowship application components as well as the submission processes. Students complete the second year by taking Step1 of the United States Medical Licensing Examination (USMLE).

Years three through five (or six) of the MD-PhD Program focus primarily on the research problem and the selected graduate curriculum. The number of years in this phase are dependent on individual progress with the required research.

During the first year in the graduate phase (year 3 of the program) the student fulfills the responsible research and ethics requirement for the Ph.D degree. Once completed, the student will be eligible to take the Oral Comprehensive Examination. For more details, refer to the degree requirements section in this catalog for the Ph.D programs available in the School of Medicine (p. 2018) or KU Lawrence Bioengineering (p. 422).

During the first or second year in the graduate phase (years 3 or 4 of the program) the student takes BIOS 799 Introduction to Statistical Genomics, or a comparable course with permission of the Program Director.
During years two through four of the graduate phase, the student will complete any remaining Program specific requirements, including responsible conduct of research the year the student plans to defend, and the student will conduct research for their dissertation culminated by the defense of their dissertation. During this phase, students have several opportunities for clinical training experiences. For example, the student-run JayDoc free clinic provides an excellent opportunity to both practice clinical skills and serve the community. Students complete Basic Life Saving training/certification approximately every 2 years to stay current in those clinical skills. Students may also elect to participate in supplemental instruction opportunities – in which they help teach and review concepts to help their peers prepare for the USMLE Step 1 exam.

After the dissertation defense and successful completion of the requirements of the graduate phase, students enter a transitional introduction to medical clerkships prior to completing their elective clinical rotations (p. 2128). After the third year of medical school, the USMLE Step 2 is taken.

In addition to the course of study outlined above, the Program also sponsors a number of other functions designed to develop professional skills relevant to a career in academic medicine. All of the students meet once a month with the program directors and their peers for one hour to discuss program-related activities, issues and events – including planning service and social activities. These meetings conclude with a formal presentation of a research project or a clinical case presentation.

Another important element of the Program is the annual retreat. Each annual summer event focuses on one of three aspects of MD-PhD training: research, clinical practice, and professional development/leadership. The retreat fosters discussion and learning about the many and varied elements in a physician-scientist’s training and career.

Below is the typical plan of study that includes 4 years in the MD phase and 3-4 years in the PhD phase. For numbering, M is for medical phase, G is for PhD phase and P is for total years in program.

### Year 1
**MD Phase (M1, P1)**
- See MD Curriculum in MD section of catalog for courses and credit hours.
- In addition MD-PhD students take:
  - PAON 920 (This course is taken in both the Fall and Spring semesters.)
- The summer between the first and second year of medical school students will enroll in Principles of Statistics in Public Health

### Year 2
**MD Phase (M2, P2)**
- See MD Curriculum in MD section of catalog for courses and credit hours.
- In addition MD-PhD students take:

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD Phase (M2, P2)</td>
<td></td>
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</tbody>
</table>

### Year 3
**PhD Phase (G3, P5)**
- Follow the PhD curriculum for your chosen program.
- Take RCR course in consultation with Program Director if defending in Year 3 of the graduate phase
- Defend dissertation Spring semester of year 3 or 4 of PhD phase.

### Year 4
**PhD Phase (G4, P6)**
- Follow the PhD curriculum for your chosen program.
- Oral Comprehensive Examination can be taken Spring semester of the G1 phase or the Fall semester of the G2 phase - depending on the departmental guidelines and when the ethics requirement is met.
- In the first or second year of the graduate phase students will enroll in BIOS 799 Introduction to Statistical Genomics, or a comparable course with permission of Program Director

### Total Hours
- Year 1: 0 hours
- Year 2: 0 hours
- Year 3: 0 hours
- Year 4: 0 hours
Graduate with PhD in May (Spring semester) year 3 or 4 of PhD phase.

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
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<td>PhD Phase (G4, P6)</td>
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<tr>
<td>Follow the PhD curriculum for your chosen program.</td>
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</tr>
<tr>
<td>Take RCR course in consultation with Program Directors</td>
<td></td>
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<tr>
<td>Defend dissertation Spring semester of year 3 or 4 of PhD phase.</td>
<td></td>
</tr>
<tr>
<td>Graduate with PhD in May (Spring semester) year 3 or 4 of PhD phase.</td>
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Total Hours 0

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Total Hours 0

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<tr>
<td>See MD Curriculum in MD section of catalog for clerkships, electives and hours.</td>
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<tr>
<td>Graduate with MD in May (Spring semester) year 4 MD phase.</td>
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</table>

Total Hours 0

All individuals admitted to the University of Kansas will be asked to verify that they can meet the technical standards of the program with or without accommodation(s). To view the Technical Standards for the M.D. program, click here (https://www.kumc.edu/school-of-medicine/academics/degree-programs/md-program/admission-and-aid/technical-standards.html). Technical Standards for the Ph.D. programs offered are included in their individual catalog section. Click on the list of programs (p. 2018) link and then the specific Ph.D. program to view technical standards for that program.

**Doctor of Medicine (M.D.)**

At the University of Kansas School of Medicine, the physicians of tomorrow are welcomed into a culture of community, forming bonds with peers and mentors by learning together. Through this support system, students reach common goals of serving their community and excelling in the knowledge of medicine and delivery of health care.

In the fall of 2017, the KU School of Medicine launched its innovative new curriculum: Active -> Competency-Based -> Excellence-Driven (ACE). The ACE curriculum’s block structure systematically introduces topics with progressive complexity of foundational and clinical content through the four years. The curriculum focuses on active learning, in which students develop skills in assessing their own learning needs and developing strategies to meet those needs.

**Top rankings**

Providing students with an outstanding medical education remains at the heart of the School of Medicine’s mission.

- U.S. News & World Report ranks the School of Medicine among the top programs for training primary care physicians.

**Three diverse academic environments**

The School of Medicine has campuses at three locations in Kansas and has gained a national reputation, particularly for educating family, primary care and rural physicians.

- At the Kansas City campus, students train at a large academic medical center, which has attracted innovative and accomplished educators and researchers from around the world. In the summer of 2017, a new $75 million, 171,000-square-foot Health Education Building opened. The new building enables the School of Medicine to train students in the technologically advanced environment required by a modern health care curriculum.

- The Wichita campus provides a community-based medical education environment, in which students learn through direct patient care inside three partner hospitals as well as in physician offices across the state. Students may also elect to train in community-based and rural settings. The instructional space on this campus was expanded and updated in 2010 to facilitate small group learning and team based experiences in anticipation of the new teaching method integral to the ACE curriculum.

- The Salina campus is designed for students with a strong interest in rural medicine and those wishing to work with a smaller group of peers on a rural regional campus with opportunities for early clinical experiences. Students are trained in a new state-of-the-art medical education building. Inter-professional activities and education occur in advanced simulated settings.

School of Medicine students in Kansas City and Wichita are also able to volunteer at the JayDoc Free Clinics, which are student-run clinics providing non-emergency urgent and preventive care to the uninsured and underinsured populations of Kansas City and Wichita. Salina students have the opportunity to assist with the medical care at Ashby House, a facility for a vulnerable population.

On the left you will find links for more information about the KU School of Medicine including administration, programs offered, campuses, and the course catalog for the School of Medicine.

**Administration**

The Kansas Board of Regents (http://www.kansasregents.org/)
KU Administration (http://www.ku.edu/about/leadership/)
KU Medical Center Administration (http://www.kumc.edu/kumc-leadership/kumc-organizational-chart.html)
KU School of Medicine Administration (http://www.kumc.edu/school-of-medicine/about-the-school/administration.html)

**General Information**

University Policies (http://ioa.ku.edu/)
About KU (http://www.ku.edu/about/)
About School of Medicine (http://www.kumc.edu/school-of-medicine.html)
History of School of Medicine (http://www.kumc.edu/school-of-medicine/about-the-school/history.html)
Special Programs (http://catalog.ku.edu/medicine-doctorate/general/special-programs/)
Salina Campus (http://www.kumc.edu/school-of-medicine/salina.html)
Wichita Campus (http://wichita.kumc.edu/)
Admissions (http://www.kumc.edu/school-of-medicine/education/admissions.html)
Medical Alumni Societies (http://www.kumc.edu/school-of-medicine/academic-societies.html)
Student Services (http://www.kumc.edu/student-services.html)
Student Organizations and Activities (https://kumc.collegiatelink.net/)
Degree Programs (http://catalog.ku.edu/medicine-doctorate/general/degree-programs/)
Medical School Requirements (http://catalog.ku.edu/medicine-doctorate/general/medical-school-requirements/)
Awards (http://catalog.ku.edu/medicine-doctorate/general/private-support/)

Curriculum

### CLASSES ENTERING AFTER 2017

ACE Curriculum Diagram (http://www.kumc.edu/school-of-medicine/education/ace-curriculum/the-curriculum.html)

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<td>ACED 805</td>
<td>Molecular and Cellular Medicine - 8</td>
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<tr>
<td>ACED 810</td>
<td>Infection, Blood and Immunity - 8</td>
</tr>
<tr>
<td>ACED 815</td>
<td>Respiration and Circulation - 8</td>
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<td>ACED 820</td>
<td>Gastrointestinal and Renal – 8</td>
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#### Year Two (32)

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<td>Muscles and Movement – 8</td>
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<tr>
<td>ACED 830</td>
<td>Brain, Mind and Behavior – 8</td>
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<tr>
<td>ACED 835</td>
<td>Reproduction, Development and Sexuality – 8</td>
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<td>ACED 840</td>
<td>Medicine Capstone - 8</td>
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#### Year Three (48)

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<tr>
<td>FCMD 950</td>
<td>Obstetrics/Gynecology Clerkship - 8</td>
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<td>OBGN 975</td>
<td>Internal Medicine Clerkship - 8</td>
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<td>MED 900/</td>
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<td>INMD 975</td>
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<tr>
<td>RLMD 976/</td>
<td>Obstetrics/Gynecology Clerkship - 8</td>
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<tr>
<td>RLMD 977/</td>
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<tr>
<td>RLMD 978/</td>
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<tr>
<td>Critical Care Selective - 4</td>
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<td>Subinternship Selective - 4</td>
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<tr>
<td>Electives (at least 12 hours must be clinical) - 20</td>
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### CLASS ENTERING 2016

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<td>CORE 800</td>
<td>Foundations of Medicine - 8</td>
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<tr>
<td>CORE 805</td>
<td>Genetics and Neoplasia - 4</td>
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<tr>
<td>CORE 810</td>
<td>Inflammation and Immunity - 4</td>
</tr>
<tr>
<td>CORE 815</td>
<td>Cardiopulmonary - 8</td>
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<tr>
<td>CORE 820</td>
<td>Gastrointestinal System and Nutrition - 4</td>
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<td>CORE 825</td>
<td>Renal and Endocrine System - 4</td>
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<td>CORE 830</td>
<td>Reproduction and Sexuality - 4</td>
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#### Year Two (30)

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<tbody>
<tr>
<td>CORE 835</td>
<td>Musculoskeletal and Soft Tissue Systems – 4</td>
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<tr>
<td>CORE 840</td>
<td>Brain and Behavior – 8</td>
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<td>CORE 845</td>
<td>Blood and Lymphoid System – 4</td>
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<tr>
<td>CORE 850</td>
<td>Infectious Diseases – 6</td>
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<tr>
<td>CORE 860</td>
<td>Integration and Consolidation – 8</td>
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#### Year Three (48)

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#### Year Four (32)

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Electives (at least 12 hours must be clinical) - 16

**CLASS ENTERING 2015**

Curriculum Diagram (http://catalog.ku.edu/medicine-doctorate/curriculum/Curriculum_diagram_7-21-14.doc)

**Year One (36)**
- CORE 800: Foundations of Medicine - 8
- CORE 805: Genetics and Neoplasia - 4
- CORE 810: Inflammation and Immunity - 4
- CORE 815: Cardiopulmonary - 8
- CORE 820: Gastrointestinal System and Nutrition - 4
- CORE 825: Renal and Endocrine System - 4
- CORE 830: Reproduction and Sexuality - 4

**Year Two (30)**
- CORE 835: Musculoskeletal and Soft Tissue Systems - 4
- CORE 840: Brain and Behavior - 8
- CORE 845: Blood and Lymphoid System - 4
- CORE 850: Infectious Diseases - 6
- CORE 860: Integration and Consolidation - 8

**Year Three (48)**
- FAPR 955/ FCMD 950: Family Medicine Clerkship - 8
- GERO 900/ GERI 950: Geriatric Medicine Clerkship - 4
- GYNO 900/ OBGN 975: Obstetrics/Gynecology Clerkship - 6
- MED 900/ INMD 975: Internal Medicine Clerkship - 8
- NEUR 900/ NROL 950: Neurology Clerkship - 4
- PED 900/ PDRC 975: Pediatrics Clerkship - 6
- PYCH 955/ PSCR 950: Psychiatry Clerkship - 4
- SURG 900/ SGRY 975: Junior Surgery Clerkship - 8
- ICM 900/ ICM 975: Issues in Clinical Medicine - 0

**Year Four (32)**
- FAPR 900/ RLMD 976/ RLMD 977/ RLMD 978: Rural Preceptorship - 4
- Critical Care Selective - 4
- PMED 960/ PVMD 975: Population Health in Practice - 4
- Subinternship Selective - 4

**Electives (at least 12 hours must be clinical) - 16**

**Core SOM Preclinical Phase**

**First Year**

ACED 800. Introduction to Doctoring. 0-3 Credits.
Introduction to Doctoring is a case-based, multidisciplinary course, taught by faculty members from foundational science and clinical departments. This course will provide students with the knowledge and skills to obtain a medical history in combination with a head-to-toe physical examination, basic life support and an introduction to the electronic medical record. In addition, students will be introduced to key topics in population health and social sciences. Students participate in large and small group activities, including lectures, case-based collaborative learning, problem-based learning, clinical skills lab and simulations. Students are assessed by multiple-choice examinations, small group and clinical skills performance, and professional development. Prerequisite: Medical School admission requirements.

ACED 805. Molecular and Cellular Medicine. 0-8 Credits.
Molecular and Cellular Medicine is a case-based, multidisciplinary course, taught by faculty members from foundational science and clinical departments. The focus of the course is the molecular and cellular mechanisms underlying health and disease. This course integrates content from the foundational, social, and clinical sciences. It includes clinical skills instruction in medical history and physical examination. Students participate in large and small group activities, including lectures, case-based collaborative learning, problem-based learning, clinical skills lab and simulations. Students will work collaboratively to master general principles, evaluate clinical literature, and develop tools for life-long learning. Students are assessed by multiple-choice examinations, small group and clinical skills performance, and professional development. Prerequisite: Successful completion of Introduction to Doctoring or permission of Associate Dean for Student Affairs.

ACED 810. Infection, Blood and Immunity. 0-8 Credits.
Infection, Blood and Immunity is a case-based, multidisciplinary course, taught by faculty members from foundational science and clinical departments. The course integrates critical principles related to microbial infection, as well as normal and abnormal activity of the immune system and blood, including content from the foundational, social, and clinical sciences. It includes clinical skills instruction in medical history and physical examination. Students participate in large and small group activities, including lectures, case-based collaborative learning, problem-based learning, clinical skills lab and simulations. Students will work collaboratively to master general principles, evaluate clinical literature, and develop tools for life-long learning. Students are assessed by multiple-choice examinations, small group and clinical skills performance, and professional development. Prerequisite: Successful completion of Molecular and Cellular Medicine or permission of Associate Dean for Student Affairs.

ACED 815. Respiration and Circulation. 0-8 Credits.
Respiration and Circulation is a case-based, multidisciplinary course, taught by faculty members from foundational science and clinical departments. The course integrates critical principles related to the normal and abnormal functioning of the cardiovascular, pulmonary and allied systems, including content from the foundational, social, and clinical sciences. It includes clinical skills instruction in medical history and physical examination. Students participate in large and small group activities, including lectures, case-based collaborative learning, problem-based learning, clinical skills lab and simulations. Students will work collaboratively to master general principles, evaluate clinical literature,
and develop tools for life-long learning. Students are assessed by multiple-choice examinations, small group and clinical skills performance, and professional development. Prerequisite: Successful completion of Infection, Blood and Immunity or permission of Associate Dean for Student Affairs.

**ACED 820. Gastrointestinal and Renal. 0-8 Credits.**

Gastrointestinal and Renal is a case-based, multidisciplinary course, taught by faculty members from foundational science and clinical departments. The course integrates critical principles related to the normal and abnormal functioning of the gastrointestinal, renal and allied systems, including content from the foundational, social, and clinical sciences. It includes clinical skills instruction in medical history and physical examination. Students participate in large and small group activities, including lectures, case-based collaborative learning, problem-based learning, clinical skills lab and simulations. Students will work collaboratively to master general principles, evaluate clinical literature, and develop tools for life-long learning. Students are assessed by multiple-choice examinations, small group and clinical skills performance, and professional development. Prerequisite: Successful completion of Respiration and Circulation or permission of Associate Dean for Student Affairs.

**Second Year**

**ACED 825. Muscles and Movement. 8 Credits.**

Muscles and Movement is a case-based, multidisciplinary course, taught by faculty members from foundational science and clinical departments. The course integrates critical principles related to the normal and abnormal functioning of the musculoskeletal, soft tissue and allied systems, including content from the foundational, social, and clinical sciences. It includes clinical skills instruction in medical history and physical examination. Students participate in large and small group activities, including lectures, case-based collaborative learning, problem-based learning, clinical skills lab and simulations. Students will work collaboratively to master general principles, evaluate clinical literature, and develop tools for life-long learning. Students are assessed by multiple-choice examinations, small group and clinical skills performance, and professional development. Prerequisite: Successful completion of Gastrointestinal and Renal and the end-of-year clinical skills assessment following the Gastrointestinal and Renal block or permission of Associate Dean for Student Affairs.

**ACED 830. Brain, Mind and Behavior. 8 Credits.**

Brain, Mind and Behavior is a case-based, multidisciplinary course, taught by faculty members from foundational science and clinical departments. The course integrates critical principles related to the normal and abnormal functioning of the central and peripheral nervous systems and mental health including content from the foundational, social, and clinical sciences. It includes clinical skills instruction in medical history and physical examination. Students participate in large and small group activities, including lectures, case-based collaborative learning, problem-based learning, clinical skills lab and simulations. Students will work collaboratively to master general principles, evaluate clinical literature, and develop tools for life-long learning. Students are assessed by multiple-choice examinations, small group and clinical skills performance, and professional development. Prerequisite: Successful completion of Muscles and Movement or permission of Associate Dean for Student Affairs.

**ACED 835. Reproduction, Development and Sexuality. 0-8 Credits.**

Reproduction, Development and Sexuality is a case-based, multidisciplinary course, taught by faculty members from foundational science and clinical departments. The course integrates critical principles related to the normal and abnormal functioning of human reproductive systems, human development and human sexuality including content from the foundational, social, and clinical sciences. It includes clinical skills instruction in medical history and physical examination. Students participate in large and small group activities, including lectures, case-based collaborative learning, problem-based learning, clinical skills lab and simulations. Students will work collaboratively to master general principles, evaluate clinical literature, and develop tools for life-long learning. Students are assessed by multiple-choice examinations, small group and clinical skills performance, and professional development. Prerequisite: Successful completion of Brain, Mind and Behavior or permission of Associate Dean for Student Affairs.

**ACED 840. Medicine Capstone. 8 Credits.**

Medicine Capstone is an 8-week, case-based, multidisciplinary course which aims to consolidate concepts and learning objectives presented throughout the basic science curriculum. Large group sessions are taught by faculty members from foundational science and clinical departments. The course will serve as the capstone for the preceding courses while preparing students for the transition to clinical duties. Clinical skills lab activities will integrate content across systems and disciplines and provide an opportunity to refine clinical skills prior to the clerkship year. Large group session material will include examples of case presentations by clinical faculty. Problem-based learning sessions will continue through this course as in all of the ACE courses. Prerequisite: Successful completion of Reproduction, Development and Sexuality or permission of Associate Dean for Student Affairs.

Course credit hours are indicated after the course title.

### Kansas City Clinical Required Course Descriptions

#### Third Year Requirements

**FAPR 955. Family Medicine Clerkship. 0-8 Credits.**

The Family Medicine (FM) clerkship will introduce third-year medical students to the principles and practice of family medicine and community health. Students will learn about the breadth and diversity of family medicine through direct patient care, simulation, case-based learning, workshops, flipped classrooms, and more. Two options for the patient care portion of the FM clerkship are available: rural placement and Kansas City placement. For the rural placement, the student is immersed in a rural community under the close tutelage of a rural family physician. Students who choose the rural placement will have opportunities to learn in various settings, likely to include outpatient clinic, hospital, emergency department, and community settings. For the Kansas City option, the student is assigned to the KU Interprofessional Teaching Clinic, the University Hospital, and outpatient settings within the academic center and greater community. Student evaluation is based on assessment by clinical supervisors, the NBME Family Medicine Subject Exam, an Objective Structured Clinical Examination (OSCE), presentation of a written assignment, and participation in all required clerkship activities. Prerequisite: Completion of Phase I (Years 1 and 2).

**ICM 900. Issues in Clinical Medicine. 0 Credits.**

This course enables students to apply the theoretical framework developed in ICM 801/802 and 850/851 to the patient care activities in which they participate during third-year clerkships. Through lectures and small group discussions students examine the ethical, legal and social aspects of medical practice and application of key principles to clinical practice. Students also explore career opportunities in medicine.
and factors to be considered in choosing a medical specialty. Students are evaluated through written assignments and participation in course activities.

**GYNO 900. Obstetrics/Gynecology Clerkship. 0-8 Credits.**
During this clerkship the student develops understanding of disease in women through history, physical examination, and laboratory studies. The clerkship includes study of biochemical, anatomical, and physiological changes of normal pregnancy and the effect of disease in altering the course of reproduction. Prerequisite: Medical Basic Sciences.

**MED 900. Internal Medicine Clerkship. 0-8 Credits.**
General medicine orientation. Students will be assigned to Kansas University Medical Center and Kansas City Veterans Administration Hospitals.

**NEUR 900. Neurology Clerkship. 4 Credits.**
The required four-week Neurology Clerkship is intended to familiarize students with the diagnosis and treatment of major neurological disorders. Effective interviewing and diagnostic skills, and competent performance of the neurological examination are emphasized. Students have an active closely supervised role in the diagnosis and treatment of both hospitalized and ambulatory patients. Clinical experience is accompanied by a didactic schedule of lectures, seminars, and practical-interactive learning sessions. Students will be assigned to Kansas University Medical Center and Kansas City Veterans Administration Hospitals. Prerequisite: Completion of Phase I (Years 1 and 2).

**PED 900. Pediatrics Clerkship. 0-8 Credits.**
The student's activities will include rotations on both pediatric inpatient wards (taking histories, examining children, and making daily ward rounds with staff physicians) and outpatient clinics. Student evaluations are based primarily upon clinical performance, assessment of problem-solving skills, and performance on a multiple-choice examination given at the end of the clerkship. Prerequisite: Medical Basic Sciences.

**PYCH 955. Psychiatry Clerkship. 4 Credits.**
The required four-week basic Psychiatry Clerkship is intended to familiarize students with the diagnosis and treatment of major psychiatric disorders. Effective interviewing and diagnostic skills, and competent performance of the mental status examination is emphasized. Students have an active closely supervised role in the diagnosis and treatment of both hospitalized and ambulatory patients. Clinical experience is accompanied by a didactic schedule of lectures, seminars, and practical-interactive learning sessions. Students will be assigned to Kansas University Medical Center and Kansas City Veterans Administration Hospitals. Prerequisite: Completion of Phase I (Years 1 and 2).

**SURG 900. Surgery Clerkship. 0-8 Credits.**
Surgical problems and diseases are studied utilizing lectures, skills laboratory experiences, study questions, clinical problem discussion and live patients. This course prepares the student to meet the pertinent aspects of the summative competencies of the University of Kansas School of Medicine during the third year of Medical School. A particularly useful goal of this course is to teach the student to identify life-threatening conditions that require urgent intervention. Although the skills of this course are necessary for an ambulatory practice, the skills that are taught in this course are most frequently seen and performed in the hospital setting. The student is expected to have a basic understanding of normal and abnormal body function. Prerequisite: first and second year medical years.

**Fourth Year Requirements**

**FAPR 900. Rural Preceptorship. 4 Credits.**

Since 1951 all medical students have completed, as a requirement of graduation, a rural preceptorship of at least four weeks with a practicing physician in the state of Kansas. The emphasis of the preceptorship is rural primary care (family medicine, general internal medicine and general pediatrics). Rural placements are made by the Course Administrator. The preceptor or site will provide housing while the student is on this rotation. The preceptor will expect the student to participate in all phases of professional life as a rural physician. Most sites have the student work in ambulatory clinic, hospital care, ER, nursing home, house calls, and night call. Students also are expected to participate in the civic, administrative and social activities of their preceptor. The preceptor will evaluate student performance based on school of medicine criteria. At the completion of the course the student will have: a working knowledge of the rural health care system, an understanding of the function of a physician in the context of community and an appreciation for the support systems needed for practice in rural Kansas. Offered in Modules I-XII. Prerequisite: Completion of year 3 clinical clerkships.

**Subinternships (4)**
The four-week subinternship gives medical students an opportunity to become more proficient in a specific area of medicine. They provide a more comprehensive course than that of the third-year required course. Students select one of the following options to fulfill the requirement.

**FAPR 901. Subinternship in Family Medicine. 4 Credits.**
This sub-internship is designed to prepare students for residency, and enrolled students will assume the role of an intern under supervision. The family medicine approach to patient care is emphasized, to include caring for patients in the context of their family environment and community, addressing structural and social determinants of health, and providing longitudinal care for patients throughout their lifetimes. Students will be assigned to patient care experiences in the hospital, ambulatory, and maternity-care settings. The student will be expected to participate in teaching and learning experiences available to residents. Students will be evaluated by their clinical supervisors in the areas of oral presentation, encounter documentation, differential building, plan formation, patient interview and physical exam skills, interpersonal and communication skills, systems knowledge, self-assessment and goal-setting skills, and professionalism. Prerequisite: Completed third year.

**GYNO 901. Subinternship in Obstetrics and Gynecology. 4 Credits.**
The objective of GYNO 901 is to provide students with advanced experience in obstetrics and gynecology. Students will be assigned to the Obstetrics and Gynecology Service at KUMC. Students will participate in the management of common obstetrical and gynecologic conditions in a role similar to that of a resident. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Subinternship selective requirement.

**MED 908. Subinternship in Internal Medicine. 4 Credits.**
The objective of this clerkship is to provide students with advanced experience in the management of acutely ill medical patients. Students will be assigned to Kansas University Medical Center and Kansas City Veterans Administration Hospital. Students will participate in the diagnosis and treatment of common medical conditions in a role similar to that of a resident. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Subinternship Selective requirement.

**OTOR 901. Subinternship in Otolaryngology. 4 Credits.**
The objective of this clerkship is to provide students with advanced experience in otolaryngology. Students will be assigned to the
Otolaryngology Service at KUMC. Students will participate in the management of common ENT conditions in a role similar to that of a resident. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Subinternship Selective requirement.

**PED 910. Subinternship in Pediatrics. 4 Credits.**

This selective is an extension of the basic pediatric clerkship. It is designed to permit senior medical students to take increasing responsibility of patient care under close supervision of the faculty. Students will learn skills in patient management by active participation in the daily activities expected of a first year resident. This selective is entirely clinical. The student will work on the Pediatric Inpatient Unit at the University of Kansas Health System. Student performance will be evaluated by the faculty based on factual knowledge, practical skills, problem-solving abilities, and personal behavior and values. On the first day of the rotation, students will report to the inpatient attending assigned to the pediatric floor. Prerequisite: PED 900 or equivalent.

**PED 914. Philmont Adolescent Medicine. 4-8 Credits.**

The Philmont Adolescent Medicine experience is in the high altitude environment at Philmont Scout Ranch in New Mexico. Students learn health screening, care of sports injuries, and diagnosis and management of pediatric, medical, surgical, gynecologic problems, primarily of teenagers, but also of children and adults. Supervision of students consists of faculty members from Medicine Pediatrics, Surgery, Neurology, Family Practice, Gynecology, and Physical Medicine in an effort to give well rounded educational guidance to the students. National Board, Part 1, must be passed in order to receive clinical elective credit. One four week experience only counts toward clinical electives requirements. Permission of Instructor. Prerequisite: Physical Diagnosis, Pathology and Pharmacology.

**PED 918. Pediatric Subinternship Selective - Outpatient. 4 Credits.**

This selective is an extension of the basic pediatric clerkship. It is designed to permit senior medical students to take increasing responsibility of patient care under close supervision of the faculty. Students will learn skills in patient care by active participation in the daily activities of the pediatric outpatient clinic. This selective is entirely clinical. The student will work in the Pediatric Outpatient Clinic at KUMC in a variety of clinics. The specific clinics will be assigned by the Chief of the Ambulatory Pediatric Section after consultation with the student. Student performance will be evaluated by the faculty based on factual knowledge, practical skills, problem-solving abilities, and personal behavior and values. This course can still be taken for elective credit even if a student already has met the subinternship selective requirement. Prerequisite: PED 900 or equivalent.

**PYCH 901. Subinternship in Psychiatry. 4 Credits.**

The student will function as an intern on the Adult and Child Psychiatric Services at the University of Kansas Medical Center and Kansas City VA Hospital. Each student will work closely with faculty and residents and will have an important role in the team care of hospital patients. The course is designed to provide a transitional experience between the predoctoral and residency stage of medical education allowing the student the opportunity to take more responsibility for patients with support and active teaching provided by faculty and residents.

**SURG 901. Subinternship - Plastic Surgery. 4 Credits.**

This course is designed to provide advanced experience to medical students the diagnosis and management of plastic surgery patients. Additionally, concepts taught during surgery 900 are reemphasized in greater detail. Ward rounds, clinical conference seminars and case studies supplement the clinical experience. An optional laboratory experience providing in-depth introduction to microvascular surgery can be arranged. Emphasis is placed on an understanding of the principles and surgical anatomy of areas of plastic surgery including congenital, trauma, tumor and cosmetic. Students are expected to participate with the surgical team in the diagnosis and management of plastic surgery patients. It is expected that the student will participate, when possible, at a resident level of responsibility. The student participates directly in patient care on the wards, in the outpatient clinics and in the operation room. Prerequisite: SURG 900, MED 900.

**SURG 902. Subinternship in Surgery. 4 Credits.**

The student will be expected to participate with surgical team in the diagnosis, operation, and management of surgical patients. It is expected that the student will participate, as possible, at a resident level of responsibility. Ward rounds, clinical conference, seminars, and case studies supplement clinical experience. The student participates directly in patient care on the ward, in the out-patient department, and in the operating room. Emphasis is placed on an understanding of alterations in physiology secondary to pathology, management of fluids and electrolytes, basic elements of pre- and post-operative care, and diseases amenable to surgical treatment. In addition, concepts taught during Surgery 900 are reemphasized and considered in more detail. We can accommodate 6 students in Modules I-XII. Prerequisite: SURG 900 and MED 900.

**SURG 909. Surgery Subinternship-Neurosurgery. 4 Credits.**

This course is designed to provide advanced experience to the student in the management of neurosurgical problems. The student is assigned to the neurosurgical service at the University hospital for four weeks. Students will participate with the surgical team in daily rounds, diagnosis, out-patient experience, operative experience and post-operative management of neurosurgical patients. Emphasis is placed on an understanding of neurologic disease with special emphasis in physical exam and dia gnos is, management of basic neurosurgical emergencies and management of common neurosurgical problems. Accommodates three students in Modules I-XII. Prerequisite: SURG 900 and MED 900.

**SURG 910. Surgery Subinternship-Urology. 4 Credits.**

This course is designed to provide advanced experience to the student in the diagnosis and management of genitourinary disease. The student is assigned to the Urology Service at KUMC or the VA Hospital for 4 weeks. Students are expected to participate with the urologic patients. It is expected that the student will participate, as possible, at a resident level of responsibility. Ward rounds, clinical conference, seminars and case studies supplement clinical experience. The student participates directly in patient care on the ward, in the out-patient department, and in the operating room. Emphasis is placed on an understanding of alterations in physiology, secondary to pathology of the genitourinary tract, and diseases amenable to surgical or medical treatment. The student is expected to become familiar with the diagnostic procedures and techniques used in evaluating patients with acute and chronic genitourinary problems (i.e. cystoscopy). The out-patient experience is particularly emphasized. By the end of the clerkship, the student should be able to describe risk factors, epidemiology, etiology, diagnosis, management strategy, prognosis, including sequelae, and preventive measures for common urologic problems. We can accommodate two students at KUMC and two students at VAH. This will be offered in Modules I-XII. Prerequisite: SURG 900 and MED 900.

**SURG 915. Subinternship-Orthopaedic Surgery. 4 Credits.**

This subinternship is designed to allow the student to participate in orthopedic clinical care. The student is assigned to the orthopedic surgical service at KUMC for four weeks. The student participates with the orthopedic surgery team in the diagnosis, surgical treatment and
postoperative management of orthopedic patients. The student will participate directly in care of patients in the emergency department, operating room, intensive care unit and orthopedic ward. Emphasis is placed on the understanding of pre-op, intra-op and postop care of the orthopedic patient. There is a limit of 4 students per rotation. Prerequisite: Successful completion of basic clinical clerkships.

**Critical Care (4)**

The four-week critical care selective presents the knowledge, skills, and attitudes required to care for very ill hospitalized patients. This allows the student to focus on an interest in a particular specialty and ensures that all students have basic knowledge and skills in critical care. Students select one of the following options to fulfill the requirement.

**ANES 911. Critical Care: Post-Anesthesia Unit. 4 Credits.**
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC Post-Anesthesia Unit. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement.

**ERMD 920. Critical Care: Emergency Room. 4 Credits.**
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the Emergency Room. Clinical work will be supplemented by conferences and other educational activities. This course is only offered on the Salina campus.

**MED 905. Critical Care: Coronary Care Unit. 4 Credits.**
The objective of this clerkship is to provide students with experience in the management of critically ill patients with cardiovascular disorders. Students will participate in the diagnosis and treatment of patients at the KUMC or Kansas City Veterans Administration Hospital Coronary Care Unit. Clinical work will be supplemented by conferences, formal and informal lectures and other educational activities. This clerkship fulfills the Critical Care Selective requirement.

**MED 912. Critical Care: Medical Intensive Care Unit. 4 Credits.**
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC or Kansas City Veterans Administration Medical Intensive Care Unit. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement.

**PED 926. Critical Care: Neonatology. 4 Credits.**
The student will be actively involved in the care and management of the high-risk and acutely ill neonate. Through a clinical participation, tutorial sessions and assigned reading emphasis will be placed on modern neonatal intensive care techniques and developmental physiology and biochemistry. Students may elect additional consecutive four-week periods to pursue aspects of neonatology in more detail, engage in investigative projects or acquire first-hand experience in the operation of a regionalized program for care of high-risk or acutely ill neonates in the state. Students wishing this additional four weeks should contact the Pediatric Department.

**PED 930. Critical Care: Pediatric Intensive Care Unit. 4 Credits.**
Principles of ongoing assessment and management of critically ill children with single and multiple organ failure will be presented. The teaching format will be formal and informal rounds at the bedside in the KUMC Pediatric ICU by faculty members of the Pediatric Critical Care Division. Integration of history-taking, physical examination skills, and laboratory and radiological assessment with pathophysiology will be emphasized.

**SURG 927. Critical Care: Burn Center. 4 Credits.**
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC Burn Center. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement.

**SURG 928. Critical Care: Neurosurgical Intensive Care Unit. 4 Credits.**
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC Neurosurgical Intensive Care Unit. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement.

**SURG 929. Critical Care: Surgical Intensive Care Unit. 4 Credits.**
The objective of this clerkship is to provide students with experience in the management of critically ill patients. Students will participate in the diagnosis and treatment of patients in the KUMC Surgical Intensive Care Unit. Clinical work will be supplemented by conferences and other educational activities. This clerkship fulfills the Critical Care Selective requirement.

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**Clinical Electives in Kansas City**

- Anesthesiology ([http://catalog.ku.edu/medicine-doctorate/kccourses/anesthesiology/](http://catalog.ku.edu/medicine-doctorate/kccourses/anesthesiology/))
- Biochemistry ([http://catalog.ku.edu/medicine-doctorate/kccourses/biochemistry/](http://catalog.ku.edu/medicine-doctorate/kccourses/biochemistry/))
- History and Philosophy of Medicine ([http://catalog.ku.edu/medicine-doctorate/kccourses/history-philosophy/](http://catalog.ku.edu/medicine-doctorate/kccourses/history-philosophy/))
- Interdisciplinary ([http://catalog.ku.edu/medicine-doctorate/kccourses/interdisciplinary/](http://catalog.ku.edu/medicine-doctorate/kccourses/interdisciplinary/))
- Internal Medicine ([http://catalog.ku.edu/medicine-doctorate/kccourses/internal-medicine/](http://catalog.ku.edu/medicine-doctorate/kccourses/internal-medicine/))
- Microbiology, Molecular Genetics, and Immunology ([http://catalog.ku.edu/medicine-doctorate/kccourses/microbiology-molecular-genetics/](http://catalog.ku.edu/medicine-doctorate/kccourses/microbiology-molecular-genetics/))
Preventive Medicine and Public Health (http://catalog.ku.edu/medicine-doctorate/kccourses/preventive-medicine-public-health/)
Psychiatry (http://catalog.ku.edu/medicine-doctorate/kccourses/psychiatry/)
Radiation Oncology (http://catalog.ku.edu/medicine-doctorate/kccourses/radiation-oncology/)
Rehabilitation Medicine (http://catalog.ku.edu/medicine-doctorate/kccourses/rehabilitation-medicine/)
Surgery (http://catalog.ku.edu/medicine-doctorate/kccourses/surgery/)

Wichita Clinical Required Courses

Third Year Requirements

FCMD 950. Family Medicine Clerkship. 0-8 Credits.
Students are introduced to the principles and practice of family medicine. They spend the majority of their time participating in the practice of a private family physician where they evaluate patients under direct supervision and recommend management. This practice experience is enhanced by case-based seminars and skills-based workshops with faculty and hospital call with family medicine residents. Evaluation is based on assessment by clinical supervisors, projects, a departmental exam, and the NBME Family Medicine Subject Exam. Prerequisite: Basic Sciences.

ICM 975. Issues in Clinical Medicine. 0 Credits.
This course is designed to promote the development of professional responsibility and medical ethics. Incorporated into the topics are medical ethical theory, skills of ethical decision making and recognizing personal and professional responsibilities and value identification. The one-hour sessions are held twice a month. All third year medical students are required to attend. Prerequisite: Medical Basic Sciences.

INMD 975. Internal Medicine Clerkship. 0-8 Credits.
Students are assigned two four-week blocks on university general medicine services. Students are expected to acquire basic clinical skills in medicine: interview and examine patients, complete databases and clinical problem assessments, write progress notes and give bedside presentations on daily rounds, and demonstrate accountability for ward duties and patient data. Rounds with visiting professors, KUSM-W Grand Rounds, and medicine case conferences supplement regularly scheduled tutorial sessions and daily ward rounds. Students receive instruction in basic skills, i.e., ECG, chest X-ray, blood count, body chemistry interpretation. Grades are based on ward work, a written history and physical and bedside practical exam (both pass/fail), Observed Structured Clinical Examination (OSCE) and National Board subject examination scores. Prerequisite: Basic Sciences.

NROL 950. Neurology Clerkship. 4 Credits.
The required four-week Neurology clerkship is intended to familiarize students with the diagnosis and treatment of major neurological disorders. Effective interviewing and diagnostic skills, and competent performance of the neurological examination are emphasized. Students have an active closely supervised role in the diagnosis and treatment of both hospitalized and ambulatory patients. Clinical experience is accompanied by a didactic schedule of lectures, seminars, and practical-interactive learning sessions.

OBGN 975. Obstetrics/Gynecology Clerkship. 0-8 Credits.
During the clinical clerkship the student develops understanding of health maintenance and disease processes specific to female patients as well as exposure to normal and high-risk pregnancy. Students will have the opportunity to gain an understanding of female anatomy through physical examination, surgery and review of imaging. This clerkship will expose students to management of patients in both inpatient and outpatient settings as well as in the operating room and labor and delivery unit. Prerequisite: Medical Basic Sciences.

PDRC 975. Pediatrics Clerkship. 0-8 Credits.
The student will spend approximately 60 percent of the time on pediatric wards taking pediatric medical histories, physical examination of children and infants and making ward rounds with attendings and house staff. Approximately 40 percent of the student's time will be spent in ambulatory pediatrics in general specialty clinics and in the offices of practicing pediatricians. Time will be spent in the newborn nursery. Prerequisite: Medical Basic Sciences.

PSCR 950. Psychiatry Clerkship. 4 Credits.
The required four-week basic Psychiatry Clerkship is intended to familiarize students with the diagnosis and treatment of major psychiatric disorders. Effective interviewing and diagnostic skills, and competent performance of the mental status examination is emphasized. Students have an active closely supervised role in the diagnosis and treatment of both hospitalized and ambulatory patients. Clinical experience is accompanied by a didactic schedule of lectures, seminars, and practical-interactive learning sessions. Prerequisite: Basic Sciences.

SGRY 975. Surgery Clerkship. 0-8 Credits.
This course offers the student an introduction to the surgical management of disease. Students are assigned to one of the several surgical services, where they participate fully in diagnosis, operation, and management of patients with a wide range of surgical diseases. Clinical conferences, seminars, ward rounds, and case studies supplement the clinical experience. Students participate directly in patient care on the ward, as well as in the outpatient department and operating room. Emphasis is placed on the understanding of alterations in physiology secondary to trauma, management of fluids and electrolytes, basic elements of pre- and post-operative care, and understanding diseases amenable to surgical treatment. Prerequisite: Medical Basic Sciences.

Fourth Year Requirements

Rural Preceptorship (4)

A preceptorship of four weeks with a practicing physician in the state of Kansas is required for graduation. Students select one of the following options to fulfill the requirement.

RLMD 976. Rural Preceptorship: Family Medicine. 4 Credits.
The student participates in the practice of a family physician in the state of Kansas. In addition, the student is asked to participate in the life of the rural community and explore the various roles a physician plays in the community. At the end of the Rural Preceptorship, the student will be able to describe the challenges and rewards of rural practice. Evaluation consists of clinical performance as assessed by the rural preceptor, and completion of a small project during the Rural Preceptorship.

RLMD 977. Rural Medicine in Internal Medicine. 4 Credits.
Rural Medicine in Internal Medicine is a four week clinical rotation during which each student works with a practicing Internal Medicine physician in the state of Kansas. Student will experience a one-to-one teaching/learning relationship in a private office (i.e., non-institutional) setting and will be exposed to both professional and non-professional aspects of the preceptor's family and social life in a non-tertiary care community environment. The student will perform a history and physical examination on each patient and will be responsible for writing daily progress notes on each assigned patient. Student will formulate diagnostic treatment and educational plans on each patient. The student will write orders after reviewing plans with attending physician. The student will also

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see patients in the emergency room and present them to the attending physician. The student will be involved in all procedures, such as treadmills, lumbar puncture, bone marrow biopsies, liver biopsies, upper GI endoscopy and flexible sigmoidoscopy on all assigned patients and other patients if appropriate. The student will be required to complete a pass/fail reflective assignment questionnaire which must be turned in to the department and reviewed by the course director. Prerequisite: Senior standing and INMD 975.

**RLMD 978. Rural Preceptorship - Pediatrics. 4 Credits.**

Rural Medicine in Pediatrics is a four-week clinical rotation during which each student works with a practicing pediatrician in the State of Kansas. Student will experience a one-to-one teaching/learning relationship in a private practice (i.e., non-institutional) setting and will be exposed to both professional and non-professional aspects of the preceptor's family and social life in a community environment. Initially the student will see patients and take calls with the pediatrician. Later in the month, the student will be given some independence seeing patients. The student may write progress notes and learn to dictate discharge summaries. The student will also participate in a number of procedures such as lumbar punctures, umbilical artery catheter insertion, etc. Students may also assist in ambulance transfers from smaller communities. Prerequisite: Senior standing and PDRC 975.

**Subinternships (4)**

The four-week subinternship gives medical students an opportunity to become more proficient in a specific area of medicine. They provide a more comprehensive course than that of the third-year required course. Students select one of the following options to fulfill the requirement.

**FCMD 998. Subinternship in Family Medicine. 4 Credits.**

The student will function as a subintern at one of the three KUSM-W sponsored family medicine residency programs - Ascension Via Christi or Wesley in Wichita or Smoky Hill in Salina. Experiences include evaluation of outpatients and inpatients, maternal and newborn care, and performance of procedures under direct supervision of residents and faculty. Assignments include in-hospital call as directed by the individual residency. Evaluation is based on assessment of clinical performance using the standard subinternship evaluation form. Prerequisite: FCMD 950.

**INMD 998. Subinternship in Internal Medicine. 4 Credits.**

This course is designed to give the student practical experience in the hospital care of general medicine patients and patient care at the intern or R1 level. Students will perform and dictate the initial history and physical, write orders, perform indicated procedures under the supervision of a senior resident and faculty attending, and dictate discharge summaries on patients. Students will take hospital call with the senior resident, attend scheduled rounds and conferences, and function as a member of the patient care team. Prerequisite: Medical Basic Sciences and INMD 975.

**OBGN 998. Subinternship in Obstetrics and Gynecology. 4 Credits.**

Students will function as a subintern in multiple clinical environments with supervised but advancing clinical responsibilities that will assist in preparation for internships. Two weeks will be spent in the obstetrics units which will include one week of night call. That portion of the rotation includes coverage of emergency / unscheduled cesarean sections and Emergency Department coverage. One week includes surgical experience and floor rounds with the Gynecologic Oncology team. One week is spent in private practice clinic with the Program Director, Department Chairman or additional faculty members as determined by the department. The student will be evaluated through faculty judgment for general information, and degree of attainment of skills necessary for matriculation into the intern year in Obstetrics and Gynecology residency. It is anticipated the subintern should have achieved competency in the ACGME Level 1 milestones for Obstetrics and Gynecology by the completion of this rotation. Prerequisite: Medical Basic Sciences and OBGN 975.

**PDRC 998. Pediatric Subinternship. 4 Credits.**

The student will participate in pediatric case management in a greater comprehensive manner than that of the general pediatric student curriculum. The student will be assigned to a pediatric resident and will participate in the clinical case load of the assigned resident. He/she will be expected to gather and analyze data as pertaining to the assigned pediatric care load. The student will perform physicals and dictate histories on assigned patients where permitted. Case load will be 1-3 patients per day. The student will formulate plan of management with written orders to be reviewed and countersigned by resident and faculty, perform indicated procedures under supervision, and dictate discharge summary of assigned patients where permitted. He/she will take call and attend scheduled rounds, pediatric clinics, and conferences with supervising resident. Evaluation will conform to the clinical assessment utilized for pediatric resident. Assessment of performance will be done jointly by supervising resident and faculty member. Prerequisite: PDRC 975 and senior standing.

**PSCR 998. Subinternship in Psychiatry. 4 Credits.**

This course is designed to expand the student's experience in general psychiatry by having them assume supervised, clinical responsibility equivalent to that of an intern or PGY-1 resident. Students will perform and dictate initial history and physical examinations, formulate diagnoses and treatment plans, write orders to be reviewed and countersigned, dictate discharge summaries, participate in the evaluation and intervention of psychiatric emergencies, attend scheduled rounds, conferences, and PGY-1 didactics. Prerequisite: PSCR 950, INMD 975, SGRY 975, senior standing.

**SGRY 998. Subinternship in Surgery. 4 Credits.**

The student will learn to work up patients with elective surgery, acute surgical abdomen, or GI bleeding, perform fundamental diagnostic and therapeutic procedures, and assist in certain endoscopies. The student will present a patient's clinical problems in a clear and concise manner. The student will be a part of a surgical team consisting of the attending surgeon and the senior and junior surgical residents. He/she will work up patients with the junior surgical resident and be reviewed by the attending surgeon and senior surgical resident. He/she will make daily rounds with the surgical team, scrub on all surgical procedures on his/her patients, and attend all conferences required of surgical residents (consultant rounds, surgical grand rounds, etc.). He/she will assist in the operation, attend clinics and minor surgery clinics. The student will work up approximately one new patient per day. Evaluation will be based on patient workups, technical skills, rapport with patient, paramedical personnel, and surgical team. Prerequisite: SGRY 975, INMD 975, and senior standing.

**Critical Care (4)**

The four-week critical care selective presents the knowledge, skills, and attitudes required to care for very ill hospitalized patients. This allows the student to focus on an interest in a particular specialty and ensures that all students have basic knowledge and skills in critical care. Students select one of the following options to fulfill the requirement.

**CCSL 977. Critical Care Selective in Neonatology. 4 Credits.**

This course is an overview of neonatal medicine. The student will develop skills and conceptual knowledge of newborns and premature infants.
Clinical Electives in Wichita

The student will also attend x-ray conferences weekly, literature review, service rounds twice daily, pediatric grand rounds weekly, and neonatal mortality review, as well as care for infants with special emphasis on NIVU, NSCU and Continuing Care Nurseries. Prerequisite: Senior standing.

CCSL 978. Critical Care Selective in Pulmonary. 4 Credits.
The student will learn the essentials of a comprehensive history, physical exam and interpretation of chest x-rays for the patient with pulmonary disease. The student will also learn the use and basic interpretation of pulmonary function testing, cardiopulmonary exercise testing, plus other laboratory information important to pulmonary disease (sputum assessment, ABG, scanning, pulmonary artery catheterization data, etc). Emphasis will be focused toward the patient in respiratory failure for diagnosis and ventilator management. Prerequisite: Senior standing.

CCSL 979. Critical Care Selective in Pediatrics. 4 Credits.
This elective experience has been designed as a one-month rotation in the pediatric intensive care unit at Wesley Medical Center. Care will be provided to critically ill patients from the neonatal period through adolescence. During this rotation the student will receive exposure to many pediatric critical care subjects and will be expected to convey an understanding of those processes during bedside rounds, in lectures, and during actual patient care. The student will participate in the educational endeavors of the critical care service, including lectures to other students and allied critical care staff such as nurses and respiratory therapists. The student will be expected to give brief presentations on topics that are identified during patient care. Prerequisite: Senior standing.

CCSL 980. Critical Care Selective in Burn. 4 Credits.
Student will be provided hands-on experience in burn management and critical care. Student will make daily rounds, assist in surgery, and participate in pre-operative and post-operative care of patients admitted to the burn unit. Student will be supervised by faculty and residents. Prerequisite: Senior standing.

CCSL 981. Critical Care Selective in Internal Medicine. 4 Credits.
The critical care rotation will aim to provide educational opportunities to acquire knowledge of and to develop clinical competence in the field of critical care medicine. The student will learn interpretation of CXR's, EKG's, Lab/Hemodynamic data and ventilator management. The student will participate in daily morning and evening rounds, and observe and be involved in ICU procedures. The student will be exposed to the many ethical issues of critical care illness. Emphasis will be on formulation of differential diagnosis and therapeutic plan. Prerequisite: Senior standing.

CCSL 983. Critical Care Selective in Trauma. 4 Credits.
The student will learn the care of surgical patients who have experienced blunt and penetrating traumas. Student will be assigned to the trauma service and work with a critical care resident. Student will develop trauma evaluation skills by participating in trauma patient work-ups in the emergency room. Student will assist in surgery and participate in hospital rounds for trauma patients in the Surgical Intensive Care Unit. Student will also develop diagnostic skills in the ambulatory care setting and attend surgical conferences. Prerequisite: Senior standing.

Postgraduate Training Programs

The KU School of Medicine provides two distinct residency and fellowship programs. Both programs are comprehensive in their training. One program is at the KU School of Medicine and Medical Center in Kansas City. The second program is at the KU School of Medicine — Wichita.

Kansas City Postgraduate Training Programs (http://www.kumc.edu/school-of-medicine/gme.html)
Wichita Postgraduate Training Programs (http://wchita.kumc.edu/education/graduate-medical-education.html)
Institute for Community Engagement (http://www.kumc.edu/community-engagement.html)
Music

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

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Bachelor of Fine Arts in Theatre-Voice (p. 2177)
Bachelor of Music (p. 2179)
Bachelor of Music Education in Music Education or Music Therapy (p. 2217)
Bachelor of Music in Bassoon, Clarinet, Flute, Oboe, Saxophone (p. 2179)
Bachelor of Music in Double Bass, Harp, Viola, Violin, Violoncello (p. 2181)
Bachelor of Music in Euphonium, French Horn, Percussion, Trombone, Trumpet, Tuba (p. 2183)
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Graduate Certificate in Music Performance (p. 2237)

The School of Music

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor's, master's, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in the Swarthout Recital Hall (remodeled in 2015), Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

Degrees

Undergraduate Degree Programs

The degree of Bachelor of Music is granted with majors in bassoon, clarinet, double bass, euphonium, flute, French horn, harp, jazz, musicology, music therapy, oboe, organ and church music, percussion, piano, saxophone, theory, composition, trombone, trumpet, tuba, viola, violin, violoncello, and voice.

The degree of Bachelor of Arts in Fine Arts in Music is offered for students with interests in any area of music who also want to pursue a second degree or minor not in the School of Music.
The degree of Bachelor of Fine Arts is granted with a major in theatre and voice.

The degree of Bachelor of Music Education is granted with a major in music education.

Requirements for Graduation

Degrees from the School of Music are conferred on candidates who have satisfactorily completed a minimum of 120 credit hours for the B.A., B.M., B.F.A., and B.M.E. degrees, including required subjects. 45 credit hours must be in junior/senior-level courses, numbered 300 and above. A minimum 2.0 grade-point average, both cumulative and in KU courses, is required for graduation. Four (4) hours of the total in each case, except the Music Therapy B.M. and the Music Education B.M.E. degrees, may be in physical education activity courses.

Remedial Courses

Remedial courses listed in the catalog and Schedule of Classes (https://classes.ku.edu/) are numbered below 100. Such courses include, but are not limited to, MATH 2. Remedial courses do not count toward graduation in the School of Music and may not be counted as distribution courses or electives.

Facilities

Murphy Hall

Murphy Hall, named for former KU Chancellor Franklin D. Murphy, houses the School of Music (http://music.ku.edu/). It is a 5-level facility with offices for faculty members in applied music, music theory and composition, musicology, opera, music education, music therapy, and ensembles. Designed for music and theater, it contains 4 performance areas.

- Crafton-Preyer Theater provides a venue for plays, operas, musical theater shows, and concerts. It is a fully equipped, 1,188-seat proscenium stage facility.
- William Inge Memorial Theater is an intimate black-box facility with seating for up to 125, suitable for plays and small opera productions.
- Swarthout Recital Hall, a 273-seat facility with exceptional acoustics, is dedicated to faculty and student solo and chamber music presentations and occasional opera productions. Swarthout Recital Hall has been fully remodeled and re-opened to public performances in April 2015.
- The Baustian Theater, a black-box facility for opera and musical theater productions, seats 125 and has a dressing room and wardrobe area, set construction and storage area, and office and performance control areas.

Murphy Hall also houses classrooms, practice rooms, rehearsal halls, and storage facilities for instruments and sheet music. The Electronic Music Studio contains a digital workstation for the recording and production of electronic music and video.

The Thomas Gorton Music and Dance Library in Murphy Hall houses more than 111,000 scores, books, sound recordings, videos, and serials, and has the leading music collection in the Great Plains. It features a public computer lab (with both Windows and Macintosh workstations); study carrels; comfortable seating; and public display of new acquisitions, current periodicals, and special exhibitions. Students can make full use of music and dance information resources. The Library also features a high-quality overhead scanner, a listening room with a vinyl record player, a multi-function printer, and an ADA-compliant workstation designed for use by those with impaired vision. The library’s computer lab features a full suite of programs, including Microsoft Office, Adobe Creative Suite, and music notation programs such as Sibelius, Finale, and MuseScore. Students may also reserve our four meeting rooms for individual study and group meetings by submitting a request at lib.ku.edu/study.

The Music Education and Music Therapy Complex in Murphy Hall contains a model music education classroom, a general music instruction classroom, large and small music therapy clinical spaces, three research spaces (Human Learning Lab, Music Behavior Observation Lab, and Perception & Cognition Lab), faculty offices, and the MEMT Computer Lab. In addition, the complex houses a Vocology Laboratory, which affords excellent resources for research-based understanding of singing voice phenomena. The stationary lab facilitates acquisition and analysis of voice data in a controlled environment. It also provides mobile configurations of resources for field-based research and pedagogy in voice studios, choir rehearsal areas, classrooms, and music therapy clinics. Interactive distance delivery of specific music education and music therapy graduate courses are taught on campus and anywhere in the world.

Lied Center

The Lied Center of Kansas (http://www.lied.ku.edu/) is a 2,020-seat performing arts hall. On KU’s west campus at Irving Hill Road and Constant Avenue, it is the venue for the Lied Center Series. It also presents School of Music (http://music.ku.edu/) productions, Student Union Activities (https://rockchalkcentral.ku.edu/?q=Student_9347) shows, and university and community events. The performing arts hall offers excellent acoustic quality and technical production capabilities. The stage features a 56-foot-wide proscenium opening, resilient wood floor, counterweighted rigging system, and ample wing space. There is a full complement of backstage support areas including seven dressing rooms, dance rehearsal studio, two warm-up rooms, a Greenroom, and a production office.

The Dane and Polly Bales Organ Recital Hall is acoustically designed for the teaching and performance of organ music. It has seating for 200 and is attached to the Lied Center main lobbies at two levels. It houses a 45-stop mechanical key-action (electric stop-action) organ built by Hellmuth Wolff et Associés, one of the finest builders of organs in the world. The hall is available to organ students for practice, lessons, and recitals. Its aesthetics are enhanced by three magnificent stained glass windows designed by Peter Thompson, former Dean of the School of Fine Arts.

Undergraduate Programs

The school acquaints undergraduates with music as an important field of a liberal culture, either as members of a discriminating public or as trained practitioners. It prepares students for careers in music and promotes scholarship and research. It offers curricula for teachers of music in public schools and institutions of higher education and special degree curricula for training music therapists.

View the list of School of Music academic programs (p. 2137).

Applied Music Lessons

All majors and nonmajors (as space permits) who wish to take lessons must first pass an audition. Students should follow their degree check sheets for level and credit hours required for lessons. Students may state their preferences as to teachers for private lessons, but final authority
rests with the director of the division. The minimum acceptable grade to remain in applied music lessons is a B-. A grade of B- or higher must be earned in each semester of lessons.

Courses for Nonmajors and Music minors

Students in other KU schools may enroll in music courses for credit, subject to the availability of instructional time and as space permits. First Year Seminar (MUS 177), The Business of Music (MUS 586), some music theory courses, most musicology courses, and all ensembles are open to all KU students.

Students in the College of Liberal Arts and Sciences not majoring in music may elect an appropriate introductory course (MUS 586, MUSC 298, MUSC 305, MUSC 308, MUSC 309, MUSC 310, MUSC 312, MUSC 313, MUSC 336, MUSC 450, or MUSC 470). Minors in music are offered for students in other disciplines. Most degree programs accept up to 6 hours of electives in music ensembles and performance.

Junior/senior credit in applied music involves a prerequisite of 4 hours of university credit in sequence in the field concerned.

University Honors Program

The school encourages qualified students to participate in the University Honors Program (http://www.honors.ku.edu/).

Ensembles

The University of Kansas Symphony Orchestra (KUSO) provides performance majors the highest quality preparation for a professional career in orchestral playing. KUSO offers a comprehensive course of orchestral studies and performs repertoire spanning from the Baroque to the 21st century, including premiers of new works. In addition to large-scale symphonic programming, each season includes performances of major solo works featuring faculty, student, and leading international guest artists who recently have included Blake Pouliot, Joshua Roman and Simone Porter. The KU Symphony Orchestra also regularly collaborates with KU Theatre and KU Opera productions, for whom it is the resident ensemble. The orchestra combines with KU Choirs for the immensely popular annual Holiday Vespers concerts and in other choral/orchestral literature throughout the year, and showcases the works of student composers in the KU Composition studio. In addition to works presented for performance, the Symphony Orchestra also regularly reads and rehearses additional orchestral literature.

The University Orchestra is an ensemble open to all enrolled students at the University of Kansas regardless of major, and typically presents 1-2 concerts per semester. The University Orchestra is open to all players without audition. If you play a wind instrument and would like to get some orchestral experience, this is a great starting place. If you played an instrument in high school and want to keep playing, this is the ensemble for you! The atmosphere is fun and friendly, and a great opportunity to meet new friends on campus. The orchestra is conducted and run by the graduate students in orchestral conducting for whom the ensemble doubles as a repertory orchestra. Repertoire performed includes standard symphonic literature, concertos and new music alongside more popular selections and arrangements.

The Wind Ensemble presents 4 or more concerts annually and tours nationally and internationally. The Symphonic and University Bands perform 2 concerts each semester.

The award-winning KU Jazz program includes 3 jazz ensembles, and several combos.

The Marching Jayhawks are part of the pageantry at football games. The Basketball Bands (Men’s and Women’s) and pep bands also perform for sporting events.


The Bales Chorale, Concert Choir, KU Glee Club, University Singers, and Treble Choir perform concerts on campus, tour, and participate in combined choral and orchestral presentations such as the annual Holiday Vespers. All KU students are eligible through audition for placement in a choir.

Recitals of music by KU student composers are presented each semester by the Kansas New Music Guild, a student organization.

Various faculty ensembles present numerous concerts throughout the year.

Visit the School of Music (http://music.ku.edu/) for current information about recitals, concerts, and performances.

Graduate Programs

The School of Music offers Master of Music programs in composition, conducting, musicology, music theory, and areas of performance and Master of Music Education programs in music education or music therapy.

The Doctor of Musical Arts degree is offered in composition, conducting, and areas of performance. We offer the Doctor of Philosophy degree in music education with a concentration in music education or music therapy and the Doctor of Philosophy degree in music with an emphasis in musicology or music theory.

View the list of School of Music academic programs (p. 2137).

The Kansas Board of Regents (http://www.kansasregents.org/) has designated KU as the sole institution in the Regents system authorized to grant doctoral degrees in music.

Graduate Grade-Point Average (GPA) Requirement

In addition to tracking degree progress with your advisory committee and other requirements appropriate to the graduate degree, a student must attain and maintain at least a 3.0 grade-point average in all graduate courses.

Please note, once you begin enrolling in your graduate career all courses 500 level and above will count towards your graduate GPA, even if you are not counting those courses towards your degree or are taking them as pre-requisite courses. Students who obtain a GPA below 3.0 will be placed on academic probation or dismissed from the School of Music.

Progress towards Degree

All graduate students must have an approved plan of study by the end of their second semester of graduate study. All students must have an
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Graduate Credit for Non-majors

Performance

Permission to enroll for graduate credit in applied music is determined by audition. This audition should be scheduled with the major division faculty at the beginning of each semester.

Music Education or Music Therapy

Permission to enroll for graduate credit in music education or music therapy is determined by the faculty advisor. Non-majors may enroll with permission from the faculty instructor.

Undergraduate Advising

Music students are advised by music faculty members from their major area of study as well as from the School of Music Student Services office. Students in Music Education and Music Therapy are each assigned a specific faculty advisor.

Each entering first-year student is encouraged to attend KU’s summer orientation program through the Center for Orientation and Transition Programs. Students are advised on course selection for the fall semester and given the opportunity to enroll.

Each semester before enrollment, students see their advisors to plan schedules and discuss academic and career interests. Students are encouraged to call on their advisors any time during the school year if they wish to change their schedules or discuss other matters. Consultation with an advisor is recommended before making schedule changes.

Music students should direct questions to the School of Music (http://music.ku.edu/) Office of Student Services.

Graduate Advising

Graduate advising for current and prospective graduate students is handled by the major professor or the Area Coordinator for that specific area of study. Faculty contact information can be found in the School of Music Directory (https://music.ku.edu/directory/).

Undergraduate Scholarships

Academic Scholarships, as well as grants, loans, and need-based financial aid, are available through Financial Aid and Scholarships (https://financialaid.ku.edu/understand-aid/).

Merit Scholarships in Music are also available. Audition application and information is available on the school’s website (http://music.ku.edu/applyaudition/).

Tuition and Fees

Information about KU tuition and fees is available from the Office of the University Registrar (http://www.registrar.ku.edu/). Tuition and fees are set by the Board of Regents and are subject to change.
Graduate Fellowships and Assistantships
Financial Aid and Scholarships (http://financialaid.ku.edu/) administers grants, loans, and need-based financial aid, and maintains a net price calculator to estimate your tuition and fees for attending KU.

The School of Music offers Graduate Teaching Assistantships (GTAs) annually to well qualified students. Interested students can apply online (https://deptsec.ku.edu/~music/forms/form29/) and talk with faculty in their area of interest. For additional information about graduate assistantships, contact the School of Music Graduate Student Services Coordinator at musicgrad@ku.edu.

For information about music scholarships, fellowships, and awards, see the Funding Resources (https://music.ku.edu/resources-academic-services/) section of the website or visit the Graduate Studies (https://graduate.ku.edu/funding/) website for information about funding opportunities for graduate students at KU.

Tuition and Fees
Information about KU tuition and fees is available from the Office of the University Registrar (http://www.registrar.ku.edu/). Tuition and fees are set by the Board of Regents and are subject to change.

University Regulations
For information about all university regulations, see Regulations (http://catalog.ku.edu/regulations/) or visit the University of Kansas Policy Library (http://www.policy.ku.edu/). A few examples specific to undergraduate students in the School of Music are shown below.

All graduate student regulations can be found in the School of Music Graduate Handbook (https://music.ku.edu/graduate-handbooks/) or the Graduate Studies (p. 2408) pages of the Academic Catalog. If you have additional questions, contact the Graduate Student Services Coordinator at musicgrad@ku.edu.

Absences
The school defines excessive absence as absence in excess of the number of credit hours in the course. A student with excessive absences may be withdrawn from the course by the dean.

Change of School
To change from one school to another, the student must submit an online Change of School form (https://Registrar.ku.edu/change-school/).

Admission is competitive. Students must have minimum cumulative grade-point averages of 2.75 on a 4.0 scale from all colleges or universities including KU. Music admission is contingent upon a successful audition. Change-of-school applicants must meet the same requirements as transfer applicants.

Credit/No Credit
A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (http://policy.ku.edu/).

Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

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

Honor Roll
Students with grade-point averages of 3.6 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

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

If the instructor specifies that repetition of a portion of the classroom work is required, the student may attend classes but should not officially enroll in that course again.

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

Extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable. After the I grade is converted to a grade of F or U, the grade may only be changed upon submission of a petition from the student containing the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

Extensions to the time limit may be granted by the dean’s representative upon submission of a petition from the student containing the endorsement of the course instructor who assigned the I grade, or the department chairperson if the instructor is unavailable. After the I grade is converted to a grade of F or U, the grade may only be changed upon submission of a petition from the student containing the character and amount of work needed, as well as the date required for completion and lapse grade if further work is not completed by this date, should be indicated.

Maximum and Minimum Semester Enrollment
The normal maximum enrollment is 20 hours during fall or spring semesters or 9 hours during the summer session. Students may exceed the normal maximum enrollment only with the permission of the dean.

Probation
Students may be dismissed at any time by the dean for excessive absences or for failure to make satisfactory progress in their studies.

A student not on probation who fails to earn a grade-point average of at least 2.0 in any semester is placed on probation for the following semester.
At the end of the semester in which the student has been on probation, he or she is removed from probation if the grade-point average for the semester is at least 2.0, with a minimum course load of 12 hours and a cumulative grade-point average of 2.0. A student whose course load is fewer than 12 hours or whose cumulative grade-point average is below 2.0 continues on probation even if the semester grade-point average is 2.0 or above.

At the end of the semester in which the student has been on probation, he or she is dismissed for poor scholarship if the grade-point average for the semester is below 2.0.

A student who has been dismissed for poor scholarship is not eligible to enroll again at any time, except with the special permission of the dean. A reinstated student is placed on final probation. If the student fails to achieve a minimum grade-point average of 2.0 for the semester, he or she is dismissed, and readmission is not granted.

Students who take courses at other institutions during the suspension may receive credit for such work only if it meets the approval of the dean.

Required Work in Residence

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

Transfer of Credit

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

Only grades of C or higher are accepted as transfer credit toward degrees.

Graduate University Regulations

For information about all university regulations, see Regulations (http://catalog.ku.edu/regulations/) or visit the University of Kansas Policy Library (http://www.policy.ku.edu/). A few examples specific to the School of Music are shown below.

Absences

A leave of absence may be granted on request. View the Graduate Studies policy on leaves of absence (http://graduate.ku.edu/policies/).

Credit/No Credit

The Credit/No Credit option is authorized, as of spring 2012, for graduate students (USRR Article II, 2.2.7). The full explanation can be found in the KU Policy Library under University Senate Rules and Regulations (http://policy.ku.edu/governance/USRR/).

Incomplete

The letter W may be given. The letter I indicates incomplete work that may be completed without re-enrollment in the course. The letter W indicates withdrawal for which no credit or grade point is assigned. For more information, see USRR Article II, Section 3 (http://policy.ku.edu/governance/USRR/).

Maximum and Minimum Semester Enrollment

The normal maximum enrollment is 16 hours during fall or spring semesters or 6 hours during the summer session. Students may exceed the normal maximum enrollment only with the permission of the dean. International students must comply with the credit requirements for their visa status.

Probation and Dismissal

Upon falling below a cumulative grade-point average of B (3.0), computed with the inclusion of grades earned at KU for all courses acceptable for graduate credit, the student is placed on probation by the Graduate Division of the school or college. The grades of P, S, U, and I, for which no numerical equivalents are defined, are excluded from the computation. If the student's overall grade average has been raised to B by the end of the next semester of enrollment after being placed on probation, the student may be returned to regular status. If not, the student is not permitted to re-enroll unless the Graduate Division acts favorably on a departmental recommendation fro the student to continue study.

For more information regarding Probation and Dismissal, see the Graduate Studies Policy library (http://www.graduate.ku.edu/policies-processes/).

Required Work in Residence

For information about the doctoral residence requirement, see the Graduate Studies (p. 2408) section of the online catalog.

Transfer of Credit

View the Graduate Studies policy on graduate credit, including transfer credit, in the Graduate Studies section of the online catalog or the KU Policy Library (http://catalog.dept.ku.edu/201314/schools/gs/regulations/). See the Required Work in Residence section of the online catalog.

Music Courses

ACMP 527. Accompanying. 1-4 Credits.
Individual instruction in vocal and/or instrumental accompanying. Open to junior, senior, and graduate pianists with permission of instructor.

ACMP 529. Performance Class in Accompanying. 1 Credits.
A class in the performance of vocal and instrumental accompaniment. Prerequisite: Completion of ACMP 527 or permission of instructor.

ACMP 727. Accompanying. 1-4 Credits.
Individual instruction in vocal and/or instrumental accompanying. Prerequisite: Consent of instructor.

ACMP 811. Advanced Accompanying. 2-4 Credits.
For graduate students majoring in accompanying. May be repeated for credit. Summer session limit one to three hours.

ACMP 822. The Accompanist’s Literature. 3 Credits.
A course in which major vocal and instrumental works are studied with vocal or instrumental participants.

Music Courses

BAND 202. Wind Ensemble. 0-1 Credits.
Study and performance of literature written for wind ensembles using an instrumentation somewhat smaller than the traditional concert band. Literature ranges from early wind and band music to contemporary avant-
garde wind ensemble literature. May be repeated for credit. Prerequisite: Audition and permission of instructor.

**BAND 204. Symphonic Band. 0-1 Credits.**
For freshmen and sophomores. Performances include concerts on campus and tours throughout the area. Literature includes wind music, transcriptions, and other standard concert band literature. May be repeated for credit. Prerequisite: Permission of director.

**BAND 206. University Band. 0-1 Credits.**
For freshmen and sophomores. This concert organization performs on campus as well as in other area concerts. The band studies and performs music from the standard band repertoire. May be repeated for credit. Prerequisite: Permission of director.

**BAND 209. Basketball Band. 0-1 Credits.**
Men's and Women's Basketball Bands. Placement by audition. Prerequisite: Participation/enrollment in BAND 410 or BAND 710.

**BAND 210. University Marching Bands. 0-1 Credits.**
For freshmen and sophomores. Open to all qualified University students, regardless of major. Public performances include presentation of maneuvers and pageantry at all home football games as well as several trips each season. Three two-hour rehearsals per week. Offered fall semester only. Membership by audition. May be repeated for credit.

**BAND 301. Workshop in: _____ 0-3 Credits.**
May be repeated for credit.

**BAND 402. Wind Ensemble. 0-1 Credits.**
Study and performance of literature written for wind ensembles using an instrumentation somewhat smaller than the traditional concert band. Literature ranges from early wind and band music to contemporary avant-garde wind ensemble literature. May be repeated for credit. Prerequisite: Audition and permission of instructor.

**BAND 404. Symphonic Band. 0-1 Credits.**
For undergraduate students. Performances include concerts on campus and tours throughout the area. Literature includes wind music, transcriptions, and other standard concert band literature. May be repeated for credit. Prerequisite: Permission of director.

**BAND 406. University Band. 0-1 Credits.**
For undergraduate students. This concert organization performs on campus as well as in other area concerts. The band studies and performs music from the standard concert band repertoire. May be repeated for credit. Prerequisite: Permission of director.

**BAND 409. Basketball Band. 0-1 Credits.**
Men's and Women's Basketball Band. Placement by audition. Prerequisite: Participation/enrollment in BAND 410 or BAND 710.

**BAND 410. University Marching Band. 0-1 Credits.**
For undergraduate students. Open to all qualified University students regardless of major. Public performances include presentation of marching maneuvers and pageantry at all home football games as well as several trips each season. Membership by audition. May be repeated for credit.

**BAND 466. Directed Study: _____ 1-3 Credits.**
May be repeated for credit. Prerequisite: Permission of instructor.

**BAND 602. Wind Ensemble. 0-1 Credits.**
Study and performance of literature written for wind ensembles using an instrumentation somewhat smaller than the traditional concert band. Literature ranges from early wind and band music to contemporary avant-garde wind ensemble literature. May be repeated for credit. Prerequisite: Audition and permission of instructor.

**BAND 604. Symphonic Band. 0-1 Credits.**
For graduate students. Performances include concerts on campus and tours throughout the area. Literature includes wind music, transcriptions, and other standard concert band literature. May be repeated for credit. Prerequisite: Permission of director.

**BAND 701. Workshop in: _____ 1-3 Credits.**
May be repeated for credit.

**BAND 702. Wind Ensemble. 0-1 Credits.**
Study and performance of literature written for wind ensembles using an instrumentation somewhat smaller than the traditional concert band. Literature ranges from early wind and band music to contemporary avant-garde wind ensemble literature. May be repeated for credit. Prerequisite: Audition and permission of instructor.

**BAND 704. Symphonic Band. 0-1 Credits.**
For graduate students. Performances include concerts on campus and tours throughout the area. Literature includes wind music, transcriptions, and other standard concert band literature. May be repeated for credit. Prerequisite: Permission of director.

**BAND 706. University Band. 0-1 Credits.**
For Graduate students. This concert organization performs on campus as well as in other area concerts. The band studies and performs music from the standard concert band repertoire. May be repeated for credit. Prerequisite: Permission of director.

**BAND 710. University Marching Band. 0-1 Credits.**
Open to all qualified University graduate students regardless of major. Public performances include presentation of marching maneuvers and pageantry at all home football games as well as several trips each season. Membership by audition. May be repeated for credit.

**BAND 803. Interpretation of Band Music. 1 Credits.**
A study of the essential factors necessary for the understanding and subsequent interpretation of various compositions of advanced band music. In addition to the regular course work, students must participate in one of the university concerts bands, attend all rehearsals each week and play in concerts. May be repeated for credit. Prerequisite: Permission of instructor.

**BAND 866. Directed Study: _____ 1-3 Credits.**
May be repeated for credit. Prerequisite: Permission of instructor.

**Music Courses**

**BASN 100. Bassoon. 1-2 Credits.**
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**BASN 101. Bassoon Reed Making. 0-1 Credits.**
The principles of bassoon reed making, including profiling and shaping of bassoon cane and scraping of bassoon reeds. Open only to freshmen and sophomores. May be repeated for credit.

**BASN 121. Bassoon. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**BASN 221. Bassoon. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

**BASN 300. Bassoon. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.
BASN 301. Bassoon Reed Making. 0-1 Credits.
The principles of bassoon reed making, including profiling and shaping of bassoon cane and scraping of bassoon reeds. Open only to juniors and seniors. May be repeated for credit.

BASN 321. Bassoon. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

BASN 421. Bassoon. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

BASN 422. Bassoon. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

BASN 622. Bassoon. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

BASN 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: BASN 622.

BASN 711. Bassoon. 1-3 Credits.
For graduate students not majoring in bassoon. Audition required. May be repeated for credit.

BASN 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

BASN 810. Elective Master's Recital. 1 Credits.
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in BASN 811.

BASN 811. Bassoon. 3-4 Credits.
For graduate students majoring in bassoon. May be repeated for credit. Summer session limit three hours.

BASN 899. Master's Recital. 1 Credits.
Master's Degree Recital. The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: BASN 811.

BASN 921. Seminar in Performance. 3 Credits.
A study of repertoire and performance practice relating to the bassoon during the seventeenth and eighteenth centuries.

BASN 922. Seminar in Performance. 3 Credits.
A study of repertoire and extended performance techniques of the twentieth century.

BASN 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in bassoon. May be repeated for credit. Summer session limit three hours.

BASN 965. Doctoral Recitals. 1-3 Credits.
Maximum seven hours credit. May be repeated for credit.

BASN 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

BASN 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

BRSS 921. Seminar in Performance and Pedagogy: _____. 3 Credits.
Repertoire, performance practice, pedagogical, and stylistic concerns relating to the music for brass instruments throughout their history. Topics will include the physical development of the instruments, their usage as solo, chamber, and large ensemble instruments in both sacred and secular literature, and a survey of historical and modern bibliographic materials. May be repeated for credit when topics vary.

Music Courses

CARI 100. Carillon. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

CARI 300. Carillon. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

CARI 621. Carillon. 1-4 Credits.
One or two lessons per week. For graduate students not majoring in carillon performance. May be repeated for credit.

CARI 711. Carillon. 1-3 Credits.
For graduate students not majoring in carillon. Audition required. May be repeated for credit.

CARI 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

CARI 804. History of Carillon Literature and Design. 3 Credits.
A survey of carillon literature and design. Prerequisite: Permission of instructor.

CARI 811. Carillon. 3-4 Credits.
For graduate students majoring in carillon. May be repeated for credit. Summer session limit three hours. Prerequisite: Permission of instructor.

CARI 820. Studio Class in Carillon. 0 Credits.
Studio performance of repertoire for students enrolled in carillon. May be repeated. Prerequisite: Permission of instructor.

CARI 899. Master's Recital. 1 Credits.
Master's Degree Recital. The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: CARI 811.

Music Courses

CHAM 216. Chamber Music. 0-1 Credits.
For freshmen and sophomores. The study of works for various combinations of instruments. May be repeated for credit.

CHAM 220. Baroque Ensemble. 0-1 Credits.
For freshmen and sophomores. Study and performance of seventeenth and eighteenth century chamber music using replicas of period instruments. May be repeated for credit.

**CHAM 254. New Music Ensemble. 0-2 Credits.**
The performance of music in the most recent styles as well as masterworks of the 20th century. May be repeated for credit. Prerequisite: Permission of the instructor.

**CHAM 320. Baroque Ensemble. 0-1 Credits.**
For juniors and seniors. Study and performance of seventeenth and eighteenth century chamber music using replicas of period instruments. May be repeated for credit.

**CHAM 336. Chamber Music. 0-2 Credits.**
For juniors and seniors. The study of standard chamber music literature with or without piano. May be repeated for credit.

**CHAM 454. New Music Ensemble. 0-2 Credits.**
The performance of music in the most recent styles as well as masterworks of the 20th century. May be repeated for credit. Prerequisite: Permission of the instructor.

**CHAM 654. New Music Ensemble. 0-2 Credits.**
The performance of music in the most recent styles as well as masterworks of the 20th century. May be repeated for credit. Prerequisite: Permission of the instructor.

**CHAM 754. New Music Ensemble. 0-2 Credits.**
The performance of music in the most recent styles as well as masterworks of the 20th century. May be repeated for credit. Prerequisite: Permission of the instructor.

**CHAM 820. Baroque Ensemble. 0-2 Credits.**
Study and performance of seventeenth and eighteenth century chamber music, using replicas of period instruments. Primarily for woodwinds, strings, and keyboards. May be repeated for credit.

**CHAM 829. Advanced Chamber Music. 0-2 Credits.**
A special study of chamber music works, with or without piano, with emphasis on problems of style and interpretation. May be repeated for credit.

**CHAM 929. Advanced Chamber Music. 0-2 Credits.**
May be repeated for credit.

### Music Courses

**CHOR 214. University Singers. 0-1 Credits.**
Open through audition. Study and performance of significant choral music from the major periods of music history. For freshmen and sophomores. May be repeated for credit.

**CHOR 216. Concert Choir. 0-1 Credits.**
Open through audition. Study and public performance of significant choral music from the major periods of music history. For freshmen and sophomores. May be repeated for credit.

**CHOR 218. KU Glee Club. 0-1 Credits.**
A choral ensemble for tenors and basses. The group will study, rehearse, and perform traditional and contemporary choral music for tenors and basses. A formal audition is not required. May be repeated for credit.

**CHOR 226. KU Treble Choir. 0-1 Credits.**
A choral ensemble for treble voices. The group will study, rehearse, and perform traditional and contemporary choral music for treble chorus. For freshmen and sophomores. May be repeated for credit.

**CHOR 242. Chamber Choir. 0-1 Credits.**
Intensive study and public performance of significant choral literature. Membership by audition. For freshmen and sophomores. May be repeated for credit.

**CHOR 254. Collegium Musicum, Vocal. 0-1 Credits.**
May be repeated for credit. (Same as MUSC 254.) Prerequisite: Permission of instructor.

**CHOR 412. Oread Singers. 0-1 Credits.**
Open through placement audition. Study and performance of significant choral music from the major periods of music history. May not be used to fulfill music scholarship award requirement. May be repeated for credit.

**CHOR 414. University Singers. 0-1 Credits.**
Open through placement audition. Study and performance of significant choral music from the major periods of music history. For undergraduate students. May be repeated for credit.

**CHOR 416. Concert Choir. 0-1 Credits.**
Open through placement audition. Study and public performance of significant choral music from the major periods of music history. For undergraduate students. May be repeated for credit.

**CHOR 418. KU Glee Club. 0-1 Credits.**
A choral ensemble for tenors and basses. The group will study, rehearse, and perform traditional and contemporary choral music for tenors and basses. A formal audition is not required. May be repeated for credit.

**CHOR 442. Chamber Choir. 0-1 Credits.**
Intensive study and public performance of significant choral literature. Membership by audition. For undergraduate students. May be repeated for credit.

**CHOR 446. KU Treble Choir. 0-1 Credits.**
A choral ensemble for treble voices. The group will study, rehearse, and perform traditional and contemporary choral music for treble chorus. For undergraduate students. May be repeated for credit.

**CHOR 642. Chamber Choir. 0-1 Credits.**
Intensive study and public performance of significant choral literature. Membership by audition. For juniors, seniors, and graduate students. May be repeated for credit.

**CHOR 654. Collegium Musicum, Vocal. 0-1 Credits.**
May be repeated for credit. (Same as MUSC 654.) Prerequisite: Permission of instructor.

**CHOR 701. Workshop in: _____. 0.5-3 Credits.**
May be repeated for credit.

**CHOR 712. Oread Singers. 0-1 Credits.**
Open through placement audition. Study and performance of significant choral music from the major periods of music history. May not be used to fulfill music scholarship award requirement. May be repeated for credit.

**CHOR 714. University Singers. 0-1 Credits.**
Open through audition. Study and performance of significant choral music from the major periods of music history. For graduate students. May be repeated for credit.

**CHOR 716. Concert Choir. 0-1 Credits.**
Open through audition. Study and public performance of significant choral music from the major periods of music history. For graduate students. May be repeated for credit.

**CHOR 718. KU Glee Club. 0-1 Credits.**
A choral ensemble for tenors and basses. The group will study, rehearse, and perform traditional and contemporary choral music for tenors and basses. A formal audition is not required. For Graduate students. May be repeated for credit.
CHOR 742. Chamber Choir. 0-1 Credits.
Intensive study and public performance of significant choral literature. Membership by audition. For graduate students. May be repeated for credit.

CHOR 746. KU Treble Choir. 0-1 Credits.
A choral ensemble for treble voices. The group will study, rehearse, and perform traditional and contemporary choral music for treble chorus. For graduate students. May be repeated for credit.

CHOR 820. OrchestralBowling Techniques for Choral Conductors. 1 Credits.
Stylistic, expressive, and technical considerations essential for making effective bowling decisions. Prerequisite: A course in conducting.

CHOR 825. Choral Diction. 3 Credits.
Study of methods to teach and learn diction in choral music contexts. Attention to International Phonetic Alphabet, acoustic implications of particular phonemes, and contributions of emerging technologies. Application of various languages, including English, Latin, Italian, French, German, and Spanish. (Same as MEMT 825.)

CHOR 826. Adolescent Changing Voices. 3 Credits.
Scientific approaches to the pedagogy of adolescent male and female voices during voice change. (Same as MEMT 826.)

CHOR 828. Science-based Voice Education. 3-6 Credits.
Comprehensive examination of vocal anatomy, respiration, phonation, resonance, articulation, and voice development, with particular attention to research-based vocal/choral pedagogies for working with child through senior adult voices. (Same as MEMT 828.) Prerequisite: Permission of instructor.

Music Courses

CHUR 222. Bales Chorale. 0-1 Credits.
A choral ensemble directed by student conductors in the Division of Organ and Church Music under the supervision of faculty. May be repeated for credit.

CHUR 320. Church Music Practicum. 0 Credits.
Methods and materials of church music. May be repeated.

CHUR 422. Bales Chorale. 0-1 Credits.
A choral ensemble directed by student conductors in the Division of Organ and Church Music under the supervision of faculty. May be repeated for credit.

CHUR 622. Bales Chorale. 0-1 Credits.
A choral ensemble directed by student conductors in the Division of Organ and Church Music under the supervision of faculty. May be repeated for credit.

CHUR 722. Bales Chorale. 0-1 Credits.
A choral ensemble directed by student conductors in the Division of Organ and Church Music under the supervision of faculty. For graduate students. May be repeated for credit.

CHUR 805. Selected Topics in Church Music: ______. 1-3 Credits.
Topics vary by semester. May be repeated for credit.

CHUR 806. Service Playing and Improvisation I. 3 Credits.
Hymn playing, service playing techniques, anthem accompaniment, conducting from the console and improvisation. Prerequisite: Permission of instructor.

CHUR 807. Service Playing and Improvisation II. 3 Credits.
Continuation of CHUR 806. Prerequisite: Permission of instructor.

CHUR 809. The Judeo-Christian Tradition and the Arts. 3 Credits.
Readings, discussion and projects concerning architecture, visual art, literature, drama, poetry, dance, and film as they have developed in the Judeo-Christian tradition.

Music Courses

CLAR 100. Clarinet. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

CLAR 121. Clarinet. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

CLAR 221. Clarinet. 1-4 Credits.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

CLAR 300. Clarinet. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

CLAR 321. Clarinet. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

CLAR 421. Clarinet. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

CLAR 422. Clarinet. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

CLAR 622. Clarinet. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

CLAR 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor in Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: CLAR 622.

CLAR 711. Clarinet. 1-3 Credits.
For graduate students not majoring in clarinet. Audition required. May be repeated for credit.

CLAR 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

CLAR 810. Elective Master’s Recital. 1 Credits.
Non-degree elective recital for Master’s students. Prerequisite: Concurrent enrollment in CLAR 811.

CLAR 811. Clarinet. 3-4 Credits.
For graduate students majoring in clarinet. May be repeated for credit. Summer session limit three hours.

CLAR 899. Master’s Recital. 1 Credits.
The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: CLAR 811.

CLAR 921. Seminar. 3 Credits.
A study of clarinet repertoire and performance techniques in the 18th and 19th centuries.

CLAR 922. Seminar. 3 Credits.
A study of clarinet repertoire and performance techniques from 1900 to the present.

CLAR 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in clarinet. May be repeated for credit. Summer session limit three hours.

CLAR 965. Doctoral Recitals. 1-3 Credits.
Maximum seven hours credit. May be repeated for credit.

CLAR 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

CLAR 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

COND 245. Conducting I. 2 Credits.
An introduction to the principles of conducting through exercises and musical examples designed to develop a specific technical skill. A study of the basic conducting patterns and their application.

COND 345. Conducting II. 2 Credits.
A continuation of COND 245. Prerequisite: COND 245.

COND 711. Choral Conducting I. 1-3 Credits.
Conducting technique, choral musicianship, and choral methods. Prerequisite: MGMT 246, MGMT 330, and/or consent of instructor.

COND 712. Choral Conducting II. 1-3 Credits.
Continuation of COND 711.

COND 745. Instrumental Conducting. 2 Credits.
A study of conducting techniques and problems in rehearsal and performance. Score analysis and repertoire development. May be repeated for credit. Prerequisite: Consent of instructor.

COND 791. Score Reading. 2 Credits.
Development of skills in the reading of all clefs and the most common transpositions. Simultaneous reading of multiple lines and their practical rendition at the piano. May be repeated for credit.

COND 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

COND 811. Advanced Choral Conducting. 2-4 Credits.
A study of conducting techniques as they pertain to developing an expressive and precise choral ensemble. Participating in rehearsals under the supervision of instructor. May involve conducting in public performance. May be repeated for credit. Summer session limit one to three hours. Prerequisite: Four hours of conducting and/or consent of instructor.

COND 820. Advanced Choral Conducting and Rehearsal Techniques. 3 Credits.
Refinement of conducting and teaching skills in a choral setting. Focus on relationships between gesture and choral sound, rehearsal structure and optimal learning, and age-appropriate choral literature and development of musicality. (Same as MGMT 820.)

COND 821. Advanced Score Reading. 2 Credits.
Development of fluency in reading full scores at the piano. May be repeated for credit. Prerequisite: Two semesters of COND 791 or consent of instructor.

COND 822. Choral Literature - Late Baroque Era to Classical Era. 3 Credits.

COND 823. Choral Literature - Romantic Era. 3 Credits.

COND 824. Choral Literature - Contemporary Era. 3 Credits.

COND 825. Choral Literature-Renaissance. 3 Credits.
The study of literature from the Renaissance to the Early Baroque period.

COND 845. Advanced Instrumental Conducting. 3 Credits.
A study of techniques needed to project the conductor's concept in rehearsal and performance. Participating in rehearsals under the supervision of the instructor. May involve conducting in public performance. May be repeated for credit. Prerequisite: Consent of instructor.

COND 899. Master's Recital. 1 Credits.
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: COND 811.

COND 921. Seminar. 3 Credits.
Choral literature from 1450 to 1650.

COND 931. Seminar. 3 Credits.
Symphonic repertoire.

COND 932. Seminar. 3 Credits.
Operatic repertoire.

COND 933. Seminar. 3 Credits.
Solo repertoire with orchestra.

COND 941. Seminar: Band Literature ______. 3 Credits.
A study of literature for wind band including original works and transcriptions. May be repeated for credit when topic varies.

COND 961. Directed Performance. 3-4 Credits.
Open only to students who have been admitted to the D.M.A. program in conducting. May be repeated for credit. Summer session limit three hours.

COND 965. Doctoral Recitals. 1 Credits.
Maximum credit, four hours. May be repeated for credit.

COND 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in conducting. May be repeated for credit. Prerequisite: Consent of instructor.

COND 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

DBBS 100. Double Bass. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

DBBS 121. Double Bass. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**DBBS 221. Double Bass. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

**DBBS 300. Double Bass. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**DBBS 321. Double Bass. 1-2 Credits.**
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

**DBBS 421. Double Bass. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**DBBS 422. Double Bass. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**DBBS 622. Double Bass. 2-4 Credits.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

**DBBS 623. Senior Recital. 1 Credits.**
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: DBBS 622.

**DBBS 711. Double Bass. 1-3 Credits.**
For graduate students not majoring in double bass. Audition required. May be repeated for credit.

**DBBS 799. Artist Certificate Recital. 1 Credits.**
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

**DBBS 811. Double Bass. 3-4 Credits.**
For graduate students majoring in double bass. May be repeated for credit. Summer session limit three hours.

**DBBS 889. Master's Recital. 1 Credits.**
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: DBBS 811.

**DBBS 961. Directed Performance. 3-4 Credits.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in double bass. May be repeated for credit. Summer session limit three hours.

**DBBS 965. Doctoral Recitals. 1-3 Credits.**
May be repeated for credit.

**Music Courses**

**EUPH 100. Euphonium. 1-2 Credits.**

Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**EUPH 121. Euphonium. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**EUPH 221. Euphonium. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

**EUPH 300. Euphonium. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**EUPH 321. Euphonium. 1-2 Credits.**
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**EUPH 421. Euphonium. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**EUPH 422. Euphonium. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**EUPH 622. Euphonium. 2-4 Credits.**
Applied music lessons for seniors majoring in music. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

**EUPH 623. Senior Recital. 1 Credits.**
For graduate students not majoring in euphonium. Audition required. May be repeated for credit.

**EUPH 810. Elective Master's Recital. 1 Credits.**
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in EUPH 811.

**EUPH 811. Euphonium. 3-4 Credits.**
For graduate students majoring in euphonium. May be repeated for credit. Summer session limit three hours.

**EUPH 889. Master's Recital. 1 Credits.**
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: EUPH 811.

**Music Courses**

**FLUT 100. Flute. 1-2 Credits.**
A study of repertoire and extended performance techniques of the twentieth century.

**FLUT 961. Directed Performance. 3-4 Credits.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in flute. May be repeated for credit. Summer session limit three hours.

**FLUT 965. Doctoral Recitals. 1-3 Credits.**
Maximum seven hours credit. May be repeated for credit.

**FLUT 970. D.M.A. Lecture-Recital. 1-4 Credits.**
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

**FLUT 972. D.M.A. Document. 1-4 Credits.**
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

**Music Courses**

**FRHN 100. French Horn. 1-2 Credits.**
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**FRHN 121. French Horn. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**FRHN 221. French Horn. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

**FRHN 252. Horn Ensemble. 0-1 Credits.**
For freshmen and sophomores. Study and performance of ensemble literature for the horn. May be repeated for credit.

**FRHN 300. French Horn. 1-2 Credits.**
Applied music lessons for juniors majoring in music. May be repeated for credit. Prerequisite: Corequisite: FLUT 622.

**FRHN 321. French Horn. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: Corequisite: FLUT 623.

**FRHN 421. French Horn. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Corequisite: FLUT 623.

**FRHN 422. French Horn. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: Corequisite: FLUT 623.

**FRHN 525. Horn Ensemble. 0-1 Credits.**
For freshmen and sophomores. Study and performance of ensemble literature for the horn. May be repeated for credit.

**FRHN 621. French Horn. 1-4 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: Corequisite: FLUT 623.

**FRHN 721. French Horn. 1-4 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: Corequisite: FLUT 623.

**FRHN 920. French Horn. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**FRHN 921. French Horn. 1-2 Credits.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in flute. May be repeated for credit. Summer session limit three hours.

**FRHN 970. D.M.A. Lecture-Recital. 1-4 Credits.**
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

**FRHN 972. D.M.A. Document. 1-4 Credits.**
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

**FRHN 975. D.M.A. Document. 1-4 Credits.**
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

**FRHN 977. D.M.A. Document. 1-4 Credits.**
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

**FLUT 121. Flute. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**FLUT 221. Flute. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

**FLUT 300. Flute. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**FLUT 321. Flute. 1-2 Credits.**
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

**FLUT 421. Flute. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**FLUT 422. Flute. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**FLUT 622. Flute. 2-4 Credits.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

**FLUT 623. Senior Recital. 1 Credits.**
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Not for performance majors.

**FLUT 711. Flute. 1-3 Credits.**
For graduate students not majoring in flute. Audition required. May be repeated for credit.

**FLUT 799. Artist Certificate Recital. 1 Credits.**
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

**FLUT 810. Elective Master's Recital. 1 Credits.**
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in FLUT 811.

**FLUT 811. Flute. 3-4 Credits.**
For graduate students majoring in flute. May be repeated for credit. Summer session limit three credits.

**FLUT 899. Master's Recital. 1 Credits.**
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: FLUT 811.

**FLUT 921. Seminar in Performance. 3 Credits.**
A study of repertoire and performance practice relating to the baroque flute and recorder during the seventeenth and eighteenth centuries.

**FLUT 922. Seminar in Performance. 3 Credits.**
A study of repertoire and extended performance techniques of the twentieth century.
and as required by the degree program. Prerequisite: Corequisite: FRHN 622.

FRHN 652. Horn Ensemble. 0-1 Credits.
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the horn. May be repeated for credit.

FRHN 711. French Horn. 1-3 Credits.
For graduate students not majoring in French horn. Audition required. May be repeated for credit.

FRHN 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

FRHN 810. Elective Master's Recital. 1 Credits.
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in FRHN 811.

FRHN 811. French Horn. 3-4 Credits.
For graduate students majoring in French horn. May be repeated for credit. Summer session limit three credits.

FRHN 899. Master's Recital. 1 Credits.
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: FRHN 811.

FRHN 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in French Horn. May be repeated for credit. Summer session limit three hours.

FRHN 965. Doctoral Recitals. 1-3 Credits.
May be repeated for credit.

FRHN 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

FRHN 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

GUIT 100. Guitar. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

GUIT 102. Beginning Group Guitar. 1 Credits.
For beginning students with little or no experience playing guitar. No previous musical background is necessary. Emphasis on guitar basics, using easy exercises, chord structure and scales, sight reading, including lead sheets. May be repeated.

GUIT 120. Intermediate Group Guitar. 2 Credits.
A pedagogical approach to guitar literature of medium difficulty. A survey of standard methods, etudes, and literature through group performance and individual assignments.

GUIT 121. Guitar. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

GUIT 122. Advanced Group Guitar. 2 Credits.
A survey of intermediate and advanced etudes as they apply to the representative and corresponding literature. Advanced technical studies.

GUIT 221. Guitar. 1-4 Credits.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

GUIT 300. Guitar. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

GUIT 321. Guitar. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

GUIT 421. Guitar. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

GUIT 422. Guitar. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performing majors.

GUIT 622. Guitar. 1-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 16 credits at the 121/221 levels.

Music Courses

HARP 100. Harp. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

HARP 121. Harp. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

HARP 221. Harp. 1-4 Credits.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

HARP 300. Harp. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

HARP 321. Harp. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

HARP 421. Harp. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

HARP 422. Harp. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performing majors.

HARP 622. Harp. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must
accumulate 12 credits (3 each semester for 4 semesters) at the 121/221
levels.

HARP 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor
of Music). Must be taken in semester the senior recital is being performed
and as required by the degree program. Prerequisite: Corequisite:
HARP 622.

HARP 711. Harp. 1-4 Credits.
For graduate students not majoring in harp. Audition required. May be
repeated for credit. Summer session limit one to three hours.

HARP 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of
the Graduate Certificate in Music Performance.

HARP 811. Harp. 2-4 Credits.
For graduate students majoring in harp. May be repeated for credit.
Summer session limit one to three hours.

Music Courses

HPCD 100. Harpsichord. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in
music. May be repeated for credit. Prerequisite: Permission of instructor
and audition may be required.

HPCD 300. Harpsichord. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May
be repeated for credit. Prerequisite: Permission of instructor and audition
may be required.

HPCD 621. Harpsichord. 1-4 Credits.
One or two lessons per week. For graduate students. May be repeated for
credit.

HPCD 711. Harpsichord. 1-3 Credits.
For graduate students not majoring in harpsichord. Audition required. May
be repeated for credit.

Music Courses

JAZZ 208. Jazz Ensemble. 0-1 Credits.
For freshmen and sophomores. A performance laboratory specializing in
the preparation and presentation of jazz compositions and arrangements.
Designed to provide today’s student musician with the background
and skills necessary to function successfully as a professional studio
musician, or as a teacher of popular jazz music. May be repeated for
credit. Prerequisite: Consent of director.

JAZZ 209. Jazz Combo. 0-1 Credits.
Study and performance of music designed for the small jazz combo.
Emphasis placed on jazz improvisation, and a survey of a wide variety
of styles for this medium. May be repeated for credit. Prerequisite:
Permission of director.

JAZZ 212. Vocal Jazz Ensemble. 0-1 Credits.
Study and performance of vocal jazz compositions and arrangements with
emphasis on vocal jazz improvisation. Membership by audition. May be
repeated for credit.

JAZZ 224. Jazz Improvisation I. 2 Credits.
Study of techniques involved in jazz improvisation, including application
of chord/scale relationships to basic blues and II-V-I chord progressions;
transcriptions of recorded jazz solos; and memorization of jazz standards
and patterns. Prerequisite: JAZZ 105 or JAZZ 305 or permission of
instructor.

JAZZ 225. Jazz Improvisation II. 2 Credits.
Study of advanced techniques in jazz improvisation, including third
relationships, Coltrane changes, advanced reharmonization and altered
pentatonic patterns and scales. Continuation of solo transcriptions,
patterns and jazz standard memorization from Jazz Improvisation I.
Prerequisite: JAZZ 224 or JAZZ 624 or permission of instructor.

JAZZ 230. Introduction to Jazz Piano. 2 Credits.
Study of common jazz piano chord voicings, including two hand block
chordal voicings and left hand-only voicings. Prerequisite: JAZZ 105 or
JAZZ 305 or permission of instructor.

JAZZ 405. Jazz Theory and Performance I. 3 Credits.
First of four classes covering concepts in jazz improvisation, theory,
and performance. Focuses on the basics of melodic line creation,
harmonic and melodic dictation (jazz ear training), an introduction to
diatonic harmony (up to but not including secondary dominants) and basic
major scale analysis (modes and chords.) Prerequisite: MTHC 105 and
MTHC 106.

JAZZ 406. Jazz Theory and Performance II. 3 Credits.
Second of four classes covering intermediate concepts in jazz
improvisation, theory, and performance. Focuses on original and
traditional melodic line creation, melodic and harmonic embellishment,
harmonic and melodic dictation (jazz ear training), and diatonic harmony
including secondary dominant, tri-tone substitution and modulation as
well as an in-depth study of the 7 modes of melodic minor. Prerequisite:
JAZZ 405.

JAZZ 407. Jazz Theory and Performance III. 3 Credits.
Third of four classes covering advanced concepts in jazz improvisation,
theory, and performance. Deals with chord scale theory, synthetic scales (creation,
analysis and harmonization), advanced poly-rhythm, transcription
(analysis, deconstruction performance and utilization), Coltrane matrix (tri-
tonic), and singing/ear training over chord progressions and standards.
Prerequisite: JAZZ 406.

JAZZ 408. Jazz Ensemble. 0-1 Credits.
For undergraduate students. May be repeated for credit.

JAZZ 409. Jazz Combo. 0-1 Credits.
Study and performance of music designed for the small jazz combo.
Emphasis placed on jazz improvisation, and a survey of a wide variety
of styles for this medium. May be repeated for credit. Prerequisite:
Permission of director.

JAZZ 410. Jazz Theory and Performance IV. 3 Credits.
Last of four classes covering advanced concepts in jazz improvisation,
theory, and performance. Focuses on the synthesis and integration
of materials from the other classes while also dealing with the use of
melodic and rhythmic motives, use of space and pacing, group interaction,
performance preparation and success, and dealing with performance
anxiety. Prerequisite: JAZZ 407.

JAZZ 412. Vocal Jazz Ensemble. 0-1 Credits.
Study and performance of vocal jazz compositions and arrangements
with emphasis on vocal jazz improvisation. Membership by audition. For
undergraduate students. May be repeated for credit.

JAZZ 430. Introduction to Jazz Piano. 2 Credits.
Study of common jazz piano chord voicings, including two hand block
chordal voicings and left hand-only voicings. Prerequisite: JAZZ 405 and
JAZZ 230 or permission of instructor.

JAZZ 435. Jazz Pedagogy. 2 Credits.
Information and techniques necessary to teach a full jazz studies
curriculum in any settings, including the college level. Special emphasis is
placed on the teaching of jazz improvisation/theory.

JAZZ 459. Jazz Arranging. 2 Credits.
Study of techniques and practices involved in arranging for the contemporary jazz ensemble (big band) and jazz combo, including voicings, counterpoint, nomenclature and writing for jazz rhythm sections. Prerequisite: JAZZ 405 and JAZZ 230 or permission of instructor.

JAZZ 505. Jazz Theory and Performance I. 3 Credits.
First of four classes covering concepts in jazz improvisation, theory, and performance. Focuses on the basics of melodic line creation, harmonic and melodic dictation (jazz ear training), an introduction to diatonic harmony (up to but not including secondary dominants) and basic major scale analysis (modes and chords.) Prerequisite: MTHC 105.

JAZZ 506. Jazz Theory and Performance II. 3 Credits.
Second of four classes covering intermediate concepts in jazz improvisation, theory, and performance. Focuses on original and traditional melodic line creation, melodic and harmonic embellishment, harmonic and melodic dictation (jazz ear training), and diatonic harmony including secondary dominant, tri-tone substitution and modulation as well as an in-depth study of the 7 modes of melodic minor. Prerequisite: JAZZ 505.

JAZZ 605. Jazz Theory and Performance III. 3 Credits.
Third of four classes covering advanced concepts in jazz improvisation, theory, and performance. Deals with chord scale theory, synthetic scales (creation, analysis and harmonization), advanced poly-rhythm, transcription (analysis, deconstruction performance and utilization), Coltrane matrix (tri-tonic), and singing/ear training over chord progressions and standards. Prerequisite: JAZZ 605.

JAZZ 606. Jazz Theory and Performance IV. 3 Credits.
Last of four classes covering advanced concepts in jazz improvisation, theory, and performance. Focuses on the synthesis and integration of materials from the other classes while also dealing with the use of melodic and rhythmic motives, use of space and pacing, group interaction, performance preparation and success, and dealing with performance anxiety. Prerequisite: JAZZ 605.

JAZZ 608. Jazz Ensemble. 0-1 Credits.
For juniors, seniors, and graduate students. May be repeated for credit.

JAZZ 609. Jazz Combo. 0-1 Credits.
Study and performance of music designed for the small jazz combo. Emphasis placed on jazz improvisation, and a survey of a wide variety of styles for this medium. May be repeated for credit. Prerequisite: Permission of director.

JAZZ 612. Vocal Jazz Ensemble. 0-1 Credits.
Study and performance of vocal jazz compositions and arrangements with emphasis on vocal jazz improvisation. Membership by audition. For juniors, seniors, and graduate students. May be repeated for credit.

JAZZ 622. Studio Instruction. 2-4 Credits.
Studio instruction in jazz with emphasis placed on study and performance in jazz improvisation for juniors and seniors majoring in Jazz Studies BM. May be repeated for credit. Prerequisite: Majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

JAZZ 623. Senior Recital. 1 Credits.
Senior recital in Jazz for undergraduate performance majors pursuing the BM in Jazz Studies. Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: JAZZ 622.

JAZZ 624. Jazz Improvisation I. 2 Credits.
Study of techniques involved in jazz improvisation, including application of chord/scale relationships to basic blues and II-V-I chord progressions; transcriptions of recorded jazz solos; and memorization of jazz standards and patterns. Prerequisite: JAZZ 105 or JAZZ 305 or permission of instructor.

JAZZ 625. Jazz Improvisation II. 2 Credits.
Study of advanced techniques in jazz improvisation, including third relationships, Coltrane changes, advanced reharmonization and altered pentatonic patterns and scales. Continuation of solo transcriptions, patterns and jazz standard memorization from Jazz Improvisation I. Prerequisite: JAZZ 224 or JAZZ 624 or permission of instructor.

JAZZ 630. Introduction to Jazz Piano. 2 Credits.
Study of common jazz piano chord voicings, including two hand block chordal voicings and left hand-only voicings. Prerequisite: JAZZ 105 or JAZZ 305 or permission of instructor.

JAZZ 635. Jazz Pedagogy. 2 Credits.
Information and techniques necessary to teach a full jazz studies curriculum in any settings, including the college level. Special emphasis is placed on the teaching of jazz improvisation/theory.

JAZZ 659. Jazz Arranging. 2 Credits.
Study of techniques and practices involved in arranging for the contemporary jazz ensemble (big band) and jazz combo, including voicings, counterpoint, nomenclature and writing for jazz rhythm sections. Prerequisite: JAZZ 105 or JAZZ 305 and JAZZ 230 or permission of instructor.

JAZZ 705. Jazz Theory and Performance I. 3 Credits.
First of four classes covering concepts in jazz improvisation, theory, and performance. Focuses on the basics of melodic line creation, harmonic and melodic dictation (jazz ear training), an introduction to diatonic harmony (up to but not including secondary dominants) and basic major scale analysis (modes and chords.)

JAZZ 706. Jazz Theory and Performance II. 3 Credits.
Second of four classes covering intermediate concepts in jazz improvisation, theory, and performance. Focuses on original and traditional melodic line creation, melodic and harmonic embellishment, harmonic and melodic dictation (jazz ear training), and diatonic harmony including secondary dominant, tri-tone substitution and modulation as well as an in-depth study of the 7 modes of melodic minor. Prerequisite: JAZZ 705.

JAZZ 707. Jazz Theory and Performance III. 3 Credits.
Third of four classes covering concepts in jazz improvisation, theory, and performance. Deals with chord scale theory, synthetic scales (creation, analysis and harmonization), advanced poly-rhythm, transcription (analysis, deconstruction performance and utilization), Coltrane matrix (tri-tonic), and singing/ear training over chord progressions and standards. Prerequisite: JAZZ 706.

JAZZ 708. Jazz Ensemble. 0-1 Credits.
For graduate students. May be repeated for credit.

JAZZ 709. Jazz Combo. 0-1 Credits.
Study and performance of music designed for the small jazz combo. Emphasis placed on jazz improvisation, and a survey of a wide variety of styles for this medium. May be repeated for credit. Prerequisite: Permission of director.

JAZZ 710. Jazz Theory and Performance IV. 3 Credits.
Last of four classes covering advanced concepts in jazz improvisation, theory, and performance. Focuses on the synthesis and integration of materials from the other classes while also dealing with the use of melodic and rhythmic motives, use of space and pacing, group interaction, performance preparation and success, and dealing with performance anxiety. Prerequisite: JAZZ 707.

JAZZ 712. Vocal Jazz Ensemble. 0-1 Credits.
Study and performance of vocal jazz compositions and arrangements with emphasis on vocal jazz improvisation. Membership by audition. For graduate students. May be repeated for credit.

**JAZZ 730. Introduction to Jazz Piano. 2 Credits.**
Study of common jazz piano chord voicings, including two hand block chordal voicings and left hand-only voicings. Prerequisite: Permission of instructor.

**JAZZ 735. Jazz Pedagogy. 2 Credits.**
Information and techniques necessary to teach a full jazz studies curriculum in any settings, including the college level. Special emphasis is placed on the teaching of jazz improvisation/theory.

**JAZZ 759. Jazz Arranging. 2 Credits.**
Study of techniques and practices involved in arranging for the contemporary jazz ensemble (big band) and jazz combo, including voicings, counterpoint, nomenclature and writing for jazz rhythm sections. Prerequisite: Permission of instructor.

**Music Courses**

**MEMT 111. Class Guitar for Nonmajors. 2 Credits.**
Common chords, major and minor triads and major-minor sevenths, and fundamentals of music notation for guitar. Strumming and rudimentary finger picking. Performance of simple melodies on all six strings from standard notation. May be repeated for credit.

**MEMT 112. Performance Media: _____ 0.5-1 Credits.**
Laboratory class lessons in pedagogy and performance. May be repeated for credit in different specific media.

**MEMT 113. Performance Media: Brass. 1 Credits.**
Knowledge and skills needed to teach brass instruments in music education settings.

**MEMT 114. Performance Media: Woodwinds I. 1 Credits.**
Knowledge and skills needed to teach flute and clarinet in music education settings.

**MEMT 115. Performance Media: Percussion. 1 Credits.**
Knowledge and skills needed to teach and use percussion instruments in music education settings.

**MEMT 117. Performance Media: Voice. 1 Credits.**
Knowledge and skills needed to teach and use voice functionally in music therapy settings.

**MEMT 118. Performance Media: Strings. 1 Credits.**
Knowledge and skills needed to teach string instruments in music education settings.

**MEMT 119. Performance Media: Guitar. 1 Credits.**
Knowledge and skills needed to teach and use guitar functionally in music education and music therapy settings.

**MEMT 120. Vocal Performance in English. 0-1 Credits.**
Fundamentals of solo vocal performance with an emphasis on English diction and communicating the English language.

**MEMT 150. Introduction to Music Therapy. 3 Credits.**
An overview of the music therapy profession including, but not limited to, history, philosophy, areas of clinical practice, necessary skills and competencies, and career opportunities.

**MEMT 160. Principles of Music Education. 1 Credits.**
An overview of the music education field. History, philosophy, curricula, necessary skills and competencies for music educators, and alternative careers in music.

**MEMT 196. Group Leadership Skills in Music Therapy. 2 Credits.**
Music therapy group leadership skills; leading group singing, playing accompanying instruments, and developing effective delivery skills. Prerequisite: MEMT 150 Introduction to Music Therapy/MEMT 760 Principles of Music Therapy.

**MEMT 230. Performance Clinic: Band. 1 Credits.**
Continued development of the knowledge and skills needed to teach band in music education settings. Prerequisite: MEMT 113 and MEMT 114, or MEMT 113 and MEMT 115, or MEMT 114 and MEMT 115, or permission of the instructor.

**MEMT 231. Performance Clinic: Choral. 1 Credits.**
Continued development of the knowledge and skills needed to teach and use the singing voice in music education and music therapy settings.

**MEMT 232. Performance Clinic: Orchestra. 1 Credits.**
Continued development of the knowledge and skills needed to teach string instruments in music education settings. Prerequisite: MEMT 118 or permission of the instructor.

**MEMT 246. Fundamentals of Conducting. 1 Credits.**
This course deals with the techniques of the baton, with gestures, signs, and cues as generally used in conducting choral and instrumental organizations. It includes the essentials of conducting techniques in both the choral and instrumental types of ensemble performance.

**MEMT 250. Human Musical Learning and Development. 2 Credits.**
Music learning and development from infancy through adulthood. Development of musical perception, cognition, performance skills, attitudes, and affective/aesthetic responses. Use of theoretical, knowledge-based rationale for building music instruction systems.

**MEMT 251. Clinical Techniques for Children. 3 Credits.**
Music therapy treatment techniques (setting goals, selecting/applying treatment, monitoring/evaluating results) for children in a variety of settings. Clinical observation and application of techniques will be course components. Prerequisite: MEMT 250. Corequisite: SPED 326.

**MEMT 296. Clinical Techniques for Adults. 3 Credits.**
Music therapy treatment techniques (setting goals, selecting/applying treatment, monitoring/evaluating results) for adults in a variety of settings. Clinical observation and application of techniques will be course components.

**MEMT 311. Intermediate Class Guitar. 2 Credits.**
Instruction in playing barre chords, blues and Latin strums, major and minor scales, position studies, and special effects such as the Travis pick, hammer on, and slurring techniques. Prerequisite: MEMT 116-Guitar; or MEMT 111; or permission of instructor.

**MEMT 314. Performance Media: Woodwinds II. 1 Credits.**
Knowledge and skills needed to teach saxophone and double reed instruments in music education settings. Prerequisite: MEMT 116-Guitar;

**MEMT 329. Rehearsal/ Conducting Clinic: _____ 1 Credits.**
Rehearsing and conducting ensembles appropriate for music education and music therapy. May be repeated for credit. Prerequisite: Permission of instructor.

**MEMT 330. Rehearsal/ Conducting Clinic: Band. 1 Credits.**
Knowledge and skills needed to rehearse and conduct band ensembles. Prerequisite: MEMT 230 and MEMT 246 and admission into the Music Education Professional Sequence; or with permission of the MEMT division.

**MEMT 331. Rehearsal/ Conducting Clinic: Choral. 1 Credits.**
Knowledge and skills needed to rehearse and conduct choral ensembles. Prerequisite: MEMT 231 and MEMT 246 for Music Education majors or MEMT 231. Corequisite: MEMT 246 for Music Therapy majors or permission of the instructor.

MEMT 332. Rehearsal/Conducting Clinic: Orchestra. 1 Credits.
Knowledge and skills needed to rehearse and conduct orchestral ensembles. Prerequisite: MEMT 232 and MEMT 246, and admission into the Music Education Professional Sequence; or with permission of the MEMT division.

MEMT 338. Rehearsal/Conducting Clinic: Non-traditional Ensemble. 1 Credits.
Rehearsing and conducting non-traditional/ORFF ensemble appropriate for music education and music therapy. Prerequisite: Admission to the MEMT Professional Sequence or permission of the instructor.

MEMT 341. Instructional Strategies in Music for Elementary Classroom Teachers. 2 Credits.
Child growth and development in music. Materials as they relate to a sequential music education curriculum in the elementary school. Prerequisite: Admission to the School of Education or the education division of the graduate school.

MEMT 350. Advanced Rehearsal/Conducting Clinic: Band. 1 Credits.
Advanced knowledge and skills needed to rehearse and conduct band ensembles, including attention to more difficult concert band literature with ensembles exhibiting increasing sophistication. Prerequisite: MEMT 330 and admission into the Music Education Professional Sequence; or with permission of the MEMT division.

MEMT 351. Advanced Rehearsal/Conducting Clinic: Choral. 1 Credits.
Advanced knowledge and skills needed to rehearse and conduct choral ensembles, including attention to more difficult choral literature with ensembles exhibiting increasing sophistication. Prerequisite: MEMT 331 and admission into the Music Education Professional Sequence; or with permission of the MEMT division.

MEMT 352. Advanced Rehearsal/Conducting Clinic: Orchestra. 1 Credits.
Advanced knowledge and skills needed to rehearse and conduct string orchestra ensembles, including attention to more difficult string orchestra literature with ensembles exhibiting increasing sophistication. Prerequisite: MEMT 332 and admission into Music Education Professional Sequence; or with permission of the MEMT division.

MEMT 367. Managing Behavior in the Musical Environment. 2 Credits.
Theories and techniques for managing the music classroom and clinic setting for best professional practice. Understanding the self and environment as management factors. Field practice of management techniques. Prerequisite: MEMT 250 and admission into the Music Education Professional Sequence or Music Therapy Professional Sequence; or with permission from the MEMT Division.

MEMT 396. Clinical Practicum. 1-3 Credits.
Supervised clinical practice in on-campus or other approved setting. May be repeated for credit. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission from the MEMT division.

MEMT 407. The Exceptional Child in Music Education. 2 Credits.
Skills and knowledge needed to facilitate appropriate and productive integration of exceptional children and youth into music classroom settings. Prerequisite: MEMT 367, SPED 326, and admission into the Music Education Professional Sequence; or with permission of the MEMT division.

MEMT 408. Vocal Pedagogy. 1 Credits.
Knowledge and skills needed to teach voice, with particular attention to lifespan voice anatomy, physiology, and acoustics, diagnosis and correction of vocal inefficiencies, teaching styles, repertoire choice, professional development, and acquaintance with current research in voice science and vocal pedagogy. Includes a voice teaching practicum. (Same as VOIC 408.) Prerequisite: MEMT 160, MEMT 231, MEMT 331 and admission into the Music Education Professional Sequence or the Music Therapy Professional Sequence; or with permission from the MEMT division.

MEMT 419. Technology in Music Education. 1 Credits.
An introduction to the role and application of technology in K-12 school music settings, enabling students to become active agents in their growth of technological skills that support learning in the 21st century music classrooms. Prerequisite: Admission into the Music Education Professional Sequence.

MEMT 420. Teaching Elementary and Secondary General Music. 3 Credits.
Methods and materials for teaching music through singing, playing instruments, moving, listening, and creative activities to students in early childhood through adulthood, including those with disabilities. The course will also deal with music in diverse cultures and integrating music into the general curriculum. Prerequisite: MEMT 367 and admission into the Music Education Professional Sequence; or with permission of the MEMT division.

MEMT 421. Advanced General Music Teaching. 1 Credits.
Enhanced methodology and pedagogy course for the general music classroom; advanced instruction in teaching children to improvise, sing, play classroom instruments, listen, move, and create music based on specific pedagogies; advanced instruction in assessment strategies. This course is for undergraduate music majors in their senior year. Prerequisite: MEMT 420 and admission to the Music Education Professional Sequence.

MEMT 431. Choral Diction for Music Educators. 1 Credits.
Knowledge and skills needed to teach choral diction in music education settings. Prerequisite: Admission into the Music Education Professional Sequence; or with permission of the MEMT division.

MEMT 432. Approaches to String Pedagogy. 1 Credits.
An examination of the concepts and skills associated with the most influential past and current pedagogical approaches to string education. Prerequisite: Admission to the Music Education Professional Sequence.

MEMT 433. Jazz Techniques. 1 Credits.
Knowledge and skills needed to teach jazz techniques in music education settings. Prerequisite: Admission into the Music Education Professional Sequence.

MEMT 435. Marching Band Techniques. 1 Credits.
Knowledge and skills needed to teach and administer marching bands in music education settings. Prerequisite: Admission into the Music Education Professional Sequence; or with permission of the MEMT division.

MEMT 450. Teaching Choral Music. 2 Credits.
Application of research-based skills for curriculum development, content selection, and development of teaching strategies for choral music programs to students in early childhood through adulthood including those with disabilities. Prerequisite: MEMT 331, MEMT 420, and admission into 
the Music Education Professional Sequence; or with permission of the MEMT division.

**MEMT 451. Teaching Instrumental Music. 2 Credits.**
Application of research-based skills for curriculum development, content selection, and development of teaching strategies for instrumental music programs to students in early childhood through adulthood including those with disabilities. Prerequisite: MEMT 330, MEMT 420, and admission into the Music Education Professional Sequence; or with permission of the MEMT division.

**MEMT 455. Psychology of Music. 3 Credits.**
Psychological bases of music and human musical behavior. Study of musical sound perception, cognition, response, reproduction, and creation. Room Acoustics are studied. Research projects required. Prerequisite: MEMT 367, MEMT 420 (music education majors); and admission into the Music Education Professional Sequence or the Music Therapy Professional Sequence; or with permission of the MEMT division.

**MEMT 463. The Influence of Music on Behavior I. 3 Credits.**
A study of the various effects of music. The place of functional music in music education. Investigation of effective media and musical patterns. The relation of music to health. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission of the MEMT division.

**MEMT 464. Music in Therapy. 3 Credits.**
Issues examined include music therapy concepts in the development of program applications, professional marketing, and job proposals. These applications are based on theoretical constructs concerning the physiological, psychological, and social responses of persons to music. In addition, this course includes current trends in the field along with regulatory guidelines concerning practice design, implementation, evaluation, ethics, and standards of clinical practice. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission of the MEMT division.

**MEMT 472. Music Education and Music Therapy Research Project. 1-3 Credits.**
Clinical, laboratory, field, or historical research in music education or music therapy. May be repeated for credit. Prerequisite: MEMT 366 or equivalent, and permission of instructor.

**MEMT 497. Independent Study in: _____ 1-4 Credits.**
Only one enrollment permitted each semester; a maximum of four hours will apply toward the bachelor's degree. May be repeated for credit. Prerequisite: Recommendation of advisor and consent of instructor.

**MEMT 498. Student Teaching. 2-4 Credits.**
A supervised teaching experience in an approved school setting, with level and subject area to be selected from either elementary general music or a secondary teaching area not covered in MEMT 496. This experience is a minimum of five weeks full time experience. It will begin the spring of the Senior Year right after the new year. Prerequisite: Admission into the Music Education Professional Sequence and MEMT 496.

**MEMT 499. Internship in Teaching Music. 4-8 Credits.**
A supervised internship experience leading to initial music teacher certification. The student assumes the total professional role as a teacher of music in an approved school setting with level and subject area to be the remaining area not experienced in MEMT 498. This experience is a minimum of eleven weeks full time experience. Prerequisite: Admission into the Music Education Professional Sequence and either completion of or concurrent enrollment with MEMT 498.

**MEMT 586. Seminar in Music Therapy Professional Development I. 1 Credits.**
This seminar style course will focus on Internship Placement, Board Certification, and Professional Advocacy. Undergraduate Prerequisite: MEMT 463 and MEMT 464. Graduate Corequisite: MEMT 763 and MEMT 764.

**MEMT 587. Seminar in Music Therapy Professional Development II. 1 Credits.**
This seminar style course will focus on supervision, Ethics, and Professional Involvement in AMTA. Prerequisite: MEMT 586.

**MEMT 596. Clinical Internship. 1-15 Credits.**
Successful completion of six months of full-time clinical experience (minimum of 1,040 hours) as a music therapy intern in an approved setting. May be repeated for credit. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Completion of senior year in music therapy or its equivalent at the graduate level.

**MEMT 597. Individual Study in: _____ 1-15 Credits.**
Successful completion of six months of full time clinical experience (minimum of 1040 hours) as a music therapy intern in an approved setting. May be repeated for credit. Prerequisite: Completion of senior year in music therapy or its equivalent at the graduate level.

**MEMT 598. Special Course: _____ 1-5 Credits.**
A special course of study to meet current needs of education students -- primarily for undergraduates. May be repeated for credit.

**MEMT 695. Developing Theoretical Framework for Evidence-Based Practice. 3 Credits.**
The purpose of this course is to provide music therapy majors with the tools to read, evaluate, understand, and facilitate research in order to develop a theoretical framework for decision making in evidence based clinical practice. Prerequisite: MEMT 464 Music in Therapy or MEMT 764 Music in Therapy and admission to the Music Therapy Professional Sequence.

**MEMT 707. Mainstreaming/Inclusion in Music Education. 2 Credits.**
Skills and knowledge needed to facilitate appropriate and productive integration of children and youth with disabilities into music classroom settings. Designed specifically for graduate students enrolled in the Graduate Licensure Program, or for those not already in possession of PK-12 Music Teacher Licensure. Prerequisite: SPED 326 and admission into the Music Education Professional Sequence; or with permission of the MEMT division.

**MEMT 710. Professional Development. 1 Credits.**
Participation in approved professional development conferences. Requires documentation of attendance, an annotated time log of activities, and a short paper. May be repeated for up to 3 credit hours.

**MEMT 713. Advanced Brass Techniques. 1.5 Credits.**
Advanced instruction of brass-specific methodologies, strategies, approaches, and materials to music education practitioners teaching in instrumental settings or clinical environments.

**MEMT 714. Advanced Woodwind Techniques. 1.5 Credits.**
Advanced instruction of woodwind-specific methodologies, strategies, approaches, and materials to music education practitioners teaching in instrumental settings or clinical environments.

**MEMT 715. Advanced Percussion Techniques. 1.5 Credits.**
Advanced instruction of percussion-specific methodologies, strategies, approaches, and materials to music education practitioners teaching in instrumental settings or clinical environments.

**MEMT 717. Advanced Low-String Techniques. 1.5 Credits.**
Offers advanced methodologies, strategies, approaches, and materials specific to cello and bass instruction for the music education practitioner teaching in instrumental settings or clinical environments.

**MEMENT 718. Advanced High-String Techniques. 1.5 Credits.**

Offers advanced methodologies, strategies, approaches, and materials specific to violin and viola instruction for the music education practitioner teaching in instrumental settings or clinical environments.

**MEMENT 735. Marching Band Technique. 1.5 Credits.**

Offers advanced instruction of the methodologies, strategies, approaches, and materials to music education practitioners teaching in instrumental settings or clinical environments.

**MEMENT 753. Psychology of Music. 3 Credits.**

Psychological bases of music and human musical behavior. Study of musical sound perception, cognition, response, reproduction and creation. Room acoustics are studied. Research projects required.

**MEMENT 755. Psychology of Music for the Music Education Practitioner. 3 Credits.**

Examines psychological aspects of music and human musical behavior as they pertain to music instruction. Study of musical development, motivation, practice, performance anxiety, and the acquisition of musical skill.

**MEMENT 760. Principles of Music Therapy. 3 Credits.**

An overview of the music therapy profession including, but not limited to, history, philosophy, areas of clinical practice, necessary skills and competencies, and career opportunities.

**MEMENT 761. Clinical Techniques for Children. 3 Credits.**

Music therapy treatment techniques (setting goals, selecting/applying treatment, monitoring, evaluating results) for children in a variety of settings. Clinical observation and application of techniques will be course components.

**MEMENT 762. Clinical Techniques for Adults. 3 Credits.**

Music therapy treatment techniques (setting goals, selecting/applying treatment, monitoring, evaluating results) for adults in a variety of settings. Clinical observation and application of techniques will be course components.

**MEMENT 763. The Influence of Music on Behavior I. 3 Credits.**

A study of the various effects of music. The place of functional music in music education. Investigation of effective media and musical patterns. The relation of music to health. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission from the MEMENT division.

**MEMENT 764. Music in Therapy. 3 Credits.**

Issues examined include music therapy concepts in the development of program applications, professional marketing, and job proposals. These applications are based on theoretical constructs concerning the physiological, psychological, and social responses of persons to music. In addition, this course includes current trends in the field along with regulatory guidelines concerning practice design, implementation, and evaluation, ethics, and standards of clinical practice. Prerequisite: Admission to the professional sequence in music education or music therapy or with permission from the MEMENT division.

**MEMENT 772. Music Education and Music Therapy Research Project. 1-3 Credits.**

Clinical, laboratory, field, or historical research in music education or music therapy. May be repeated for credit. Prerequisite: MEMENT 366 or equivalent, permission of instructor.

**MEMENT 791. Music Education/Music Therapy Techniques: _____ . 1-3 Credits.**

Specific methodologies, strategies, approaches, and materials for music education/music therapy for specific populations, musical media, instructional settings, or clinical environments. May be repeated for credit.

**MEMENT 798. Special Course: _____ . 1-3 Credits.**

A special course of study to meet current needs of education professionals -- primarily for graduate students. May be repeated for credit.

**MEMENT 812. Research in Music Education and Music Therapy. 3 Credits.**

Study of research in music education and music therapy. Required of all candidates for graduate degrees. Enrollment must precede or be concurrent with enrollment in thesis.

**MEMENT 813. History and Philosophy of Music Education. 3 Credits.**

A study of music education with reference to its historical development and to educational psychology. Consideration of recent trends and the place of music in the school curriculum. Criteria for the evaluation of activities, courses, materials, and methods in a well-balanced program of music.

**MEMENT 814. Sociology of Music. 3 Credits.**

A study of societal influence on musical thought and practice, both in historical perspective and in comparative study of contemporary societies. The relations between school and community music. The role of musical organizations, institutions, and agencies in American life.

**MEMENT 815. Musical Values and Aesthetics. 3 Credits.**

Examination of musical values in the context of music's functions and uses. Diverse viewpoints are considered, with attention to philosophical and psychological aesthetics. Implications and applications of values systems for music education, music therapy, and other fields.

**MEMENT 816. Current Trends in Music Education. 3 Credits.**

A comprehensive study of the elements that contribute to current practice and successful music programs (many of all of these may be anticipated dependent upon the class participants' needs): curriculum, standards, assessment, classroom management, pedagogy, leadership, organizational structure, budget and finance, scheduling, federal mandates, and administrative practices.

**MEMENT 817. Methodologies in Music Education. 3 Credits.**

A survey of music methodologies (general, vocal, instrumental) used by teachers at the pre-school, elementary, middle/junior high, and high school levels.

**MEMENT 818. Behavior Management in Music. 3 Credits.**

A study of behavioral theories and techniques as applied to classroom and clinical settings for music professionals. Emphasis on a conceptual framework for human behavior and the ameliorative aspects of music.

**MEMENT 819. Music in Early Childhood. 2 Credits.**

Child development as related to musical development, including implications for participation in music from birth through age seven. Current trends in goals, objectives, materials, equipment, facilities, training and evaluation will be discussed.

**MEMENT 820. Advanced Choral Conducting and Rehearsal Techniques. 3 Credits.**

Refinement of conducting and teaching skills in a choral setting. Focus on relationships between gesture and choral sound, rehearsal structure and optimal learning, and age-appropriate choral literature and development of musicality. (Same as COND 820.)

**MEMENT 821. 20th Century School Band & Orchestra. 3 Credits.**


Examines instrumental music in the public school as a uniquely American phenomenon. A period-by-period approach to its development is taken, beginning with various precursors.

MEMT 823. Seminar in: _____ . 1-3 Credits.
May be repeated for credit.

MEMT 825. Choral Diction. 3 Credits.
Study of methods to teach and learn diction in choral music contexts. Attention to International Phonetic Alphabet, acoustic implications of particular phonemes, and contributions of emerging technologies. Application of various languages, including English, Latin, Italian, French, German, and Spanish. (Same as CHOR 825.)

MEMT 826. Adolescent Changing Voices. 3 Credits.
Scientific approaches to the pedagogy of adolescent male and female voices during voice change. (Same as CHOR 826.)

MEMT 828. Science-based Voice Education. 3-6 Credits.
Comprehensive examination of vocal anatomy, respiration, phonation, resonance, articulation, and voice development, with particular attention to research-based vocal/choral pedagogies for working with children during senior adult voices. (Same as CHOR 828.) Prerequisite: Permission of instructor.

MEMT 830. Leadership and Program Development in Music Education. 2-3 Credits.
A comprehensive study of the elements of leadership, management, organizational structure, budget and finance, federal mandates, and administrative practices.

MEMT 835. Practical Applications of Advanced Methodology in the Music Classroom. 2-3 Credits.
A comprehensive study and application of the elements that contribute to current practice in methodology and pedagogy in the music classroom, encompassing elementary general, choral, orchestral, and band music.

MEMT 838. Orff Applications in Music Education and Music Therapy. 2 Credits.
The use of the Orff-Shulwerk approach in music education and music therapy. Course includes historical background, philosophical approach and practical application of the process. Prerequisite: Admission to professional sequence or permission from MEMT division.

MEMT 840. Development and Application of Improvisation Skills. 2-3 Credits.
Development of individual and group improvisation skills and their applications in professional practice.

MEMT 845. Curriculum Development in Music Education. 3 Credits.
Developing a practical and useful music curriculum that aligns theoretical/philosophical position, program goals, course objectives, instructional materials, learning activities, and assessments.

MEMT 850. Measurement of Musical Behavior. 3 Credits.
Measurement theory applied to the development and administration of measures of musical ability, achievement, attitude, and performance for the use in individual and program evaluation. Classical and innovative methods for establishing reliability and validity. Each student will develop and evaluate a measure of some type of musical behavior appropriate for an educational or therapeutic setting.

MEMT 854. Music Therapy in Pediatrics. 2 Credits.
The use of music therapy in individual and group pediatric settings. Course includes an overview of childhood illnesses, associated medical terminology, and therapy techniques used as contextual and procedural support. Prerequisite: Admission to professional sequence or permission from MEMT division.

MEMT 855. Music Therapy in Hospice and Bereavement. 2 Credits.
The use of music therapy for hospice patients and their families, as well as clients who are grieving due to death of a loved one. Course includes historical, theoretical and practical perspectives. Prerequisite: Admission to professional sequence or permission from MEMT division.

MEMT 857. Music Therapy in Gerontology. 2 Credits.
The theories and clinical applications of music therapy across the life span of older adults, including the young old, the middle old, and the old old. Special considerations will be given to persons with debilitating conditions including dementia, and to older persons’ professional and family caregivers. Prerequisite: Admission to the graduate program in music therapy or permission of the instructor.

MEMT 858. Music Therapy in Medical Care and Wellness of Adult Persons. 2 Credits.
The theories and practice of music therapy as an enhancement to health and wellness and to medical interventions for adults will include applications within the medical setting and in the home setting. Interventions will include, among others, approaches for stress management, medical procedural support, pre-operative and post-operative support, follow-up care in catastrophic illness, interventions in post-traumatic stress disorder, and others. Prerequisite: Admission to the graduate program in music therapy or permission of the instructor.

MEMT 860. Assessment in Music Therapy Professional Practice. 2 Credits.
Skills and knowledge needed to assess and evaluate clients, goals, treatments and their effectiveness, program outcomes, program quality, and quality of care.

MEMT 861. Current Trends in Music Therapy. 2 Credits.
A comprehensive study of the elements that contribute to current practice in music therapy, but not limited to, professional competencies, code of ethics, assessment and implementation of interventions, leadership, organizational structure, budget and finance, scheduling and management of contracts, grant writing, and other administrative practices.

MEMT 863. The Influence of Music on Behavior II. 2 Credits.
A laboratory and research course to accompany or follow MEMT 763.

MEMT 864. Philosophy and Theory of Music Therapy. 3 Credits.
Concentrated, interdisciplinary study of conceptual foundations for music therapy.

MEMT 890. Practicum in Music Therapy. 1-16 Credits.
Advanced music therapy practice including clinical work with a population of the student's choice which incorporates music therapy program design, implementation, and evaluation. The student will work in consultation with qualified Music Therapy staff. May be repeated for credit.

MEMT 892. Supervision in Music Therapy I. 3 Credits.
Study and application of theoretical models and supervisory roles applicable to music therapy clinical supervision. Students will review developmental levels for supervisors and practicum students. Supervision of music therapy clinical practicum students will be required.

MEMT 893. Supervision in Music Therapy II. 3 Credits.
A model of practicum supervision will be applied in music therapy clinical practicum supervision. Video and/or tape recordings of supervision conferences with practicum students will be reviewed in consultation with qualified music therapy staff.

MEMT 895. Master’s Project. 1-3 Credits.
May be repeated for credit.

**MEMT 897. Independent Study:** 1-4 Credits.  
May be repeated for credit. Prerequisite: Consent of advisor and instructor.

**MEMT 898. Comprehensive Examination.** 1 Credits.  
An independent course in preparation for the non-thesis M.M.E. degree final examination. Prerequisite: Permission of the instructor.

**MEMT 899. Master's Thesis.** 1-6 Credits.  
May be repeated for credit.

**MEMT 910. Learning Theories and Music Education.** 3 Credits.  
(V) A broad survey of formal learning theories and other approaches to the teaching-learning situation, accenting implications for, applications to, and research needs in music education.

**MEMT 915. Teaching Music in Higher Education.** 3 Credits.  
Knowledge, skills, and dispositions for graduate students in music who are preparing to teach at the college level. This course is directed toward the end of developing competencies and understandings that will contribute to one's becoming an effective college/university teacher.

**MEMT 920. Doctoral Seminar in Music Education and Music Therapy.** 0-1 Credits.  
This course will emphasize strategies and skills for successful completion of the doctoral program, as well as strategies and skills to prepare doctoral students to contribute to the profession as college teachers, researchers, master teachers, and arts administrators. Course may be repeated for zero credit.

**MEMT 921. Seminar in Performance and Pedagogy.** 3 Credits.  
Repertoire, performance practice, and pedagogical and stylistic problems relating to stringed instrument music before 1800. (Same as STRG 921.)

**MEMT 922. Seminar in Performance and Pedagogy.** 3 Credits.  
Stringed instrument repertoire from 1800 to 1875. (Same as STRG 922.)

**MEMT 923. Seminar in Performance and Pedagogy.** 3 Credits.  
Stringed instrument repertoire from 1875 to present. (Same as STRG 923.)

**MEMT 925. Seminar in: _____ .** 1-3 Credits.  
Special topics in Music Education & Music Therapy. May be repeated for credit.

**MEMT 965. Advanced Methods in Experimental and Descriptive Research in Music.** 3 Credits.  
An advanced study of experimental and descriptive research techniques with careful investigation of research design, experimental control, analysis and manuscript composition. Consideration of recent trends in research methods and their place in the scholarlay schemata will be reviewed. Prerequisite: MEMT 812 or permission of instructor.

**MEMT 972. Research in Music Education.** 2-5 Credits.  
For students who are sufficiently qualified to conduct original investigations in this field. Consent of instructor necessary. May be repeated for credit.

**MEMT 980. Advanced Topics: _____ .** 1-3 Credits.  
A special course of study to meet current needs of education professionals - primarily for post-master's level students. May be repeated for credit.

**MEMT 995. Field Experience in: _____ .** 1-5 Credits.  
Supervised and directed experiences in selected educational settings. The advisor will schedule regular observations of the field experience and conferences with the student. Written summaries and evaluations of the field experiences will be prepared independently by the student, a representative of the cooperating agency, and the advisor. Open only to advanced students. Field experience credit in any one semester may not exceed five hours, and total credit may not exceed eight hours. May be repeated for credit.

**MEMT 996. Practicum in College Teaching.** 1-3 Credits.  
College teaching experience, guided by a major professor in the department. Open only to doctoral aspirants or candidates.

**MEMT 997. Individual Study: _____ .** 1-4 Credits.  
May be repeated for credit. Prerequisite: Prior graduate course work in the area of study and consent of Instructor.

**MEMT 998. Seminar in: _____ .** 1-4 Credits.  
May be repeated for credit.

**MEMT 999. Doctoral Dissertation.** 1-15 Credits.  
May be repeated for credit.

### Music Courses

**MTHC 99. Fundamentals of Music.** 1 Credits.  
Tutoring for music majors as required based on fundamentals exam given in MTHC 105, Theory I.

**MTHC 105. Theory I.** 3 Credits.  
The first semester of a two-year theory sequence that examines the harmonic, melodic, rhythmic, and formal organization of music. Open to all KU students. Music majors and minors should take concurrently with MTHC 106.

**MTHC 106. Aural Skills I.** 1 Credits.  
The first semester of a one-year aural skills course that trains students to hear and sing the melodies, rhythms, and harmonies associated with common-practice tonal music. Must be taken concurrently with MTHC 105.

**MTHC 115. Theory II.** 3 Credits.  
The second semester of a two-year theory sequence that examines the harmonic, rhythmic, and formal organization of music. Open to all KU students. Music majors and minors should take concurrently with MTHC 116. Satisfies: Goal 1 Outcome 1 (GE11). Prerequisite: MTHC 105.

**MTHC 116. Aural Skills II.** 1 Credits.  
The second semester of a one-year aural skills course that trains students to hear and sing the melodies, rhythms, and harmonies associated with common-practice tonal music. Must be taken concurrently with MTHC 115. Prerequisite: MTHC 106.

**MTHC 205. Theory III.** 4 Credits.  
The third semester of an integrated two-year theory sequence that examines the harmonic, melodic, rhythmic, and formal organization of music while developing critical listening and keyboard skills. Prerequisite: MTHC 115 and MTHC 116.

**MTHC 252. Introduction to Composition.** 2 Credits.  
Fundamentals of musical composition, including melody, rhythm, harmony, notation, and instrumentation. Students will create new works while developing critical listening and keyboard skills. Prerequisite: MTHC 115 and MTHC 116 or permission of instructor.

**MTHC 253. Composition.** 2 Credits.  
For music theory and composition majors. Creative writing using basic concepts in harmony, melody, and form. May be repeated for credit. Prerequisite: MTHC 115 and MTHC 116 and MTHC 252 or permission of instructor.

**MTHC 301. Music Videos.** 3 Credits.  
The analysis of music videos from 1981-present.

**MTHC 302. How to Make Music.** 3 Credits.
An introduction to techniques for composing Western music in various styles. Designed for students with little or no prior training in music. May not contribute to major requirements for School of Music students.

MTHC 315. Theory IV. 4 Credits.
The fourth semester of an integrated two-year theory sequence that examines the harmonic, melodic, rhythmic, and formal organization of music while developing critical listening and keyboard skills. Includes study of musical forms from the common practice period and analytical techniques for post-tonal music. Prerequisite: MTHC 205.

MTHC 316. Tonal Form and Post-Tonal Techniques. 4 Credits.
A study of musical forms from the common practice period through the present day and analytical techniques for post-tonal music. The class is designed for music education and music therapy majors. Prerequisite: MTHC 205, music education, or music therapy major.

MTHC 355. Readings in Music Theory. 1-4 Credits.
Investigation of a subject by means of directed readings using primary scholarly sources. May be repeated for credit. Prerequisite: Consent of instructor.

MTHC 400. Graduate Review: Written Theory. 1 Credit.
A review of basic harmonic and voice-leading principles relevant to the common-practice period. For graduate students deficient in undergraduate harmonic theory.

MTHC 402. Graduate Review: Aural Skills. 1 Credit.
A review of aural and sight-reading skills relevant to the common-practice period. For graduate students deficient in undergraduate aural theory.

MTHC 404. Graduate Review: Form. 1 Credit.
A review of basic forms relevant to the common-practice period. For graduate students deficient in undergraduate form.

MTHC 406. Graduate Review: Post-Tonal Music. 1 Credit.
A review of basic theories and techniques relevant for understanding post-tonal music. For graduate students deficient in undergraduate post-tonal theory.

MTHC 410. Form and Analysis. 3 Credits.
Analysis of the formal designs of movement-length forms from the Baroque to the present day with an emphasis on performance and interpretation. Prerequisite: MTHC 315.

MTHC 432. Introduction to the Analysis Contemporary Music. 3 Credits.
Introductory course in the sequence, presenting the basic tools of post-tonal and 20th century composition, including, serial techniques, set theory, extended tertian harmony, minimalist techniques, contemporary tonality and other trends. Exploration of form and complex rhythmic structures as well as aural skills appropriate to the subject matter. Prerequisite: MTHC 315.

MTHC 433. Advanced Analysis of Contemporary Music. 3 Credits.
Analysis seminar, emphasizing intense study of larger contemporary works, using techniques learned in the first course (MTHC 732). Further content will vary according to the instructor. Includes aural skills work appropriate to the subject matter. Prerequisite: MTHC 432.

MTHC 442. Modal Counterpoint. 3 Credits.
A study of modal counterpoint with original work and analysis. Prerequisite: MTHC 205.

MTHC 455. Readings in Music Theory. 1-4 Credits.
Investigation of a subject by means of directed readings of primary scholarly sources. May be repeated for credit. Prerequisite: MTHC 410 and consent of instructor.

MTHC 460. Choral Arranging and Composition. 3 Credits.
Introduction to arranging and composing for choruses of various genres, ages and abilities. Prerequisite: MTHC 315.

MTHC 463. Survey in Jazz Composition and Arranging. 3 Credits.
Analysis of jazz composition and orchestration, beginning with early procedures (Louis Armstrong through the "Big Band Era") and culminating with analysis of scores by Gil Evans and Bob Brookmeyer. Prerequisite: Permission of instructor required.

MTHC 470. Seminar in New Art Song. 3 Credits.
Collaborative workshop for composers, singers, and collaborative pianists. Collaborative performance and analysis of recent art song. Collaborative composition and performance of new art song. Prerequisite: Consent of instructor.

MTHC 471. Tonal Counterpoint. 3 Credits.
A study of tonal counterpoint with original work and analysis. Prerequisite: MTHC 205.

MTHC 474. Orchestration I. 3 Credits.
A study of the four families of orchestral instruments (woodwinds, brass, percussion, and strings) concentrating on ranges, transpositions, timbres, and techniques of the various instruments. Scoring projects concentrate on voicing and balance within the individual choirs of the orchestra. Prerequisite: MTHC 205.

MTHC 476. Orchestration II. 3 Credits.
A continuation of MTHC 474. Emphasis on scoring for full symphony orchestra and the large wind ensemble. Prerequisite: MTHC 474.

MTHC 477. Electro-Acoustic Composition I. 3 Credits.
Survey of concepts and practices of electronic sound synthesis. Required of music theory and composition majors, and open to other music majors by consent of department. Prerequisite: MTHC 315.

MTHC 480. Electro-Acoustic Composition II. 3 Credits.
Basic concepts and techniques of electronic composition. For majors in music theory and composition. Prerequisite: MTHC 477.

MTHC 498. Undergraduate Recital. 1 Credit.
Composition recital for undergraduate music composition majors. Prerequisite: Permission of instructor.

MTHC 499. Senior Research Project. 1-4 Credits.
For seniors majoring in music theory who will normally enroll for two credits in each of the last two semesters. Students will write a scholarly paper on an approved topic. May be repeated for credit.

MTHC 541. Eighteenth-Century Counterpoint. 3 Credits.
A study of eighteenth century style with analysis and original work. Prerequisite: MTHC 205.

MTHC 542. Sixteenth-Century Counterpoint. 3 Credits.
A study of sixteenth century style with analysis and original work. Prerequisite: MTHC 205.

MTHC 563. Survey in Jazz Composition and Arranging. 3 Credits.
Analysis of jazz composition and orchestration, beginning with early procedures (Louis Armstrong through the "Big Band Era") and culminating with analysis of scores by Gil Evans and Bob Brookmeyer. Prerequisite: Permission of instructor required.

MTHC 583. Composition. 2 Credits.
Advanced composition including larger forms in a variety of media. Composition majors will present a public recital of original works during the fourth semester of enrollment. May be repeated for credit. Prerequisite: MTHC 253 or consent of instructor.

MTHC 643. Contemporary Repertoire. 3 Credits.
Comprehensive overview of major composers and works of the past beginning in the mid 20th Century, but focusing on music written in the last 40 years, major contemporary ensembles and granting organizations. Prerequisite: Graduate standing in MTHC or permission of instructor.

**MTHC 655. Readings in Music Theory: _____** 1-4 Credits.
Investigation of a subject by means of directed readings of primary scholarly sources. May be repeated for credit. Prerequisite: MTHC 410 and consent of instructor.

**MTHC 670. Seminar in New Art Song. 3 Credits.**
Collaborative workshop for composers, singers, and collaborative pianists. Collaborative performance and analysis of recent art song. Collaborative composition and performance of new art song. Prerequisite: Consent of instructor.

**MTHC 674. Orchestration I. 3 Credits.**
A study of the four families of orchestral instruments (woodwinds, brass, percussion, and strings) concentrating on ranges, transpositions, timbres, and techniques of the various instruments. Scoring projects concentrate on voicing and balance within the individual choirs of the orchestra. Prerequisite: MTHC 205.

**MTHC 676. Orchestration II. 3 Credits.**
A continuation of MTHC 674. Emphasis on scoring for full symphony orchestra and the large wind ensemble. Prerequisite: MTHC 674.

**MTHC 678. Electro-Acoustic Composition I. 3 Credits.**
Survey of concepts and practices of electronic sound synthesis. Required of music theory and composition majors, and open to other music majors by consent of department. Prerequisite: MTHC 315 or MTHC 316.

**MTHC 680. Electro-Acoustic Composition II. 3 Credits.**
Basic concepts and techniques of electronic composition. For majors in music theory and composition. Prerequisite: MTHC 678 and consent of division.

**MTHC 701. Music Videos. 3 Credits.**
The analysis of music videos from 1981-present.

**MTHC 732. Introduction to the Analysis of Contemporary Music. 3 Credits.**
Introductory course in the sequence, presenting the basic tools of post-tonal and 20th century composition, including, serial techniques, set theory, extended tertian harmony, minimalist techniques, contemporary tonality and other trends. Exploration of form and complex rhythmic structures as well as aural skills appropriate to the subject matter. Prerequisite: MTHC 315 or MTHC 316.

**MTHC 733. Advanced Analysis of Contemporary Music. 3 Credits.**
Analytical seminar, emphasizing intense study of larger contemporary works, using techniques learned in the first course (MTHC 732). Further content will vary according to the instructor. Includes aural skills work appropriate to the subject matter. Prerequisite: MTHC 732.

**MTHC 741. Canon and Fugue. 3 Credits.**
A study of strict imitation and fugal writing. Practical work in two, three, and four parts in various media. Prerequisite: MTHC 541.

**MTHC 742. Modal Counterpoint. 3 Credits.**
A study of modal counterpoint with original work and analysis.

**MTHC 743. Contemporary Repertoire. 3 Credits.**
Comprehensive overview of major composers and works of the past beginning in the mid 20th Century, but focusing on music written in the last 40 years, major contemporary ensembles and granting organizations. Prerequisite: Graduate standing in MTHC or permission of instructor.

**MTHC 755. Readings in Music Theory: _____** 1-4 Credits.
Investigation of a subject by means of directed readings of primary scholarly sources. For Graduate students. May be repeated for credit. Prerequisite: Consent of instructor.

**MTHC 760. Choral Arranging and Composition. 3 Credits.**
Introduction to arranging and composing for choruses of various genres, ages and abilities. Prerequisite: MTHC 315, graduate standing in MTHC, or permission of instructor.

**MTHC 763. Survey in Jazz Composition and Arranging. 3 Credits.**
Analysis of jazz composition and orchestration, beginning with early procedures (Louis Armstrong through the “Big Band Era”) and culminating with analysis of scores by Gil Evans and Bob Brookmeyer. Prerequisite: Permission of instructor required.

**MTHC 770. Seminar in New Art Song. 3 Credits.**
Collaborative workshop for composers, singers, and collaborative pianists. Collaborative performance and analysis of recent art song. Collaborative composition and performance of new art song. Prerequisite: Consent of instructor.

**MTHC 771. Tonal Counterpoint. 3 Credits.**
A study of tonal counterpoint with original work and analysis.

**MTHC 774. Orchestration I. 3 Credits.**
A study of the four families of orchestral instruments (woodwinds, brass, percussion, and strings) concentrating on ranges, transpositions, timbres, and techniques of the various instruments. Scoring projects concentrate on voicing and balance within the individual choirs of the orchestra.

**MTHC 776. Orchestration II. 3 Credits.**
A continuation of MTHC 774. Emphasis on scoring for full symphony orchestra and the large wind ensemble. Prerequisite: MTHC 774.

**MTHC 777. Electro-Acoustic Composition I. 3 Credits.**
Survey of concepts and practices of electronic sound synthesis. For music theory and composition majors, open to other music majors by consent of department.

**MTHC 778. History of Music Theory. 3 Credits.**
A historical survey of music theory, both practical and speculative, from the ancient Greeks to the late twentieth century. (Same as MUSC 778.)

**MTHC 780. Electro-Acoustic Composition II. 3 Credits.**
Basic concepts and techniques of electronic composition. For majors in music theory and composition. Prerequisite: MTHC 777 and consent of division.

**MTHC 789. Seminar on Selected Topics: _____** 0.5-3 Credits.
Topics vary by semester. May be repeated for credit.

**MTHC 801. Advanced Analysis I. 3 Credits.**
A bibliographic survey intended to explore aspects of both structure (rhythm, texture and timber) and methodology (semiotics, gesture and cognition) that variously complement the pitch-based approaches to musical interpretation associated with Schenkerian tonal analysis and pitch-class theory. Prerequisite: MTHC 732 Introduction to the Analysis of Contemporary Music or permission of instructor.

**MTHC 802. Advanced Analysis II. 3 Credits.**
A bibliographic survey intended to explore in depth the pitch grammars developed by composers of Western Art Music since circa 1910, and the various methodologies assembled to codify them. Prerequisite: MTHC 732 Introduction to the Analysis of Contemporary Music or permission of instructor.

**MTHC 810. Advanced Form. 3 Credits.**
An investigation of formal types, processes and functions in the music of the seventeenth through the twentieth centuries, focusing on instrumental genres. Prerequisite: Permission of instructor.
MTHC 820. Seminar in Schenkerian Analysis. 3 Credits.
A study of the theories and analytical methodologies developed by the Austrian theorist Heinrich Schenker. Prerequisite: MTHC 410 or permission of the instructor.

MTHC 825. Computers in Music and Music Research. 3 Credits.
A seminar designed to develop and explore the use and programming of microcomputers as an aid in research and the production of music. Topics will include composition and production tools for music, structured program design, data representation, and basic computer-assisted instruction models. Prerequisite: EECS 138 or equivalent or permission of the instructor.

MTHC 830. Pedagogy of Music Theory. 1-3 Credits.
Procedures for teaching theoretical concepts and skills. Survey of available texts and related materials. Three credits when offered during a full academic term; one-two credits when offered as a short-term institute. Prerequisite: MTHC 315 or MTHC 316 or permission of instructor.

MTHC 840. Pedagogy of Music Composition. 3 Credits.
This course provides an overview of pedagogical philosophies in music composition and is designed to prepare students for a teaching position in higher education. The course emphasizes broad critical understanding of historic, aesthetic, and theoretical perspectives pertinent to the field of composition pedagogy. Teaching methodologies are explored for one-on-one studio instruction, group lesson instruction, masterclass, and classroom instruction. Prerequisite: Consent of instructor.

MTHC 853. Advanced Composition. 1-6 Credits.
Essentially for theory and composition majors on the master's level. May be repeated for credit. Summer session limit one to three hours.

MTHC 887. Advanced Orchestration. 3 Credits.
Prerequisite: MTHC 776, or consent of department. May be repeated for credit.

MTHC 898. Recital. 1 Credits.
Recorded grade for MM Composition recital.

MTHC 899. Thesis. 1-6 Credits.
May be repeated for credit.

MTHC 953. Advanced Composition. 1-6 Credits.
Essentially for theory and composition majors on the doctoral level. May be repeated for credit. Summer session limit one to three hours.

MTHC 965. Doctoral Composition Recital. 2 Credits.
May be repeated for credit.

MTHC 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

MTHC 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

MTHC 999. Dissertation. 1-12 Credits.
May be repeated for credit.

Music Courses

MUS 100. Directed Study: _____. 1-4 Credits.
This is an all-purpose fill in the blank course for freshmen and sophomores. It can be used when need arises. May be repeated for credit.

MUS 177. First Year Seminar: _____. 3 Credits.
A limited-enrollment seminar course for first-time freshmen, organized around current issues in music. May not contribute to major requirements for School of Music students. First year seminar topics are coordinated and approved through the Office of First Year Experiences. Prerequisite: First-time freshman status.

MUS 300. Directed Studies: _____. 1-4 Credits.
This is an all-purpose fill in the blank course for juniors and seniors. It can be used when need arises. May be repeated for credit.

MUS 388. Curriculum and Pedagogy in: _____. 1 Credits.
Independent study. Prerequisite: Permission of Instructor.

MUS 586. The Business of Music. 3 Credits.
A course covering commercial aspects of the music business, including publishing, copyright law, recording, live performance, the motion picture and radio business, composition, teaching, and music merchandising. Prerequisite: Consent of the instructor.

MUS 587. Entrepreneurship and Outreach. 3 Credits.
An expansion of knowledge of current entrepreneurship trends and approaches to arts management. Prerequisite: MUS 586. Open only to junior, senior, and graduate students.

MUS 588. Arts Management. 3 Credits.
A comprehensive overview of the arts management field. Prerequisite: MUS 586. Open only to junior, senior, and graduate students.

MUS 800. Directed Study: _____. 1-4 Credits.
This is an all-purpose fill in the blank course for graduate students. It can be used when need arises. May be repeated for credit.

MUS 888. Curriculum and Pedagogy in: _____. 1 Credits.
Independent study. Prerequisite: Permission of instructor.

Music Courses

MUSC 135. Understanding Music. 3 Credits.
Honors version of MUSC 135/MUSC 335. Open only to students in the University Honors Program or by permission of instructor. Designed to aid non-music majors in developing skills needed for listening to and understanding music. Emphasis on masterworks of Western music. A student may receive credit for only one of the four courses numbers: MUSC 135, MUSC 335, MUSC 136, MUSC 336.

MUSC 136. Understanding Music. 3 Credits. HT H
Designed to aid non-music majors in developing skills needed for listening to and understanding music. Main emphasis on Western classical music, though other musical traditions are discussed. A student may receive credit in either MUSC 136 or MUSC 336, but not both. Satisfies: Goal 3 Arts and Humanities (GE3H), H Humanities (H), HT Historical Studies PC (HT).

MUSC 254. Collegium Musicum, Vocal. 0-1 Credits.
May be repeated for credit. (Same as CHOR 254.) Prerequisite: Permission of instructor.

MUSC 256. Collegium Musicum, Instrumental. 0-1 Credits.
May be repeated for credit. Prerequisite: Permission of instructor.

MUSC 298. Introduction to Jazz. 3 Credits. HT H/W
A survey of the history of jazz from its beginnings in the early twentieth century to the present. Open to music and non-music majors.

MUSC 302. The Broadway Musical. 3 Credits. H
A survey of the Broadway Musical from the early twentieth century to the present.

MUSC 305. Music of Latin America. 3 Credits. H
Designed for non-music majors, the course surveys the geographical and ethnohistorical sources of the many forms of music in Latin America.
The various forms of music will be examined from historical, cultural, and stylistic perspectives.

**MUSC 307. Music of Africa and the Middle East. 3 Credits.**
Survey of the many musical traditions of Black Africa and the Middle East, emphasizing their cultural and social context. Open to both majors and non-majors.

**MUSC 308. Music in East Asia. 3 Credits.**
Study of musical cultures in China, Korea, and Mongolia, with a special focus on court music, music theater, popular music, and the influence of East Asian music on the Western art music and vice-versa. (Same as EALC 308.)

**MUSC 309. History of Rock and Roll. 3 Credits.**
Survey of the history of rock and roll, starting with its origins in rhythm and blues and continuing to the present day. Open to both majors and non-majors.

**MUSC 310. History of Film Music. 3 Credits.**
A survey course for non-majors on the history of film music from silent films to the present. Students will use written texts, website materials such as streaming video and audio, and regular screening in an auditorium setting for assignments and papers.

**MUSC 311. History of African American Music. 3 Credits.**
This course examines the richness and diversity of African American music and its influence on the entire American musical landscape. Beginning with African relocations in African American music, the course will trace the history and development of both written and oral traditions from 1700 to the present day.

**MUSC 312. Music in the Andes. 3 Credits.**
This course examines the history, culture, and musical traditions of the Andean region: Peru, Ecuador, Bolivia, Chile, Columbia, and Venezuela. It focuses on a selection of indigenous rituals and popular music of mestizo and African American origin. By the end of the semester students will be acquainted with particular genres, instruments, and the social contexts with which they are associated.

**MUSC 313. Music in Mexico and the Caribbean. 3 Credits.**
This course examines the history, culture, and musical traditions of Mexico and the Caribbean. It focuses on a selection of rituals and traditional and popular music of the region. By the end of the semester students will be acquainted with various musical genres, instruments, and the social contexts with which they are associated.

**MUSC 314. Exploring Hip Hop and Intersections in American Culture. 3 Credits.**
Exploring Hip Hop & Intersections in American Culture. This course examines the multicultural origins of hip hop and how this small, African American Bronx-based subculture expanded into one of the most influential styles of music in the world. The course will begin by analyzing the cultural conditions out of which hip hop arose in the mid-1970’s; from there it will turn to examining how hip hop music, over the last forty years, has sounded the identity of its creators. This includes critical analysis of music and lyrics, as well as musical production practices.

**MUSC 315. History of Country Music. 3 Credits.**
Study of country music in the U.S. from the early 1920’s to the present, including performers, styles, historical context, and technology.

**MUSC 318. Drumming Cultures of the World. 3 Credits.**
Survey of drumming styles and its influence on culture, history, aesthetics, and beliefs from around the world (West Africa, the Caribbean, South America, East Asia, South Asia, the Middle East, Europe, and North America). Includes evolution of the drum set and the global hip hop phenomenon. The main goal of this course is to learn about how these varied musical styles are interconnected. Open to all majors.

**MUSC 320. Music History I. 3 Credits.**
An introduction to music as an academic discipline, the fields of musicology and ethnomusicology, and a survey of representative world music cultures. Prerequisite: One year of music theory.

**MUSC 335. Understanding Music - Study Abroad. 3 Credits.**
A study abroad class in which students will develop skills in listening to music and placing that music into its cultural context with examples drawn from the Western repertoires associated with the places to where the class will travel during the winter interterm, returning just before the spring semester begins. Not open to students with credit in: MUSC 135, MUSC 136, or MUSC 336.

**MUSC 336. Understanding Music. 3 Credits.**
Designed to aid non-music majors in developing skills needed for listening to and understanding music. Main emphasis on Western classical music, though other musical traditions are discussed. A student may receive credit in either MUSC 136 or MUSC 336, but not both. Satisfies: Goal 3 Arts and Humanities (GE3H), H Humanities (H), HT Historical Studies PC (HT).

**MUSC 337. Selected Topic in Music: ______. 1-3 Credits.**
A selected topic in music or an interdisciplinary topic in the fine arts. The course may be repeated for credit when topic varies. Open only to non-music majors.

**MUSC 340. Music History II. 3 Credits.**
A survey of major developments in Western music and its social, cultural, and political contexts from Antiquity to 1750. Prerequisite: MUSC 320.

**MUSC 436. Collegium Musicum, Instrumental. 0-1 Credits.**
May be repeated for credit. Prerequisite: Permission of instructor.

**MUSC 440. Music History III. 3 Credits.**
A survey of major developments in Western music and its social, cultural, and political contexts from 1750 to the present. Prerequisite: MUSC 340.

**MUSC 450. Selected Topics in Music: ______. 0.5-3 Credits.**
Varies based on the topic. Prerequisite: MUSC 320, MUSC 340, MUSC 440, and MUSC 480 or permission of instructor.

**MUSC 470. Music in World Cultures. 3 Credits.**
An introduction to music as part of the cultural experience in India, Southeast Asia, the Orient, and Africa, with comparisons to Western traditions and influences on contemporary music.

**MUSC 474. Graduate Review: Medieval. 1 Credits.**
A review of the practice of Western art music composed between c. 1000 and 1400. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. This is a 6-week online course offered online as a review class to remediate music history deficiencies as determined by the graduate diagnostic exam. Open only to School of Music graduate students.

**MUSC 475. Graduate Review: Renaissance. 1 Credits.**
A review of the practice of Western art music composed between c. 1420 and 1600. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. This is a 6-week online course offered online as a review class to remediate music history deficiencies as determined by the graduate diagnostic exam. Open only to School of Music graduate students.

**MUSC 476. Graduate Review: Baroque. 1 Credits.**
A review of the practice of Western art music composed between c. 1600 and 1750. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. This is a 6-
week online course offered online as a review class to remediate music history deficiencies as determined by the graduate diagnostic exam. Open only to School of Music graduate students.

**MUSC 477.** Graduate Review: Classic. 1 Credits.
A review of the practice of Western art music composed between c. 1750 and 1815. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. This is a 6-week online course offered online as a review class to remediate music history deficiencies as determined by the graduate diagnostic exam. Open only to School of Music graduate students.

**MUSC 478.** Graduate Review: Romantic. 1 Credits.
A review of the practice of Western art music composed between c. 1815 and 1900. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. This is a 6-week online course offered online as a review class to remediate music history deficiencies as determined by the graduate diagnostic exam. Open only to School of Music graduate students.

**MUSC 479.** Graduate Review: 20th-21st Centuries. 1 Credits.
A review of the practice of Western art music composed between c. 1900 and the present day. It examines the genres, forms, styles, and performance practice of representative works by a variety of composers. This is a 6-week online course offered online as a review class to remediate music history deficiencies as determined by the graduate diagnostic exam. Open only to School of Music graduate students.

**MUSC 480.** Music History IV. 3 Credits.
A survey of music in the United States from the colonial period to the present, including classical and vernacular styles. Prerequisite: MUSC 440.

**MUSC 481.** Music of the Middle Ages. 3 Credits.
A concentrated survey of Western music from about 500 to 1400. Prerequisite: MUSC 320.

**MUSC 482.** Music of the Renaissance. 3 Credits.
A concentrated survey of Western music from about 1400 to 1600. Prerequisite: MUSC 340.

**MUSC 483.** Music of the Baroque Era. 3 Credits.
A concentrated survey of Western music from about 1600 to 1750. Prerequisite: MUSC 340 and MUSC 440.

**MUSC 484.** Music of the Classical Era. 3 Credits.
A concentrated survey of Western music from about 1750 to 1815. Prerequisite: MUSC 440.

**MUSC 485.** Music of the Romantic Era. 3 Credits.
A concentrated survey of Western music from about 1815 to 1900. Prerequisite: MUSC 440 and MUSC 480.

**MUSC 486.** Music of the Twentieth Century. 3 Credits.
A concentrated survey of Western music during the twentieth century. Prerequisite: MUSC 480.

**MUSC 487.** Music in America. 3 Credits.
A concentrated survey of music in the United States. Prerequisite: One course in the field of musicology or permission of the instructor.

**MUSC 488.** History of Opera. 3 Credits.
A concentrated survey of the history of opera. Prerequisite: MUSC 340, MUSC 440, and MUSC 480.

**MUSC 489.** History of Chamber Music. 3 Credits.
A concentrated survey of the history of chamber music. Prerequisite: MUSC 440 and MUSC 480.

**MUSC 490.** History of the Concerto. 3 Credits.
A concentrated survey of the history of the concerto. Prerequisite: MUSC 440 and MUSC 480.

**MUSC 491.** History of the Symphony. 3 Credits.
A concentrated survey of the history of the symphony. Prerequisite: MUSC 440 and MUSC 480.

**MUSC 492.** History of Wind Band Music. 3 Credits.
A chronological survey of the development of the wind band/ensemble and its music, using standard musical works from each historical period. Prerequisite: MUSC 440 and MUSC 480 or permission of the instructor.

**MUSC 494.** Readings in Musicology: _____ 1-3 Credits.
May be repeated for credit. Prerequisite: Minimum average of B in MUSC 320, MUSC 340, MUSC 440, MUSC 480 or equivalent, and permission of instructor.

**MUSC 499.** Senior Thesis. 2 Credits.
An original research project that will result in a scholarly paper of moderate size. May be repeated once for credit.

**MUSC 560.** Music in World Cultures. 3 Credits. NW W
An introduction to music as part of the cultural experience in India, Southeast Asia, the Orient, and Africa, with comparisons to Western traditions and influences on contemporary music.

**MUSC 650.** Selected Topics in Music: _____ 0.5-3 Credits.
May be repeated for credit. Prerequisite: MUSC 320, MUSC 340, MUSC 440, and MUSC 480 or permission of instructor.

**MUSC 654.** Collegium Musicum, Vocal. 0-1 Credits.
May be repeated for credit. (Same as CHOR 654.) Prerequisite: Permission of instructor.

**MUSC 656.** Collegium Musicum, Instrumental. 0-1 Credits.
May be repeated for credit. Prerequisite: Permission of instructor.

**MUSC 736.** Collegium Musicum, Instrumental. 0-1 Credits.
May be repeated for credit. Prerequisite: Permission of instructor.

**MUSC 750.** Selected Topics in Music: _____ 0.5-3 Credits.
May be repeated for credit. Prerequisite: Graduate standing or permission of instructor.

**MUSC 752.** Music of the Middle Ages. 3 Credits.
Prerequisite: MUSC 320.

**MUSC 753.** Music of the Renaissance. 3 Credits.
Prerequisite: MUSC 340.

**MUSC 754.** Music of the Baroque Era. 3 Credits.
Prerequisite: MUSC 340 and MUSC 440.

**MUSC 755.** Music of the Classical Era. 3 Credits.
Prerequisite: MUSC 440.

**MUSC 756.** Music of the Romantic Era. 3 Credits.
Prerequisite: MUSC 440 and MUSC 480.

**MUSC 757.** Music of the Twentieth Century. 3 Credits.
Prerequisite: MUSC 440.

**MUSC 758.** History of Musical Instruments. 3 Credits.
Prerequisite: MUSC 340 or MUSC 440 or permission of instructor.

**MUSC 759.** Music in America. 3 Credits.
A survey of historical developments from the Pilgrims to the present. (Same as AMS 737.) Prerequisite: One course in the field of music history or permission of the instructor.

**MUSC 760.** History of Opera. 3 Credits.
Prerequisite: MUSC 340, MUSC 440, and MUSC 480.

**MUSC 761.** History of the Mass. 3 Credits.
Music Courses

OBOE 100. Oboe. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

OBOE 101. Oboe Reed Making. 0-1 Credits.
The principles of oboe reed making, including tube cane selection, pre-gouging, gouging, shaping, tying and scraping reeds. Knife sharpening and tool maintenance will also be covered. Open only to freshmen and sophomores. May be repeated for credit.

OBOE 121. Oboe. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

OBOE 221. Oboe. 1-4 Credits.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

OBOE 300. Oboe. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

OBOE 301. Oboe Reed Making. 0-1 Credits.
The principles of oboe reed making, including tube cane selection, pre-gouging, gouging, shaping, tying and scraping reeds. Knife sharpening and tool maintenance will also be covered. Open only to juniors and seniors. May be repeated for credit.

OBOE 321. Oboe. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

OBOE 421. Oboe. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

OBOE 422. Oboe. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

OBOE 622. Oboe. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

OBOE 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: OBOE 622.

OBOE 711. Oboe. 1-3 Credits.
For graduate students not majoring in oboe. Audition required. May be repeated for credit.

OBOE 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

OBOE 810. Elective Master's Recital. 1 Credits.
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in OBOE 811.

**OBOE 811. Oboe. 3-4 Credits.**
For graduate students majoring in oboe. May be repeated for credit. Summer session limit three hours.

**OBOE 899. Master's Recital. 1 Credits.**
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: OBOE 811.

**OBOE 921. Seminar in Performance. 3 Credits.**
A study of repertoire and performance practice relating to the baroque oboe during the seventeenth and eighteenth centuries.

**OBOE 922. Seminar in Performance. 3 Credits.**
A study of repertoire and extended performance techniques of the twentieth century.

**OBOE 961. Directed Performance. 3-4 Credits.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in oboe. May be repeated for credit. Summer session limit three hours.

**OBOE 965. Doctoral Recitals. 1-3 Credits.**
Maximum seven hours credit. May be repeated for credit.

**OBOE 970. D.M.A. Lecture-Recital. 1-4 Credits.**
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Summer session limit one to three credits. Prerequisite: Consent of instructor.

**OBOE 972. D.M.A. Document. 1-4 Credits.**
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

**Music Courses**

**ORCH 200. University Symphony Orchestra. 0-1 Credits.**
For freshmen and sophomores. Four hours full rehearsal and one hour sectional (string only) rehearsal each week throughout the school year. An intensive study of the symphonic repertoire, instrumental and vocal accompaniments, and complete major opera. Two public concerts each semester and numerous out-of-town concerts, radio broadcasts, and local vespers performances. Acceptance for membership and playing positions is determined by tryout. May be repeated for credit.

**ORCH 400. Symphony Orchestra. 0-1 Credits.**
An intensive study of the symphonic repertoire, instrumental and vocal accompaniments, and complete major opera. Two public concerts each semester as well as out-of-town concerts, radio broadcasts, and local vespers performances. Acceptance for membership and playing positions is determined by audition. May be repeated for credit.

**ORCH 406. University Orchestra. 0-1 Credits.**
For undergraduate students. Open to all students without audition. This chamber organization performs on campus as well as locally. The orchestra studies and performs music from the standard orchestral repertoire, along with lighter, popular works. May be repeated for credit.

**ORCH 600. University Symphony Orchestra. 0-1 Credits.**
For juniors, seniors, and graduate students. May be repeated for credit.

**ORCH 700. Symphony Orchestra. 0-1 Credits.**
An intensive study of the symphonic repertoire, instrumental and vocal accompaniments, and complete major opera. Two public concerts each semester as well as out-of-town concerts, radio broadcasts, and local vespers performances. Acceptance for membership and playing positions is determined by audition. For graduate students. May be repeated for credit.

**ORCH 701. Workshop in: ____. 0.5-3 Credits.**
May be repeated for credit.

**ORCH 706. University Orchestra. 0-1 Credits.**
For graduate students. This chamber organization performs on campus as well as locally. The orchestra studies and performs music from the standard orchestral repertoire, along with lighter, popular works. May be repeated for credit.

**Music Courses**

**ORGN 100. Organ. 1-2 Credits.**
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**ORGN 121. Organ. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**ORGN 221. Organ. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

**ORGN 300. Organ. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**ORGN 320. Studio Class in Organ - Lab. 0 Credits.**
Studio performance of works prepared under individual instruction. May be repeated.

**ORGN 321. Organ. 1-2 Credits.**
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

**ORGN 402. Master Class in Organ - Lab. 0 Credits.**
A class in the performance of advanced organ repertoire. For organ majors only or by consent of instructor. May be repeated.

**ORGN 421. Organ. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**ORGN 422. Organ. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**ORGN 502. Master Class in Organ - Lab. 0 Credits.**
A class in the performance of advanced organ repertoire. For organ majors only or by consent of instructor. May be repeated.

**ORGN 608. Organ Pedagogy. 2 Credits.**
For seniors and graduate students majoring in organ or by permission of instructor. May be repeated for credit. Materials and methods of pedagogy. Lectures, discussion, demonstration teaching, planning, and evaluation. One beginning or lower level organ student assigned to each class member with teaching done under supervision of class instructor.

**ORGN 622. Organ. 2-4 Credits.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must
accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

ORGN 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: ORGN 622.

ORGN 702. Master Class in Organ - Lab. 0 Credits.
A class in the performance of advanced organ repertoire. For organ majors only or by consent of instructor. May be repeated.

ORGN 711. Organ. 1-3 Credits.
For graduate students not majoring in organ. Audition required. May be repeated for credit.

ORGN 720. Studio Class in Organ-Lab. 0 Credits.
Studio performance of works prepared under individual instruction. May be repeated for credit.

ORGN 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

ORGN 800. Organ Building and Design. 3 Credits.
Acoustics; design, construction, and maintenance of organs; organ consulting, examination of organs.

ORGN 801. History of Organ Literature and Organ Design I. 3 Credits.
Organ literature and organ design from the Middle Ages, the Renaissance, and the Spanish, Italian, and English Baroque.

ORGN 802. History of Organ Literature and Organ Design II. 3 Credits.
Organ literature and organ design in the Dutch and German Baroque with special emphasis on J.S. Bach. Prerequisite: Permission of instructor.

ORGN 803. History of Organ Literature and Organ Design III. 3 Credits.
French organ literature and organ design from the 17th century to the present.

ORGN 804. History of Organ Literature and Organ Design IV. 3 Credits.
German, North American, British, Scandinavian and Eastern European organ literature and organ design from the Classic era to the present. Prerequisite: Permission of instructor.

ORGN 805. Selected Topics in Organ. 1-3 Credits.
An exploration of selected topics in organ design and literature. Topics change by semester. May be repeated for credit.

ORGN 806. Organ Pedagogy. 3 Credits.
Philosophy, methods, and materials of organ pedagogy. Prerequisite: Permission of instructor.

ORGN 807. Organ Study Tour. 1-3 Credits.
Study of European or North American organs through reading and site visits to instruments.

ORGN 811. Organ. 3-4 Credits.
For graduate students majoring in organ. May be repeated for credit. Summer session limit three hours.

ORGN 899. Master’s Recital. 1 Credits.
Master’s Degree Recital: The Master’s recital is the culminating event for the Master of Music degree and must be given before the Master’s Final Oral Exam. Prerequisite: Corequisite: ORGN 811.

ORGN 921. Seminar in Performance: _____ . 3 Credits.
A detailed study of organ repertoire, performance practice, the history of organ building as it affects the performance of a particular body of literature, liturgical or other extra-musical contexts, and other influences on musical style. May be repeated for credit when topics vary.

ORGN 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. program in organ. May be repeated for credit. Summer session limit three hours.

ORGN 965. Doctoral Recitals. 0-1 Credits.
Maximum credit, seven hours. May be repeated for credit.

ORGN 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student’s major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

ORGN 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student’s major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

PCUS 100. Percussion. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

PCUS 121. Percussion. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

PCUS 221. Percussion. 1-4 Credits.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

PCUS 300. Percussion. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

PCUS 321. Percussion. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 12 credits.

PCUS 421. Percussion. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

PCUS 422. Percussion. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

PCUS 622. Percussion. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

PCUS 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: PCUS 622.
PCUS 711. Percussion. 1-3 Credits.
For graduate students not majoring in percussion. Audition required. May be repeated for credit.

PCUS 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

PCUS 810. Elective Master's Recital. 1 Credits.
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in PCUS 811.

PCUS 811. Percussion. 3-4 Credits.
For graduate students majoring in percussion. May be repeated for credit. Summer session limit three credits.

PCUS 899. Master's Recital. 1 Credits.
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: PCUS 811.

PCUS 921. Seminar in Performance and Pedagogy. 3 Credits.
A study of the interpretive problems encountered in percussion music from the various historical periods, and a study of the performance practices in orchestral, band, chamber ensemble, and solo literature.

PCUS 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in percussion. May be repeated for credit. Summer session limit three hours.

PCUS 965. Doctoral Recitals. 1-3 Credits.
May be repeated for credit.

PCUS 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

PCUS 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

PENS 252. Percussion Ensemble. 0-1 Credits.
For freshmen and sophomores. Study and performance of works for various percussion instrument combinations. May be repeated for credit.

PENS 652. Percussion Ensemble. 0-1 Credits.
For juniors, seniors, and graduate students. Study and performance of works for various percussion instrument combinations. May be repeated for credit.

Music Courses

PIAN 100. Piano. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

PIAN 111. Elementary Keyboard Musicianship. 2 Credits.
The development of keyboard skills in sightreading, transposition, harmonization, improvisation, score reading, and playing by ear. Open to all students not majoring in music who have little or no music training.

PIAN 121. Piano. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

PIAN 144. Elementary Keyboard Skills I. 1 Credits.
The development of keyboard skills in sightreading, transposition, harmonization, improvisation, score reading, and playing by ear. Open to all music majors with little or no piano background.

PIAN 148. Elementary Keyboard Skills II. 1 Credits.
A continuation of PIAN 144.

PIAN 216. Chamber Music for Pianists. 1-2 Credits.
For freshmen and sophomores majoring in piano. The study of chamber music literature for piano and various instrumental combinations. Development of rehearsal conducting techniques and leadership skills through collaboration with other musicians. May be repeated for credit.

PIAN 221. Piano. 1-4 Credits.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

PIAN 229. Performance Class in Accompanying. 1 Credits.
A class in the performance of vocal and instrumental accompaniment. Prerequisite: May be repeated for credit.

PIAN 237. Accompanying for Dance. 1-3 Credits.
Instruction in dance accompanying. Open to freshman and sophomore pianists with permission of instructor.

PIAN 284. Intermediate Keyboard Skills I. 2 Credits.
Continuation of PIAN 148. Prerequisite: Permission of instructor.

PIAN 288. Intermediate Keyboard Skills II. 2 Credits.
Continuation of PIAN 284. Prerequisite: Permission of instructor.

PIAN 300. Piano. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

PIAN 310. Advanced Keyboard Skills. 2 Credits.
The development of functional keyboard skills in sight reading, transposition, harmonization, improvisation, score reading, and playing by ear. Prerequisite: MTHC 115 or permission of instructor.

PIAN 321. Piano. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

PIAN 336. Chamber Music for Pianists. 1-2 Credits.
For juniors and seniors majoring in piano. The study of chamber music literature for piano and various instrumental combinations. Development of rehearsal conducting techniques and leadership skills through collaboration with other musicians. May be repeated for credit.

PIAN 421. Piano. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

PIAN 422. Piano. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

PIAN 429. Performance Class Accompanying. 1 Credits.
A class in the performance of vocal and instrumental accompaniment. May be repeated for credit.

PIAN 437. Accompanying for Dance. 1-3 Credits.
Instruction in dance accompanying. Open to junior and senior pianists with permission of instructor.
PIAN 443. Piano Repertoire I. 3 Credits.
Study and analysis of keyboard repertoire from its beginning through the Classical period.

PIAN 444. Piano Repertoire 2. 3 Credits.
Study and analysis of keyboard repertoire of the Romantic and Modern periods.

PIAN 447. Contemporary Piano Literature. 3 Credits.
The study of piano literature focusing on music of mid-century modernists through the present day. Prerequisite: PIAN 443 and PIAN 444 or instructor permission.

PIAN 448. The Contemporary Pianist. 3 Credits.
Discover and perfect all of the tools required to become a successful pianist in the 21st Century by learning from the examples of the great pianists of yesterday and today. Prerequisite: PIAN 443 and PIAN 444 or instructor permission.

PIAN 449. Piano Pedagogy I. 1 Credits.
An introduction to the principles of design, theory of operation, maintenance, and tuning of the piano. Lecture and laboratory. Open to junior, senior, and graduate students.

PIAN 450. Piano Pedagogy II. 1 Credits.
A continuation of PIAN 449. Piano Technology I. Application of principles of design, theory of operation, maintenance, and tuning of the piano. Prerequisite: PIAN 449.

PIAN 452. Piano Technology I. 1 Credits.
Observation and research of the techniques and materials relevant to piano instruction at the elementary to intermediate levels. Additional topics pertinent to music education to include child development, learning, communication, and group dynamics. Prerequisite: Permission of instructor.

PIAN 454. Piano Pedagogy II. 2-3 Credits.
Observation and research of the techniques and materials relevant to piano instruction at the elementary to intermediate levels. Additional topics pertinent to music education to include child development, learning, communication, and group dynamics. Prerequisite: PIAN 452.

PIAN 456. Piano Pedagogy III. 2-3 Credits.
Observation and research of the techniques and materials relevant to piano instruction at the elementary to intermediate levels. Additional topics pertinent to music education to include child development, learning, communication, and group dynamics. Prerequisite: PIAN 454 or permission of instructor.

PIAN 522. Piano Technology I. 1 Credits.
An introduction to the principles of design, theory of operation, maintenance, and tuning of the piano. Lecture and laboratory. Open to junior, senior, and graduate students.

PIAN 523. Piano Technology II. 1 Credits.
A continuation of PIAN 522. Piano Technology I. Application of principles of design, theory of operation, maintenance, and tuning of the piano. Prerequisite: PIAN 522.

PIAN 540. Piano Pedagogy I. 2-3 Credits.
Observation and research of the techniques and materials relevant to piano instruction at the elementary to intermediate levels. Additional topics pertinent to music education to include child development, learning, communication, and group dynamics. Prerequisite: PIAN 540 or permission of instructor.

PIAN 622. Piano. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

PIAN 623. Senior Recital. 1 Credit.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: PIAN 622.

PIAN 643. Piano Repertoire I. 3 Credits.
Study and analysis of keyboard repertoire from its beginning through the Classical period.

PIAN 644. Piano Repertoire 2. 3 Credits.
Study and analysis of keyboard repertoire of the Romantic and Modern periods.

PIAN 646. Piano Pedagogy IV. 1-2 Credits.
Practicum in piano instruction at the elementary to intermediate levels. Prerequisite: PIAN 640 or permission of instructor.

PIAN 647. Contemporary Piano Literature. 3 Credits.
The study of piano literature focusing on music of mid-century modernists through the present day. Prerequisite: PIAN 643 and PIAN 644 or instructor permission.

PIAN 648. The Contemporary Pianist. 3 Credits.
Discover and perfect all of the tools required to become a successful pianist in the 21st Century by learning from the examples of the great pianists of yesterday and today. Prerequisite: PIAN 643 and PIAN 644 or instructor permission.

PIAN 711. Piano. 1-3 Credits.
For graduate students not majoring in piano. Audition required. May be repeated for credit.

PIAN 743. Piano Repertoire I. 3 Credits.
Study and analysis of keyboard repertoire from its beginning through the Classical period.

PIAN 744. Piano Repertoire 2. 3 Credits.
Study and analysis of keyboard repertoire of the Romantic and Modern periods.

PIAN 747. Contemporary Piano Literature. 3 Credits.
The study of piano literature focusing on music of mid-century modernists through the present day. Prerequisite: PIAN 743 and PIAN 744 or instructor permission.

PIAN 748. The Contemporary Pianist. 3 Credits.
Discover and perfect all of the tools required to become a successful pianist in the 21st Century by learning from the examples of the great pianists of yesterday and today. Prerequisite: PIAN 743 and PIAN 744 or instructor permission.

PIAN 799. Artist Certificate Recital. 1 Credit.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

PIAN 811. Piano. 3-4 Credits.
For graduate students majoring in piano. May be repeated for credit. Summer session limit three hours.

PIAN 840. Advanced Piano Pedagogy I. 3 Credits.
The techniques and materials for the development of keyboard literacy at the elementary and intermediate levels.

PIAN 846. Advanced Piano Pedagogy II. 3 Credits.
The techniques and materials for the development of keyboard literacy at the elementary and intermediate levels. Prerequisite: PIAN 840.

PIAN 899. Master's Recital. 1 Credit.
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: PIAN 811.

PIAN 921. Seminar in Performance and Pedagogy: ___. 3 Credits.
A detailed study of repertoire, performance practice, pedagogical, and stylistic problems relating to keyboard music. May be repeated for credit when topics vary.

PIAN 940. Special Projects in Piano Pedagogy. 3 Credits.
In-depth study of a student-selected topic in piano pedagogy. Prerequisite: PIAN 840 and PIAN 846.

PIAN 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in piano. May be repeated for credit. Summer session limit three hours.

PIAN 965. Doctoral Recitals. 1-3 Credits.
Maximum credit, seven hours. May be repeated for credit.
PIAN 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

PIAN 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

REC 100. Laboratory in Music Performance. 0 Credits.
This course deals with the performance of music. The goal is to increase the understanding of music and music performance through exposure to a wide variety of repertory and performance styles, mediums, techniques, and related issues. May be repeated.

Music Courses

PIAN 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

SAXO 100. Saxophone. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

SAXO 121. Saxophone. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

SAXO 221. Saxophone. 1-4 Credits.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

SAXO 300. Saxophone. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

SAXO 321. Saxophone. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

SAXO 421. Saxophone. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

SAXO 422. Saxophone. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

SAXO 622. Saxophone. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

SAXO 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: SAXO 622.

SAXO 711. Saxophone. 1-3 Credits.

For graduate students not majoring in saxophone. Audition required. May be repeated for credit.

SAXO 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

SAXO 810. Elective Master’s Recital. 1 Credits.
Non-degree elective recital for Master’s students. Prerequisite: Concurrent enrollment in SAXO 811.

SAXO 811. Saxophone. 3-4 Credits.
For graduate students majoring in saxophone. May be repeated for credit. Summer session limit three hours.

SAXO 899. Master’s Recital. 1 Credits.
Master’s Degree Recital: The Master’s recital is the culminating event for the Master of Music degree and must be given before the Master’s Final Oral Exam. Prerequisite: Corequisite: SAXO 811.

SAXO 921. Seminar in Performance. 3 Credits.
A study of repertoire and performance techniques from the saxophone’s inception to 1950.

SAXO 922. Seminar in Performance. 3 Credits.
A study of repertoire and extended performance techniques from 1950 to the present.

SAXO 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in saxophone. May be repeated for credit. Summer session limit three hours.

SAXO 965. Doctoral Recitals. 1-3 Credits.
Maximum seven hours credit. May be repeated for credit.

SAXO 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student’s major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

SAXO 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to the candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

STRG 424. String Pedagogy: _____ . 1 Credits.
Lectures, demonstrations, and discussions of such topics as physiological factors, style and interpretation, music editing, teaching materials and repertoire, planning, and evaluation. May be repeated for credit as instrument varies.

STRG 921. Seminar in Performance and Pedagogy. 3 Credits.
Repertoire, performance practice, and pedagogical and stylistic problems relating to stringed instrument music before 1800. (Same as MMEM 921.)

STRG 922. Seminar in Performance and Pedagogy. 3 Credits.
Stringed instrument repertoire from 1800 to 1875. (Same as MMEM 922.)

STRG 923. Seminar in Performance and Pedagogy. 3 Credits.
Stringed instrument repertoire from 1875 to present. (Same as MMEM 923.)

STRG 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student’s major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

STRG 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

**Music Courses**

**TROM 100. Trombone. 1-2 Credits.**
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**TROM 121. Trombone. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**TROM 221. Trombone. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

**TROM 252. Trombone Choir. 0-1 Credits.**
For freshmen and sophomores. Study and performance of ensemble literature for the trombone. May be repeated for credit.

**TROM 300. Trombone. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**TROM 321. Trombone. 1-2 Credits.**
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

**TROM 421. Trombone. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**TROM 422. Trombone. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**TROM 622. Trombone. 2-4 Credits.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

**TROM 623. Senior Recital. 1 Credits.**
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in the semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: TROM 622.

**TROM 652. Trombone Choir. 0-1 Credits.**
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the trombone. May be repeated for credit.

**TROM 711. Trombone. 1-3 Credits.**
For graduate students not majoring in trombone. Audition required. May be repeated for credit.

**TROM 799. Artist Certificate Recital. 1 Credits.**
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

**TROM 810. Elective Master's Recital. 1 Credits.**
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in TROM 811.

**TROM 811. Trombone. 3-4 Credits.**
For graduate students majoring in trombone. May be repeated for credit. Summer session limit three hours.

**TROM 899. Master's Recital. 1 Credits.**
Master's Degree Recital. The Master's Recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: TROM 811.

**TROM 961. Directed Performance. 3-4 Credits.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in trombone. May be repeated for credit. Summer session limit three hours.

**TROM 965. Doctoral Recitals. 1-3 Credits.**
May be repeated for credit.

**TROM 970. D.M.A. Lecture-Recital. 1-4 Credits.**
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

**TROM 972. D.M.A. Document. 1-4 Credits.**
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

**Music Courses**

**TRUM 100. Trumpet. 1-2 Credits.**
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**TRUM 121. Trumpet. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**TRUM 221. Trumpet. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 4 credits (8 for performance majors).

**TRUM 252. Trumpet Ensemble. 0-1 Credits.**
For freshmen and sophomores. Study and performance of ensemble literature for the trumpet. May be repeated for credit.

**TRUM 300. Trumpet. 1-2 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**TRUM 321. Trumpet. 1-2 Credits.**
Applied music lessons for sophomores majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**TRUM 421. Trumpet. 1-4 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

**TRUM 422. Trumpet. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**TRUM 622. Trumpet. 2-4 Credits.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

**TRUM 623. Senior Recital. 1 Credits.**
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in the semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: TRUM 622.

**TRUM 652. Trumpet Choir. 0-1 Credits.**
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the trumpet. May be repeated for credit.

**TRUM 711. Trumpet. 1-3 Credits.**
For graduate students not majoring in trombone. Audition required. May be repeated for credit.

**TRUM 799. Artist Certificate Recital. 1 Credits.**
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

**TRUM 810. Elective Master's Recital. 1 Credits.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

TRUM 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: TRUM 622.

TRUM 652. Trumpet Ensemble. 0-1 Credits.
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the trumpet. May be repeated for credit.

TRUM 711. Trumpet. 1-3 Credits.
For graduate students not majoring in trumpet. Audition required. May be repeated for credit.

TRUM 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

TRUM 810. Elective Master's Recital. 1 Credits.
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in TRUM 811.

TRUM 811. Trumpet. 3-4 Credits.
For graduate students majoring in trumpet. May be repeated for credit. Summer session limit three hours.

TRUM 899. Master's Recital. 1 Credits.
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: TRUM 811.

TRUM 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in trumpet. May be repeated for credit. Summer session limit three hours.

TRUM 965. Doctoral Recitals. 1-3 Credits.
Maximum credit, seven hours. May be repeated for credit.

TRUM 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

TRUM 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

TUBA 100. Tuba. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

TUBA 121. Tuba. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

TUBA 221. Tuba. 1-4 Credits.
Applied music lessons for sophomores majoring music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

TUBA 300. Tuba. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

TUBA 321. Tuba. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

TUBA 421. Tuba. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

TUBA 422. Tuba. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

TUBA 622. Tuba. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

TUBA 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: TUBA 622.

TUBA 711. Tuba. 1-3 Credits.
For graduate students not majoring in tuba. Audition required. May be repeated for credit.

TUBA 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

TUBA 810. Elective Master's Recital. 1 Credits.
Non-degree elective recital for Master's students. Prerequisite: Concurrent enrollment in TUBA 811.

TUBA 811. Tuba. 3-4 Credits.
For graduate students majoring in tuba. May be repeated for credit. Summer session limit three hours.

TUBA 899. Master's Recital. 1 Credits.
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: TUBA 811.

TUBA 961. Directed Performance. 3-4 Credits.
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in tuba. May be repeated for credit. Summer session limit three hours.

TUBA 965. Doctoral Recitals. 1-3 Credits.
Maximum credit, seven hours. May be repeated for credit.

TUBA 970. D.M.A. Lecture-Recital. 1-4 Credits.
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

TUBA 972. D.M.A. Document. 1-4 Credits.
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.
Music Courses

TUEU 252. Tuba-Euphonium Consort. 0-1 Credits.
For freshmen and sophomores. Study and performance of ensemble literature for the tuba and euphonium. May be repeated for credit.

TUEU 652. Tuba-Euphonium Consort. 0-1 Credits.
For juniors, seniors, and graduate students. Study and performance of ensemble literature for the tuba and euphonium. May be repeated for credit.

Music Courses

VIOA 100. Viola. 1-2 Credits.
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

VIOA 121. Viola. 1-4 Credits.
Applied music lessons for freshmen majoring in music. May be repeated for credit.

VIOA 221. Viola. 1-4 Credits.
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

VIOA 300. Viola. 1-2 Credits.
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

VIOA 321. Viola. 1-2 Credits.
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

VIOA 421. Viola. 1-2 Credits.
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

VIOA 422. Viola. 1-2 Credits.
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

VIOA 622. Viola. 2-4 Credits.
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

VIOA 623. Senior Recital. 1 Credits.
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: VIOA 622.

VIOA 711. Viola. 1-3 Credits.
For graduate students not majoring in viola. Audition required. May be repeated for credit.

VIOA 799. Artist Certificate Recital. 1 Credits.
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

VIOA 811. Viola. 3-4 Credits.
For graduate students majoring in viola. May be repeated for credit. Summer session limit three hours.
For graduate students majoring in violin. May be repeated for credit. Summer session limit three hours.

**VNCL 799. Master's Recital. 1 Credits.**
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: VNCL 811.

**VNCL 899. Master's Recital. 1 Credits.**
For graduate students majoring in violoncello. May be repeated for credit. Summer session limit three hours.

**VNCL 961. Directed Performance. 3-4 Credits.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in violoncello. May be repeated for credit. Summer session limit three hours.

**VNCL 965. Doctoral Recitals. 1-3 Credits.**
Maximum of seven hours credit. May be repeated for credit.

### Music Courses

**VNCL 100. Violoncello. 1-2 Credits.**
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**VNCL 121. Violoncello. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**VNCL 221. Violoncello. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (8 for performance majors).

**VNCL 300. Violoncello. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**VNCL 321. Violoncello. 1-2 Credits.**
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

**VNCL 421. Violoncello. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**VNCL 422. Violoncello. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**VNCL 622. Violoncello. 2-4 Credits.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits (3 each semester for 4 semesters) at the 121/221 levels.

**VNCL 623. Senior Recital. 1 Credits.**
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: VNCL 622.

**VNCL 711. Violoncello. 1-3 Credits.**
For graduate students not majoring in violoncello. Audition required. May be repeated for credit.

**VNCL 799. Artist Certificate Recital. 1 Credits.**
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

**VNCL 811. Violoncello. 3-4 Credits.**
For graduate students majoring in violoncello. May be repeated for credit. Summer session limit three hours.

**VNCL 899. Master's Recital. 1 Credits.**
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: VNCL 811.

**VNCL 961. Directed Performance. 3-4 Credits.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in violoncello. May be repeated for credit. Summer session limit three hours.

**VNCL 965. Doctoral Recitals. 1-3 Credits.**
May be repeated for credit to a maximum of seven hours.

### Music Courses

**VOIC 100. Voice. 1-2 Credits.**
Applied music lessons for freshmen and sophomores not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**VOIC 120. Vocal Performance in English. 1 Credits.**
Fundamentals of solo vocal performance with an emphasis on English diction and communicating the English language.

**VOIC 121. Voice. 1-4 Credits.**
Applied music lessons for freshmen majoring in music. May be repeated for credit.

**VOIC 221. Voice. 1-4 Credits.**
Applied music lessons for sophomores majoring in music. May be repeated for credit. Prerequisite: 121-level until the music major has accumulated 4 credits (6 for performance majors).

**VOIC 270. Lyric Diction for Singers: _____. 1 Credits.**
Pronation in a specific language to be chosen from Italian, French, English, German, or other languages pertinent to the singer. Open to voice and theatre/voice majors, and to others with approval of instructor. May be repeated for credit as language varies.

**VOIC 300. Voice. 1-2 Credits.**
Applied music lessons for juniors and seniors not majoring in music. May be repeated for credit. Prerequisite: Permission of instructor and audition may be required.

**VOIC 320. Vocal Performance Class II. 1 Credits.**
Solo vocal performance in a class situation with emphasis including the preparation, planning of repertoire, and interpretive skills appropriate to a recital. Designed for junior/senior voice and theatre-voice majors. Prerequisite: Permission of instructor. Eligibility for VOIC 622.

**VOIC 321. Voice. 1-2 Credits.**
Applied music lessons for juniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 221-level until the music major has accumulated 8 credits.

**VOIC 405. Vocal Literature I. 2 Credits.**
A survey of English song.

**VOIC 406. Vocal Literature II. 2 Credits.**
A survey of German song.

**VOIC 408. Vocal Pedagogy. 1 Credits.**
Knowledge and skills needed to teach voice, with particular attention to lifespan voice anatomy, physiology, and acoustics, diagnosis and
correction of vocal inefficiencies, teaching styles, repertoire choice, professional development, and acquaintance with current research in voice science and vocal pedagogy. Includes a voice teaching practicum. (Same as MENT 408.)

**VOIC 421. Voice. 1-2 Credits.**
Applied music lessons for seniors majoring in music. Not for performance majors. May be repeated for credit. Prerequisite: 321-level until the music major has accumulated 12 credits.

**VOIC 422. Voice. 1-2 Credits.**
Applied music lessons. Must be taken in the semester a recital is being performed and as required by the degree program. Not for performance majors.

**VOIC 470. Lyric Diction for Singers: _____ 1 Credits.**
Pronunciation in a specific language to be chosen from Italian, French, English, German, or other languages pertinent to the singer. Open to voice and theatre/voice majors, and to others with approval of instructor. May be repeated for credit as language varies.

**VOIC 490. Opera Workshop. 0-4 Credits.**
The study of various aspects of opera, such as character development, aria, chorus, and opera scene study, staging, body movement, and audition techniques. May be repeated for credit.

**VOIC 492. Opera Production. 1-4 Credits.**
The preparation and performance of an opera role. May be repeated for credit.

**VOIC 500. Directed Study in: _____ 1-3 Credits.**
Investigation of a special topic or project. May be repeated for credit. Prerequisite: Consent of instructor.

**VOIC 520. Vocal Coaching. 1 Credits.**
In-depth investigation of elements of vocal performance such as language, musical style, tradition, and dramatic content and the communication thereof in preparation for the senior recital. Open to undergraduates majoring in voice and theatre/voice in the senior year, with consent of instructor. May be repeated for credit.

**VOIC 622. Voice. 2-4 Credits.**
Applied music lessons for juniors and seniors majoring in performance. May be repeated for credit. Prerequisite: Performance majors must accumulate 12 credits at the 121/221 levels.

**VOIC 623. Senior Recital. 1 Credits.**
Applied music lessons for undergraduate performance majors (Bachelor of Music). Must be taken in semester the senior recital is being performed and as required by the degree program. Prerequisite: Corequisite: VOIC 622.

**VOIC 670. Advanced Lyric Diction for Singers: _____ 1 Credits.**
Pronunciation in a specific language to be chosen from Italian, French, English, German, or other languages pertinent to the singer. Open to graduate students in voice and opera performance, and to others with approval of instructor. May be repeated for credit as language varies.

**VOIC 704. Vocal Repertoire: _____ 2 Credits.**
A survey of selected topics in vocal repertoire to be chosen from categories such as: Italian, German, French, and English songs, oratorio literature, and art songs by women composers. The course may be repeated for credit when topic varies.

**VOIC 711. Voice. 1-3 Credits.**
For graduate students not majoring in voice. Audition required. May be repeated for credit.

**VOIC 720. Vocal Performance Class II. 1 Credits.**
Solo vocal performance in a class situation with emphasis including the preparation, planning of repertoire, and interpretive skills appropriate to a recital. Advanced repertoire and appropriate level of vocal and musical comprehension shall be expected from the graduate student. Prerequisite: Consent of instructor.

**VOIC 799. Artist Certificate Recital. 1 Credits.**
This course is the culminating event and is required for the completion of the Graduate Certificate in Music Performance.

**VOIC 808. Vocal Pedagogy. 1 Credits.**
A course offering performers and beginning teachers of classical singing a basic overview of vocal production. The class will explore the empirical and scientific principles of breathing, resonance, timbre, and other vocal features. Discussions of repertoire choices, vocal health, teaching styles, career development and other topics pertaining to the training of singers will be included. Added emphasis will be placed on historical and contemporary pedagogues through original research.

**VOIC 811. Voice. 3-4 Credits.**
For graduate students majoring in voice. May be repeated for credit. Summer session limit three hours.

**VOIC 820. Vocal Coaching. 1-4 Credits.**
In-depth investigation of elements of vocal performance such as: language, musical style, tradition, dramatic content and the communication thereof. Open to graduate voice majors with consent of instructor. May be repeated for credit.

**VOIC 890. Opera Workshop. 0-4 Credits.**
The study of various aspects of opera, such as character development, aria, chorus, and opera scene study, staging, body movement, and audition techniques. May be repeated for credit.

**VOIC 892. Opera Production. 1-4 Credits.**
The preparation and performance of an opera role. May be repeated for credit.

**VOIC 899. Master's Recital. 1 Credits.**
Master's Degree Recital: The Master's recital is the culminating event for the Master of Music degree and must be given before the Master's Final Oral Exam. Prerequisite: Corequisite: VOIC 811.

**VOIC 900. Directed Study in: _____ 1-3 Credits.**
Investigation of a special topic or project. May be repeated for credit. Prerequisite: Consent of instructor.

**VOIC 921. Seminar in Performance: _____ 3 Credits.**
A detailed study of vocal repertoire, performance practice, and stylistic problems on a selected topic from areas such as oratorio, cantata, song cycles, vocal chamber music, song, or opera of specific composers (i.e., Verdi, Wagner, Mozart, Debussy, Poulenc, Wolf, Strauss), or twentieth century song. May be repeated for credit.

**VOIC 961. Directed Performance. 3-4 Credits.**
Individual instruction. Open only to students who have been admitted to the D.M.A. curriculum in voice. May be repeated for credit. Summer session limit three hours.

**VOIC 965. Doctoral Recitals. 1-3 Credits.**
Maximum seven hours credit. May be repeated for credit.

**VOIC 970. D.M.A. Lecture-Recital. 1-4 Credits.**
A lecture-recital and scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance. May be repeated for credit. Prerequisite: Consent of instructor.

**VOIC 972. D.M.A. Document. 1-4 Credits.**
A scholarly paper on a subject pertinent to the student's major field. Open only to candidates for the D.M.A. in performance and conducting. May be repeated for credit. Prerequisite: Consent of instructor.

Music Courses

W&P 125. Wind and Percussion Pedagogy. 1 Credits.
For freshmen and sophomores. Materials and concepts for teaching beginning and intermediate instrumental students; instrument repair, adjustments and modification; reed making and adjustment where appropriate; solo and ensemble repertoire. May be repeated for credit. Prerequisite: Corequisite: Applied instruction for the appropriate instrument. (e.g. FRHN 121, PCUS 221).

W&P 130. Orchestral Repertoire. 1 Credits.
For freshmen and sophomores. Weekly reading sessions for wind, percussion and harp students with the objective of acquainting the student with important orchestral passages for his or her particular instrument. May be repeated for credit. Enrollment controlled by the instructor in charge.

W&P 325. Wind and Percussion Pedagogy. 1 Credits.
For juniors and seniors. Continuation of W&P 125. May be repeated for credit. Prerequisite: Corequisite: Applied instruction for the appropriate instrument. (e.g. FRHN 321, PCUS 622).

W&P 630. Orchestral Repertoire. 1 Credits.
The study of orchestral literature for wind and percussion instruments. May be repeated for credit. Permission of instructor.

W&P 655. Independent Study in: _____, 1-4 Credits.
May be repeated for credit. Prerequisite: Consent of advisor and instructor.

W&P 702. Special Studies in Woodwind Instrument Pedagogy. 1-3 Credits.
Physiological factors of woodwind playing, teaching materials and techniques, practice methods, solo and chamber music repertoire, mouthpieces and reeds, discography, techniques of tone production, articulation, embouchure, and intonation. May be repeated for credit to a maximum of five hours.

W&P 704. Special Studies in Brass Instrumental Pedagogy. 1 Credits.
Physiological factors of brass playing, teaching materials and techniques, practice methods, solo and chamber music repertoire, mouthpieces, discography, techniques of tone production, articulation, embouchure, and intonation. May be repeated for credit to a maximum of five hours.

W&P 708. Special Studies in Percussion Instrument Pedagogy. 1-3 Credits.
The study of percussion pedagogy of Membrane Percussion; Keyboard Percussion; and Jazz/Rock/Commercial Drum Set, Marching and World Percussion. Study will include but not limited to such areas as teaching materials and techniques, repertoire, performance practice, and discography. Course may concentrate on one of the three areas listed above, or be taught as a survey course covering all three topics. May be repeated for credit to maximum of five hours.

Music Courses

WENS 252. Wind Ensemble. 0-1 Credits.
For freshmen and sophomores. Study and performance of original works for various wind instrument combinations. May be repeated for credit.

WENS 652. Wind Ensemble. 0-1 Credits.

Bachelor of Arts in Fine Arts in Music

B.A. in Fine Arts in Music Degree Requirements

The B.A. in Fine Arts in Music is offered for students with interests in any area of music who also want to consider pursue a second degree or minor not in the School of Music.

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will gain knowledge in a variety of areas while pursuing the B.A. and may include any approved KU major or minor without adding extra credit hours to their degree program. Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities, as well as a senior performance recital.

With this degree, students will be well-rounded prospects for nearly any employer upon graduation. Students can also go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

The School of Music

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor’s, master’s, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in Swarthout Recital Hall, Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

Instrumental Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty.
member in the studio area or the faculty advisor in music therapy as appropriate.

1 Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I. University Band or University Orchestra if placed by audition.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

B.A. in Fine Arts in Music Degree Requirements

The B.A. in Fine Arts in Music is offered for students with interests in any area of music who also want to pursue a second degree or minor not in the School of Music.

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>ENGL 101</td>
<td>Composition (or any course that fulfills GE21)</td>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (or any course that fulfills GE12)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (or any course that fulfills GE22)</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science: any course that fulfills GE3N</td>
<td>3</td>
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<tr>
<td>Social Science: any course that fulfills GE3S</td>
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<tr>
<td>Culture&amp;Diversity: any course that fulfills AE41</td>
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<tr>
<td>Culture&amp;Diversity: any course that fulfills AE42</td>
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</tr>
<tr>
<td>Ethics: any course that fulfills AE51 or AE52</td>
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<tr>
<td>Major or minor outside Music or non-music electives</td>
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</table>

Any KU approved major or minor. Must be declared in the School/College of your major/minor and completed with your music major.

Music Core

| MTHC 105 | Theory I | 3     |
| MTHC 106 | Aural Skills I | 1     |
| MTHC 115 | Theory II | 3     |
| MTHC 116 | Aural Skills II | 1     |
| MUSC 340 | Music History II | 3     |
| MUSC 440 | Music History III | 3     |
| REC 100 | Laboratory in Music Performance (2 semesters) | 0     |

Music Lessons/Ensembles

| Music lessons: 4 semesters (2 each 121 and 221) | 8     |
| Ensembles: 4 semesters each for one credit | 4     |

Music electives

Must include one capstone: Goal 6 based on your area of interest and determine these music electives

Freshman

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<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tr>
<td>ENGL 101 (or any course that fulfills GE21)</td>
<td>3 ENGL 102 (or any course that fulfills GE21)</td>
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<tr>
<td>MATH 101 (or any course that fulfills GE12)</td>
<td>3 Natural Science: any course that fulfills GE3N</td>
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<tr>
<td>Major/minor/pre-class</td>
<td>3 Major/minor/pre-class</td>
<td>3</td>
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<tr>
<td>MTHC 105</td>
<td>3 MTHC 115</td>
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Bachelor of Fine Arts in Theatre-Voice

Theatre and Voice

The Division of Voice offers the Bachelor of Fine Arts (B.F.A.) for singers interested in art song, opera, oratorio, concert, other classical pieces or vocal teaching. Students receive training in vocal technique, languages and diction, vocal repertoire, acting and the theatrical arts. Performance opportunities range from workshops to fully staged productions, allowing students to develop their talents at the most beneficial pace.

The B.F.A. in Theatre and Voice degree requires 121 credits (45 at the Jr/Sr level 300+). Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the in-depth exploration of music as well as performing a junior recital and a senior recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for theatre/musical productions, or create their own path in music or music-related endeavors.

The School of Music

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<tr>
<td>422 Lessons (Senior Recital)/Ensemble</td>
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<tr>
<td>MTHC 499</td>
<td>Senior Research Project</td>
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<td>MUSC 499</td>
<td>Senior Thesis</td>
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<td>MUSC 499</td>
<td>Senior Thesis</td>
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<td>Ensemble</td>
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<td>Fall</td>
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<td>Music elective (321 Lessons &amp; Ensemble recommended)</td>
<td>3 Music elective (321 Lessons &amp; Ensemble recommended)</td>
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<td>MUSC 440</td>
<td>3 Culture &amp; Diversity: any course that fulfills AE41</td>
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<td>Major/minor/pre- class</td>
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<tr>
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<td>3 300+ Major/minor/pre- class</td>
<td>3</td>
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<tr>
<td>300+ Major/minor/pre- class</td>
<td>3 300+ Major/minor/pre- class</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>14</td>
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</tbody>
</table>

| Total Hours 120 |         |        |

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music Goal 6 options for SENIOR fall (minimum 2 credits)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>422 Lessons (Senior Recital)/Ensemble</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>MTHC 499</td>
<td>Senior Research Project</td>
<td>1-4</td>
</tr>
<tr>
<td>MUSC 499</td>
<td>Senior Thesis</td>
<td>2</td>
</tr>
<tr>
<td>Music Goal 6 options for SENIOR spring (minimum 2 credits)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>422 Lessons (Senior Recital)/Ensemble</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MTHC 499 &amp; 422 Lessons</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MTHC 499</td>
<td>Senior Research Project</td>
<td>1-4</td>
</tr>
<tr>
<td>MUSC 499</td>
<td>Senior Thesis</td>
<td>2</td>
</tr>
</tbody>
</table>
first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program to another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

B.F.A. Degree Requirements for the Theatre and Voice Major

A total of 124 hours (45 at the Jr/Sr level 300+) is required, distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Music Theory</strong></td>
<td></td>
</tr>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Musicology</strong></td>
<td></td>
</tr>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Theatre and Voice Major Courses</strong></td>
<td></td>
</tr>
<tr>
<td>VOIC 120</td>
<td>Vocal Performance in English</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Electives from the following</strong></td>
<td></td>
</tr>
<tr>
<td>MUSC 470</td>
<td>Lyric Diction for Singers: _____ (2 of 3 required: French, German, Italian)</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 470</td>
<td>Lyric Diction for Singers: _____ (2 of 3 required: French, German, Italian)</td>
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<tr>
<td>MTHC 405</td>
<td>Vocal Literature I</td>
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<tr>
<td>or VOIC 406</td>
<td>Vocal Literature II</td>
<td></td>
</tr>
<tr>
<td>THR 106</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THR 206</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THR 210</td>
<td>Musical Performance for the Actor I</td>
<td>3</td>
</tr>
<tr>
<td>THR 212</td>
<td>Beginning Voice and Speech for Actors</td>
<td>3</td>
</tr>
<tr>
<td>THR 213</td>
<td>Movement I: The Acting Instrument</td>
<td>3</td>
</tr>
<tr>
<td>VOIC 490</td>
<td>Opera Workshop (2 semesters minimum to earn 4 credits)</td>
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</tr>
<tr>
<td>or VOIC 492</td>
<td>Opera Production</td>
<td></td>
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<tr>
<td></td>
<td><strong>Freshman</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Fall</strong></td>
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<tr>
<td>ENGL 101</td>
<td>Composition (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (or any course that fulfills GE22)</td>
<td>2</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (or any course that fulfills GE22)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (or any course that fulfills GE12)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Spring</strong></td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>or MTHC 115</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MTHC 105</td>
<td>3 MTHC 115</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>1 MTHC 116</td>
<td>1</td>
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<tr>
<td>PIAN 144</td>
<td>1 PIAN 148</td>
<td>1</td>
</tr>
<tr>
<td>REC 100</td>
<td>0 REC 100</td>
<td>0</td>
</tr>
</tbody>
</table>

Total Hours: 121-124
Each student who is a candidate for the Bachelor of Music degree must carry a major in

- Musicology,
- Music theory,
- Music composition,
- Music therapy, or
- Music performance, including Jazz.

A minimum of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student's knowledge, practice, and experience in their chosen major. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors. Individuals who complete the music therapy program are eligible to take the national music therapy board certification examination. The music therapy major does not lead to licensure to teach music in public schools.

The School of Music

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor's, master's, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in Swarthout Recital Hall, Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

Bachelor of Music in Bassoon, Clarinet, Flute, Oboe, Saxophone

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student's knowledge, practice, and experience on their major instrument. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.
Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

Instrumental Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble¹ each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

¹ Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I. University Band or University Orchestra if placed by audition.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information is available on the School of Music website (http://music.ku.edu/admissions/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditionsing from one program into another.

Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

B.M. Degree Requirements for the Bassoon, Clarinet, Flute, Oboe, Saxophone Major

A total of 120 hours (45 at the Jr/Sr level 300+) is required for the degree, distributed as follows:

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Form and Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Two upper-division theory courses</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(MTHC numbered 300 or above)</td>
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Musicology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
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Music Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Applied music lessons: 8 semesters each</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>for 3 credits, plus junior and senior</td>
<td></td>
</tr>
<tr>
<td></td>
<td>recitals</td>
<td></td>
</tr>
<tr>
<td>Piano</td>
<td>(proficiency level of PIAN 284)</td>
<td>3</td>
</tr>
<tr>
<td>Ensembles</td>
<td>8 semesters each for credit</td>
<td>8</td>
</tr>
<tr>
<td>Chamber</td>
<td>music: 4 semesters each for credit</td>
<td>4</td>
</tr>
<tr>
<td>REC 100</td>
<td>Laboratory in Music Performance (2 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>COND 245</td>
<td>Conducting I</td>
<td>2</td>
</tr>
<tr>
<td>W&amp;P 325</td>
<td>Wind and Percussion Pedagogy</td>
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Music Electives

<table>
<thead>
<tr>
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<th>Hours</th>
</tr>
</thead>
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<td></td>
<td></td>
<td>10</td>
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Non-music Electives

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

Basic Courses

...
### Bachelor of Music in Double Bass, Harp, Viola, Violin, Violoncello

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student's knowledge, practice, and experience on their major instrument in strings. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

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In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

1. Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I. University Band or University Orchestra if placed by audition.

#### Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful
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Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

B.M. Degree Requirements for the String Majors

A total of 120 hours (45 at the Jr/Sr level 300+) is required for the degree in strings, distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Form and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Upper division theory course (MTHC numbered 300 or above) 3

Musicology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Music Courses

Applied music lessons: 8 semesters each for 3 credits, plus junior and senior recitals 25

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COND 245</td>
<td>Conducting I</td>
<td>2</td>
</tr>
<tr>
<td>Piano (proficiency level of PIAN 284)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Orchestra: 8 semesters each for credit</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Chamber music: 8 semesters each for credit</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>REC 100</td>
<td>Laboratory in Music Performance (2 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>STRG 424</td>
<td>String Pedagogy: _____ or MEMT 432 Approaches to String Pedagogy</td>
<td>1</td>
</tr>
</tbody>
</table>

Basic Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (or any course that fulfills GE22)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (or any course that fulfills GE12)</td>
<td>3</td>
</tr>
</tbody>
</table>

Natural Science: any course that fulfills GE3N

Social Science: any course that fulfills GE3S

Ethics: any course that fulfills AE51 or AE52

Electives: 12 credits minimum must be in nonmusic courses 18

Violin majors must take 2 credits of viola lessons (VIOA 300) towards the 18 electives

Total Hours 120

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>3</td>
<td>MTHC 115</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
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<td>MTHC 116</td>
<td>1</td>
</tr>
<tr>
<td>121 Studio lessons</td>
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<td>121 Studio lessons</td>
<td>3</td>
</tr>
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<td>ORCH 400</td>
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Sophomore

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<tr>
<td>MTHC 205</td>
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<td>MTHC 315</td>
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Bachelor of Music in Euphonium, French Horn, Percussion, Trombone, Trumpet, Tuba

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student’s knowledge, practice, and experience on their major instrument. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

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<td>MUSC 340</td>
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<td><strong>Total Hours</strong></td>
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### Instrumental Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

1 Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I. University Band or University Orchestra if placed by audition.

### Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

### Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

### Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310).
Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

**B.M. Degree Requirements for the Euphonium, French Horn, Percussion, Trombone, Trumpet, Tuba Major**

A total of 120 hours (45 at the Jr/Sr level 300+) is required for the degree, distributed as follows:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<td>MTHC 105</td>
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<td>MTHC 106</td>
<td>Aural Skills I</td>
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<td>MTHC 115</td>
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<td>Aural Skills II</td>
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<td>Music History I</td>
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<td>Music History IV</td>
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<td>Critical Reading and Writing (or any course that fulfills GE21)</td>
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<td>COMS 130</td>
<td>Speaker-Audience Communication (or any course that fulfills GE22)</td>
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<td>College Algebra: _____ (or any course that fulfills GE12)</td>
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<td>ENGL 102</td>
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**Total Hours**

120

**Freshman**

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<td>Two upper-division theory electives (MTHC numbered 300 or above)</td>
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<tr>
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</table>
Bachelor of Music in Jazz

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student's knowledge, practice, and experience on their major instrument. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

Instrumental Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

B.M. Degree Requirements for the Jazz Major

A minimum of 120 hours (45 at the Jr/Sr level 300+) is required for the degree in Jazz, distributed as follows:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>MTHC 105</td>
<td>Theory I</td>
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<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
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<td>MTHC 115</td>
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<td>MTHC 116</td>
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</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
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</table>
Bachelor of Music in Musicology

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student's knowledge, practice, and experience in musicology. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice.

With this degree, students can go on to pursue graduate studies in music, or create their own paths in music or music-related endeavors.

**Instrumental Ensemble Policy**

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level...
of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I. University Band or University Orchestra if placed by audition.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

B.M. Degree Requirements for Musicology Majors

To graduate, the student must attain a minimum grade-point average of 3.0 in all Musicology coursework. A minimum of 120 hours (45 at the Jr/Sr level 300+) is required, distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 499</td>
<td>Senior Thesis (1-2 credits/semester, 2 semesters)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Plus 15 hours selected from 400-level courses. See your advisor with questions.</td>
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Music Theory and Composition

<table>
<thead>
<tr>
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<td>MTHC 105</td>
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<tr>
<td>MTHC 106</td>
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<td>MTHC 205</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Form and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 442</td>
<td>Modal Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 471</td>
<td>Tonal Counterpoint</td>
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Music Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (or any course that fulfills GE12)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (or any course that fulfills GE12)</td>
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<tr>
<td></td>
<td>Natural Science: any course that fulfills GE3N</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social Science: any course that fulfills GE3S</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Ethics: any course that fulfills AE51 or AE52</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GERM, FREN, ITAL, or SPAN: 13 credits in same language</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Choose from the following for an additional 5-6 credits in non-music courses:</td>
<td>5-6</td>
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<tr>
<td></td>
<td>4th semester of foreign language (3)</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Music in Music Composition

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student’s knowledge, practice, and experience in music composition. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all core work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice.

With this degree, students can go on to pursue graduate studies in music, or create their own paths in music or music-related endeavors.

Instrumental Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble for each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

1 Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I. University Band or University Orchestra if placed by audition.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

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**Keyboard Skills Placement Examination:**

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

**Music Composition**

To graduate, the student must maintain a minimum grade-point average of 3.0 in music theory and composition courses on both the first- and second-year and the junior/senior levels.

Students majoring in music composition (B.A. or B.M.) must complete MTHC 105, MTHC 106, MTHC 115, MTHC 116, and MTHC 205 before preparing a portfolio of their work for application to the professional sequence. The earliest a student may submit a portfolio is the fourth semester. Transfer students must be in residence for at least 1 semester before they can submit a portfolio.

This portfolio must include recent work (musical compositions for composers), 2 letters of recommendation (1 from the student's major instrument instructor and 1 from a MTHC professor who has had the student in a class), and a minimum grade-point average of 3.0 in MTHC courses. The student may be asked to provide a demonstration of musicality on his or her major instrument.

Portfolios are accepted once each semester for admission to the professional sequence the following semester. The portfolio is assessed by the MTHC faculty with one of 3 recommendations: admit, revise and resubmit next semester, or denied. Students in composition are not allowed to enroll in MTHC 583 Composition and MTHC 498 Undergraduate Recital without a favorable recommendation from the faculty.

**B.M. Degree Requirements for the Music Composition Major**

Students with a major in composition must offer in partial fulfillment of the degree requirements a recital of approximately 45 minutes duration consisting of original works in various media (MTHC 498). MTHC 499 is not required for the B.M. in Music Composition.

Pianists and organists take 16 credits of lessons (2 credits per semester) and do not take the additional 8 credits of piano, organ, and/or harpsichord lessons, while all other instrumentalists or vocalists take only 8 credits of lessons (1 credit per semester) and the additional 8 credits of the piano proficiency course sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288) and/or piano, organ, and/or harpsichord lessons.

A minimum of 120 hours (45 at the Jr/Sr level 300+) is required for the degree in Music Composition, distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Form and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 433</td>
<td>Advanced Analysis of Contemporary Music</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 442</td>
<td>Modal Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 471</td>
<td>Tonal Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 474</td>
<td>Orchestration I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 476</td>
<td>Orchestration II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 477</td>
<td>Electro-Acoustic Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 480</td>
<td>Electro-Acoustic Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 252</td>
<td>Introduction to Composition</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 253</td>
<td>Composition</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 583</td>
<td>Composition (minimum 3 semesters)</td>
<td>6</td>
</tr>
<tr>
<td>MTHC 498</td>
<td>Undergraduate Recital</td>
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**Music History**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
</tr>
</tbody>
</table>

**Music Courses**

Applied music lessons: 8 semesters instrument/voice (1 credit each) plus piano or 8 semesters piano/organ/harpsichord (2 credits each)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC 100</td>
<td>Laboratory in Music Performance (2 semesters required satisfactorily completed)</td>
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</tr>
<tr>
<td>COND 245</td>
<td>Conducting I</td>
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</table>

**Basic Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Music in Music Composition

ENGL 102 Critical Reading and Writing (or any course that fulfills GE21) 3
COMS 130 Speaker-Audience Communication (or any course that fulfills GE22) 3
MATH 101 College Algebra: _____ (or any course that fulfills GE22) 3
FREN, GERM or ITAL: 2 semesters of same language 10
Natural Science: any course that fulfills GE3N 3
Social Science: any course that fulfills GE3S 3
PHIL 160 Introduction to Ethics (or any course that fulfills AE51 or AE52) 3

Total Hours 120

Non-Keyboard Emphasis/Instrument/Voice

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MTHC 105</td>
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<td>MTHC 115</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>1</td>
<td>MTHC 116</td>
<td>1</td>
</tr>
<tr>
<td>121 Studio lessons</td>
<td>1</td>
<td>121 Studio lessons</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>PIAN 144 (if placed, or PIAN lessons)</td>
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<td>PIAN 148 (if placed, or PIAN lessons)</td>
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</tr>
<tr>
<td>REC 100</td>
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<td>REC 100</td>
<td>0</td>
</tr>
<tr>
<td>ENGL 101 (or any course that fulfills GE21)</td>
<td>3</td>
<td>ENGL 102 (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>FREN, GERM or ITAL (2 semesters same language)</td>
<td>5</td>
<td>FREN, GERM or ITAL (continue the same language)</td>
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</tbody>
</table>

15

Sophomore

<table>
<thead>
<tr>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>MTHC 205</td>
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<tr>
<td>MUSC 320</td>
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<td>MUSC 340</td>
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<tr>
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<td>221 Studio lessons</td>
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<tr>
<td>Ensemble</td>
<td>1</td>
<td>Ensemble</td>
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<tr>
<td>PIAN 284 (if placed, or PIAN lessons)</td>
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<td>PIAN 288 (if placed, or PIAN lessons)</td>
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<tr>
<td>COMS 130 (or any course that fulfills GE22)</td>
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<td>MATH 101 (or any course that fulfills GE12)</td>
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16

Junior

<table>
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<tr>
<th>Hours</th>
<th>Spring</th>
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<tbody>
<tr>
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<td>3</td>
<td>MTHC 433</td>
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<tr>
<td>MTHC 583</td>
<td>2</td>
<td>MTHC 442</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>3</td>
<td>MTHC 583</td>
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<tr>
<td>COND 245</td>
<td>2</td>
<td>MUSC 480</td>
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<tr>
<td>321 Studio lessons</td>
<td>1</td>
<td>321 Studio lessons</td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
<td>Ensemble</td>
</tr>
<tr>
<td>Natural Science: any course that fulfills GE3N</td>
<td>3</td>
<td>PIAN/ORGN/HPCD lessons</td>
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15

Senior

<table>
<thead>
<tr>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MTHC 471</td>
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<td>MTHC 476</td>
</tr>
<tr>
<td>MTHC 474</td>
<td>3</td>
<td>MTHC 498</td>
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Total Hours 122

Piano/Organ/Keyboard Emphasis

<table>
<thead>
<tr>
<th>Freshman</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>MTHC 105</td>
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<td>MTHC 115</td>
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<tr>
<td>MTHC 106</td>
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<td>1</td>
</tr>
<tr>
<td>REC 100</td>
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<td>REC 100</td>
<td>0</td>
</tr>
<tr>
<td>ENGL 101 (or any course that fulfills GE21)</td>
<td>3</td>
<td>ENGL 102 (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
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<td>FREN, GERM or ITAL (continue the same language)</td>
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15

Sophomore

<table>
<thead>
<tr>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 205</td>
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<td>MTHC 252</td>
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<td>MUSC 340</td>
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<tr>
<td>Ensemble</td>
<td>1</td>
<td>Ensemble</td>
</tr>
<tr>
<td>COMS 130 (or any course that fulfills GE22)</td>
<td>3</td>
<td>MATH 101 (or any course that fulfills GE12)</td>
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</table>

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Junior

<table>
<thead>
<tr>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 410</td>
<td>3</td>
<td>MTHC 433</td>
</tr>
<tr>
<td>MTHC 583</td>
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</tr>
<tr>
<td>MUSC 440</td>
<td>3</td>
<td>MTHC 583</td>
</tr>
<tr>
<td>COND 245</td>
<td>2</td>
<td>MUSC 480</td>
</tr>
<tr>
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</tr>
<tr>
<td>Ensemble</td>
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<td>Ensemble</td>
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<td>Natural Science: any course that fulfills GE3N</td>
<td>3</td>
<td>PIAN/ORGN/HPCD lessons</td>
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</table>

15

Senior

<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MTHC 471</td>
<td>3</td>
<td>MTHC 476</td>
</tr>
<tr>
<td>MTHC 474</td>
<td>3</td>
<td>MTHC 498</td>
</tr>
</tbody>
</table>
Music audition and application information is contingent upon demonstration by audition of satisfactory level proficiency. Students who wish to major in music must audition. All music students must audition for the School of Music. Students who have transferred from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

Music Theory

To graduate, the student must maintain a minimum grade-point average of 3.0 in music theory and composition courses on both the first- and second-year and the junior/senior levels.

Students majoring in music theory (B.A. or B.M.) must complete MTHC 105, MTHC 106, MTHC 115, MTHC 116, and MTHC 205 before preparing a portfolio of their work for application to the professional sequence. The earliest a student may submit a portfolio is the fourth semester. Transfer students must be in residence for at least 1 semester before they can submit a portfolio.

This portfolio must include recent work (scholarly papers for music theory), 2 letters of recommendation (1 from the student’s major instrument instructor and 1 from a MTHC professor who has had the student in a class), and a minimum grade-point average of 3.0 in MTHC courses. The student may be asked to provide a demonstration of musicality on his or her major instrument.

Portfolios are accepted once each semester for admission to the professional sequence the following semester. The portfolio is assessed is available on the School of Music website (http://music.ku.edu/admission/).

Bachelor of Music in Music Theory

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student’s knowledge, practice, and experience in music theory. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice.

With this degree, students can go on to pursue graduate studies in music, or create their own paths in music or music-related endeavors.

Instrumental Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A. & B.M.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble 1 each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information
by the MTHC faculty with one of 3 recommendations: admit, revise and resubmit next semester, or denied. Students in music theory are not allowed to enroll in MTHC 499 Senior Research Project without a favorable recommendation from the faculty.

**B.M. Degree Requirements for the Music Theory Major**

Students with a major in theory must offer in partial fulfillment of the degree requirements a senior project culminating in a scholarly paper on an approved topic (MTHC 499). MTHC 498 is not required for the B.M. in Music Theory.

The piano requirement may include the piano proficiency course sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288) and piano, organ, and/or harpsichord lessons.

A minimum of 120 hours (45 at the Jr/Sr level 300+) is required for the degree in Music Theory, distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Form and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 432</td>
<td>Introduction to the Analysis Contemporary Music</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 442</td>
<td>Modal Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 471</td>
<td>Tonal Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 474</td>
<td>Orchestration I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 476</td>
<td>Orchestration II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 477</td>
<td>Electro-Acoustic Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 499</td>
<td>Senior Research Project</td>
<td>3-4</td>
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<tr>
<td>MTHC 252</td>
<td>Introduction to Composition</td>
<td>2</td>
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<td>MTHC 253</td>
<td>Composition</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
<td>4</td>
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<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
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<td>Form and Analysis</td>
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<tr>
<td>MTHC 442</td>
<td>Modal Counterpoint</td>
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<tr>
<td>MTHC 471</td>
<td>Tonal Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 474</td>
<td>Orchestration I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 476</td>
<td>Orchestration II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 477</td>
<td>Electro-Acoustic Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 499</td>
<td>Senior Research Project</td>
<td>3-4</td>
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<tr>
<td>MTHC 252</td>
<td>Introduction to Composition</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 253</td>
<td>Composition</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
</tr>
</tbody>
</table>

**Music Theory**

**Music Composition**

- MTHC 252: Introduction to Composition
- MTHC 253: Composition

**Musicology**

- MUSC 320: Music History I
- MUSC 340: Music History II
- MUSC 440: Music History III
- MUSC 480: Music History IV

**Music Courses**

- Applied music lessons: 8 semesters for 2 credits each semester, plus senior recital
- Piano, organ, and/or harpsichord (proficiency level of PIAN 288 and lessons)
- REC 100: Laboratory in Music Performance (2 semesters required satisfactorily completed)
- COND 245 or MEMT 246: Conducting I or Fundamentals of Conducting
- Ensemble: 8 semesters for credit each semester

**Basic Courses**

- ENGL 101: Composition (or any course that fulfills GE21)
- ENGL 102: Critical Reading and Writing (or any course that fulfills GE21)
- COMS 130: Speaker-Audience Communication (or any course that fulfills GE22)
- MATH 101: College Algebra: ______ (or any course that fulfills GE12)
- FREN, GERM or ITAL: 2 semesters of same language
- Natural Science: any course that fulfills GE3N
- Social Science: any course that fulfills GE3S
- PHIL 160: Introduction to Ethics (or any course that fulfills AE51 or AE52)

**Total Hours 120-122**

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tr>
<td>MTHC 105</td>
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<td>MTHC 115</td>
<td>3</td>
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<tr>
<td>MTHC 106</td>
<td>1</td>
<td>MTHC 116</td>
<td>1</td>
</tr>
<tr>
<td>121 Studio lessons</td>
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<td>121 Studio lessons</td>
<td>2</td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>PIAN 144 (if placed, or PIAN lessons)</td>
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<td>PIAN 148 (if placed, or PIAN lessons)</td>
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</tr>
<tr>
<td>REC 100</td>
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<td>REC 100</td>
<td>0</td>
</tr>
<tr>
<td>ENGL 101 (or any course that fulfills GE21)</td>
<td>3</td>
<td>ENGL 102 (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>FREN, GERM or ITAL (2 semesters same language)</td>
<td>5</td>
<td>FREN, GERM or ITAL (continue the same language)</td>
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</table>

**Sophomore**

<table>
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<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
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<tbody>
<tr>
<td>MTHC 205</td>
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<td>MTHC 253</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 252</td>
<td>2</td>
<td>MTHC 315</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>3</td>
<td>MTHC 442</td>
<td>3</td>
</tr>
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<td>221 Studio lessons</td>
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<td>MUSC 340</td>
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<tr>
<td>Ensemble</td>
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<td>PIAN 284 (or lessons)</td>
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<td>Ensemble</td>
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<tr>
<td>MATH 101 (or any course that fulfills GE12)</td>
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<td>MATH 288 (or lessons)</td>
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</table>

**Junior**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MTHC 410</td>
<td>3</td>
<td>MUSC 480</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 432</td>
<td>3</td>
<td>321 Studio lessons</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>3</td>
<td>Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>321 Studio lessons</td>
<td>2</td>
<td>PIAN/ORGN/HPCD lessons (only if not a pianist or organist)</td>
<td>2</td>
</tr>
<tr>
<td>Ensemble</td>
<td>1</td>
<td>COMS 130 (or any course that fulfills GE22)</td>
<td>3</td>
</tr>
<tr>
<td>COND 245 or MEMT 246</td>
<td>1-2</td>
<td>Natural Science: any course that fulfills GE3N</td>
<td>3</td>
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**Total Hours 13-14**
Senior
Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours Spring</th>
<th>Hours</th>
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<tr>
<td>MTHC 471</td>
<td>3 MTHC 476</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 474</td>
<td>3 MTHC 499</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 477</td>
<td>3 422 Studio lessons/senior recital</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 499</td>
<td>1-2 Ensemble</td>
<td>1</td>
</tr>
<tr>
<td>421 Studio lessons</td>
<td>2 Social Science: any course that fulfills GE3S</td>
<td>3</td>
</tr>
<tr>
<td>Ensemble</td>
<td>1 Ethics: any course that fulfills AE51 or AE52</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 120-122

Bachelor of Music in Music Therapy

Music Therapy

The program helps students develop competence for entry into the music therapy profession. The interdisciplinary curriculum emphasizes understanding of human behavior, musical and otherwise. It includes extensive work in music, behavioral science, biological science, and liberal arts, in addition to specific academic, clinical, and research studies in music therapy.

Music Therapy Program

The undergraduate music therapy program provides full preparation for entry into the profession. It culminates in the degree of Bachelor of Music with a major in music therapy. Graduates are prepared for general music therapy practice in a variety of settings, which may include, but are not limited to hospitals, schools, community health programs, wellness centers, and private and group settings across the age span. The KU music therapy program is approved by the American Music Therapy Association. Individuals who complete the program are eligible to take the national music therapy board certification examination. The music therapy major does not lead to licensure to teach music in public schools.

Advising

Students admitted to the music therapy program will be assigned an appropriate academic faculty advisor to work with the student throughout their academic career. Students are expected to consult with their advisor each semester to plan enrollment for the next semester. The advisor is available to help, to suggest ways to avoid course conflicts, to recommend courses particularly beneficial for various emphases, and to offer career guidance. The responsibility for taking appropriate courses and for meeting other requirements rests upon the student. Information regarding all requirements is in writing and available to students. Lack of knowledge of any requirement does not free the student from meeting that requirement. All students must sign up for a graduation check with the School of Music Student Services Office in 450 Murphy Hall one year prior to their graduation date.

Regardless of applied performance medium, each entering student should be able to sing independently, in tune, and with acceptable tone quality. Functional keyboard skills (accompanying, playing by ear, improvising, and transposing) are helpful. Experience working with others is also beneficial as well. Well-developed interpersonal skills are an asset.

Students are strongly encouraged to read the Music Therapy Undergraduate Program Handbook, which is available on the School of Music website (https://music.ku.edu/undergraduate-music-therapy-bm-handbook/) and from the Student Services Office, 450 Murphy Hall, and provides detailed procedures, suggestions, and specifications.

Admission

Students must meet or exceed the School of Music academic admission requirements and successfully complete a major performance medium audition to be admitted. Students should declare the B.M. in music therapy as the major on the KU application for admission. Music therapy majors are in plan MTP-BM in the School of Music.

Students pursuing the B.M. in music therapy degree should apply for admission to the professional sequence upon completion of the second semester of the sophomore year with 50 or more KU hours. Transfer students with more than 45 hours of transfer credit must complete this application the first semester of classes at KU. Students may not enroll in courses in the professional sequence before formal approval by the director of music therapy. Music therapy majors who have been admitted to the professional sequence are in plan MTPPS-BM in the School of Music.

Students must be admitted to the music therapy professional sequence to enroll in upper-division music therapy courses. See the Music Therapy Undergraduate Program Handbook (https://music.ku.edu/undergraduate-music-therapy-bm-handbook/) for details.

Candidates are reviewed for admission periodically. No student may be admitted to the professional sequence for a semester during which he or she will be on academic probation. The application form for music therapy professional sequence admission is distributed to students prior to their time to apply. Information about the application process may be found on the KU School of Music website (https://music.ku.edu/music-therapy-professional-sequence/).

Instrumental Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A., B.M., and B.M.E.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform assigned as in assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

Students pursuing the B.M. in music therapy degree should apply for admission to the School of Music website (https://music.ku.edu/undergraduate-music-therapy-bm-handbook/) for details.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://
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**Transfer Students**

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

**Keyboard Skills Placement Examination:**

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

**Requirements for the B.M. with a Major in Music Therapy**

The degree requires a minimum of 120 semester hours of credit (including 45 at the Junior/Senior 300+ level) appropriately distributed among general studies, the major, and supporting music areas and behavioral sciences. With careful planning, the program can be completed in about 4½ years. Four academic years of study and clinical work on campus are followed by a full-time, 6-month internship in an approved clinical institution.

The degree requires at least a 3.00 cumulative grade-point average in all course work and a minimum of 3.00 in all MEMT courses. All music therapy majors must demonstrate proficiency in the major applied performance medium and in other performance areas.

All students must demonstrate functional vocal skills and ability to perform accompaniments on a portable chordal instrument, such as accordion, autoharp, guitar, or electric piano. These skills are assessed periodically throughout the program.

**General Education Requirements (31 hours)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (or other approved options: ENGL 105, ENGL 203, ENGL 205, ENGL 209, ENGL 210, ENGL 211.)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or THR 120 Public Speaking as Performance</td>
<td></td>
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</tbody>
</table>

**Behavioral Sciences**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 350</td>
<td>Psychological Disorders</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Behavioral science electives (6 semester credit hours chosen with consent of advisor from fields such as psychology, sociology, anthropology, special education, human development, speech and audiology, motor/psychomotor development and behavior, educational psychology). One of the two Behavioral Science electives must be a Social Awareness course to fulfill requirements for Service Learning Certification.</td>
<td>6</td>
</tr>
</tbody>
</table>

**Biological Sciences and Mathematics**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (or higher)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100</td>
<td>Principles of Biology</td>
<td>3</td>
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<td>BIOL 102</td>
<td>Principles of Biology Laboratory</td>
<td>1</td>
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<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Performance Requirements (28-31 hours)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>121</td>
<td>122 Applied music lessons (2 semesters)</td>
<td>4</td>
</tr>
<tr>
<td>321</td>
<td>Applied music lessons (2 semesters)</td>
<td>4</td>
</tr>
<tr>
<td>422</td>
<td>Applied music lessons (Senior Recital) (1 semester)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Ensemble: Band, Orchestra, Chorus, etc.**

7 semesters of participation for 7 credits total, including experience in small ensembles. 5 should be large ensembles.

**Piano Skills**

An audition is required. If skills are insufficient, remedial course work is necessary. Students with a major performance medium of piano or organ take only PIAN 310.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIAN 144</td>
<td>Elementary Keyboard Skills I</td>
<td></td>
</tr>
<tr>
<td>PIAN 148</td>
<td>Elementary Keyboard Skills II</td>
<td></td>
</tr>
<tr>
<td>PIAN 284</td>
<td>Intermediate Keyboard Skills I</td>
<td></td>
</tr>
<tr>
<td>PIAN 288</td>
<td>Intermediate Keyboard Skills II</td>
<td></td>
</tr>
<tr>
<td>PIAN 310</td>
<td>Advanced Keyboard Skills</td>
<td></td>
</tr>
</tbody>
</table>

**Performance Techniques**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 115</td>
<td>Performance Media: Percussion</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 119</td>
<td>Performance Media: Guitar</td>
<td>1</td>
</tr>
</tbody>
</table>

admissions.ku.edu/'). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.
MEMT 117  Performance Media: Voice  1
or MEMT 120  Vocal Performance in English

Conducting/Rehearsing Skills
MEMT 246  Fundamentals of Conducting  1
MEMT 338  Rehearsal/Conducting Clinic: Non-traditional Ensemble  1

Musicianship and Music Therapy Requirements (61 hours)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 150</td>
<td>Introduction to Music Therapy</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 196</td>
<td>Group Leadership Skills in Music Therapy</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 250</td>
<td>Human Musical Learning and Development</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 251</td>
<td>Clinical Techniques for Children</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 296</td>
<td>Clinical Techniques for Adults</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 455</td>
<td>Psychology of Music</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 463</td>
<td>The Influence of Music on Behavior I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 464</td>
<td>Music in Therapy</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 586</td>
<td>Seminar in Music Therapy Professional Development I</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEMT 587</td>
<td>Seminar in Music Therapy Professional Development II</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEMT Clinical Experience (8 hours minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 396</td>
</tr>
<tr>
<td>MEMT 596</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music Theory and Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
</tr>
<tr>
<td>MTHC 106</td>
</tr>
<tr>
<td>MTHC 115</td>
</tr>
<tr>
<td>MTHC 116</td>
</tr>
<tr>
<td>MTHC 205</td>
</tr>
<tr>
<td>MTHC 315</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recital Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC 100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Musicology and Music Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
</tr>
<tr>
<td>MUSC 440</td>
</tr>
<tr>
<td>MUSC 480</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music Electives (Level 300 and above needed to meet Jr/Sr graduation requirement.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music electives</td>
</tr>
</tbody>
</table>

**Freshman**

**Fall**

- MEMT 150 (F)  3 MEMT 196 (S)  2
- MEMT 115 (B)  1 MEMT 250 (S)  2
- MEMT 117 (F) or  1 MEMT 119 (B)  1
- MEMT 120 (F)  1 MTHC 115 (S)  3
- MTHC 105 (F)  3 MTHC 116 (S)  1
- MTHC 106 (F)  1 121 Studio lessons  2
- 121 Studio lessons  2 Ensemble  1
- Ensemble  1 REC 100  0
- REC 100  0 PIAN 148 (S)  1
- PIAN 144 (if needed) (F)  1 ENGL 102 (or other approved options: ENGL 105, ENGL 203, ENGL 205, ENGL 209, ENGL 210, ENGL 211. (B)  3
- ENGL 101 (B)  3
- Total Hours 32

**Sophomore**

**Fall**

- MEMT 251 (F)  3 MTHC 296 (S)  3
- MEMT 246 (B)  1 MTHC 315 (S)  4
- MTHC 205 (F)  4 PIAN 288 (S)  2
- PIAN 284 or 310 (310 only for piano or organ applied students) (F)  2
- 221 Studio lessons  2 Ensemble  1
- Ensemble  1 MATH 101  3
- Total Hours 31

**Music Therapy 4.5 Year Plan**

Students with no prior piano experience should take the keyboard skills sequence (PIAN 144 - PIAN 288). Demonstration of skills is needed to pass/test out of PIAN 144 - PIAN 288. Students whose major performance medium is piano or organ should take PIAN 310 after completing two semesters of music theory (this course is only taken once in the fall term of the sophomore year).

**Professional Sequence**

**Professional Sequence Admission Requirements**

Students should apply for admission to the Professional Sequence as early as possible and must be admitted before beginning the first semester of the junior year. Admission requirements:
1. Cumulative grade-point average of 3.0 or higher.
2. Grade-point average of 3.0 or higher in MEMT courses.
3. A grade of C or higher in each of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 150</td>
<td>Introduction to Music Therapy</td>
<td>3</td>
</tr>
<tr>
<td>MEMT 196</td>
<td>Group Leadership Skills in Music Therapy</td>
<td>2</td>
</tr>
<tr>
<td>MEMT 250</td>
<td>Human Musical Learning and Development</td>
<td>2</td>
</tr>
<tr>
<td>MEMT 251</td>
<td>Clinical Techniques for Children</td>
<td>3</td>
</tr>
<tr>
<td>MEMT 296</td>
<td>Clinical Techniques for Adults</td>
<td>3</td>
</tr>
</tbody>
</table>

4. At least 50 hours of college credit.
5. A signed applied music recommendation form verifying successful completion of the first semester of sophomore-level lessons.
6. Successful completion of the application form.

• Students must successfully complete Clinical Practicum Musicianship Assessment before entering their second MEMT 396 Clinical Practicum. This assessment is addressed across MEMT 251 and 296.

### Junior

#### Fall

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 396</td>
<td>(4 semesters total)</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 463</td>
<td>(F)</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>321 Studio lessons</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>(F)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 102</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>BIOL 100</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Music Elective (4 credits total)</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

#### Total Hours 30

1 Students must achieve admission to the music therapy professional sequence prior to enrolling in these courses.
2 Music Theory I and II and Aural Skills I and II should be taken before Music History I or higher.

• Students must apply for their internship 1 year in advance of completion of academic work. Check the Music Therapy undergraduate handbook for information on this procedure. Students must complete the Internship Eligibility Application during MEMT 586.
• Students must successfully complete the Internship Pre-Assessment as part of MEMT 586 and before entering their final MEMT 396 Clinical Practicum.

### Senior

#### Fall

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 396</td>
<td>(4 semesters total)</td>
<td>2</td>
</tr>
<tr>
<td>MEMT 455</td>
<td>(F)</td>
<td>1</td>
</tr>
<tr>
<td>MEMT 586</td>
<td>(F)</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ensemble</th>
<th>1 Behavioral science elective</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>422 Studio lessons</td>
<td>Music elective (4 credits total)</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 350</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

#### Total Hours 29

1 Students must achieve admission to the music therapy professional sequence prior to enrolling in these courses.

• All MEMT professional courses as noted on the undergraduate music therapy degree requirement check sheet must be completed with a C or higher prior to beginning internship.
• Students must pass all Clinical Musicianship and Internship Assessments and Musicianship Portfolio.
• Students must request a graduation check from the School of Music Student Services Office approximately 1 year before the estimated internship date. Graduation checks before that time should occur with the student’s MEMT advisor.
• Upon acceptance to an internship site students must complete and turn in the Music Therapy Internship Information sheet to the Student Services office.
• Students must do the following in the final semester before leaving for internship:
  • review degree requirement check sheet to see that they have met all graduation requirements
  • submit an application for graduation online through Enroll and Pay
  • successfully complete the major applied instrument (422 Lessons with Senior Recital) including the senior half-recital

#### Year 5

<table>
<thead>
<tr>
<th>Code</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 596</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Total Hours 2

1 Students must achieve admission to the music therapy professional sequence prior to enrolling in these courses.

### Bachelor of Music in Organ and Church Music

A total of 124 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student’s knowledge, practice, and experience of organ and church music. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In
addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/); Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

B.M. Degree Requirements for the Organ and Church Music Major

A total of 124 hours (45 at the Jr/Sr level 300+) is required for the degree in Organ and Church Music, distributed as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 205</td>
<td>Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
<td>4</td>
</tr>
<tr>
<td>MTHC 410</td>
<td>Form and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 471</td>
<td>Tonal Counterpoint</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Music Courses

Applied music lessons: 8 semesters each for 3 credits, plus junior and senior recitals

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COND 245</td>
<td>Conducting I</td>
<td>2</td>
</tr>
<tr>
<td>COND 345</td>
<td>Conducting II</td>
<td>2</td>
</tr>
<tr>
<td>PIAN100/300</td>
<td>Piano lessons (2 to 4 semesters)</td>
<td>4</td>
</tr>
<tr>
<td>VOIC100/300</td>
<td>Voice lessons (1 to 2 semesters)</td>
<td>2</td>
</tr>
<tr>
<td>REC 100</td>
<td>Laboratory in Music Performance (2 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>PIAN 284</td>
<td>Piano (proficiency level)</td>
<td>8</td>
</tr>
<tr>
<td>CHUR 422</td>
<td>Ensembles: 8 semesters each for credit and 4 of the 8 must be</td>
<td>0</td>
</tr>
<tr>
<td>ORGN 320, ORGN 402 and CHUR 320</td>
<td>(8 semesters of each for 0 credit)</td>
<td>4</td>
</tr>
</tbody>
</table>

Basic Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (or any course that fulfills GE21)</td>
<td>3</td>
</tr>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication (or any course that fulfills GE22)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (or any course that fulfills GE12)</td>
<td>3</td>
</tr>
<tr>
<td>HUM 204</td>
<td>Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HUM 205</td>
<td>Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>FREN or GERM (2 semesters of same language)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Natural Science: any course that fulfills GE3N</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social Science: any course that fulfills GE3S</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Ethics: any course that fulfills AE51 or AE52</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Music in Piano

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School’s undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of International Admissions (https://admissions.ku.edu/apply/) for information about international admissions.

Please note: All B.M. organ and church music majors must enroll in ORGN 320 Studio Class in Organ — Lab and ORGN 402 Master Class in Organ — Lab and CHUR 320 Church Music Practicum — Lab each semester of residence.

### Bachelor of Music in Piano

A total of 120 credit hours (45 at the Jr/Sr level 300+) is required and is designed to further the student’s knowledge, practice, and experience of piano. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

### Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

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**Keyboard Skills Placement Examination:**

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284, PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

**B.M. Degree Requirements for the Piano Major**

A total of 120 hours (45 at the Jr/Sr level 300+) is required, distributed as follows:

<table>
<thead>
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<td>MTHC 105</td>
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<td>MTHC 106</td>
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<td>Theory III</td>
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<td>MTHC 315</td>
<td>Theory IV</td>
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<td>Form and Analysis</td>
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<tr>
<td>MTHC 471</td>
<td>Tonal Counterpoint</td>
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<td>MUSC 320</td>
<td>Music History I</td>
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<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
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<tr>
<td>MUSC 440</td>
<td>Music History III</td>
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</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
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</tbody>
</table>

**Music Theory**

- PIAN 216/336 Chamber music: 2 semesters each for credit (2)
- REC 100 Laboratory in Music Performance (2 semesters) (0)
- COND 245 Conducting I (2)
- Ensembles: 4 semesters each for credit (4)

**Music electives**

- PIAN 447 Contemporary Piano Literature (3)
- PIAN 448 The Contemporary Pianist (3)

**Basic Courses**

- ENGL 101 Composition (or any course that fulfills GE21) (3)
- ENGL 102 Critical Reading and Writing (or any course that fulfills GE21) (3)
- COMS 130 Speaker-Audience Communication (or any course that fulfills GE22) (3)

**Foreign language:** 2 semesters of same language (10)
- MATH 101 College Algebra: _____ (or any course that fulfills GE12) (3)

**Natural Science:** any course that fulfills GE3N (3)
- Social Science: any course that fulfills GE3S (3)
- Ethics: any course that fulfills AE51 or AE52 (3)

**Total Hours 122**

**Freshman**

<table>
<thead>
<tr>
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<th>Spring</th>
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<td>Ensemble</td>
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<td>PIAN 229</td>
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<td>REC 100</td>
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<tr>
<td>ENGL 101</td>
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<td>ENGL 102</td>
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<td>(or any course that fulfills GE21)</td>
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<tr>
<td>Foreign Language (2 semesters of same language)</td>
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**Sophomore**

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<td>MTHC 315</td>
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<td>MUSC 320</td>
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<td>MUSC 340</td>
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</tr>
<tr>
<td>PIAN 221</td>
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<td>PIAN 221</td>
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<td>1</td>
</tr>
<tr>
<td>PIAN 229</td>
<td>1</td>
<td>PIAN 444</td>
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<tr>
<td>PIAN 310</td>
<td>2</td>
<td>MATH 101</td>
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</tr>
<tr>
<td>(or any course that fulfills GE12)</td>
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<td></td>
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</tr>
<tr>
<td>PIAN 443</td>
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**Junior**

<table>
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<tr>
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<td>MUSC 440</td>
<td>3</td>
<td>PIAN 622</td>
<td>3</td>
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<td>PIAN 622</td>
<td>3</td>
<td>PIAN 448</td>
<td>1-3</td>
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<tr>
<td>PIAN 447</td>
<td>3</td>
<td>COMS 130</td>
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<tr>
<td>(or any course that fulfills GE22)</td>
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</tbody>
</table>
Bachelor of Music in Voice

The Division of Voice offers the Bachelor of Music for singers interested in art song, opera, oratorio, concert, other classical pieces or vocal teaching. Students receive training in vocal technique, languages and diction, vocal repertoire, acting and the theatrical arts. Performance opportunities range from workshops to fully staged productions, allowing students to develop their talents at the most beneficial pace.

A total of 124 (45 at the Jr/Sr level 300+) credit hours is required and is designed to further the student's knowledge, practice, and experience in voice. To graduate, a student must earn a minimum grade-point average of 3.0 in all major courses and a minimum average of 2.0 in all course work.

Students will study with faculty members who are nationally and internationally recognized. Courses in music theory and musicology are part of the exploration of music as are private instruction, ensemble and chamber music opportunities. All students pursuing the B.M. degree will perform a senior recital on their primary instrument/voice. In addition, performance majors will also complete a junior recital and music composition majors will also give a music composition recital.

With this degree, students can go on to pursue graduate studies in music, establish private studios, audition for music ensembles, or create their own paths in music or music-related endeavors.

Undergraduate Admission to the School of Music

First-year students should enter the school directly. Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale) and are eligible to return to the college or university last attended in addition to completing a successful audition. Other students can be admitted only with the permission of the dean. Send applications to the Office of Admissions (http://admissions.ku.edu/). Visit the Office of International Admissions (https://world.ku.edu/apply/) for information about international admissions.

Students who wish to major in music must audition. All music students academically approved for admission to the School of Music are admitted contingent upon demonstration by audition of satisfactory level proficiency in their areas of applied music. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Transfer Students

Students may transfer to the school from other institutions or from other KU schools if they have at least a 2.75 GPA (on a 4.0 scale), are eligible to return to the college or university last attended, and complete a successful audition. Only grades of C or higher are accepted in transfer credit toward degrees offered by the School of Music. Students who wish to transfer performance credit from another institution toward any music degree at KU must validate this credit by audition. Music audition and application information is available on the School of Music website (http://music.ku.edu/admission/). There is a limit of two times a prospective student may request an audition for entrance into one of the School's undergraduate degree programs. The second request must be within 12 months of the first and may be as early as 1 month following the first audition. The limitation also applies to students within the School auditioning from one program into another.

Keyboard Skills Placement Examination:

If a student has a background in piano playing, they may choose to take one or more Piano Quiz-Out tests. Successfully passing a Quiz-Out will exempt a student from having to take a particular class in the PIAN sequence (PIAN 144, PIAN 148, PIAN 284), and PIAN 288, and PIAN 310). Students should check with their advisor about how this will impact their particular degree requirements.

Freshmen and transfer students with no previous piano study experience should enroll in PIAN 144. No examination or permission number is necessary. Students should check with their advisor about their particular degree requirements.

More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

B.M. Degree Requirements for the Voice Major

A total of 124 hours (45 at the Jr/Sr level 300+) is required, distributed as follows:

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<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
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<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>1</td>
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<td>MTHC 115</td>
<td>Theory II</td>
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<td>MTHC 116</td>
<td>Aural Skills II</td>
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<td>MTHC 205</td>
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<td>MTHC 315</td>
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<td>MTHC 410</td>
<td>Form and Analysis</td>
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<td>MUSC 320</td>
<td>Music History I</td>
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<tr>
<td>MUSC 440</td>
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<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
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</table>
Music Courses

VOIC 120 Vocal Performance in English 2
& VOIC 320 and Vocal Performance Class II

Applied music lessons: 8 semesters each for 3 credits, plus junior and senior recitals

VOIC 405 Vocal Literature I 2
VOIC 406 Vocal Literature II 2
VOIC 408 Vocal Pedagogy 1
Ensembles: 8 semesters each for credit 8

PIAN 284 (if needed) 2

Ensemble

Fall

GERM 104 or ITAL 110 3

MTHC 205 3
VOIC 320 3
MUSC 320 3
PIAN 284 (if needed) 3
COMS 130 (or any course that fulfills GE22) 3

Spring

MUSC 440 3
VOIC 622 3
Ensemble 1
VOIC 320 1

Total Hours 122-126

Bachelor of Music Education in Music Education

Music Education

The program helps students develop specific skills in planning and delivering instruction in all types of music education classrooms. The curriculum emphasizes both the theoretical and practical elements of human behavior, musical and otherwise, and integrates with this core a variety of learning experiences that prepare the pre-service teacher for the classroom medium. Among these is a broad spectrum of learning experiences both at KU and in area classrooms. These include planning and delivering instruction, classroom management, conducting, assessment, and curriculum design. Within the curriculum, individual emphases are reflected in the choice of major performance medium and performance ensembles. The goal of the music education curriculum is to prepare the student for success in the profession.

Advising

Students admitted to the music education program will be assigned an appropriate academic faculty advisor to work with the student throughout their academic career. Students are expected to consult with their advisor each semester to plan enrollment for the next semester. The advisor is available to help, to suggest ways to avoid course conflicts, to recommend courses particularly beneficial for various emphases, and to offer career guidance. The responsibility for taking appropriate courses and for meeting other requirements rests upon the student. Information regarding all requirements is in writing and available to students. Lack of knowledge of any requirement does not free the student from meeting that requirement. All students must sign up for a graduation check with the
School of Music Student Services Office in 450 Murphy Hall one year prior to their graduation date.

Regardless of applied performance medium, each entering student should be able to sing independently, in tune, and with acceptable tone quality. Functional keyboard skills (accompanying, playing by ear, improvising, and transposing) are helpful. Experience working with others is also beneficial as well. Well-developed interpersonal skills are an asset.

Students are strongly encouraged to read the B.M.E. handbook, which is available on the School of Music website (http://music.ku.edu/) and from the Student Services Office, 450 Murphy Hall, and provides detailed procedures, suggestions, and specifications.

Music Education Program

This program provides full preparation for entry into the profession. It leads to the Bachelor of Music Education and eligibility for licensure to teach vocal, instrumental, and general music in grades pre-K through 12 in the state of Kansas. The program typically requires eight semesters of full-time work, which includes a semester of student teaching and internship in the public schools.

Music Teacher Licensure Program

Teacher licensure in Kansas is a function of the Kansas State Board of Education. Individuals who complete an approved music teacher licensure program are recommended to the state for licensure in music for grades pre-K through 12. Students must meet additional state requirements, such as passing specified standardized tests, before licenses are granted. Contact the Student Services Office, 450 Murphy Hall, for information.

Admission

Students must meet or exceed the School of Music academic admission requirements and successfully complete a major performance medium audition to be admitted. Students should declare the B.M.E. as their major on the KU application for admission. Music education majors are in plan ME-BME in the School of Music.

Students pursuing the B.M.E. must apply for admission to the professional sequence by the first Monday in February of the sophomore year. Transfer students with more than 45 hours of transfer credit must complete this application the first semester of classes at KU. Students may not enroll in courses in the professional sequence before formal approval by the director of music education. Music education majors who have been admitted to the professional sequence are in plan MEPS-BME in the School of Music.

Students must be admitted to the music education professional sequence to enroll in upper-division music education courses. See the Music Education Undergraduate Program Handbook (https://music.ku.edu/undergraduate-bme-handbook/) for details.

No student may be admitted to the music education professional sequence for a semester during which he or she is on academic probation. The application form for music education professional sequence admission is distributed to students prior to their time to apply. Information about the application process may be found on the KU School of Music website (https://music.ku.edu/music-education-professional-sequence/).

Instrumental Ensemble Policy

In order to remain enrolled in studio instruction (lessons), all undergraduate (B.A., B.M., and B.M.E.) and M.M. students who enroll in any level of studio instruction (including nonmajor levels) in band and orchestral instruments must audition for and perform as assigned in a major instrumental ensemble each semester in which they are enrolled. For music majors, 1 ensemble taken for credit each semester is required for graduation. Exceptions to this policy are allowed on a case-by-case basis and only by the ensemble conductor in consultation with the faculty member in the studio area or the faculty advisor in music therapy as appropriate.

1 Symphony Orchestra, Wind Ensemble, Symphonic Band, Marching Band, or Jazz Ensemble I. University Band or University Orchestra if placed by audition.

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More information about the Keyboard Skills Placement Examination including deadlines is available on the School of Music website (https://music.ku.edu/entrance-exams/).

The Music Education Teacher Licensure Curriculum

The B.M.E. degree requires a minimum of 120 semester credit hours (including 45 at the Junior/Senior 300+ level) distributed among general studies, the major, professional education class work, and student teaching and internship. The degree requires at least a 3.00 cumulative grade-point average in all course work. Each student must participate in appropriate performing ensembles and demonstrate proficiency in a major applied performance medium and in other performance areas.

### General Education Requirements (28 hours)

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tr>
<td>ENGL 101</td>
<td>Composition</td>
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<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing (or other approved options: ENGL 105, ENGL 203, ENGL 205, ENGL 209, ENGL 210, ENGL 211.)</td>
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<td>PSYC 104</td>
<td>General Psychology</td>
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<td>College of Lib Arts &amp; Sciences - elective (SOC/ANTH elective recommended)</td>
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<td>College of Lib Arts &amp; Sciences - elective</td>
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<td>BIOL 100</td>
<td>Principles of Biology</td>
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<td>MATH 101</td>
<td>College Algebra: ______</td>
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<td>PHIL 160</td>
<td>Introduction to Ethics recommended or any course that fulfills Goal 5: AE51 or AE52</td>
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### Performance Requirements (36-39 hours)

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<td>MENT 250</td>
<td>Human Musical Learning and Development</td>
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<td>SPED 326</td>
<td>Teaching Exceptional Children and Youth in General Education</td>
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<td>C&amp;T 359</td>
<td>Literacy in the Content Areas</td>
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<td>MENT 407</td>
<td>The Exceptional Child in Music Education</td>
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<td>MENT 420</td>
<td>Teaching Elementary and Secondary General Music</td>
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<td>MENT 450</td>
<td>Teaching Choral Music</td>
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<tr>
<td>MENT 451</td>
<td>Teaching Instrumental Music</td>
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<td>MENT 455</td>
<td>Psychology of Music</td>
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<td>MENT 421</td>
<td>Advanced General Music Teaching</td>
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<td>MENT 431</td>
<td>Choral Diction for Music Educators</td>
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<tr>
<td>MENT 432</td>
<td>Approaches to String Pedagogy</td>
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<tr>
<td>MENT 435</td>
<td>Marching Band Techniques</td>
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<tr>
<td>MENT 117</td>
<td>Performance Media: Voice (non-VOIC Emphasis )</td>
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<td>MENT 119</td>
<td>Performance Media: Guitar</td>
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<tr>
<td>MENT 314</td>
<td>Performance Media: Woodwinds II</td>
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<td>MENT 338</td>
<td>Rehearsal/Conducting Clinic: Non-traditional Ensemble</td>
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<td>MENT 419</td>
<td>Technology in Music Education</td>
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<td>MENT 433</td>
<td>Jazz Techniques</td>
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<tr>
<td>MENT 456</td>
<td>Psychology of Music</td>
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<tr>
<td>MENT 457</td>
<td>Performance Media: Brass</td>
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<tr>
<td>MENT 458</td>
<td>Vocal Pedagogy</td>
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### Professional Education/Music Education (22 hours)

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<tr>
<td>MENT 113</td>
<td>Performance Media: Brass</td>
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<tr>
<td>MENT 114</td>
<td>Performance Media: Woodwinds I</td>
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<td>MENT 115</td>
<td>Performance Media: Percussion</td>
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<tr>
<td>MENT 118</td>
<td>Performance Media: Strings</td>
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<tr>
<td>MENT 408</td>
<td>Vocal Pedagogy</td>
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### Conducting/Rehearsal Skills

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>MENT 230</td>
<td>Performance Clinic: Band</td>
<td>1</td>
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<tr>
<td>MENT 231</td>
<td>Performance Clinic: Choral</td>
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</tr>
<tr>
<td>MENT 232</td>
<td>Performance Clinic: Orchestra</td>
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</table>
MEMT 246  Fundamentals of Conducting  1
MEMT 330  Rehearsal/Conducting Clinic: Band  1
MEMT 331  Rehearsal/Conducting Clinic: Choral  1
MEMT 332  Rehearsal/Conducting Clinic: Orchestra  1
Select one of the following:  1
MEMT 350  Advanced Rehearsal/Conducting Clinic: Band
MEMT 351  Advanced Rehearsal/Conducting Clinic: Choral
MEMT 352  Advanced Rehearsal/Conducting Clinic: Orchestra

Basic Musicianship Requirements (28 hours)

<table>
<thead>
<tr>
<th>Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
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<td>MTHC 106</td>
<td>Aural Skills I</td>
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<td>MTHC 116</td>
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<tr>
<td>MTHC 205</td>
<td>Theory III</td>
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</tr>
<tr>
<td>MTHC 315</td>
<td>Theory IV</td>
<td>4</td>
</tr>
</tbody>
</table>

Musicology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 320</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Music History III</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Music History IV</td>
<td>3</td>
</tr>
</tbody>
</table>

Recital Attendance

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC 100</td>
<td>Laboratory in Music Performance (2 semesters)</td>
<td>0</td>
</tr>
</tbody>
</table>

Music Education 4 Year Plan

Music Education majors are strongly encouraged to adhere to this sequence of courses.

Students with no prior piano experience should take the keyboard skills sequence (PIAN 144-PIAN 288). Demonstration of skills is needed to pass or test out of PIAN 144-PIAN 288. Students whose major performance medium is piano or organ should take PIAN 310 after completing 2 semesters of music theory (this course is only taken once in the fall term of the sophomore year).

- F = Fall only
- S = Spring only

Freshman

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>(F)</td>
<td>3</td>
<td>MTHC 115</td>
<td>(S)</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>(F)</td>
<td>1</td>
<td>MTHC 116</td>
<td>(S)</td>
</tr>
<tr>
<td>MEMT 160</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>121 Studio lessons</td>
<td>(F)</td>
</tr>
<tr>
<td>MEMT 113</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>Ensemble</td>
<td>(F)</td>
</tr>
<tr>
<td>MEMT 111</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>1 REC 100</td>
<td>(F)</td>
</tr>
<tr>
<td>121 Studio lessons</td>
<td>(F)</td>
<td>2</td>
<td>PIAN 148</td>
<td>(S)</td>
<td>1</td>
</tr>
<tr>
<td>Ensemble</td>
<td>(F)</td>
<td>1</td>
<td>ENGL 102 (or other approved options: ENGL 105, ENGL 203, ENGL 205, ENGL 209, ENGL 210, ENGL 211)</td>
<td>(F)</td>
<td>3</td>
</tr>
</tbody>
</table>

Sophomore

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 205</td>
<td>Theory I</td>
<td>(F)</td>
<td>4</td>
<td>MTHC 315</td>
</tr>
<tr>
<td>MEMT 114</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>MEMT 115</td>
</tr>
<tr>
<td>MEMT 230</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>MEMT 230</td>
</tr>
<tr>
<td>MEMT 231</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>MEMT 231</td>
</tr>
<tr>
<td>MUSC 320</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>MEMT 246</td>
</tr>
<tr>
<td>MUSC 340</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>PIAN 288</td>
</tr>
<tr>
<td>MUSC 440</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>121 Studio lessons</td>
</tr>
<tr>
<td>MUSC 480</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>Ensemble</td>
</tr>
<tr>
<td>PSYC 104</td>
<td>Theory I</td>
<td>(F)</td>
<td>1</td>
<td>MUSC 340</td>
</tr>
</tbody>
</table>

Total Hours 69

1. Courses must be completed before admission to the Music Education Professional Sequence.
2. Music Theory I and II and Aural Skills I & II should be taken before Music History I or higher.
3. Students must apply for admission to the Music Education Professional Sequence by the first Monday in February of the sophomore year.

Professional Sequence Admission Requirements

1. Cumulative grade-point average of 3.00 or higher.
2. Grades of C or higher in MATH 101 and 6 hours of English as listed on the application.
3. Satisfactory completion of "Criteria for Admission" courses as shown in the Application for Music Education Professional Sequence Admission.
4. The student must write and attach a one-page essay (12-point font, double-spaced) to the application form that answers the following question: As a music educator in your first year of teaching, reflect on how your music program could impact the community-at-large.
5. A fully completed application form and associated documents must be submitted to Dr. Jacob Dakon at j710d307@ku.edu via email attachment.
Transfer students with more than 45 hours of transfer credit must complete the professional sequence application during the first semester of classes at KU.

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours Spring</th>
<th>Hours</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEMT 330 (F)</td>
<td>1 MMENT 331</td>
<td></td>
<td>MEMT 332 (F)</td>
</tr>
<tr>
<td>MEMT - Elective (check deg req sheet) select either fall or spring.</td>
<td>1 Select either MMENT 350 or MMENT 431 or both MMENT 352 and MMENT 432</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>MMENT 408</td>
<td>1 MMENT 350 (Wind and Percussion) (S)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ensemble</td>
<td>1 MMENT 431 (Choral) (S)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>321 Studio lessons</td>
<td>2 MMENT 352 (Strings) (S)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MMENT 440 (F)</td>
<td>3 MMENT 432 (Strings) (S)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BIOL 100</td>
<td>3 MMENT 420 (S)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 102</td>
<td>1 Ensemble</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SPED 326</td>
<td>3 321 Studio lessons</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>MUSC 480 (S)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSC 495 (S)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 160</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Hours 22-28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students must achieve admission to the Music Education Professional Sequence prior to enrolling in these courses.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students must do the following during the final semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– register to take the PLT (Principles of Learning and Teaching) test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– register to take the Praxis II Music Content test during the final semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– check their degree requirement check sheet to see that they have met all of the graduation requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLT and Praxis II Exams required for licensure, not for graduation. Required scores: PLT Exam 160 minimum, Praxis II Music Exam 152 minimum.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students must do the following before graduation:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– submit an application for graduation online through Enroll and Pay at the beginning of their last semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– successfully complete their major applied instrument (422) including the senior half recital</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Minor in Music**

**The School of Music**

The School of Music at the University of Kansas ranks among the finest in America, offering comprehensive programs at the bachelor's, master's, and doctoral levels.

The school nurtures and advances the art of music through creation, performance, scholarly inquiry, entrepreneurship, and enhancement of the artistic skills and experiences of the university and regional cultural communities.

The school is a major contributor to the arts community through the student, faculty, and professional performances in Swarthout Recital Hall, Bales Organ Recital Hall, the Robert Baustian Theatre, and the Lied Center of Kansas.

The School of Music is an accredited institutional member of the National Association of Schools of Music (http://nasm.arts-accredit.org/). The entrance and graduation requirements in this catalog conform to the published guidelines of that organization.

**Requirements for the Minor in Music**

**Open to All KU Students**

Students must first audition to be accepted as music minors, then may earn a minor in music by taking 24 hours in the courses listed below. At least 12 hours must be junior/senior-level courses, numbered 300 and above (300+). A minimum grade-point average of 2.0 in the minor is required.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 105</td>
<td>Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 106</td>
<td>Aural Skills I</td>
<td>1</td>
</tr>
<tr>
<td>MTHC 115</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 116</td>
<td>Aural Skills II</td>
<td>1</td>
</tr>
</tbody>
</table>
Undergraduate Certificate in Music Enterprise

The Music Enterprise Certificate is a program enhancement option for undergraduate and graduate music major students designed to provide foundational understanding and experiences in establishing, managing, promoting, and otherwise successfully operating business enterprises in the music industry. The intent of the certificate is not to provide comprehensive training in all non-performance aspects of the music business, but rather, to allow students to explore how to combine their own musical interests and priorities with the tools and concepts necessary to function creatively in the music industry of today, while also preparing to be adaptable for the changing landscape of music production and consumption in the future. Non-music major students may pursue the Music Enterprise Certificate by permission of the director of the program.

Music Majors: Undergraduate students who have completed a minimum of 60 credit hours, with a cumulative GPA of 3.0 or higher, may declare the Music Enterprise Certificate by completing the declaration in the School of Music Student Services office.

Non-music Majors: Undergraduate non-music majors must have completed a minimum of 60 credit hours, with a cumulative GPA of 3.0 or higher and interview with the director of the program who will determine whether the student has the necessary background.

12 credits required for completion of the certificate.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 586</td>
<td>The Business of Music (*)</td>
<td>3</td>
</tr>
<tr>
<td>MUS 587</td>
<td>Entrepreneurship and Outreach</td>
<td>3</td>
</tr>
<tr>
<td>MUS 588</td>
<td>Arts Management</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 301</td>
<td>Starting Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 302</td>
<td>Financing Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 303</td>
<td>Marketing Your Own Business</td>
<td>3</td>
</tr>
</tbody>
</table>

*MUS 586 The Business of Music is a prerequisite for MUS 587 and MUS 588.

Please note – the 3 ENTR courses are required for the School of Business Certificate of Entrepreneurship for non-Business majors.

Master of Music

View requirements for:

- Master of Music in Conducting (p. 2206)
- Master of Music in Musicology (p. 2207)
- Master of Music in Music Theory or Composition (p. 2208)
- Master of Music in Music Performance: Brass and Percussion (p. 2209)
- Master of Music in Music Performance: Organ, Church Music, and Carillon (p. 2210)
- Master of Music in Music Performance: Piano (p. 2212)
- Master of Music in Music Performance: Strings (p. 2213)
- Master of Music in Music Performance: Voice and Opera (p. 2214)
- Master of Music in Music Performance: Woodwinds (p. 2215)

M.M. in Conducting Admission

Applicants are expected to have educational backgrounds equivalent to the B.M. or B.M.E. degree from KU. They should have one or two years of experience in conducting. Such experience may include work in public school, college, or with other amateur or professional ensembles. Applicants normally are expected to have a high level of performing ability on an instrument or in voice. Applicants must complete audition-interviews successfully before the divisional faculty and should provide a résumé of their conducting experience, including programs of public appearances.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:
A program of study in conducting (minimum of 30 hours) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Choral Conducting</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>CHOR 820</td>
<td>Orchestral Bowing Techniques for Choral Conductors</td>
<td>1</td>
</tr>
<tr>
<td>Choral literature</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Seminar conducting/rehearsal</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>COND 899</td>
<td>Master’s Recital</td>
<td>1</td>
</tr>
</tbody>
</table>

- Choral conducting majors must enroll in an ensemble for a minimum of 2 semesters.

**M.M. in Conducting Degree Requirements**

**Diagnostic Examinations**

All incoming graduate students, except those in the MM-Opera program, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

**Master’s Recital**

The conducting degree candidate must present a final concert-length recital consisting of a public choral or instrumental program. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option is still available to students and faculty members. Divisions must approve the recital content well in advance but no less than three weeks before the recital date. The Master’s recital must be given before the final oral exam can occur.

**Final Oral Exam**

Master’s degree students must schedule and pass a final oral examination. The student’s 3-member Graduate Advisory Committee consists of the student’s major professor, one member from the student’s major division and one musicology or music theory professor. This committee administers the final oral exam.

**M.M. in Musicology Admission**

Applicants are expected to have educational backgrounds equivalent to the B.A. or B.M. from KU or another accredited university. Applicants are expected to have a reading knowledge of German, French, Italian, Spanish, or any other foreign language approved by the department. A language deficiency may be satisfied after entrance into the program. Proficiency at the piano is encouraged. Applicants must submit samples of original scholarly writing. In addition to the required course work, students are encouraged to continue study of performance or composition.

**Graduate Admission to the School of Music**

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.
Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

M.M. in Musicology Degree Requirements

Final Oral Exam
Master's degree students must schedule and pass a final oral exam. For the Master's degree in musicology, the final oral exam is a defense of the student's thesis.

The musicology student's 3-member Graduate Advisory Committee consists of the student's major professor, one member from the student's major division and one musicology or music theory professor. This committee administers the final oral exam.

The course work for the M.M. degree in musicology (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Musicology courses in 700-level or above</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Advanced music theory courses</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 940</td>
<td>Seminar on Selected Topics in Musicology: ___</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>MUSC 899</td>
<td>Thesis</td>
<td>6</td>
</tr>
</tbody>
</table>

Master of Music in Music Theory or Composition

Master of Music in Music Theory or Composition Degree Programs
The Master of Music (M.M.) degrees in theory or composition require a minimum of 30 credits and are designed to further the student's knowledge and in-depth exploration of music theory or composition at the post-baccalaureate level.

M.M. in Music Theory or Composition Admission
Applicants are expected to have educational backgrounds equivalent to the B.A., the B.M. in music theory, or the B.M. in composition from KU. Composition applicants should submit scores and recordings (if available) of original compositions; theory applicants should submit research papers in music theory. Applicants are expected to have a reading knowledge of German, French, Italian, or Spanish. A language deficiency may be satisfied after entrance into the program. In addition to the required course work, students are encouraged to continue study of performance and participate in ensembles on their major instruments.

Graduate Admission to the School of Music
Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

M.M. in Music Theory or Composition Degree Requirements

Final Oral Exam
Master's degree students must schedule and pass a final oral exam. The student's 3-member Graduate Advisory Committee consists of the student's major professor, one member from the student's major division and one musicology or music theory professor. This committee administers the final oral exam.

Programs of study are as follows:
Music Theory (minimum of 30 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Advanced music theory</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Advanced musicology and/or advanced composition</td>
<td>9</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 778</td>
<td>History of Music Theory</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Thesis</td>
<td>6</td>
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</tbody>
</table>

Composition (minimum of 30 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Advanced composition</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Advanced musicology and music theory</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Recital</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Thesis</td>
<td>5</td>
</tr>
</tbody>
</table>

Composition/Jazz Emphasis (minimum of 30 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Advanced composition</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>7</td>
</tr>
<tr>
<td>JAZZ 659</td>
<td>Jazz Arranging</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 563</td>
<td>Survey in Jazz Composition and Arranging</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Recital</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Thesis</td>
<td>5</td>
</tr>
</tbody>
</table>

1 The master's thesis in composition shall consist of either a 20-minute work for large ensemble or a 30-minute chamber work, either of which may include electronic media. All thesis proposals must be approved by the MTHC faculty before the student begins work on the thesis.

Master of Music in Music Performance: Brass and Percussion

Master of Music in Performance Degree Programs

M.M. degree programs in music performance:

- Accompanying
- Bassoon
- Carillon
- Cello
- Church Music
- Clarinet
- Double Bass
- Euphonium
- Flute
- French Horn
- Harp
- Oboe
- Opera Performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
- Tuba
- Viola
- Violin
- Voice

M.M. in Performance Admission

The applicant must perform an audition before the faculty of the major performance division. In some cases, an audio recording may be submitted in lieu of a live performance. A complete list of repertoire studied should be submitted with the graduate application. A prescreening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/grad-audition-music/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in
thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

### M.M. in Performance Degree Requirements

#### Diagnostic Examinations

All incoming graduate students are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

#### Master’s Recital

A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The candidate must file a copy of the final recital program with the School of Music before the final oral examination is scheduled. The audio recording of the recital will be placed in the School of Music archives.

#### Final Oral Examination

All Master’s students in Music must schedule a Final Oral Exam during the semester the student plans to graduate. The Master’s Recital must be performed before the Final Oral Exam can be taken. The Oral Exam is administered by the student’s 3-member advisory committee. The committee is comprised of two faculty members from the student’s major division and a Musicology or Music Theory faculty member.

Students in the Master of Music program who play band or orchestral instruments must enroll in a major ensemble for a minimum of 2 semesters.

**A program of study in brass and percussion is as follows:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Advanced applied music</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory (at least one course in each area)</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
<td>1</td>
</tr>
<tr>
<td>W&amp;P 704</td>
<td>Special Studies in Brass Instrumental Pedagogy (brass majors)</td>
<td></td>
</tr>
<tr>
<td>W&amp;P 708</td>
<td>Special Studies in Percussion Instrument Pedagogy (percussion majors)</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Major Ensemble</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Master’s Recital</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

View a check sheet (https://music.ku.edu/master-of-music/) for this degree program.

### M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

### Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or
from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

• Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
• Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

M.M. in Performance Degree
Requirements
Diagnostic Examinations
All incoming graduate students, except those in MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Master's Recital
A final solo recital is required for all master's degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The candidate must file a copy of the final recital program with the School of Music before the final oral examination is scheduled. The audio recording of the recital will be placed the School of Music archives.

Final Oral Examination
All Master's students in Music must schedule and pass a Final Oral Exam during the semester the student plans to graduate. The Master's Recital must be performed before the Final Oral Exam can be taken. The Oral Exam is administered by the student's 3-member advisory committee. The committee is comprised of the student's major professor, one member from the student's major division, and one Musicology or Music Theory faculty member.

A program of study in church music/choral conducting emphasis (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Advanced courses in church music</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Voice</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Master's Recital</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

• Students must enroll in a minimum of 4 semesters of choral ensemble.

A program of study in church music/organ emphasis (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>ORGN 811</td>
<td>Organ</td>
<td>12</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CHUR Music courses (CHUR 801-CHUR 810, CHUR 821-CHUR 824, CHUR 921, CHUR 962)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>ORGN 702</td>
<td>Master Class in Organ - Lab (4 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>ORGN 720</td>
<td>Studio Class in Organ-Lab (4 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>CHUR 806</td>
<td>Service Playing and Improvisation I</td>
<td>3</td>
</tr>
<tr>
<td>CHUR 807</td>
<td>Service Playing and Improvisation II</td>
<td>3</td>
</tr>
<tr>
<td>Advanced conducting</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CHUR 622</td>
<td>Bales Chorale (4 semesters minimum)</td>
<td>0</td>
</tr>
<tr>
<td>Master's Recital</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

• Church music majors must take 2 semesters of voice, if not previously taken.

A program of study in organ (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>ORGN 811</td>
<td>Organ</td>
<td>12</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Advanced academic courses in organ (ORGN 800-ORGN 807, ORGN 921)</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>ORGN 702</td>
<td>Master Class in Organ - Lab (4 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>ORGN 720</td>
<td>Studio Class in Organ-Lab (4 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>CHUR 622</td>
<td>Bales Chorale (2 semesters minimum)</td>
<td>0</td>
</tr>
<tr>
<td>Master's Recital</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

A program of study in carillon (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARI 811</td>
<td>Carillon</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
</tbody>
</table>
Advanced courses in musicology and music theory 9
CARI 804 History of Carillon Literature and Design 3
CARI 820 Studio Class in Carillon 0
Electives 2
Master's Recital 1

Master of Music in Music Performance: Piano

Master of Music in Performance Degree Programs

M.M. degree programs in music performance:

• Bassoon
• Carillon
• Cello
• Church music
• Clarinet
• Collaborative Piano
• Double bass
• Euphonium
• Flute
• French horn
• Harp
• Oboe
• Opera performance
• Organ
• Percussion
• Piano
• Saxophone
• Trumpet
• Trombone
• Tuba
• Viola
• Violin
• Voice

M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

• Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
• Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

M.M. in Performance Degree Requirements

Diagnostic Examinations

All incoming graduate students, except those in MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Master's Recital

A final solo recital is required for all master's degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The candidate must file a copy of the final recital program with the School of Music before the final oral examination is scheduled. The audio recording of the recital will be placed in the School of Music archives.

Final Oral Examination

All Master's students in Music must schedule and pass a Final Oral Exam during the semester the student plans to graduate. The Master's Recital
must be performed before the Final Oral Exam can be taken. The Oral Exam is administered by the student's 3-member advisory committee. The committee is comprised of the student's major professor, one member from the student’s major division, and one Musicology or Music Theory faculty member.

A program of study in piano performance is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIAN 811</td>
<td>Piano (Applied lessons)</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory (at least one course in each area)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Chamber Music/Concerto recital</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Master's Recital</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Master of Music in Music Performance: Strings

Master of Music in Performance Degree Programs

M.M. degree programs in music performance:
- Bassoon
- Carillon
- Cello
- Church music
- Clarinet
- Collaborative piano
- Double bass
- Euphonium
- Flute
- French horn
- Harp
- Oboe
- Opera performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
- Tuba
- Viola
- Violin
- Voice

M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:
- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

M.M. in Performance Degree Requirements

Diagnostic Examinations

All incoming graduate students, except those in MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.
Master’s Recital

A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The candidate must file a copy of the final recital program with the School of Music before the final oral examination is scheduled. The audio recording of the recital will be placed in the School of Music archives.

Final Oral Examination

All Master's students in Music must schedule and pass a Final Oral Exam during the semester the student plans to graduate. The Master’s Recital must be performed before the Final Oral Exam can be taken. The Oral Exam is administered by the student’s 3-member advisory committee. The committee is comprised of the student’s major professor, one member from the student’s major division, and one Musicology or Music Theory faculty member.

A program of study for students in cello, double bass, harp, viola, and violin (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Advanced applied music</td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory (at least one course in each area)</td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Ensemble (2 semesters)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Master's Recital</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

View a check sheet (https://music.ku.edu/master-of-music/) for this degree program.

Master of Music in Music Performance: Voice and Opera

Master of Music in Performance Degree Programs

M.M. degree programs in music performance:

- Bassoon
- Carillon
- Cello
- Church music
- Clarinet
- Collaborative piano
- Double bass
- Euphonium
- Flute
- French horn
- Harp
- Oboe
- Opera performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
- Tuba
- Viola
- Violin
- Voice

M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/grad-audition-music/).

Students in opera performance must take a minimum of 1 year each in French, German, and Italian before entering graduate studies or before completing the M.M. degree. For the master's degree program in voice, the language requirement is 1 year of 2 of the following: French, German, or Italian. Both programs have prerequisites in French, German, and Italian diction. Students found deficient in a particular area of diction must enroll in the specific course in which they are deficient and pass it with a minimum grade of C or demonstrate proficiency by passing a diction diagnostic examination. A student whose transcript shows she or he has passed a particular language diction course normally is considered proficient in the diction of that language.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:
• Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
• Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

M.M. in Performance Degree
Requirements

Diagnostic Examinations
All incoming graduate students, except those in the MM-Opera program, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of “C.” The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Master's Recital
A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The candidate must file a copy of the final recital program with the School of Music before the final oral examination is scheduled. The audio recording of the recital will be placed the School of Music archives.

Final Oral Examination
All Master’s students in Music must schedule and pass a Final Oral Exam during the semester the student plans to graduate. The Master's Recital must be performed before the Final Oral Exam can be taken. The Oral Exam is administered by the student's 3-member advisory committee. The committee is comprised of the student’s major professor, one member from the student’s major division, and one Musicology or Music Theory faculty member.

Language and Diction Requirements
Students in opera performance must take a minimum of 1 year each in French, German, and Italian before entering graduate studies or before completing the M.M. degree. For the master’s degree program in voice, the language requirement is 1 year of 2 of the following: French, German, or Italian. Both programs have prerequisites in French, German, and Italian diction. Students found deficient in a particular area of diction must enroll in the specific course in which they are deficient and pass it with a minimum grade of C or demonstrate proficiency by passing a diction diagnostic examination. A student whose transcript shows she or he has passed a particular language diction course normally is considered proficient in the diction of that language.

A program of study in opera performance (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOIC</td>
<td>Master's Recital</td>
<td>1</td>
</tr>
</tbody>
</table>

The written diagnostic examinations in musicology and music theory are not required in the opera performance program.

A program of study in voice (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOIC</td>
<td>Master's Recital</td>
<td>1</td>
</tr>
</tbody>
</table>

Master of Music in Music Performance: Woodwinds

Master of Music in Performance Degree Programs

M.M. degree programs in music performance:

- Bassoon
- Carillon
- Cello
- Church music
- Clarinet
- Collaborative piano
- Double bass
- Euphonium
- Flute
- French horn
- Harp
- Oboe
- Opera performance
- Organ
- Percussion
- Piano
- Saxophone
- Trumpet
- Trombone
- Tuba
• Viola
• Violin
• Voice

M.M. in Performance Admission

The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

M.M. in Performance Degree Requirements

Diagnostic Examinations

All incoming graduate students, except those in MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Master’s Recital

A final solo recital is required for all master’s degrees in performance. A recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve recital content well in advance but no less than 3 weeks before the recital date. The candidate must file a copy of the final recital program with the School of Music before the final oral examination is scheduled. The audio recording of the recital will be placed the School of Music archives.

Final Oral Examination

All Master’s students in Music must schedule and pass a Final Oral Exam during the semester the student plans to graduate. The Master’s Recital must be performed before the Final Oral Exam can be taken. The Oral Exam is administered by the student’s 3-member advisory committee. The committee is comprised of the student’s major professor, one member from the student’s major division, and one Musicology or Music Theory faculty member.

Students in the Master of Music program who play band or orchestral instruments must enroll in a major ensemble for a minimum of 2 semesters.

A program of study for students in bassoon, clarinet, flute, oboe, and saxophone (minimum of 30 credits) is as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced applied music</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory (at least one course in each area)</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Ensemble (2 semesters)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Master’s Recital</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

View a check sheet (https://music.ku.edu/master-of-music/) for this degree program.
Master of Music Education in Music Education or Music Therapy

Master of Music Education

With a Major in Music Education or Music Therapy

The division’s graduate programs include advanced professional and scholarly study for music educators and music therapists, licensure/certification programs for those with baccalaureate degrees in other fields who plan to enter the music education or music therapy professions (these initial licensure/certification programs typically also require collateral undergraduate study), and advanced study for individuals in related disciplines. Areas of emphasis, curricula, examinations, and regulations and procedures are described in the MEMT Master's Handbook available in the division office and online (https://music.ku.edu/graduate-handbooks/).

Music Education M.M.E. Program

Master of Music Education

The division’s graduate programs include advanced professional and scholarly study for music educators and music therapists, licensure/certification programs for those with baccalaureate degrees in other fields who plan to enter the music education or music therapy professions (these initial licensure/certification programs typically also require collateral undergraduate study), and advanced study for individuals in related disciplines. Areas of emphasis, curricula, examinations, and regulations and procedures are described in the MEMT Master's Handbook available in the division office and online (https://music.ku.edu/graduate-handbooks/).

M.M.E. in Music Education or M.M.E. in Music Therapy Admission

Admission requirements are as follows:

1. Undergraduate grade-point average of 3.0 or higher on a 4.0 scale.
2. An appropriate baccalaureate degree to support the individual’s goals for master’s study. Students seeking entrance into the graduate licensure program in music education or the graduate equivalency program in music therapy should have substantial backgrounds in music regardless of undergraduate major.
3. Three (3) letters of recommendation regarding applicant's qualifications for graduate study in their selected program.
4. Submission of a video recording appropriate to degree of application.
5. Submission of resume.
6. Other supporting materials are required.

Additional detailed admission requirements and information are found online (https://music.ku.edu/graduate-programs/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

• Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
• Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

M.M.E. with a Major in Music Education

Course and Proficiency Requirements

The degree requires a minimum of 30 hours of graduate credit. At least one-half of the required credit hours must be in courses open only to graduate students. At least 20 of the hours must be in regularly scheduled classes excluding directed study, research, and thesis or comprehensive examination (as applicable). The work must be distributed as indicated in the categories shown on the appropriate Master's Degree Program Plan (https://music.ku.edu/mme/).

Course Distribution

• At least 17 hours in MEMT including MEMT 812 Research in Music Education and Music Therapy (3 hours), MEMT 899 Master’s Thesis (3-5 hours if thesis option) or MEMT 898 Comprehensive Examination (1 hour if nonthesis option), and additional hours to reach the minimum elected from 700- and 800-level MEMT courses, subject to the advisor’s approval. At least 2 courses must be at the 800 level.
• At least 10 graduate hours outside of MEMT, including
• at least 2 hours of applied music or conducting;
• at least 3 hours in musicology, theory, or composition;
• at least 3 hours in a supportive elective area; and
• additional non-MEMT hours necessary to reach the minimum.

All of these selections are subject to the advisor’s approval.

Final Master’s Examination (Thesis)

The student must be enrolled at the time the final master’s exam is held. The exam will be scheduled for a period of 2 hours. The examination committee shall be comprised of the student’s major advisor and 2 other graduate faculty members jointly selected by the student and major advisor. It is the student’s responsibility to present the final thesis copy to each committee member 2 weeks in advance of the scheduled exam date.

The candidate will begin by giving a twenty-minute oral presentation on his or her thesis, but the exam is not confined to that topic. Thereafter, the candidate will address questions posed by the committee arising from the candidate’s presentation and the thesis document.

Final Master’s Examination (Non-Thesis)

The non-thesis option typically functions as a terminal degree and the work must be distributed as indicated in the categories shown on the appropriate Degree Program Plan. This option culminates with enrollment in a 1-credit hour comprehensive final examination (MEMT 898 Comprehensive Examination) and the subsequent portfolio and presentation.

The student must be enrolled at the time the final non-thesis master’s exam is held. The non-thesis master’s exam includes presenting a portfolio and will be scheduled for a period of 1 hour. The examination committee shall be comprised of the student’s major advisor and 2 other graduate faculty members jointly selected by the student and major advisor. It is the student’s responsibility to present the final portfolio to each committee member 2 weeks in advance of the scheduled examination date.

More information about the thesis or non-thesis option is available online (https://music.ku.edu/graduate-handbooks/) in the MEMT Graduate Handbook.

Plan of Study

The Master of Music Education with a major in music education program plan is available online (https://music.ku.edu/mme/).

Music Therapy M.M.E. Program

Master of Music Education

With a Major in Music Therapy

The division’s graduate programs include advanced professional and scholarly study for music educators and music therapists, licensure/certification programs for those with baccalaureate degrees in other fields who plan to enter the music education or music therapy professions (these initial licensure/certification programs typically also require collateral undergraduate study), and advanced study for individuals in related disciplines. Areas of emphasis, curricula, examinations, and regulations and procedures are described in the MEMT Master’s Graduate Handbook available in the division office and online (https://music.ku.edu/graduate-handbooks/).

M.M.E. in Music Education or M.M.E. in Music Therapy Admission

Admission requirements are as follows:

1. Undergraduate grade-point average of 3.0 or higher on a 4.0 scale.
2. An appropriate baccalaureate degree to support the individual’s goals for master’s study. Students seeking entrance into the graduate licensure program in music education or the graduate equivalency program in music therapy should have substantial backgrounds in music regardless of undergraduate major.
3. Three (3) letters of recommendation regarding applicant’s qualifications for graduate study in their selected program.
4. Submission of a video recording appropriate to degree of application.
5. Submission of resume.
6. Other supporting materials are required.

Additional detailed admission requirements and information are found online (https://music.ku.edu/graduate-programs/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

• Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
• Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in
thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

**M.M.E. with a Major in Music Therapy**

**Course and Proficiency Requirements**

The degree requires a minimum of 30 hours of graduate credit. At least one half of the required credit hours must be in courses open only to graduate students. At least 20 of the hours must be in regularly scheduled classes excluding directed study, research, and thesis or comprehensive examination (as applicable).

**Course Distribution**

- The program must include at least 17 hours of graduate work in the division, including MEMT 812 Research in Music Education and Music Therapy (3 hours), MEMT 864 Philosophy and Theory of Music Therapy (3 hours), MEMT 890 Practicum in Music Therapy (2 hours), MEMT 899 Master’s Thesis (3 hours if thesis option) or MEMT 898 Comprehensive Examination (1 hour if nonthesis option), and additional hours to reach the minimum elected from 700- and 800-level MEMT courses, subject to the advisor’s approval. At least 2 courses must be at the 800 level. At least 9 of these hours must be in regularly scheduled courses.

- At least 10 hours in supportive studies outside MEMT.

- Proficiency as a performing musician must be demonstrated before the degree may be awarded.

The work is distributed as indicated in the categories on the appropriate Degree Program Plan found online (https://music.ku.edu/mme/). All of these selections are subject to the advisor’s approval.

The M.M.E. with a major in music therapy may be earned only by individuals eligible to sit for the national examination offered by the Certification Board for Music Therapists (CBMT).

**Final Master’s Examination (Thesis)**

The student must be enrolled at the time the final master’s exam is held. The exam will be scheduled for a period of 2 hours. The examination committee shall be comprised of the student’s major advisor and 2 other graduate faculty members jointly selected by the student and major advisor. It is the student’s responsibility to present the final portfolio to each committee member 2 weeks in advance of the scheduled examination date.

More information about the thesis or non-thesis option is available online (http://music.ku.edu/MME/requirements/) in the MEMT Graduate Handbook.

**Plan of Study**

The Master of Music Education with a major in music therapy program plan is available online (https://music.ku.edu/mme/).

**Doctor of Musical Arts**

**Programs**

View requirements for:

- Doctor of Musical Arts in Composition (p. 2219)
- Doctor of Musical Arts in Conducting (p. 2221)
- Doctor of Musical Arts in Music Performance: Brass and Percussion (p. 2223)
- Doctor of Musical Arts in Music Performance: Organ and Church Music (p. 2225)
- Doctor of Musical Arts in Music Performance: Piano (p. 2227)
- Doctor of Musical Arts in Music Performance: Strings (p. 2229)
- Doctor of Musical Arts in Music Performance: Voice (p. 2231)
- Doctor of Musical Arts in Music Performance: Woodwinds (p. 2233)

**Doctor of Musical Arts in Composition**

**Doctor of Musical Arts**

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance

**D.M.A. Admission**

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2408) section of the online catalog. Further admission requirements are listed below.
Composition

Applicants should submit at least 3 scores of original works (including master’s thesis), recordings if available, and lists of past performances.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in the student's dissertation or academically equivalent program objectives.

Research Skills and Engagement

Before scheduling the oral comprehensive exam, doctoral students must satisfy the residency, basic research skills, and responsible scholarship requirements. MUSC 801: Music Bibliography and Research (or its equivalent as determined by the Musicology division) will satisfy the research skills and responsible scholarship requirements.

Prior to the semester in which the comprehensive exam is held, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by University policy (https://policy.ku.edu/graduate-studies/fulltime-enrollment/)
- At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Summer enrollment is not required to maintain registration but summer enrollments may be counted toward the 18 part-time pre-comprehensive hours. The time spent in attaining the master’s degree at KU may also count toward this enrollment requirement, at the program’s discretion.

During the required enrollment outlined above, the student’s supervisor must affirm that the course work and research involvement contribute to the student’s dissertation or academically equivalent program objectives. Research must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off campus.

Diagnostic Examinations

All incoming graduate students, except MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Advisory Committee

Each graduate student selects a faculty advisory committee, in consultation with the major advisor, subject to the consent of the faculty members involved, and approved by the associate dean. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations.

Recitals

Composition students must present a public program of original compositions with approximately 45 minutes of music and participate in at least one work as either a performer or conductor.

All recitals and public appearances are graded by the student's graduate advisory committee chair. The student must achieve at least a grade of B on each recital for satisfactory completion of degree requirements.

Written and Oral Comprehensive Examinations

Composition doctoral students must take written qualifying examinations in composition, music theory and musicology when most of the course work has been completed and the research skills/responsible scholarship requirements have been fulfilled. All diagnostic deficiencies must be satisfied before taking the written qualifying and oral comprehensive exams. After successful completion of the written qualifying examinations, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee.

Dissertation in Composition

Candidates in composition must submit to the student’s graduate advisory committee a proposal for a large-scale composition at the Oral Comprehensive Exam or at least 12 weeks prior to the scheduled
The composition proposal should outline a large-scale work in a medium chosen in consultation with the committee director, reflecting the student's primary focus within the profession of composition, and should include a preliminary analysis.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination. For students in composition, the examination is primarily a defense of the large-scale composition.

The student must receive at least a grade of B on the composition for satisfactory completion of degree requirements.

Examinations
At least 1 month must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination for candidates for the D.M.A. degree.

Composition Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHC 953</td>
<td>Advanced Composition</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Advanced theory or score reading</td>
<td>9</td>
</tr>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology</td>
<td>9</td>
</tr>
<tr>
<td>MTHC 965</td>
<td>Doctoral Composition Recital</td>
<td>2</td>
</tr>
<tr>
<td>MTHC 643</td>
<td>Contemporary Repertoire</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 840</td>
<td>Pedagogy of Music Composition</td>
<td>3</td>
</tr>
<tr>
<td>MTHC 999</td>
<td>Dissertation</td>
<td>16</td>
</tr>
</tbody>
</table>

(A work for large ensemble, a major concerto, a work for chorus and orchestra or an opera, or a major work involving live performers and electronic media. A written analysis of the work must be included after the title page in the full score.)

Composition majors must present a public program of original compositions approximately 45 minutes in duration before being admitted to the comprehensive examination.

Doctor of Musical Arts in Conducting

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master's degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2408) section of the online catalog. Further admission requirements are listed below.

Conducting

Applicants are expected to have had experience in conducting that spans a period of not less than 2 years. This may include work in public school, college, or with other amateur or professional ensembles. Applicants normally are expected to have a high level of performing ability on an instrument or in voice. Applicants are expected to submit preliminary audition materials that include a video audition of the applicant conducting in performance and in rehearsal, a recording of an ensemble trained and conducted by the applicant, and a prescribed formal analysis project. Details can be found at the band, choral, and orchestral links on the School of Music's website (http://music.ku.edu/). An entrance interview-audition is required for admission. The audition is heard by a committee composed of the Graduate Faculty of the conducting divisions. Approval by a majority of the committee is required for acceptance into the program. The audition may include

1. Harmonic and melodic dictation and/or sight-singing;
2. Score identification;
3. Score reading at the keyboard; and
4. Conducting from a band, choral, or orchestral score to be selected by the examiners.

Applicants may upload videos directly to their graduate application and Graduate Faculty in the ensemble divisions will review these recordings.

Students applying to the D.M.A. program in choral conducting must display a working knowledge of 2 of the following 4 languages: French, German, Spanish, and Italian. A working knowledge normally implies at least 2 semesters of undergraduate study.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.Ed.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.Ed. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.
Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

D.M.A. Degree Requirements
Research Skills and Engagement
Before scheduling the oral comprehensive exam, doctoral students must satisfy the residency, basic research skills, and responsible scholarship requirements. MUSC 801: Music Bibliography and Research (or its equivalent as determined by the Musicology division) will satisfy the research skills and responsible scholarship requirements.

Prior to the semester in which the comprehensive exam is held, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by University policy (https://policy.ku.edu/graduate-studies/fulltime-enrollment/)
- At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Summer enrollment is not required to maintain registration but summer enrollments may be counted toward the 18 part-time pre-comprehensive hours. The time spent in attaining the master’s degree at KU may also count toward this enrollment requirement, at the program’s discretion.

During the required enrollment outlined above, the student’s supervisor must affirm that the course work and research involvement contribute to the student’s dissertation or academically equivalent program objectives. Research must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off-campus.

Diagnostic Exams
All incoming graduate students, except MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of “C.” The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Advisory Committee
Each doctoral student must form a Graduate Advisory Committee. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from Musicology or Music Theory (at least 1 from Musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

Program of Study
A Program of Study approved by the major advisor must be submitted for the approval of the Associate Dean for Academic Affairs by the end of the second term of admission. Student who do not submit a Program of Study by the end of the second semester shall not be permitted to enroll in third semester courses.

Recitals
All students in performance and in choral, orchestral, and wind conducting must perform a total of 3 doctoral recitals. This number does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project.

The first of the three doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program. It must be given within the first two semesters of enrollment unless a petition is submitted for an extension.

Doctoral conducting students are expected to perform 3 public, concert-length recitals. Up to 2 recitals may consist of the combination of works conducted with various official university ensembles over the course of several semesters. The third recital must be a single program with a major ensemble assigned as part of course work or teaching duties and presented as a regular program in that ensemble’s performance schedule. The third recital may include a complete performance of an opera, ballet, dance, or musical. A student who wishes to use an ensemble other than an official university ensemble must obtain permission to do so from the directors of ensembles.

For the first 2 required recitals in the D.M.A. program in performance and conducting, a recital preview is left to the discretion of the faculty members of each division. In divisions with no preview requirement, the option to have a preview is still available to students and faculty members. Divisions must approve the recital content well in advance but no less than 3 weeks before the recital date. Normally, there is no recital preview for the final recital.

Written and Oral Comprehensive Examinations
Performance D.M.A. students must take written qualifying examinations in Musicology, Music Theory, and the major area. Composition D.M.A. and Ph.D. students in Musicology and Music Theory take written qualifying exams in Music Theory and Musicology. After successful completion of the written examinations and the residency and research skills requirements, the student is eligible to schedule the oral comprehensive examination administered by the student's graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the oral examinations.
Document or Lecture-Recital
Candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document, or a longer D.M.A. document only, at the Oral Comprehensive Exam or at least 12 weeks prior to the scheduled defense. Guidelines for proposals can be found on the School of Music website.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements.

Examinations
At least 1 month must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination for candidates for the D.M.A. degree.

Cognate
Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student's advisory committee. Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

Choral Conducting Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>COND 961</td>
<td>Directed Performance</td>
<td>12</td>
</tr>
<tr>
<td>CHOR 820</td>
<td>Orchestral Bowing Techniques for Choral Conductors</td>
<td>1</td>
</tr>
<tr>
<td>Seminar conducting/rehearsal</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Choral literature</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Electives*</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>COND 965</td>
<td>Doctoral Recitals</td>
<td>3</td>
</tr>
<tr>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

* Conducting majors must be enrolled in an ensemble for a minimum of 2 semesters.

*Credits can be used to fulfill the optional Cognate credits

Wind Conducting Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Advanced conducting</td>
<td>12-14</td>
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<td>Score reading</td>
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<td>Seminars</td>
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<tr>
<td>COND 965</td>
<td>Doctoral Recitals</td>
<td>3</td>
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<tr>
<td>D.M.A. document or lecture-recital</td>
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<tr>
<td>Electives*</td>
<td>11-13</td>
<td></td>
</tr>
</tbody>
</table>

* Conducting majors must be enrolled in an ensemble for a minimum of 2 semesters.

* Credits can be used to fulfill the optional Cognate credits

Doctor of Musical Arts in Music Performance: Brass and Percussion

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master's degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2408) section of the online catalog. Further admission requirements are listed below.

Performance

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant also should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. In the case of international students, acceptance may be achieved by submitting a video to be reviewed by the Graduate
Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

**Graduate Admission to the School of Music**

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

**Program Areas**

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

**D.M.A. Degree Requirements**

**Research Skills and Engagement**

Before scheduling the oral comprehensive exam, doctoral students must satisfy the residency, basic research skills, and responsible scholarship requirements. MUSC 801 Music Bibliography and Research (or its equivalent as determined by the Musicology division) will satisfy the research skills and responsible scholarship requirements.

Prior to the semester in which the comprehensive exam is held, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by University policy (https://policy.ku.edu/graduate-studies/fulltime-enrollment/)
- At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Summer enrollment is not required to maintain registration but summer enrollments may be counted toward the 18 part-time pre-comprehensive hours. The time spent in attaining the master's degree at KU may also count toward this enrollment requirement, at the program’s discretion.

During the required enrollment outlined above, the student’s supervisor must affirm that the course work and research involvement contribute to the student’s dissertation or academically equivalent program objectives. Research must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off-campus.

**Diagnostic Examinations**

All incoming graduate students, except MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of “C.” The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

**Advisory Committee**

Each doctoral student must form a Graduate Advisory Committee. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from Musicology or Music Theory (at least 1 from Musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

**Program of Study**

A Program of Study approved by the major advisor must be submitted for the approval of the Associate Dean for Academic Affairs by the end of the second term of admission. Students who do not submit a Program of Study by the end of the second semester shall not be permitted to enroll in third semester courses.

**Recitals**

All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. At least two of the three degree recitals must be performed before the oral comprehensive examination.

The first of the three doctoral recitals is considered to be a qualifying recital for determining whether the student will remain in the doctoral program. It must be given within the first two semesters of enrollment unless a petition is submitted for an extension.

**Written and Oral Comprehensive Examinations**

Performance D.M.A. students must take written qualifying examinations in Musicology, Music Theory, and the major area. Composition D.M.A. students and Ph.D. students in Musicology and Music Theory take
written qualifying exams in Music Theory and Musicology. After successful completion of the written examinations and the residency and research skills requirements, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the oral examinations.

**Document or Lecture-Recital**

Candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document, or a longer D.M.A. document only, at the Oral Comprehensive Exam or at least 12 weeks prior to the scheduled defense. Guidelines for proposals can be found on the School of Music website.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements.

**Examinations**

At least 1 month must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.

**Cognate**

Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee. Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

**Percussion Program**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Applied music</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Seminar in percussion</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>PCUS 965</td>
<td>Doctoral Recitals</td>
<td>3</td>
</tr>
<tr>
<td>W&amp;P 708</td>
<td>Special Studies in Percussion Instrument Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

* Credits may be used to fulfill the 12 optional Cognate credits.

**French Horn, Trombone, Trumpet, and Tuba Program**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td>Applied music</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Seminar in trombone, trumpet, or tuba</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Recitals</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>W&amp;P 704</td>
<td>Special Studies in Brass Instrument Pedagogy</td>
<td>3</td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

* Credits may be used to fulfill the 12 optional Cognate credits.

**Doctor of Musical Arts in Music Performance: Organ and Church Music**

**Doctor of Musical Arts**

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

**D.M.A. Admission**

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants must submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies catalog. Further admission requirements are listed below.

**Performance**

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. In the case of international students, acceptance may be achieved by submitting a video tape (DVD) to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

**Graduate Admission to the School of Music**

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements.
Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MERM) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

D.M.A. Degree Requirements

Research Skills and Engagement

Before scheduling the oral comprehensive exam, doctoral students must satisfy the residency, basic research skills, and responsible scholarship requirements. MUSC 801: Music Bibliography and Research (or its equivalent as determined by the Musicology division) will satisfy the research skills and responsible scholarship requirements.

Prior to the semester in which the comprehensive exam is held, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by University policy (https://policy.ku.edu/graduate-studies/fulltime-enrollment/)
- At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Summer enrollment is not required to maintain registration but summer enrollments may be counted toward the 18 part-time pre-comprehensive hours. The time spent in attaining the master's degree at KU may also count toward this enrollment requirement, at the program's discretion.

During the required enrollment outlined above, the student's supervisor must affirm that the course work and research involvement contribute to the student's dissertation or academically equivalent program objectives. Research must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off campus.

Diagnostic Exams

All incoming graduate students, except MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Language Requirement

All organ and church music doctoral students must demonstrate competence in one foreign language. Approved languages include French and German for organ majors and French, German, or Latin for Church Music majors. Students may petition the organ faculty for approval of a language other than those stated.

Advisory Committee

Each doctoral student must form a Graduate Advisory Committee. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from Musicology or Music Theory (at least 1 from Musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

Program of Study

A Program of Study approved by the major advisor must be submitted for the approval of the Associate Dean for Academic Affairs by the end of the second term of admission. Student who do not submit a Program of Study by the end of the second semester shall not be permitted to enroll in third semester courses.

Recitals

All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. At least two of the three degree recitals must be performed before the oral comprehensive examination.

The first of the three doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program. It must be given within the first two semesters of enrollment unless a petition is submitted for an extension.

Church Music with Choral Conducting emphasis must present 2 choral recitals and 1 organ or voice recital. Church Music with Organ emphasis must present 2 organ recitals and 1 choral recital.

Written and Oral Comprehensive Examinations

Performance D.M.A. students must take written qualifying examinations in Musicology, Music Theory, and the major area. Composition D.M.A. and Ph.D. students in Musicology and Music Theory take written qualifying exams in Music Theory and Musicology. After successful completion of the written examinations and the residency and research skills requirements, the student is eligible to schedule the oral comprehensive examination administered by the student's graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the oral examinations.

Document or Lecture-Recital

Candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital
document, or a longer D.M.A. document only, at the Oral Comprehensive Exam or at least 12 weeks prior to the scheduled defense. Guidelines for proposals can be found on the School of Music website.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements.

Examinations
At least 1 month must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.

Cognate
Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student's advisory committee. Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

Church Music (Choral Conducting Emphasis) Program

<table>
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<tr>
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<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced choral conducting</td>
<td>12</td>
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<tr>
<td></td>
<td>Instrumental conducting</td>
<td>4</td>
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<tr>
<td></td>
<td>Advanced courses in church music</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Recitals (2 choral recitals, 1 organ or voice recital)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Secondary applied area (organ or voice)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in secondary applied area (organ or voice)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Electives*</td>
<td>5</td>
</tr>
</tbody>
</table>

*Credits may be used to fulfill the 12 optional Cognate credits.

- D.M.A. church music majors (choral conducting emphasis) who have not studied voice for a minimum of 2 semesters before entering this program must enroll for 2 semesters.
- Students must take 2 credits of Service Playing and Improv, if not previously taken.

Organ Program

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
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<tr>
<td>ORGN 961</td>
<td>Directed Performance</td>
<td>18</td>
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<tr>
<td>Advanced courses in organ</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Advanced courses in church music</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>ORGN 965</td>
<td>Doctoral Recitals (3 organ recitals, 1 credit each)</td>
<td>3</td>
</tr>
<tr>
<td>CHUR 622</td>
<td>Bales Chorale (Minimum of 2 semesters)</td>
<td>0</td>
</tr>
<tr>
<td>ORGN 702</td>
<td>Master Class in Organ - Lab (Minimum of 4 semesters)</td>
<td>0</td>
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<tr>
<td>ORGN 720</td>
<td>Studio Class in Organ-Lab (Minimum of 4 semesters)</td>
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<tr>
<td>Electives*</td>
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*Credits may be used to fulfill the 12 optional Cognate credits.

Church Music (Organ Emphasis) Program

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<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
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<tr>
<td>ORGN 961</td>
<td>Directed Performance</td>
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<td>Advanced courses in organ</td>
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<td>Advanced courses in church music</td>
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<td>Advanced courses in musicology and music theory*</td>
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<td>Recitals (2 organ recitals, 1 choral recital)</td>
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<td>Secondary applied area (choral conducting)</td>
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<td>CHUR 622</td>
<td>Bales Chorale (Minimum of 4 semesters)</td>
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</tr>
<tr>
<td>ORGN 702</td>
<td>Master Class in Organ - Lab (Minimum of 4 semesters)</td>
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Doctor of Musical Arts in Music Performance: Piano

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2408) section of the online catalog. Further admission requirements are listed below.
Performance

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant also should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. Applicants may submit a video audition to their graduate application to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor’s degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

D.M.A. Degree Requirements

Research Skills and Engagement

Before scheduling the oral comprehensive exam, doctoral students must satisfy the residency, basic research skills, and responsible scholarship requirements. MUSC 801 Music Bibliography and Research (or its equivalent as determined by the Musicology division) will satisfy the research skills and responsible scholarship requirements.

Prior to the semester in which the comprehensive exam is held, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by University policy (https://policy.ku.edu/graduate-studies/fulltime-enrollment/)
- At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Summer enrollment is not required to maintain registration but summer enrollments may be counted toward the 18 part-time pre-comprehensive hours. The time spent in attaining the master’s degree at KU may also count toward this enrollment requirement, at the program’s discretion.

During the required enrollment outlined above, the student’s supervisor must affirm that the course work and research involvement contribute to the student’s dissertation or academically equivalent program objectives. Research must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off campus.

Diagnostic Examinations

All incoming graduate students, except those in MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course. The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Advisory Committee

Each doctoral student must form a Graduate Advisory Committee. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from Musicology or Music Theory (at least 1 from Musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

Program of Study

A Program of Study approved by the major advisor must be submitted for the approval of the Associate Dean for Academic Affairs by the end of the second term of admission. Students who do not submit a Program of Study by the end of the second semester shall not be permitted to enroll in third semester courses.

Recitals

All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. At least two of the three degree recitals must be performed before the oral comprehensive examination.

The first of the three doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral
program. It must be given within the first two semesters of enrollment unless a petition is submitted for an extension.

Written and Oral Comprehensive Examinations

Performance D.M.A. students must take written qualifying examinations in Musicology, Music Theory, and the major area. Composition D.M.A. and Ph.D. students in Musicology and Music Theory take written qualifying exams in Music Theory and Musicology. After successful completion of the written examinations and the residency and research skills requirements, the student is eligible to schedule the oral comprehensive examination administered by the student's graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the oral examinations.

Document or Lecture-Recital

Candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document, or a longer D.M.A. document only, at the Oral Comprehensive Exam or at least 12 weeks prior to the scheduled defense. Guidelines for proposals can be found on the School of Music website.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements.

Examinations

At least 1 month must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.

Cognate

Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student's advisory committee. Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

Piano Performance, Literature, and Pedagogy Program

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<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
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<tr>
<td>PIAN 961</td>
<td>Directed Performance (Applied lessons)</td>
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<td>Seminars in piano</td>
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<tr>
<td>PIAN 965</td>
<td>Doctoral Recitals (1 credit each)</td>
<td>3</td>
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<tr>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
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<tr>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
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<tr>
<td>Minor concentration (pedagogy or accompanying)</td>
<td>6</td>
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<tr>
<td>Electives*</td>
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* Credits may be used to fulfill the 12 optional Cognate credits.

1 All teaching assistants must enroll in 1 semester of PIAN 840 for 3 credit hours.

Doctor of Musical Arts in Music Performance: Strings

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master's degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2408) section of the online catalog. Further admission requirements are listed below.

Performance

The applicant must be prepared to perform a 40-minute recital program including the repertoire requirements listed by instrument on the Graduate Audition page: https://music.ku.edu/graduate-auditions. The applicant must perform an audition before at least two members of the faculty of the major performance division. In some cases, a video recording may be submitted in lieu of a live performance. A complete list of repertoire studied, including past recital programs, should be included with the graduate application. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions homepage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E.
programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas
Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

D.M.A. Degree Requirements
Research Skills and Engagement
Before scheduling the oral comprehensive exam, doctoral students must satisfy the residency, basic research skills, and responsible scholarship requirements. MUSC 801 Music Bibliography and Research (or its equivalent as determined by the Musicology division) will satisfy the research skills and responsible scholarship requirements.

Prior to the semester in which the comprehensive exam is held, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by University policy (https://policy.ku.edu/graduate-studies/fulltime-enrollment/)
- At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Summer enrollment is not required to maintain registration but summer enrollments may be counted toward the 18 part-time pre-comprehensive hours. The time spent in attaining the master’s degree at KU may also count toward this enrollment requirement, at the program’s discretion.

During the required enrollment outlined above, the student’s supervisor must affirm that the course work and research involvement contribute to the student’s dissertation or academically equivalent program objectives. Research must be performed under the direct supervision of the major advisor if on campus, or with adequate liaison if off campus.

Diagnostic Examinations
All incoming graduate students, except MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of “C.” The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Advisory Committee
Each doctoral student must form a Graduate Advisory Committee. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from Musicology or Music Theory (at least 1 from Musicology for D.M.A. composition), and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

Program of Study
A Program of Study approved by the major advisor must be submitted for approval of the Associate Dean for Academic Affairs by the end of the second term of admission. A student who does not submit a Program of Study by the end of the second semester shall not be permitted to enroll in their third semester of courses.

Recitals
All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. At least two of the three degree recitals must be performed before the oral comprehensive examination.

The first of the three doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program. It must be given within the first two semesters of enrollment unless a petition is submitted for an extension.

Written and Oral Comprehensive Examinations
Performance D.M.A. students must take written qualifying examinations in Musicology, Music Theory, and the major area. Composition D.M.A. and Ph.D. students in Musicology and Music Theory take written qualifying exams in Music Theory and Musicology. After successful completion of the written examinations and the residency and research skills requirements, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the oral examinations.

Document or Lecture-Recital
Candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document, or a longer D.M.A. document only, at the Oral Comprehensive Exam or at least 12 weeks prior to the scheduled defense. Guidelines for proposals can be found on the School of Music website.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements.

Examinations
At least 1 month must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.
Cognate

Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student's advisory committee. Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

Strings Program

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<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
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<td>Applied music</td>
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<td>Seminars</td>
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<td>Recitals (1 credit each)</td>
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<td>Advanced courses in musicology and music theory*</td>
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<td>4</td>
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<tr>
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<td>Electives*</td>
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* Credits may be used to fulfill the 12 optional Cognate credits.

Doctor of Musical Arts in Music Performance: Voice

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

- Church music (organ or choral conducting emphasis),
- Composition,
- Conducting (choral, orchestral, or wind), and
- Areas of performance.

D.M.A. Admission

The applicant is expected to have a master's degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2408) section of the online catalog. Further admission requirements are listed below.

Performance

The applicant must be prepared to perform as much as a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant also should submit with the application a comprehensive repertoire list. In the case of international students, acceptance may be achieved by submitting a video tape (DVD) to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants.

View School of Music audition requirements and procedures (https://music.ku.edu/grad-audition-music/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

D.M.A. Degree Requirements

Research Skills and Engagement

Before scheduling the oral comprehensive exam, doctoral students must satisfy the residency, basic research skills, and responsible scholarship requirements. MUSC 801: Music Bibliography and Research (or its equivalent as determined by the Musicology division) will satisfy the research skills and responsible scholarship requirements.

Prior to the semester in which the comprehensive exam is held, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

- Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by University policy (https://policy.ku.edu/graduate-studies/fulltime-enrollment/)

* Credits may be used to fulfill the 12 optional Cognate credits.
• At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Summer enrollment is not required to maintain registration but summer enrollments may be counted toward the 18 part-time pre-comprehensive hours. The time spent in attaining the master’s degree at KU may also count toward this enrollment requirement, at the program’s discretion.

During the required enrollment outlined above, the student’s supervisor must affirm that the course work and research involvement contribute to the student’s dissertation or academically equivalent program objectives. Research must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off campus.

**Diagnostic Exams**

All incoming graduate students, except MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of "C." The student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

**Advisory Committee**

Each graduate student, in consultation with the major advisor, selects a Graduate Advisory Committee subject to the consent of the faculty members involved, and approval of the School of Music Graduate office. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), 1 from the School of Music at large and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

**Program of Study**

A Program of Study approved by the major advisor must be submitted for the approval of the Associate Dean for Academic Affairs by the end of the second term of admission. Students who do not submit a Program of Study by the end of the second semester shall not be permitted to enroll in third semester courses.

**Recitals**

All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. At least two of the three degree recitals must be performed before the oral comprehensive examination.

The first of the doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program. It must be given within the first two semesters of enrollment unless a petition is submitted for an extension.

**Written and Oral Comprehensive Examinations**

Performance D.M.A. students must take written qualifying examinations in Musicology, Music Theory, and the major area. Composition D.M.A. and Ph.D. students in Musicology and Music Theory take written qualifying exams in Music Theory and Musicology. After successful completion of the written examinations and the residency and research skills requirements, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the oral examinations.

**Document or Lecture-Recital**

Candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document, or a longer D.M.A. document only, at the Oral Comprehensive Exam or at least 12 weeks prior to the scheduled defense. Guidelines for proposals can be found on the School of Music website.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements.

**Language and Diction**

Students in the D.M.A. program in voice must take or have taken a minimum of 1 year each of French, German, and Italian, and courses in English, French, Italian, and German diction before completing the D.M.A. program. If deficient in any language or diction coursework, as determined either through transcript evaluations or during the audition when selections from each language have been performed, the student must enroll in the specific course for that deficiency and pass with a grade of C or better. All deficiencies must be satisfied before the oral comprehensive exam can be scheduled.

**Examinations**

At least 1 month must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination/defense for candidates for the D.M.A. degree.

**Cognate**

Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee.

Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

**Voice Program**

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<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
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<tr>
<td>VOIC 961</td>
<td>Directed Performance (Applied lessons)</td>
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<td>Seminars</td>
<td>9</td>
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<td>VOIC 965</td>
<td>Doctoral Recitals (1 credit each)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
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<tr>
<td></td>
<td>Electives*</td>
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<td>D.M.A. document or lecture-recital</td>
<td>4</td>
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</table>

* Credits may be used to fulfill the 12 optional Cognate credits.
Doctor of Musical Arts in Music Performance: Woodwinds

Doctor of Musical Arts

The Doctor of Musical Arts (DMA) degree is a professional degree program that recognizes exceptional student academic and music qualifications in preparation for professional careers, including teaching at the university level. The DMA student has the opportunity to collaborate with music scholars, theorists, and other performers to attain a broad and well-rounded foundation for advanced careers in music. The degree of Doctor of Musical Arts is offered in:

• Church music (organ or choral conducting emphasis),
• Composition,
• Conducting (choral, orchestral, or wind), and
• Areas of performance.

D.M.A. Admission

The applicant is expected to have a master’s degree, or its demonstrated equivalent, in the proposed field. In addition to official transcripts and letters of recommendation, all applicants should submit résumés of their training and experience in teaching and performing.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2408) section of the online catalog. Further admission requirements are listed below.

Performance

The applicant must be prepared to perform the equivalent of a full master’s recital as deemed appropriate by the major performance division. The audition is heard by at least two members of the major division Graduate Faculty. The applicant should consult the major performance division for specific memory and repertoire requirements. The applicant also should submit with the application a comprehensive repertoire list indicating work studied, memorized, performed in public, or ready for immediate performance. Applicants may submit a video audition with their graduate application to be reviewed by the Graduate Faculty in the major division. A pre-screening audition is required for voice and piano applicants. View School of Music audition requirements and procedures (https://music.ku.edu/graduate-auditions/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

• Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
• Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

D.M.A. Degree Requirements

Research Skills and Engagement

Before scheduling the oral comprehensive exam, doctoral students must satisfy the residency, basic research skills, and responsible scholarship requirements. MUSC 801: Music Bibliography and Research (or its equivalent as determined by the Musicology division) will satisfy the research skills and responsible scholarship requirements.

Prior to the semester in which the comprehensive exam is held, all doctoral students must complete a minimum program engagement equivalent to two full-time semesters. This may be accomplished through either of the following:

• Two semesters (fall and/or spring) of full-time enrollment in KU coursework, as defined by University policy (https://policy.ku.edu/graduate-studies/fulltime-enrollment/)
• At least 18 hours of enrollment in KU coursework spread out over several part-time semesters

Summer enrollment is not required to maintain registration but summer enrollments may be counted toward the 18 part-time pre-comprehensive hours. The time spent in attaining the master's degree at KU may also count toward this enrollment requirement, at the program’s discretion.

During the required enrollment outlined above, the student’s supervisor must affirm that the course work and research involvement contribute to the student’s dissertation or academically equivalent program objectives. Research must be performed under the direct supervision of the major adviser if on campus, or with adequate liaison if off campus.

Diagnostic Examinations

All incoming graduate students, except MM-Opera, are required to take diagnostic exams in Musicology and Music Theory. The exams are given during the week before the Fall and Spring semesters begin. Diagnostic deficiencies can only be satisfied in one of two ways: 1) re-taking the exam the next time it is given (one re-take only) or 2) enrolling in the appropriate review course and receiving at least a grade of “C.”
student must satisfy all diagnostic deficiencies by the end of the third semester of enrollment.

Advisory Committee
Each graduate student, in consultation with the major advisor, selects a Graduate Advisory Committee subject to the consent of the faculty members involved, and approval of the School of Music Graduate office. The committee consists of 5 faculty members: at least 2 faculty members from the major division, 1 from musicology or music theory (at least 1 from musicology for D.M.A. composition), 1 from the School of Music at large and 1 from outside the MUSIC department. This committee administers the comprehensive and final oral examinations. Performance members of the advisory committee grade the required degree recitals.

Program of Study
A Program of Study approved by the major advisor must be submitted for the approval of the Associate Dean for Academic Affairs by the end of the second term of admission. Student who do not submit a Program of Study by the end of the second semester shall not be permitted to enroll in third semester courses

Recitals
All students in performance and conducting must perform a total of 3 public recitals. This does not include the D.M.A. lecture-recital if the student selects a lecture-recital as a final project. At least two of the three degree recitals must be performed before the oral comprehensive examination.

The first of the doctoral recitals is considered to be a qualifying recital for determining whether the student can remain in the doctoral program. It must be given within the first two semesters of enrollment unless a petition is submitted for an extension.

Written and Oral Comprehensive Examinations
Performance D.M.A. students must take written qualifying examinations in Musicology, Music Theory, and the major area. Composition D.M.A. and Ph.D. students in Musicology and Music Theory take written qualifying exams in Music Theory and Musicology. After successful completion of the written examinations and the residency and research skills requirements, the student is eligible to schedule the oral comprehensive examination administered by the student’s graduate advisory committee. Majors in performance and conducting must have presented 2 of the 3 required recitals before taking the oral examinations.

Document or Lecture-Recital
Candidates in performance, conducting, and composition must submit to the graduate advisory committee a proposal for a D.M.A. lecture-recital document, or a longer D.M.A. document only, at the Oral Comprehensive Exam or at least 12 weeks prior to the scheduled defense. Guidelines for proposals can be found on the School of Music website.

Upon satisfactory completion of all other degree requirements, candidates must schedule a final oral examination (defense). The student must receive at least a grade of B on the document, lecture-recital, or composition for satisfactory completion of degree requirements.

Examinations
At least 1 month must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination for candidates for the D.M.A. degree.

Cognate
Each D.M.A. student (not including Composition) may choose a defined cognate area of 12 credits with the approval of the student’s advisory committee.

Hours taken to fulfill the Musicology, Music Theory and elective requirements may be used to meet the optional 12 credit Cognate.

Bassoon, Clarinet, Flute, Oboe, and Saxophone Program

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<td></td>
<td>Seminars</td>
<td>6</td>
</tr>
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<td></td>
<td>Recitals (1 credit each)</td>
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<tr>
<td>W&amp;P 702</td>
<td>Special Studies in Woodwind Instrument Pedagogy</td>
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<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced courses in musicology and music theory*</td>
<td>12</td>
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<tr>
<td></td>
<td>Electives*</td>
<td>11</td>
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<tr>
<td></td>
<td>D.M.A. document or lecture-recital</td>
<td>4</td>
</tr>
</tbody>
</table>

* Credits may be used to fulfill the 12 optional Cognate credits.

Doctor of Philosophy

View requirements for:

- Doctor of Philosophy in Music (p. 2234)
- Doctor of Philosophy in Music Education (p. 2236)

Doctor of Philosophy in Music

Ph.D. in Music

The Ph.D. in Music is offered in Musicology or Music Theory.

Ph.D. in Music Admission

The Doctor of Philosophy degree in music is offered in musicology and music theory. The applicant is expected to hold a Master of Music degree with emphasis in musicology or music theory from KU or an equivalent master’s degree from another accredited institution. In addition to the required transcripts and letters of recommendation, the applicant for admission to the Ph.D. program should submit a resume or CV of professional training and experience and samples of original scholarly writing.

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.
Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Programs of study leading to the Master of Music (M.M.), Master of Music Education (M.M.E.), Doctor of Musical Arts (D.M.A.), and Doctor of Philosophy (Ph.D.) are offered through the School of Music. Specific admission procedures and degree requirements for the M.M. and M.M.E. programs are described under division headings. Specific admission procedures and degree requirements for the D.M.A., Ph.D. (musicology/music theory), and Ph.D. (music education/music therapy) are listed in the appropriate sections.

**Program Areas**

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

**Doctor of Philosophy in Music Degree Requirements**

**Foreign Language Requirements**

Aspirants to the Ph.D. degree in music theory and musicology are expected to have a reading knowledge of German, French, Italian, Spanish, or any other foreign language approved by the department. Reading proficiency must be demonstrated before scheduling the oral comprehensive examination. The student also may be advised to develop reading proficiency in another language or languages in order to pursue research for the dissertation.

**Course of Study**

Specific course work for each student is arranged individually in consultation with the student’s advisor. The Ph.D. program normally requires 4 years of full-time study beyond the master's degree, with the first 2 years devoted to coursework. A minimum of 18 credit hours is devoted to the dissertation, an original contribution to knowledge in the student’s research area.

Students in musicology must complete 2 semesters of MUSC 940 Seminar on Selected Topics in Musicology. Students in music theory must complete 2 semesters of MTHC 789 Seminar on Special Topics in Music Theory. In addition, students must complete at least 3 more 3-credit-hour courses in advanced musicology and at least 3 more 3-credit-hour courses in advanced music theory.

Although the Ph.D. program does not include a minor area, students are encouraged to continue their study of performance and/or composition, and may be advised to take non-music courses that are directly applicable to their fields of research for the dissertation.

For general information on academic requirements, residence, tenure, and enrollment, see the Graduate Studies (p. 2408) section of the online catalog.

**Research Skills and Responsible Scholarship**

Doctoral students are required to have training in both responsible scholarship and research skills pertinent to the doctoral level of research in their field of study.

To satisfy both components, Ph.D. students in Musicology or Music Theory must complete MUSC 801 Music Bibliography and Research (or its equivalent) and, if available, participate in advanced performance seminars.

**Scholarly Presentation**

Each candidate for the Ph.D. degree in musicology and music theory must make a public presentation of no less than 20 minutes on a scholarly topic. This requirement may be fulfilled by reading a paper at a national or regional meeting of a society in the student’s discipline or in a colloquium at KU.

**Written and Oral Comprehensive Examinations**

Students must take written examinations in music theory and musicology when most of the course work has been completed and research skills/responsible scholarship requirements have been fulfilled. Some major divisions also may require a written examination in the major area. Upon successful completion of all written examinations, the student is eligible to schedule the oral comprehensive examination administered by the graduate advisory committee. With the satisfactory completion of both written and oral comprehensive examinations the aspirant is admitted to candidacy for the degree of Doctor of Philosophy.

**Dissertation Proposal**

No later than the end of the semester after successful completion of the written and oral comprehensive examinations, the candidate, in consultation with the faculty dissertation committee, must submit a dissertation proposal of several pages with a preliminary bibliography, outline, and description of the project and research plan.

**Final Oral Examination**

Following completion of the dissertation, a final oral examination is scheduled in which the candidate presents and defends the results of dissertation research and is expected to respond to questions from the faculty committee. A grade of at least B must be achieved on the dissertation for satisfactory completion of the degree requirements.

**Doctor of Philosophy in Musicology Program**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
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</tbody>
</table>

Musicology (At least 9 credits must be 700-level or above, at least 6 credits must be MUSC 940)
Doctor of Philosophy in Theory Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 801</td>
<td>Music Bibliography and Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced Music Theory (12 credits of MTHC 789, and at least 12 credits of graduate level MTHC courses)</td>
<td>24</td>
</tr>
<tr>
<td>MUSC 999</td>
<td>Dissertation</td>
<td>18</td>
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<tr>
<td>Electives</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Doctor of Philosophy in Music Education

Ph.D. in Music Education

The Doctor of Philosophy with an emphasis in either music education or music therapy focuses on research and scholarship. It is often sought by those who aspire to careers in research and graduate-level teaching. The requirements help the student develop broad and profound understanding of musical behavior, sophisticated skill and extensive experience in pursuing new knowledge of such behavior, and a rational system for evaluating the relationships between the specialty and other areas of human understanding. The program culminates with completion of a substantial piece of original research.

Ph.D. in Music Education Admission

Requirements for Regular Admission

1. Master's grade point average of at least 3.5 on a 4.0 scale.
2. Appropriate baccalaureate and master's degrees to support the individual's goals for doctoral study.
3. Three (3) letters of recommendation estimating the applicant's potential for success in doctoral study.
4. Documentation of at least 3 years successful full-time experience, or its equivalent, as a professional music educator if seeking a concentration in music education, or at least 5 years successful full-time experience as a professional music therapist, or its equivalent, if seeking a concentration in music therapy.
5. Submission of a video recording appropriate to the degree emphasis.
6. A reasoned statement of professional goals and research interests.
7. An interview with the appropriate faculty for area of emphasis.
8. Final official degree conferred transcript(s) must be sent directly from all previous colleges or universities.
10. Other supporting materials may be required.

Additional detailed admission requirements and information are found on the School of Music website (https://music.ku.edu/music-education-music-therapy/).

Graduate Admission to the School of Music

Application procedures and program requirements can change. Please visit the School of Music Admissions webpage (https://music.ku.edu/graduate-programs/) for current information.

Graduate programs in the School of Music are open to students with acceptable baccalaureate degrees, as specified by the admitting areas, whose academic records indicate that they can do successful work at the graduate level. Regular admission requires a bachelor's degree and a grade-point average of at least a B (3.0 on a 4.0 scale), from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements.

Program Areas

Graduate study in the School of Music is organized into program areas within 2 units:

- Music includes programs in composition, conducting, musicology, music theory, and areas of performance.
- Music Education and Music Therapy (MEMT) includes programs in music education or music therapy.

At least a 3.0 grade-point average, overall and in the major area, is required for all course work counted toward any graduate degree in the School of Music. If the overall grade-point average falls below 3.0, the student is placed on probation for one semester; if the cumulative average is not 3.0 or higher after the next semester, the student is dismissed from the program. Students must also achieve at least a grade of B in thesis, lecture-recital, document or dissertation, and on each recital for satisfactory completion of degree requirements.

Ph.D. in Music Education Degree Requirements

Research Skills

Doctoral students in music education and music therapy at KU must demonstrate research skills by completing 3 research projects suitable for publication. These may be developed and completed independently or in consultation with appropriate doctoral faculty members. There must be a project for three different types of research methodology, usually representing methods of descriptive, experimental, and historical (including the history and logic of ideas) research. If those methods are chosen the descriptive and experimental research articles should be presented in APA style. The historical research article may be presented in Turabian, MLA, or APA style. The student may propose other divergent methodologies if those fit his/her program of study more adequately.

It is up to the doctoral program planning committee to approve the methodologies each student utilizes.

Each completed project is reviewed by the student's doctoral planning committee, which rules in the majority whether the project is of sufficient
quality for publication in a national, refereed research journal in music education or music therapy. The committee chair will determine if the projects will be reviewed by additional faculty not a part of the program planning committee. Single-author studies that have been published or accepted for publication in such journals may be used to demonstrate these skills.

Completion of each of the 3 research projects must be certified by the student’s mentor/advisor in music education or music therapy on the MEMT Doctoral Check list in the student’s file in the MEMT office. The mentor/advisor must submit an appropriate MEMT Do-All form after the completion of each project.

Responsible scholarship requirements are met by satisfactory completion of courses MEMT 812 Research in Music Education and Music Therapy and MEMT 920 Doctoral Seminar in Music Education and Music Therapy.

**Preliminary and Comprehensive Examinations**
The student must pass a series of examinations, culminating with the comprehensive oral examination.

The music education and music therapy Ph.D. handbook is available online and includes information about patterns of course work, the Ph.D. minor, examinations, and the dissertation.

**Plan of Study**
Course requirements for the doctoral degree are flexible. The Ph.D. program requires a minor. Each student’s program is planned specifically in light of his or her background and to meet the needs of the anticipated academic and professional career. However, each student is expected to achieve a broad understanding of human musical behavior and to become skilled in research. Professional competence, not hours of credit per se, is the underlying requisite for conferring the degree.

The student works with her or his faculty advisor to complete a Degree Requirement Program Plan. The advisor submits the completed program plan with the MEMT Do-All form.

**Graduate Certificate in Music Enterprise**
The Music Enterprise Certificate is a program enhancement option for undergraduate and graduate music major students designed to provide foundational understanding and experiences in establishing, managing, promoting, and otherwise successfully operating business enterprises in the music industry. The intent of the certificate is not to provide comprehensive training in all non-performance aspects of the music business, but rather, to allow students to explore how to combine their own musical interests and priorities with the tools and concepts necessary to function creatively in the music industry of today, while also preparing to be adaptable for the changing landscape of music production and consumption in the future. Non-music major students may pursue the Music Enterprise Certificate by permission of the Associate Dean for Academic Affairs in Music.

**Current Music Graduate Degree-Seeking Students:** Graduate students in good standing (non-probationary) may declare for the Music Enterprise Certificate at any time during their course of study. There are no admission requirements for current music graduate students.

**Current Graduate Students outside of Music:** Non-music graduate students in good standing (non-probationary) who wish to be admitted to the Certificate program must apply directly to the certificate by completing the application to add a Graduate Certificate for current degree-seeking students (https://gograd.ku.edu/register/current_ku_certificate/) (online form submission). Applicants will be invited to interview with the Director of the Program who will determine whether the student has the necessary background.

**Certificate-Seeking Students (non-degree seeking):** Students applying directly to the Certificate program must apply directly to KU Graduate Certificate Program (http://gradapply.ku.edu/apply/) (online submission). Applicants will be invited to interview with the Director of the Program who will determine whether the student has the necessary background.

12 credits are required to complete the certificate.

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MUS 586</td>
<td>The Business of Music</td>
<td>3</td>
</tr>
<tr>
<td>MUS 587</td>
<td>Entrepreneurship and Outreach</td>
<td>3</td>
</tr>
<tr>
<td>MUS 588</td>
<td>Arts Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Choose 1 course from the following School of Business courses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENTR 701</td>
<td>Entrepreneurship</td>
<td>3</td>
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<tr>
<td>ENTR 702</td>
<td>Financing Your Own Business</td>
<td>3</td>
</tr>
<tr>
<td>ENTR 703</td>
<td>Marketing Your Own Business</td>
<td>3</td>
</tr>
</tbody>
</table>

MUS 586 is a prerequisite for MUS 587 and MUS 588.

**Graduate Certificate in Music Performance**
The Graduate Certificate in Music Performance offers a one-year program providing an intensive period of post-baccalaureate study in music performance or conducting. It is intended for exceptionally gifted and accomplished performers and conductors seeking professional performing careers, but not wishing to engage in academic studies required for a graduate degree. Study is available in woodwinds, brass, percussion, strings, piano, voice, organ, church music, jazz, carillon and conducting (band, orchestra and choir).

**Admission to Music Performance Graduate Certificate Program**
Candidates for admission to the Graduate Certificate in Music Performance must provide proof of a bachelor’s degree in keeping with the Admission to Graduate Study policy (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/).

**Current Music Graduate Degree-Seeking Students:** Graduate students in good standing (non-probationary) may declare for the Music Performance Certificate at any time during their course of study. There are no admission requirements and no cost for current music graduate students.

**Current Graduate Students outside of Music:** Non-music graduate students in good standing (non-probationary) who wish to be admitted to the Certificate program must apply directly to the certificate by completing the application to add a Graduate Certificate for current degree-seeking students (https://gograd.ku.edu/register/current_ku_certificate/) (online form submission).
form submission - no cost). Applicants will be invited to audition with the Area Coordinator for the program of interest, who will determine whether the student has the necessary background.

Certificate-Seeking Students (non-degree seeking): Students applying directly to the Certificate program must apply directly to KU Graduate Certificate Program (http://gradapply.ku.edu/apply/) (online form submission, cost: $30). Applicants will be invited to audition with the Area Coordinator for the program of interest, who will determine whether the student has the necessary background.

Twelve (12) credit hours must be completed during one year of study to obtain the Graduate Certificate in Music Performance. An additional twelve (12) credit hours in music performance must be completed if continuing for a second year of study.*

Courses are in the following categories (credit hours are per year):

- Applied Studio Instruction (6)
- Large Ensemble (2)
- Chamber music/Jazz Combo/Accompanying/Coaching (2)
- Recital (1)
- Community Outreach Performance Project (1) or Elective (1)

*International Graduate Students

Federal regulations require F-1 international graduate students to maintain an enrollment of 9 credit hours per semester until their final semester of enrollment. Elective courses in the School of Music or courses in the AEC may be taken to reach this enrollment. Students enrolling in a combination of AEC and music courses will be issued a “pathway” I-20 instead of a Certificate I-20.

Applied Studio Instruction Courses

Students are required to enroll in 3 credit hours each semester in applied studio instruction ___711 with the appropriate faculty member.

Large Ensemble

Students are required to enroll in 1 credit hour each semester in a large ensemble specific to their area of instruction.

Chamber music/Jazz Combo/Accompanying/Coaching

Students are required to enroll in 1 credit hour each semester in a course specific to their area of instruction.

Recitals

Students are required to enroll in 1 credit hour of recital in the final semester of their course load.

MUS 799 Artist Certificate Recital

Community Outreach Performance Project

Students may enroll in 1 credit hour to satisfy the outreach project. All projects are overseen by the Associate Dean for Performance Activities. Students for whom this course is not appropriate will take an elective course (see Elective Courses).

MUS 800 Directed Study: Music Engagement and Outreach

Elective Courses

Students are strongly advised to consult with their primary professor to choose an elective course(s) that is consistent with their primary course of study. International Graduate Students who have a TOEFL score between 65 and 80 (Internet-based) must take a minimum of 3 credits through the Applied English Center (AEC) during their first semester of enrollment.
Nursing

The School of Nursing is one of three schools at the University of Kansas Medical Center (http://www.kumc.edu/) (KUMC) in Kansas City, Kansas. Academic programs at KUMC are offered through the Schools of Health Professions, Medicine, and Nursing. In addition to the Kansas City campus location, the School of Nursing also has a campus location in Salina, Kansas. The Office of Graduate Studies at KUMC (http://nursing.kumc.edu/academic-affairs/graduate-studies.html) handles matters related to graduate programs in Health Professions, Medicine, and Nursing.

The KU School of Nursing’s baccalaureate, master’s, and doctor of nursing practice (DNP) programs are accredited by the Commission on Collegiate Nursing Education (CCNE) (https://www.aacnnursing.org/CCNE/). The Nurse-Midwifery Program is fully accredited by the Accreditation Commission for Midwifery Education (ACME) (https://www.midwife.org/acme/) of the American College of Nurse-Midwives, 8403 Colesville Road, Suite 1550, Silver Spring, MD, 20910, (240) 485-1800.

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

School of Nursing Degree Programs

Degrees (p. 2239)

 Bachelor of Science in Nursing (p. 2258)
 Master of Science in Nursing (p. 2265)
 Doctor of Nursing Practice (p. 2270)
 Doctor of Philosophy in Nursing (p. 2267)

Certificates (p. 2239)

 Post-Master’s Certificate Programs in Nursing (p. 2274)
 Graduate Certificate - Adult-Gerontology Acute Care Nurse Practitioner (p. 2275)
 Graduate Certificate - Adult-Gerontology Primary Care Nurse Practitioner (p. 2277)
 Graduate Certificate - Family Nurse Practitioner (p. 2278)
 Graduate Certificate - Health Professions Educator (p. 2282)
 Graduate Certificate - Health Informatics (p. 2015)
 Graduate Certificate - Nurse Midwifery (p. 2283)
 Graduate Certificate - Psychiatric/Mental Health Nurse Practitioner (p. 2285)

Undergraduate Programs

The Bachelor of Science in Nursing (BSN) (p. 2259) program prepares baccalaureate generalist nurses for professional nursing practice. The American Association of Colleges of Nursing’s (AACN) Essentials of Baccalaureate Education for Professional Nursing Practice provide the framework for this first step in professional nursing education (AACN, 2008). The roles of the baccalaureate generalist include: provider of care; designer/manager/coordinator of care; and member of a profession. Baccalaureate generalist education provides the foundation for all graduate nursing education. This traditional BSN program is a full-time program, requiring on-campus attendance. The traditional BSN program is offered through both the Kansas City and Salina campus locations.

The online RN to BSN (https://catalog.ku.edu/nursing/bs/#admissiontext) program provides registered nurses (RN) a flexible format to complete the baccalaureate degree and expand career options. The program is fully online, accessible 24 hours a day, and can be completed in one calendar year of full-time study or up to five years of part-time study. Students can enter the program at any semester, i.e., spring, summer or fall. In the KU School of Nursing’s RN to BSN program, students will refresh skills and learn new ones, with a curriculum that will broaden abilities in many areas, including leadership and critical thinking.

The Community College Nursing Partnership (CCNP) (https://catalog.ku.edu/nursing/bs/#admissiontext) offers the convenience of staying at a community college while pursuing both the Associate Degree in Nursing (ADN) and the Bachelor of Science in Nursing (BSN). The program bypasses the traditional prelicensure associate degree nursing step. Instead, the curriculum makes it possible for students to complete the ADN and BSN simultaneously, through on-campus courses at the community college and online courses through KU School of Nursing. After completing the CCNP program, eligible students are awarded both an ADN from the partner community college and a BSN from KU School of Nursing, and are eligible to take the National Council Licensure Examination (NCLEX) for registered nurses.

High School Preparation

High school students planning to enter the baccalaureate program in nursing are encouraged to follow a general college preparatory course of study. Such a course usually emphasizes basic preparation in English, a foreign language, mathematics, natural science, and social sciences.

Graduate Programs

Basic admission requirements are listed in the Graduate Studies (p. 2408) section of the online catalog. Individual graduate programs may have additional specific requirements including prerequisite undergraduate courses. These are listed or referenced in program descriptions. Combined degree options are available.

The School of Nursing offers the following graduate programs:

- Master of Science (p. 2265)
- Doctor of Nursing Practice (p. 2270)
- Doctor of Philosophy (p. 2267)
- Nursing Certificate Programs (p. 2274)
- Interprofessional Certificate Programs (p. 2274)

For online information about graduate programs, visit the School of Nursing website (http://nursing.kumc.edu/).
In addition to the graduate degree and graduate certificate options, the School of Nursing periodically also has post-doctoral fellowship opportunities available to DNP or PhD-prepared applicants seeking additional skill-development opportunities in clinical practice or research, respectively. Current opportunities are listed on the KU School of Nursing website (http://nursing.kumc.edu/).

**Undergraduate University Regulations**

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

**Academic Forgiveness**

Academic forgiveness does not apply in the School of Nursing undergraduate programs.

**Application**

Each undergraduate program (i.e., BSN, RN to BSN, CCNP) abides by specific application requirements and deadlines. More details can be found within the description of each program.

**Credit/No Credit**

Undergraduate students may choose to select a Credit/No Credit option for one course enrollment per semester. This option is not available for courses required of the student's major or minor program of study. For more information, visit the KU Policy Library (http://policy.ku.edu/). Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages. The KU School of Nursing does not accept Credit classes where a Credit is awarded for the grade of D.

**Grading**

Courses in which grades of D and F are earned do not count toward graduation.

**Graduation with Distinction and Highest Distinction**

Students who rank in the upper 10 percent of their graduating class may graduate With Distinction. The upper third of those students awarded With Distinction may graduate With Highest Distinction. The list is compiled each spring and includes August, December, and May graduates.

**Honor Roll**

Students with grade-point averages of 3.5 who have completed at least 12 hours are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

**Honors Graduates**

For students who complete the School of Nursing’s Honors Program, designation of Departmental Honors appears on the transcript.

**Probation**

Students whose cumulative grade-point average (GPA) falls below 2.0 are placed on probation. The associate dean of Student Affairs and Enrollment Management notifies the student by letter. It is the student’s responsibility to seek a conference with the Student Affairs advisor. The student and the Student Affairs advisor assess the situation jointly and make appropriate recommendations.

A student is removed from probation when, upon completion of the next 12 credit hours of enrollment, he student's cumulative GPA is equal to or greater than 2.0. Only courses required for the nursing major (i.e., junior/senior course work) apply toward the required GPA average for removal from probation. No student may graduate with a nursing and overall grade-point average less than 2.0.

If a student on probation does not attain a cumulative GPA equal to or greater than 2.0 at the end of the probationary semester, the student is dismissed for academic reasons. One nursing course may be repeated one time, only if necessary to earn the minimum grade of C or S. Failure to achieve a minimum grade of C or S in two nursing courses or one repeated nursing course results in the student’s dismissal from the program.

**Repetition of Courses**

For admission to the school, grades in all courses taken and retaken are included in the grade-point average. All grades are considered for calculation of honors and awards.

**Transfer of Credit**

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

**Graduate University Regulations**

For information about university regulations, see Regulations (http://catalog.ku.edu/regulations/). For Graduate Studies regulations, see Office of Graduate Studies, Medical Center Campus (p. 2413) section of this catalog.

**Academic Forgiveness**

Academic forgiveness does not apply in the School of Nursing.

**Credit/No Credit**

Graduate students may select the Credit/No Credit option for courses that do not fulfill a degree requirement, but this option may be limited in certain programs. Students should follow the policy outlined in the University Senate Rules and Regulations, Section 2, article 2.27, and contact the department or program for more information.

**Nursing (Graduate) Courses**

IPHI 820. Program, Project, and Communication Planning. 2 Credits.

Strategies to promote program, project, and communication planning are presented and applied by the student. Communication strategies
for informing, guiding, and persuading clients, health care providers, payers, and other stakeholders to advance program and project development are discussed. The use of evolving information technologies to improve program, project and communication planning is emphasized. Prerequisites: Corequisite: NRSG 880, or consent of instructor.

**IPHI 850. Introduction to Health Informatics. 2 Credits.**
This course provides a broad survey of health informatics focused on five themes: health informatics foundations; clinical decision support; human factors/organization factors; public health informatics and current issues in health informatics including best practices.

**IPHI 851. Transforming Health Care through Use of Information Systems and Technology. 3 Credits.**
Includes 2 credit hour lecture and 1 credit hour practicum. The application of the information system development life cycle in the design, selection, and implementation of health information technology applications will be examined. Human computer interactions and emerging technologies will be explored for their impact on patient care and safety. The role of legal, regulatory, ethical and security issues will be discussed as they apply to clinical and consumer information technologies. Prerequisite: Consent of Instructor.

**IPHI 852. Health Data Theory and Practice. 3-4 Credits.**
Data science concepts and database theory as related to healthcare settings will be introduced. Simple database modeling, design, and manipulation will be explored using a database management system and a query language. Key data science methods, such as data wrangling and visualization, will be leveraged for decision making. Prerequisite: None.

**IPHI 853. Abstraction and Modeling of Healthcare Information. 3 Credits.**
Includes 2 credit hour lecture and 1 credit hour practicum. The information system development life cycle process is presented with emphasis on determination and analysis of information system requirements and system design that meet the identified health care information requirements. Object-oriented techniques will be introduced, including Unified Modeling Language and Unified Modeling Methodology, to facilitate process analysis and design proposal development. Prerequisite: NRSG 820 and consent of instructor.

**IPHI 854. Knowledge Management in Healthcare. 3 Credits.**
Includes 2 credit hour lecture and 1 credit hour practicum. Knowledge management is the creation, communication, and leveraging of a healthcare organization's knowledge assets. Defining knowledge, describing the knowledge creation cycle, and the identification of the knowledge worker and his/her impact on the organization are discussed. Information technology and communities of practice are presented in a balanced approach supporting a systematic viewpoint of the knowledge management process. Knowledge management theory is enhanced with the performance of a knowledge audit and the development of knowledge management tools. (Same as NRSG 854.) Prerequisite: NRSG 820 and consent of instructor.

**IPHI 856. Health Informatics Practicum. 1-3 Credits.**
In collaboration with healthcare information faculty, preceptors, students design an experience to facilitate application of theories and research related to health care informatics. Emphasis is on the application of the information system development life cycle. Students analyze the leadership and technical behaviors of various informatics roles and negotiate an informatics project to be completed within the practicum. Prerequisite: All Specialty Core, Leadership Core, IPHI 853, Abstraction and Modeling of Health Care Information, IPHI 852, Health Data: Theory & Practice. Prerequisite or Co-requisite: IPHI 854, Knowledge Management in Healthcare, IPHI 851, Topics in Health Care Informatics, IPHI 860, Research Project in Nursing, or consent of instructor. LEC

**IPHI 858. Health Informatics Practicum: Pharmacy. 4 Credits.**
In collaboration with health informatics faculty and preceptors, students design an experience to facilitate application of theories and research related to health informatics in a pharmacy setting. Emphasis is on the application of the information system development life cycle. Students analyze the leadership and technical behaviors of various informatics roles and negotiate an informatics project to be completed within the practicum. This course is only open to students enrolled in the dual PharmD and MS in Health Informatics degree. Prerequisite: All leadership core courses, IPHI 852, IPHI 853. Prerequisite or Co-requisite: IPHI 851, IPHI 854, IPHI 860, or consent of instructor.

**IPHI 860. Health Informatics Scholarly Project. 2 Credits.**
This research or evidence-based project course is designed for students to apply knowledge from their coursework. Students will work with a faculty mentor on components of a research, quality improvement, or evidence-based practice project. The student will create a scholarly document. Prerequisite: A research course and two informatics courses, or consent of instructor.

**IPHI 957. Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety. 3 Credits.**
Includes 2 credit hour lecture and 1 credit hour practicum. The need to exchange clinical information consistently between health care providers, care settings, researchers and other requires syntactic and semantic interoperability. Requirements and approaches to meet interoperability will be explored. Standards for messaging, terminology, and knowledge representation will be investigated. Prerequisite: Consent of instructor.

**IPHI 958. Knowledge Representation and Interoperability. 3 Credits.**
Includes 2 credit hour lecture and 1 credit hour practicum. The need to exchange clinical information consistently between health care providers, care settings, researchers and other requires syntactic and semantic interoperability. Requirements and approaches to meet interoperability will be explored. Standards for messaging, terminology, and knowledge representation will be investigated. Prerequisite: Consent of instructor.

**Nursing (Graduate) Courses**

**NRSG 700. Analysis of Variance for Nursing Research. 2 Credits.**
In this course, students will learn appropriate analytic approaches for experimental and quasi-experimental research designs. Basic statistical foundations such as distributional assumptions and hypothesis testing will be reviewed. Essential statistical concepts, including effect size, power and sample size, and error rates will be discussed in the context of experimental designs. The core focus of the course will be a general linear model approach to analysis of variance (ANOVA) methods including one-way ANOVA, contrasts and post hoc tests, factorial designs, analysis of covariance (ANCOVA), and repeated measures ANOVA. Applications of methods for nursing and healthcare research will be examined. Prerequisite: Graduate level introductory statistics course or consent of instructor.

**NRSG 722. Scholarly Writing for the Health Professional. 3 Credits.**
Development of scholarly writing skills is emphasized to promote professional communication and to enhance professional image. Students enrolled in this interdisciplinary course analyze their own and others’ writing to improve their written communications. Writing skills are practiced and developed by critiquing published articles, and by...
NRSG 748. **Theories for Practice and Research.** 3 Credits.
Theory development and analysis techniques provide the framework for the study of concepts and theories from nursing and related disciplines. Particular emphasis will be placed on the relationship of theory and research in the development of nursing knowledge to support evidence-based practice. This course will enhance the decision-making skills for choosing and using concepts and theories that guide practice. Prerequisite: Admission to the graduate nursing program, or consent of instructor.

NRSG 754. **Health Care Research.** 3 Credits.
This course will enable the student to synthesize nursing knowledge and make recommendations to translate research findings into practice within diverse health care settings. Research methods, processes and findings for use in practice will be critically evaluated. Emphasis will be placed on formulating relevant research questions from theory and practice. Prerequisite: Admission to the graduate nursing program, Graduate Statistics, or consent of instructor.

NRSG 755. **Professionalism in Advanced Nursing Practice.** 3 Credits.
An analysis of economic, political, legal, ethical, professional, societal and cultural issues is conducted within the context of advanced nursing practice. Application of concepts essential to understanding, influencing and leading change in health care delivery specific to advanced nursing practice is emphasized. Prerequisite: Admission to the graduate nursing program, or consent of instructor.

NRSG 801. **Advanced Health Assessment and Clinical Reasoning.** 3 Credits.
The purpose of this course is to develop knowledge and skills for advanced clinical nursing practice, including comprehensive history and physical exam across lifespan. Content on special populations, communication with patients and care teams, cultural considerations, health promotion and prevention, and use of electronic health records will be discussed with opportunity for application. Prerequisite: Corequisite: NRSG 812: Advanced Pathophysiology, or permission of course faculty.

NRSG 803. **Introduction to Clinical Research.** 1 Credit.
This course will provide a comprehensive overview to clinical research. The student will gain an understanding of how to develop clinical research questions including protocol design and the factors that should be considered in initiating a clinical research study. This will include biostatistical considerations, the recruitment of study participants, regulatory issues, and data management, and defining measures and instruments. Students will gain knowledge of how to define clinical research among the various institutional entities involved with clinical research at the University of Kansas Medical Center such as the Research Institute (RI), General Clinical Research Center (GCRC) and the Human Subjects Committee (HSC). Additionally, one component of the course will focus on how to apply for funding (grantmanship), critical appraisal of research studies, and how to present research data. Prerequisite: Consent of instructor.

NRSG 804. **Interpreting Research for Applied Science.** 3 Credits.
Research relevant to therapeutic intervention comes from a variety of disciplines involving varied research designs and analysis strategies. Students in this course will examine selected research studies and gain skill in analyzing methods and results as well as in applying research findings to practical problems. Students will also design their own research project reflecting their area of interest. Prerequisite: Corequisite: NRSG 748, 754, and 755 or consent of instructor.

NRSG 805. **Understanding Disability through Mass Media.** 2 Credits.
This class is an overview of how mass media frames disability for the public. This course will focus on issues related to disability and the mass media representation including journalism, TV, film, advertising and the internet. Topics discussed will be the various models of media representation of disability, the impact of stigma in mass media imagery, the impact of cultural and media representations on the experiences of people with disabilities, content created by and for people with disabilities, news about disability rights in the US society, and "hidden" disabilities. Also considered will be the healthcare response to these images and to people with disabilities. The course will be offered online in a synchronous format. Prerequisite: Consent of instructor.

NRSG 806. **Advanced Physiology.** 3 Credits.
A course designed to lead to an advanced comprehension of the physiology of organ systems in the human in both cellular and organ processes. Physiology subject matter relevant to clinical health sciences include membrane transport, muscle, cardiovascular, respiratory, renal, gastrointestinal, neurological, and endocrine function. Cellular mechanisms include the structure and function of ion channels and pumps, mechanisms of calcium regulation, excitation-coupling processes. Prerequisite: Admission to the School of Nursing or consent of instructor.

NRSG 807. **Genetics in Primary Care.** 2 Credits.
This course is designed to give the primary care nurse practitioner and other graduate nursing students a foundation in medical genetics. The basics of genetics, common genetic disorders and genetic testing are discussed. The application of this knowledge to counsel individuals at risk for genetic disorders is emphasized through the use of case studies. Ethical, legal and clinical practice issues and perspectives of primary care counseling in genetics are addressed. Prerequisite: Admission to the Graduate Nursing Program or Consent of Instructor.

NRSG 808. **The Social Context for Health Care Policy.** 2 Credits.
Using a local/single clinical issue students examine ways to abstract this issue into a social policy context. Local exemplars are used throughout the course to demonstrate the leadership and structural systems required to effect change in policy. Strategies to identify constituencies and build coalitions are studied. Prerequisite: NRSG 755, or consent of instructor.

NRSG 809. **Health Promotion and Complementary Therapeutics.** 3 Credits.
Current trends in health promotion and clinical preventive care across the lifespan are examined. Specific guidelines for assisting clients to maintain/improve health and/or prevent illness are reviewed. Attention is given to the roles of the health care provider and care recipient in screening, communication, and counseling. The use of complementary (non-pharmacological) therapeutics in assisting clients to achieve goals of health promotion is examined. The recommendation and use of non-pharmacological interventions will be evaluated based on research findings related to selection of therapeutics and measurement of expected outcomes following use of a particular intervention. Prerequisite: Admission to the graduate nursing program, or consent of instructor.

NRSG 811. **Principles of Clinical Epidemiology.** 3 Credits.
Principles of Clinical Epidemiology introduces the basic concepts of epidemiology with meaningful clinical and translational applications to healthcare. This course is designed to equip graduate students to make informed high-quality evidence-based decisions in clinical care and to develop answerable research questions regarding structural, social, and health conditions impacting the population. Students will be able to efficiently and effectively search the literature for high quality evidence...
NRSG 812. Advanced Pathophysiology. 3 Credits.
Course focus is the in-depth scientific knowledge base relevant to selected pathophysiological states confronted in advanced nursing practice. This information provides a foundation for clinical assessment and the formulation of decisions related to clinical diagnosis and the management of therapeutic regimens. Age specific and developmental alterations are correlated with clinical diagnosis and management. Application is made through age appropriate examples. Prerequisite: Admission to the graduate nursing program or consent of instructor.

NRSG 813. Advanced Pharmacology. 3 Credits.
The clinical application of specific categories of drugs, commonly encountered in primary care settings is discussed. The use of protocols, prescription writing, and the ethical/legal, and economic issues surrounding the advanced nurses' role in prescribing and monitoring pharmacologic therapies in the ambulatory setting are explained. Factors such as age-appropriate content related to pharmacokinetics, dosages, expected outcomes, and side effects of the drugs are discussed. First line versus second line drugs, alternate drugs, drug interactions, adjusting drug dosages, patient education, and compliance issues related to drug therapy are addressed. The nurse's role and responsibility related to data collection, problem identification, and consultation with the physician is explored. Application is made through age-appropriate case studies. Prerequisite: NRSG 812 Advanced Pathophysiology or consent of instructor.

NRSG 820. Program, Project, and Communication Planning. 2 Credits.
Strategies to promote program, project, and communication planning are presented and applied by the student. Communication strategies for informing, guiding, and persuading clients, health care providers, payers, and other stakeholders to advance program and project development are discussed. The use of evolving information technologies to improve program, project and communication planning is emphasized. Prerequisites: Corequisite: NRSG 880, or consent of instructor.

NRSG 821. Clinical Dynamics and Interventions in Diabetology. 3 Credits.
A complexity science framework is used to discuss current and innovative concepts and trends in the care of person with diabetes. The disease process of diabetes, preventive measures, complications, pharmacologic, technologic, lifestyle interventions and self-management techniques based on current evidence are presented and analyzed in relations to care of persons with diabetes across age groups and in different settings. Consideration is given the complexity of the co-morbidities that accompany diabetes as well as the special approaches to age appropriate treatment and cultural diversity factors that influence care. External barriers that contribute to decrease in quality outcomes are analyzed and innovative solutions are proposed. Prerequisite: NRSG 801, NRSG 813, or Consent of Instructor.

NRSG 826. Global Perspective and Diversity in Healthcare. 2 Credits.
Cultural receptivity is integrated into the collaboration, development, and implementation of health programs at the local, national, and international level. Frameworks that emphasize the meanings of health and healthcare; prevention and management; and related ethical, economic, and social justice concerns are introduced. Students partner with a community of interest to understand their health and illness beliefs, identify barriers to healthcare access, integrate the historical, social, political and economic forces that impact healthcare. Together they plan and implement appropriate strategies to influence positive community outcomes. Prerequisite: NRSG 880, or consent of instructor.

NRSG 827. Advanced Concepts in Public Health Nursing. 2 Credits.
Public health is addressed in terms of common values and interests as well as particular client populations (vulnerable and at risk groups) across the lifespan. Health promotion and disease prevention for whole communities and selected vulnerable and at risk aggregates are emphasized. Ethical and social justice concerns as well as public policy and legislative issues in population-focused health care are discussed. Selected models, concepts, theories, and research in public health provide the framework for identifying, exploring, prioritizing and planning interventions for public health concerns. Ultimately, a grant proposal is developed to support the action plan. Prerequisite: Prerequisites: NRSG 754, NRSG 755, NRSG 809, NRSG 880, NRSG 885, IPHI 820, PRVM 830. Corequisites: NRSG 828 or consent of instructor.

NRSG 828. Public Health Nursing: Practicum I. 3 Credits.
Students are provided with an opportunity to explore advanced practice roles within the context of public health needs. Based on each student's goals and interests, health related needs of an identified population are assessed, analyzed, and synthesized; and a plan of action proposed. Prerequisite: Corequisite: NRSG 827, or consent of instructor.

NRSG 829. Public Health Practicum. 3 Credits.
Students will complete an intensive practicum in a community/public health setting. Prerequisite: NRSG 827, NRSG 828 or Consent of Instructor

NRSG 839. Global Perspectives and Diversity in Healthcare: Practicum. 2 Credits.
Students will have the opportunity to integrate concepts and theories of global health and diversity by direct program planning, delivery, and evaluation of care activities with a vulnerable population. Students will partner with a community of interest to provide directed advanced nursing care and or leadership activities via individual/population/organizational assessment, intervention, and evaluation. Emphasis will be placed on building cultural competence with an understanding of the historical, social, political, and economic forces of health within a specific community setting or geographic area. The worldview of the individual/population/organization will be respected and integrated into all aspects of health care delivery. Prerequisite: NRSG 826 or consent of instructor.

NRSG 841. Reproductive Endocrinology. 2 Credits.
In-depth examination of the anatomy and physiologic processes of reproduction are studied, and will include normal growth and development, as well as clinical genetics. Essential information will be focused on understanding of the reproductive hormones. With a complete understanding of menstrual hormone regulation, students will be better prepared to apply concepts to alterations that are encountered with maturation/development, puberty, pregnancy, lactation, menopause, and management of common sexual and reproductive needs (such as contraception). Prerequisite: NRSG 812 or Consent of Instructor.

NRSG 842. Topics in Mental Health Nursing. 1-5 Credits.
Investigation of issues and psychiatric mental health problems relevant to a selected population in mental health nursing. Prerequisite: Consent of instructor.

NRSG 844. Advanced Psychiatric Assessment. 3 Credits.
Advanced psychiatric assessment of children, adults and the elderly will be covered, including conducting patient-centered, culturally competent
interviews in simulated situations. Epidemiology of psychiatric disorder is addressed. Assessment for psychiatric diagnoses of substance abuse, mood and anxiety disturbances, psychosis, dementia and disorders arising in childhood and adolescence are emphasized. Assessment of dangerous behaviors and crisis intervention is covered. Prerequisite: Corequisite: NRSG 801, or consent of instructor.

NRSG 850. Mental Health Assessment of Infants, Children and Adolescents. 3 Credits.
This is an advanced course in infant, child and adolescent mental health assessment development for those individuals who desire to gain greater knowledge and understanding of complex mental health issues in children, adolescents and their families. The course focus is to identify deviations between normal and abnormal development. Identification of environmental and social determinates will be examined. Recognition of pre-birth risk factors affecting children and protective measure that promote positive growth and development will be discussed. Assessment tools and strategies for effective assessment will be reviewed. Emphasis on the legal and ethical issues regarding safety and well-being of children and families will be addressed. Prerequisite: NRSG 748, or consent of instructor.

NRSG 851. Psychopharmacology for Advanced Nursing Practice. 3 Credits.
Understanding of the neuron, neurotransmitter and receptor functioning as the basis for psychopharmacotherapy is emphasized in developing the knowledge for prescribing and monitoring psychotropic medications for clients diagnosed with psychiatric disorders. The major classes of psychotherapeutic drugs, their mechanism of action, metabolism, interaction, adverse and side effects are discussed. Drug development is reviewed and ethical and legal issues involved in prescribing across the lifespan are covered. Knowledge is applied to case studies that include differentiating drugs, dosages and response to clients’ internal environment, racial/ethnic background, and age. Prerequisite: NRSG 844 or equivalent; or consent of instructor.

NRSG 853. Abstraction and Modeling of Healthcare Information. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. The information system development life cycle process is presented with emphasis on determination and analysis of information system requirements and system design that meet the identified health care information requirements. Object-oriented techniques will be introduced, including Unified Modeling Language and Unified Modeling Methodology, to facilitate process analysis and design proposal development. Prerequisite: NRSG 820 or Consent of Instructor.

NRSG 854. Knowledge Management in Healthcare. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. Knowledge management is the creation, communication, and leveraging of a healthcare organization’s knowledge assets. Defining knowledge, describing the knowledge creation cycle, and the identification of the knowledge worker and his/her impact on the organization are discussed. Information technology and communities of practice are presented in a balanced approach supporting a systematic viewpoint of the knowledge management process. Knowledge management theory is enhanced with the performance of a knowledge audit and the development of knowledge management tools. (Same as IPHI 854.) Prerequisite: NRSG 820 or consent of instructor.

NRSG 856. Health Informatics Practicum. 1-3 Credits.
In collaboration with healthcare informatics program/department, students design an experience to facilitate application of theories and research related to health informatics. Emphasis is on the application of the information system development life cycle. Students analyze the leadership and technical behaviors of various informatics roles and negotiate an informatics project to be completed within the practicum. Prerequisite: All Common Core, Leadership Core, NRSG 853, NRSG 858. Prerequisite/Corequisite: NRSG 854, NRSG 855, NRSG 898, or consent of instructor.

NRSG 857. Transforming Health Care through Use of Information Systems and Technology. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. The application of the information system development life cycle in the design, selection, and implementation of health information technology applications will be examined. Computer interactions and emerging technologies will be explored for their impact on patient care and safety. The role of legal, regulatory, ethical and security issues will be discussed as they apply to clinical and consumer information technologies. Prerequisite: Consent of Instructor.

NRSG 858. Health Data: Theory and Practice. 3-4 Credits.
Includes 2 credit hour lecture and 1-2 credit hour practicum. Principles of database theory, modeling, design and manipulation will be introduced. Students will have experience using a relational database management system. Database manipulation will be explored using structured query language (SQL) to compose and execute query statements and critically evaluate the results. Prerequisite: None.

NRSG 859. Introduction to Health Informatics. 2-3 Credits.
This course provides a broad survey of health informatics focused on five themes: health informatics foundations; clinical decision support; human factors/organization factors; public health informatics and current issues in health informatics including best practices. Students may register for either 2 credit hours or 3 credit hours. Students enrolled for 3 credit hours will develop and demonstrate a practical, innovative small-group health informatics project from one of a set of faculty recommended projects or from a student-proposed idea, in addition to course requirements expected with a 2 credit hour enrollment. Prerequisite: Consent of Instructor.

NRSG 870. Designing a Student Learning Environment. 3 Credits.
The roles of both the educator and student in designing a learning environment provide the framework for analyzing pedagogical philosophies, theories, ethical/legal issues, and research related to teaching strategies and education. The interprofessional focus is on best practices and research-based strategies to promote various learning styles and create an active learning environment that increases student retention and learning success for diverse, multicultural student populations. Attention will be given to the relationship between the setting, methodologies of clinical teaching, and the assessment of competencies. Prerequisite: NRSG 748, NRSG 754, or consent of instructor.

NRSG 871. Curriculum/Program Planning and Evaluation. 3 Credits.
Philosophies, methods, and processes of curriculum and instruction in health professions’ education provide the framework for discussing curricular and program planning theories/models, resources for decision making, research, and evaluation methods that create a learner-centered environment. Attention is given to frameworks for program evaluation, methods of data collection, and the ethics and standards of evaluation practice. The influence of societal trends, and current health professions issues relevant to curriculum planning are addressed. Emphasis is on strategies for anticipating future societal needs and developing educational curriculum to meet those needs. Matters of diversity, inclusion, interprofessional practice, workforce development, and ethics/legal issues in curriculum planning and education also are included. Prerequisite: NRSG 748, NRSG 754, or consent of instructor.
NRSG 872. Topics in Nursing Education. 1-5 Credits.
Investigation of special issues or problems relevant to appropriate client systems (client, family, and student or health care professional) in Nursing Education. Prerequisite: Consent of instructor.

NRSG 873. Teaching with Technologies. 3 Credits.
Theories and trends that support the use of merging and emerging technologies for the enhancement of teaching and learning in the health professions are explored. The focus is on assisting educators to gain skills in choosing appropriate instructional technologies to enhance learning. Learning variables, including the environment context, interprofessional education, finance, policy, and the influence of those variables on technologies are examined. The evaluation and impact of current technology on the delivery of education are examined along with strategies for considering/anticipating future technologies to meet educational needs. Prerequisite: NRSG 748, NRSG 754 or Consent of Instructor.

NRSG 874. Health Professions Educator Preceptorship. 3 Credits.
The role components of the health professions educator are implemented with a preceptor in selected educational settings. Opportunities are provided to utilize teaching and learning strategies, research findings, and evaluation methods with diverse students. Professional issues, educational trends, changing role of the educator, and self-assessment are incorporated in accompanying modules. Prerequisite: NRSG 870, NRSG 871, NRSG 873.

NRSG 877. Foundations in Education and Learning. 3 Credits.
Foundations and applications of education and evaluation strategies for teaching and learning in academic, clinical, research, and organizational settings are explored. Scholarly evidence from a variety of sources is used to develop educational processes, products, and evaluation strategies. Students acquire knowledge to support professional development and employ research skills as educators in diverse teaching environments with diverse learners. Prerequisite: Admission to the Doctoral Program, or Consent of Instructor.

NRSG 878. Clinical Radiology for the Advanced Practice Nurse. 2 Credits.
A complexity science framework is used to present the basic and advanced technical aspects of radiological tests used in the care of adult and pediatric patients in the diagnostic work up of the etiology of the health problem. The science that forms the basis for all plain (cathode) films as well as computerized scanning and magnetic resonance imaging tests is covered in the course. The emphasis is on the appropriate choice of radiological tests in the work-up of the patient's health problem. Also, advanced practice nurses will learn a framework for evaluating the findings of the radiological test, and the clinical implications of the findings. Prerequisite: Corequisite: NRSG 818, or NRSG 868, or NRSG 869, or NRSG 849, or NRSG 840, or consent of instructor.

NRSG 880. Organizational Foundations for Leading Change. 3 Credits.
Self-discovery as a foundation for professional development while exploring the concepts of leader, manager and follower is emphasized. Analysis and prediction of an organization’s stages of development and its capacity for linear and social change are introduced through the lens of complexity science. Political, legal, ethical and other issues that constrain and destabilize organizations and strategies to restore equilibrium are explored. (Same as HP&M 840.) Prerequisite: NRSG 748, or consent of instructor. Prerequisite/Corequisite: NRSG 755.

NRSG 881. Applied Budgeting and Finance. 3 Credits.
Leaders apply basic principles associated with program, project and service-line fiscal management, price setting, budget preparation, cost-benefit/break-even analysis, managed-care contracting, and interpreting financial ratios while concurrently acquiring a financial vocabulary to communicate with various stakeholders. Financial reports such as balance sheets, budget forms and expense reports are studied and formulated related to government agencies, small clinical operations, grant-funded projects, and start-up programs. Staffing models and the staffing-quality equation are analyzed for the purpose of projecting human resource requirements. Prerequisite: NRSG 880, HP&M 822, or Consent of Instructor.

NRSG 882. Introduction to Operations. 3 Credits.
Examines performance of health care organizations, sources of variation, methods of measurement, and strategies for improving performance. Considers several approaches to performance improvement and examines tools widely used in operations management. Incorporates lecture, discussion, and fieldwork. (Same as HP&M 850.) Prerequisite: NRSG 754 or NRSG 880 or equivalent course; or consent of instructor.

NRSG 883. Complexity Science Approaches to Improve Organizational Effectiveness. 3 Credits.
This course introduces complexity science principles with the aim of improving the quality and effectiveness of healthcare organizations. Traditional approaches to quality improvement will be contrasted with tools and metrics that can be applied in complex organizations. Principles that relate to embeddedness, diversity, distributed control, co-existence of order and disorder, nonlinearity, inability to predict, emergence, and functioning at the edge of chaos will be introduced. Prerequisite: NRSG 880, or consent of instructor.

NRSG 884. Topics in Organizational Leadership. 3 Credits.
Investigation of current and futuristic issues and trends relevant to organizational leadership.

NRSG 885. Evaluation and Analysis for Healthcare Effectiveness. 2 Credits.
Systematic approaches for analyzing and evaluation processes of care delivery and their impact on client populations, organizational processes, and communities are considered. Research concepts and methods are used in a systems context. Program evaluation, performance improvement, and other methods of measuring outcomes are examined for their utility within the health care setting. Linkages between program evaluation and regulatory policy are studied. Prerequisite: NRSG 754. Prerequisite/Corequisite: NRSG 880 or Consent of Instructor.

NRSG 886. Organizational Leadership Practicum. 1-3 Credits.
The knowledge, skills, and abilities learned throughout the course of study are integrated in this practicum experience designed to develop further specialized knowledge. The faculty and preceptor provide support and guidance to help interpret experiences, and gain a broader world-view within organizational leadership. Students design an experience to facilitate application of theories and research related to organizational leadership. Emphasis is on expanding the capacity of the emerging leader in leading change, facilitating advanced communication skills, and demonstrating one or more areas of leadership expertise. Students negotiate a leadership project to be completed within the practicum. Prerequisite: Corequisite: NRSG: 808, 820, 826, 881, 882 or 883, 885, 891 & HP&M 822, or consent of instructor.

NRSG 888. Clinical Specialty Practicum for Nurse Educators. 1-3 Credits.
The Master of Science, Nursing Education Specialty prepares educators with direct care expertise in a specific clinical area of practice. Students will identify a practice area and complete a practicum with sustained clinical experiences designed to strengthen patient care delivery skills at the master's level. Direct care is defined as nursing care provided to individuals or families that is intended to achieve specific health goals or
health outcomes. The course is collaboratively designed by the student and a faculty facilitator who has expertise in the clinical practice area desired by the student. The practicum may be completed in a wide range of settings such as acute and critical care, long term care, home health, community-based settings, etc. and prepares the student for advanced nursing practice care. Prerequisite: NRSG 755, NRSG 801, NRSG 812, NRSG 813, NRSG 870, and NRSG 880 or consent of instructor.

NRSG 889. Grant Writing. 3 Credits.
All aspects of preparing grant applications are covered. This includes writing an actual grant application containing all the usual elements of grants—budgets, biosketches, resources, and scientific text. In addition, different funding agencies, building research teams, the review process, responding to reviewers, and resubmitting grants will be covered. Prerequisite: Appropriate research methods and statistics courses in student's current graduate program (at least 2 statistics courses, one including content of multiple regression), and permission of instructor. For students in the Outcomes Management and Research Concentration: prerequisites: HP&M 821 or PRVM 800. Same as ANAT 869 and HP&M 788.

NRSG 890. Independent Study in Nursing. 1-5 Credits.
Intensive study in an area of interest with experiences selected according to the student's written purposes, conceptual framework, objectives and evaluation (1-5 credit hours). Appropriate prerequisite courses, as determined by the Independent Study faculty advisor, must be completed.

NRSG 891. Human Resources and Workforce Development. 3 Credits.
The focus of this course is to understand the leadership functions of human resource management in organizations to create a competitive edge through employee empowerment. Core human resource concepts are introduced and applied to optimize human capital within a variety of healthcare settings, including compensation and benefits, employee recognition, and employee/ labor relations. National, regional and local strategies and workforce trends are discussed related to best practices for the selection, retention, and management as a healthcare employer of choice. Prerequisite: All Leadership Core Courses, or consent of instructor. Same as HP&M 854.

NRSG 892. Independent Study in Nursing Practicum. 1-5 Credits.
Intensive practicum in a specified area of interest with experiences selected according to aims that are mutually agreed upon by faculty and student. Prerequisite: None

NRSG 893. Preparing for Healthcare Practice in Rural Communities. 2 Credits.
Establishing and maintaining healthy rural communities is dependent on preparation of the rural healthcare workforce. This includes professionals living and working in rural communities as well as distant providers who contribute services and/or support through telehealth. Students will explore broad patterns of health and illness in rural communities, evaluate resources and develop advanced strategies to meet the diverse needs of rural communities. Prerequisite: Prerequisites: NRSG 748, NRSG 754, NRSG 809, or Consent of Instructor.

NRSG 895. Grant Writing for Nursing Science. 1 Credits.
All aspects of preparing grant applications are reviewed including developing the purpose, aims, approach, methods, budget, biosketch, and resources and facilities. In addition, the importance of building a research team and identifying suitable funding agencies will be covered. Prerequisite: Prerequisite: None. Corequisite: NRSG 896.

NRSG 896. Grant Writing Application. 2 Credits.
The student will work with their faculty research mentor to develop a federal level grant application (NIH, HRSA, AHRQ, or foundation) in preparation for submission. The funding proposal will be developed in conjunction with the NRSG 895 Grant Writing for Nursing Science course that provides information related to grant application structure and key issues. The mentor will provide content expertise and will work with the student to develop the specific content for a grant application. The final product will be a grant proposal suitable for submission. Prerequisite: Prerequisites: Current enrollment in the PhD in Nursing program or Consent of Instructor. Corequisites: NRSG 895.

NRSG 898. Scholarly Project in Nursing. 2 Credits.
The scholarly project course is designed for students to apply knowledge from their research/evidence-based practice coursework into practice. Emphasis is placed on experiential learning on the conduct of research, quality improvement, or evidence-based practice scholarship. Students will work with a faculty mentor on components of a research, quality improvement, or evidence-based practice project. Prerequisite: NRSG 754 plus one leadership specialty track course, or consent of instructor.

NRSG 899. Thesis. 1-6 Credits.
Prerequisite: NRSG 754, and one core track course.

NRSG 901. Primary Care I: Adult-Gerontology Health. 3 Credits.
The first of two core specialty courses using a systems approach that emphasizes a multi-dimensional and interprofessional approach to assessment, differential diagnosis and treatment formulation for the health care needs of adults across the life span in multiple care settings. Common health conditions are explored in relation to health promotion, health maintenance, assessment, diagnosis and management of common episodic, chronic, and complex conditions affecting health. Students develop skills in critical thinking, analysis and synthesis of data from a variety of sources, and use of evidence-based practice guidelines in diagnosing and managing health care needs. In addition to cultural & spiritual diversity, students learn how patient preferences in health care decision making are incorporated in a focus on person-centered care. Prerequisite: NRSG 801, NRSG 812, and NRSG 813.

NRSG 902. Primary Care II: Adult-Gerontology Health. 3 Credits.
The second of two core specialty courses using a systems approach that emphasizes a multi-dimensional and interprofessional approach to assessment, differential diagnosis and treatment formulation for the health care needs of adults across the life span in multiple care settings. Common health conditions are explored in relation to health promotion, health maintenance, assessment, diagnosis and management of common episodic, chronic, and complex conditions affecting health. Students develop skills in critical thinking, analysis and synthesis of data from a variety of sources, and use of evidence-based practice guidelines in diagnosing and managing health care needs. In addition to cultural & spiritual diversity, students learn how patient preferences in health care decision making are incorporated in a focus on person-centered care. Prerequisite: NRSG 901 or consent of instructor.

NRSG 903. Primary Care Practicum I: Adult/Gerontology - Nurse Practitioner. 2-4 Credits.
This is the first practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the adult-gerontology primary care nurse practitioner as a provider of direct health care services. The patient population of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). Within this role, the adult-gerontology primary care nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion,
This is the second practicum course in a series of three practicum courses that prepares the student for entry into practice as a clinical nurse specialist. The focus of this course is ongoing acquisition of CNS competencies: direct care, consultation, systems leadership, collaboration, coaching, research, and ethical decision-making related to patients, families, and patient populations. The patient population of the adult-gerontology CNS learner includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). Clinical activities include designing, implementing and evaluating evidence-based advanced nursing practice interventions along with measurement of outcomes; promoting and facilitating change and innovation in practice; project management; and program evaluation. Clinical practice will include comprehensive interprofessional coordination of the acute and chronic health care needs for culturally diverse populations of adults from adolescence through elder adulthood with specific systems dysfunctions. Effective communication, leading groups, difficult patient and staff situations, research, CNS practice settings, the business of CNS practice, professional development, and networking are covered in this course. Prerequisite: NRSG 904 or Consent of Instructor.

NRSG 905. Primary Care Practicum III: Adult/Gerontology - Nurse Practitioner. 2-4 Credits.

This is the final practicum course in a series of three practicum courses that prepares the student for entry into practice as a clinical nurse specialist. This course is designed to prepare the adult-gerontology primary care nurse practitioner as a provider of direct health care services. The patient population of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). Within this role, the adult-gerontology primary care nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the adult-gerontology primary care nurse practitioner practice. Prerequisite: NRSG 903 or Consent of Instructor.

NRSG 906. Primary Care Practicum I: Adult/Gerontology - Clinical Nurse Specialist. 2 Credits.

This is the first practicum course in a series of three practicum courses that prepares the student for entry into practice as a clinical nurse specialist. The focus of this course is an introduction to the CNS role that includes the competencies of direct care, consultation, systems leadership, collaboration, coaching, research, and ethical decision-making related to patients, families, and patient populations. The patient population of the adult-gerontology CNS learner includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, old, and old-old adults). The three spheres of CNS influence are reviewed: patient, nurse/nursing, and organization/system. Clinical activities include designing, implementing and evaluating evidence-based advanced nursing practice interventions along with measurement of outcomes; promoting and facilitating change and innovation in practice; project management; and program evaluation. Clinical practice will include comprehensive interprofessional coordination of the acute and chronic health care needs for culturally diverse populations of adults from adolescence through elder adulthood with specific systems dysfunctions. This course is designed to provide students with knowledge about what constitutes historical scholarship and research application experience in historical research methods. Students will learn how to construct historical research questions and select the appropriate study designs, data collection procedures and analyses of the data. The course focuses on content on techniques and issues involved in generating research areas, designing and implementing studies, and analyzing and interpreting the results. This course includes a historical research application experience. This could be as an individual, small group or large group in an area of interest concerning nursing or health topics. Prerequisite: NRSG 904 or Consent of Instructor.

NRSG 907. Primary Care Practicum II: Adult/Gerontology - Clinical Nurse Specialist. 4 Credits.
NRSG 913. Business Strategies for Healthcare Leaders. 3 Credits.

The learner will develop advanced leadership skills focusing on business strategies in a variety of healthcare and industry settings in the private and public sector. Through application, analysis, synthesis and evaluation methods, using a variety of approaches to modern day business challenges, the learner is positioned to gain a high-level, mind-raising attitude about how to think differently in addressing organizational and business problems, and supporting organizational success. Prerequisite: NRSG 808, 820, 880, 881, 882 or 883, 885, 891 & HP&M 822, or Consent of Instructor.

NRSG 914. Primary Care I: Family Health. 3 Credits.

The first of two core specialty courses using a systems approach that emphasizes a multi-dimensional & interprofessional approach to assessment, differential diagnosis and treatment formulation for the primary care needs of individuals and families across the lifespan. Common health conditions are explored in relation to health promotion, health maintenance, assessment, diagnosis, and management of common episodic, chronic, and complex conditions affecting health. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing primary care needs. In addition to cultural and spiritual diversity, students learn patient preferences in health care decision making with a focus on person centered care. Prerequisite: NRSG 801, NRSG 812, and NRSG 813.

NRSG 915. Primary Care II: Family Health. 3 Credits.

The second of two core specialty courses using a systems approach that emphasizes a multi-dimensional & interprofessional approach to assessment, differential diagnosis and treatment formulation for the primary care needs of individuals and families across the lifespan. Common health conditions are explored in relation to health promotion, health maintenance, assessment, diagnosis, and management of common episodic, chronic, and complex conditions affecting health. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing primary care needs. In addition to cultural and spiritual diversity, students learn patient preferences in health care decision making with a focus on person centered care. Prerequisite: NRSG 914 or consent of instructor.

NRSG 916. Primary Care Practicum I: Family Nurse Practitioner. 2-4 Credits.

This is the first practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the family nurse practitioner student as a provider of direct health care services. The patient population of the family provider includes individuals and families across the lifespan. Within this role, the family nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the family nurse practitioner practice. Prerequisite: NRSG 915 or Consent of Instructor.

NRSG 917. Primary Care Practicum II: Family Nurse Practitioner. 4 Credits.

This is the second practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the family nurse practitioner student as a provider of direct health care services. The patient population of the family provider includes individuals and families across the lifespan. Within this role, the family nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the family nurse practitioner practice. Prerequisite: NRSG 916 or Consent of Instructor.

NRSG 918. Primary Care Practicum III: Family Nurse Practitioner. 2-4 Credits.

This is the final practicum course in a series of three practicum courses that prepares the student for entry into practice as a primary care provider. This course is designed to prepare the family nurse practitioner student as a provider of direct health care services. The patient population of the family provider includes individuals and families across the lifespan. Within this role, the family nurse practitioner student will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states. Advanced practice competencies incorporate the health promotion, health protection, disease prevention, and management focus of the family nurse practitioner practice. Prerequisite: NRSG 917, or consent of instructor.

NRSG 919. Foundations for Leading and Communicating in Organizations. 3 Credits.

Theoretical foundations in organizational decision making and communication will enhance students’ development of expertise in assessing organizations, identifying systems issues, and facilitating organization- and system-wide improvements in healthcare. Traditional approaches to organizing and communicating are contrasted with emerging approaches that promote sensitivity to diverse organizational cultures and populations. Through examination of theoretical perspectives, the student will develop an ability to integrate the contributions of different points of view and ways of thinking crucial to accurately assess, design and lead high performing healthcare organizations in a dynamic world. Prerequisite: NRSG 829 or 833 or 856 or 886 (Practicum respective to specialty) and NRSG 941, or consent of instructor.

NRSG 920. Microsystems in Health Care Operations. 3 Credits.

Competencies necessary for studying clinical Microsystems and examining their influence on patient safety, satisfaction, and other clinical outcomes are developed in this course. Microsystems will be determined, deconstructed, analyzed for best practice, and re-constituted for the purpose of improved organizational performance. The roots of quality improvement are traced and quality improvement application within a microsystem environment is explored. Key topics include: assessment tools and models, continuous quality improvement theory, evidence-based practice, performance improvement methods (measurement, statistics, problem identification and analysis, control charts) and the development of team-based problem solving and resolution. Students examine productivity and cost indicators, strategic and operational planning, healthcare finance, relationship-building, collaboration techniques, and leadership principles. Prerequisite: Completion of graduate program in organization leadership or nursing administration, or consent of instructor.

NRSG 921. Primary Care of Women Across the Lifespan. 2 Credits.

The knowledge and skills necessary to promote health, prevent illness, and manage the primary care needs of women across the lifespan will be provided. Theory- and research-based therapeutic management
of acute, episodic and chronic conditions that occur in women across the lifespan will be explored. Professional values including standards of practice, cultural, legal and ethical issues and professional roles will be addressed. The health care delivery system will be analyzed for cost effectiveness and sensitivity to women. Prerequisite: NRSG 801, NRSG 809, NRSG 812, NRSG 813, NRSG 841, or Consent of Instructor.

NRSG 922. Nurse-Midwifery II: Preconception and Prenatal Care. 3 Credits.
Care during the antepartum period is presented, with a focus on strategies for risk reduction and early identification of deviation from normal. Biopsychosocial, and cultural, and family influences on preconception and pregnancy are analyzed. Concepts of evidence-based practice, ethics, legal and political issues, nutrition, genetics, pharmacotherapeutics, and health promotion are included. Prerequisite: NRSG 801, NRSG 809, NRSG 812, NRSG 813, NRSG 921, or consent of instructor.

NRSG 923. Nurse-Midwifery III: Postpartum and Newborn Care. 2 Credits.
Synthesis of the nurse-midwifery philosophy for postpartum and newborn periods is conceptualized. Health maintenance for postpartum persons and infants is explored. Evidence-based practice, ethics, legal and political issues, nutrition, pharmacotherapeutics, and health promotion are included. The nurse-midwifery role in consultation, collaboration, and referral are addressed. Prerequisite: Prerequisite: NRSG 922, or Consent of Instructor. Corequisite: NRSG 924.

NRSG 924. Nurse-Midwifery IV: Intrapartum Care. 3 Credits.
Nurse-midwifery care of uncomplicated women in the intrapartum period is presented and analyzed. Intrapartum and immediate postpartum deviations from normal, complications and emergency events are addressed. Concepts of evidence-based practice, ethics, legal and political issues, nutrition, pharmacotherapeutics, and health promotion are included. Prerequisite: Prerequisite: NRSG 922 or Consent of Instructor. Corequisite: NRSG 923.

NRSG 925. Care of Women in The Antepartal Period Practicum. 2 Credits.
This clinical practicum focuses on competencies for management of pregnant women in various health care environments. Health promotion and risk reduction in pregnant women are emphasized. Management experiences in the advanced practice role include antepartal risk-assessment, consultation, collaboration, and referral when medically necessary. Prerequisite: NRSG 841, NRSG 922 or Consent of Instructor. Corequisite: NRSG 926 or Consent of Instructor.

NRSG 926. Primary Care of Women Across the Lifespan Practicum. 2 Credits.
This practicum focuses on clinical competencies for the advanced practice nurse providing primary care and gynecologic management of women throughout the lifespan. Health promotion, complementary therapies, and evidence-based models of health care delivery are incorporated in the care of women. Clinical management experiences in the advanced practice role include but are not limited to: family planning, gynecologic health, and primary care for women from adolescence through menopause. Clinical experiences will include consultation, collaboration, and/or referral when medically necessary. Prerequisite: NRSG 841, NRSG 921 or Consent of Instructor. Corequisite: NRSG 925 or Consent of Instructor.

NRSG 927. Childbearing Family Practicum: Intrapartum, Postpartum, and Newborn. 3 Credits.
Competencies for nurse-midwifery management according to national standards of practice for the care of healthy women during labor, birth, and postpartum are demonstrated; additionally, competencies for nurse-midwifery management according to national standards of practice for the care of newborns are demonstrated. The development of a skill base for intrapartum, postpartum, and newborn emergencies is addressed. Nurse-midwifery management practice provides experience in the role of care provider during normal labor, delivery, postpartum, and newborn periods. This care may include consultation, collaboration, and referral when medically necessary. Prerequisite: NRSG 923, NRSG 924. Completion of Intermediate or Advanced Fetal Heart Monitoring Course within past 3 years. Up-to-date Neonatal Resuscitation Program (NRP) certification. 

NRSG 928. Nurse-Midwifery Integration Practicum. 4 Credits.
The theoretical, clinical and role components of care as delivered by the advanced nurse-midwife student are implemented through an intensive supervised clinical practicum. Advanced professional clinical skills and evidence-based practice in the assessment, management and care of women and newborns are applied. Emphasis is on increased independence and decision-making embracing the function, scope and practice of nurse-midwifery practice. Prerequisite: NRSG 925, NRSG 926, NRSG 927 or Consent of Instructor.

NRSG 929. Psychotherapeutic Interventions I: Psychiatric Mental Health Nurse Practitioner. 3 Credits.
Focus is placed on assessing vulnerabilities, social determinants and resilience as they relate to health promotion, disease prevention, symptom management, and behavior change. Mental health and common psychiatric disorders such as depression and anxiety throughout the life span are discussed. Evidence-based brief psychotherapeutic intervention frameworks including psychotherapy are applied to individuals, groups and families across the life span. Professional issues that commonly occur in implementing the advanced practice role in psychiatric and mental health care are emphasized. Prerequisite: NRSG 748, NRSG 754, NRSG 755, NRSG 801, NRSG 809, NRSG 812, NRSG 813, NRSG 844, NRSG 850, or Consent of Instructor. Prerequisite/Corequisite: NRSG 851.

NRSG 930. Psychotherapeutic Interventions II: Psychiatric Mental Health Nurse Practitioner. 3 Credits.
This theory course focuses on recovery-oriented, person-centered approaches for individuals, families, and populations with complex and persistent alterations in mental health functioning. Factors that affect mental health functioning will be explored with a focus on interventions that facilitate recovery including psychopharmacology. In addition, policies and socioeconomic factors that influence the delivery of mental health services will be analyzed. Emphasis is placed on identifying the unique role of the psychiatric mental health nurse practitioner (PMHNP) within an integrated, client-centered delivery system. Prerequisite: NRSG 929 or consent of instructor.

NRSG 931. Psychotherapeutics Practicum I: Psychiatric Mental Health Nurse Practitioner. 2 Credits.
This course is the first of three practicum courses. The focus of this clinical course is to apply theories and evidence-based findings in a clinical setting serving culturally diverse individuals, groups, and families. Students will have opportunities to conduct comprehensive psychiatric assessments, formulate diagnoses, and conduct therapy in conjunction with an interdisciplinary team. Prerequisite: NRSG 930, or Consent of Instructor.

NRSG 932. Psychotherapeutics Practicum II: Psychiatric Mental Health Nurse Practitioner. 4 Credits.
In this second of three practicum courses, students will apply recovery oriented, evidence-based frameworks such as biobehavioral, pharmacologic and psychoeducational to individuals and groups across the lifespan with complex alterations in functioning. The psychiatric mental health nurse practitioner in collaboration with interdisciplinary team members and families coordinates person-centered culturally sensitive
NRSNG 933. Psychotherapeutics Practicum III: Psychiatric Mental Health Nurse Practitioner. 3-4 Credits.
In this third of three clinical practicum courses, students will demonstrate integration of knowledge from previous courses in implementing the psychiatric mental health nurse practitioner role. This includes using diagnostic reasoning, evidence-based therapy, biobehavioral, and psychoeducational interventions with culturally diverse clients from different age groups. Students will implement care within interdisciplinary teams using consultation and referral as needed to deliver person-centered culturally sensitive care. Students will work with age groups needed to meet the role of psychiatric nurse practitioner across the lifespan. Prerequisite: NRSNG 932, or Consent of Instructor.

NRSNG 934. Foundations of Data Science. 3 Credits.
The course is designed to provide students with foundational knowledge about data science and big data. Students will learn the skills to participate on and lead interprofessional teams analyzing health and other related data to build knowledge and apply findings to practice. Topics to be examined will include diverse types and sources of data, data management techniques, exploratory data analysis approaches, and data visualization. Prerequisite: Admission to the SON PhD program, Graduate level research course (NSRG 754 or equivalent), or Consent of Instructor.

NRSNG 935. Professionalism and Scholarship Workshop. 2 Credits.
Building a foundation for advanced study is explored in the context of professionalism and scholarship. Strategies for promoting professional development while preparing for future roles as nurse scholars and nurse scientists are examined. Students are introduced to a model of scholarship that includes discovery, integration, application, and teaching. Issues associated with scientific integrity in academics, research and scholarship that includes discovery, integration, application, and teaching. Students are introduced to methods for conducting and synthesizing literature that is essential to the doctoral level student. Prerequisite: Admission to the Doctoral Program or Consent of Instructor.

NRSNG 936. Philosophy of Nursing Science. 2 Credits.
This course examines the origins and development of western philosophy and science. Students will explore nursing knowledge from diverse philosophical perspectives as well as the natural and human sciences. Different conceptions of broad topics such as knowledge, personhood, the body, and technology will be examined for the investigation of nursing phenomena. Prerequisite: Admission to the PhD program, graduate level nursing theory course, or Consent of Instructor.

NRSNG 937. Innovative Theories and Models for Nursing Science. 3 Credits.
This course explores innovative models and theories to guide nursing science. Historical foundations of theory are traced to current trends and future possibilities in theory development, application, and evaluation. Strategies for using existing theoretical knowledge for nursing science and to foster new knowledge are also examined. Prerequisite: NRSNG 936 or Consent of Instructor.

NRSNG 938. Informatics and Technology Applications. 2 Credits.
The field of nursing informatics and the role of the nurse to support research and evidence-based practice inquiry in a variety of organizational settings is introduced. The current state of the science in naming nursing phenomena and how these phenomena are represented in information systems is explored. The use of technology as an adjunct to doctoral-level inquiry and how it supports clinical and professional decision-making is explained and demonstrated. Prerequisite: Corequisite: NRSNG 935, or consent of instructor.

NRSNG 939. Precision Health. 3 Credits.
This course focuses on precision health as an emerging approach for health promotion, disease prevention and treatment that considers individual variability in genes, environment, and lifestyle (also known as the determinants of health). Students will learn to more accurately predict prevention and treatment strategies for various populations. This course will assist students in understanding the National Institute of Nursing Research (NINR) pathway to precision science that focuses on personalized strategies to prevent and manage symptoms across diverse populations and settings. Students will also learn about the vision reflected in the Precision Medicine Initiative to accelerate discoveries that can provide nurse scientists with new tools, knowledge, and therapies for individuals and populations. Prerequisite: Admission to Doctoral Program or consent of instructor.

NRSNG 941. Preparing for Doctoral Leadership. 3 Credits.
Skills in leading, managing, and following as the doctoral graduate assumes critical roles within academia, the healthcare system, or other business entities are developed and strengthened. Through developmental exercises, theoretical and practical explorations of organizational structures and settings, and career trajectory planning, the student is poised to optimize the doctoral experience to influence social change. Prerequisite: Admission to a School of Nursing Doctoral Program or consent of instructor.

NRSNG 945. Synthesis Workshop I. 1 Credits.
Leadership development and technologic applications are integrated with theoretical, statistical, and research methods. Doctoral leadership skills are refined and tested through case study simulations of theory and research applications in diverse practice settings. A qualifying examination concludes the Workshop consisting of a written and oral case study simulation. Prerequisite: BIOS 730 and BIOS 740 or equivalent, NRSNG 941, NRSNG 942, NRSNG 946, or Consent of Instructor. Prerequisite/Corequisite: NRSNG 877.

NRSNG 946. Measurement Principles and Practice. 3 Credits.
Classical measurement theory and related measurement concepts are the focus of this course. Various approaches to instrumentation are examined. Students use existing data to evaluate selected measures, with emphasis on reliability and validity. They also critically analyze published reports of instrumentation for research. Basic knowledge of concept analysis is expected prior to enrollment. Prerequisite: NRSNG 940, or consent of instructor.

NRSNG 948. Methods for Assessing Organizational and Clinical Practice Outcomes. 2 Credits.
This course will provide a broad overview of concepts in design and measurement strategies that are applicable to doctoral projects. A variety of approaches will be used to evaluate organizational, sociotechnical, population health, or clinical issues. Different methods, measures, and data sources relevant to these issues will be explored. Prerequisite: NRSNG 754 or consent of instructor.

NRSNG 949. Synthesis Workshop II. 1 Credits.
Content from the full range of doctoral courses including theory, research, statistics and professional development is integrated and synthesized. Strategies for using these content areas to meet program objectives and students’ professional objectives are explored. A qualifying examination, consisting of a written and oral case study simulation, concludes the Workshop. Prerequisites: Completion of all doctoral course work. Pre/Corequisite: NRSNG 970.

NRSNG 950. Symptom Science in Nursing. 3 Credits.
In this course, students will determine personalized strategies to identify, prevent, and treat the adverse symptoms of acute and chronic illness across diverse populations and settings. Biological and behavioral dynamics of symptoms (e.g., dyspnea, fatigue, impaired sleep/insomnia, pain, depression) that can change the trajectory of chronic illnesses, and how the dynamics can be optimized and maintained to prevent symptom relapse, will be discussed. Various innovative care delivery models (e.g. interdisciplinary, family-based), research methods (e.g. community engaged research, pragmatic trials) and technologies (e.g. eHealth) will be reviewed that can be used to improve symptom management and change the chronic illness trajectory especially among individuals who experience disparate health outcomes. Prerequisite: Admission to Doctoral Program or consent of instructor.

NRSG 951. Biomarkers. 3 Credits.
This course builds a foundation for doctoral students to understand how biomarkers can be used as targets for therapeutic and clinical interventions. Students will describe potential biomarkers for measures of normal biological processes, pathogenic processes, or pharmacologic responses. Biological elements ("biomarkers") associated with symptoms and symptom experiences across populations and conditions will be explored. Students are introduced to direct and indirect biomarkers and the various methods for sampling. Issues associated with sensitivity and specificity of particular biomarkers are examined. Prerequisite: Admission to Doctoral Program or consent of instructor.

NRSG 952. Qualitative Research Methods and Application. 4 Credits.
Qualitative methodologies, such as ethnography, phenomenology/ hermeneutics, grounded theory, and their epistemological origins are explored. Emphasis is placed on the appropriateness of each approach in diverse settings. Students are guided in formulating qualitative research questions and developing component parts of a qualitative research proposal. Students complete simulated qualitative research activities to gain experience in data collection and analysis. Prerequisite: NRSG 754 Health Care Research, or admission to the doctoral program.

NRSG 953. Quantitative Research Methods and Application. 4 Credits.
The course is designed to provide students with knowledge and research application experience in quantitative research methods. Students will learn how research questions lead to different study designs, data collection procedures, and analyses in nursing and health care. The course focuses on content on methodological techniques and issues involved in generating research questions and hypotheses, designing and implementing quantitative studies, and analyzing and interpreting results. The course includes a quantitative research application experience provided through the exercise in planning, conducting, and interpreting analyses with existing data. Prerequisite: NRSG 946 Measurement Principles and Practice, NRSG 934 Foundations of Data Science, BIOS 730 Applied Linear Regression, or consent of instructor.

NRSG 954. DNP Synthesis Workshop. 1 Credits.
Students will have the opportunity to demonstrate synthesis, integration, and translation of knowledge and skills acquired throughout the first half of the DNP program and during this course. Sessions and activities will focus on doctoral leadership and role transition, scientific inquiry and research application, applications of theory, and specific practice/program related competencies. A qualifying examination concludes the course. Prerequisite: NRSG 748, NRSG 755, NRSG 804, NRSG 808; for Advanced Practice major, completion of NRSG 801, NRSG 812, and NRSG 813, and one specialty course; for Leadership major, completion of IPHI 820; NRSG 826, NRSG 880, NRSG 885, NRSG 948 or Consent of Instructor.

NRSG 957. Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. The use of information systems including medical devices is paramount in achieving patient safety. Students will attain an inclusive understanding of how human factors and ergonomic principles can be used to improve patient safety in the design, implementation, and evaluation of information systems and medical devices. Additionally, health care professionals will acquire skills to appropriately apply error reduction strategies developed in high reliability organizations. Prerequisite: Admission to a doctoral program in nursing, NRSG 857 or consent of instructor.

NRSG 958. Knowledge Representation and Interoperability. 3 Credits.
Includes 2 credit hour lecture and 1 credit hour practicum. The need to exchange clinical information consistently between health care providers, care settings, researchers and other requires syntactic and semantic interoperability. Requirements and approaches to meet interoperability will be explored. Standards for messaging, terminology, and knowledge representation will be investigated. Prerequisite: Admission to a doctoral program in nursing, NRSG 853 or consent of instructor.

NRSG 959. Research Experience. 1-4 Credits.
This practicum is an intensive research experience with a specific faculty mentor. It involves working on part of the faculty mentor’s current research or on a subject closely related to the mentor’s work. The student submits a proposal for this research experience to the faculty mentor. After approval by the faculty mentor, the proposal undergoes necessary review and approval processes (e.g. Human Subjects Committee - IRB approval with departmental administrative review). The outcome of this experience is a paper prepared in publishable form on the research conducted or other scholarly dissemination as agreed upon (e.g. conference presentation). Prerequisite: Consent of instructor.

NRSG 960. Dissemination and Implementation Science in Healthcare. 3 Credits.
This course is designed for doctoral-level learners interested in conducting dissemination and implementation research and applying implementation strategies to improve the uptake and sustainability of evidence-based guidelines, interventions, and innovations in healthcare. Learners are introduced to the field of implementation science; theories and frameworks; research designs, measures, and analyses; implementation strategies; fidelity and adaptation; evaluation; and sustainability. Learners also examine how dissemination research and practice influences the generation, uptake, and spread of policy and guides healthcare decision making. Learners work together to co-design a dissemination or implementation science project to address a critical issue that impacts health or health systems. Leadership competencies for supporting dissemination and implementation research and practice also are explored. Prerequisite: For PhD students: NRSG 952 and NRSG 953. For DNP students: NRSG 804. For interprofessional students: doctoral level research methods or analysis course. Or consent of instructor. Pre or Corequisites: DNP students: NRSG 948.

NRSG 963. Advanced Leadership Residency. 1-9 Credits.
The advanced leadership residency is designed to expand the DNP student’s breadth and depth of leadership knowledge and skills in an area of practice at the aggregate/systems/organization level. Students will have the opportunity to enhance their existing advanced leadership skills in one or more of the following areas: organizational and systems leadership for enhancing healthcare outcomes; quality improvement strategies to support decision-making; prediction and evaluation of practice outcomes; patient safety initiatives; health care policy; creating and sustaining change at organizational and policy levels; or ethics related to healthcare
systems; information technology; knowledge management; or population health. Prerequisite: Corequisite: NRSG 919 and NRSG 941, or consent of instructor.

NRSG 964. Advanced Clinical Residency. 1-9 Credits.
The advanced clinical residency is designed to expand the DNP student’s breadth and/or depth of clinical knowledge and skills in an area of practice. The focus can be either on the delivery of sub-specialty care services or full spectrum primary care services. Students will have the opportunity to enhance their existing advanced practice skills in one or more of the following areas: the diagnosis and management of ambulatory patients with complex diagnoses and comorbid conditions in the context of family, community and culture; the diagnosis and management of patients with complex diagnoses and/or comorbid conditions who present with acute changes in health status requiring interventions available only in an acute care setting; and the diagnosis and management of patients who are unable to function independently due to age related alteration in mental and physical status, developmental, perceptual and physical disability and chronic, degenerative illness. Students will synthesize clinical knowledge and use evidence-based decision making to construct symptom-based assessments, advanced differential diagnoses, independent therapeutic interventions, and outcome evaluation of the care of clients. Prerequisites: Post-BSN students: final practicum course or consent of instructor. Post-Master’s students: A minimum of 1000 clinical hours in your current or previous work following graduation from an accredited Master’s in Nursing program; National certification in your area of expertise (e.g. family, adult, psych, pediatric, CNM, etc.).

NRSG 970. Synthesis of Emphasis Area of Study. 2 Credits.
This course provides an opportunity for the PhD student to synthesize work in their selected emphasis area. After completion of emphasis area coursework, students will focus on synthesizing content across these emphasis area courses. The synthesis experience culminates in a written synthesis paper in the emphasis area to assure the student’s competency in the emphasis area of study. Typically, the emphasis area coursework and the emphasis area synthesis paper contribute directly to the student’s dissertation. Prerequisite: Completion of emphasis area coursework (at least 9 credit hours) and NRSG 945, or consent of instructor.

NRSG 971. Special Considerations for the Acute Care Nurse Practitioner. 1 Credits.
This course will focus on the preparation and scope of practice of the adult-gerontology acute care nurse practitioner. Concepts of the advanced practice role, primary vs. acute care, transitions of care, and age-related considerations of the adult-gerontology patient will be reviewed. Prerequisite: Consent of Instructor.

NRSG 972. Advanced Pharmacology for the Acute Care Setting. 2 Credits.
This course for acute care settings is complementary to any advanced pharmacology course for advanced practice nursing. The clinical application of specific categories of drugs commonly encountered in acute care settings is discussed. First line versus second line drugs, alternate drugs, drug interactions, adjusting drug dosages, patient education, and compliance issues related to drug therapy are addressed. The nurse’s role and responsibility related to data collection, problem identification, and consultation with the physician is explored. Application is made through age appropriate studies. Prerequisite: NRSG 801, NRSG 812, NRSG 813 or Consent of Instructor.

NRSG 973. Acute Care I: Adult-Gero NP. 3 Credits.
The first of two core specialty courses using a systems approach that emphasizes a multi-dimensional and interprofessional approach to assessment, differential diagnosis, and treatment formulation for the care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: NRSG 971, NRSG 972, or Consent of Instructor.

NRSG 974. Acute Care II: Adult-Gero NP. 3 Credits.
The second of two core specialty courses using a systems approach that emphasizes a multi-dimensional and interprofessional approach to assessment, differential diagnosis, and treatment formulation for the care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: NRSG 973 or Consent of Instructor.

NRSG 975. Acute Care Practicum I: Adult-Gero NP. 4 Credits.
This is the first practicum course in a series of three practicum courses that prepares the student for entry into practice as an acute care provider. This course is designed to prepare the adult-gerontology acute care nurse practitioner as a provider of direct health care services. The patient populations of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, and old-old adults). Within this role, the adult-gerontology acute care nurse practitioner will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states, including care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. The competencies of this course incorporate health promotion, disease prevention, and management focus of the adult-gerontology acute care nurse practitioner practice. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: Pre or Co-Req: NRSG 973 or Consent of Instructor.

NRSG 976. Acute Care Practicum II: Adult-Gero NP. 2-4 Credits.
This is the second practicum course in a series of three practicum courses that prepares the student for entry into practice as an acute care provider. This course is designed to prepare the adult-gerontology acute care nurse practitioner as a provider of direct health care services. The patient populations of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, and old-old adults). Within this role, the adult-gerontology acute care nurse practitioner will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states, including care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. The competencies of this course incorporate health promotion, disease prevention, and management focus of the adult-gerontology acute care nurse practitioner practice. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: NRSG 975 Acute Care Practicum I: Adult-Gero NP or Consent of Instructor. Co-Req: NRSG 974 Acute Care Practicum II: Adult-Gero NP.
NRSG 977. Acute Care Practicum III: Adult-Gero NP. 2-4 Credits.
This is the final practicum course in a series of three practicum courses that prepares the student for entry into practice as an acute care provider. This course is designed to prepare the adult-gerontology acute care nurse practitioner as a provider of direct health care services. The patient populations of the adult-gerontology provider includes young adults (including late adolescents and emancipated minors), adults, and older adults (including young-old, and old-old adults). Within this role, the adult-gerontology acute care nurse practitioner will synthesize theoretical, scientific, and contemporary clinical knowledge for the assessment and management of both health and illness states, including care needs of the chronically, acutely, or critically ill or those who are experiencing an acute exacerbation of a chronic health problem. The competencies of this course incorporate health promotion, disease prevention, and management focus of the adult-gerontology acute care nurse practitioner practice. Students will develop skills in critical thinking and the use of evidence-based practice guidelines in developing the rationale for diagnosing and managing care needs across the acute, critical, and complex care continuum in order to return the individual to their optimal level of health. Prerequisite: NRSG 976 Acute Care Practicum II: Adult-Gero NP or Consent of Instructor.

NRSG 980. Doctor of Nursing Practice Project. 1-6 Credits.
The Doctor of Nursing Practice (DNP) project is an amalgamation of the student’s field of inquiry in his/her doctoral course of study. As such, the DNP project requires that a practice-focused problem be identified and examined in depth. For most students the DNP project will include application of an evidence-based intervention suitable to their area of focus (e.g. organizational leadership, clinical practice, education, etc.) that involves the appropriate metric (or sets of metrics) evaluation, and dissemination of the project findings to a targeted audience. The DNP project must meet DNP Project guidelines for the DNP program. Prerequisite: NRSG 911 and completion of 2 doctoral level specialty courses, or consent of instructor.

NRSG 981. DNP Project Proposal Development. 1-2 Credits.
The Doctor of Nursing Practice (DNP) Project Proposal Development is the first course in a progressive sequence of three courses to advance the scholarly project. The scholarly project provides evidence to support a change to address current and relevant needs within a health care environment to improve health outcomes and provide a process for implementation and evaluation. During the course the student collaborates with an intra/interprofessional team to develop and write the proposed scholarly project. Prerequisite: NRSG 911, NRSG 948, NRSG 954, or consent of instructor.

NRSG 982. DNP Project Implementation Practicum. 1-3 Credits.
The Doctor of Nursing Practice (DNP) Project Implementation Practicum course is the second course in a progressive sequence of three courses to advance the scholarly project. During this course the student implements the scholarly project to address current and relevant needs within a health care environment to improve health outcomes. During the course the student collaborates with an intra/interprofessional team to lead the scholarly project. Prerequisite: NRSG 981 or consent of instructor.

NRSG 990. Doctoral Research. 1-12 Credits.
Original and independent investigation approved by and conducted under the supervision of the student's adviser or advisory committee and in partial fulfillment of the requirements for the Ph.D. degree. Prerequisite: Consent of Advisor.

NRSG 997. Independent Study. 1-4 Credits.
Having chosen an appropriate mentor, the student selects an area of advanced study. Specific objectives and credit hours are jointly determined by the student and selected faculty member. Prerequisite: Prior graduate course work in the area of study and consent of instructor.

NRSG 999. Dissertation. 1-12 Credits.
Preparation of the dissertation based upon original research and in partial fulfillment of the requirements for the Ph.D. degree. Credit is given only after the dissertation proposal has been accepted by the student’s dissertation committee. Prerequisite: Consent of Instructor.

Nursing Courses
NURS 320. Pathophysiology for the Practicing Nurse. 3 Credits.
This course is designed to provide students with a basic understanding of pathophysiological changes that occur within the internal environment of the individual. Understanding these alterations is basic to providing quality nursing care. System variations across the lifespan are addressed. Prerequisites: Admission to the School of Nursing and RN to BSN program or consent of instructor.

NURS 326. Pharmacology for the Practicing Nurse. 3 Credits.
Pharmacodynamics and pharmacokinetics of drug therapy are discussed in order to provide a basic understanding of the client's reaction to a drug, both therapeutically and adversely, and to predict potential drug interactions. Internal and external environmental factors affecting drug therapy are assessed in order to provide a comprehensive database for therapeutic nursing interventions. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, side effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drug effects, and client system education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisite: Admission to the School of Nursing or consent of instructor.

NURS 327. Communicating and Managing Healthcare Information. 3 Credits.
Basic theories of interpersonal communication, information technologies, and information management are explored. Use of these skills and technologies to develop therapeutic relationships with patients and the interdisciplinary healthcare team is emphasized. Legal and ethical issues related to health information technology and health information exchanges will be examined. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 331, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333 or consent of instructor.

NURS 328. Professional Development I: Introduction to the Profession. 2 Credits.
Students are introduced to the evolution of the profession of nursing. Concepts of caring, professional identity and scholarship are examined. Students will have opportunities to investigate personal and professional boundaries, examine their own beliefs and values, and explore the value of scholarship on nursing practice. Students will examine how their lived experience will impact their professional practice. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 327, NURS 331, NURS 329, NURS 330, NURS 332, NURS 333 or consent of instructor.

NURS 329. Alterations in Physiological Functioning I. 2 Credits.
Basic mechanisms underlying illness and disease are stressed as a basis for the understanding of health promotion and disease prevention in this first of two sequential courses. Pathophysiological changes that occur within the environments of individuals in the presence of dysfunction or disease of selected systems are presented as a rationale for nursing diagnoses and therapeutic interventions. System variations across the life span (fetuses, children, pregnant women, adults, and older adults) are addressed. Prerequisite: Admission to the School of Nursing or consent
of instructor. Corequisite: NURS 327, NURS 331, NURS 328, NURS 330, NURS 332, NURS 333 or consent of instructor.

**NURS 330. Pharmacology I. 2 Credits.**
Pharmacodynamics and pharmacokinetics of drug therapy across the lifespan are discussed in order to provide a basic understanding of the patient's reaction to a drug both therapeutically and adversely, and to predict potential drug interactions. Personal, genetic, and environmental factors affecting drug therapy are assessed in order to provide a comprehensive data base for therapeutic nursing interventions. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, adverse effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drug effects, and patient education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 327, NURS 331, NURS 328, NURS 329, NURS 332, NURS 333 or consent of instructor.

**NURS 331. Basic Assessment and Clinical Skills. 3 Credits.**
Skills necessary to perform basic patient assessment and clinical skills are discussed and demonstrated. Opportunities are provided in a laboratory setting for students to demonstrate cognitive and psychomotor competencies of therapeutic interventions and assessment of the individual patient across the life span. The emphasis is on interviewing techniques, physical examination, and psychomotor skills. Developmental factors and risk factors, including genetic and environmental, that affect the patient's health will be explored. Prerequisite: Admission to the School of Nursing or consent of instructor. Corequisite: NURS 327, NURS 331, NURS 328, NURS 329, NURS 332, NURS 333 or consent of instructor.

**NURS 332. Health and Illness: Foundations of Nursing. 3 Credits.**
Concepts basic to the art and science of nursing are introduced as a foundation for safe, quality patient care. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Evidence-based principles of nursing and health promotion are integrated to prepare the student to meet the health-related needs of a patient. The nurse's role as a member of the interdisciplinary team will be examined. Prerequisite: Corequisite: NURS 331, NURS 327, NURS 328, NURS 329, NURS 330, NURS 333, or consent of instructor.

**NURS 333. Practicum I: Foundations of Nursing. 1 Credits.**
Evidence-based clinical reasoning is applied in the care of individual patients with acute and chronic illness to ensure safe and quality outcomes. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisite: NURS 331, or consent of instructor. Corequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, or consent of instructor.

**NURS 334. Professional Development II: Image, Roles, and Ethics. 3 Credits.**
Ethical principles are applied to care of persons in diverse settings. Team building and group process skills are explored to facilitate students working within teams. The role of the nurse as a member of the interprofessional team is examined using concepts of ethics, advocacy, group process, and team building. The professional responsibilities and role of the advocate will be explored. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Corequisite: NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor.

**NURS 335. Quality Improvement. 2 Credits.**
Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor.

**NURS 336. Alterations in Physiological Functioning II. 3 Credits.**
Building on NURS 321, this course expands knowledge of pathophysiological changes that occur within the environments of the individual in the presence of dysfunction or disease. The most common alterations in selected physiological systems are presented as a framework for clinical reasoning. Relevant risk factors, epidemiology, pathophysiologic mechanisms, and clinical manifestations across the life span (fetuses, children, pregnant women, adults, and older adults) are discussed. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, or consent of instructor.

**NURS 337. Pharmacology II. 2 Credits.**
In this second sequential course, students continue their study of pharmacology across the lifespan. Specific prototypes of selected drug classifications provide the framework for understanding the action, use, adverse effects and nursing implications of drugs. The nurse's role in drug administration, assessment of drugs' effects, and patient education are emphasized. Legal and ethical responsibilities for administering drugs are considered. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, or consent of instructor. Corequisite: NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor.

**NURS 338. Health and Illness: Nursing Across the Lifespan. 3 Credits.**
A greater sophistication of clinical reasoning is developed to achieve safe and quality outcomes using multiple ways of knowing including nursing knowledge. Emphasis is placed on managing the care of patients experiencing acute and chronic illnesses and promoting health across the lifespan. Strategies to empower and engage patients/designees in all aspects of the health care process are examined. Evidenced-based therapeutic nursing interventions that meet a patient's holistic health needs will be expanded. Perspectives of other health care members will be recognized in order to collaborate and work effectively as a team to provide interdisciplinary care. Technology and communication skills are integrated as methods to support safe processes of care. Prerequisite: NURS 331, NURS 332, NURS 333, NURS 327, NURS 328, NURS 329, NURS 330, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, or consent of instructor.

**NURS 339. Practicum II: Nursing Across the Lifespan. 3 Credits.**
Students engage patients in active partnerships to manage acute and chronic illness and promote health across the lifespan. Multiple sources of evidence are incorporated into the planning, implementation and evaluation of nursing care including aseptic and evidence-based practice. Coordination, integration and continuity of care for multiple patients will be applied in the healthcare microenvironment. Emphasis is placed on interdisciplinary collaboration to ensure safe and quality outcomes. Technology and information management tools are utilized to support safe processes of care. Prerequisite: NURS 331, NURS 332, NURS 333, NURS 327, NURS 328, NURS 329, NURS 330, or consent of instructor. Corequisite: NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, or consent of instructor.

**NURS 345. Nursing of Children: Practicum. 2 Credits.**
Evidenced based clinical reasoning is applied in the care of children with acute and chronic illness to ensure safe and quality outcomes. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisite: NURS 333, NURS 339, or consent of instructor.

NURS 346. Nursing of Adults: Practicum. 2 Credits.
Evidenced based clinical reasoning is applied in the care of adults with acute and chronic illness to ensure safe and quality outcomes. Emphasis is placed on the patient and/or designee as the source of control and full partner in providing compassionate and coordinated care. Tools of communication and technology are utilized in the delivery and documentation of care. The role of the nurse within the interdisciplinary team is demonstrated. Prerequisite: NURS 333, NURS 339, or consent of instructor.

NURS 347. Introduction to Healthcare Practices in Rural Communities. 2 Credits.
This course offers a broad overview of the unique challenges that are encountered in rural healthcare. Introduction to the role of the nurse within the rural healthcare setting and community is provided. Students will explore patterns of health, illness, and resources that meet the diverse needs of rural communities. Students will examine the influence of the rural community culture on health care practice. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339.

NURS 352. Client Assessment for the Practicing Nurse. 3 Credits.
Opportunities are provided, in a laboratory setting and with simulations, to demonstrate competencies in assessment of the individual client system across the life span. Historical data collection and psychological and physical assessment are reviewed. Interviewing techniques and the four basic methods of physical examination (inspection, percussion, palpation, and auscultation) are presented. Critical thinking is emphasized to cluster data to select and support nursing diagnoses. Prerequisite: Admission to the School of Nursing and RN licensure, or consent of instructor.

NURS 356. Using Technology and Informatics to Improve Patient Safety. 3 Credits.
Beginning theory and practical applications of various uses and results of computer technologies, including electronic health records, are explored in order to provide the basic skills and current infrastructure for information management in healthcare delivery. These concepts and skills are essential for curriculum related activities, as well as for providing therapeutic nursing interventions and communications with faculty, client systems, and other healthcare participants. Built-in safeguards, and legal and ethical issues related to electronic communications and health records are emphasized using 21st century tools of communication and collaboration. Knowledge and skills presented in this course will be expanded in future nursing courses related to the baccalaureate completion program. Prerequisite: Admission to the School of Nursing or consent of instructor, Satisfactory completion of a statistics course.

NURS 357. Introduction to the Baccalaureate Nurse Role. 3 Credits.
Contemporary issues confronting the nursing profession are discussed. Personal accountability, professional boundaries, and group process skills are explored to facilitate students working within interprofessional health care teams. Students will examine their own beliefs and values, establish personal and professional boundaries, and develop their personal philosophy of nursing. Students will explore how their lived experience will impact their professional practice. Prerequisite: Admission to the School of Nursing or consent of instructor.

NURS 382. Honors Seminar. 1 Credits.
This seminar provides the Honors nursing student the opportunity to explore topics of interest and begin reviewing the current research literature on a given topic. Emphasis is placed on interaction with active nurse researchers to enable the student to identify available research opportunities in ongoing studies. Students are introduced to the application of various methods used to address nursing questions. Prerequisite: Admission to the Nursing Honors Program.

NURS 401. Basic Spanish for Nurses. 2 Credits.
This is an entry level Medical Spanish course for students with minimal or no Spanish language education. Students will develop working language skills, learning techniques for optimal communication, phonetics, morphology, grammar, understanding sentence structure, conjugation and cultural aspects applicable to the current health care environment. The goal is to achieve proficiency and confidence when using the Spanish language with Hispanic patients. Prerequisite: None or Consent of Instructor.

NURS 402. Health Care of the Older Adult. 2-3 Credits.
Students will explore concepts and theories to increase their knowledge base of the complex challenges that face older adults and their families. Emphasis will be on promotion, maintenance and restoration of health and wellness, and the prevention of disease. Internal and external environmental factors will be assessed including biophysical, psychological, behavioral, sociocultural, economic and political. Students will utilize case examples and discussion to practice integrating communication and clinical skills into the role of the nurse as a client advocate and professional health team member. A clinical experience option for one-credit hour is offered for students to provide direct care to older adults in a variety of settings. Prerequisite: NURS 360, NURS 420, NURS 434 or consent of instructor.

NURS 408. Spirituality in Healthcare. 2 Credits.
The focus of this elective is to explore the relationship between spirituality and a person’s health. A non-religious approach with a focus on global spiritual traditions and needs will be explored. Prerequisite: Admission to the School of Nursing or consent of instructor.

NURS 410. Primary Women’s Health Care Across the Lifespan. 3 Credits.
Psychological, sociological, and physiological issues of health and human functioning of the female client systems across the life span are explored. Theory and research-based therapeutic management of acute, episodic, and chronic conditions that occur in community based women and their families will be planned. Professional values including standards of practice, certification, cultural, legal and ethical issues, and professional roles will be addressed. The health care delivery system will be analyzed for cost effectiveness and sensitivity to women. Prerequisite: Corequisite: RN-BSN student or consent of instructor.

NURS 411. Population-Based Nursing. 3 Credits.
Concepts and theories related to providing health care to complex systems and aggregates in the community, state, nation and world are explored. Emphasis is placed on the promotion, maintenance and restoration of health and wellness, and the prevention of disease. Environmental components including historical, political, social, cultural, and economic factors are presented. The role of the health care provider in identifying, prioritizing and meeting the health and life participation needs of populations is discussed. Prerequisite: Admission to the School of Nursing.

NURS 412. Nursing in Healthcare Microsystems. 3 Credits.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in micro-environments of health care delivery. The microsystem is the structural unit responsible for delivering care to specific patient populations or the frontline places where patients, families, and care teams meet. This environment is where the nurse participates in a broad mixture of direct and indirect patient care delivery. Findings of current research related to nursing leadership are discussed. Professional, organizational, historical, and social factors that affect health care delivery within a clinical micro system are considered. Prerequisite: Admission to the School of Nursing or consent of instructor.

NURS 413. Ethics, Advocacy, and Collaboration in Nursing Practice. 3 Credits.
Ethical principles of patient care are applied. Team building and group process skills are explored to facilitate working within the interprofessional healthcare team. The role of the nurse as a member of the healthcare team is examined using concepts and theories of communication, group process, team building, and advocacy. Skills to continue professional growth and support excellence in nursing practice are investigated. Prerequisite: Admission to the School of Nursing or consent of instructor.

NURS 414. Organizational Influences on Nursing Practice. 3 Credits.
The impact that nursing departments and organizational decision making has on the achievement of quality patient outcomes will be explored. Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the meso-environment of health care delivery. The role of the nurse as leader in achieving organizational goals addressing socio-cultural, economic, legal, and political environmental factors is examined. Prerequisite: Admission to the School of Nursing or consent of instructor.

NURS 415. Improving Healthcare Quality. 3 Credits.
Skills of inquiry and information literacy are developed to locate and evaluate information to improve healthcare quality. Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: Admission to the School of Nursing or consent of instructor, Satisfactory completion of a statistics course.

NURS 416. Evidence-Based Nursing Practice. 3 Credits.
Searching, critiquing and synthesizing sources of evidence as it applies to the nurse's clinical practice will be emphasized. Fundamental principles of the research process and models for applying evidence to clinical practice will be explored. Strategies for implementation of evidence into clinical practice will be discussed. Prerequisite: Admission to the School of Nursing or consent of instructor, Satisfactory completion of a Statistics course.

NURS 417. Influences of the Healthcare Macro-System on Nursing Practice. 3 Credits.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the macro-environment of health care delivery. The role of the nurse as a provider of direct and indirect care is expanded to include local, state, national and international regulatory, legal, and professional association's interactions that impact the ability of the nurse to deliver patient care. Prerequisite: Admission to the School of Nursing.

NURS 418. Senior Nursing Project. 3 Credits.
Synthesis of knowledge for professional practice will guide development of a small test of change project to meet an identified need in an area of interest. The student will select an area associated with a patient safety initiative, patient education need or agency educational need for project implementation. Prerequisite: NURS 353, NURS 354, NURS 355, NURS 356, NURS 357, NURS 411, NURS 412, NURS 413, NURS 414, NURS 415, NURS 416, NURS 417, or consent of instructor.

NURS 441. Evidence Based Practice in Nursing. 3 Credits.
Searching, critiquing and synthesizing sources of evidence as it applies to the nurse's clinical practice will be emphasized. Fundamental principles of the research process and models for applying evidence to clinical practice will be explored. Strategies for implementation of evidence into clinical practice will be discussed. Prerequisite: Admission to the RN to BSN program, course in statistics, or consent of instructor.

NURS 443. Developing the Baccalaureate Nurse Role. 3 Credits.
Contemporary issues confronting the nursing profession are discussed and methods to advocate for patients and the profession are investigated. Communication, clinical leadership, and evidence-based practice skills that enhance the student's ability to perform in a complex organizational system are emphasized. Personal accountability, professional boundaries, team building, and group process skills are explored to facilitate students working within interprofessional health care teams. Students will examine their own beliefs and values and develop their personal philosophy of nursing. Prerequisite: Admission to the RN to BSN program.

NURS 444. Using Technology to Enhance Client Safety. 3 Credits.
Beginning theory and practical applications of various uses and results of computer technologies, including electronic health records, are explored in order to provide the basic skills and current infrastructure for information management in healthcare delivery. These concepts and skills are essential for curriculum related activities, as well as for providing therapeutic nursing interventions and communications with faculty, client systems, and other healthcare participants. Built-in safeguards, and legal and ethical issues related to electronic communications and health records are emphasized using 21st century tools of communication and collaboration. Knowledge and skills presented in this course will be expanded in future nursing courses related to the baccalaureate completion program. Prerequisite: Admission to the RN to BSN program.

This course is designed to enlighten students to new cultures, provide the opportunity to see how these cultures deal with health care, and assess the clients' internal and external environment that impact health care. Various roles and responsibilities of nurses participating in international health are examined. A short term immersion experience provides an opportunity to incorporate the nursing process in clinic and community settings and to function as members of a health care team. Prerequisite: NURS 333, NURS 339, or consent of instructor.

NURS 446. Population Based Health Care for the Practicing Nurse. 3 Credits.
Concepts and theories important to providing health care to aggregates, communities, and populations are explored. Health promotion and prevention of disease and injury as essential elements of baccalaureate nursing practice are emphasized. Determinants of health are identified to allow students to construct methodologies that address health care disparities. The role of individuals within the interprofessional healthcare team is examined to determine the contributions of each to the achievement of healthy populations. Prerequisite: Admission to the RN to BSN program.

NURS 447. Nursing Practice within the Clinical Health Care Micro System. 3 Credits.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in micro-environments of health care delivery. The microsystem is the structural unit responsible for
delivering care to specific patient populations or the frontline places where patients, families, and care teams meet (2008 AANCN Essentials, p. 38). This environment is where the nurse participates in a broad mixture of direct and indirect care patient care delivery. Findings of current research related to nursing leadership are discussed. Professional, organizational, historical, and social factors that affect health care delivery within a clinical microsystem are considered. Prerequisite: Admission to the RN to BSN program.

NURS 448. Scholarly Inquiry for Quality Improvement. 3 Credits.
Skills of inquiry and information literacy are developed to locate and evaluate information to improve healthcare quality. Continuous quality improvement is introduced as a foundation for quality care and patient safety. Data to monitor the processes and outcomes of care are discussed. Methods to design and test changes to continuously improve the quality and safety of healthcare systems are explored. Prerequisite: Admission to the RN to BSN program.

NURS 449. Nursing Practice within the Healthcare Organization. 3 Credits.
The impact that nursing departments and organizational decision making has on the achievement of quality patient outcomes will be explored. Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the meso-environment of health care delivery. The role of the nurse as leader in achieving organizational goals addressing socio-cultural, economic, legal, and political environmental factors is examined. Prerequisite: Admission to the RN to BSN program.

NURS 451. Navigating the Influences of the Health Care Macro-Environment. 3 Credits.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges in the macro-environment of health care delivery. The role of the nurse as a provider of direct and indirect care is expanded to include local, state, national, and international regulatory, legal, and professional association interactions that impact the ability of the nurse to deliver patient care. Prerequisite: Admission to the RN to BSN program.

NURS 466. Laboratory Data and Diagnostic Procedures: Clinical Applications. 2 Credits.
Understanding and interpreting common laboratory tests and diagnostic procedures to identify potential or actual needs of individuals is the primary purpose of this course. Alterations in laboratory data and diagnostic testing procedures due to common pathological states of individuals across the life span will be explored. The focus will be on using this knowledge to identify nursing concepts, diagnoses, and appropriate interventions.

NURS 469. Independent Study in Nursing. 1-5 Credits.
Intensive study in an area of interest with experiences selected according to the student’s written purposes, conceptual framework, objectives and evaluation. Appropriate prerequisite courses, as determined by the Independent Study faculty advisor, must be completed.

NURS 471. Development of a Microsystem Leader. 3 Credits.
Development of a microsystem leader supports the student's understanding of nursing leadership opportunities at all levels of nursing practice. Emphasis will be placed on building and growing teams, modeling a culture of safety and resource utilization, allocation and financial management. Students will be given the opportunity to demonstrate effective decision making and clinical judgement while exploring their role in the healthcare microsystem. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339 or consent of instructor. Corequisite: NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor.

NURS 472. Evidence-Based Practice: Translating Research to Practice. 2 Credits.
Concepts of evidence-based practice (EBP) and healthcare research are explored. Methods to critically appraise healthcare research will be applied. Critical appraisal of evidence will be employed to inform the delivery of safe and quality nursing care. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisite: NURS 471, NURS 473, NURS 474, NURS 475, or consent of instructor.

NURS 473. Professional Development III: Transition to Practice. 2 Credits.
Contemporary issues confronting the nursing profession are discussed and methods to advocate for the profession are investigated. Professional skills, such as job interviewing, portfolio development, and examination of advanced roles in nursing will be emphasized. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or Consent of Instructor. Corequisite: NURS 471, NURS 472, NURS 474, NURS 475, or Consent of Instructor.

NURS 474. Health and Illness: Nursing with Diverse Populations. 4 Credits.
Comprehensive and focused evidence-based care of patients in diverse populations with complex health conditions will be examined. The nurse’s role in assuring coordination, integration, and continuity of care is investigated. Integration of the physical, behavioral, psychological, spiritual, socioeconomic and environmental factors that influence patient centered care is explored. Collaboration with other health care team members to provide safe and quality care for diverse patients in a variety of complex settings is analyzed. Information management tools to monitor outcomes of care are evaluated. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisite: NURS 471, NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor.

NURS 475. Practicum III: Nursing with Diverse Populations. 3 Credits.
Coordination, integration, and continuity of care for diverse patients with multiple/complex problems will be applied in the dynamic microenvironments such as: maternity, pediatrics, mental health, and critical care. Patients/designees are engaged in active partnerships that promote health, safety, well-being, and self-care management. Synthesis of evidence and collaboration with other members of the health care team are used to plan, implement, and evaluate safe and quality care for patients. Technologies that support clinical decision-making, error prevention, and care coordination are emphasized. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, or consent of instructor. Corequisite: NURS 471, NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor.

NURS 476. Nursing in an Evolving Healthcare System. 4 Credits.
Nursing practice in an evolving health care system is addressed with emphasis on the unique challenges presented to the nurse. The role of the nurse as provider of direct and indirect patient care is expanded to include the external influences of the health care organization, the regulatory environment, and the professional association. The development of the nurse as a member of a profession is expected. Inherent is a developing knowledge and appreciation for the diversity of
opinions and organizations that exist to provide assistance in the delivery of direct patient care. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisite: NURS 477, NURS 478, NURS 479, NURS 480, or consent of instructor.

NURS 477. Practicum V: Capstone. 3 Credits.
A preceptor model of learning professional nursing practice provides opportunities to synthesize and integrate previous learning experiences. Emphasis is placed on the roles of the nurse as provider of indirect and direct care; designer, manager and coordinator of care; and member of the profession. The focus is on individual transition to the professional nursing role, recognizing the organizational, social, political, economic, ethical, and legal context in which interdisciplinary health care is delivered in a selected clinical setting. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisite: NURS 476, NURS 478, NURS 479, NURS 480, or consent of instructor.

NURS 478. Integration of Concepts and Clinical Competencies. 1 Credit.
Students integrate concepts discussed in the classroom with competencies learned in the clinical setting. Using small group guided discussion, students begin building a skill set that shows knowledge of and appreciation for the roles of direct care provider, designer, manager and coordinator of care; and member of profession. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisite: NURS 476, NURS 477, NURS 480, NURS 486, or consent of instructor.

NURS 480. Practicum IV: Leadership in a Population Health Setting. 2 Credits.
Concepts and theories from leadership and population health are applied to the health care of: individuals, groups, communities and populations. There is a concentrated focus on leadership in health promotion that provides safe, effective, and efficient care. Leadership concepts such as systems theory, quality improvement, economics, and evidence are applied. Students are provided opportunities for inter-professional collaboration in the planning of health care and promotion of quality outcomes for diverse populations. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 474, NURS 475, or consent of instructor. Corequisite: NURS 476, NURS 478, NURS 479, NURS 485, or consent of instructor.

NURS 481. Honors Evidence-Based Practice: Translating Research to Practice. 2 Credits.
Concepts of evidence-based practice (EBP) and health care research are explored to inform the delivery of safe and quality nursing care. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339, NURS 382, or consent of instructor. Corequisite: NURS 471, NURS 473, NURS 474, NURS 475, or consent of instructor. This course is for Honors students only.

NURS 482. Honors Practicum I. 2 Credits.
Under the mentorship of an active nurse researcher the student designs and conducts a research project and participates as a member of a research project team. Students apply principles of research learned in NURS 460 to design and critique their own research project while providing feedback to peers. Through seminar activities they critically analyze the issues, rewards, and challenges of conduction research.

NURS 483. Honors Practicum II. 2 Credits.
Under the mentorship of an active nurse researcher the student designs and conducts a research project and participates as a member of a research project team. Students apply principles of research learned in NURS 460 to design and critique their own research project while providing feedback to peers. Through seminar activities they critically analyze the issues, rewards, and challenges of conduction research.

NURS 485. Population Health, From Local to Global I. 2 Credits.
Population based health and multi-sectoral systems influencing health, locally and globally, are explored. Students build upon clinical reasoning skills from an individual level of care to a global context of care. Focus is on risk reduction, protective and predictive factors, and the systems influencing the health of individuals, families, and communities. Multiple determinants of health and basic data patterns are applied to assess the health and illness beliefs, assets and barriers to health and to explore historical, social, political and economic forces impacting the health of communities. Prerequisite: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 332, NURS 333, NURS 334, NURS 335, NURS 336, NURS 337, NURS 338, NURS 339 Corequisites: NURS 471, NURS 472, NURS 473, NURS 474, NURS 475, or consent of instructor.

NURS 486. Population Health, Local to Global II. 2 Credits.
Community theories, models and frameworks are explored to guide a community health improvement project. Community engagement and collaboration, health coaching and behavior change, and chronic disease management are used to create a community health improvement plan. Quality indicators and sustainable health outcomes are explored to address local, state, and global health issues impacting communities. Prerequisite: Prerequisites: NURS 327, NURS 328, NURS 329, NURS 330, NURS 331, NURS 336, NURS 337, NURS 338, NURS 339, NURS 471, NURS 472, NURS 473, NURS 474, NURS 475, NURS 485. Corequisites: NURS 476, NURS 477, NURS 478, NURS 480.

NURS 492. Senior Project. 2-3 Credits.
Synthesis of knowledge for professional practice will guide development of a project to meet an identified need in an area of interest. The student will select one of three areas (management, clinical practice, education for patients and families, staff, or agency personnel) for project implementation. Prerequisite: NURS 320, NURS 352, NURS 433, NURS 434, NURS 435, and NURS 437. Corequisite: NURS 326, NURS 439, and NURS 441.

Bachelor of Science in Nursing

The School of Nursing offers three undergraduate nursing programs: Pre-Licensure BSN, RN to BSN (p. 2259), and Community College Nursing Partnership (CCNP) (p. 2259).

With a Bachelor of Science in Nursing (BSN) from the University of Kansas School of Nursing, graduates are prepared for success in any health care setting. KU BSN graduates are ready to work in hospitals, community health agencies, industrial or long-term care facilities, as travel nurses, flight nurses, and many other diverse clinical settings.

Graduates of the KU School of Nursing baccalaureate program, begun in 1929, go on to become charge nurses and move into other leadership positions in Kansas and across the country. They are also well-prepared for continuing their education through master’s and doctoral programs in nursing.
School of Nursing alumni are hired by hospitals of great renown, including Johns Hopkins and Mayo Clinic and excellent hospital systems closer to home at The University of Kansas Health System and Children’s Mercy Hospitals and Clinics.

The KU School of Nursing’s baccalaureate, master’s, and doctor of nursing practice (DNP) programs are accredited by the Commission on Collegiate Nursing Education (https://www.aacnnursing.org/CCNE/) (CCNE), 655 K Street NW, Suite 750, Washington, DC 20001, (202) 887-6791. CCNE is a nationally recognized professional accrediting body for collegiate nursing programs. The baccalaureate, master’s, and DNP programs also are approved by the Kansas State Board of Nursing (http://www.kson.org/). The Nurse Midwifery Program is fully accredited by the Accreditation Commission for Midwifery Education (ACME) (https://www.midwife.org/acme/) of the American College of Nurse-Midwives (http://www.midwife.org/), 8403 Colesville Rd., Suite 1550, Silver Spring, MD 20910, (240) 485-1800.

### Undergraduate Admission to the School of Nursing

- Pre-Licensure BSN Program (p. 2259)
- RN to BSN Program (p. 2260)
- Community College Nursing Partnership Program (CCNP) (p. 2261)

### Pre-Licensure BSN Program

Students enter the Pre-Licensure BSN program after taking 58 semester credit hours of prerequisite work in an accredited college or university. Admission to the school is competitive. A minimum grade-point average of 2.5 is required to apply.

### Pre-Nursing Advising

A pre-nursing advisor is available by appointment during the fall and spring semesters in the Undergraduate Advising Center (http://advising.ku.edu/), Summerfield Hall, on the Lawrence campus and year-round on the Kansas University Medical Center campus in Kansas City. The advisor provides students with information about the nursing profession, help with course selection in preparation for nursing application, and guidance in the admission process. For an appointment, current Lawrence campus students can call (785) 864-2834. All other students can call (913) 588-1619 for an appointment in Kansas City.

### Admission Procedure

Applications for the pre-licensure BSN program are accepted from July 1st to October 1st for admission the following fall semester. Applications are accepted through the KU Medical Center online application (https://gograd.ku.edu/apply/?sr=ca7d45b3-11fc-471c-89d2-5abe042c93bb) site.

### Admission Criteria

The School of Nursing is meeting the changing needs of society by selecting applicants who, in the judgment of the Student Admission and Progression Committee, demonstrate the academic achievement, maturity, integrity, and motivation necessary for the successful study and practice of nursing, and who will best meet the needs of the citizenry. Students are selected based on college scholastic achievement, interest in and commitment to nursing, letters of reference, extracurricular activities, personal characteristics, and health-related work and volunteer experience. The University of Kansas prohibits discrimination on the basis of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, and genetic information in the university’s programs and activities.

### Locations

The School of Nursing has two campuses: one on the University of Kansas Medical Center campus in Kansas City, KS, about one hour east of the Lawrence Campus, and one on the University of Kansas Medical Center campus in Salina, KS, about two hours west of the Lawrence campus.

### Course Requirements

Within the 58 hours required for admission to the basic BSN program, the following must be included:

#### Humanities and Social Sciences

Courses in English composition and literature, public speech, general sociology, general psychology, theories of child or human development, global awareness, and humanities are required. Students who complete these general education requirements through the Lawrence Campus meet these requirements by taking the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 105</td>
<td>Honors Introduction to English</td>
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</tr>
<tr>
<td>PSYC 104</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 104</td>
<td>Elements of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>or SOC 160</td>
<td>Social Problems and American Values</td>
<td></td>
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<tr>
<td>ABSC 160</td>
<td>Introduction to Child Behavior and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Natural Sciences and Mathematics

Courses in general chemistry, microbiology, biology, and human anatomy are required. These courses must include laboratory experience. Courses in college algebra, statistics, physiology, and nutrition are required, but do not require a laboratory experience. Students who complete these general education requirements through the Lawrence Campus meet these requirements by taking the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>View course list</td>
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<tr>
<td>View course list</td>
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#### Oral Communication

Select one of the following:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>COMS 130</td>
<td>Speaker-Audience Communication</td>
<td>3</td>
</tr>
<tr>
<td>or Exemption for current KU students only</td>
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</tbody>
</table>

#### Global Awareness class

1 course designated Advanced Education 4.2 in this catalog

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>1 course designated Advanced Education 4.2 in this catalog</td>
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#### Natural Sciences

Select one of the following:

<table>
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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>View course list</td>
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</table>

#### Key

1. View course list
2. View course list
disability, status as a veteran, sexual orientation, marital status, parental
basis of race, color, ethnicity, religion, sex, national origin, age, ancestry,
disability, status as a veteran, sexual orientation, marital status, parental
status, gender identity, gender expression, and genetic information in the
university’s programs and activities.

Course Requirements
Within the 60 prerequisite credit hours required for admission to the RN to
BSN program, the following must be included:

Humanities and Social Sciences
Courses in English composition and literature, speech or interpersonal
communication, general sociology, general psychology, theories of child
or human development, global perspectives, and humanities are required.
Students who complete these general education requirements through
the KU College of Liberal Arts and Sciences meet these requirements by
taking the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>ENGL 105</td>
<td>Honors Introduction to English</td>
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<table>
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<tr>
<th>Social Sciences</th>
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<tr>
<td>PSYC 104 General Psychology</td>
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<tr>
<td>SOC 160 Social Problems and American Values</td>
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<tr>
<th>Humanities</th>
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<tbody>
<tr>
<td>1 course designated General Education 3H in this catalog</td>
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<table>
<thead>
<tr>
<th>Oral Communication</th>
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<tbody>
<tr>
<td>Select one of the following:</td>
</tr>
<tr>
<td>COMS 130 Speaker-Audience Communication</td>
</tr>
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</table>

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<tr>
<th>Global Awareness class</th>
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<tr>
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<th>Natural Sciences and Mathematics</th>
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<tbody>
<tr>
<td>Courses in general chemistry, microbiology, and human anatomy are required. These courses must include a laboratory experience. Courses in college algebra, statistics, physiology, and nutrition are required but do not require a laboratory experience. Students who complete these general education requirements through the Lawrence Campus meet these requirements by taking the following courses:</td>
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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Basic Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 203</td>
<td>Introductory Microbiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 241</td>
<td>Human Anatomy Observation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives can be chosen according to the student’s interests or needs. Examples of such elective areas of study are foreign language, philosophy, literature, creative writing, history, physics, mathematics, political science, western civilization, biological sciences, economics, etc. A maximum of 4 performance-based credit hours can be accepted in the 58 credit hours required for admission. These 4 credit hours may be in physical education courses and technique courses in art, music, and dance.

RN to BSN Program
Through the RN to BSN program, licensed registered nurses (RN) with
associate degrees in nursing can complete the Bachelor of Science (BSN)
degree online.

Admission Procedure
The application for the RN to BSN program always is open, with the
following deadline dates: January 15th for mid-spring semester, April
1st for summer semester, July 1st for fall semester, August 1st for mid-
fall semester, and November 1st for spring semester. Applications are
accepted through the KU Medical Center online application (https://
ggrad.ku.edu/apply/?sr=ca7d45b3-1f3c-471c-89d2-5abe042c93bb) site.

Admission Criteria
Eligible applicants must have current United States RN licensure, an
associate degree in nursing from an ACEN-accredited college, and
completion of 60 prerequisite credit hours with a cumulative GPA of at
least 2.50.

The School of Nursing is meeting the changing needs of society by
selecting applicants who, in the judgment of the student admission
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disability, status as a veteran, sexual orientation, marital status, parental
status, gender identity, gender expression, and genetic information in the
university’s programs and activities.

Course Requirements
Within the 60 prerequisite credit hours required for admission to the RN to
BSN program, the following must be included:

Humanities and Social Sciences
Courses in English composition and literature, speech or interpersonal
communication, general sociology, general psychology, theories of child
or human development, global perspectives, and humanities are required.
Students who complete these general education requirements through
the KU College of Liberal Arts and Sciences meet these requirements by
taking the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 105</td>
<td>Honors Introduction to English</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 104 General Psychology</td>
</tr>
<tr>
<td>SOC 160 Social Problems and American Values</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 course designated General Education 3H in this catalog</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one of the following:</td>
</tr>
<tr>
<td>COMS 130 Speaker-Audience Communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Awareness class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 course designated Advanced Education 4.2 in this catalog</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Natural Sciences and Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses in general chemistry, microbiology, and human anatomy are required. These courses must include a laboratory experience. Courses in college algebra, statistics, physiology, and nutrition are required but do not require a laboratory experience. Students who complete these general education requirements through the Lawrence Campus meet these requirements by taking the following courses:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Basic Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 203</td>
<td>Introductory Microbiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 241</td>
<td>Human Anatomy Observation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
</tbody>
</table>
Mathematics and Statistics

- MATH 101 College Algebra: _____ (or exemption) 3
- PSYC 210 Statistics in Psychological Research 3
  or MATH 365 Elementary Statistics 3

Electives

Electives can be chosen according to the student’s interests or needs. Examples of such elective areas of study are foreign language, philosophy, literature, creative writing, history, oral communication, physics, mathematics, political science, western civilization, biological sciences, economics, etc. A maximum of 8 performance-based credit hours can be accepted in the 60 credit hours required for admission. These 8 credit hours may be in physical education courses, and technique courses in art, music, and dance.

Community College Nursing Partnership Program (CCNP)

Students first complete 59-62 credit hours of prerequisite liberal arts and science courses, and then simultaneously complete the Associate Degree in Nursing (A.D.N./A.S.N.) at a partner community college and 30 credit hours of BSN courses online through KU School of Nursing.

Admission Procedure

Students should apply for admission to the CCNP immediately upon notification of admission to their selected A.D.N./A.S.N. program, but no later than the following dates: July 1st for fall semester and December 1st for spring semester. Applications are accepted through the KU Medical Center online application (https://gograd.ku.edu/apply/?sr=ca7d45b3-1f3c-471c-89d2-5abe042c93bb) site.

Admission Criteria

Eligible applicants must be admitted to a participating community college’s Associate Degree in Nursing (A.D.N./A.S.N.) program and complete 59-62 credit hours of community college specific prerequisite credit hours with a cumulative GPA of at least 2.50. The School of Nursing is meeting the changing needs of society by selecting applicants who, in the judgment of the student admission and progression committee, demonstrate the academic achievement, maturity, integrity, and motivation necessary for the successful study and practice of nursing, and who will best meet the needs of the citizenry. Students are selected on the basis of college scholastic achievement, interest in and commitment to nursing, letters of reference, extracurricular activities, personal characteristics, and health-related work and volunteer experience. The University of Kansas prohibits discrimination on the basis of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression, and genetic information in the university’s programs and activities.

Course Requirements

Within the 59-62 hours required for admission to the CCNP program, the following must be included:

Humanities and Social Sciences

Courses in English composition and literature, speech or interpersonal communication, general sociology, general psychology, theories of child or human development, global perspectives, and humanities are required. Students who complete these general education requirements through the KU College of Liberal Arts and Sciences meet these requirements by taking the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Critical Reading and Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 105</td>
<td>Honors Introduction to English</td>
<td></td>
</tr>
</tbody>
</table>

Social Sciences

- PSYC 104 General Psychology 3
- SOC 104 Elements of Sociology 3
  or SOC 160 Social Problems and American Values 3
- ABSC 160 Introduction to Child Behavior and Development (or PSYC 250 or PSYC 333 or ABSC 250) 3

Humanities

- 1 course designated General Education 3H in this catalog 1 3

Oral Communication

- Select one of the following:
  - COMS 130 Speaker-Audience Communication 3

Global Awareness class

- 1 course designated Advanced Education 4.2 in this catalog 2 3
  - Exemption

1 View principal course list
2 View principal course list

Natural Sciences and Mathematics

Courses in general chemistry, microbiology, and human anatomy are required. These courses must include a laboratory experience. Courses in college algebra, statistics, physiology, and nutrition are required but do not require a laboratory experience. Students who complete these general education requirements through the KU College of Liberal Arts and Sciences meet these requirements by taking the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 200</td>
<td>Basic Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 203</td>
<td>Introductory Microbiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 241</td>
<td>Human Anatomy Observation Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>Principles of Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 110</td>
<td>Introductory Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 130</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
</tbody>
</table>

Mathematics and Statistics

- MATH 101 College Algebra: _____ (or exemption) 3
- PSYC 210 Statistics in Psychological Research 3
  or MATH 365 Elementary Statistics 3

Electives

Electives can be chosen according to the student’s interests or needs. Examples of such elective areas of study are foreign language, philosophy, literature, creative writing, history, oral communication, physics, mathematics, political science, western civilization, biological sciences, economics, etc.

Additional Requirements
Students from certain community colleges will be required to take Nursing Assessment, Pathophysiology and/or Pharmacology as prerequisite courses. See the KU School of Nursing website for detailed requirements for each specific partnership school.

The BSN degree is granted to candidates recommended by the School of Nursing as having successfully fulfilled all prescribed requirements, including the courses listed below. A total of 120 credit hours is required for the Pre-Licensure BSN degree, and a total of 120 credit hours is required for the RN to BSN degree, with a cumulative grade-point average of at least 2.0. Only courses in which a grade of C or higher is earned count toward graduation. The last 30 hours completed for the degree must have been taken in residence at KU. A portion of total hours applied toward graduation may be earned through credit by examination. An applicant who receives a failing grade of D or F in the semester prior to the admission decision (e.g., Fall 2020 for Fall 2021 entry) will be removed from consideration. The professional portion of the BSN program can be completed in 2 academic years of full-time study.

Pre-Licensure BSN Program

The professional portion of the BSN program can be completed in 2 academic years of full-time study. In addition to the required courses listed below, each student must take a 2-credit hour elective.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 327</td>
<td>Communicating and Managing Healthcare Information</td>
<td>3</td>
</tr>
<tr>
<td>NURS 328</td>
<td>Professional Development I: Introduction to the Profession</td>
<td>2</td>
</tr>
<tr>
<td>NURS 329</td>
<td>Alterations in Physiological Functioning I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 330</td>
<td>Pharmacology I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 331</td>
<td>Basic Assessment and Clinical Skills</td>
<td>3</td>
</tr>
<tr>
<td>NURS 332</td>
<td>Health and Illness: Foundations of Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 333</td>
<td>Practicum I: Foundations of Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NURS 334</td>
<td>Professional Development II: Image, Roles, and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>NURS 335</td>
<td>Quality Improvement</td>
<td>2</td>
</tr>
<tr>
<td>NURS 336</td>
<td>Alterations in Physiological Functioning II</td>
<td>3</td>
</tr>
<tr>
<td>NURS 337</td>
<td>Pharmacology II</td>
<td>2</td>
</tr>
<tr>
<td>NURS 338</td>
<td>Health and Illness: Nursing Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NURS 339</td>
<td>Practicum II: Nursing Across the Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>NURS 382</td>
<td>Honors Seminar (if in Nursing Honors Program)</td>
<td>1</td>
</tr>
<tr>
<td>NURS 471</td>
<td>Development of a Microsystems Leader</td>
<td>3</td>
</tr>
<tr>
<td>NURS 472</td>
<td>Evidence-Based Practice: Translating Research to Practice</td>
<td>2</td>
</tr>
<tr>
<td>NURS 473</td>
<td>Professional Development III: Transition to Practice</td>
<td>2</td>
</tr>
<tr>
<td>NURS 474</td>
<td>Health and Illness: Nursing with Diverse Populations</td>
<td>4</td>
</tr>
<tr>
<td>NURS 475</td>
<td>Practicum III: Nursing with Diverse Populations</td>
<td>3</td>
</tr>
<tr>
<td>NURS 476</td>
<td>Nursing in an Evolving Healthcare System</td>
<td>4</td>
</tr>
<tr>
<td>NURS 477</td>
<td>Practicum V: Capstone</td>
<td>3</td>
</tr>
<tr>
<td>NURS 478</td>
<td>Integration of Concepts and Clinical Competencies</td>
<td>1</td>
</tr>
<tr>
<td>NURS 480</td>
<td>Practicum IV: Leadership in a Population Health Setting</td>
<td>2</td>
</tr>
<tr>
<td>NURS 481</td>
<td>Honors Evidence-Based Practice: Translating Research to Practice (if in Nursing Honors Program)</td>
<td>2</td>
</tr>
<tr>
<td>NURS 482</td>
<td>Honors Practicum I (if in Nursing Honors Program)</td>
<td>2</td>
</tr>
<tr>
<td>NURS 483</td>
<td>Honors Practicum II (if in Nursing Honors Program)</td>
<td>2</td>
</tr>
<tr>
<td>NURS 485</td>
<td>Population Health, From Local to Global I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 486</td>
<td>Population Health, Local to Global II</td>
<td>2</td>
</tr>
</tbody>
</table>

RN to BSN Program

The RN to BSN program provides registered nurses a way to complete the baccalaureate degree in a flexible online format. The program can be completed in as little as one calendar year of full-time study or up to five years of part-time study. A total of 120 semester credit hours is required for the degree, comprised of 60 credit hours of liberal arts prerequisite courses and 60 credit hours of nursing courses and evidence of RN licensure. NURS 326 and NURS 352 are eligible for credit by portfolio or transfer from approved associate degree programs. The last 30 hours completed for the degree must be taken at KU.

KU RN to BSN Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 320</td>
<td>Pathophysiology for the Practicing Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 326</td>
<td>Pharmacology for the Practicing Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 352</td>
<td>Client Assessment for the Practicing Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 441</td>
<td>Evidence Based Practice in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 443</td>
<td>Developing the Baccalaureate Nurse Role</td>
<td>3</td>
</tr>
<tr>
<td>NURS 444</td>
<td>Using Technology to Enhance Client Safety</td>
<td>3</td>
</tr>
<tr>
<td>NURS 446</td>
<td>Population Based Health Care for the Practicing Nurse</td>
<td>3</td>
</tr>
<tr>
<td>NURS 447</td>
<td>Nursing Practice within the Clinical Health Care Micro System</td>
<td>3</td>
</tr>
<tr>
<td>NURS 448</td>
<td>Scholarly Inquiry for Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>NURS 449</td>
<td>Nursing Practice within the Healthcare Organization</td>
<td>3</td>
</tr>
<tr>
<td>NURS 451</td>
<td>Navigating the Influences of the Health Care Macro-Environment</td>
<td>3</td>
</tr>
<tr>
<td>NURS 492</td>
<td>Senior Project</td>
<td>2-3</td>
</tr>
</tbody>
</table>

Total Hours 35-36

Portfolio/Transfer Credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 470</td>
<td>Introduction to Professional Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURS 471</td>
<td>Assessment/Therapeutic Interventions</td>
<td>3</td>
</tr>
<tr>
<td>NURS 472</td>
<td>Foundations of Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NURS 473</td>
<td>Image, Roles &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>NURS 474</td>
<td>Nursing Across the Lifespan</td>
<td>6</td>
</tr>
<tr>
<td>NURS 475</td>
<td>Nursing Diverse Populations</td>
<td>7</td>
</tr>
<tr>
<td>NURS 476 and NURS 352</td>
<td>are eligible for credit by portfolio from approved associate degree programs.</td>
<td>0-6</td>
</tr>
</tbody>
</table>

Total Hours 25-31

Community College Nursing Partnership Program (CCNP)

Students first complete 59-62 credit hours of community college specific prerequisite liberal arts and science courses, and then simultaneously...
complete the associate degree in nursing at a partner community college and 30 credit hours of BSN courses online through KU School of Nursing.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 356</td>
<td>Using Technology and Informatics to Improve Patient Safety</td>
<td>3</td>
</tr>
<tr>
<td>NURS 357</td>
<td>Introduction to the Baccalaureate Nurse Role</td>
<td>3</td>
</tr>
<tr>
<td>NURS 411</td>
<td>Population-Based Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 412</td>
<td>Nursing in Healthcare Microsystems</td>
<td>3</td>
</tr>
<tr>
<td>NURS 413</td>
<td>Ethics, Advocacy, and Collaboration in Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 414</td>
<td>Organizational Influences on Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 415</td>
<td>Improving Healthcare Quality</td>
<td>3</td>
</tr>
<tr>
<td>NURS 416</td>
<td>Evidence-Based Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 417</td>
<td>Influences of the Healthcare Macro-System on Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 418</td>
<td>Senior Nursing Project</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 30**

**Portfolio/Transfer Credits**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introduction to Professional Nursing</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Assessment/Therapeutic Interventions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Foundations of Nursing</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Image, Roles &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Nursing Across the Lifespan</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Nursing Diverse Populations</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Nursing Assessment</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 31**

**On-Campus BSN Plan of Study**

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 100</td>
<td>3</td>
<td>CHEM 110 (with lab)</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 102</td>
<td>1</td>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>SOC 104 or 160</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>3</td>
<td>KU Core 4.2 Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal 3H Arts and Humanities</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSYC 104</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 240</td>
<td>3</td>
<td>BIOL 200</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 241</td>
<td>2</td>
<td>BIOL 203</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 246</td>
<td>3</td>
<td>MATH 365 or PSYC 210</td>
<td>3</td>
</tr>
<tr>
<td>ABSC 160 (or PSYC 333 or PSYC 250 or ABSC 250)</td>
<td>3 HSES 330</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours 58**

For more details on the Arts and Humanities and Global Awareness courses visit the KU Core website (http://kucore.ku.edu/). Sample schedules for the RN to BSN and Community College Nursing Partnership programs are available online on the School of Nursing website (https://www.kumc.edu/school-of-nursing.html).

**University Honors Program**

The School of Nursing encourages all qualified on-campus BSN undergraduates to participate in the University Honors Program (http://www.honors.ku.edu/).

**Departmental Honors Program**

The School of Nursing’s Departmental Honors Program offers enhanced educational opportunities for the most academically talented, promising, and motivated baccalaureate students while providing a foundation for leadership development and articulation into graduate education.

Students in the School of Nursing Honors Program develop and complete a research or scholarly inquiry project under the guidance of a faculty research mentor. Students must make formal application and be admitted to the Honors Program to take honors courses. Once admitted to the program, students may use departmental honors courses to help meet the requirements of the University Honors Program.

Selection criteria for the Nursing Honors Program are as follows:

- Enrollment in the Pre-Licensure BSN program
- Full-time status
- Completion of Nursing Honors Program application - available during the first semester of nursing school
- Overall grade-point average of 3.25 or higher and contingent upon earning a nursing grade-point average of 3.5 or higher at the end of the fall semester (exceptions are considered on an individual basis)

Academic progression through the honors curriculum is evaluated on an individual basis. To graduate with departmental honors from the School of Nursing, the student must attain an overall grade-point average of 3.25 with a nursing grade-point average of 3.5 and satisfactory grades in all clinical practicum courses, complete all required courses in the Nursing Honors Program, and have their oral and written reports of research/scholarly inquiry findings certified.

The honors curriculum comprises the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 382</td>
<td>Honors Seminar (spring of junior year)</td>
<td>1</td>
</tr>
<tr>
<td>NURS 481</td>
<td>Honors Evidence-Based Practice: Translating Research to Practice (summer between junior and senior year)</td>
<td>2</td>
</tr>
<tr>
<td>NURS 482</td>
<td>Honors Practicum I (fall of senior year)</td>
<td>2</td>
</tr>
<tr>
<td>NURS 483</td>
<td>Honors Practicum II (spring of senior year)</td>
<td>2</td>
</tr>
</tbody>
</table>

Students who successfully complete the Nursing Honors Program are recognized in the following ways:

- The notation of Departmental Honors on the official university transcript
• An official certificate indicating graduation with BSN Honors
• Listing in the School of Nursing Recognition Ceremony program
• Formal recognition at the School of Nursing Recognition Ceremony
• Listing in the University of Kansas Commencement Program
• Formal recognition at the Cording Ceremony on the Lawrence campus for students also completing the University Honors Program

For more information, contact the School of Nursing Office of Student Affairs and Enrollment Management (https://nursing.kumc.edu/about-the-school/contact-us.html).

TECHNICAL STANDARDS FOR ADMISSION
University of Kansas School of Nursing

I. Introduction

All individuals admitted to the University of Kansas School of Nursing will be asked to verify that they can meet the following Technical Standards, with or without accommodation(s). In courses or programs without clinical components, or involving no direct client care, the Technical Standards may be modified by the Student Admission and Progression Committee (SAPC). After acceptance, but before admission to the School of Nursing, students in all programs must be able to document current certification/evidence of completion of a course in cardiopulmonary resuscitation for healthcare providers. This requires being able to successfully complete both the written and practical test for certification. In addition, with or without accommodation, the following abilities and expectations must be met by all students, undergraduate and graduate, admitted to the School of Nursing.

II. Standards

A. Observation/Sensory-motor: Applicants must be able to observe demonstrations and learn from experiences in the basic sciences, including but not limited to, physiology and pharmacology, microbiology and pathophysiology laboratory situations. Applicants must be able to observe and learn from experiences in the clinical nursing laboratory such as the following examples: accurately read gradients/calibrations on a syringe; measure medications accurately; accurately recognize color changes on chemical reaction strips; assess heart, breath, abdominal sounds; assess normal and abnormal color changes in the skin; observe pupil changes; and observe digital or waveform readings.

B. Communication: Communications include not only speech but also reading, writing, and computer usage, including handheld digital access. Applicants must be able to communicate accurately and effectively with patients, caregivers, physicians, other health professionals, clinical facility staff, faculty and staff, peers, and the community in general in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications.

C. Psychomotor: Applicants should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers. Applicants should be physically able to collect specimens and perform basic tests (such as glucose finger stick, urine dipstick). Applicants should be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of nurses are cardiopulmonary resuscitation, administration of intravenous medication, application of pressure to stop bleeding, and assist in moving and lifting patients using proper body mechanics. Such actions require coordination of both gross and fine muscular movements, equilibrium and using tactile and visual senses.

D. Intellectual-Conceptual, Integrative, and Quantitative: Applicants must be able to comprehend and interpret documents written in English. Applicants should have cognitive abilities including measurements, calculation, reasoning, analysis, and synthesis. Critical thinking is the ability to synthesize knowledge and integrate the relevant aspects of a client’s history, physical exam findings and diagnostic studies. Problem solving, the critical skill demanded of nurses, requires all of these intellectual abilities. In addition, the applicant should be able to comprehend three dimensional relationships and to understand the spatial relationships of structures in order to understand normal and abnormal anatomy and physiology.

E. Behavioral and Social Attributes: Applicants must possess the emotional health required to utilize their intellectual abilities fully, exercise good judgment, complete all responsibilities attendant to the nursing diagnosis and care of patients promptly, and the development of mature, sensitive and effective relationships with patients and their families. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal communication skills, interest and motivation are all personal qualities that should be assessed during the admissions and education process. As a component of nursing education, a student must demonstrate ethical behavior including adherence to the professional nursing and student honor codes. The honor code at the KU School of Nursing is the Professional Integrity System (PROFITS). KU PROFITS is a peer-oriented integrity system to promote an environment where academic honesty is valued and expected.

III. Reasonable Accommodation

Applicants who disclose a disability are considered for admission if they are otherwise qualified so long as such accommodation does not significantly alter the essential requirements of the curriculum and the educational program, or significantly affect the safety of patient care or others. When applicants or students disclose a disability, the provision of reasonable accommodations will be considered in an attempt to assist these individuals in meeting these required technical standards. Applicants whose response indicates that they cannot meet one or more of the expectations will be reviewed further by the University’s Office for Academic Accommodations, with applicant and faculty input, to determine if any reasonable accommodations are possible to facilitate successful completion of the nursing curriculum and preparation for the national registry examination.

It is important to give persons interested in enrolling in nursing a realistic view of the vigorous demands of the School of Nursing’s theoretical and practicum curriculum while at the same time investigating reasonable accommodations. Whether or not a requested accommodation is reasonable will be determined on a case by case basis. Interested individuals may schedule an orientation visit to the nursing skills laboratory and actual sites of the University of Kansas Hospital and/or University of Kansas Medical Center. These orientation visits enable persons to assess their interest and ability to function in the actual clinical areas and in learning and demonstrating manual skills.
Nursing and Interprofessional Master of Science Degrees

The Nursing Master of Science degree program enlarges the focus of nursing, using as its foundation the basic baccalaureate nursing program. The master's program curriculum includes the following components: Common Core, Leadership Core, Research Core, and Specialty Core. Leadership specializations include nursing education, organizational leadership, and public health nursing.

The KU School of Nursing's baccalaureate, master's, and doctor of nursing practice (DNP) programs are accredited by the Commission on Collegiate Nursing Education (https://www.aacnnursing.org/CCNE/) (CCNE), 655 K Street NW, Suite 750, Washington, DC 20001, (202) 887-6791. CCNE is a nationally recognized professional accrediting body for collegiate nursing programs. The baccalaureate, master's, and DNP programs also are approved by the Kansas State Board of Nursing (http://www.ksbn.org/).

The Health Informatics Master of Science (https://catalog.ku.edu/nursing/ms-health-informatics/#text) degree program is administered by the Center for Health Informatics, which is sponsored by the School of Nursing. This program is interprofessional and open to baccalaureate-prepared students of all backgrounds. Healthcare experience is preferred, but not required.

Applications to the Nursing Master of Science and Interprofessional Health Informatics Master of Science (https://catalog.ku.edu/nursing/ms-nursing/) degree programs are accepted twice a year. April 1st and September 1st are the respective deadlines for fall and spring semesters.

Eligibility requirements, NURSING MASTER OF SCIENCE:

1. Bachelor of Science in Nursing (BSN) from a nationally accredited (NLNAC or CCNE) program
2. Current registered nurse licensure in at least one state in the United States
3. Minimum of one year of clinical work experience as a registered nurse is recommended
4. Minimum cumulative undergraduate grade point average (GPA) of 3.0 on a 4.0 scale
5. Potential for leadership and application of scholarship in nursing
6. Potential to provide expert service and leadership in functional area
7. Completion of a graduate-level statistics course either prior to admission or during first semester of graduate study
8. Satisfactory criminal background check, which is completed once an offer of admission has been extended to applicant

Eligibility requirements, INTERPROFESSIONAL HEALTH INFORMATICS:

Requirements for the Master of Science in Health Informatics (MSHI) are located in the program's Admissions requirements (https://catalog.ku.edu/nursing/ms-health-informatics/#admissiontext).

English Language Requirements

All applicants for study at the University of Kansas Medical Center (KUMC) whose native language is not English must demonstrate an established level of English language proficiency through either the TOEFL (Test of English as a Foreign Language) or the academic format of the EILTS (International English Language Testing System). The test must have been taken within two years of the first semester of enrollment.

See also Admissions (p. 2413) in the Graduate Studies section of the online catalog.

Nursing Master of Science Degree

Nursing Education (NE) Specialty (minimum 39 credit hours) - prepares nurses for the educator role in academic and clinical settings to deliver didactic and clinical instruction through a variety of teaching, learning and evaluation methods.

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>NRSG 748</td>
<td>Theories for Practice and Research</td>
<td>3</td>
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<td>NRSG 754</td>
<td>Health Care Research</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 755</td>
<td>Professionalism in Advanced Nursing Practice</td>
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Leadership and Advanced Practice Core

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<tbody>
<tr>
<td>NRSG 880</td>
<td>Organizational Foundations for Leading Change</td>
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</tr>
<tr>
<td>NRSG 812</td>
<td>Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 801</td>
<td>Advanced Health Assessment and Clinical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 813</td>
<td>Advanced Pharmacology</td>
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<tr>
<td>NRSG 888</td>
<td>Clinical Specialty Practicum for Nurse Educators (1-3 credit hour required)</td>
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Research Core

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Specialty Core

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</tr>
<tr>
<td>NRSG 871</td>
<td>Curriculum/Program Planning and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 873</td>
<td>Teaching with Technologies</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 874</td>
<td>Health Professions Educator Preceptorship</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 877</td>
<td>Foundations in Education and Learning</td>
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Total Hours: 39-41

Organizational Leadership (OL) Specialty (minimum 37 credit hours) - prepares nurses to assume leadership positions in hospitals and other health agencies.

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<tr>
<td>NRSG 748</td>
<td>Theories for Practice and Research</td>
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<tr>
<td>NRSG 754</td>
<td>Health Care Research</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 755</td>
<td>Professionalism in Advanced Nursing Practice</td>
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Leadership Core

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<tbody>
<tr>
<td>NRSG 808</td>
<td>The Social Context for Health Care Policy</td>
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</tr>
<tr>
<td>IPHI 820</td>
<td>Program, Project, and Communication Planning</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 826</td>
<td>Global Perspective and Diversity in Healthcare</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 880</td>
<td>Organizational Foundations for Leading Change</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 885</td>
<td>Evaluation and Analysis for Healthcare Effectiveness</td>
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Research Core

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<th>Title</th>
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<tbody>
<tr>
<td>NRSG 898</td>
<td>Scholarly Project in Nursing</td>
<td>2</td>
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</table>
considered for admission to the MSHI program. New students will be functions.

Health Informatics (HI) Specialty (minimum 37 credit hours) - prepares nurses with skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions. Graduates will be prepared for entry and mid-level positions with hospital or clinic informatics departments, electronic health record (EHR) vendors, public health organizations, and as consultants and/or staff in organizations that specialize in knowledge management. Graduates also have the skills to enter the growing field of health information exchange, which includes regional health information organizations and the emerging health organizations, and as consultants and/or staff in organizations that specialize in knowledge management. Graduates also have the skills to enter the growing field of health information exchange, which includes regional health information organizations and the emerging personal health records. In addition to a foundation in applied health informatics, special skills will be acquired in organizational change, project management and impact evaluation.

Interprofessional Health Informatics Master of Science

Professionals in applied Health Informatics have skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions. Graduates will be prepared for entry and mid-level positions with hospital or clinic informatics departments, electronic health record (EHR) vendors, public health organizations, and as consultants and/or staff in organizations that specialize in knowledge management. Graduates also have the skills to enter the growing field of health information exchange, which includes regional health information organizations and the emerging personal health records. In addition to a foundation in applied health informatics, special skills will be acquired in organizational change, project management and impact evaluation.

DUAL DEGREES

NURSING DUAL DEGREE PROGRAM

Students who wish to earn master's degrees in both Nursing (organizational leadership [OL] specialty) and Health Services Administration may elect the dual degree option. By combining some course work, the two degrees may be completed in a shorter time frame. Students in the MS, OL/MHSA dual degree program must complete a total of 62 graduate credit hours: 29 credit hours in the School of Nursing and 33 credit hours in Health Policy & Management. If completed separately, the MS in nursing requires 37 credit hours, and the MHSA degree requires 52-54 credit hours.

Master of Science (Organizational Leadership, specialty) (MS) (p. 2265)

Master of Health Services Administration (MHSA) (p. 2100)

HEALTH INFORMATICS DUAL DEGREE PROGRAM

PharmD students currently enrolled in the KU Pharmacy degree program who wish to earn a master's degree in health informatics while completing their pharmacy degree may apply for the MSHI-PharmD dual degree program (https://catalog.ku.edu/nursing/ms-health-informatics/dualprogramtext).

TECHNICAL STANDARDS FOR ADMISSION
University of Kansas School of Nursing (MSHI technical standards are located the MSHI degree webpage ([https://catalog.ku.edu/nursing/ms-health-informatics/#technicalstandardstext]))

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Doctor of Philosophy in Nursing

The Doctor of Philosophy in Nursing (PhD) Program prepares graduates to function in faculty positions in college and university settings; conduct independent research as nurse scientists, perform scholarly endeavors in nursing; generate and expand the theoretical, empirical, and philosophical bases for nursing practice; provide leadership to the profession; and interpret nursing to society. Students have opportunities to expand their theoretical knowledge and research skills in one of three emphasis areas (Health Systems, Symptom Science, or Education); develop expertise in nursing theory development; expand research skills; and gain a historical and philosophical perspective that broadens their professional orientation and provides a basis for understanding changing social expectations, cultural perspectives,
and economic and political trends. The PhD Program prepares nurse scientists for the future with coursework in Precision Health, Data Science, and Grant Writing.

Nurses engaged in doctoral study are adult learners with unique perspectives gained from personal, professional, and educational experiences. These individuals tend to be self-directed, goal-oriented, highly motivated and capable of abstract, original thinking. Individual interests are explored through study in the selected emphasis area. Learning is achieved through independent study and research, as well as instructed courses.

**PhD Program Objectives**

1. Develop expertise in the application of theoretical and conceptual frameworks to nursing.
2. Conduct and communicate research that advances the body of scientific nursing knowledge.
3. Analyze, develop, and evaluate concepts and theories that contribute to the science of nursing.
4. Evaluate the impact of the expanded knowledge base in nursing and external forces on the provision of health care to society and on the development of health care policy.
5. Examine the ways in which nursing knowledge and practice are influenced by historical developments, philosophical thought, and cultural diversity.

**Admission Criteria**

New students are accepted to the PhD degree program once a year, for instruction that begins in June during the summer semester. The application deadline is January 1st for admission the following summer. Prospective students can apply using the KU online application (https://gograd.ku.edu/apply/?sr=ca7d45b3-1f3c-471c-89d2-5abe042c93bb).

1. Completion of a Bachelor of Science in Nursing (BSN), Master of Science (MS) in nursing, or Doctor of Nursing Practice (DNP) degree from a nationally accredited (NLNAC or CCNE) program.
2. Current registered nurse licensure in at least one state in the United States. This requirement may be waived for international students who will not engage in patient care while in the program.
3. Preference is given to applicants with a 3.5 GPA in a BSN program or 3.25 GPA in a Master's or DNP program.
4. Potential for leadership and scholarship in nursing.
5. Prerequisite preparation must include a graduate-level statistical methods course and an Analysis of Variance (ANOVA) course.
6. Satisfactory criminal background check (completed once an offer of admission has been extended to applicant), which may affect the student’s eligibility to enter the program.

**English Language Requirements**

All applicants for study at the University of Kansas Medical Center (KUMC) whose native language is not English must demonstrate an established level of English language proficiency through either the TOEFL (Test of English as a Foreign Language) or the academic format of the EILTS (International English Language Testing System). The test must have been taken within two years of the first semester of enrollment.

See also Admissions (p. 2413) in the Graduate Studies section of the online catalog.

**Program Options**

Students may apply to the research doctoral (PhD) program after completing a doctorate of nursing (DNP), master's degree in nursing or a baccalaureate degree with a major in nursing. The post-baccalaureate entry option is for exceptionally well-qualified BSN graduates whose career goals are research-oriented and who wish to progress as rapidly as possible toward the research doctorate in nursing.

**Course Requirements**

The PhD degree requires 67 credit hours; 52 coursework credit hours and at least 15 dissertation credit hours for Post-MS students. Post-BSN students complete an additional 6 credit hours from the graduate nursing core. DNP-to-PhD students complete 27 credit hours of coursework and 15 dissertation credit hours.

The PhD program is offered through a combination of formats, including:

- Three required on-campus, one-week summer intensives at the University of Kansas Medical Center in Kansas City, Kansas
- Online coursework throughout the year, including synchronous and asynchronous web-based conferencing on a regular basis
- On-campus and videoconference mentoring by faculty for research and career advisement and scholar development

Coursework includes curriculum components: core (41 credit hours for Post-MS), an Emphasis Area (11 credit hours), and Dissertation (at least 15 credit hours). DNP-to-PhD students complete 27 credit hours of coursework and 15 dissertation credit hours.

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<tr>
<td>BIOS 704</td>
<td>Principles of Statistics in Public Health (or equivalent)</td>
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<td>NRSG 700</td>
<td>Analysis of Variance for Nursing Research (or equivalent)</td>
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or

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>BIOS 720</td>
<td>Analysis of Variance</td>
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**BSN-PhD Required Courses**

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<td>Theories for Practice and Research</td>
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<td>NRSG 754</td>
<td>Health Care Research</td>
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**BSN-PhD and MS-PhD Required Core**

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<td>NRSG 896</td>
<td>Grant Writing Application</td>
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<td>Foundations of Data Science</td>
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<td>Professionalism and Scholarship Workshop</td>
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<td>Philosophy of Nursing Science</td>
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<td>NRSG 937</td>
<td>Innovative Theories and Models for Nursing Science</td>
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<td>NRSG 939</td>
<td>Precision Health</td>
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<td>NRSG 941</td>
<td>Preparing for Doctoral Leadership</td>
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<td>NRSG 946</td>
<td>Measurement Principles and Practice</td>
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<tr>
<td>NRSG 949</td>
<td>Synthesis Workshop II</td>
<td>1</td>
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and pathophysiology laboratory situations. Applicants must be able to observe and learn from experiences in the clinical nursing laboratory such as the following examples: accurately read gradients/calibrations on a syringe; measure medications accurately; accurately recognize color changes on chemical reaction strips; assess heart, breath, abdominal sounds; assess normal and abnormal color changes in the skin; observe pupil changes; and observe digital or waveform readings.

B. Communication: Communications include not only speech but also reading, writing, and computer usage, including handheld digital access. Applicants must be able to communicate accurately and effectively with patients, caregivers, physicians, other health professionals, clinical facility staff, faculty and staff, peers, and the community in general in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications.

C. Psychomotor: Applicants should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers. Applicants should be physically able to collect specimens and perform basic tests (such as glucose finger stick, urine dipstick). Applicants should be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of nurses are cardiopulmonary resuscitation, administration of intravenous medication, application of pressure to stop bleeding, and assist in moving and lifting patients using proper body mechanics. Such actions require coordination of both gross and fine muscular movements, equilibrium and using tactile and visual senses.

D. Intellectual-Conceptual, Integrative, and Quantitative: Applicants must be able to comprehend and interpret documents written in English. Applicants should have cognitive abilities including measurements, calculation, reasoning, analysis, and synthesis. Critical thinking is the ability to synthesize knowledge. Problem solving, the critical skill demanded of nurses, requires all of these intellectual abilities. In addition, the applicant should be able to comprehend three dimensional relationships and to understand the spatial relationships of structures in order to understand normal and abnormal anatomy and physiology, which may be an essential part of the selected research topic.

E. Behavioral and Social Attributes: Applicants must possess the emotional health required to utilize their intellectual abilities fully, exercise good judgment, complete all responsibilities attendant to the nursing diagnosis and care of patients promptly, and the development of mature, sensitive and effective relationships with patients and their families. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal communication skills, interest and motivation are all personal qualities that should be assessed during the admissions and education process. As a component of nursing education, a student must demonstrate ethical behavior including adherence to the professional nursing and student honor codes. The honor code at the KU School of Nursing is the Professional Integrity System (PROFITS). KU PROFITS is a peer-oriented integrity system to promote an environment where academic honesty is valued and expected.

III. Reasonable Accommodation

Applicants who disclose a disability are considered for admission if they are otherwise qualified so long as such accommodation does not significantly alter the essential requirements of the curriculum and the
educational program, or significantly affect the safety of patient care or others. When applicants or students disclose a disability, the provision of reasonable accommodations will be considered in an attempt to assist these individuals in meeting these required technical standards. Applicants whose response indicates that they cannot meet one or more of the expectations will be reviewed further by the University’s Office for Academic Accommodations, with applicant and faculty input, to determine if any reasonable accommodations are possible to facilitate successful completion of the nursing curriculum and preparation for the national registry examination.

It is important to give persons interested in enrolling in nursing a realistic view of the vigorous demands of the School of Nursing’s theoretical and practicum curriculum while at the same time investigating reasonable accommodations. Whether or not a requested accommodation is reasonable will be determined on a case by case basis. Interested individuals may schedule an orientation visit to the nursing skills laboratory and actual sites of the University of Kansas Hospital and/or University of Kansas Medical Center. These orientation visits enable persons to assess their interest and ability to function in the actual clinical areas and in learning and demonstrating manual skills.

**Doctor of Nursing Practice (DNP) to Doctor of Philosophy in Nursing (PhD) Program**

The University of Kansas School of Nursing PhD program prepares graduates to function in faculty positions in college and university settings; conduct independent research and scholarly endeavors in nursing; generate and expand the theoretical, empirical, and philosophical bases for nursing practice; provide leadership to the profession; and interpret nursing to society. The DNP-to-PhD in Nursing program prepares graduates for these purposes for those who previously earned a DNP degree. The advanced practice or leadership cognate area from the DNP program serves as the “emphasis area” for the DNP-to-PhD program. Additional content provided in the PhD program is focused on statistics, theory, data science, or precision health, research methods, grant writing, and conduct of research, (i.e., skills essential to the research doctorate). The DNP-to-PhD program focuses on preparing the graduate for conducting independent and collaborative research for nursing science. DNP-PhD students complete 27 credit hours of coursework and 15 dissertation credit hours.

**Eligibility and Requirements**

1. Completion of a Doctor of Nursing Practice degree from a nationally accredited (NLNAC or CCNE) program.
2. Current registered nurse licensure in at least one state in the U.S.
3. Minimum cumulative graduate grade point average (GPA) of 3.0 on a 4.0 scale. Preference is given to applicants with a 3.25 GPA in the DNP program.
4. Potential for leadership and scholarship in nursing.
The advanced-practice nursing major prepares nurses for nurse practitioner or nurse-midwife specialty areas.

**DNP Admission**

New students are accepted to the DNP degree program once a year, for study that begins during the summer semester. The application deadline is January 1st for admission the following summer (June). Prospective students can apply using the KU Medical Center online application (https://gograd.ku.edu/apply/?sr=ca7d45b3-113c-471c-89d2-5abe042c93bb).

**DNP Program Admission Criteria**

1. Completion of a Bachelor of Science in Nursing (BSN) degree (for BSN to DNP), or completion of a nursing Master of Science (MS) degree (for post-master's DNP) from a nationally accredited (NLNAC or CCNE) program
2. Minimum cumulative undergraduate GPA of 3.0 for BSN-DNP application; for post-master’s DNP, preference is given to applicants with a 3.25 graduate GPA in the master’s program
3. Potential for leadership and application of scholarship in nursing
4. Potential to provide expert advanced clinical care or expert service in functional areas
5. New BSN graduates must obtain RN licensure prior to the first fall semester of enrollment
6. National certification in specialty area, where applicable (e.g., post-master’s Advanced Practice DNP)
7. A graduate-level statistics course (may be completed prior to admission or during first semester of enrollment)
8. A background check and drug screen are required during the admission process and may affect the student’s eligibility to enter the program

**English Language Requirements:** All applicants for study at the University of Kansas Medical Center (KUMC) whose native language is not English must demonstrate an established level of English language proficiency through either the TOEFL (Test of English as a Foreign Language) or the academic format of the IELTS (International English Language Testing System). The test must have been taken within two years of the first semester of enrollment.

See also Admissions (p. 2413) in the Graduate Studies section of the online catalog.

**Post-Baccalaureate DNP Degree Requirements**

The post-baccalaureate DNP curriculum is designed for registered nurses who have completed a Bachelor of Science in Nursing (BSN) degree. The program for these students is divided into two components. The first consists of courses focusing on initial preparation for advanced nursing practice in clinically-focused or leadership-focused roles. The second component includes courses for doctoral level preparation for advanced nursing practice in clinically-focused or leadership-focused roles.

**Advanced-Practice Major**

The advanced-practice nursing major prepares nurses for nurse practitioner or nurse-midwife roles.

**Leadership Major**

The leadership major prepares nurses for leadership roles in health informatics (73 credit hours), organizational leadership (74 credit hours), or public health nursing (75 credit hours).

**Curriculum**

The post-baccalaureate (BSN) DNP program requires the following:

- 30 credit hours of post-baccalaureate Common Core and DNP core courses, which includes 1 credit hour DNP Synthesis Workshop course
- A minimum of 6 credit hours of doctoral practice project
- 12-17 credit hours of Advanced-Practice or Leadership core
- 12-24 credit hours of specialization courses
- 2-8 credit hours of specialty area support and practicum courses
- Satisfactory completion of the DNP oral comprehensive exam
- Satisfactory completion of the University's research skills and responsible scholarship requirement

Total required DNP program credit hours vary from 73 to 79, depending on the specialization. Although curricular changes occur, examples of core courses include:

**Common Core (Post-BSN)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>NRSG 748</td>
<td>Theories for Practice and Research</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 754</td>
<td>Health Care Research</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 755</td>
<td>Professionalism in Advanced Nursing Practice</td>
<td>3</td>
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</tbody>
</table>

**DNP Core (Post-BSN and Post-Masters)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>PRVM 826</td>
<td>Epidemiology for Advanced Nursing Practice (or NRSG equivalent)</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 804</td>
<td>Interpreting Research for Applied Science</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 808</td>
<td>The Social Context for Health Care Policy</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 911</td>
<td>Tools for Practice Doctorate Scholarship</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 935</td>
<td>Professionalism and Scholarship Workshop</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 941</td>
<td>Preparing for Doctoral Leadership</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 948</td>
<td>Methods for Assessing Organizational and Clinical Practice Outcomes</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 954</td>
<td>DNP Synthesis Workshop</td>
<td>1</td>
</tr>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2</td>
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**Advanced Practice Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NRSG 801</td>
<td>Advanced Health Assessment and Clinical Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>Code</td>
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<tr>
<td>NRSG 809</td>
<td>Health Promotion and Complementary Therapeutics</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 812</td>
<td>Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 813</td>
<td>Advanced Pharmacology</td>
<td>3</td>
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</tbody>
</table>

**Leadership Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 808</td>
<td>The Social Context for Health Care Policy</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 820</td>
<td>Program, Project, and Communication Planning</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 826</td>
<td>Global Perspective and Diversity in Healthcare</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 880</td>
<td>Organizational Foundations for Leading Change</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 885</td>
<td>Evaluation and Analysis for Healthcare Effectiveness</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 919</td>
<td>Foundations for Leading and Communicating in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 920</td>
<td>Microsystems in Health Care Operations</td>
<td>3</td>
</tr>
</tbody>
</table>

**Adult/Gerontology Acute Care Nurse Practitioner Specialty Core (not admitting to this specialty during the 2022-2023 cycle)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 971</td>
<td>Special Considerations for the Acute Care Nurse Practitioner</td>
<td>1</td>
</tr>
<tr>
<td>NRSG 972</td>
<td>Advanced Pharmacology for the Acute Care Setting</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 973</td>
<td>Acute Care I: Adult-Gero NP</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 974</td>
<td>Acute Care II: Adult-Gero NP</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 975</td>
<td>Acute Care Practicum I: Adult-Gero NP</td>
<td>4</td>
</tr>
<tr>
<td>NRSG 976</td>
<td>Acute Care Practicum II: Adult-Gero NP</td>
<td>2-4</td>
</tr>
<tr>
<td>NRSG 977</td>
<td>Acute Care Practicum III: Adult-Gero NP</td>
<td>2-4</td>
</tr>
</tbody>
</table>

**Adult/Gerontology Primary Care Nurse Practitioner Specialty Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 901</td>
<td>Primary Care I: Adult-Gerontology Health</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 902</td>
<td>Primary Care II: Adult-Gerontology Health</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 903</td>
<td>Primary Care Practicum I: Adult/Gerontology - Nurse Practitioner</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 904</td>
<td>Primary Care Practicum II: Adult/Gerontology - Nurse Practitioner</td>
<td>4</td>
</tr>
<tr>
<td>NRSG 905</td>
<td>Primary Care Practicum III: Adult/Gerontology - Nurse Practitioner</td>
<td>4</td>
</tr>
</tbody>
</table>

**Family Nurse Practitioner Specialty Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NRSG 914</td>
<td>Primary Care I: Family Health</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 915</td>
<td>Primary Care II: Family Health</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 916</td>
<td>Primary Care Practicum I: Family Nurse Practitioner</td>
<td>2-4</td>
</tr>
<tr>
<td>NRSG 917</td>
<td>Primary Care Practicum II: Family Nurse Practitioner</td>
<td>4</td>
</tr>
<tr>
<td>NRSG 918</td>
<td>Primary Care Practicum III: Family Nurse Practitioner</td>
<td>2-4</td>
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**Nurse-Midwife Specialty Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NRSG 925</td>
<td>Care of Women in The Antepartal Period Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 926</td>
<td>Primary Care of Women Across the Lifespan Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 927</td>
<td>Childbearing Family Practicum: Intrapartum, Postpartum, and Newborn</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 928</td>
<td>Nurse-Midwifery Integration Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 929</td>
<td>Psychotherapeutic Interventions I: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 930</td>
<td>Psychotherapeutic Interventions II: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 931</td>
<td>Psychotherapeutics Practicum I: Psychiatric Mental Health Nurse Practitioner</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 932</td>
<td>Psychotherapeutics Practicum II: Psychiatric Mental Health Nurse Practitioner</td>
<td>4</td>
</tr>
<tr>
<td>NRSG 933</td>
<td>Psychotherapeutics Practicum III: Psychiatric Mental Health Nurse Practitioner</td>
<td>3-4</td>
</tr>
</tbody>
</table>

**Psychiatric/Mental Health Nurse Practitioner Specialty Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 844</td>
<td>Advanced Psychiatric Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 850</td>
<td>Mental Health Assessment of Infants, Children and Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 851</td>
<td>Psychopharmacology for Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 929</td>
<td>Psychotherapeutic Interventions I: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 930</td>
<td>Psychotherapeutic Interventions II: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 931</td>
<td>Psychotherapeutics Practicum I: Psychiatric Mental Health Nurse Practitioner</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 932</td>
<td>Psychotherapeutics Practicum II: Psychiatric Mental Health Nurse Practitioner</td>
<td>4</td>
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</tbody>
</table>

**Health Informatics Specialty Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 852</td>
<td>Health Data Theory and Practice</td>
<td>3-4</td>
</tr>
<tr>
<td>IPHI 853</td>
<td>Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 854</td>
<td>Knowledge Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 856</td>
<td>Health Informatics Practicum</td>
<td>1-3</td>
</tr>
<tr>
<td>IPHI 957</td>
<td>Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 958</td>
<td>Knowledge Representation and Interoperability</td>
<td>3</td>
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**Organizational Leadership Specialty Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>HP&amp;M 822</td>
<td>Health Care Economics</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 881</td>
<td>Applied Budgeting and Finance</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 882</td>
<td>Introduction to Operations</td>
<td>3</td>
</tr>
</tbody>
</table>
Post-Master's DNP Degree Requirements

The post-master's DNP curriculum is designed for nurses who have already earned a nursing Master of Science degree. The DNP degree allows nurses to serve at a higher level as an advanced practice nurse or leader in their specialty. Two majors are offered in the post-master's DNP program: 1) Advanced-Practice and 2) Leadership. A minimum of 32 credit hours is required for the post-master's DNP. Depending on curricular background, some specialty specific courses are required. For example, IPHI 957 and IPHI 958 are required for students with a specialty background in informatics.

- 19 credit hours of post-master's DNP core courses. Although curricular changes may occur, examples of core courses include:

  • Advanced-Practice

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>NRSG 804</td>
<td>Interpreting Research for Applied Science</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 808</td>
<td>The Social Context for Health Care Policy</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 911</td>
<td>Tools for Practice Doctorate Scholarship</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 935</td>
<td>Professionalism and Scholarship Workshop</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 941</td>
<td>Preparing for Doctoral Leadership</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 948</td>
<td>Methods for Assessing Organizational and Clinical Practice Outcomes</td>
<td>2</td>
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</tbody>
</table>

  • Leadership

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 804</td>
<td>Interpreting Research for Applied Science</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 808</td>
<td>The Social Context for Health Care Policy</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 911</td>
<td>Tools for Practice Doctorate Scholarship</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 919</td>
<td>Foundations for Leading and Communicating in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 920</td>
<td>Microsystems in Health Care Operations</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 935</td>
<td>Professionalism and Scholarship Workshop</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 941</td>
<td>Preparing for Doctoral Leadership</td>
<td>3</td>
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</table>

For further information, visit the Doctor of Nursing Practice section of the School of Nursing's website (https://www.kumc.edu/school-of-nursing/academics/degree-programs/doctor-of-nursing-practice.html).

TECHNICAL STANDARDS FOR ADMISSION

University of Kansas School of Nursing

I. Introduction

All individuals admitted to the University of Kansas School of Nursing will be asked to verify that they can meet the following Technical Standards, with or without accommodation(s). In courses or programs without clinical components, or involving no direct client care, the Technical Standards may be modified by the Student Admission and Progression Committee (SAPC). After acceptance, but before admission to the School of Nursing, students in all programs must be able to document current certification/evidence of completion of a course in cardiopulmonary resuscitation for healthcare providers. This requires being able to successfully complete both the written and practical test for certification. In addition, with or without accommodation, the following abilities and expectations must be met by all students, undergraduate and graduate, admitted to the School of Nursing.

II. Standards

A. Observation/Sensory-motor: Applicants must be able to observe demonstrations and learn from experiences in the basic sciences, including but not limited to, physiology and pharmacology, microbiology and pathophysiology laboratory situations. Applicants must be able to observe and learn from experiences in the clinical nursing laboratory such as the following examples: accurately read gradients/calibrations on a syringe; measure medications accurately; accurately recognize color changes on chemical reaction strips; assess heart, breath, abdominal sounds; assess normal and abnormal color changes in the skin; observe pupil changes; and observe digital or waveform readings.

B. Communication: Communications include not only speech but also writing, reading, and computer usage, including handheld digital access. Applicants must be able to communicate accurately and effectively with patients, caregivers, physicians, other health professionals, clinical facility staff, faculty and staff, peers, and the community in general in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications.

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E. Behavioral and Social Attributes: Applicants must possess the emotional health required to utilize their intellectual abilities fully, exercise good judgment, complete all responsibilities attendant to the nursing diagnosis and care of patients promptly, and the development of mature, sensitive and effective relationships with patients and their families. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal communication skills, interest and motivation are all personal qualities that should be assessed during the admissions and education process. As a component of nursing education, a student must demonstrate ethical behavior including adherence to the professional nursing and student honor codes. The honor code at the KU School of Nursing is the Professional Integrity System (PROFITS). KU PROFITS is a peer-oriented integrity system to promote an environment where academic honesty is valued and expected.

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Applicants who disclose a disability are considered for admission if they are otherwise qualified so long as such accommodation does not significantly alter the essential requirements of the curriculum and the educational program, or significantly affect the safety of patient care or others. When applicants or students disclose a disability, the provision of reasonable accommodations will be considered in an attempt to assist these individuals in meeting these required technical standards. Applicants whose response indicates that they cannot meet one or more of the expectations will be reviewed further by the University’s Office for Academic Accommodations, with applicant and faculty input, to determine if any reasonable accommodations are possible to facilitate successful completion of the nursing curriculum and preparation for the national registry examination.

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Nursing and Interprofessional Certificate Programs

The School of Nursing offers several post-graduate Nursing Certificate programs in Advanced Practice. In addition, two post-baccalaureate Interprofessional certificates are offered: Health Informatics and Health Professions Educator. Select the program link below for detailed information on admission and certificate requirements for each certificate option.

Advanced Practice Post-Graduate Certificate Programs

The advanced practice clinical certificates programs require that applicants have completed an advanced practice registered nurse (APRN) educational program from a nationally accredited school of nursing. Applicants must also have completed the following advanced practice prerequisite courses (either as part of their previous graduate degree or as post-graduate study through an accredited university): advanced health assessment, advanced pathophysiology, advanced pharmacology, and health promotion.

The Adult/Gerontology Acute Care Nurse Practitioner (AGACNP) Certificate (19 credit hours) is designed to provide APRNs who have a baseline preparation in primary care with an opportunity for additional training in acute care, as part of an interprofessional healthcare team. The curriculum includes core concepts of the advanced practice nursing role in acute care settings, expanded models of acute care, care transitions, and age-related considerations of the adult/gerontology patient in acute care. The role of the AGACNP may include episodic management of a patient in a clinical specialty unit, following a caseload of patients during a hospitalization, or caring for patients across the acute care continuum.

Required didactic courses are offered online. Practicum courses NRSG 975, NRSG 976, and NRSG 977 use on-campus, face-to-face clinical learning experiences, with clinical placement opportunities in diverse acute care environments, which may include the University of Kansas Health System. Simulation spaces on the KU Medical Center campus are used for skills training. Application deadline is April 1 for Summer semester. The AGACNP Certificate is not offered for the 2022-2023 admission cycle.

The Adult/Gerontology Primary Care Nurse Practitioner (AGPCNP) Certificate (16 credit hours) focuses on the knowledge and skills required to educate advanced practice nurses to provide primary health care to a diverse population of adults. The Adult/Gerontology Primary Care Nurse Practitioner focuses on assessment and management of common acute and chronic health care problems of adult and older adult patients in a primary care setting. A variety of practice settings are used: primary care or internal medicine clinics; occupational health clinics; home based care; long-term, assisted living or post-acute care; rural health clinics; and other sites serving adults and older adults.

Required didactic courses are offered online. Practicum courses NRSG 903, NRSG 904, and NRSG 905 require visits to the KU Medical Center campus several times during each semester for Clinical Intensive workshops and Standardized Patient exams. Application deadline is June 1 for Fall semester.
The Family Nurse Practitioner (FNP) Certificate (16 credit hours) focuses on the knowledge and skills required to educate advanced practice nurses to provide primary health care to clients and families across the lifespan. Family Nurse Practitioners provide comprehensive health promotion services to ambulatory clients; evaluate presenting problems at the client’s initial contact with the primary care system; and continuing care to clients with acute and stable chronic illnesses.

Required didactic courses are offered online. Practicum courses NRSG 916, NRSG 917 and NRSG 918 require visits to the KU Medical Center campus several times during each semester for Clinical Intensive workshops and Standardized Patient exams. Application deadline is June 1 for Fall semester.

The Psychiatric/Mental Health Nurse Practitioner (PMHNP) Certificate (24 credit hours) prepares advanced practice nurses to diagnose and treat common mental health conditions in general medical settings and to deliver effective psychiatric care in mental health settings. Students are prepared to apply knowledge and skills in interpersonal, psychotherapeutic, and psychopharmacologic interventions for individuals, groups, and families with psychiatric disorders. All courses are online and offered in sequence every other year. Spring 2023 starts the next available course sequence. Application deadline is November 1 for Spring semester.

The Nurse-Midwife Certificate (23 credit hours) prepares advanced practice nurses to focus on the care and management of well women’s primary and reproductive health care needs throughout the life span. The program content is family-centered, respectful of individual and cultural variations, and promotes health through individual choice and participation. Courses are offered online and on the KU Medical Center campus. The next available sequence begins Fall 2022. The application deadline is June 1, 2022.

Required didactic courses are offered online. Practicum courses NRSG 925, NRSG 926, NRSG 927, and NRSG 928 require visits to the KU Medical Center campus several times during each semester for Clinical Intensive workshops, simulation experiences, and Standardized Patient exams. The next available sequence begins Fall 2022. The application deadline is June 1, 2022.

Interprofessional Certificate Programs

The Health Informatics Certificate (17 credit hours) is an interprofessional program designed to prepare clinicians and health care professionals with skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions. The graduate will be prepared for entry and mid-level positions within informatics departments, and as consultants and/or staff in organizations specializing in electronic health systems and knowledge management. A baccalaureate degree in any area is required and previous health care experience is preferred, but not required. All classes are offered online.

The Health Professions Educator Certificate (12 credit hours) is an interprofessional program that affords broad opportunities and necessary skills to develop healthcare education expertise in various roles within academic and clinical settings. Students complete applied teaching projects in each educator course, including a final student teaching capstone. Students may complete the Health Professions Educator Certificate as a post-baccalaureate student with a health-related degree, as a post-graduate certificate, or concurrently with a graduate program in nursing or other health-related discipline. All required didactic courses are online. Practicum courses typically require in-person attendance at the practicum sites.

Adult/Gerontology Acute Care Nurse Practitioner Certificate

The Adult/Gerontology Acute Care Nurse Practitioner (AGACNP) Certificate (19 credit hours) is designed to provide APRNs who have a baseline preparation in primary care with an opportunity for additional training in acute care, as part of an interprofessional healthcare team. The curriculum includes core concepts of the advanced practice nursing role in acute care settings, expanded models of acute care, care transitions, and age-related considerations of the adult-gerontology patient in acute care. The role of the AGACNP may include episodic management of a patient in a clinical specialty unit, following a caseload of patients during a hospitalization, or caring for patients across the acute care continuum.

Required didactic courses are offered online. Practicum courses NRSG 975, NRSG 976, and NRSG 977 use on-campus, face-to-face clinical learning experiences, with clinical placement opportunities within the University of Kansas Health System. Simulation spaces on the KU Medical Center campus are used for skills training. Application deadline is April 1 for Summer semester. The AGACNP Certificate is not offered for the 2022-2023 admission cycle.

Application for the Adult/Gerontology Acute Care Nurse Practitioner Graduate Certificate is an online process. This program is one of several certificate programs offered in the Advanced Practice (AP) area by the School of Nursing. Detailed instructions on how to apply are posted on the School of Nursing website (http://nursing.kumc.edu/academics/certificate-programs/how-to-apply.html). The courses are offered in sequence beginning with the Summer semester. Application deadline: April 1 for Summer semester.

Admission requirements:

- Completion of an advanced practice registered nurse (APRN) graduate educational program from a nationally accredited (NLNAC or CCNE) school of nursing
- Official transcripts from all course work taken at any institution are required
- Current registered nurse licensure in at least one state in the United States
- Minimum cumulative grade point average (GPA) of 3.0 on a 4.0 scale
- Potential to provide expert service and leadership in functional area
- Satisfactory criminal background check (completed once an offer of admission has been extended to applicant)

English Language Requirements: All applicants for study at the University of Kansas Medical Center (KUMC) whose native language is not English must demonstrate an established level of English language proficiency through either the TOEFL (Test of English as a Foreign Language) or the academic format of the EILTS (International English Language Testing System). The test must have been taken within two years of the first semester of enrollment.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.
See also Admissions (p. 2413) in the Graduate Studies section of the online catalog.

The Adult/Gerontology Acute Care Nurse Practitioner Certificate requires completion of at least 19 credit hours of required coursework, earning at least a 3.0 (i.e., B equivalent) on a 4.0 GPA scale.

Certificate requirements:

- Certificate requirements are normally completed within two years of admission to the program although a maximum of four years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all graduate certificate coursework.
- Enrollment in a minimum of one credit hour the semester program is completed.
- Graduate certificates may not be granted retroactively.
- Successful completion of the following courses:

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<td>Advanced Pharmacology for the Acute Care Setting</td>
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<td>Acute Care II: Adult-Gero NP</td>
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<td>NRSG 976</td>
<td>Acute Care Practicum II: Adult-Gero NP</td>
<td>2-4</td>
</tr>
<tr>
<td>NRSG 977</td>
<td>Acute Care Practicum III: Adult-Gero NP</td>
<td>2-4</td>
</tr>
</tbody>
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TECHNICAL STANDARDS FOR ADMISSION

University of Kansas School of Nursing

I. Introduction

All individuals admitted to the University of Kansas School of Nursing will be asked to verify that they can meet the following Technical Standards, with or without accommodation(s). In courses or programs without clinical components, or involving no direct client care, the Technical Standards may be modified by the Student Admission and Progression Committee (SAPC). After acceptance, but before admission to the School of Nursing, students in all programs must be able to document current certification/evidence of completion of a course in cardiopulmonary resuscitation for healthcare providers. This requires being able to successfully complete both the written and practical test for certification. In addition, with or without accommodation, the following abilities and expectations must be met by all students, undergraduate and graduate, admitted to the School of Nursing.

II. Standards

A. Observation/Sensory-motor: Applicants must be able to observe demonstrations and learn from experiences in the basic sciences, including but not limited to, physiology and pharmacology, microbiology, and pathophysiology laboratory situations. Applicants must be able to observe and learn from experiences in the clinical nursing laboratory such as the following examples: accurately read gradients/calibrations on a syringe; measure medications accurately; accurately recognize color changes on chemical reaction strips; assess heart, breath, abdominal sounds; assess normal and abnormal color changes in the skin; observe pupil changes; and observe digital or waveform readings.

B. Communication: Communications include not only speech but also reading, writing, and computer usage, including handheld digital access.

C. Psychomotor: Applicants should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers. Applicants should be physically able to collect specimens and perform basic tests (such as glucose finger stick, urine dipstick). Applicants should be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of nurses are cardiopulmonary resuscitation, administration of intravenous medication, application of pressure to stop bleeding, and assist in moving and lifting patients using proper body mechanics. Such actions require coordination of both gross and fine muscular movements, equilibrium and using tactile and visual senses.

D. Intellectual-Conceptual, Integrative, and Quantitative: Applicants must be able to comprehend and interpret documents written in English. Applicants should have cognitive abilities including measurements, calculation, reasoning, analysis, and synthesis. Critical thinking is the ability to synthesize knowledge and integrate the relevant aspects of a client’s history, physical exam findings and diagnostic studies. Problem solving, the critical skill demanded of nurses, requires all of these intellectual abilities. In addition, the applicant should be able to comprehend three dimensional relationships and to understand the spatial relationships of structures in order to understand normal and abnormal anatomy and physiology.

E. Behavioral and Social Attributes: Applicants must possess the emotional health required to utilize their intellectual abilities fully, exercise good judgment, complete all responsibilities attendant to the nursing diagnosis and care of patients promptly, and the development of mature, sensitive and effective relationships with patients and their families. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal communication skills, interest and motivation are all personal qualities that should be assessed during the admissions and education process. As a component of nursing education, a student must demonstrate ethical behavior including adherence to the professional nursing and student honor codes. The honor code at the KU School of Nursing is the Professional Integrity System (PROFITS). KU PROFITS is a peer-oriented integrity system to promote an environment where academic honesty is valued and expected.

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**Adult/Gerontology Primary Care Nurse Practitioner Certificate**

The Adult/Gerontology Primary Care Nurse Practitioner (AGPCNP) Certificate develops the knowledge and skills required for advanced practice nurses to provide primary health care to a culturally diverse population of adults. The Adult/Gerontology Primary Care nurse practitioner focuses upon assessment and management of common acute and chronic health care problems of adult and older adult patients in the primary care setting. A variety of practice settings are utilized: primary care or internal medicine clinics; occupational health clinics; home based care; long-term, assisted living or post-acute care; rural health clinics; and other adult and geriatric sites.

Required didactic courses are offered online. Practicum courses NRSG 903, NRSG 904, and NRSG 905 require visits to the KU Medical Center campus several times during each semester for Clinical Intensive workshops and Standardized Patient exams.

The Adult/Gerontology Primary Care Nurse Practitioner Certificate program requires that students have completed an advanced practice registered nurse (APRN) graduate educational program from a nationally accredited school of nursing. Three separate, comprehensive graduate-level courses in advanced pathophysiology, advanced assessment, and advanced pharmacology are required.

The annual application deadline is June 1 for the Fall semester.

**Admission requirements:**

- Completion of an advanced practice registered nurse (APRN) graduate educational program from a nationally accredited (NLNAC or CCNE) school of nursing
- Official transcripts from all course work taken at any institution are required
- Current registered nurse licensure in at least one state in the United States
- Minimum cumulative grade point average (GPA) of 3.0 on a 4.0 scale
- Potential to provide expert service and leadership in functional area
- Satisfactory criminal background check (completed once an offer of admission has been extended to applicant)

**English Language Requirements:** All applicants for study at the University of Kansas Medical Center (KUMC) whose native language is not English must demonstrate an established level of English language proficiency through either the TOEFL (Test of English as a Foreign Language) or the academic format of the EILTS (International English Language Testing System). The test must have been taken within two years of the first semester of enrollment.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

See also Admissions (p. 2413) in the Graduate Studies section of the online catalog.

**Certificate requirements:**

- Certificate requirements are normally completed within two years of admission to the program although a maximum of four years is allowed
- Cumulative grade-point average (GPA) of at least a 3.0 for all graduate certificate coursework
- Enrollment in a minimum of one credit hour the semester program is completed
- Graduate certificates may not be granted retroactively
- Successful completion of the following courses:

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<td>Primary Care II: Adult-Gerontology Health</td>
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<td>NRSG 904</td>
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<tr>
<td>NRSG 905</td>
<td>Primary Care Practicum III: Adult/Gerontology - Nurse Practitioner</td>
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</tbody>
</table>

**Total Hours** 16

**TECHNICAL STANDARDS FOR ADMISSION**

University of Kansas School of Nursing

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II. **Standards**

A. Observation/Sensory-motor: Applicants must be able to observe demonstrations and learn from experiences in the basic sciences, including but not limited to, physiology and pharmacology, microbiology and pathophysiology laboratory situations. Applicants must be able to observe and learn from experiences in the clinical nursing laboratory such as the following examples: accurately read gradients/calibrations on a syringe; measure medications accurately; accurately recognize color changes on chemical reaction strips; assess heart, breath, abdominal
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B. Communication: Communications include not only speech but also reading, writing, and computer usage, including handheld digital access. Applicants must be able to communicate accurately and effectively with patients, caregivers, physicians, other health professionals, clinical facility staff, faculty and staff, peers, and the community in general in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications.

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D. Intellectual-Conceptual, Integrative, and Quantitative: Applicants must be able to comprehend and interpret documents written in English. Applicants should have cognitive abilities including measurements, calculation, reasoning, analysis, and synthesis. Critical thinking is the ability to synthesize knowledge and integrate the relevant aspects of a client’s history, physical exam findings and diagnostic studies. Problem solving, the critical skill demanded of nurses, requires all of these intellectual abilities. In addition, the applicant should be able to comprehend three dimensional relationships and to understand the spatial relationships of structures in order to understand normal and abnormal anatomy and physiology.

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Family Nurse practitioner Certificate

The program prepares advanced practice nurses to add expertise in the role of Family Nurse Practitioner (FNP), a clinician who provides primary care in collaboration with other professionals to support health care for individuals, families, and communities. Students acquire knowledge, skills, and competencies for FNP practice, to manage primary health care needs of clients and families throughout the life span. The certificate courses include primary care theory courses, practice-focused clinical courses, and an intensive preceptorship experience. Courses are offered online and on the KU Medical Center campus, with precepted experiences in various community-based settings.

Required didactic courses are offered online. Practicum courses NRSG 916, NRSG 917, and NRSG 918 require visits to the KU Medical Center campus several times during each semester for Clinical Intensive workshops and Standardized Patient exams.

The Family Nurse Practitioner Certificate program requires that students have completed an advanced practice registered nurse (APRN) graduate educational program from a nationally accredited school of nursing. Three separate, comprehensive graduate-level courses in advanced pathophysiology, advanced assessment, and advanced pharmacology are required.

The annual application deadline is June 1 for the Fall semester.

Admission requirements:

- Completion of an advanced practice registered nurse (APRN) graduate educational program from a nationally accredited (NLNAC or CCNE) school of nursing
- Official transcripts from all course work taken at any institution are required
- Current registered nurse licensure in at least one state in the United States
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Certificate requirements:
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<td>NRSG 915</td>
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<td>NRSG 917</td>
<td>Primary Care Practicum II: Family Nurse Practitioner</td>
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<td>NRSG 918</td>
<td>Primary Care Practicum III: Family Nurse Practitioner</td>
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TECHNICAL STANDARDS FOR ADMISSION
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educational program, or significantly affect the safety of patient care or others. When applicants or students disclose a disability, the provision of reasonable accommodations will be considered in an attempt to assist these individuals in meeting these required technical standards. Applicants whose response indicates that they cannot meet one or more of the expectations will be reviewed further by the University's Office for Academic Accommodations, with applicant and faculty input, to determine if any reasonable accommodations are possible to facilitate successful completion of the nursing curriculum and preparation for the national registry examination.

It is important to give persons interested in enrolling in nursing a realistic view of the vigorous demands of the School of Nursing's theoretical and practicum curriculum while at the same time investigating reasonable accommodations. Whether or not a requested accommodation is reasonable will be determined on a case by case basis. Interested individuals may schedule an orientation visit to the nursing skills laboratory and actual sites of the University of Kansas Hospital and/or University of Kansas Medical Center. These orientation visits enable persons to assess their interest and ability to function in the actual clinical areas and in learning and demonstrating manual skills.

Health Informatics Certificate

Emerging technologies are fundamentally changing the way we manage and apply knowledge. In addition, healthcare organizations must meet the challenges of the HITECH Act and HIPAA, as well as regulatory influences. As a result, the need for trained healthcare informaticians has increased dramatically over the last few years. In order to appropriately select and use technology to improve healthcare and to meet the requirements of regulating bodies, health informatics professionals need training in the use of informatics concepts and methodologies.

The Health Informatics Certificate program meets this need by preparing students to:

1. Apply health informatics using theoretical, conceptual, and experiential knowledge base
2. Articulate a vision of health informatics in an organization in the context of interprofessional practice and complex healthcare delivery systems
3. Implement and evaluate information systems that support multi-professional clinical/administrative practice
4. Facilitate the delivery of evidence-based practice at point of care
5. Sit for national Nursing, medicine or graduate level certification exams, such as nursing or MD, as appropriate

The advantage of this certificate program is that it offers an interprofessional learning experience and is open to graduates in all fields. This is an interprofessional program administered by the Center for Health Informatics (http://www.kumc.edu/health-informatics.html), which is sponsored by the School of Nursing.

Approved as a Stackable Program: To encourage career and academic progression, students who have completed the Health Informatics Certificate may apply the courses towards the degree requirements for the Master of Science in Health Informatics.

The application process for the Health Informatics Certificate program is an online process. Detailed instructions on how to apply are posted on the Center for Health Informatics (https://www.kumc.edu/health-informatics.html) website. Students are admitted for the fall and spring semesters only. Applications for the fall semester must be received by April 1st and by September 1st for the spring semester.

Admission Requirements:

- A bachelor's or master's degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended are required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.
- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale.
- Applicants, who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://catalog.ku.edu/graduate-studies/kumc/#EnglishProficiencyRequirement).
- A background check (https://catalog.ku.edu/graduate-studies/kumc/#BackgroundCheck) is required during the admission process; it may affect the student's eligibility to enter the program.
- Three letters of recommendation from individuals who can assess your academic and professional background and potential for success in a graduate-level certificate program.
- A personal statement regarding applicant's career objectives and purpose.
- A current resume or curriculum vitae.
- A satisfactory phone or in-person interview.

Applicants will be assessed on the above criteria and selected applicants will in the judgment of the admissions committee, demonstrate the academic achievement, maturity, integrity, and motivation necessary for successful advancement. In addition, the committee looks for applicants who will contribute academic, nonacademic, and socioeconomic diversity to the class. The committee is interested in evidence of capacity for mature and independent scholarship.

After an applicant has been admitted, the program may defer an applicant's admission for one year after which time the applicant must submit a new application. Admission requirements are subject to change. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

Certificate Program Information: (p. 2425)

Certificates are not granted retroactively. An individual who is not currently a degree-seeking graduate student at KU must apply and may be admitted directly to a certificate program.

The certificate program is not a means of entry into a graduate degree program. If students admitted to a certificate program are later admitted to a graduate degree program as degree-seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the department and within general guidelines, be approved by the Office of Graduate Studies to be counted toward the degree.

While the courses comprising a certificate may be used as evidence in support of a student's application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a
degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral.

Graduate credit from another institution may not be transferred to a certificate program.

The graduate certificate program focuses on the theory and application of informatics, computer technology, knowledge management, and evidence-based practice that supports healthcare informatics and clinical decision-making. The program culminates with a mentored practicum experience and project.

Health Informatics Certificate

Certificate requirements:

- Certificate requirements are normally completed within one (1) year of admission to the program although a maximum of 4 years is allowed.
- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate certificate coursework.
- Enrollment in a minimum of one (1) credit hour the semester the program is completed. Graduate certificates may not be granted retroactively.
- Successful completion of a minimum of 17-18 credit hours.
- Successful completion of the following courses:
  
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 852</td>
<td>Health Data Theory and Practice (3 credits required)</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 853</td>
<td>Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 854</td>
<td>Knowledge Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 856</td>
<td>Health Informatics Practicum (Can be taken over 1-3 consecutive semesters. Students who are taking the PharmD program concurrent with the HI Certificate, will substitute IPHI 858 for this course.)</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 858</td>
<td>Health Informatics Practicum: Pharmacy (Required for PharmD students who are completing the HI Certificate concurrent with their PharmD program. All other HI Certificate students will be required to take IPHI 856.)</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Hours 17-18

Graduate credit from another institution may not be transferred to a graduate certificate program.

Certificate requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

Healthcare Informatics Certificate

Effective Fall 2019, the Healthcare Informatics Certificate will no longer be accepting applications. Please apply to the Health Informatics Certificate program listed above.

Certificate requirements:

- Certificate requirements are normally completed within two to three years of admission to the program although a maximum of four years is allowed
- Cumulative grade-point average (GPA) of at least a 3.0 for all graduate certificate coursework
- Students must be enrolled in a minimum of 1 credit during their graduation semester. Certificates may not be granted retroactively
- Successful completion of the following online courses:
  
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 820</td>
<td>Program, Project, and Communication Planning</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 852</td>
<td>Health Data Theory and Practice (3 credits required)</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 853</td>
<td>Knowledge Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 856</td>
<td>Health Informatics Practicum</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Total Hours 17-20

Typical Plan of Study

The Health Informatics Certificate program consists of 19 credit hours. The 3-credit hour practicum (IPHI 856) requires a total of 200 clock hours and may be taken only after the majority of coursework is complete. This practicum may be taken over 1-3 consecutive semesters and must include the last semester in the program.

PharmD students who are concurrently completing the Health Informatics Certificate program will take 2 credit hours of IPH 858: Health Informatics Practicum for Pharmacy instead of IPHI 856.

Full-Time Students

<table>
<thead>
<tr>
<th>Year 1</th>
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<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>Hours</td>
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<tr>
<td>-------</td>
</tr>
<tr>
<td>IPHI 851</td>
</tr>
<tr>
<td>IPHI 853</td>
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<tr>
<td>6</td>
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</tbody>
</table>

Total Hours 17

Part-Time Students

<table>
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<tr>
<th>Year 1</th>
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<tbody>
<tr>
<td>Fall</td>
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<td>Hours</td>
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<tr>
<td>-------</td>
</tr>
<tr>
<td>IPHI 851</td>
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</table>

<table>
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<tr>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
</tr>
<tr>
<td>Hours</td>
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<tr>
<td>-------</td>
</tr>
<tr>
<td>IPHI 853</td>
</tr>
</tbody>
</table>
Health Professions Educator Certificate

The Health Professions Educator Graduate Certificate (12 credit hours) is an interprofessional program that affords broad opportunities and necessary skills to develop healthcare education expertise in various roles within academic and clinical settings. Students complete applied teaching projects in each educator course, including a final student teaching capstone.

Students may complete the Health Professions Educator Certificate as a post-baccalaureate student with a health-related degree, as a post-graduate certificate, or concurrently with a graduate program in nursing or other health-related discipline. All required didactic courses are online.

Approved as a Stackable Program: To encourage career and academic progression, students who have completed the Health Professions Educator Certificate may apply for the four certificate courses (NRSG 870, NRSG 871, NRSG 873, NRSG 874) towards degree requirements for the Master of Science in Nursing, Nursing Education specialty area.

Application for the Health Professions Educator Graduate Certificate is an online process. Detailed instructions on how to apply are posted on the School of Nursing website (http://nursing.kumc.edu/academics/certificate-programs/how-to-apply.html). Application deadlines: June 1 for Fall semester; April 1 for Summer semester; November 1 for Spring semester.

Admission requirements:

- Baccalaureate degree or higher in nursing or other health related discipline.
- Minimum cumulative undergraduate grade point average (GPA) of 3.0 on a 4.0 scale
- Potential to provide expert service and leadership in functional area
- Satisfactory criminal background check (completed once an offer of admission has been extended to applicant)

English Language Requirements: All applicants for study at the University of Kansas Medical Center (KUMC) whose native language is not English must demonstrate an established level of English language proficiency through either the TOEFL (Test of English as a Foreign Language) or the academic format of the EILTS (International English Language Testing System). The test must be taken within two years of the first semester of enrollment.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

See also Admissions (p. 2413) in the Graduate Studies section of the online catalog.

Certificate requirements:

- Certificate requirements are normally completed within one to two years of admission to the program although a maximum of four years is allowed
- Cumulative grade-point average (GPA) of at least a 3.0 for all graduate certificate coursework
- Enrollment in a minimum of one credit hour the semester program is completed

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
<tr>
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Total Hours 17
• Graduate certificates may not be granted retroactively
• Successful completion of the following online courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>NRSG 870</td>
<td>Designing a Student Learning Environment</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 871</td>
<td>Curriculum/Program Planning and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 873</td>
<td>Teaching with Technologies</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 874</td>
<td>Health Professions Educator Preceptorship</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

TECHNICAL STANDARDS FOR ADMISSION
University of Kansas School of Nursing

I. Introduction

All individuals admitted to the University of Kansas School of Nursing will be asked to verify that they can meet the following Technical Standards, with or without accommodation(s). In courses or programs without clinical components, or involving no direct client care, the Technical Standards may be modified by the Student Admission and Progression Committee (SAPC). After acceptance, but before admission to the School of Nursing, students in all programs must be able to document current certification/ evidence of completion of a course in cardiopulmonary resuscitation for healthcare providers. This requires being able to successfully complete both the written and practical test for certification. In addition, with or without accommodation, the following abilities and expectations must be met by all students, undergraduate and graduate, admitted to the School of Nursing.

II. Standards

A. Observation/Sensory-motor: Applicants must be able to observe demonstrations and learn from experiences in the basic sciences, including but not limited to, physiology and pharmacology, microbiology and pathophysiology laboratory situations. Applicants must be able to observe and learn from experiences in the clinical nursing laboratory such as the following examples: accurately read gradients/calibrations on a syringe; measure medications accurately; accurately recognize color changes on chemical reaction strips; assess heart, breath, abdominal sounds; assess normal and abnormal color changes in the skin; observe pupil changes; and observe digital or waveform readings.

B. Communication: Communications include not only speech but also reading, writing, and computer usage, including handheld digital access. Applicants must be able to communicate accurately and effectively with patients, caregivers, physicians, other health professionals, clinical facility staff, faculty and staff, peers, and the community in general in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications.

C. Psychomotor: Applicants should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers. Applicants should be physically able to collect specimens and perform basic tests (such as glucose finger stick, urine dipstick). Applicants should be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of nurses are cardiopulmonary resuscitation, administration of intravenous medication, application of pressure to stop bleeding, and assist in moving and lifting patients using proper body mechanics. Such actions require coordination of both gross and fine muscular movements, equilibrium and using tactile and visual senses.

D. Intellectual-Conceptual, Integrative, and Quantitative: Applicants must be able to comprehend and interpret documents written in English. Applicants should have cognitive abilities including measurements, calculation, reasoning, analysis, and synthesis. Critical thinking is the ability to synthesize knowledge and integrate the relevant aspects of a client’s history, physical exam findings and diagnostic studies. Problem solving, the critical skill demanded of nurses, requires all of these intellectual abilities. In addition, the applicant should be able to comprehend three dimensional relationships and to understand the spatial relationships of structures in order to understand normal and abnormal anatomy and physiology.

E. Behavioral and Social Attributes: Applicants must possess the emotional health required to utilize their intellectual abilities fully, exercise good judgment, complete all responsibilities attendant to the nursing diagnosis and care of patients promptly, and the development of mature, sensitive and effective relationships with patients and their families. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients.

Compassion, integrity, concern for others, interpersonal communication skills, interest and motivation are all personal qualities that should be assessed during the admissions and education process. As a component of nursing education, a student must demonstrate ethical behavior including adherence to the professional nursing and student honor codes. The honor code at the KU School of Nursing is the Professional Integrity System (PROFITS). KU PROFITS is a peer-oriented integrity system to promote an environment where academic honesty is valued and expected.

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Nurse-Midwifery Certificate

The Nurse-Midwifery Graduate Certificate program (23 credit hours) prepares advanced practice nurses to focus on the care and management of well women’s primary and reproductive health care needs throughout...
the life span. The program content is family-centered, respectful of individual and cultural variations, and promotes health through individual choice and participation. Courses are offered online and on the KU Medical Center campus.

The next available sequence begins Fall 2022. The application deadline is June 1, 2022.

The application for the Nurse-Midwifery Graduate Certificate is an online process. This program is one of several certificate programs offered in the Advanced Practice (AP) area by the School of Nursing. Detailed instructions on how to apply are posted on School of Nursing website (http://nursing.kumc.edu/academics/certificate-programs/how-to-apply.html). The courses are offered online in sequence beginning with the Fall semester. Application deadline: June 1 for Fall semester.

Admission requirements:

- Completion of an advanced practice registered nurse educational program from a nationally accredited (NLNAC or CCNE) school of nursing
- Current registered nurse licensure in at least one state in the United States
- Minimum cumulative undergraduate grade point average (GPA) of 3.0 on a 4.0 scale
- Official transcripts from all course work taken at any institution are required
- Potential to provide expert service and leadership in functional area
- Satisfactory criminal background check (completed once an offer of admission has been extended to applicant)

English Language Requirements: All applicants for study at the University of Kansas Medical Center (KUMC) whose native language is not English must demonstrate an established level of English language proficiency through either the TOEFL (Test of English as a Foreign Language) or the academic format of the EILTS (International English Language Testing System). The test must have been taken within two years of the first semester of enrollment.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

See also Admissions (p. 2413) in the Graduate Studies section of the online catalog.

Certificate requirements:

- Certificate requirements are normally completed within two to three years of admission to the program although a maximum of four years is allowed
- Cumulative grade-point average (GPA) of at least a 3.0 for all graduate certificate coursework
- Enrollment in a minimum of one credit hour the semester program is completed
- Graduate certificates may not be granted retroactively
- Successful completion of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 841</td>
<td>Reproductive Endocrinology</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 921</td>
<td>Nurse-Midwifery I: Sexual, Reproductive, and Gynecologic Health in Primary Care</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 922</td>
<td>Nurse-Midwifery II: Preconception and Prenatal Care</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 923</td>
<td>Nurse-Midwifery III: Postpartum and Newborn Care</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 924</td>
<td>Nurse-Midwifery IV: Intrapartum Care</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 925</td>
<td>Care of Women in The Antepartal Period Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 926</td>
<td>Primary Care of Women Across the Lifespan Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 927</td>
<td>Childbearing Family Practicum: Intrapartum, Postpartum, and Newborn</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 928</td>
<td>Nurse-Midwifery Integration Practicum</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Hours 23

TECHNICAL STANDARDS FOR ADMISSION

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and lifting patients using proper body mechanics. Such actions require coordination of both gross and fine muscular movements, equilibrium and using tactile and visual senses.

D. Intellectual-Conceptual, Integrative, and Quantitative: Applicants must be able to comprehend and interpret documents written in English. Applicants should have cognitive abilities including measurements, calculation, reasoning, analysis, and synthesis. Critical thinking is the ability to synthesize knowledge and integrate the relevant aspects of a client’s history, physical exam findings and diagnostic studies. Problem solving, the critical skill demanded of nurses, requires all of these intellectual abilities. In addition, the applicant should be able to comprehend three dimensional relationships and to understand the spatial relationships of structures in order to understand normal and abnormal anatomy and physiology.

E. Behavioral and Social Attributes: Applicants must possess the emotional health required to utilize their intellectual abilities fully, exercise good judgment, complete all responsibilities attendant to the nursing diagnosis and care of patients promptly, and the development of mature, sensitive and effective relationships with patients and their families. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal communication skills, interest and motivation are all personal qualities that should be assessed during the admissions and education process. As a component of nursing education, a student must demonstrate ethical behavior including adherence to the professional nursing and student honor codes. The honor code at the KU School of Nursing is the Professional Integrity System (PROFITS). KU PROFITS is a peer-oriented integrity system to promote an environment where academic honesty is valued and expected.

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Psychiatric/Mental Health Nurse Practitioner Certificate

The Psychiatric/Mental Health Nurse Practitioner Graduate Certificate program (24 credit hours) prepares advanced practice nurses to diagnose and treat common mental health conditions in general medical settings and to deliver effective psychiatric care in mental health settings. Students are prepared to apply knowledge and skills in interpersonal, psychotherapeutic, and psychopharmacologic interventions for individuals, groups, and families with psychiatric disorders. All courses are online and offered in sequence every other year. Spring 2023 starts the next available course sequence. Application deadline is November 1 for Spring semester.

Application for the Adult Psychiatric/Mental Health Nurse Practitioner Certificate is an online process. This program is one of several certificate programs offered in the Advanced Practice (AP) area by the School of Nursing. Detailed instructions on how to apply are posted on School of Nursing website (http://nursing.kumc.edu/academics/certificate-programs/how-to-apply.html).

Admission requirements:

- Completion of an advanced practice registered nurse (APRN) graduate educational program from a nationally accredited (NLNAC or CCNE) school of nursing
- Current registered nurse licensure in at least one state in the United States
- Official transcripts from all course work taken at any institution are required
- Minimum cumulative undergraduate grade point average (GPA) of 3.0 on a 4.0 scale
- Potential to provide expert service and leadership in functional area
- Satisfactory criminal background check (completed once an offer of admission has been extended to applicant)

English Language Requirements: All applicants for study at the University of Kansas Medical Center (KUMC) whose native language is not English must demonstrate an established level of English language proficiency through either the TOEFL (Test of English as a Foreign Language) or the academic format of the EILTS (International English Language Testing System). The test must have been taken within two years of the first semester of enrollment.

Applicants will be assessed based on these requirements. After an applicant has been admitted, a program may defer an applicant's admission for one year after which time the applicant must submit a new application.

See also Admissions (p. 2413) in the Graduate Studies section of the online catalog.

Certificate requirements:

- Certificate requirements are normally completed within two to three years of admission to the program although a maximum of four years is allowed
- Cumulative grade-point average (GPA) of at least a 3.0 for all graduate certificate coursework
- Enrollment in a minimum of one credit hour the semester program is completed
• Graduate certificates may not be granted retroactively
• Successful completion of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 844</td>
<td>Advanced Psychiatric Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 850</td>
<td>Mental Health Assessment of Infants, Children and Adolescents</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 851</td>
<td>Psychopharmacology for Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 929</td>
<td>Psychotherapeutic Interventions I: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 930</td>
<td>Psychotherapeutic Interventions II: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 931</td>
<td>Psychotherapeutics Practicum I: Psychiatric Mental Health Nurse Practitioner</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 932</td>
<td>Psychotherapeutics Practicum II: Psychiatric Mental Health Nurse Practitioner</td>
<td>4</td>
</tr>
<tr>
<td>NRSG 933</td>
<td>Psychotherapeutics Practicum III: Psychiatric Mental Health Nurse Practitioner</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 24

TECHNICAL STANDARDS FOR ADMISSION
University of Kansas School of Nursing

I. Introduction

All individuals admitted to the University of Kansas School of Nursing will be asked to verify that they can meet the following Technical Standards, with or without accommodation(s). In courses or programs without clinical components, or involving no direct client care, the Technical Standards may be modified by the Student Admission and Progression Committee (SAPC). After acceptance, but before admission to the School of Nursing, students in all programs must be able to document current certification/ evidence of completion of a course in cardiopulmonary resuscitation for healthcare providers. This requires being able to successfully complete both the written and practical test for certification. In addition, with or without accommodation, the following abilities and expectations must be met by all students, undergraduate and graduate, admitted to the School of Nursing.

II. Standards

A. Observation/Sensory-motor: Applicants must be able to observe demonstrations and learn from experiences in the basic sciences, including but not limited to, physiology and pharmacology, microbiology and pathophysiology laboratory situations. Applicants must be able to observe and learn from experiences in the clinical nursing laboratory such as the following examples: accurately read gradients/calibrations on a syringe; measure medications accurately; accurately recognize color changes on chemical reaction strips; assess heart, breath, abdominal sounds; assess normal and abnormal color changes in the skin; observe pupil changes; and observe digital or waveform readings.

B. Communication: Communications include not only speech but also reading, writing, and computer usage, including handheld digital access. Applicants must be able to communicate accurately and effectively with patients, caregivers, physicians, other health professionals, clinical facility staff, faculty and staff, peers, and the community in general in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications.

C. Psychomotor: Applicants should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion, and other diagnostic maneuvers. Applicants should be physically able to collect specimens and perform basic tests (such as glucose finger stick, urine dipstick). Applicants should be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of nurses are cardiopulmonary resuscitation, administration of intravenous medication, application of pressure to stop bleeding, and assist in moving and lifting patients using proper body mechanics. Such actions require coordination of both gross and fine muscular movements, equilibrium and using tactile and visual senses.

D. Intellectual-Conceptual, Integrative, and Quantitative: Applicants must be able to comprehend and interpret documents written in English. Applicants should have cognitive abilities including measurements, calculation, reasoning, analysis, and synthesis. Critical thinking is the ability to synthesize knowledge and integrate the relevant aspects of a client’s history, physical exam findings and diagnostic studies. Problem solving, the critical skill demanded of nurses, requires all of these intellectual abilities. In addition, the applicant should be able to comprehend three dimensional relationships and to understand the spatial relationships of structures in order to understand normal and abnormal anatomy and physiology.

E. Behavioral and Social Attributes: Applicants must possess the emotional health required to utilize their intellectual abilities fully, exercise good judgment, complete all responsibilities attendant to the nursing diagnosis and care of patients promptly, and the development of mature, sensitive and effective relationships with patients and their families. Applicants must be able to tolerate physically taxing workloads and to function effectively under stress. They must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, interpersonal communication skills, interest and motivation are all personal qualities that should be assessed during the admissions and education process. As a component of nursing education, a student must demonstrate ethical behavior including adherence to the professional nursing and student honor codes. The honor code at the KU School of Nursing is the Professional Integrity System (PROFITS). KU PROFITS is a peer-oriented integrity system to promote an environment where academic honesty is valued and expected.

III. Reasonable Accommodation

Applicants who disclose a disability are considered for admission if they are otherwise qualified so long as such accommodation does not significantly alter the essential requirements of the curriculum and the educational program, or significantly affect the safety of patient care or others. When applicants or students disclose a disability, the provision of reasonable accommodations will be considered in an attempt to assist these individuals in meeting these required technical standards. Applicants whose response indicates that they cannot meet one or more of the expectations will be reviewed further by the University’s Office for Academic Accommodations, with applicant and faculty input, to determine if any reasonable accommodations are possible to facilitate successful completion of the nursing curriculum and preparation for the national registry examination.

It is important to give persons interested in enrolling in nursing a realistic view of the vigorous demands of the School of Nursing’s theoretical and practicum curriculum while at the same time investigating reasonable
accommodations. Whether or not a requested accommodation is reasonable will be determined on a case by case basis. Interested individuals may schedule an orientation visit to the nursing skills laboratory and actual sites of the University of Kansas Hospital and/or University of Kansas Medical Center. These orientation visits enable persons to assess their interest and ability to function in the actual clinical areas and in learning and demonstrating manual skills.

Master of Science in Health Informatics

Professionals in applied Health Informatics have skills in analysis, design, implementation, and evaluation of information systems that support a full range of clinical and patient care functions. Graduates will be prepared for entry and mid-level positions with hospital or clinic informatics departments, electronic health record (EHR) vendors, public health organizations, and as consultants and/or staff in organizations that specialize in knowledge management. Graduates also have the skills to enter the growing field of health information exchange, which includes regional health information organizations and the emerging personal health records. In addition to a foundation in applied health informatics, special skills will be acquired in organizational change, project management and impact evaluation.

This is an interprofessional program administered by the Center for Health Informatics (http://www.kumc.edu/health-informatics.html), which is sponsored by the School of Nursing.

The application process is an online process. Detailed instructions on how to apply and the application deadlines are posted on the Master of Science in Health Informatics (https://www.kumc.edu/research/center-for-health-informatics/academics/master-of-science-in-health-informatics.html) website.

Admission requirements:

- A bachelor’s degree from a regionally accredited institution documented by submission of official transcript indicating the degree has been conferred before entering the program. Official transcripts from institutions attended post-baccalaureate are also required. Students with degrees from outside the U.S. may be subject to transcript evaluation indicating the degree is equivalent to a U.S. degree and meets the minimum cumulative GPA requirements.

- A cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale.

- Applicants who are not native speakers of English, whether domestic or international, must demonstrate they meet the Minimum English Proficiency Requirement (https://www.kumc.edu/academic-and-student-affairs/departments/office-of-international-programs/inbound-programs/information-for-students/academic-english-requirements.html).

- A current resume or curriculum vitae.

- A personal essay outlining the applicant's reasons for wanting to pursue graduate education in health informatics, career objectives, and any other information that would help the admissions committee get to know the applicant.

- Three letters of recommendation preferably from employers, instructors, or other persons who can assess the applicant's academic and professional potential. Letters are submitted per instructions provided for the online application process.

- A background check (https://www.kumc.edu/academic-and-student-affairs/student-resources/criminal-background-checks-for-students.html) is required during the admission process; it may affect the student’s eligibility to enter the program.

- A graduate level statistics course (may be completed prior to admission or during the first semester of enrollment.)

After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

International Students

Due to the number of required online courses for this degree, the Health Informatics Program at KUMC does not meet the U.S. student visa requirements at this time. Therefore, we are unable to accept individuals who are on student visas. If you received your university education outside of the U.S. or are in the U.S. on another type of visa, please contact HealthInformatics@kumc.edu for additional application requirements.

Admission requirements are subject to change. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

The Master’s in Health Informatics curriculum is divided into three cores: informatics, leadership, and research along with a discipline-specific emphasis track. The student and advisor will work closely together to develop a plan of study that meets the career goals of the student.

Degree requirements:

- Degree requirements can be completed within 2 years of admission to the program although a maximum of 7 years is allowed. Part-time students normally complete requirements within 4 years of admission to the program.

- Completion of a minimum of 40 credit hours.

- Cumulative grade-point average (GPA) of at least a 3.0 for all KU graduate coursework.

- Successful completion of a general examination (https://catalog.ku.edu/graduate-studies/kumc/#ThesisDefense) the semester the student will graduate.

- Enrollment in a minimum of one (1) credit hour the semester the student will graduate.

- Degree requirements and course descriptions are subject to change. Any courses taken as an equivalent must be approved by the Graduate Director and the Office of Graduate Studies. In most cases, use the catalog (http://catalog.ku.edu/archives/) of the year student entered the program.

- Successful completion of the Health Informatics Core (minimum 17 credit hours.) These courses provide the core knowledge and skills essential to the practice of health informatics.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 850</td>
<td>Introduction to Health Informatics</td>
<td>2</td>
</tr>
<tr>
<td>IPHI 851</td>
<td>Transforming Health Care through Use of Information Systems and Technology</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 852</td>
<td>Health Data Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>IPHI 853</td>
<td>Abstraction and Modeling of Healthcare Information</td>
<td>3</td>
</tr>
</tbody>
</table>
Successful completion of the **Leadership Core** (minimum 9 credit hours.)
This includes a minimum of one health policy course. Choose from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 820</td>
<td>Program, Project, and Communication Planning</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 808</td>
<td>The Social Context for Health Care Policy</td>
<td>2</td>
</tr>
<tr>
<td>NRSG 880</td>
<td>Organizational Foundations for Leading Change</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 885</td>
<td>Evaluation and Analysis for Healthcare Effectiveness</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 832</td>
<td>Governance and Health Law</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 833</td>
<td>Ethics</td>
<td>2</td>
</tr>
<tr>
<td>HP&amp;M 837</td>
<td>Health Policy</td>
<td>3</td>
</tr>
</tbody>
</table>

Successful completion of the **Research Core** (minimum 5 credit hours.)
This component includes a research project that involves applying aspects of the research process to the student's area of health informatics practice.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 754</td>
<td>Health Care Research</td>
<td>3</td>
</tr>
<tr>
<td>or HP&amp;M 819</td>
<td>Research for Health Care Leaders</td>
<td></td>
</tr>
<tr>
<td>IPHI 860</td>
<td>Health Informatics Scholarly Project</td>
<td>2</td>
</tr>
</tbody>
</table>

Successful completion of one **Discipline-Specific Emphasis Track** (minimum 9 credit hours.) The Discipline-Specific Track (Clinical, Health Policy and Management, Public Health, or Project Management) and the courses within the core are selected in consultation with the student's advisor based on the student's background and career goals.

- **Clinical Track** (select 9 credit hours.) Choose from:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 748</td>
<td>Theories for Practice and Research</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 755</td>
<td>Professionalism in Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 883</td>
<td>Complexity Science Approaches to Improve Organizational Effectiveness</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 891</td>
<td>Human Resources and Workforce Development</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Health Policy and Management Track** (select 9 credit hours). Choose from:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP&amp;M 810</td>
<td>The Health Care System</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 822</td>
<td>Health Care Economics</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 825</td>
<td>Financial Concepts in Healthcare Management</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 846</td>
<td>Health Information Technology Management</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 850</td>
<td>Introduction to Operations</td>
<td>3</td>
</tr>
<tr>
<td>HP&amp;M 854</td>
<td>Human Resources and Workforce Development</td>
<td>3</td>
</tr>
</tbody>
</table>

- **Public Health Track** (select 9 credit hours). Choose from:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRVM 800</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 809</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 815</td>
<td>Infectious Disease Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 818</td>
<td>Social and Behavioral Aspects of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PRVM 845</td>
<td>Health, Society, and Culture</td>
<td>3</td>
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</table>

- **Project Management Track** (select 9 credit hours).
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 816</td>
<td>Project Management Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 817</td>
<td>Project Management Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 818</td>
<td>Project Management Fundamentals III</td>
<td>3</td>
</tr>
</tbody>
</table>

**Typical Plan of Study for Part-Time Students**

**Year 1**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disciplinespecific course</td>
<td>3</td>
<td>IPHI 850</td>
<td>2</td>
<td>IPHI 854</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Leadership Core course</td>
<td>2</td>
<td>Disciplinespecific course</td>
<td>3</td>
<td>Leadership Core course</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>7</td>
<td>3</td>
<td></td>
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</table>

**Year 2**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Core course</td>
<td>3</td>
<td>IPHI 852</td>
<td>3</td>
<td>NRSG 754</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IPHI 851</td>
<td>3 Disciplinespecific Core course</td>
<td>3</td>
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</table>

**Year 3**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPHI 860</td>
<td>2</td>
<td>IPHI 856</td>
<td>2</td>
<td>IPHI 856</td>
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<td>IPHI 853</td>
<td>3</td>
<td>Leadership Core course</td>
<td>2</td>
<td>Oral Comprehensive Examination</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>1</td>
<td></td>
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</tbody>
</table>

**Total Hours 40**

**Dual Degree: Doctor of Pharmacy & Master of Science in Health Informatics**

The dual PharmD/MSI in health informatics (MSHI) degree program is designed particularly for those students intending to pursue opportunities in pharmacy informatics. The dual PharmD/MSHI students will concurrently enroll in both programs during years 2-4 of the PharmD program. During the last semester, the HI practicum will satisfy 1 of 9 required advanced pharmacy practice experiences (APPEs). A Health Informatics comprehensive oral examination occurs during the last semester of enrollment in the Dual Degree (P4 Year, Spring semester). Admission to this program is restricted to students currently in the PharmD program at KU.

**Degree Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 Year</td>
<td></td>
<td></td>
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<tr>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P&amp;TX 630</td>
<td>Pharmacology I</td>
<td>4</td>
</tr>
</tbody>
</table>
P2 Year
Spring
IPHI 850 Introduction to Health Informatics 2
PHCH 626 Biopharmaceutics and Drug Delivery 3
Summer
IPHI 854 Knowledge Management in Healthcare 3
P3 Year
Fall
IPHI 851 Transforming Health Care through Use of Information Systems and Technology 3
PHPR 624 Pharmacoepidemiology and Public Health 2
PHPR 629 Research Design and Biostatistics 2
PHPR 635 Problems in Pharmacy Practice (1 credit required) 1-5
Spring
NRSG 880 Organizational Foundations for Leading Change 3
IPHI 852 Health Data Theory and Practice (3 credits required) 3-4
PHPR 630 Drug Information and Literature Evaluation 1
PHPR 635 Problems in Pharmacy Practice (1 credit required) 1-5
P4 Year
Fall
IPHI 853 Abstraction and Modeling of Healthcare Information 3
IPHI 820 Program, Project, and Communication Planning 2
NRSG 808 The Social Context for Health Care Policy 2
Spring
IPHI 858 Health Informatics Practicum: Pharmacy (20 hours/ week for 8 weeks at pharmacy informatics (site(s)) 4
IPHI 957 Health Informatics, Human Factors, and Ergonomics as Applied to Patient Safety 3
NRSG 885 Evaluation and Analysis for Healthcare Effectiveness 2

TECHNICAL STANDARDS FOR ADMISSION

Center for Health Informatics

The Master of Science in Health Informatics degree and Graduate Certificate signify that the holder is prepared for entry into the practice of applied health informatics. Therefore, it follows that graduates must have the knowledge and skills necessary to function in a broad range of situations. The following abilities and expectations must be met by all students with or without accommodations admitted to the program.

1. Observation: Students must be able to observe: lectures, demonstrations, online written and recorded audio/visual material, online meetings, and research and practice situations. Observation necessitates the functional use of the senses of vision and hearing.

2. Communication: Applicants also must be able to communicate effectively and efficiently in English with other students, faculty, staff and mentors/preceptors. Communication includes not only speech, but also listening, reading, and writing. Effective communication includes the ability to comprehend conversation, presentations, assigned readings, and the ability to present information verbally and in writing.

3. Motor: A student must have sufficient motor function to attend classes, prepare assignments, use a computer keyboard, and make public presentations if required. Course requirements will also include field work in a variety of health organizations.

4. Intellectual, conceptual, integrative, quantitative, and problem-solving abilities: An applicant must be able to understand and learn factual information from readings and didactic presentations, gather information independently, analyze and synthesize learned material, and apply that information. In addition, an applicant must possess the ability to understand and work with measurements, carry out calculations and engage in reasoning, analysis and synthesis based on the calculations. An applicant must be able to draw on all these abilities to be an effective problem solver.

5. Behavioral and social attributes: Integrity, reliability, self-direction, motivation, and the ability to work with diverse groups are qualities necessary for effective preparation for and practice in this field. A student must have the emotional health required for the full use of his or her intellectual ability, exercise of sound judgment, and timely completion of all responsibilities attendant to the completion of academic responsibilities.

NOTE: Reasonable accommodations will be considered and may be made to qualified students who disclose a disability, so long as such accommodation does not significantly alter the essential requirements of the curriculum and the training program, or significantly affect the safety of patient care. Students who disclose that they have a disability are considered for the program if they are otherwise qualified. Qualified students with a disability who wish to request accommodations should provide the appropriate documentation of disability and submit a request for accommodation to the University’s Office for Academic Accommodations.
Pharmacy

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

Doctor of Pharmacy (p. 2290)
- Doctor of Pharmacy (p. 2308)
- PharmD Research Certificate Program (p. 2311)

Medicinal Chemistry (p. 2312)
- Master of Science in Medicinal Chemistry (p. 2314)
- Doctor of Philosophy in Medicinal Chemistry (p. 2314)

Neurosciences (p. 2315)
- Master of Science in Neurosciences (p. 2315)
- Doctor of Philosophy in Neurosciences (p. 2316)

Pharmaceutical Chemistry (p. 2318)
- Master of Science in Pharmaceutical Chemistry (p. 2322)
- Doctor of Philosophy in Pharmaceutical Chemistry (p. 2323)

Pharmacology and Toxicology (p. 2324)
- Master of Science in Pharmacology and Toxicology (p. 2328)
- Doctor of Philosophy in Pharmacology and Toxicology (p. 2329)

Pharmacy Practice (p. 2330)
- Master of Science in Pharmacy Practice (p. 2335)

The School of Pharmacy

Since its founding in 1885, the University of Kansas School of Pharmacy (http://pharmacy.ku.edu/) has been a leader in pharmacy education. Since 1996, the school has only offered the Doctor of Pharmacy degree as the entry-level practice degree. The curriculum gives the student the knowledge, skills, and ability required of the pharmacy practitioner; it is comprehensive and produces a highly competent general practitioner.

Approximately 65 full-time faculty members teach in the undergraduate professional Doctor of Pharmacy and graduate programs. Three departments (Pharmacology and Toxicology, Medicinal Chemistry, and Pharmaceutical Chemistry) offer Master of Science and Doctor of Philosophy degrees. The Department of Pharmacy Practice offers the master’s degree.

Both the undergraduate and graduate divisions have outstanding national and international reputations based on the excellence and productivity of the faculty. KU is consistently ranked in the top 5 among colleges/schools of pharmacy that receive National Institutes of Health research funding. KU’s School of Pharmacy was awarded more than $11 million in research grants and contracts from the NIH in fiscal year 2017.

The School of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education (https://www.acpe-accredit.org/), 190 S. LaSalle St, Suite 2850, Chicago, IL 60603-4810, (312) 664-3575, info@acpe-accredit.org, the official accrediting body for American schools of pharmacy.

Professional Program

The School of Pharmacy offers a 6-year Doctor of Pharmacy (p. 2308) program. The 2-year pre-pharmacy portion of the program may be taken at any accredited 2- or 4-year college.

After acceptance into the School of Pharmacy students complete the first 2 years of the Doctor of Pharmacy professional degree program (3rd and 4th year of college) are then awarded a Bachelor of Science in Pharmaceutical Studies (BSPS). Students must then go on to complete the remaining 5th and 6th professional years to be awarded the Doctor of Pharmacy (Pharm.D.) degree, which makes them eligible to sit for licensure examinations (NAPLEX and MPJE). These degree programs are available to students on both the Lawrence and Wichita campuses.

University Honors Program

The school encourages qualified students entering KU as freshman to participate in the University Honors Program (http://www.honors.ku.edu/).

Graduate Programs

The School of Pharmacy offers graduate programs through the departments of

- Medicinal Chemistry (p. 2312),
- Pharmaceutical Chemistry (p. 2318),
- Pharmacology and Toxicology (p. 2324), and
- Pharmacy Practice (p. 2330).

The Department of Pharmacy Practice offers the Master of Science degree. The other 3 departments offer both the M.S. and the Ph.D. with majors in their respective disciplines. Programs in Neurosciences (p. 2315) are offered in cooperation with KU Medical Center.

Requirements for admission and baccalaureate preparation vary with each department and are discussed separately. Address inquiries and correspondence about graduate studies to the program or department of interest.

Undergraduate Scholarships and Financial Aid

Financial Aid and Scholarships (https://financialaid.ku.edu), located at the KU Visitor Center at 1502 Iowa St, Lawrence, KS 66045-7518, 785-864-4700, financialaid@ku.edu, administers grants, loans, and other need-based financial aid. In recent years, about $29 million has been processed annually through the office, including about $2 million annually in short-term loans. Prospective students should contact Financial Aid and Scholarships. Some financial aid programs have application deadlines as early as January 15. The earlier an application is received and the student’s file is completed, the better the chance of obtaining financial aid.

For information about scholarships from KU and various outside agencies based on academic merit, diversity, major, and residence, visit Scholarship Information for KU Students (https://financialaid.ku.edu/understand-aid/scholarships/).

School of Pharmacy Financial Aid

The School of Pharmacy, in cooperation with Financial Aid and Scholarships (https://financialaid.ku.edu), offers financial assistance.
to pharmacy students. Applications are received in the dean’s office according to an announced schedule each year. Awards are based on merit and need. Assistance is available for both entering and continuing students.

**Graduate Fellowships and Assistantships**

For information about graduate assistantships, contact the School of Pharmacy (http://pharmacy.ku.edu/). Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU. Financial Aid and Scholarships (https://financialaid.ku.edu) administers grants, loans, and need-based financial aid.

**Undergraduate University Regulations**

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

**Academic Misconduct**

Instructors detecting academic misconduct must act in accordance with the School of Pharmacy (http://policy.ku.edu/pharmacy/academic-professional-scholarly-conduct/) and Faculty Senate Rules and Regulations (http://policy.ku.edu/governance/USRR/).

Students experiencing difficulties or problems with a particular course or having complaints or grievances about a particular instructor are urged to discuss the problem in a timely fashion with the instructor. If the student feels awkward or uncomfortable doing this, he or she should see the chair of the instructor’s department, or if necessary, an associate dean. The chair or dean brings the matter to the instructor’s attention, preserving the student’s anonymity, if so requested.

**Credit/No Credit**

A Credit/No Credit option is available to all degree-seeking undergraduates. You may enroll in one pre-pharmacy course a semester under the option, if the course is not in your major or minor. For more information, visit the KU Policy Library (http://www.policy.ku.edu/). All professional coursework is graded. **Warning:** Undesirable consequences regarding admission may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages.

**Exemptions and Petitions**

A student may gain an exemption or academic credit from introductory pre-pharmacy courses by successfully completing the Advanced Placement or College Level Examination Program examinations or by other recognized means. A total of 208 credit hours of college-level course work is still required for the PharmD degree. In meritorious cases, the department offering a specific course may waive course prerequisites. Students whose educational goals would be better served by courses other than those prescribed in the normal curriculum may petition the admissions and/or curriculum committee(s) for permission to make appropriate course substitutions.

**Graduation with Distinction and Highest Distinction**

Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction. Grade-point averages are determined on the basis of credit hours taken while enrolled in the School of Pharmacy. The list is compiled each spring and includes July, December, and May graduates.

**Health Insurance and Immunizations**

The School of Pharmacy requires students to provide proof of health insurance and professional insurance coverage and immunizations for MMR, hepatitis B, varicella, and tetanus, and a current TB skin test.

**Honor Roll**

Students with grade-point averages of 3.5 who have completed at least 12 professional hours are recognized on the honor roll or dean’s list in fall and spring. An Honor Roll notation appears on the transcript.

**Maximum Community College Credit Allowed**

The School of Pharmacy allows a maximum of 68 credit hours from any accredited college or university toward completion of the PharmD degree prerequisites. All professional coursework must be completed at a college or school of pharmacy that is accredited by ACPE. To graduate from KU School of Pharmacy, all P3 and P4 coursework and rotations (APPEs) must be completed at KU.

**Prerequisites and Corequisites**

In meritorious cases, course prerequisites may be waived by the department offering the course. Waiver is not granted if the prerequisite course was taken and failed.

**Probation**

**Probation**

A student will be placed on academic probation if they:

1. fail to attain a 2.5 grade point average of professional coursework in any semester, or whose overall professional course grade-point average falls below 2.5.
   a. A student falling below the minimum grade point average of 2.5 will be required to develop and submit an individualized remediation plan to their Academic Faculty Advisor and the Chair of the Academic Standings committee.
2. fail an introductory or advanced pharmacy practice experience.
   a. A student failing either an IPPE or APPE will be required to develop an individualized remediation plan with the Assistant Dean for Experiential Education and the Associate Deans for Administration and Academic Affairs.
3. fails two or more milestone exams within the six-semester pharmacy skills laboratory curriculum.
4. fails to comply with programmatic requirements in a timely manner (see the pharmacy student handbook (http://policy.ku.edu/pharmacy/student-handbook/)).
Suspension
A student who fails or does not make timely progress in a course or courses while a student in the School of Pharmacy may be placed on suspension. Additionally, a student who fails to comply with the School conduct policy, or academic and/or programmatic requirements may be placed on suspension.

Dismissal
Students will be dismissed from school if they:

1. fail to attain a 2.5 grade-point-average in all courses or in professional courses for any semester while on probation.
2. receive a grade of “F” in 40 percent or more of the credit hours taken during any semester (including semesters in which they are enrolled in only one course).
3. fail an individual course twice.
4. fail two advanced pharmacy practice experiences (APPEs).
5. they fail a milestone exam within the six-semester pharmacy skills laboratory curriculum while on probation as a result of prior milestone failure or academic poor performance (i.e. professional GPA <2.5)
6. are placed on probation or suspended for a second academic semester for failure to comply with programmatic requirements.

Petitions
Students dismissed for poor scholarship may file a written petition with the academic standing committee for reinstatement. The committee’s decision is final. The committee normally takes one of the following actions:

1. The student is allowed to enroll, often with specific recommendations regarding strategies for restoring good academic standing.
2. The committee may deny the petition.

Courses Taken Outside the School
Students on probation or in nondegree-student status may take courses outside the School of Pharmacy, or at other institutions, to improve the grade-point average. Prior approval is required, and in general, only courses that count toward graduation are honored. All professional coursework must be completed at a college or school of pharmacy that is accredited by ACPE.

Return to Good Standing
Students will return to good standing when the overall pharmacy grade point average reaches 2.5. Students are required to be in good standing (i.e. GPA of 2.5 or higher) to be eligible to enroll and participate in advanced pharmacy practice experiences. If a student who was placed on academic probation due to milestone exam failure passes all the milestone exams during the subsequent semester they will be removed from probation (only if their professional GPA is also at or above 2.5).

1. Students with professional GPAs at or above 2.5 who are on academic probation due to milestone failure(s) at the end of their P3 spring will be required to complete a remediation rotation with a faculty member, preferably in a practice setting similar to the milestone failure. These students will need to pass the remediation rotation in order to start in their required 9 APPE rotations.
2. Courses taken outside the School: Only courses completed within an ACPE accredited institution may be used to increase a student’s professional GPA. Authorization to complete or use non-KU School of Pharmacy professional coursework requires prior Curriculum Committee approval. Credit for coursework completed as part of a dual degree (e.g. MBA, MSCR, etc), academic minors (e.g. business, etc), or other coursework outside the School of Pharmacy are not included in GPA calculations to determine a student’s academic standing or eligibility for progression to the P4 year.

Required Work in Residence
To be eligible for the Doctor of Pharmacy degree, all P3 and P4 coursework and rotations (APPEs) must be completed in residence at the KU School of Pharmacy.

Terminal-Year Courses
A student cannot enroll in the principal terminal-year pharmacy practice experiential rotations unless he or she has a grade-point average in professional courses of at least 2.5 and has completed all didactic course work required for the degree and expected programmatic requirements as outlined in the student handbook.

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

Academic Forgiveness
The school does not participate in academic forgiveness.

Academic Misconduct
Students experiencing difficulties or problems with a particular course or having complaints or grievances about a particular instructor are urged to discuss the problem in a timely fashion with the instructor. If the student feels awkward or uncomfortable doing this, he or she should see the chair of the instructor’s department, or if necessary, the dean. The chair or dean brings the matter to the instructor’s attention, preserving the student’s anonymity, if so requested.

Instructors detecting academic misconduct must act in accordance with the School of Pharmacy (http://policy.ku.edu/pharmacy/academic-professional-scholarly-conduct/) and Faculty Senate Rules and Regulations (http://www.policy.ku.edu/).

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

Graduation with Distinction and Highest Distinction
Students who rank in the upper 10 percent of their graduating class graduate with distinction. The upper third of those awarded distinction graduate with highest distinction. Grade-point averages are determined on the basis of credit hours taken while enrolled in the School of Pharmacy. The list is compiled each spring and includes July, December, and May graduates.
Health Insurance and Immunizations
The School of Pharmacy requires students to provide proof of health insurance and professional insurance coverage and immunizations for MMR, hepatitis B, varicella, and tetanus, and a current TB skin test.

Requirements to Practice Pharmacy in Kansas
A license is required to practice pharmacy. State boards of pharmacy grant licenses to students who successfully pass board examinations. In all states, eligibility to take board examinations requires graduation from an accredited school of pharmacy and completion of required experiential training. The Kansas State Board of Pharmacy (http://www.kansas.gov/pharmacy/) requires graduates of schools of pharmacy to indicate any current, pending, or previous convictions, fines, violations, or disciplinary action that may affect their eligibility to take the licensing examination. Pharmacists generally may transfer their licenses from a state in which they completed the entire examination to another state, provided the 2 states had similar practical experience requirements at the time the pharmacist was licensed by examination. Most pharmacists find it useful to maintain a license in the state where they were licensed by examination. By doing so, they can preserve their eligibility to transfer to another state.

Pharmacists in Kansas must renew their licenses biennially by paying the required fee and providing proof that they have completed the required 30 clock hours of continuing education.

The Kansas Board of Pharmacy requires completion of an appropriate degree from an accredited school of pharmacy plus 1,500 hours of practical experience in pharmacy. At the conclusion of the program, students are certified to the Kansas State Board of Pharmacy as having completed the entire externship requirement (1,500 hours) and are therefore eligible to take the Kansas licensure examination. Students must register as interns with the board at matriculation in the School of Pharmacy. Students desiring to compile an official record of pharmacy experience obtained on their own initiative may do so by submitting this information to the Kansas State Board of Pharmacy. Practical experience above and beyond the 1,500 required hours may be gained by working as a licensed pharmacy student intern in Kansas, then transferring the hours to another state.

Medicinal Chemistry Courses
MDCM 601. Medicinal Biochemistry I. 3 Credits.
A study of the biochemical principles of macromolecular structure and function, molecular communication, and the metabolism of nutrients and xenobiotics as applied to problems of medicinal and pharmacological significance.

MDCM 603. Medicinal Biochemistry II. 3 Credits.
A study of the biochemical principles of macromolecular structure and function, biosynthesis, molecular communication, and the metabolism of nutrients and xenobiotics as applied to problems of medicinal and pharmacological significance. Prerequisite: Students must have first year professional standing in the School of Pharmacy. Students must have successfully completed MDCM 601.

MDCM 606. Phytomedicinal Agents. 1 Credit.
This course will acquaint the pharmacy students with the current status of botanical use in the United States. A basic foundation will be provided so that the pharmacist can properly assess the appropriateness and usefulness of various phytomedicines and combinations in managing certain ailments with regard to efficacy, safety, potential toxicity, and potential herb-drug interactions. Prerequisite: Students must be admitted to the school or division of Pharmacy and have successfully completed MDCM 601 to enroll in this course.

MDCM 607. Clinical Pharmacognosy. 1 Credit.
The course will provide a technical background for understanding the scientific basis underlying the use of herbal medicines. This will be followed by practical information about the pharmacological and chemical properties as well as clinical uses of herbal medicines. Active student participation in discussing the properties of these non-prescription medicinals is expected. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy. Students must have successfully completed MDCM 601.

MDCM 625. Medicinal Chemistry I: Neuroeffector and Cardiovascular Agents. 4 Credits.
A study, from the molecular viewpoint, of the organic substances used as medicinal agents, including consideration of their origins, chemical properties, structure-activity relationships, metabolism and mechanisms of action; this course emphasizes drugs affecting the cardiovascular and central nervous systems. Prerequisite: Students must be admitted to the school or division of Pharmacy and have successfully completed MDCM 603 to enroll in this course.

MDCM 626. Medicinal Chemistry II: Homeostatic Agents. 4 Credits.
A continuation of MDCM 625 with special emphasis on anticancer, antiviral, antibacterial, antifungal, anti diabetic, anticholesterol, and steroidal drugs. Prerequisite: Students must have second year professional standing in the School of Pharmacy. Students must have successfully completed MDCM 625.

MDCM 690. Undergraduate Research. 1-5 Credits.
Research in medicinal chemistry. Students will be assigned to a laboratory research problem. Prerequisite: Consent of instructor.

MDCM 692. Problems in Medicinal Chemistry. 1-5 Credits.
This course encompasses original work on a laboratory problem of limited scope, honors reading assignments from medicinal chemistry literature, or in-depth discussions of assigned topics. Prerequisite: Consent of instructor.

MDCM 701. Advanced Medicinal Biochemistry I. 3 Credits.
A study of the principles of macromolecular structure and function, biosignaling, bioenergetics and metabolism, with an emphasis on the relationship between biochemistry and medicine. Prerequisite: Graduate standing or permission of instructor.

MDCM 703. Advanced Medicinal Biochemistry II. 3 Credits.
A study of the principles of basic enzymology, including chemical reactions, biosynthesis, and metabolism. In addition, the course will cover lipids, hormones, vitamins, and minerals. Prerequisite: Graduate standing or permission of instructor.

MDCM 710. Chemistry of Drug Action I. 4 Credits.
This course provides an overview of topics central to the understanding and practice of contemporary medicinal chemistry. It illustrates the interplay of anatomy and physiology with the organic-, bio- and analytical chemistry of drugs in the body. Topics covered include physiological mechanisms and disease processes; cell structure and function; basic intermediary metabolism; basic principles underlying drug action including the physicochemical properties of drugs and how these affect the interaction of drugs with living systems; chemical and biological manipulation of the absorption, distribution, metabolism and excretion of drugs and prodrugs; kinetics and inhibition of enzymes and transporters; quantitation and molecular modeling of drug binding to
of presentation materials and tests. Each student will be evaluated by
discussion leader and lecturer in a limited number of class sessions. Each
requirements for the Ph.D. in Neuroscience. The student will function as a
presentations. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, P&TX 801,
and PHCH 800.)

MDCM 816. Careers in the Biomedical Sciences. 1 Credits.
Advanced course examining career options open to PhD scientists in
the biomedical sciences, and providing preparation for the different
career paths. Extensive student/faculty interaction is emphasized utilizing
lectures, class discussion of assigned readings, and oral presentations.
Graded on a satisfactory/unsatisfactory basis. (Same as BIOL 816,
CHEM 816, and PHCH 816.) Prerequisite: Permission of instructor.

MDCM 817. Rigor, Reproducibility and Responsible Conduct in
Research. 3 Credits.
This class addresses the recognized problems in rigor, reproducibility,
and transparency that are plaguing modern science. Students will learn
the fundamentals of hypothesis design, avoiding bias, randomization,
sampling, and appropriate statistical analyses, reagent validation, among
other key topics. This course also introduces principles for being an
ethical, responsible, and professional research scientist. Topics include:
plagiarism, fabrication and falsification of data, record keeping and data
sharing, mentor/mentee and collaborative relationships, among others.
The class will include a mixture of lecture, case studies and discussion.
(Same as BIOL 817/CHEM 817/PHCH 817.) Prerequisite: Graduate
student.

MDCM 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including:
transcription and translation, cell signaling, genetic and genomics,
biochemical pathways, macromolecular structure, and the biosynthesis of
peptides, carbohydrates, natural products, and nucleic acids. Concepts
of thermodynamics and kinetics, bioconjugations and bioorthogonal
chemistry. Prerequisite: Consent of instructor.

MDCM 890. Research Seminar in Medicinal Chemistry. 1 Credits.
Reports by research students and discussions of developments in the
field not covered in formal courses.

MDCM 898. Proposal Preparation. 2 Credits.
Presentation of a literature seminar and writing an original NIH-style
research proposal concerning contemporary problems in medicinal
chemistry. Prerequisite: Consent of instructor.

MDCM 999. Doctoral Dissertation. 1-12 Credits.
Hours and credit to be arranged. Original chemical research in the
synthesis and development of medicinal agents, elucidation of the
chemical mechanisms of drug action, drug metabolism, and drug
toxicities.

Neuroscience Courses

NURO 775. Chemistry of the Nervous System. 3 Credits.
A detailed study of the molecular aspects of nerve transmission will
be covered with special emphasis on the uptake, storage, release,
biosynthesis, and metabolism of specific neurotransmitters. Drugs
affecting these processes and current research on receptor isolation and
receptor mechanisms will be discussed from a chemical viewpoint. (Same
as MDCM 775, P&TX 775, and PHCH 775.) Prerequisite: BIOL 600 or
equivalent.

NURO 799. Neuroscience Seminar Series. 2 Credits.
Presentations of research papers by faculty, post-doctoral research
associates, and graduate students. All graduate students in the
Neuroscience program participate in this seminar series throughout their
period of training. Each student has to present a seminar once every
semester. Presentations by students are evaluated by other graduate
students and faculty at the end of each seminar. (Same as NEUS 799.)
Prerequisite: Graduate standing in the Neuroscience program.

NURO 800. Neuroscience Teaching Principles. 2 Credits.
This course is to be used by graduate students fulfilling the teaching
requirements for the Ph.D. in Neuroscience. The student will function as a
discussion leader and lecturer in a limited number of class sessions. Each
student will meet with faculty whom he or she is assisting in preparation
of presentation materials and tests. Each student will be evaluated by
the faculty mentor and by the students in the class taught. Prerequisite:
Graduate standing in Neuroscience.

NURO 801. Issues in Scientific Integrity. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific
career, with emphasis on practical topics of special importance in
molecular-level research in the chemical, biological, and pharmaceutical
sciences. Topics will include the nature of ethics, the scientist in the
laboratory, as author, grantee, reviewer, employer/employee, teacher/
student, and citizen. Discussions will focus on case histories. This course
is open only to distance education students. Graded on a satisfactory/
unsatisfactory basis. Same as MDCM 801, P&TX 801, PHCH 801 and
PHCH 802.)
NURO 803. Neuroscience Literature Review I. 1 Credits.
This course is designed for graduate students and will fulfill the first written exam requirement for the Ph.D. in Neuroscience. The student will research and write a six page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in the Neuroscience Program.

NURO 805. Neuroscience Literature Review II. 1 Credits.
This course is designed for graduate students and will fulfill the second written exam requirement for the Ph.D. in Neuroscience. The student will research and write a twelve page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in the Neuroscience Program.

NURO 825. Research in Neuroscience. 1-10 Credits.
Original investigations at an advanced level in the areas of neuroscience. The research by each student will be performed in the laboratory of one of the faculty mentors of the graduate program in Neuroscience. Prerequisite: Graduate standing in the Neuroscience program.

NURO 844. Neurophysiology. 3 Credits.
Somatic sensory, motor and cognitive function of the brain will be discussed using a combination of lecture and student presentation formats. Current issues and evidence underlying accepted concepts and mechanisms will be emphasized. (Same as NEUS 844 and PHSL 844.) Prerequisite: PHSL 846 or equivalent and consent of instructor.

NURO 846. Advanced Neuroscience. 5 Credits.
Team-taught, in-depth neuroscience course focusing on normal and diseased brain function at the molecular, cellular and systems levels. Lectures and discussions will emphasize current issues in neuroscience research. (Same as ANAT 846, PHCL 846, PHSL 846 and NEUS 846.) Prerequisite: Permission of the course director.

NURO 847. Developmental Neurobiology. 2 Credits.
Development of the nervous system from early induction to the development of learning and memory. Topics include: Induction; Cellular Differentiation; Axon Growth and Guidance; Target Selection; Cell Survival and Growth; Synapse Formation; Synapse Elimination; and Development of Behavior. (Same as ANAT 847, PHSL 847, and NEUS 847.) Prerequisite: Advanced Neuroscience (ANAT 846; NURO 846; PHSL 846) or consent of instructor.

NURO 848. Molecular Mechanisms of Neurological Disorders. 3 Credits.
An in-depth coverage of pathogenic mechanisms in neurological diseases; cellular and molecular responses to brain injury and disease, neuroinflammatory diseases (e.g., multiple sclerosis), neurodegenerative diseases (e.g., Alzheimer's, Parkinson's, Huntington's, amyotrophic lateral sclerosis, and prion diseases), neurogenetic diseases (e.g., lysosomal and peroxisomal disorders, Down's syndrome and fragile X), trauma, stroke, and viral diseases (e.g., HIV encephalitis). (Same as ANAT 848, PHCL 848, PHSL 848, and NEUS 848.) Prerequisite: Advanced Neuroscience (ANAT 846; PHCL 846 or PHSL 846) or an equivalent course and consent of instructor.

NURO 899. Neuroscience Master's Thesis. 1-11 Credits.
Hours and credit for this course to be arranged with the mentor. Independent investigation of a research problem in neuroscience, but of limited scope. Prerequisite: Graduate standing in the Neuroscience program and consent of mentor/instructor.

Hours and credit for this course to be arranged with the mentor. Conduct of original investigation in neurosciences. Prerequisite: Graduate standing in the Neuroscience program post-oral comprehensive examination and consent of mentor/instructor.

**Pharmaceutical Chemistry Courses**

PHCH 510. Emerging Trends in Pharmaceutical Chemistry I. 1 Credits.
This elective class will explore emerging areas of research currently impacting the pharmaceutical industry. Potential topics include: biologicals as therapeutics, drug targeting, prodrugs, nanotechnology, biological barriers, gene therapy, transporters, vaccines, intracellular drug trafficking, controlled release drug delivery, cancer therapy, analytical biotechnology and many others. The class will be team taught by PHCH faculty and guest speakers. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be accepted to the Pharmacy Program.

PHCH 512. Road Map to the Development and Regulatory Approval of a New Drug. 1 Credits.
This special topics course will cover key steps in developing and bringing a new drug through pharmaceutical development and regulatory approval and into commercial use. Development of both traditional small-molecule chemical drugs and biotechnology-based protein drugs will be discussed. Example topics include: (1) how does a drug candidate move from its discovery at the lab bench into clinical trials? (2) what are the key hurdles in developing a new medicine that can be produced at large-scale in a manufacturing facility? (3) why are patents and venture capital so important in drug development? Guest lecturers will provide real world perspectives including case studies. This is two-hour class that meets 8 times during the semester. Prerequisite: 1st, 2nd or 3rd professional year standing in the School of Pharmacy.

PHCH 514. Scientific Writing for the Health Professional. 2 Credits.
Communicating research plans and experimental findings is a critical skill for health care professionals working in a research environment, and successful communication depends on clarity of thought and careful use of language. This course is intended for 3rd professional (P3) year students who are seeking residency and will need to write research proposals and abstracts, as well as prepare effective posters and presentations. It is an intensive course with multiple writing assignments. Students are expected to participate fully, and individual feedback and guidance on writing will be provided by the instructor. Graded on a satisfactory/fail basis. Prerequisite: 3rd professional (P3) year students who plan to complete post-doctoral residency training.

PHCH 515. Oral Presentations for the Health Professional. 1 Credits.
Communicating research plans and experimental findings is a critical skill for health care professionals working in a research environment, and a successful oral presentation depends on clear thinking and careful slide design to tell a story. This course is intended for 3rd year professional (P3) pharmacy students who are seeking residency and will need to prepare effective presentations. It is an intensive course with successive slide drafts and presentations. Students are expected to participate fully, and individual feedback and guidance on presentations will be provided by the other students and by the instructor. Graded on a satisfactory/fail basis. Prerequisite: PHCH 514.

PHCH 517. Pharmacy Calculations. 2 Credits.
An introduction to the mathematics involved in filling prescriptions and in manufacturing pharmaceuticals. Includes an introduction to standard prescription notation and familiarization with pharmaceutical weights and measures.

PHCH 518. Physical-Chemical Principles of Solution Dosage Forms. 3 Credits.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. Prerequisite: Students must have first year professional standing in the School of Pharmacy. Students must have successfully completed PHCH 517.

**PHCH 605. Vaccines. 1 Credits.**

Vaccines are currently the most powerful therapeutic approach available for infectious disease and promise to become of increasing importance for a wide variety of other pathologies including cancer. This course discusses the immunological basis of vaccinology, types of vaccines currently available and in development and the process by which vaccines are made from the basic research stage through their pharmaceutical development and marketing. Ethical aspects of vaccine use will also be considered. Prerequisite: Students must have first, second or third year professional standing in the School of Pharmacy.

**PHCH 625. Pharmacokinetics. 3 Credits.**

A discussion of the basic concepts, and some clinical applications, of pharmacokinetics, clearance concepts, extravascular dosing, and the use of pharmacokinetics in dosage regimen design and adjustment. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have successfully completed PHCH 517 and PHCH 518.

**PHCH 626. Biopharmaceutics and Drug Delivery. 3 Credits.**

A study of biological barriers to drug delivery, conventional dosage forms, and new and future drug delivery strategies. Prerequisite: Students must have second year professional standing in the School of Pharmacy. Students must have successfully completed PHCH 517, PHCH 518, and PHCH 625.

**PHCH 667. Introduction to Clinical Chemistry. 2 Credits.**

A lecture-discussion course concerned with identification of the contents of physiological fluids, changes in physiological fluid content induced by disease and drugs, and therapeutic drug monitoring: case studies are presented. Prerequisite: Must be accepted to the Pharmacy Program.

**PHCH 690. Undergraduate Research in Pharmaceutical Chemistry. 1-5 Credits.**

Student will be assigned a suitable research project in the area of pharmaceutical analysis or pharmaceutics. Prerequisite: Consent of instructor.

**PHCH 693. Clinical Pharmacokinetics. 2 Credits.**

This course presents discussions on physiological and disease state variables in pharmacokinetics for selected drugs and drug classes, and instructs students in the use of physiological and disease state pharmacokinetic information to develop individualized therapeutic regimens. Prerequisite: Students must be admitted to the School of Pharmacy to enroll in this course. Students must have successfully completed PHCH 625 and PHCH 626.

**PHCH 694. Problems in Pharmaceutical Chemistry. 1-5 Credits.**

A student will be assigned a suitable research project in an area of pharmaceutical analysis or pharmaceutics. This course is offered regularly by the Department of Pharmaceutical Chemistry to meet the special needs of selected students, usually for one of the following two situations: (1) This course may be taken when a student has a special interest in a problem or area of limited scope and desires to pursue that study in depth under supervision of a member of the faculty. (2) This course is sometimes used as a remedial class to provide a mechanism of intensive review and study in an area of weakness. Prerequisite: Consent of instructor.

**PHCH 700. Experimental Methods in Pharmaceutical Chemistry. 1-5 Credits.**

Discussions, lectures, and laboratory work designed to acquaint and provide hands on experiences to advanced undergraduate and graduate students with experimental design, methods, and approaches relevant to modern research in pharmaceutical chemistry. Prerequisite: Consent of instructor.

**PHCH 705. Writing and Communicating Science for Graduate Students. 3 Credits.**

Communicating research proposals and experimental findings is a critical skill for scientists. Successful communication depends on clarity of thought and careful use of language. This course will use class discussions with examples and homework assignments to help prepare the graduate student to successfully communicate in both academia and industry settings. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in PHCH or consent of the instructor.

**PHCH 712. Road Map to the Development and Regulatory Approval of a New Drug. 1 Credits.**

This special topics course will cover key steps in developing and bringing a new drug through pharmaceutical development and regulatory approval and into commercial use. Development of both traditional small-molecule chemical drugs and biotechnology-based protein drugs will be discussed. Example topics include: (1) how does a drug candidate move from its discovery at the lab bench into clinical trials? (2) what are the key hurdles in developing a new medicine that can be produced at large-scale in a manufacturing facility? (3) why are patents and venture capital so important in drug development? Guest lecturers will provide real world perspectives including case studies. This is two-hour class that meets 8 times during the semester. Prerequisite: Graduate standing in Pharmaceutical Chemistry or a trainee of the NIH Biotech Training Grant.

**PHCH 715. Drug Delivery. 3 Credits.**

The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. Prerequisite: Master's or PhD candidate in Engineering, Chemistry, Medicinal Chemistry, or Pharmaceutical Chemistry (by appointment for seniors or graduate students in departments not listed).

**PHCH 716. Drug Delivery. 3 Credits.**

The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. Prerequisite: This course is only open to distance education students.

**PHCH 717. Drug Delivery. 3 Credits.**

The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative
understanding of drug delivery practice and theory is the goal. This course is only open to external non-degree seeking students. Offered in spring semesters. Prerequisite: PHCH 732.

PHCH 718. Physical-Chemical Principles of Solution Dosage Forms. 3 Credits.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. Prerequisite: Graduate standing.

PHCH 719. Physical-Chemical Principles of Solution Dosage Forms. 3 Credits.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. This course is only open to distance education students. Prerequisite: Graduate standing.

PHCH 721. Physical-Chemical Principles of Solution Dosage Forms. 3 Credits.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. This course is only open to external non-degree seeking students. Offered in spring semesters.

PHCH 725. Cellular and Molecular Pharmacuetics. 3 Credits.
The pharmaceutical relevance of fundamental and advanced concepts in cell biology and the molecular interactions responsible for cell and tissue functions, homeostasis in health and disease will be presented. Current analytical methods for examining cells and tissues, and molecular components important in understanding drug and protein biodistribution and metabolism will be discussed. Discussion topics will include the chemical and physical properties of small molecules, proteins, nucleic acids and lipids and their impact on cellular and subcellular structures and ultimately of either adverse or therapeutic benefit. (Same as C&PE 725.) Prerequisite: Graduate standing or consent of instructor.

PHCH 726. Cellular and Molecular Pharmacuetics. 3 Credits.
The pharmaceutical relevance of fundamental and advanced concepts in cell biology and the molecular interactions responsible for cell and tissue functions, homeostasis in health and disease will be presented. Current analytical methods for examining cells and tissues, and molecular components important in understanding drug and protein biodistribution and metabolism will be discussed. Discussion topics will include the chemical and physical properties of small molecules, proteins, nucleic acids and lipids and their impact on cellular and subcellular structures and ultimately of either adverse or therapeutic benefit. Prerequisite: Graduate standing or consent of instructor.

PHCH 730. Biopharmaceutics and Pharmacokinetics. 3 Credits.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems.

PHCH 731. Biopharmaceutics and Pharmacokinetics. 3 Credits.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems. This course open only to distance education students.

PHCH 732. Biopharmaceutics and Pharmacokinetics. 3 Credits.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems. This course is only open to external non-degree seeking students. Offered in fall semesters.

PHCH 744. Organic Chemistry for Pharmaceutical Scientists. 3 Credits.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include functional group chemistry: electronic structure, acid/base properties: molecular structure and properties (dipole, strain, and steric effects, inductive and resonance effects); dynamics of reactions (the major organic reaction mechanism, kinetics, energy profiles, isotope effects, linear free energy relationships, solvent effects, stereochemistry and conformation, an introduction to orbital symmetry control; basic thermodynamic and kinetic concepts; and an overview of important classes of mechanisms. This course is only open to distance education students. Prerequisite: CHEM 624 and CHEM 626.

PHCH 775. Chemistry of the Nervous System. 3 Credits.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as MDCM 775, NURO 775 and P&TX 755.) Prerequisite: BIOL 600 or equivalent.

PHCH 801. Issues in Scientific Integrity. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. This course is open only to distance education students. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, P&TX 801 and PHCH 802.)

PHCH 802. Issues in Scientific Integrity. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. This course is open only to distance education students. Graded on a satisfactory/unsatisfactory basis. (Same as PHCH 801, MDCM 801, NURO 801, and P&TX 801.)

PHCH 816. Careers in the Biomedical Sciences. 1 Credits.
Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as BIOL 816, CHEM 816 and MDCM 816.) Prerequisite: Permission of instructor.

PHCH 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.
This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion.
PHCH 850. Solid State Stability and Formulation. 2 Credits.
This course is designed to provide an understanding of the formulation and stability of small and large drug candidates in the solid state. The first two-thirds of the course will focus on small molecules, with the last third being devoted to proteins. Prerequisite: Graduate standing in PHCH or consent of the instructor.

PHCH 851. Solid State Stability and Formulation. 2 Credits.
This course is designed to provide an understanding of the formulation and stability of small and large drug candidates in the solid state. The first two-thirds of the course will focus on small molecules, with the last third being devoted to proteins. This course is open only to distance education students. Prerequisite: Graduate standing in Pharmaceutical Chemistry or consent of the instructor.

PHCH 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, CHEM 860 and MDCM 860.) Prerequisite: Permission of instructor.

PHCH 862. Physical Chemistry of Solutions, Solids and Surfaces. 3 Credits.
A course on equilibria in aqueous and non-aqueous systems with emphasis on solutions of interest to pharmaceutical technology. Included are association-dissociation equilibria, complexation, protein binding calculation of species concentrations, estimation of solubility and ionization constants. Methods for the determination of chemical potential in solution are presented.

PHCH 863. Physical Chemistry of Solutions, Solids and Surfaces. 3 Credits.
A course on equilibria in aqueous and non-aqueous systems with emphasis on solutions of interest to pharmaceutical technology. Included are association-dissociation equilibria, complexation, protein binding calculation of species concentrations, estimation of solubility and ionization constants. Methods for the determination of chemical potential in solution are presented. This course is open only to distance education students.

PHCH 864. Pharmaceutical Analysis. 4 Credits.
This course is intended to be a comprehensive treatment of contemporary techniques used to validate analytical methods for the determination of drugs in the bulk form, pharmaceutical formulations, biological samples and other relevant media. The emphasis will be on chromatographic techniques reflecting the preeminent position that those techniques occupy in the field of pharmaceutical and biomedical analysis. Prerequisite: Previous or concurrent enrollment in PHCH 684.

PHCH 865. Pharmaceutical Analysis. 4 Credits.
Advanced course on pharmaceutical analysis. This course is open only to distance education students.

PHCH 870. Advanced Pharmaceutical Biotechnology. 4 Credits.
A course designed to emphasize the important facets of recombinant proteins and vaccines as pharmaceutical agents. Basics of protein structure and analysis will be introduced, and methods for production, isolation, and purification of recombinant proteins will be described. Potential chemical and physical degradation processes and strategies for circumventing these difficulties will be discussed. An overview of the development and formulation of vaccines and their immunological basis will be presented. Prerequisite: BIOL 600 or consent of instructor.

PHCH 871. Advanced Pharmaceutical Biotechnology. 4 Credits.
A course designed to emphasize the important facets of recombinant proteins and vaccines as pharmaceutical agents. Basics of protein structure and analysis will be introduced, and methods for production, isolation, and purification of recombinant proteins will be described. Potential chemical and physical degradation processes and strategies for circumventing these difficulties will be discussed. This course is open only to distance education students. An overview of the development and formulation of vaccines and their immunological basis will be presented. Prerequisite: BIOL 600 or consent of instructor.

PHCH 895. Research in Pharmaceutical Chemistry. 1-11 Credits.
Advanced level research in collaboration with a faculty member in pharmaceutical chemistry or related areas. This course is limited to students who are doing research, but not necessarily working toward either a master's or a doctoral degree.

PHCH 898. Master's Thesis. 1-10 Credits.
Master's Thesis. This course is open only to distance education students.

PHCH 899. Master's Thesis. 1-11 Credits.
Graded on a satisfactory/fail basis.

PHCH 920. Chemical Kinetics. 2 Credits.
This course provides the principles of kinetic data analysis as applied to problems in pharmaceutical chemistry. Topics include the setup and solution of rate equations related to chemical reactions; simplifications and approximations in complex equation systems; isotope, solvent and salt rate effects; and diffusion and activation controlled reactions.

PHCH 921. Chemical Kinetics. 2 Credits.
This course provides the principles of kinetic data analysis as applied to problems in pharmaceutical chemistry. Topics include the setup and solution of rate equations related to chemical reactions; simplifications and approximations in complex equation systems; isotope, solvent and salt rate effects; and diffusion and activation controlled reactions. This course is open only to distance education students.

PHCH 972. Mechanisms of Drug Deterioration and Stabilization. 3 Credits.
A course dealing with mechanisms and chemical kinetics of drug deterioration and stabilization.

PHCH 973. Mechanisms of Drug Deterioration and Stabilization. 3 Credits.
A course dealing with mechanisms and chemical kinetics of drug deterioration and stabilization. This course is only open to distance education students.

PHCH 974. Advanced Special Topics in Pharmaceutical Chemistry. 1-3 Credits.
Various topics pertinent to the area of pharmaceutical chemistry will be explored. Graded on a satisfactory/unsatisfactory basis.

PHCH 978. Pharmaceutical Chemistry Seminar. 1 Credits.
A seminar on the chemistry of pharmaceutical systems.

PHCH 998. Doctoral Dissertation in Pharmaceutical Chemistry. 1-11 Credits.
This course is open only to distance education students.

PHCH 999. Doctoral Dissertation in Pharmaceutical Chemistry. 1-11 Credits.

Pharmacology and Toxicology Courses

P&TX 630. Pharmacology I. 4 Credits.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in P&TX 630 include, general principles of pharmacokinetics and pharmacodynamics, molecular biology, pharmacogenomics, and pharmacology of the nervous system. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have successfully completed BIOL 646.

P&TX 631. Pharmacology II. 3 Credits.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Prerequisite: Students must have first year professional standing in the School of Pharmacy. Students must have successfully completed P&TX 630.

P&TX 632. Pharmacology III. 3 Credits.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have successfully completed P&TX 630 and P&TX 631.

P&TX 633. Pharmacology IV. 3 Credits.
The pharmacology series covers the basic principles of the immunology, inflammation, and targeted drugs used to regulate the immune response. In addition, basic concepts of infectious diseases and their therapeutics are discussed. Prerequisite: Students must have second year professional standing in the School of Pharmacy. Students must have successfully completed P&TX 630, P&TX 631 and P&TX 632.

P&TX 640. Toxicology. 2 Credits.
General principles of toxicology, treatment, and management of accidental poisoning, and current topics of interest. Prerequisite: Students must have third year professional standing in the School of Pharmacy. Students must have successfully completed P&TX 630, P&TX 631, P&TX 632 and P&TX 633.

P&TX 642. Obesity, Diabetes, and Metabolic Syndrome: Current Concepts. 1 Credits.
The objective of this course is to provide students with an opportunity to read, examine, and report on a broad array of topics relevant to diabetes and obesity. Students will be given broad latitude to propose topics of interest to them within the area of diabetes and obesity. The format of the course will be group presentations. Groups of 3 students will identify a topic of interest to them among a list of provided topics, prepare a 30 minute presentation and deliver it to the class for discussion. Prerequisite: Completion of P&TX 632 or special permission from faculty.

P&TX 643. Current Concepts of Neurodegenerative Disease. 1 Credits.
Neurodegenerative diseases, such as Alzheimer's and Parkinson's diseases, are associated with older age and/or enhanced oxidative stress. The possible causes for the development and progression of these diseases with relation to current research in the field will be discussed. Additionally, a summary of available and suggested future treatments will be given. Prerequisite: Students must be admitted to the school of Pharmacy and have successfully completed P&TX 630 to enroll in this course.

P&TX 644. Adverse Drug Events. 1 Credits.
The objective of this course is to alerts students to common and preventable adverse drug events. This course will provide students with an opportunity to read, examine, and report on a broad array of topics relevant to adverse drug events. Students will be given broad latitude to propose topics of interest to them within the area of adverse drug events. In addition students can report on common and preventable food-drug, herb-drug, and disease-drug interactions. The format of the course will be group presentations. Groups of 3 students will identify a topic of interest to them among a list of provided topics, prepare a 30 minute presentation and deliver it to the class for discussion. Prerequisite: 3rd, 4th, or 5th professional year standing in the School of Pharmacy.

P&TX 645. Neurobiological Basis of Addiction: Physiological, Biochemical, Pharmacological & Treatment Concepts. 1 Credits.
Several addictions will be discussed including addictions to alcohol, cocaine, methamphetamine, gambling, and others as time permits. The physiology, biochemistry, pharmacology and available treatments for these addictions will be reviewed. The role of pharmacotherapies will be discussed, particularly as they relate to the molecular basis of addiction. Behavioral and psychological approaches also will be examined. Prerequisite: Completion of P&TX 632 or special permission from faculty.

P&TX 646. Current Concepts of Psychotropic Medication. 1 Credits.
This course provides information regarding commonly used psychotropic medications, or any drug that affects brain activities associated with mental processes and behavior. This includes, but are not limited to, the categories of antipsychotics, mood stabilizers, anti-anxiety (anxiolytics), antidepressants, and stimulants. The range of topics from basic biology to drug-drug interactions will be explored in the course. Groups of three students will identify a topic of interest to them in the field of psychotropic drugs and affect, mood, or behavior, prepare a 30 min presentation, and deliver it to the class for discussion. Prerequisite: P&TX 630.

P&TX 694. Undergraduate Laboratory: Research in Pharmacology and Toxicology. 1-5 Credits.
Original research on a laboratory problem of limited scope. This course cannot count toward pharmacology and toxicology requirements in the School of Pharmacy. Prerequisite: Consent of instructor.

P&TX 698. Library Problems in Pharmacology and Toxicology. 1-5 Credits.
Original library review of a limited special topic in pharmacology and toxicology. The student will write a review in his or her report. This course may count toward pharmacology and toxicology requirements in the School of Pharmacy. Prerequisite: P&TX 635 and consent of instructor.

P&TX 700. Professional Issues in the Biomedical Sciences. 2 Credits.
A course designed to assist doctoral students in the biomedical sciences in their professional development by providing presentations, discussions, and practical experiences related to career planning. Topics include diverse career opportunities and expectations of each, preparation of vitae/resumes and other elements of a successful job search, writing scientific papers and dealing with editors, developing programmatic research programs, balancing professional obligations, advancing through promotions, and related topics. Prerequisite: Graduate standing in pharmacology and toxicology.

P&TX 705. Current Concepts in Biochemical Pharmacology and Toxicology. 3 Credits.
A detailed study of the foundational concepts and leading-edge discoveries in biochemistry and molecular biology that underlie the actions and effects of drugs and toxicants with particular relevance to human disease and new therapeutic strategies. The interconnectedness and
integration of seemingly disparate pathways and regulatory mechanisms will be emphasized. The technologies and experimental approaches used in biochemical pharmacology and toxicology will be illustrated. Topics may vary from year to year depending on recent advances in the field. The course will involve a combination of lectures and discussions with an emphasis on critically reading and analyzing primary research papers. Students will be evaluated on the basis of oral presentations and take-home problem sets. Prerequisite: Graduate standing in Pharmacology and Toxicology. Two semesters of undergraduate biochemistry with molecular biology.

P&TX 730. Advanced Pharmacology I - CNS and ANS. 2 Credits.
A detailed study of the fundamentals of autonomic nervous system, central nervous system, and their pharmacology. The student will attend P&TX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 731. Advanced Pharmacology II - Cardiovascular and Renal System. 2 Credits.
A detailed study of the fundamentals of cardiovascular system, renal system and their pharmacology. The student will attend P&TX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 732. Advanced Pharmacology III - Immunology and Inflammatory Diseases. 2 Credits.
A detailed study of the fundamentals of immunology and inflammation and their pharmacology. The student will attend P&TX 633 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 733. Advanced Pharmacology IV - Endocrinology. 2 Credits.
A detailed study of the fundamentals of endocrinology and associated pharmacology. The student will attend P&TX 633 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 740. Advanced Biotechnology. 3 Credits.
An examination of basic principles of molecular biology, immunology, and protein chemistry as they apply to the identification, production, stability, delivery, and monitoring of new therapeutic agents provided by the expanding biotechnology industry. Students will attend lectures in P&TX 633 and meet separately with faculty for additional discussions of more advanced material on these topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology.

P&TX 741. Biomedical Statistics. 3 Credits.
This course is primarily intended for students concerned with the analysis of experimental and observational data, with an emphasis on biomedical and pharmacological applications. The topics covered by the course include the design of experimental studies, data collection, probability theory, descriptive statistics, probability distribution, hypothesis testing, t-test, analyses of variance for factorial designs, linear and multiple regression, analysis of covariance and non-parametric methods. Prerequisite: P&TX graduate student status in good academic standing.
Pharmacology and Toxicology, and completion of P&TX 750, P&TX 785 and P&TX 751.

P&TX 757. Biomedical Statistics. 3 Credits.
This course is primarily intended for students concerned with the analysis of experimental and observational data, with an emphasis on biomedical and pharmacological applications. The topics covered by the course include the design of experimental studies, data collection, probability theory, descriptive statistics, probability distribution, hypothesis testing, T-test, analyses of variance for factorial designs, linear and multiple regression, analysis of covariance and non-parametric methods. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology.

P&TX 758. Pharmacogenomics. 2 Credits.
A detailed study of fundamental concepts of pharmacogenomics - how genes and genetic variation determine interindividudal differences in drug response - experimental approaches, select gene-drug examples, translation from research to clinical use, and ethical, legal and social implications. Prerequisites: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology.

P&TX 775. Chemistry of the Nervous System. 3 Credits.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as MDCM 775, NURO 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent.

P&TX 785. Research Proposal. 2 Credits.
To satisfy the research requirement for the on-line distance M.S. program in Pharmacology and Toxicology, the aspiring student must define a research project and prepare a written proposal describing the nature and goals of the project. It is suggested that the student in conjunction with their distance research mentor collaborate in the selection of and the definition of the proposed research. The proposal should be 4 pages (0.5 in margins, 11-12 point Arial, Times Roman or Calibri font) that states the overall goal of the project, the hypothesis to be tested, 2-3 specific aims, a statement of significance and impact of the research and research approach. Prerequisite: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology, and completion of P&TX 750.

P&TX 799. Pharmacology and Toxicology Seminar. 1-2 Credits.
A review of current literature and research in pharmacology and toxicology. Required of all graduate students in the department every fall and spring semester. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in P&TX.

P&TX 800. Pharmacology and Toxicology Teaching Principles. 2 Credits.
This course is to be used by graduate students fulfilling the teaching requirements for the Ph.D. in pharmacology and toxicology. The student will function as a discussion leader and lecturer in a limited number of class sessions. Each student will meet with the faculty whom he or she is assisting. Prerequisite: Graduate standing in pharmacology and toxicology program.

P&TX 801. Issues in Scientific Integrity. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. This course is open only to distance education students. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, PHCH 801 and PHCH 802.)

P&TX 803. Pharmacology Literature Review I. 1 Credits.
This course is designed for graduate students and will fulfill the first written exam requirement for the Ph.D. in pharmacology and Toxicology. The student will research and write a six page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 805. Pharmacology Literature Review II. 1 Credits.
This course is designed for graduate students and will fulfill the second written exam requirement for the Ph.D. in pharmacology and Toxicology. The student will research and write a twelve page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 825. Research in Pharmacology and Toxicology. 1-10 Credits.
Original investigations at an advanced level in the areas of pharmacology or toxicology or related fields. This research will be performed by graduate students in collaboration with a faculty member. Prerequisite: Graduate standing and consent of instructor.

P&TX 826. Online Research in Pharmacology and Toxicology. 8 Credits.
Original investigations at an advanced level in the areas of pharmacology or toxicology or related fields. This research will be performed by graduate students in collaboration at their place of off-site mentoring in collaboration with the faculty mentor. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology and consent of KU Pharmacology and Toxicology Faculty Mentor.

P&TX 885. Distance Master's Research in Pharmacology and Toxicology. 1-12 Credits.
Original investigations at an advanced level in areas of pharmacology or toxicology or related fields. This research will be performed by graduate students in collaboration at their place of off-site mentoring in collaboration with the faculty mentor. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology and completion of P&TX 785.

P&TX 889. Distance Master's Thesis. 2 Credits.
Independent investigation of a research problem of limited scope, leading to the preparation of a written Master's Degree thesis. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology and completion of 12 credits in P&TX 885.

P&TX 890. Distance M.S. Thesis. 2 Credits.
Independent investigation of a research problem of limited scope, leading to the preparation of a written Master's Degree thesis. Prerequisite: Graduate standing in the On-line M.S. Program in Pharmacology and Toxicology.

P&TX 898. Online Master's Thesis. 1-2 Credits.
Independent investigation of a research problem of limited scope leading to the preparation of a written Master's Degree thesis. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology.

P&TX 899. Master's Thesis. 1-11 Credits.
Independent investigation of a research problem of limited scope leading to the preparation of a written Master's Degree thesis. Prerequisite: Graduate standing in P&TX and consent of instructor.

P&TX 990. Postdoctoral Research. 1-11 Credits.
Advanced level research in collaboration with a faculty member in the department. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Doctoral degree or equivalent in an appropriate related area, and consent of instructor.

P&TX 999. Doctoral Dissertation. 1-11 Credits.
Hours and credit to be arranged. Original investigation in pharmacology and toxicology. Prerequisite: Consent of instructor.

Pharmacy Practice Courses

PHPR 506. Precision Medicine. 1 Credits.
This course will address the role of precision medicine in pharmacy practice and is designed to extend the students' understanding of the basis for interindividual variation in drug response and the evolving role of the pharmacist. The course will include required readings, lectures, cases, and in-class discussions that focus on the evidence and practicality of precision medicine in pharmacy practice. Using selected examples, students will learn about patient factors that drive variability in drug response and how these factors drive drug selection and dosing. With the current focus on the use of genomic data to drive individualized therapy, students will learn about current pharmagenomic-based practice guidelines and clinical practice references. Students will prepare a 2-page writing assignment and an in-class presentation on the impact of precision medicine on pharmacy practice. Prerequisite: Must be admitted to the School of Pharmacy.

PHPR 507. Advanced Community Practice. 1 Credits.
The objective of this course is to prepare pharmacy students to practice as advanced pharmacists in a community setting. The course will cover patient care as well as the business and insurance aspects surrounding community pharmacy practice. We will cover a variety of topics including reimbursement, legal issues, Medication Therapy Management (MTM), communication, ethics, and the future of Community Pharmacy practice. Prerequisite: 3rd professional year standing in the School of Pharmacy.

PHPR 508. Hematology/Oncology Pharmacy. 1 Credits.
This course explores many cancer-related topics, including non-pharmacologic treatment modalities, complications of cancer and its treatment, supportive care issues, and precision medicine. It also reviews current cancer screening and prevention guidelines and cancer research. Various cancers are discussed, such as myeloma, pediatric cancers, and cancers of the bladder, kidneys, ovaries, and testes. Prerequisite: Students must have third year professional standing in the School of Pharmacy and have successfully completed MDCM 626.

PHPR 509. Medicare Part D. 1 Credits.
This elective course will focus on the understanding and active enrollment of patients into Medicare prescription drug benefit (Part D). Students will mainly focus on the understanding of Medicare eligibility, benefits, formulary requirements, and the administration of benefits. Students will also participate in community outreach which may focus on underserved patients. Prerequisite: Students must be admitted to the School of Pharmacy to enroll in this course. Must be a 2nd or 3rd professional year standing in the School of Pharmacy.

PHPR 510. Medical Terminology Elective. 1 Credits.
This course provides the fundamentals for developing a medical vocabulary. The student will develop the ability to understand, define and utilize medical terminology and abbreviations used in patient care.

PHPR 513. Chemical Dependency Elective. 1 Credits.
This elective course will enhance the pharmacy student's knowledge and understanding of the current theories behind the addiction process, frequently abused drugs and/or chemicals and the treatment and recovery process. Prerequisite: Must be accepted to the Pharmacy Program.

PHPR 514. Communication and Counseling. 1 Credits.
An elective course designed to help students improve professional communication skills. Prerequisite: PHAR 500.

PHPR 515. The Aging Patient. 1 Credits.
This elective course is designed for the learner to explore many of the clinical considerations employed when caring for the aging patient within our health care system. The course will be devoted to exploring perceptions of the older adult patient, learning how the aging process can impact patient care, and identifying the role of the pharmacist in enhancing this care through the 5Ms of geriatric care. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy.

PHPR 516. Pharmacy in Public Health. 1 Credits.
Public health is more than providing treatment for an illness; it is a concern for the health of an entire population. The ideal is to ensure the health of all. This course will focus on providing students with a solid foundational understanding of what public health is and how pharmacists play a role as a public health provider. The course will cover the concepts and tools used in public health including issues such as: determining health, cultural competence, health promotion, disease prevention, epidemiology and disease, describing populations and community health. Lastly, the course will provide students with specific pharmacist models of public health. Successful models include tobacco cessation programs, community vaccination programs, obesity prevention, tuberculosis monitoring, emergency preparedness and domestic violence. Prerequisite: Must be accepted to the Pharmacy Program.

PHPR 517. Medication Safety and Error Prevention. 1 Credits.
This course introduces the student to medication safety and the technology as well as the tools used in error prevention. The student will also learn about adverse drug events including both medication errors and adverse drug reactions in hospital and retail pharmacy settings. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy.

PHPR 519. Business Planning for Pharmacy. 1 Credits.
This course is designed for students interested in developing a business plan. Most pharmacists will have an opportunity to develop a new service, product line or even start a new business venture in their careers. Students need to know how to create a formal business plan and how to present the plan to decision makers. The course will cover the basic components and rationale of creating a formal a business plan. When finished students will be expected to have created a written business plan and will present their creation to the class. In this manner, students will gain experience in developing an idea into a plan. Prerequisite: Students must be admitted to the school of Pharmacy.

PHPR 520. Specialty Pharmacy. 1 Credits.
This course will review a variety of diseases including: multiple sclerosis, hepatitis C and autoimmune conditions (psoriasis, ulcerative colitis, etc) and the specialty medications used to treat these conditions. Specialty pharmacy accreditation standards as well as topic discussions reviewing many issues facing the specialty pharmacy industry will be discussed. Guest speakers from different specialty pharmacies in the greater Kansas City area will also present information on their career experiences. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy.

PHPR 521. Practical Pediatrics. 1 Credits.
This course will expose students to conditions frequently encountered in pediatric care. Students will further develop knowledge and skills necessary to provide appropriate pediatric care in institutional, ambulatory, and community practice settings. The course will involve interactive lectures followed by case-based learning to promote student
This advanced elective course will focus on clinical application of vancomycin, aminoglycoside, and anti-fungal therapeutic drug monitoring utilizing multiple-day real patient cases. The course format will consist of alternating week(s) of online learning via calculation assignments and in-person class debriefing discussions. Prerequisite: P3 Standing in School of Pharmacy.

**PHPR 541. Foundations of Interprofessional Collaboration I. 0 Credits.**

This TeamSTEPPS Level 1 experience will introduce interprofessional students to the basic concepts of interprofessional collaboration including values and ethics, roles and responsibilities of healthcare team members, and interprofessional communication tools using the evidence-based national curriculum of TeamSTEPPS. Upon completion of this training experience students will be able to: 1) demonstrate a work ethic with individuals of other professions to maintain a climate of mutual respect and shared values; 2) define the role of health professions (including your own) within the healthcare system; 3) identify opportunities to seek expertise of health professionals to improve communication and healthcare; and 4) acquire basic TeamSTEPPS communication tools to effectively use with healthcare teams. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Student must have P1 standing in the School of Pharmacy.

**PHPR 542. Foundations of Interprofessional Collaboration II. 0 Credits.**

This TeamSTEPPS Level 2 experience will provide interprofessional students opportunities to apply key knowledge and skills gained in FIPC I, through role-play and case-based learning. Students will apply their knowledge of roles and responsibilities of healthcare team members and interprofessional communication tools and continue learning with, from, and about students from other professions. Upon completion of this training experience students will be able to: 1) engage diverse healthcare professionals who complement one’s own professional expertise, as well as associated resources, to develop strategies to meet specific patient care needs; 2) choose effective communication tools and techniques, including information systems and communication technologies, to facilitate discussions and interactions that enhance team function; and 3) engage other health professionals appropriate to the specific care situation—in shared patient-centered problem-solving. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Student must have P2 standing in the School of Pharmacy and successfully completed PHPR 661.

**PHPR 543. Foundations of Interprofessional Collaboration III. 0 Credits.**

This TeamSTEPPS Level 3 experience will provide interprofessional students opportunities to demonstrate key knowledge and skills gained
in FIPC I and II, through simulation. Students will demonstrate their interprofessional communication skills, including specific opportunities to utilize TeamSTEPPS tools. Students will also demonstrate their teamwork abilities by working with interprofessional students during the simulation. Upon completion of this training experience students will be able to: 1) demonstrate communicating effectively with other health professionals about a patient case; 2) exhibit teamwork skills with an interprofessional healthcare team; and 3) utilize key TeamSTEPPS tools with an interprofessional healthcare team. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Students must have third year professional standing in the School of Pharmacy. Students must have successfully completed PHPR 663.

**PHPR 601. Advanced Pharmacy Practice Experience 1. 4 Credits.**
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an "Excellent", "Satisfactory", or "Unsatisfactory" grading basis.

**PHPR 602. Advanced Pharmacy Practice Experience 2. 4 Credits.**
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an "Excellent", "Satisfactory", or "Unsatisfactory" grading basis.

**PHPR 603. Advanced Pharmacy Practice Experience 3. 4 Credits.**
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an "Excellent", "Satisfactory", or "Unsatisfactory" grading basis.

**PHPR 604. Advanced Pharmacy Practice Experience 4. 4 Credits.**
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in
these experiences for optimal learning. This course is graded using an "Excellent", "Satisfactory", or "Unsatisfactory" grading basis. Prerequisite: Students must have fourth year professional standing in the School of Pharmacy.

PHPR 608. Advanced Pharmacy Practice Experience 8. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an "Excellent", "Satisfactory", or "Unsatisfactory" grading basis. Prerequisite: Students must have fourth year professional standing in the School of Pharmacy.

PHPR 609. Advanced Pharmacy Practice Experience 9. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an "Excellent", "Satisfactory", or "Unsatisfactory" grading basis. Prerequisite: Students must have fourth year professional standing in the School of Pharmacy.

PHPR 610. Advanced Pharmacy Practice Experience 10. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in nine pharmacy practice experience rotations (PHPR 601-609). PHPR 610 is reserved for students requiring a remedial experiential rotation. This course is graded using an "Excellent", "Satisfactory", or "Unsatisfactory" grading basis. Prerequisite: Students must have fourth year professional standing in the School of Pharmacy.

PHPR 613. Pharmacoeconomics and Health Outcomes. 2 Credits.
A course to foster an understanding of economic, financial and outcome principles that drive the demand and supply of medical care in the US. Economic logic behind decisions made by patients, physicians, hospitals, managed care organizations, and governments will be covered. Students completing this course should be able to identify the drivers of the health economy, identify different types of pharmacoeconomic evaluations, critically analyze pharmacoeconomic and outcome literature, and apply economic principles to pharmaceutical care. Prerequisite: Students must have third year professional standing in the School of Pharmacy.

PHPR 614. Pharmacy Management. 3 Credits.
A course designed to provide knowledge and skills to effect efficient and effective pharmacy management. This will include foundations in financial management, inventory control, purchasing, cost-effective drug utilization, quality management, pharmacoeconomics, and human resource management.

PHPR 618. Hospital and Health-System Pharmacy. 1 Credits.
Introduction to pharmacy services within health-system pharmacies with an emphasis on medication distribution systems, parenteral and sterile products, clinical pharmacy practice and other services. Prerequisite: Must be accepted to the Pharmacy program.

PHPR 619. Health Care Systems and Informatics. 3 Credits.
This course is an introduction to the organization, financing, and delivery of health care services with a focus on the U.S. health care system. Course content addresses the following questions: how do we evaluate the health care sector, where is health care provided, how is health care financed, what are the characteristics of health care providers (individuals and institutions), what influences the performance of the health care sector, and what lies in the future for health care delivery. The purpose of the course is to prepare pharmacy students for non-clinical aspects of their practice sites. Enrollment limited to pharmacy majors. Prerequisite: Students must have first year professional standing in the School of Pharmacy.

PHPR 620. Ethical, Legal, and Cultural Issues in Patient Care. 2 Credits.
This course provides an introduction to the fundamentals of law and ethics as they apply to the practice of pharmacy. Course sessions will focus on ethical expectations of the profession, principles and issues in medical and pharmacy ethics, and laws that govern medication dispensing.

PHPR 621. Pharmacy Law. 2 Credits.
A course developed to increase students' knowledge and understanding of laws that regulate the pharmacy profession. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must be in their third professional year standing in the School of Pharmacy and eligible for APPE rotations at the conclusion of the semester.

PHPR 624. Pharmacoepidemiology and Public Health. 2 Credits.
Pharmacy profession has a unique and critical opportunity and responsibility to contribute to the improvement of population health. Public health is a broader discipline that encompasses population health with a variety of other areas, including but not limited to epidemiology, cultural competence, health promotion, disease prevention, and drug safety. Pharmacoepidemiology is the application of the principles of epidemiology to the study of medications and their effects. Considerations are centered on providing beneficial or adverse effects of medication use in large populations and making relevant inferences from essential analytical research designs used in public health. Using population-based-care approach, students will adopt and fulfill public health roles and activities. This course provides a broad introduction to the principles of pharmacoepidemiology and public health with a focus on applications in the field of pharmacy. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have P3 standing in the School of Pharmacy.

PHPR 629. Research Design and Biostatistics. 2 Credits.
This course reviews study designs and statistical methods commonly used in primary medical literature. In collaboration with other courses in the curriculum, this course prepares students to interpret and apply primary literature during patient care, collect and analyze data, and maintain clinical competency throughout their professional career in pharmacy. Following completion of this course, students should be able to identify or select appropriate research methods and study designs; collect, summarize and interpret research data; understand basic statistical concepts; identify or select appropriate statistical tests for hypothesis
testing; conduct and interpret the results of statistical tests; and evaluate
the validity and reliability of published research studies.

PHPR 630. Drug Information and Literature Evaluation. 1 Credits.
This course will review the fundamental tools used to identify drug
information in primary, secondary and tertiary resources. In addition,
students will learn to assess published literature, utilize electronic
resources, and learn to formulate a response to drug information
questions. Following completion of this course, students will be able
to understand the strengths and weaknesses of the drug information
resources and to apply drug information skills to clinical practice relevant
to patient care. Prerequisite: Successful completion of PHPR 629 and
Fifth year standing (P3 student).

PHPR 635. Problems in Pharmacy Practice. 1-5 Credits.
A course designed for the study of special topics in pharmacy practice. A
research paper will be required. Prerequisite: Consent of instructor.

PHPR 661. Pharmacotherapy I. 4 Credits.
A course dealing with the clinical applications of drug knowledge to
patient care. Drug interactions and patient counseling techniques will
be covered. Over-the-counter medications and herbals will also be
a significant portion of the course. Prerequisite: Students must be
admitted to the school of Pharmacy to enroll in this course. Student must
have first year professional standing in the School of Pharmacy and
successfully completed PHAR 510, PHAR 512 and concurrent enrollment
or successfully completed PHAR 515 and PHAR 517.

PHPR 662. Pharmacotherapy II. 4 Credits.
A course dealing with the clinical applications of drug knowledge to
patient care. Disease and drug knowledge will be applied to the design
and monitoring of therapeutic treatment plans for patients. Prerequisite:
Students must be admitted to the school of Pharmacy and have
successfully completed PHPR 661 and PHAR 515 and PHAR 517 to
enroll in this course.

PHPR 663. Pharmacotherapy III. 4 Credits.
A course dealing with the clinical applications of drug knowledge to
patient care. Disease and drug knowledge will be applied to the design
and monitoring of therapeutic treatment plans for patients. Prerequisite:
Students must be admitted to the school of Pharmacy to enroll in
this course. Student must have second year professional standing in
the School of Pharmacy and successfully completed PHPR 662 and
PHAR 520.

PHPR 664. Pharmacotherapy IV. 4 Credits.
A course dealing with the clinical applications of drug knowledge to
patient care. Disease and drug knowledge will be applied to the design
and monitoring of therapeutic treatment plans for patients. Prerequisite:
Students must be admitted to the school of Pharmacy and have
successfully completed PHPR 663 and PHAR 525 to enroll in this course.

PHPR 665. Pharmacotherapy V. 4 Credits.
A course dealing with the clinical applications of drug knowledge to
patient care. Disease and drug knowledge will be applied to the design
and monitoring of therapeutic treatment plans for patients. Prerequisite:
Students must have third year professional standing in the School of
Pharmacy. Students must have successfully completed PHAR 530 and
PHPR 664.

PHPR 670. Clinical Assessment. 2 Credits.
This laboratory course will allow students to develop clinical assessment
skills necessary in the provision of pharmaceutical care to patients with
a variety of disease states. Students will combine physical assessment
skills, patient counseling skills, and pharmacotherapy knowledge and
apply this information to patient care related activities in various clinical
settings. Students will apply their skills using various practice models
that include medication therapy management, collaborative drug therapy
management, and interprofessional healthcare teams. The lab component
will require students to meet between 1:00 to 5:00 PM on either Monday,
Tuesday, or Wednesdays. In addition, there is a required Thursday
discussion section. A detailed schedule of lab meeting dates and times
will be provided in the syllabus. Prerequisite: Students must be admitted
to the School of Pharmacy to enroll in this class. Students must pass
PHPR 664 to be eligible to complete PHPR 670.

PHPR 690. Research in Pharmacy Practice. 1-5 Credits.
Students will conduct original research in a laboratory, educational, or
clinical research setting under the supervision of department faculty.
Prerequisite: Students must be admitted to the School of Pharmacy to
enroll in this class.

PHPR 845. Professional Communications and Leadership. 2 Credits.
A course designed to give the graduate student a practical experience in
areas of professional communications such as administrative proposals,
grants, letters, memos, poster presentations, and written papers. The
course focuses on the different kinds of communications required to relate
to other health care professionals. Prerequisite: Consent of instructor.

PHPR 855. Economic Evaluation of Health Care Programs and
Services. 3 Credits.
The course will provide students with an overview and appraisal of the
"state-of-the-art" in the evaluation of health care programs and services
(with a special emphasis on pharmaceutical programs, services, and
products). The purpose of the course is to provide the student with the
tools to conduct economic rather than general evaluation of health care
programs and services. There will be some discussion of theoretical
concepts, but the major emphasis will be on practical methodological
issues in economic evaluation of pharmaceutical programs. The course
integrates the perspectives of pharmaceutical and health care technology
assessment, managed care, outcomes research, and public health. The
main topics covered in the course include: cost, cost-minimization,
cost-effectiveness, cost-utility, and cost-benefit analyses.

PHPR 860. Seminar in Pharmacy Practice. 1 Credits.
Research reports, reviews, and/or presentations on the current status of
various aspects of pharmacy practice. Prerequisite: Consent of instructor.

PHPR 865. Advanced Institutional Pharmacy Services I. 1.5 Credits.
Advanced Institutional Pharmacy Services (I) includes activities involving
administrative and behavioral science techniques to manage the
business of pharmacy practice. Topics and information will be borrowed
from the disciplines of business management, accounting, economics,
finance, marketing, operations research and applied to the practice of
pharmacy. Upon completion of the course, students should be able
to explain, understand and apply pharmacy practice management
techniques in the following general areas: human resource
management techniques in the following general areas: business management,
accounting, economics, finance, marketing, operations research and applied to
the practice of pharmacy. Upon completion of the course, students should be able
to explain, understand and apply pharmacy practice management
techniques in the following general areas: human resource
management techniques in the following general areas: business management,
accounting, economics, finance, marketing, operations research and applied to
the practice of pharmacy. Upon completion of the course, students should be able
to explain, understand and apply pharmacy practice management
techniques in the following general areas: human resource
management techniques in the following general areas: business management,
accounting, economics, finance, marketing, operations research and applied to
the practice of pharmacy. Upon completion of the course, students should be able
to explain, understand and apply pharmacy practice management
techniques in the following general areas: human resource
management techniques in the following general areas: business management,
accounting, economics, finance, marketing, operations research and applied to
the practice of pharmacy. Upon completion of the course, students should be able
to explain, understand and apply pharmacy practice management
techniques in the following general areas: human resource
management techniques in the following general areas: business management,
accounting, economics, finance, marketing, operations research and applied to
the practice of pharmacy. Upon completion of the course, students should be able
to explain, understand and apply pharmacy practice management
techniques in the following general areas: human resource
management, clinical services management, specialty pharmacy services and technology management. Prerequisite: Consent of Instructor.

PHPR 899. Research in Pharmacy Practice. 1-6 Credits.
Original investigation in the area of pharmacy practice. Prerequisite: Consent of instructor.

Pharmacy Courses

PHAR 500. Introduction to Pharmacy. 1 Credits.
This course is designed to introduce pharmacy students to the profession of pharmacy, potential career pathways, and available academic and post-doctoral educational opportunities. Additionally, topics such as professionalism, leadership, professional advocacy, empathy, cultural competency, self-directed learning, interprofessional education, and professional communication will be discussed. Students will receive instruction and fulfill the prerequisites for their Introductory Pharmacy Practice Experiences (IPPE) occurring in the summer semesters of the PharmD program.

PHAR 509. History of Pharmacy Elective. 1 Credits.
This course is comprised of a survey of historical highlights of the development of Pharmacy as a discipline. The course will cover early antecedents of pharmacy, development of the discipline in Europe and the United States, the development of professional organizations, standards, education, and literature, economic development, and the pharmacists' contributions to community service, science, and the industry. There will be a mix of some lectures, discussion, assigned readings, and short papers. Prerequisite: Students must have first, second or third year professional standing in the School of Pharmacy.

PHAR 510. Pharmacy Skills I-A. 1 Credits.
The Professional Activities Lab curriculum is a team-taught, 6-semester, 10-credit hour laboratory sequence designed to prepare students to perform Entrustable Professional Activities (EPAs) for pharmacy practice prior to milestone examinations and experiential rotations. Lab activities will focus on students' exposure to, hands-on-practice of, and competency of a variety of pharmacy-specific skills. The P1 year will focus on community pharmacy related skills and activities, the P2 year will focus on institutional pharmacy skills, and the P3 year will focus on advanced pharmacy practice skills across multiple settings. As students progress through the 6-semester sequence, they will be expected to increasingly combine physical assessment, communication, patient counseling, and drug information skills, along with applying pharmacotherapy knowledge towards patient-care related activities. A variety of teaching and assessment modalities will be used including but not limited to podcasts, online quizzes, active-learning games, role playing, standardized patients, high-fidelity simulator mannequins, online modules, and traditional exams. Prerequisite: Students must have first, second or third year professional standing in the School of Pharmacy.

PHAR 512. Pharmacy Skills I-B. 1 Credits.
The Professional Activities Lab curriculum is a team-taught, 6-semester, 10-credit hour laboratory sequence designed to prepare students to perform Entrustable Professional Activities (EPAs) for pharmacy practice prior to milestone examinations and experiential rotations. Lab activities will focus on students' exposure to, hands-on-practice of, and competency of a variety of pharmacy-specific skills. The P1 year will focus on community pharmacy related skills and activities, the P2 year will focus on institutional pharmacy skills, and the P3 year will focus on advanced pharmacy practice skills across multiple settings. As students progress through the 6-semester sequence, they will be expected to increasingly combine physical assessment, communication, patient counseling, and drug information skills, along with applying pharmacotherapy knowledge towards patient-care related activities. A variety of teaching and assessment modalities will be used including but not limited to podcasts, online quizzes, active-learning games, role playing, standardized patients, high-fidelity simulator mannequins, online modules, and traditional exams. Prerequisite: Students must have first, second or third year professional standing in the School of Pharmacy.

PHAR 514. Scientific Writing for the Health Professional. 2 Credits.
Communicating research plans and experimental finding is a critical skill for health care professionals working in a research environment, and successful communication depends on clarity of thought and careful use of language. This course is intended for 3rd professional (P3) year students who are seeking residency and will need to write research proposals and abstracts, as well as prepare effective posters and presentations. It is an intensive course with multiple writing assignments. Students are expected to participate fully, and individual feedback and guidance on writing will provided by the instructor. Graded on a satisfactory/fail basis. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must be in their third professional year (P3).

PHAR 515. Pharmacy Skills II-A. 1 Credits.
The Professional Activities Lab curriculum is a team-taught, 6-semester, 10-credit hour laboratory sequence designed to prepare students to perform Entrustable Professional Activities (EPAs) for pharmacy practice prior to milestone examinations and experiential rotations. Lab activities will focus on students' exposure to, hands-on-practice of, and competency of a variety of pharmacy-specific skills. The P1 year will focus on community pharmacy related skills and activities, the P2 year will focus on institutional pharmacy skills, and the P3 year will focus on advanced pharmacy practice skills across multiple settings. As students progress through the 6-semester sequence, they will be expected to increasingly combine physical assessment, communication, patient counseling, and drug information skills, along with applying pharmacotherapy knowledge towards patient-care related activities. A variety of teaching and assessment modalities will be used including but not limited to podcasts, online quizzes, active-learning games, role playing, standardized patients, high-fidelity simulator mannequins, online modules, and traditional exams. Prerequisite: Students must have first year professional standing in the School of Pharmacy. Students must have successfully completed PHAR 510 and PHAR 512; and current enrollment or successful completion of PHAR 517 and PHPR 661.

PHAR 516. Oral Presentations for the Health Professional. 1 Credits.
Communicating research plans and experimental findings is a critical skill for health care professionals working in a research environment, and a successful oral presentation depends on clear thinking and careful slide design to tell a story. This course is intended for 3rd year professional (P3) pharmacy students who are seeking residency and will need to prepare effective presentations. It is an intensive course with successive slide drafts and presentations. Students are expected to participate fully, and individual feedback and guidance on presentations will be provided by the other students and by the instructor. Graded on a satisfactory/fail basis. Prerequisite: Students must have third year professional standing in the School of Pharmacy. Students must have successfully completed PHAR 514.

PHAR 517. Pharmacy Skills II-B. 1 Credits.
The Professional Activities Lab curriculum is a team-taught, 6-semester, 10-credit hour laboratory sequence designed to prepare students to perform Entrustable Professional Activities (EPAs) for pharmacy practice...
practice prior to milestone examinations and experiential rotations. Lab activities will focus on students’ exposure to, hands-on-practice of, and competency of a variety of pharmacy-specific skills. The P1 year will focus on community pharmacy related skills and activities, the P2 year will focus on institutional pharmacy skills, and the P3 year will focus on advanced pharmacy practice skills across multiple settings. As students progress through the 6-semester sequence, they will be expected to increasingly combine physical assessment, communication, patient counseling, and drug information skills, along with applying pharmacotherapy knowledge towards patient-care related activities. A variety of teaching and assessment modalities will be used including but not limited to podcasts, online quizzes, active-learning games, role playing, standardized patients, high-fidelity simulator mannequins, online modules, and traditional exams. Prerequisite: Students must have first year professional standing in the School of Pharmacy. Students must have successfully completed PHAR 510 and PHAR 512; and current enrollment or successful completion of PHAR 515 and PHPR 661.

PHAR 520. Pharmacy Skills III. 1 Credits.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing, and patient counseling. Prerequisite: Students must be admitted to the School of Pharmacy and have successfully completed PHPR 661 and PHAR 515 and PHAR 517 and have successfully completed or be concurrently enrolled in PHPR 662 to enroll in this course.

PHAR 525. Pharmacy Skills IV. 1 Credits.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing, and patient counseling. Prerequisite: Students must have second year professional standing in the School of Pharmacy and successfully completed PHPR 662, PHAR 520 and current enrollment or successful completion of PHPR 663.

PHAR 530. Pharmacy Skills V. 1 Credits.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing, and patient counseling. Prerequisite: Students must be admitted to the school of Pharmacy and have successfully completed PHPR 663 and PHAR 525 and have successfully completed or be concurrently enrolled in PHPR 664 to enroll in this course.

PHAR 535. Pharmacy Skills VI. 1 Credits.
Exercises that reinforce the concepts taught in pharmacy practice, pharmaceutical chemistry, medicinal chemistry, and pharmacology courses. Includes exercises in compounding, dispensing, and patient counseling. Prerequisite: Students must have third year professional standing in the School of Pharmacy. Students must have successfully completed PHAR 530 and PHPR 664; and current enrollment or successful completion of PHAR 537.

PHAR 537. Pharmacy Skills VII. 1 Credits.
This laboratory course will allow students to develop clinical assessment skills necessary in the provision of pharmaceutical care to patients with a variety of disease states. Students will combine physical assessment skills, patient counseling skills, and pharmacotherapy knowledge and apply this information to patient care related activities in various clinical settings. Students will apply their skills using various practice models that include medication therapy management, collaborative drug therapy management, and interprofessional healthcare teams. The lab component will require students to meet between 1:00 to 5:00PM on either Monday, Tuesday, or Wednesdays. Prerequisite: Students must have third year professional standing in the School of Pharmacy. Students must have successfully completed PHAR 530 and PHPR 664; and current enrollment or successful completion of PHAR 535.

PHAR 550. Introductory Pharmacy Practice Experience - Community. 4 Credits.
A required four credit hour experiential course involving 160 hours of on-site experiential education. The course is designed to provide the student pharmacist with exposure to the practice of pharmacy in either an independent community or chain pharmacy in either a rural or urban setting within the state of Kansas. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have successfully completed PHAR 500.

PHAR 560. Introductory Pharmacy Practice Experience - Institutional. 4 Credits.
A required four credit hour experiential course years involving 160 hours of on-site experiential education. The course is designed to provide the student pharmacist with exposure to the practice of pharmacy in an institutional health-system (hospital) environment in either a rural or urban setting within the state of Kansas. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy.

PHAR 599. Advanced Infectious Disease - Translational Case Studies. 2 Credits.
This course is an interdepartmental elective focusing on advanced clinical decision-making within the field of infectious diseases. Utilizing clinical infectious disease cases based off of real-life patients, students will assess and make therapeutic recommendations via team-based active-learning exercises. These activities aim prepare students for advanced pharmacy practice and residency experiences in acute care settings with complicated and challenging patients, by providing students hands-on instruction in reading and assessing patient data including laboratory values and radiology reports, following patient progress over multiple days and adjusting patient care plans based on new unforeseen data, writing infectious diseases-specific SOAP notes, orally presenting patients using presentation styles expected for 4th year APPE rotations and residency rotations, and using basic scientific principles when determining appropriate courses of patient care. Additional professional preparation in "soft skills" will be provided. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must be in their third professional year (P3).

PHAR 600. Hospital and Health-System Pharmacy. 1 Credits.
Introduction to pharmacy services within health-system pharmacies with an emphasis on medication distribution systems, parenteral and sterile products, clinical pharmacy practice and other services. Prerequisite: Must be accepted to the Pharmacy program.

Doctor of Pharmacy

The School of Pharmacy

Since its founding in 1885, the University of Kansas School of Pharmacy (http://pharmacy.ku.edu) has been a leader in pharmacy education. Since 1996, the school has offered only the Doctor of Pharmacy degree as the entry-level practice degree. The curriculum gives the student the knowledge, skills, and ability required of the pharmacy practitioner; it is comprehensive and produces a highly competent general practitioner.

About 60 full-time faculty members teach in the professional Doctor of Pharmacy program and in the graduate programs. 3 departments (Pharmacology and Toxicology, Medicinal Chemistry, and Pharmaceutical
Applying students should meet the following requirements:

Requirements

- Undergraduate application for transfer admission. International students schools other than KU. Students not yet at KU should submit an
- The required pre-pharmacy curriculum may be completed at accredited
- They should have completed or be on pace to complete the 68 credit
- They should apply via PharmCAS to the School of Pharmacy during
- Pre-pharmacy students are advised by the Undergraduate Advising
- The advisor serves continuously during the student’s tenure in the school. Students are expected to meet with their advisors at least once each semester and are encouraged to meet more often to discuss academic issues and career and professional development.
- Pre-pharmacy students are strongly encouraged to make appointments in the Deans office of the School of Pharmacy, 2010 Becker Drive, Room 2050, for co-advising services and when they have questions concerning pharmacy course requirements or appropriate electives or any other concerns about their preparation for pharmacy admission. Pre-pharmacy students are also encouraged to participate in the pre-pharmacy club. Email pharmacy@ku.edu to request to be added to the club’s e-mail distribution list.

Undergraduate Admission to KU

Prospective students must be eligible for admission to the University of Kansas as an undergraduate student. See the Office of Admissions (http://admissions.ku.edu/), KU Visitor Center, 1502 Iowa St., Lawrence, KS 66044-7576, 785-864-3911, adm@ku.edu for information regarding requirements. Prospective pharmacy students should declare prepharmacy as the major field of study. Visit the Office of International Support Services (http://iss.ku.edu/) for information about international admissions.

Undergraduate Admission to the School of Pharmacy

Students should apply via PharmCAS to the School of Pharmacy during the application period (late July through February 1). When they apply, they should have completed or be on pace to complete the 68 credit hours of required pre-pharmacy courses by August of the following fall. The required pre-pharmacy curriculum may be completed at accredited schools other than KU. Students not yet at KU should submit an undergraduate application for transfer admission. International students should apply for undergraduate admission via International Admissions.

Requirements

Applying students should meet the following requirements:

- Complete the required pre-pharmacy courses (http://pharmacy.ku.edu/academics/) and document the credit with official transcript(s) sent to KU Admissions.
- Maintain a grade-point average (GPA) of 2.50 or higher, overall and in the sciences. This is the minimum GPA acceptable for admission; the average GPA is generally much higher: approximately 3.50.
- Complete the PharmCAS application at www.PharmCAS.org (http://www.pharmcas.org/). To complete the PharmCAS application, one will need:
  - Official transcripts sent directly to PharmCAS from each postsecondary institution attended.
  - Contact information for individuals who will provide letters of recommendation (evaluations) directly to PharmCAS.
  - Submit application payment directly to PharmCAS.
  - PCAT scores are not required; only considered supplemental.
- Supplemental application: transfer students and international students not already attending KU must also submit the corresponding KU undergraduate admission application.
  - An interview is scheduled with select applicants.

Procedures

The School of Pharmacy admissions committee, consisting of at least 2 faculty members from each department and representation from the Deans office, determines admissions. A record documenting the required materials is created by each applicant through PharmCAS. Consideration is given to a student’s overall GPA, science GPA, and GPA within the pre-pharmacy curriculum. The average GPA of past admits is approximately 3.50. Good scholarship is considered a predictor of success in the pharmacy curriculum. However, good communication skills, emotional maturity, leadership ability, professional attitude, an understanding of the pharmacy profession, work experience in a pharmacy, and interest in service to the community are also important. These additional skills may outweigh very high grades or choice of pre-pharmacy courses. Admission is competitive and depends on the number of applications received and the qualifications of the applicants.

Applications are considered and admissions are determined on a rolling basis during the PharmCAS application period. Our preferred application deadline is February 1, however the school may consider later applications. Most admission decisions are made by March. As a condition of matriculation into the KU School of Pharmacy, all admitted students must successfully clear an investigative criminal background check and successfully obtain pharmacy intern status with the Kansas Board of Pharmacy. Successful clearance of the background check and attainment of pharmacy intern status with the Board of Pharmacy is required to enroll in the School of Pharmacy and to participate in curricular and extracurricular curricular activities including interacting with patients. Instructions for completing the background check are provided with the letter of acceptance.

Doctor of Pharmacy Degree Requirements

Prepharmacy Requirements

The Doctor of Pharmacy degree requires completion of all of the required pre-pharmacy and professional courses and a total of 207 credit hours with an overall and professional grade-point average of at least 2.5.

The pre-pharmacy requirements of 67 credit hours include a year each of English, general chemistry, and organic chemistry. Other required courses include calculus, interpersonal communication, molecular and cellular biology, microbiology, human anatomy, physiology, statistics, physics; and 12 credit hours of general studies that satisfy the following KU Core Curriculum requirements: goal 3 humanities; goal 3 social science; goal
4 outcome 1; and goal 4 outcome 2. The KU Core Curriculum goals 1 through 4 must be satisfied during the completion of the pre-pharmacy curriculum requirements. KU Core goals 5 and 6 are satisfied during the professional curriculum.

Students are expected to have or to develop basic competence with personal computers, including word processing and spreadsheet software. All students are required to personally own electronic devices that are capable of running software to complete some class assignments, assessments, as well as for professional work assignments. Information regarding this technology requirement will be provided to matriculating students.

Courses in other professional schools (e.g., engineering, education) may not be counted toward the degree unless the student can show that such courses are directly relevant to pharmacy. For example, a course in business law taken in the business school may count (consult with the office of the dean in the school of pharmacy).

**Prepharmacy Curriculum**

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ENGL 101</td>
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<td>ENGL 102</td>
<td>3</td>
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<tr>
<td>CHEM 130</td>
<td>5</td>
<td>CHEM 135</td>
<td>5</td>
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<tr>
<td>BIOL 150</td>
<td>3</td>
<td>BIOL 240</td>
<td>3</td>
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<tr>
<td>MATH 115</td>
<td>3</td>
<td>MATH 365 (approved alternatives include BIOL 570, PSYC 210, DSCI 202)</td>
<td>3</td>
</tr>
</tbody>
</table>

General studies

| 3 PHSX 114 | 4 |

Total Hours 17

**Year 2**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CHEM 330</td>
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<td>CHEM 335</td>
<td>3</td>
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<tr>
<td>CHEM 331</td>
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<td>CHEM 336</td>
<td>2</td>
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<tr>
<td>BIOL 400</td>
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<td>BIOL 546</td>
<td>3</td>
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<tr>
<td>BIOL 402</td>
<td>2</td>
<td>BIOL 647</td>
<td>2</td>
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<tr>
<td>COMS 130 (approved alternatives include COMS 131-132, JOU 150, THR 120, and PHIL 150)</td>
<td>3</td>
<td>General studies</td>
<td>6</td>
</tr>
</tbody>
</table>

General studies

| 3 | PHSX 114 | 4 |

Total Hours 16

**Total Hours 67**

1 Select a course that satisfies KU Core Curriculum requirements: goal 3 humanities; goal 3 social science; goal 4 outcome 1; or goal 4 outcome 2. All of the above need completed.

**Professional Requirements**

The Doctor of Pharmacy degree requires completion of all the required prepharmacy and professional courses and a total of 207 credit hours with an overall and professional grade-point averages of 2.5.

The curriculum includes instruction in the 3 basic sciences: medicinal chemistry, pharmaceutical chemistry, and pharmacology and toxicology. It also includes courses in the various aspects of pharmacy practice, including the health care system, law, and emerging roles for pharmacy practitioners. The curriculum integrates course material among departments. Assignments within the curriculum foster development of independent learning, communication skills, problem solving, and professional motivation. The professional curriculum includes a requirement that each student must complete a minimum of 4 elective credit hours within School of Pharmacy. One credit hour must be completed from the pharmacy practice department, 1 credit hour must be completed from a basic science department (either medicinal chemistry, pharmaceutical chemistry, and pharmacology and toxicology) and the remaining two credit hours are left to the students discretion.

Students enroll in introductory pharmacy practice experiences during the summer following the first and second years. These experiences are located throughout the state of Kansas and vary in the type of professional setting.

The final year of the curriculum consists of nine 4-week advanced pharmacy practice experiences with preceptors at pharmacy practice sites throughout Kansas. Students must have their own transportation to reach their assigned sites. Housing at these sites is also the student's responsibility.

**Professional Program**

The following curriculum is applicable to the graduating class of 2019 (matriculating in the fall of 2015) and later. See [http://pharmacy.ku.edu/academics](http://pharmacy.ku.edu/academics) for the curriculum for the graduating classes of 2016, 2017, and 2018.

**Year 1**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>MDCM 601</td>
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<td>MDCM 603</td>
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<tr>
<td>P&amp;TX 630</td>
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<td>P&amp;TX 631</td>
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<tr>
<td>PHAR 512</td>
<td>1</td>
<td>PHPR 541</td>
<td>0</td>
</tr>
</tbody>
</table>

Total 16

| 17 | 16 | 4 |

1 Elective option (1 of 4 required credits)

| BSOPS awarded | 17 | 16 | 4 |
Upon satisfactory completion of the program requirements, students will receive a KU Undergraduate Research Experience Program Certificate. The PRCP, students accepted into the Pharm.D. Research Certificate Program (PRCP), will receive intensive research training in a laboratory or clinical setting, and will complete research-related curricular requirements. PRCP will receive intensive research training in a laboratory or clinical setting, and will complete research-related curricular requirements. Students accepted into the Pharm.D. Research Certificate Program (PRCP) will be matched to a faculty research mentor. The mentor and student will draft and sign a program contract that outlines the academic and research plans and workload expectations. This contract will be provided to the program coordinator. During the remaining time in the Pharm.D. program student will satisfy KU’s Undergraduate Research Certificate (prior to being awarded the BS in Pharmaceutical Studies degree) and complete 15 credit hours of research credit (MDCM 690 or 692, P&TX 694 or 698, PHCH 690 or 694, or PHPR 635 or 690 which represents ~ 900 clock hours of effort that may be spread across seven semesters). Four of the 15 research credit hours will be used to satisfy the Pharm.D elective coursework. Students will complete the following courses and activities:

### PharmD Research Certificate Program

#### PharmD Research Certificate Program

The Pharm.D. Research Certificate Program (PRCP) is designed for Pharm.D. students who excel in their Pharm.D. courses and have a strong desire and commitment to gain extensive experience and training in research. In the past, students and faculty found each other for research projects through informal methods. The PRCP aims to facilitate this interaction by pairing interested students with interested faculty in a more formal arrangement. Students accepted into the PRCP will receive intensive research training in a laboratory or clinical setting, and will complete research-related curricular requirements. Upon satisfactory completion of the program requirements, students will receive a KU Undergraduate Research Experience Program Certificate on their BSPS transcript and a Pharm.D. Research Certificate on their Pharm.D. transcript, and these certificates are expected to enhance their applications to post-graduate programs.

### Admissions

The Pharm.D. Research Certificate Program (PRCP) will be introduced to all P1 students in the fall during one of the student seminars. To apply for the PRCP, students are required to have a minimal GPA of 3.0 (School of Pharmacy GPA). Students interested in the program should prepare their application package that includes cover letter, CV, description of research interests, list of 3 potential research mentors and brief description of their research. Application package should be sent to Dr. Judy Wu (judywu@ku.edu (Judywu@ku.edu)) before December 31.

At the start of the P1 spring semester, students selected to participate in the program will be matched to a faculty research mentor. The mentor and student will draft and sign a program contract that outlines the academic and research plans and workload expectations. This contract will be provided to the program coordinator. During the remaining time in the Pharm.D. program student will satisfy KU’s Undergraduate Research Certificate (prior to being awarded the BS in Pharmaceutical Studies degree) and complete 15 credit hours of research credit (MDCM 690 or 692, P&TX 694 or 698, PHCH 690 or 694, or PHPR 635 or 690 which represents ~ 900 clock hours of effort that may be spread across seven semesters). Four of the 15 research credit hours will be used to satisfy the Pharm.D elective coursework. Students will complete the following courses and activities:

- **P1 Spring:**
  - Conduct research as outlined in their program contract for academic credit
  - Attend KU’s Undergraduate Research Symposium

- **P1 Summer:**
  - Conduct research as outlined in their program contract. If a student is paid a summer stipend, academic credit may not be awarded.

- **P2 Fall:**
  - Conduct research as outlined in their program contract for academic credit

- **P2 Spring:**
  - Conduct research as outlined in their program contract for academic credit
  - Present research at KU’s Undergraduate Research Symposium
  - Complete KU’s Undergraduate Research Certificate requirements (to be noted on BSPS transcript)

- **P2 Summer:**
  - Conduct research as outlined in their program contract. If a student is paid a summer stipend, academic credit may not be awarded.

- **P3 Fall:**
  - PHAR 514 Scientific Writing for the Healthcare Professional (2 credits)
  - Conduct research as outlined in their program contract for academic credit
P3 Spring:
- PHAR 516 Scientific Presentations for the Healthcare Professional (1 credit)
- Attend Mossberg Honors Research Symposium
- Conduct research as outlined in their program contract for academic credit

P4 Year:
- Enroll in two Advanced Pharmacy Practice Experiences (PHPR 601-609) involving research (8 credits in total)
- Present (poster or oral) at the Mossberg Honors Research Symposium
- PharmD Research Certificate completion noted on PharmD transcript

Department of Medicinal Chemistry

Medicinal Chemistry Graduate Programs

Medicinal chemistry is an interdisciplinary field at the interface of chemistry and biology. It approaches important biological and health-related problems through application of fundamental principles of organic chemistry, biochemistry, natural product chemistry, and molecular pharmacology. Graduates are expected to be thoroughly familiar with the chemistry of organic compounds, including their synthesis and biosynthesis, their reactivity, and their interactions with and alteration by living systems. Research is at the heart of the program, and the department’s research activities encompass many areas of modern medicinal chemistry.

Currently, the department has 8 full-time faculty members, 15 - 20 graduate students on an average, about 10-15 postdoctoral associates, numerous undergraduate researchers, and an outstanding technical staff. The department is recognized nationally and internationally, and generally, our graduates pursue successful careers in the pharmaceutical industry and in academia.

Facilities

The department is well equipped for both chemical and biochemical research and has research facilities for about 50 graduate students, postdoctoral associates, and research technicians. Laboratory space in the department provides research laboratories for chemical synthesis and biochemical research. Faculty are housed in modern research buildings on west campus (Shankel Structural Biology Center) and main campus (Integrated Science Building). The department has an excellent complement of modern spectroscopic, biochemical, and chromatographic instrumentation, and other specialized research instrumentation is available through cooperative arrangements with other departments and core laboratories.

Advanced instrumentation and facilities are available through KU’s Molecular Structures Group (https://msg.ku.edu) (MSG). MSG laboratories include the Biochemical Research Service Laboratory (BRSL), the Mass Spectrometry Laboratory, the Nuclear Magnetic Resonance Laboratory, the Molecular Graphics and Modeling Laboratory, the X-ray Crystallography Laboratory, and the Protein Structure Laboratory (dedicated to macromolecular X-ray crystallography) with more than $10 million in instrumentation.

The Shankel Structural Biology Center (SBC) offers new research opportunities for medicinal chemists interested in protein and nucleic acid structure and combinatorial synthesis; it also houses a 800-MHz NMR. The Analytical Proteomics Laboratory, which combines activities of the Mass Spectrometry Lab and BRSL to create a collaborative environment for protein handling, protein mass spectrometry, and bioinformatics, is in SBC. In the same building, the High Throughput Screening Laboratory (http://www.hts.ku.edu/) has integrated and automated robotics equipment for carrying out biochemical and cell-based assays and a chemical library of more than 100,000 compounds with diverse structures and drug-like properties for biological screening. The service laboratories have professional staff that provides training in specialized research techniques in addition to their service functions.

Department of Medicinal Chemistry

Del Shankel Structural Biology Center (SBC)
2034 Becker Drive, Room 1089
Lawrence, KS 66047
785-864-4495
medchem@ku.edu
http://www.medchem.ku.edu/

Barbara N. Timmermann, Chair
785-864-4495

Mark Farrell, Graduate Advisor
785-864-4495
mdcmdgs@ku.edu

Courses

MDCM 601. Medicinal Biochemistry I. 3 Credits.
A study of the biochemical principles of macromolecular structure and function, molecular communication, and the metabolism of nutrients and xenobiotics as applied to problems of medicinal and pharmacological significance.

MDCM 603. Medicinal Biochemistry II. 3 Credits.
A study of the biochemical principles of macromolecular structure and function, biosynthesis, molecular communication, and the metabolism of nutrients and xenobiotics as applied to problems of medicinal and pharmacological significance. Prerequisite: Students must have first year professional standing in the School of Pharmacy. Students must have successfully completed MDCM 601.

MDCM 606. Phytomedicinal Agents. 1 Credit.
This course will acquaint the pharmacy students with the current status of botanical use in the United States. A basic foundation will be provided so that the pharmacist can properly assess the appropriateness and usefulness of various phytomedicines and combinations in managing certain ailments with regard to efficacy, safety, potential toxicity, and potential herb-drug interactions. Prerequisite: Students must be admitted to the school or division of Pharmacy and have successfully completed MDCM 601 to enroll in this course.

MDCM 607. Clinical Pharmacognosy. 1 Credit.
The course will provide a technical background for understanding the scientific basis underlying the use of herbal medicines. This will be followed by practical information about the pharmacological and chemical properties as well as clinical uses of herbal medicines. Active student participation in discussing the properties of these non-prescription medicinals is expected. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy. Students must have successfully completed MDCM 601.
MDCM 625. Medicinal Chemistry I: Neuroeffector and Cardiovascular Agents. 4 Credits.
A study, from the molecular viewpoint, of the organic substances used as medicinal agents, including consideration of their origins, chemical properties, structure-activity relationships, metabolism and mechanisms of action; this course emphasizes drugs affecting the cardiovascular and central nervous systems. Prerequisite: Students must be admitted to the school or division of Pharmacy and have successfully completed MDCM 603 to enroll in this course.

MDCM 626. Medicinal Chemistry II: Homeostatic Agents. 4 Credits.
A continuation of MDCM 625 with special emphasis on anticancer, antiviral, antibacterial, antifungal, antidiabetic, anticholesterol, and steroidal drugs. Prerequisite: Students must have second year professional standing in the School of Pharmacy. Students must have successfully completed MDCM 625.

MDCM 690. Undergraduate Research. 1-5 Credits.
Research in medicinal chemistry. Students will be assigned to a laboratory research problem. Prerequisite: Consent of instructor.

MDCM 692. Problems in Medicinal Chemistry. 1-5 Credits.
This course encompasses original work on a laboratory problem of limited scope, honors reading assignments from medicinal chemistry literature, or in-depth discussions of assigned topics. Prerequisite: Consent of instructor.

MDCM 701. Advanced Medicinal Biochemistry I. 3 Credits.
A study of the principles of macromolecular structure and function, biosignaling, bioenergetics and metabolism, with an emphasis on the relationship between biochemistry and medicine. Prerequisite: Graduate standing or permission of instructor.

MDCM 703. Advanced Medicinal Biochemistry II. 3 Credits.
A study of the principles of basic enzymology, including chemical reactions, biosynthesis, and metabolism. In addition, the course will cover lipids, hormones, vitamins, and minerals. Prerequisite: Graduate standing or permission of instructor.

MDCM 710. Chemistry of Drug Action I. 4 Credits.
This course provides an overview of topics central to the understanding and practice of contemporary medicinal chemistry. It illustrates the interplay of anatomy and physiology with the organic-, bio- and analytical chemistry of drugs in the body. Topics covered include physiological mechanisms and disease processes; cell structure and function; basic intermediary metabolism; basic principles underlying drug action including the physicochemical properties of drugs and how these affect the interaction of drugs with living systems; chemical and biological manipulation of the absorption, distribution, metabolism and excretion of drugs and prodrugs; kinetics and inhibition of enzymes and transporters; quantitation and molecular modeling of drug binding to targets. Prerequisite: One year of organic chemistry, one semester of biochemistry, and one college-level course in biology.

MDCM 775. Chemistry of the Nervous System. 3 Credits.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as NURO 775, P&TX 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent.

MDCM 790. Chemistry of Drug Action II. 3 Credits.
A discussion of the principles of contemporary drug design with specific examples chosen from the original literature. This course covers the organic substances used as medicinal agents, including consideration of their origins, chemical properties, structure-activity relationships, metabolism and mechanisms of action. Prerequisite: Graduate standing or completion of MDCM 625 and MDCM 626.

MDCM 798. Master's Literature Seminar in Medicinal Chemistry. 1 Credits.
Literature seminar for graduate students in Spring of their 2nd year. Prerequisite: Graduate students in 2nd year of program.

MDCM 799. Research Seminar in Medicinal Chemistry. 1 Credits.
Reports by research students and discussions of developments in the field not covered in formal courses.

MDCM 801. Issues in Scientific Integrity. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. This course is open only to distance education students. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, P&TX 801, PHCH 801 and PHCH 802.)

MDCM 816. Careers in the Biomedical Sciences. 1 Credits.
Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as BIOL 816, CHEM 816, and PHCH 816.) Prerequisite: Permission of instructor.

MDCM 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.
This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion. (Same as BIOL 817/CHM 817/PHCH 817.) Prerequisite: Graduate student.

MDCM 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, CHEM 860 and PHCH 860.) Prerequisite: Permission of instructor.

MDCM 895. Research in Medicinal Chemistry. 1-12 Credits.
Hours and credit to be arranged.

MDCM 899. Master's Thesis. 1-12 Credits.
Hours and credit to be arranged. Independent investigation of a research problem of limited scope. Prerequisite: Consent of instructor.

MDCM 950. Advanced Topics in Medicinal Chemistry: ______. 1-3 Credits.
An in-depth discussion of topics of current interest to medicinal chemists. Prerequisite: Consent of instructor.

**MDCM 980. Proposal Preparation. 2 Credits.**
Presentation of a literature seminar and writing an original NIH-style research proposal concerning contemporary problems in medicinal chemistry. Prerequisite: Consent of instructor.

**MDCM 999. Doctoral Dissertation. 1-12 Credits.**
Hours and credit to be arranged. Original chemical research in the synthesis and development of medicinal agents, elucidation of the chemical mechanisms of drug action, drug metabolism, and drug toxicities.

## Master of Science in Medicinal Chemistry

### Medicinal Chemistry Graduate Programs

Medicinal chemistry is an interdisciplinary field at the interface of chemistry and biology. It approaches important biological and health-related problems through application of fundamental principles of organic chemistry, biochemistry, natural product chemistry, and molecular pharmacology. Graduates are expected to be thoroughly familiar with the chemistry of organic compounds, including their synthesis and biosynthesis, their reactivity, and their interactions with and alteration by living systems. Research is at the heart of the program, and the department’s research activities encompass many areas of modern medicinal chemistry.

Currently, the department has 8 full-time faculty members, about 15-20 graduate students on an average, about 10-15 postdoctoral associates, numerous undergraduate researchers, and an outstanding technical staff. The department is recognized nationally and internationally, and generally, our graduates pursue successful careers in the pharmaceutical industry and in academia.

### Graduate Admission

Graduate students are primarily admitted to the department to pursue the Ph.D. degree. The M.S. degree and postdoctoral training are also available. An applicant wishing to enter the graduate program must have earned a bachelor’s or master’s degree in pharmacy, medicinal chemistry, chemistry, biochemistry, or a closely related field, and must have completed 1 year of organic chemistry with laboratory (equivalent to CHEM 330, CHEM 331, CHEM 335, and CHEM 336). In all cases, general admission requirements must be met.

Applications are evaluated by the graduate selection committee. Applications must be supported by 1 copy of official transcripts of all previous college and university work, both undergraduate and graduate. In addition, a resume, a statement of purpose, and 3 letters of recommendation from current or former teachers, advisors, or employers must be submitted. Students from non-English-speaking countries also must furnish proof of proficiency in English. Graduate Record Examination (GRE) general test scores are required, and applicants are strongly encouraged to take the subject test in chemistry as well.

The graduate selection committee makes admission decisions based on grade-point averages for previous college work (particularly in the relevant science areas), letters of recommendation, previous research or employment experience relevant to the graduate training being sought, GRE scores, etc. The number of applicants who can be admitted at any time varies, depending on the availability of laboratory space, research facilities, and financial support for research activities, but generally averages between 5-10 a year.

Graduate applications (http://www.graduate.ku.edu/) and all other requested application materials (transcripts, résumé, statement of purpose, recommendation letters, etc.) must be submitted online:

**The University of Kansas**
**Department of Medicinal Chemistry**
**Del Shankel Structural Biology Center (SBC)**
**2034 Becker Drive, Room 1089**
**Lawrence, KS 66047**

### M.S. Degree Requirements

Candidates for this degree must satisfy general requirements as well as those of 1 of the following options:

- Students who are proceeding toward the Ph.D. degree at KU receive the master’s degree after satisfactorily completing the course work requirement for the Ph.D. and passing a comprehensive oral examination.
- Students who wish to earn only the M.S. degree must complete a prescribed subset of the course work requirements for the Ph.D. degree and a thesis representing at least 10 credit hours of research and pass a thesis defense.

### Doctor of Philosophy in Medicinal Chemistry

### Medicinal Chemistry Graduate Programs

Medicinal chemistry is an interdisciplinary field at the interface of chemistry and biology. It approaches important biological and health-related problems through application of fundamental principles of organic chemistry, biochemistry, natural product chemistry, and molecular pharmacology. Graduates are expected to be thoroughly familiar with the chemistry of organic compounds, including their synthesis and biosynthesis, their reactivity, and their interactions with and alteration by living systems. Research is at the heart of the program, and the department’s research activities encompass many areas of modern medicinal chemistry.

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Applications are evaluated by the graduate selection committee. Applications must be supported by 1 copy of official transcripts of
all previous college and university work, both undergraduate and graduate. In addition, a resume, a statement of purpose, and 3 letters of recommendation from current or former teachers, advisors, or employers must be submitted. Students from non-English-speaking countries also must furnish proof of proficiency in English. Graduate Record Examination (GRE) general test scores are required, and applicants are strongly encouraged to take the subject test in chemistry as well.

The graduate selection committee makes admission decisions based on grade-point averages for previous college work (particularly in the relevant science areas), letters of recommendation, previous research or employment experience relevant to the graduate training being sought, GRE scores, etc. The number of applicants who can be admitted at any time varies, depending on the availability of laboratory space, research facilities, and financial support for research activities, but generally averages between 5-10 a year.

Graduate applications (http://www.graduate.ku.edu/) and all other requested application materials (transcripts, résumé, statement of purpose, recommendation letters, etc.) must be submitted online:

The University of Kansas
Department of Medicinal Chemistry
Del Shankel Structural Biology Center (SBC)
2034 Becker Drive, Room 1089
Lawrence, KS 66047

Ph.D. Degree Requirements

If credit has not already been obtained in the courses below or their equivalents, students must complete the following courses as early as is practical in the graduate program: 1 semester of Physical Chemistry, and Biochemistry. Satisfactory completion of qualifying American Chemical Society (ACS) examinations in organic chemistry and biochemistry also is required.

A comprehensive written examination is used to assess students’ knowledge of medicinal chemistry, organic chemistry, and biochemistry. This examination is administered immediately at the end of year 1 in the summer. After completing the comprehensive examination, the major part of the course work, and other requirements, the student takes an oral comprehensive examination. After completing this examination, the student prepares an original research proposal for presentation to the faculty. The final requirement for the Ph.D. is the preparation and defense of a dissertation based on original laboratory research conducted by the candidate.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

General requirements, such as those related to the comprehensive oral examination, the dissertation, and the dissertation defense, are listed in the Graduate Studies (p. 2408) section of the online catalog.

Neurosciences Programs

Neurosciences Graduate Programs

The graduate program in neurosciences at the University of Kansas is a degree-granting program. Students are admitted directly into the program. The program is coordinated by the Lawrence campus of the university - with strengths in the behavioral, biological, chemical, and pharmaceutical sciences - and the Medical Center campus in Kansas City - with strengths in all the biomedical and clinical sciences. Each student is asked to indicate the campus on which he or she would like to be considered for admission. Students in this program should expect to be admitted to and receive a Ph.D. degree in neurosciences.

The program appeals to students who want to teach and/or do research in a university or do research in a pharmaceutical/biotechnology company or government laboratory. Students who are interested in this field wish to work out individual programs spanning a great breadth from molecular and cellular neurobiology to organism-based neurophysiology, behavioral neurobiology, and cognitive neuroscience. Students take advantage of the many research and training opportunities available at two campuses of a major research university. Our students can look forward to personal development in an atmosphere that fosters strong collaborative activities as well as independent scholarship. If this type of program fits your professional training expectations, we invite you to join us.

Neurosciences Program

The University of Kansas
Neuroscience Graduate Program
School of Pharmacy, Ste 2001-D
2010 Becker Drive
Lawrence, KS 66047
785-864-3893
neuroscience@ku.edu
http://www.neuroscience.ku.edu/

Rick Dobrowsky, Co-Director, Lawrence
785-864-3531
dobrowsky@ku.edu

Douglas E. Wright, Co-Director, KU Medical Center
913-588-2713
dwright@kumc.edu

Master of Science in Neurosciences

Neurosciences Graduate Programs

The graduate program in neurosciences at the University of Kansas is a degree-granting program. Students are admitted directly into the program. The program is coordinated by the Lawrence campus of the university - with strengths in the behavioral, biological, chemical, and pharmaceutical sciences - and the Medical Center campus in Kansas City - with strengths in all the biomedical and clinical sciences. Each student is asked to indicate the campus on which he or she would like to be considered for admission. Students in this program should expect to be admitted to and receive a Ph.D. degree in neurosciences.

The program appeals to students who want to teach and/or do research in a university or do research in a pharmaceutical/biotechnology company or government laboratory. Students who are interested in this field wish to work out individual programs spanning a great breadth from molecular and cellular neurobiology to organism-based neurophysiology, behavioral neurobiology, and cognitive neuroscience. Students take advantage of the many research and training opportunities available at two campuses of a major research university. Our students can look forward to personal development in an atmosphere that fosters strong collaborative activities.
as well as independent scholarship. If this type of program fits your professional training expectations, we invite you to join us.

**M.S. Degree Requirements**

The M.S. is offered in rare cases where attainment of the Ph.D. is inappropriate. A student may earn the M.S. by completing these minimum requirements:

- The courses in the curriculum of the first year of the Ph.D. training program.
- The course in advanced neuroscience.
- A thesis based on either original research or library research.
- The total credit hours of graduate-level courses required for the M.S. degree.

**Doctor of Philosophy in Neurosciences**

**Neurosciences Graduate Programs**

The graduate program in neurosciences at the University of Kansas is a degree-granting program. Students are admitted directly into the program. The program is coordinated by the Lawrence campus of the university - with strengths in the behavioral, biological, chemical, and pharmaceutical sciences - and the Medical Center campus in Kansas City - with strengths in all the biomedical and clinical sciences. Each student is asked to indicate the campus on which he or she would like to be considered for admission. Students in this program should expect to be admitted to and receive a Ph.D. degree in neurosciences.

The program appeals to students who want to teach and/or do research in a university or do research in a pharmaceutical/biotechnology company or government laboratory. Students who are interested in this field wish to work out individual programs spanning a great breath from molecular and cellular neurobiology to organism-based neurophysiology, behavioral neurobiology, and cognitive neuroscience. Students take advantage of the many research and training opportunities available at two campuses of a major research university. Our students can look forward to personal development in an atmosphere that fosters strong collaborative activities as well as independent scholarship. If this type of program fits your professional training expectations, we invite you to join us.

**Applications and Program Administration**

The administrative offices for the interdisciplinary neuroscience program are in School of Pharmacy in Lawrence and at the Hemenway Life Sciences Innovation Center in Kansas City.

All application materials are reviewed by faculty committees on the Lawrence and Kansas City campuses. Students should have B.A. or B.S. degrees in one of the following fields: anthropology, behavioral sciences (psychology, human development), biology, chemistry, engineering, neuroscience, or pharmacology. Preference is given to students who have completed courses in introductory biology and at least one course in advanced biology topics such as biochemistry, physiology, microbiology, molecular biology, and courses in introductory and organic chemistry or in calculus and physics. The graduate curriculum requires background knowledge in these fields. Students who do not have sufficient training will be asked to complete the appropriate courses before being admitted. The program requires submission of the standard GRE scores with all applications, three letters of recommendation, and an essay by the applicant about his or her career goals, i.e. why he or she wishes to become a neuroscientist. Selection of graduate students is based on grade-point average, Graduate Record Examination scores, letters of recommendation, and evidence of previous experience in research. The minimum standard acceptable for admission to the graduate program is a grade-point average of 3.0. Inquiries and applications are welcome at any time. Most students enter the program in August. Full consideration for August admission can be assured for all applications received by the 2nd Friday of January.

The University of Kansas accepts only on-line applications. The fees are:

- Domestic student on-line application fee: $65
- International student on-line application fee: $85

The **deadline for receipt of application materials** to the Neuroscience Graduate Program is the 2nd Friday of January in consideration for admission to the Fall semester. **Institution Code: 6871 / Neuroscience Program Code: 0213**

Online application (http://graduate.ku.edu/ku-graduate-application/) For further information, contact

The University of Kansas
Neuroscience Graduate Program
c/o Dr. Rick Dobrowsky
School of Pharmacy, Ste 2001-D
2010 Becker Drive
Lawrence, KS 66047
Telephone: (785) 864-3531 or (785) 864-3893
E-mail: neuroscience@ku.edu

or

KUMC Online application
The University of Kansas Medical Center
Neuroscience Graduate Program
c/o Dr. Doug Wright 2079 HLSIC 3901 Rainbow Blvd. Kansas City, KS 66160 Telephone: (913) 588-2713 E-mail: dwright@kumc.edu

KUMC Online application (http://www.kumc.edu/school-of-medicine/neuroscience.html)

The University of Kansas Medical Center
Neuroscience Graduate Program
c/o Dr. Doug Wright
2079 HLSIC
3901 Rainbow Blvd.
Kansas City, KS 66160
Telephone: (913) 588-2713
E-mail: dwright@kumc.edu

**Ph.D. Degree Requirements**

The neuroscience curriculum is subdivided into core courses that all students must complete and electives representing the 2 major specializations,

- Cell and Molecular Neuroscience and
- Cognitive and Systems Neuroscience.

There is considerable flexibility in the curriculum to accommodate specific interests of the students and course availability. Course choices should be done by consulting your mentor and the Director of the Neuroscience Program prior to establishing a graduate committee. A 5-member faculty advisory committee including at least 3 members of the neuroscience
program should be in place at the beginning of the second year of study to help the student choose electives if needed but more so to provide guidance on the research progress. Students should meet with the committee in the Fall of their second year of study and present their research progress to the committee and an outline of their thoughts for preparing a 6 page proposal for their oral defense in the spring/summer of the second year.

Continued enrollment in the neuroscience seminar is required and students are expected to present a yearly seminar. This can constitute a literature review for first year students and subsequent presentations are typically on research progress.

Students also receive training in the responsible conduct of research and teaching in the neurosciences. For the Ph.D., the student completes the core curriculum as well as research skills training, comprehensive oral examination, preparation of a dissertation, and final oral examination and defense of the dissertation.

All students must complete a research skill. Commonly used areas are radiation biology and radiation safety, cell culture methodology, techniques of electron and confocal microscopy, molecular biology laboratory training, computer science training, statistics, and training in electronics and instrumentation.

Note: Contact your department or program for more information about research skills and responsible scholarship, and the current requirements for doctoral students. Current Lawrence and Edwards Campus policies on Doctoral Research Skills and Responsible Scholarship are listed in the KU Policy Library.

An example of a standard progression through the curriculum is provided below.

Core Curriculum for the Ph.D. in Neurosciences

Year 1

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>P&amp;TX 740</td>
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<tr>
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Year 2

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<th>Spring</th>
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<tr>
<td>NURO 801 (offered in the fall every odd-numbered year)</td>
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<td>Second elective for Cell and Molecular Neuroscience or Cognitive and Systems Neuroscience</td>
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<tr>
<td>Cell and Molecular Neuroscience course</td>
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</tr>
<tr>
<td>First elective for Cell and Molecular Neuroscience or Cognitive and Systems Neuroscience</td>
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<tr>
<td><strong>Total Hours</strong></td>
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Year 3

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Year 4

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<th>Spring</th>
<th>Hours</th>
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<tbody>
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<td>NURO 799</td>
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Year 5

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</table>

Total Hours 69

Students must

- Complete 1 core course from Cognitive and Systems Neuroscience;
- Complete 1 core course from Cell and Molecular Neuroscience;
- Complete 1 core course from General Neurobiology;
- Take Bioethics or NURO 801 Issues in Scientific Integrity; and
- Receive training in effective oral communication and teaching by enrolling in 1 semester of NURO 800 Neuroscience Teaching Principles, which includes a teaching experience.

Neuroscience Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<td>NURO 825</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>11</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Cognitive and Systems Neuroscience

- BIOL 701: Topics in: _____ (Brain Disorders and Neurological Disorders)
- NURO 844: Neurophysiology
- PSYC 961: Biological Foundations of Psychopathology

Cell and Molecular Neuroscience

- NURO 775: Chemistry of the Nervous System
- NURO 848: Molecular Mechanisms of Neurological Disorders

General Neurobiology

- NURO 846: Advanced Neuroscience
- NURO 847: Developmental Neurobiology

Neuroscience Seminar

- NURO 799: Neuroscience Seminar Series

Scientific Integrity

- NURO 801: Issues in Scientific Integrity

Teaching Experience

- NURO 800: Neuroscience Teaching Principles
Department of Pharmaceutical Chemistry

Pharmaceutical Chemistry Graduate Programs

Pharmaceutical Chemistry is a broad discipline that integrates diverse areas of science ranging from biological to chemical sciences. Students in the program will become familiar with aspects of physical, organic and analytical chemistry, chemical kinetics, biopharmaceutics and pharmacokinetics, and biotechnology including vaccines. To address these needs, the department offers a series of eight (8) core courses designed to hone the student's skills in these topical areas, which are considered essential in understanding problems of biological, biophysical and chemical processes at the molecular level. Refer to the website (http://pharmchem.ku.edu/academics-overview) for details. Every student entering the program is expected to complete the core courses during the first three semesters of graduate study. Students can choose from a variety of elective courses that allow them to gain knowledge and skills in areas specific to individual research project interests. The department places emphasis on excellence in research making every effort to ensure that students can maximize efforts on their research projects toward earning the Ph.D. degree in a timely fashion.

Currently, the department has 16 faculty members, about 35 graduate students, and a similar number of postdoctoral fellows and research scientists. The department is recognized nationally and internationally, with most graduates and researchers going on to successful careers in the pharmaceutical industry, government positions and academia. The department serves as the home department for the long-standing NIH training grant in pharmaceutical biotechnology.

Facilities

The department is located on KU's west campus in the Simons Biosciences Research Laboratories and the Multidisciplinary Research Building (MRB). Recently renovated and expanded, Simons is a modern, well-equipped research facility. MRB houses researchers from the pharmaceutical chemistry and a variety of other disciplines, thus encouraging interdisciplinary interaction and collaboration. The department is well equipped for biochemical, biophysical and chemical research, having state-of-the-art spectroscopic, physical characterization, chromatographic and mass spectrometry instrumentation. Within the department there are facilities for cell culture, several advanced fluorescence microscopes, and numerous components and software for proteomic analysis. Furthermore, the faculty has established the Macromolecule and Vaccine Stabilization Center (MVSC) and Kansas Vaccine Institute (KVI), which contain an extensive array of instrumentation for the characterization of both small and macromolecules. Examples of analytical instrumentation include circular dichroism spectrophotometers, FTIR, capillary LCQ-Tof mass spectrometry, and particulate analysis. Additionally the university offers state of the art equipment and service facilities to assist with many aspects of research. For example, the Molecular Structures Group (MSG) is a campus-wide facility encompassing NMR, MS, X-ray Crystallography, Protein Production, Fragment-based Drug Discovery, and Molecular Graphics and Modeling Laboratories available to all campus members for a nominal fee. Near the Simons building, the structural biology wing of the MSG houses an 800-MHz NMR along with many other instruments and services.

Department of Pharmaceutical Chemistry

182A Simons Laboratories
2093 Constant Ave.
Lawrence, KS 66047
Phone: 785-864-4822
Fax: 785-864-5736
http://www.pharmchem.ku.edu/

Christian Schöneich, Chair
785-864-4880
schoneic@ku.edu

John Stobaugh, Graduate Advisor
785-864-3996
stobaugh@ku.edu

Courses

PHCH 510. Emerging Trends in Pharmaceutical Chemistry I. 1 Credits.
This elective class will explore emerging areas of research currently impacting the pharmaceutical industry. Potential topics include: biologicals as therapeutics, drug targeting, prodrugs, nanotechnology, biological barriers, gene therapy, transporters, vaccines, intracellular drug trafficking, controlled release drug delivery, cancer therapy, analytical biotechnology and many others. The class will be team taught by PHCH faculty and guest speakers. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Must be accepted to the Pharmacy Program.

PHCH 512. Road Map to the Development and Regulatory Approval of a New Drug. 1 Credits.
This special topics course will cover key steps in developing and bringing a new drug through pharmaceutical development and regulatory approval and into commercial use. Development of both traditional small-molecule chemical drugs and biotechnology-based protein drugs will be discussed. Example topics include: (1) how does a drug candidate move from its discovery at the lab bench into clinical trials? (2) what are the key hurdles in developing a new medicine that can be produced at large-scale in a manufacturing facility? (3) why are patents and venture capital so important in drug development? Guest lecturers will provide real world perspectives including case studies. This is a two-hour class that meets 8 times during the semester. Prerequisite: 1st, 2nd or 3rd professional year standing in the School of Pharmacy.

PHCH 514. Scientific Writing for the Health Professional. 2 Credits.
Communicating research plans and experimental findings is a critical skill for health care professionals working in a research environment, and successful communication depends on clarity of thought and careful use of language. This course is intended for 3rd professional (P3) year students who are seeking residency and will need to write research proposals and abstracts, as well as prepare effective posters and presentations. It is an intensive course with multiple writing assignments. Students are expected to participate fully, and individual feedback and guidance on writing will be provided by the instructor. Graded on a satisfactory/fail basis. Prerequisite: 3rd professional (P3) year students who plan to complete post-doctoral residency training.

PHCH 515. Oral Presentations for the Health Professional. 1 Credits.
Communicating research plans and experimental findings is a critical skill for health care professionals working in a research environment, and a successful oral presentation depends on clear thinking and careful slide design to tell a story. This course is intended for 3rd year professional (P3) pharmacy students who are seeking residency and will need to prepare effective presentations. It is an intensive course with successive slide drafts and presentations. Students are expected to participate fully, and individual feedback and guidance on presentations will be provided by the other students and by the instructor. Graded on a satisfactory/fail basis. Prerequisite: PHCH 514.

PHCH 517. Pharmacy Calculations. 2 Credits.
An introduction to the mathematics involved in filling prescriptions and in manufacturing pharmaceuticals. Includes an introduction to standard prescription notation and familiarization with pharmaceutical weights and measures.

PHCH 518. Physical-Chemical Principles of Solution Dosage Forms. 3 Credits.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. Prerequisite: Students must have first year professional standing in the School of Pharmacy. Students must have successfully completed PHCH 517.

PHCH 605. Vaccines. 1 Credits.
Vaccines are currently the most powerful therapeutic approach available for infectious disease and promise to become of increasing importance for a wide variety of other pathologies including cancer. This course discusses the immunological basis of vaccinology, types of vaccines currently available and in development and the process by which vaccines are made from the basic research stage through their pharmaceutical development and marketing. Ethical aspects of vaccine use will also be considered. Prerequisite: Students must have first, second or third year professional standing in the School of Pharmacy.

PHCH 625. Pharmacokinetics. 3 Credits.
A discussion of the basic concepts, and some clinical applications, of pharmacokinetics, clearance concepts, extravascular dosing, and the use of pharmacokinetics in dosage regimen design and adjustment. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have successfully completed PHCH 517 and PHCH 518.

PHCH 626. Biopharmaceutics and Drug Delivery. 3 Credits.
A study of biological barriers to drug delivery, conventional dosage forms, and new and future drug delivery strategies. Prerequisite: Students must have second year professional standing in the School of Pharmacy. Students must have successfully completed PHCH 517, PHCH 518, and PHCH 625.

PHCH 667. Introduction to Clinical Chemistry. 2 Credits.
A lecture-discussion course concerned with identification of the contents of physiological fluids, changes in physiological fluid content induced by disease and drugs, and therapeutic drug monitoring: case studies are presented. Prerequisite: Must be accepted to the Pharmacy Program.

PHCH 690. Undergraduate Research in Pharmaceutical Chemistry. 1-5 Credits.
Student will be assigned a suitable research project in the area of pharmaceutical analysis or pharmaceutics. Prerequisite: Consent of instructor.

PHCH 693. Clinical Pharmacokinetics. 2 Credits.
This course presents discussions on physiological and disease state variables in pharmacokinetics for selected drugs and drug classes, and instructs students in the use of physiological and disease state pharmacokinetic information to develop individualized therapeutic regimens. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have successfully completed PHCH 625 and PHCH 626.

PHCH 694. Problems in Pharmaceutical Chemistry. 1-5 Credits.
A student will be assigned a suitable research project in an area of pharmaceutical analysis or pharmaceutics. This course is offered regularly by the Department of Pharmaceutical Chemistry to meet the special needs of selected students, usually for one of the following two situations: (1) This course may be taken when a student has a special interest in a problem or area of limited scope and desires to pursue that study in depth under supervision of a member of the faculty. (2) This course is sometimes used as a remedial class to provide a mechanism of intensive review and study in an area of weakness. Prerequisite: Consent of instructor.

PHCH 700. Experimental Methods in Pharmaceutical Chemistry. 1-5 Credits.
Discussions, lectures, and laboratory work designed to acquaint and provide hands on experiences to advanced undergraduate and graduate students with experimental design, methods, and approaches relevant to modern research in pharmaceutical chemistry. Prerequisite: Consent of instructor.

PHCH 705. Writing and Communicating Science for Graduate Students. 3 Credits.
Communicating research proposals and experimental findings is a critical skill for scientists. Successful communication depends on clarity of thought and careful use of language. This course will use class discussions with examples and homework assignments to help prepare the graduate student to successfully communicate in both academia and industry settings. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in PHCH or consent of the instructor.

PHCH 706. Writing and Communicating Science for Graduate Students. 3 Credits.
Communicating research proposals and experimental findings is a critical skill for scientists. Successful communication depends on clarity of thought and careful use of language. This course will use class discussions with examples and homework assignments to help prepare the graduate student to successfully communicate in both academia and industry settings. Graded on a satisfactory/unsatisfactory basis. Prerequisite: This course is only open to distance education students.

PHCH 712. Road Map to the Development and Regulatory Approval of a New Drug. 1 Credits.
This special topics course will cover key steps in developing and bringing a new drug through pharmaceutical development and regulatory approval and into commercial use. Development of both traditional small-molecule chemical drugs and biotechnology-based protein drugs will be discussed. Example topics include: (1) how does a drug candidate move from its discovery at the lab bench into clinical trials? (2) what are the key hurdles in developing a new medicine that can be produced at large-scale in a manufacturing facility? (3) why are patents and venture capital so important in drug development? Guest lecturers will provide real world perspectives including case studies. This is two-hour class that meets 8 times during the semester. Prerequisite: Graduate standing in Pharmaceutical Chemistry or a trainee of the NIH Biotech Training Grant.

PHCH 715. Drug Delivery. 3 Credits.
The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance
drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. Prerequisite: Master's or PhD candidate in Engineering, Chemistry, Medicinal Chemistry, or Pharmaceutical Chemistry (by appointment for seniors or graduate students in departments not listed).

PHCH 716. Drug Delivery. 3 Credits.
The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. Prerequisite: This course is only open to distance education students.

PHCH 717. Drug Delivery. 3 Credits.
The course will survey the latest technology for delivering pharmaceuticals and biologicals to reduce side effects and enhance drug efficacy. The course will survey the latest research in this area and examine more classical delivery methods. A qualitative and quantitative understanding of drug delivery practice and theory is the goal. This course is only open to external non-degree seeking students. Offered in spring semesters. Prerequisite: PHCH 732.

PHCH 718. Physical-Chemical Principles of Solution Dosage Forms. 3 Credits.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. Prerequisite: Graduate standing.

PHCH 719. Physical-Chemical Principles of Solution Dosage Forms. 3 Credits.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. This course is only open to distance education students. Prerequisite: Graduate standing.

PHCH 721. Physical-Chemical Principles of Solution Dosage Forms. 3 Credits.
Physical properties of pharmaceutical solutions and their physiological compatibility will be discussed (intermolecular interactions, energetics, colligative properties, isotonicity, pH, buffers and drug solubility). Kinetics and mechanisms of drug degradation in solution will also be introduced. This course is only open to external non-degree seeking students. Offered in spring semesters.

PHCH 725. Cellular and Molecular Pharmaceutics. 3 Credits.
The pharmaceutical relevance of fundamental and advanced concepts in cell biology and the molecular interactions responsible for cell and tissue functions, homeostasis in health and disease will be presented. Current analytical methods for examining cells and tissues, and molecular components important in understanding drug and protein biodistribution and metabolism will be discussed. Discussion topics will include the chemical and physical properties of small molecules, proteins, nucleic acids and lipids and their impact on cellular and subcellular structures and ultimately of either adverse or therapeutic benefit. Prerequisite: Graduate standing or consent of instructor.

PHCH 730. Biopharmaceutics and Pharmacokinetics. 3 Credits.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems.

PHCH 731. Biopharmaceutics and Pharmacokinetics. 3 Credits.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems. This course open only to distance education students.

PHCH 732. Biopharmaceutics and Pharmacokinetics. 3 Credits.
A quantitative treatment of the processes involved with drug absorption, distribution, metabolism, and excretion in living systems. This course is only open to external non-degree seeking students. Offered in fall semesters.

PHCH 744. Organic Chemistry for Pharmaceutical Scientists. 3 Credits.
A consideration of the structural features and driving forces that control the course of chemical reactions. Topics will include functional group chemistry: electronic structure, acid/base properties: molecular structure and properties (dipole, strain, and steric effects, inductive and resonance effects); dynamics of reactions (the major organic reaction mechanism, kinetics, energy profiles, isotope effects, linear free energy relationships), solvent effects, stereochemistry and conformation, an introduction to orbital symmetry control; basic thermodynamic and kinetic concepts; and an overview of important classes of mechanisms. This course is only open to distance education students. Prerequisite: CHEM 624 and CHEM 626.

PHCH 775. Chemistry of the Nervous System. 3 Credits.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as MDCM 775, NURO 775 and P&TX 755.) Prerequisite: BIOL 600 or equivalent.

PHCH 801. Issues in Scientific Integrity. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. This course is open only to distance education students. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, P&TX 801 and PHCH 802.)

PHCH 802. Issues in Scientific Integrity. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. This course is open only to distance education students. Graded on a satisfactory/unsatisfactory basis. (Same as PHCH 801, MDCM 801, NURO 801, and PTX 801.)
PHCH 816. Careers in the Biomedical Sciences. 1 Credits.
Advanced course examining career options open to PhD scientists in the biomedical sciences, and providing preparation for the different career paths. Extensive student/faculty interaction is emphasized utilizing lectures, class discussion of assigned readings, and oral presentations. Graded on a satisfactory/unsatisfactory basis. (Same as BIOL 816, CHEM 816 and MDCM 816.) Prerequisite: Permission of instructor.

PHCH 817. Rigor, Reproducibility and Responsible Conduct in Research. 3 Credits.
This class addresses the recognized problems in rigor, reproducibility, and transparency that are plaguing modern science. Students will learn the fundamentals of hypothesis design, avoiding bias, randomization, sampling, and appropriate statistical analyses, reagent validation, among other key topics. This course also introduces principles for being an ethical, responsible, and professional research scientist. Topics include: plagiarism, fabrication and falsification of data, record keeping and data sharing, mentor/mentee and collaborative relationships, among others. The class will include a mixture of lecture, case studies and discussion. (Same as BIOL 817/CHEM 817/MDCM 817.) Prerequisite: Graduate student.

PHCH 850. Solid State Stability and Formulation. 2 Credits.
This course is designed to provide an understanding of the formulation and stability of small and large drug candidates in the solid state. The first two-thirds of the course will focus on small molecules, with the last third being devoted to proteins. Prerequisite: Graduate standing in PHCH or consent of the instructor.

PHCH 851. Solid State Stability and Formulation. 2 Credits.
This course is designed to provide an understanding of the formulation and stability of small and large drug candidates in the solid state. The first two-thirds of the course will focus on small molecules, with the last third being devoted to proteins. This course is open only to distance education students. Prerequisite: Graduate standing in Pharmaceutical Chemistry or consent of the instructor.

PHCH 860. Principles and Practice of Chemical Biology. 3 Credits.
A survey of topics investigated by chemical biology methods including: transcription and translation, cell signaling, genetic and genomics, biochemical pathways, macromolecular structure, and the biosynthesis of peptides, carbohydrates, natural products, and nucleic acids. Concepts of thermodynamics and kinetics, bioconjugations and bioorthogonal chemistry will also be presented. (Same as BIOL 860, CHEM 860 and MDCM 860.) Prerequisite: Permission of instructor.

PHCH 862. Physical Chemistry of Solutions, Solids and Surfaces. 3 Credits.
A course on equilibria in aqueous and non-aqueous systems with emphasis on solutions of interest to pharmaceutical technology. Included are association-dissociation equilibria, complexation, protein binding calculation of species concentrations, estimation of solubility and ionization constants. Methods for the determination of chemical potential in solution are presented.

PHCH 863. Physical Chemistry of Solutions, Solids and Surfaces. 3 Credits.
A course on equilibria in aqueous and non-aqueous systems with emphasis on solutions of interest to pharmaceutical technology. Included are association-dissociation equilibria, complexation, protein binding calculation of species concentrations, estimation of solubility and ionization constants. Methods for the determination of chemical potential in solution are presented. This course is open only to distance education students.

PHCH 864. Pharmaceutical Analysis. 4 Credits.
This course is intended to be a comprehensive treatment of contemporary techniques used to validate analytical methods for the determination of drugs in the bulk form, pharmaceutical formulations, biological samples and other relevant media. The emphasis will be on chromatographic techniques reflecting the preeminent position that those techniques occupy in the field of pharmaceutical and biomedical analysis. Prerequisite: Previous or concurrent enrollment in PHCH 684.

PHCH 865. Pharmaceutical Analysis. 4 Credits.
Advanced course on pharmaceutical analysis. This course is only open to distance education students.

PHCH 870. Advanced Pharmaceutical Biotechnology. 4 Credits.
A course designed to emphasize the important facets of recombinant proteins and vaccines as pharmaceutical agents. Basics of protein structure and analysis will be introduced, and methods for production, isolation, and purification of recombinant proteins will be described. Potential chemical and physical degradation processes and strategies for circumventing these difficulties will be discussed. An overview of the development and formulation of vaccines and their immunological basis will be presented. Prerequisite: BIOL 600 or consent of instructor.

PHCH 871. Advanced Pharmaceutical Biotechnology. 4 Credits.
A course designed to emphasize the important facets of recombinant proteins and vaccines as pharmaceutical agents. Basics of protein structure and analysis will be introduced, and methods for production, isolation, and purification of recombinant proteins will be described. Potential chemical and physical degradation processes and strategies for circumventing these difficulties will be discussed. This course is only open to distance education students. An overview of the development and formulation of vaccines and their immunological basis will be presented. Prerequisite: BIOL 600 or consent of instructor.

PHCH 895. Research in Pharmaceutical Chemistry. 1-10 Credits.
Advanced level research in collaboration with a faculty member in pharmaceutical chemistry or related areas. This course is limited to students who are doing research, but not necessarily working toward either a master's or a doctoral degree.

PHCH 898. Master's Thesis. 1-10 Credits.
Master's Thesis. This course is open only to distance education students.

PHCH 899. Master's Thesis. 1-11 Credits.
Graded on a satisfactory/fail basis.

PHCH 920. Chemical Kinetics. 2 Credits.
This course provides the principles of kinetic data analysis as applied to problems in pharmaceutical chemistry. Topics include the setup and solution of rate equations related to chemical reactions; simplifications and approximations in complex equation systems; isotope, solvent and salt rate effects; and diffusion and activation controlled reactions.

PHCH 921. Chemical Kinetics. 2 Credits.
This course provides the principles of kinetic data analysis as applied to problems in pharmaceutical chemistry. Topics include the setup and solution of rate equations related to chemical reactions; simplifications and approximations in complex equation systems; isotope, solvent and salt rate effects; and diffusion and activation controlled reactions. This course is only open to distance education students.

PHCH 970. Mechanisms of Drug Deterioration and Stabilization. 3 Credits.
A course dealing with mechanisms and chemical kinetics of drug deterioration and stabilization.

PHCH 973. Mechanisms of Drug Deterioration and Stabilization. 3 Credits.
A course dealing with mechanisms and chemical kinetics of drug deterioration and stabilization. This course is only open to distance education students.

**PHCH 974. Advanced Special Topics in Pharmaceutical Chemistry. 1-3 Credits.**
Various topics pertinent to the area of pharmaceutical chemistry will be explored. Graded on a satisfactory/unsatisfactory basis.

**PHCH 978. Pharmaceutical Chemistry Seminar. 1 Credits.**
A seminar on the chemistry of pharmaceutical systems.

**PHCH 998. Doctoral Dissertation in Pharmaceutical Chemistry. 1-11 Credits.**
This course is open only to distance education students.

**PHCH 999. Doctoral Dissertation in Pharmaceutical Chemistry. 1-11 Credits.**

### Master of Science in Pharmaceutical Chemistry

#### Pharmaceutical Chemistry Graduate Programs

Pharmaceutical Chemistry is a broad discipline that integrates diverse areas of science ranging from biological to chemical sciences. Students in the program will become familiar with aspects of physical, organic and analytical chemistry, chemical kinetics, biopharmaceutics and pharmacokinetics, and biotechnology including vaccines. To address these needs, the department offers a series of eight (8) core courses designed to hone the student’s skills in these topical areas, which are considered essential in understanding problems of biological, biophysical and chemical processes at the molecular level. Every student entering the program is expected to complete the core courses during the first three semesters of graduate study. Refer to the website [http://pharmchem.ku.edu/academics-overview](http://pharmchem.ku.edu/academics-overview) for details. Students can choose from a variety of elective courses that allow them to gain knowledge and skills in areas specific to individual research project interests. The department places emphasis on excellence in research making every effort to ensure that students can maximize efforts on their research projects toward earning the Ph.D. degree in a timely fashion.

Students are primarily admitted to the department to pursue the Ph.D. degree, however students may opt to terminate graduate studies with the M.S. degree. For external students seeking an advanced degree, the department offers the distance M.S. and Ph.D. degrees. To be eligible for the distance programs, the students must be employed in the private or government sectors, meeting the same requirements as on-site students, have access to laboratory facilities and the availability of an appropriately trained scientific advisor at the remote site. The distance Ph.D. program is only available to students who have completed the distance M.S. degree with a highly meritorious performance.

#### Graduate Admission

Students with a bachelor level degree or a master’s degree in chemistry, pharmacy, the biological sciences, material sciences, chemical engineering or related disciplines are encouraged to seek admission to our program. Except under unusual circumstances, we review and accept candidates for admission into the fall semester only. All information must be delivered to us before we can begin to consider your application. Entering students are expected to be competent in basic principles of organic chemistry, physical chemistry and two semesters of calculus equivalent to KU MATH 121/122.

Refer to the website [http://pharmchem.ku.edu/academics-overview](http://pharmchem.ku.edu/academics-overview) then consult the link Admissions and Requirements, then the sub-link Admissions Requirements for details. Although the department does not have a formal application deadline, the faculty begins evaluations of applications around January 15 each year. To ensure full consideration, it is highly recommended that complete applications be in the department far in advance of January 15.

Admitted students receive a competitive stipend, tuition, and basic health insurance. Students also can be selected to participate in the Takeru Higuchi and Nigel Manning Ph.D. Intersearch Program, allowing them to conduct a portion of their research at the Victorian College of Pharmacy ([http://www.vcp.monash.edu.au](http://www.vcp.monash.edu.au)) at Monash University in Melbourne, Australia. In addition, students are encouraged to participate in other industrial and/or academic internship programs the department offers.

A number of fellowship awards are offered to recognize academic superiority and to assist meritorious students in the timely completion of their degree programs. The number of fellowships awarded each year depends upon available funds. For a description of funding opportunities for KU graduate students, visit the Graduate Studies website ([https://graduate.ku.edu/funding](https://graduate.ku.edu/funding)). Students who are particularly outstanding undergraduate records may be eligible for special awards. The Department of Pharmaceutical Chemistry is a Madison and Lila Self Graduate Fellowship Program ([http://selfgraduate.ku.edu](http://selfgraduate.ku.edu)) partner at KU. The program provides a generous stipend and tuition for outstanding students for 4 years of graduate study. At the department level, the Higuchi, Lindenbaum, Rytting, Stella, and Waugh Fellowships are awarded each year to incoming graduate students with high promise.

Any materials sent directly to the department should be directed to:

The University of Kansas
Department of Pharmaceutical Chemistry
Attn: Michelle Huslig
Simons Labs
2095 Constant Ave., Room 182
Lawrence, KS 66047
Telephone: 785-864-4822, fax: 785-864-5736, mhuslig@ku.edu

### M.S. Degree Requirements

Except under unusual circumstances, the Department of Pharmaceutical Chemistry does not recruit students seeking the M.S. degree; however after admission to the Ph.D. program, the student may select to terminate with the M.S. degree. For this option, the student must have satisfactorily completed most of the core courses and sufficient research to support an M.S. thesis and oral defense. Alternatively, provision may be made for the preparation of an extensive research report based on laboratory investigations, which is presented in an oral examination.
Distance Master’s Degree Program

The department also offers a distance master’s program. See the website (http://pharmchem.ku.edu/admissions-requirements-ms (http://pharmchem.ku.edu/admissions-requirements-ms/)) for details. To be eligible for the M.S. distance program, the student must be employed in the private or government sectors, meeting the same requirements as on-site students, have access to laboratory facilities and the availability of an appropriately trained scientific advisor at the remote site. This program features the same high-quality lectures and courses offered in the on-campus M.S./Ph.D. program but allows students to complete the degree while working at a remote location. Students typically take 1 course a semester. All courses offered by the department can be taken this way. For questions, contact the director of the distance master’s program, John Stobaugh, 785-864-3996, stobaugh@ku.edu.

Doctor of Philosophy in Pharmaceutical Chemistry

Pharmaceutical Chemistry Graduate Programs

Pharmaceutical Chemistry is a broad discipline that integrates diverse areas of science ranging from biological to chemical sciences. Students in the program will become familiar with aspects of physical, organic and analytical chemistry, chemical kinetics, biopharmaceutics and pharmacokinetics, and biotechnology including vaccines. To address these needs, the department offers a series of core courses (refer to the graduate student handbook http://www.pharmchem.ku.edu (http://www.pharmchem.ku.edu/)) designed to hone the student’s skills in these topical areas, which are considered essential in understanding problems of biological, biophysical and chemical processes at the molecular level. Every student entering the program is expected to complete the core courses during the first three semesters of graduate study. Students can choose from a variety of elective courses that allow them to gain knowledge and skills in areas specific to individual research project interests. The department places emphasis on excellence in research making every effort to ensure that students can maximize efforts on their research projects toward earning the Ph.D. degree in a timely fashion.

Admitted students receive a competitive stipend, tuition, and basic health insurance. Students also can be selected to participate in the Takeru Higuchi and Nigel Manning Ph.D. Intersearch Program, allowing them to conduct a portion of their research at the Victorian College of Pharmacy (http://www.vcp.monash.edu.au (https://www.monash.edu/pharm/)) at Monash University in Melbourne, Australia. In addition, students are encouraged to participate in other industrial and/or academic internship programs the department offers.

A number of fellowship awards are offered to recognize academic superiority and to assist meritorious students in the timely completion of their degree programs. The number of fellowships awarded each year depends upon available funds. For a description of funding opportunities for KU graduate students, visit the Graduate Studies website (https://graduate.ku.edu/funding (https://graduate.ku.edu/funding/)). Students with particularly outstanding undergraduate records may be eligible for special awards. The Department of Pharmaceutical Chemistry is a Madison and Lila Self Graduate Fellowship Program (http://selfgraduate.ku.edu (http://selfgraduate.ku.edu/)) partner at KU. The program provides a generous stipend and tuition to outstanding students for 4 years of graduate study. At the department level, the Higuchi, Lindenbaum, Ryting, Stella, and Waugh Fellowships are awarded each year to incoming graduate students with high promise.

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Lawrence, KS 66047
Telephone: 785-864-4822, fax: 785-864-5736, mhuslig@ku.edu

Ph.D. Degree Requirements

Entering Background

Students entering the program are expected to be competent in basic principles of physical/organic chemistry and mathematics. These requirements are typically satisfied by most degrees in the basic or pharmaceutical sciences. One year of organic chemistry for majors, a physical chemistry course that includes classical thermodynamics, and two semesters of calculus equivalent to KU MATH 121/122.

Core Courses and Foundation Exam

All students participating in the Pharmaceutical Chemistry Ph.D. program are required to take eight (8) core courses, which are designed to ensure that graduates maintain the department’s long-standing reputation for strength in the physical-chemical sciences as they relate to modern research in Pharmaceutical Chemistry (Pharmaceutics). After satisfactory
completion of the eight (8) core courses the student is eligible to take the Foundation Exam.

Research Skills (RS2) and Elective Requirements

Graduate students must take one elective course in addition to core courses. This may be from the courses offered by the Department of Pharmaceutical Chemistry or from other science and engineering departments on campus with prior approval from the graduate director. This requirement must be completed prior to undertaking the comprehensive examination at the end of year 2.

Comprehensive Examination for Ph.D. Students

The student will be eligible for the comprehensive examination subsequent a satisfactory performance on the Foundation Exam and the completion of RS2 requirements. The exam will be based on a series of oral questions based upon an oral presentation of a research proposal focused on their research. For addition details refer to the website (http://pharmchem.ku.edu/academics-overview)then consult the link Department Graduate Student Handbook. Upon passing the comprehensive examination, students continuing on to the Ph.D. degree will receive a non-thesis M.S. degree.

Dissertation

Each Ph.D. candidate must submit and defend a dissertation resulting from research of sufficient originality and quality for publication in peer-reviewed scientific journals. The research is conducted under the supervision and guidance of the student’s advisor, with input from the dissertation committee as needed. The median time for students to complete the Ph.D. degree is 5.3 years.

Distance Ph.D. Degree Program

The department also offers a distance Ph.D. program. Admittance is offered to a limited number of highly qualified students who excelled while completing the Distance M.S. degree program. Interested students should inquire with their M.S. advisor, onsite advisor and the graduate director for details. This program features the same didactic coursework and research requirements as in the onsite Ph.D. program but allows students to complete the degree while working at a remote location. For questions, contact the graduate director, John Stobaugh, 785-864-3996, stobaugh@ku.edu.

Department of Pharmacology and Toxicology

Pharmacology and Toxicology Graduate Programs

The Department of Pharmacology and Toxicology has research strengths in neuropharmacology — especially in neurodegeneration, psychiatric disorders, and addiction — and the effects of diabetes on the nervous system. The research program is founded on strong Ph.D. and M.S. graduate programs.

Doctoral students are prepared to teach and do research in a university, pharmaceutical, biotechnology, or government laboratory setting. New Ph.D. students can look forward to personal development in an atmosphere that fosters strong collaborative activities as well as independent scholarship. The department recruits 4 to 5 Ph.D. students each year and offers stipends and tuition coverage.

The major aim of the MS degree program is to provide qualified graduates to institutions in academia, industry, and government. The Master of Science in Pharmacology and Toxicology program emphasizes students’ research skills in molecular and neuro-pharmacology and toxicology. In addition to the didactic component of our training, we view hands-on training in laboratory research critical to the master’s thesis experience.

The Distance Master of Science degree in Pharmacology and Toxicology is a program designed to train individuals in molecular, cellular and organ systems pharmacology and toxicology. The program provides advanced scientific knowledge in pharmacology and toxicology and is designed for individuals who are seeking additional academic qualifications that will facilitate their advancement at their place of employment, or will increase their competitiveness for admission to other graduate or professional programs.

The department’s research programs and faculty place it at the leading edge of research in the pharmacological and toxicological neurosciences.

Facilities

Research facilities offer a range of modern instrumentation and many research support services. Major instruments include tissue culture rooms, ultracentrifuges, scintillation counters, high-pressure liquid chromatography systems, a patch-clamp electrophysiology system with Nikon fluorescent microscope, microprocessor-controlled spectrophotometers and fluorometers including a dual excitation wavelength instrument for intracellular measurements and a time-resolved luminescence and fluorescence microplate reader with dual dispensing capabilities, a Seahorse Extracellular Flux Analyzer for measuring cell metabolism and major energy-producing pathways of the cell, a dark room with a film processor, and real-time PCR equipment.

University research support facilities also contribute to the high quality of research and training for graduate students. These facilities are fully staffed by professionals and include the Electron Microscopy Lab with transmission and scanning scopes; the Biochemical Research Services Lab for Illumina RNAseq, protein and DNA sequencing, amino acid analysis, and oligonucleotide and peptide syntheses; a High Throughput Laboratory for screening compounds as potential tools and drug development, and the Molecular Graphics and Modeling Lab with VAX computers, extensive databases for protein structures, and multiple molecular modeling programs an NMR facility; an X-ray Crystallography Laboratory; a Mass Spectrometry Laboratory; and an Instrumentation Design Laboratory. All labs have current computer technology, including hardware and extensive software for imaging, data analysis, data reduction, protein and gene analysis, and statistical tests.

Department of Pharmacology and Toxicology

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1251 Wescoe Hall Drive, Room 5064
Lawrence, KS 66045
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Nancy Muma, Chair
785-864-4001
nmuma@ku.edu
Courses

P&TX 630. Pharmacology I. 4 Credits.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Topics in P&TX 630 include, general principles of pharmacokinetics and pharmacodynamics, molecular biology, pharmacogenomics, and pharmacology of the nervous system. Prerequisite: Students must be admitted to the School of Pharmacy to enroll in this course. Students must have successfully completed BIOL 646.

P&TX 631. Pharmacology II. 3 Credits.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Prerequisite: Students must have first year professional standing in the School of Pharmacy. Students must have successfully completed P&TX 630.

P&TX 632. Pharmacology III. 3 Credits.
The pharmacology series covers the mechanisms by which drugs interact with living organisms. An integrative emphasis will be placed on understanding the molecular basis of drug action with respect to modifying the pathophysiology of specific disease states. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have successfully completed P&TX 630 and P&TX 631.

P&TX 633. Pharmacology IV. 3 Credits.
The pharmacology series covers the basic principles of the immunology, inflammation, and targeted drugs used to regulate the immune response. In addition, basic concepts of infectious diseases and their therapeutics are discussed. Prerequisite: Students must have second year professional standing in the School of Pharmacy. Students must have successfully completed P&TX 630, P&TX 631 and P&TX 632.

P&TX 640. Toxicology. 2 Credits.
General principles of toxicology, treatment, and management of accidental poisoning, and current topics of interest. Prerequisite: Students must have third year professional standing in the School of Pharmacy. Students must have successfully completed P&TX 630, P&TX 631, P&TX 632 and P&TX 633.

P&TX 642. Obesity, Diabetes, and Metabolic Syndrome: Current Concepts. 1 Credits.
The objective of this course is to provide students with an opportunity to read, examine, and report on a broad array of topics relevant to diabetes and obesity. Students will be given broad latitude to propose topics of interest to them within the area of diabetes and obesity. The format of the course will be group presentations. Groups of 3 students will identify a topic of interest to them in the field of psychotropic drugs and affect, mood, or behavior, prepare a 30 min presentation, and deliver it to the class for discussion. Prerequisite: Students must be admitted to the school of Pharmacy and have successfully completed P&TX 630 to enroll in this course.

P&TX 643. Current Concepts of Neurodegenerative Disease. 1 Credits.
Neurodegenerative diseases, such as Alzheimer's and Parkinson's diseases, are associated with older age and/or enhanced oxidative stress. The possible causes for the development and progression of these diseases with relation to current research in the field will be discussed. Additionally, a summary of available and suggested future treatments will be given. Prerequisite: Students must be admitted to the school of Pharmacy and have successfully completed P&TX 630 to enroll in this course.

P&TX 644. Adverse Drug Events. 1 Credits.
The objective of this course is to alerts students to common and preventable adverse drug events. This course will provide students with an opportunity to read, examine, and report on a broad array of topics relevant to adverse drug events. Students will be given broad latitude to propose topics of interest to them within the area of adverse drug events. In addition students can report on common and preventable food-drug, herb-drug, and disease-drug interactions. The format of the course will be group presentations. Groups of 3 students will identify a topic of interest to them among a list of provided topics, prepare a 30 minute presentation and deliver it to the class for discussion. Prerequisite: 3rd, 4th, or 5th professional year standing in the School of Pharmacy.

P&TX 645. Neurobiological Basis of Addiction: Physiological, Biochemical, Pharmacological & Treatment Concepts. 1 Credits.
Several addictions will be discussed including addictions to alcohol, cocaine, methamphetamine, gambling, and others as time permits. The physiology, biochemistry, pharmacology and available treatments for these addictions will be reviewed. The role of pharmacotherapies will be discussed, particularly as they relate to the molecular basis of addiction. Behavioral and psychological approaches also will be examined. Prerequisite: Completion of P&TX 632 or special permission from faculty.

P&TX 646. Current Concepts of Psychotropic Medication. 1 Credits.
This course provides information regarding commonly used psychotropic medications, or any drug that affects brain activities associated with mental processes and behavior. This includes, but are not limited to, the categories of antipsychotics, mood stabilizers, anti-anxiety (anxiolytics), antidepressants, and stimulants. The range of topics from basic biology to drug-drug interactions will be explored in the course. Groups of three students will identify a topic of interest to them in the field of psychotropic drugs and affect, mood, or behavior, prepare a 30 min presentation, and deliver it to the class for discussion. Prerequisite: P&TX 630.

P&TX 694. Undergraduate Laboratory: Research in Pharmacology and Toxicology. 1-5 Credits.
Original research on a laboratory problem of limited scope. This course cannot count toward pharmacology and toxicology requirements in the School of Pharmacy. Prerequisite: Consent of instructor.

P&TX 698. Library Problems in Pharmacology and Toxicology. 1-5 Credits.
Original library review of a limited special topic in pharmacology and toxicology. The student will write a review in his or her report. This course may count toward pharmacology and toxicology requirements in the School of Pharmacy. Prerequisite: P&TX 635 and consent of instructor.

P&TX 700. Professional Issues in the Biomedical Sciences. 2 Credits.
A course designed to assist doctoral students in the biomedical sciences in their professional development by providing presentations, discussions, and practical experiences related to career planning. Topics include diverse career opportunities and expectations of each, preparation of vitae/resumes and other elements of a successful job search, writing scientific papers and dealing with editors, developing programmatic research programs, balancing professional obligations, advancing through promotions, and related topics. Prerequisite: Graduate standing in pharmacology and toxicology.
P&TX 705. Current Concepts in Biochemical Pharmacology and Toxicology. 3 Credits.
A detailed study of the foundational concepts and leading-edge discoveries in biochemistry and molecular biology that underlie the actions and effects of drugs and toxicants with particular relevance to human disease and new therapeutic strategies. The interconnectedness and integration of seemingly disparate pathways and regulatory mechanisms will be emphasized. The technologies and experimental approaches used in biochemical pharmacology and toxicology will be illustrated. Topics may vary from year to year depending on recent advances in the field. The course will involve a combination of lectures and discussions with an emphasis on critically reading and analyzing primary research papers. Students will be evaluated on the basis of oral presentations and take-home problem sets. Prerequisite: Graduate standing in Pharmacology and Toxicology. Two semesters of undergraduate biochemistry with molecular biology.

P&TX 730. Advanced Pharmacology I - CNS and ANS. 2 Credits.
A detailed study of the fundamentals of autonomic nervous system, central nervous system, and their pharmacology. The student will attend P&TX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 731. Advanced Pharmacology II - Cardiovascular and Renal System. 2 Credits.
A detailed study of the fundamentals of cardiovascular system, renal system and their pharmacology. The student will attend P&TX 632 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 732. Advanced Pharmacology III - Immunology and Inflammatory Diseases. 2 Credits.
A detailed study of the fundamentals of immunology and inflammation and their pharmacology. The student will attend P&TX 633 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 733. Advanced Pharmacology IV - Endocrinology. 2 Credits.
A detailed study of the fundamentals of endocrinology and associated pharmacology. The student will attend P&TX 633 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 740. Advanced Biotechnology. 3 Credits.
An examination of basic principles of molecular biology, immunology, and protein chemistry as they apply to the identification, production, stability, delivery, and monitoring of new therapeutic agents provided by the expanding biotechnology industry. Students will attend lectures in P&TX 633 and meet separately with faculty for additional discussions of more advanced material on these topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology.

P&TX 741. Biomedical Statistics. 3 Credits.
This course is primarily intended for students concerned with the analysis of experimental and observational data, with an emphasis on biomedical and pharmacological applications. The topics covered by the course include the design of experimental studies, data collection, probability theory, descriptive statistics, probability distribution, hypothesis testing, T-test, analyses of variance for factorial designs, linear and multiple regression, analysis of covariance and non-parametric methods. Prerequisite: P&TX graduate student status in good academic standing.

P&TX 742. Experimental Pharmacology. 3 Credits.
Experimental approaches to understanding mechanism of drug action. Use of drugs as tools to understand functioning of biological systems will also be stressed. Historically important experiments will be discussed along with experiments which are currently used to define drug mechanisms. Topics will include: dose-response, drug receptors, drug metabolism, chemotherapy as well as autonomic CNS, cardiovascular and renal pharmacology. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 747. Molecular Toxicology. 2 Credits.
A detailed study of the fundamentals of the experimental methods used in a modern toxicology laboratory. The student will attend P&TX 640 lectures and meet separately with the faculty for additional discussions of advanced material on the topics. The students will be examined on the advanced material. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 750. Pharmacology I- Introduction to Pharmacology and Biotechnology. 3 Credits.
An introduction to the basic principles of biochemistry and molecular biology as well as pharmacokinetics and pharmacodynamics of drug action. Additional lectures will introduce students to principles of genomics, transgenic technologies and microscopy. Prerequisite: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology.

P&TX 751. Pharmacology II - Endocrine Pharmacology. 2 Credits.
A detailed study of the fundamental concepts of endocrinology with an emphasis on the pathophysiologic details of diabetes and the pharmacology of treatment. Brief discussions on hypothalamic/pituitary, reproductive, thyroid and adrenal endocrinology and pharmacology will be presented. Prerequisite: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology, and completion of P&TX 750 and P&TX 785.

P&TX 752. Pharmacology III- Central Nervous System and Autonomic Nervous System. 4 Credits.
A detailed study of the fundamental concepts of the autonomic nervous system, central nervous system, and select diseases of the CNS and their pharmacology. Prerequisite: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology, and completion of P&TX 750, P&TX 785 and P&TX 751.

P&TX 753. Pharmacology IV- Cardiovascular and Renal System. 2 Credits.
A detailed study of the fundamental principles of the cardiovascular system, renal system and their associated pharmacology. Prerequisite: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology, and completion of P&TX 750, P&TX 785, P&TX 751 and P&TX 752.

P&TX 754. Pharmacology V - Immunopharmacology, Infectious Diseases and Gastrointestinal Pharmacology. 2 Credits.
This course is a detailed study of the fundamental concepts of immunology, inflammatory-related diseases and immunopharmacology, infectious diseases and gastrointestinal pharmacology. Prerequisite: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology, and completion of P&TX 750, P&TX 785 and P&TX 751.
P&TX 755. Molecular Toxicology. 2 Credits.
A detailed study of the fundamentals of the toxicology, drug transformations and the mode of toxicity of various drug classes. Prerequisite: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology, and completion of P&TX 750, P&TX 785 and P&TX 751.

P&TX 757. Biomedical Statistics. 3 Credits.
This course is primarily intended for students concerned with the analysis of experimental and observational data, with an emphasis on biomedical and pharmacological applications. The topics covered by the course include the design of experimental studies, data collection, probability theory, descriptive statistics, probability distribution, hypothesis testing, T-test, analyses of variance for factorial designs, linear and multiple regression, analysis of covariance and non-parametric methods. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology.

P&TX 758. Pharmacogenomics. 2 Credits.
A detailed study of fundamental concepts of pharmacogenomics - how genes and genetic variation determine interindividual differences in drug response - experimental approaches, select gene-drug examples, translation from research to clinical use, and ethical, legal and social implications. Prerequisites: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology.

P&TX 775. Chemistry of the Nervous System. 3 Credits.
A detailed study of the molecular aspects of nerve transmission will be covered with special emphasis on the uptake, storage, release, biosynthesis, and metabolism of specific neurotransmitters. Drugs affecting these processes and current research on receptor isolation and receptor mechanisms will be discussed from a chemical viewpoint. (Same as MDCM 775, NURO 775, and PHCH 775.) Prerequisite: BIOL 600 or equivalent.

P&TX 785. Research Proposal. 2 Credits.
To satisfy the research requirement for the on-line distance M.S. program in Pharmacology and Toxicology, the aspiring student must define a research project and prepare a written proposal describing the nature and goals of the project. It is suggested that the student in conjunction with their distance research mentor collaborate in the selection of and the definition of the proposed research. The proposal should be 4 pages (0.5 in margins, 11-12 point Arial, Times Roman or Calibri font) that states the overall goal of the project, the hypothesis to be tested, 2-3 specific aims, a statement of significance and impact of the research and research approach. Prerequisite: Graduate standing in the Distance M.S. Program in Pharmacology and Toxicology, and completion of P&TX 750.

P&TX 799. Pharmacology and Toxicology Seminar. 1-2 Credits.
A review of current literature and research in pharmacology and toxicology. Required of all graduate students in the department every fall and spring semester. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Graduate standing in P&TX.

P&TX 800. Pharmacology and Toxicology Teaching Principles. 2 Credits.
This course is to be used by graduate students fulfilling the teaching requirements for the Ph.D. in pharmacology and toxicology. The student will function as a discussion leader and lecturer in a limited number of class sessions. Each student will meet with the faculty whom he or she is assisting. Prerequisite: Graduate standing in pharmacology and toxicology program.

P&TX 801. Issues in Scientific Integrity. 1 Credits.
Lectures and discussion on ethical issues in the conduct of a scientific career, with emphasis on practical topics of special importance in molecular-level research in the chemical, biological, and pharmaceutical sciences. Topics will include the nature of ethics, the scientist in the laboratory, as author, grantee, reviewer, employer/employee, teacher/student, and citizen. Discussions will focus on case histories. This course is open only to distance education students. Graded on a satisfactory/unsatisfactory basis. (Same as MDCM 801, NURO 801, PHCH 801 and PHCH 802.)

P&TX 803. Pharmacology Literature Review I. 1 Credits.
This course is designed for graduate students and will fulfill the first written exam requirement for the Ph.D. in pharmacology and Toxicology. The student will research and write a six page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 805. Pharmacology Literature Review II. 1 Credits.
This course is designed for graduate students and will fulfill the second written exam requirement for the Ph.D. in pharmacology and Toxicology. The student will research and write a twelve page literature review by choosing a topic provided by the faculty. Prerequisite: Graduate standing in Pharmacology and Toxicology Program.

P&TX 825. Research in Pharmacology and Toxicology. 1-10 Credits.
Original investigations at an advanced level in the areas of pharmacology or toxicology or related fields. This research will be performed by graduate students in collaboration with a faculty member. Prerequisite: Graduate standing and consent of instructor.

P&TX 826. Online Research in Pharmacology and Toxicology. 8 Credits.
Original investigations at an advanced level in the areas of pharmacology or toxicology or related fields. This research will be performed by graduate students in collaboration at their place of off-site mentoring in collaboration with the faculty mentor. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology and consent of KU Pharmacology and Toxicology Faculty Mentor.

P&TX 885. Distance Master's Research in Pharmacology and Toxicology. 1-12 Credits.
Original investigations at an advanced level in areas of pharmacology or toxicology or related fields. This research will be performed by graduate students in collaboration at their place of off-site mentoring in collaboration with the faculty mentor. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology and completion of P&TX 785.

P&TX 889. Distance Master's Thesis. 2 Credits.
Independent investigation of a research problem of limited scope, leading to the preparation of a written Master's Degree thesis. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology and completion of 12 credits in P&TX 885.

P&TX 890. Distance M.S. Thesis. 2 Credits.
Independent investigation of a research problem of limited scope, leading to the preparation of a written Master's Degree thesis. Prerequisite: Graduate standing in the On-line M.S. Program in Pharmacology and Toxicology.

P&TX 898. Online Master's Thesis. 1-2 Credits.
Independent investigation of a research problem of limited scope leading to the preparation of a written Master's Degree thesis. Prerequisite: Graduate standing in the Online M.S. Program in Pharmacology and Toxicology.

P&TX 899. Master's Thesis. 1-11 Credits.
Hours and credit to be arranged. Independent investigation of a research problem of limited scope. Prerequisite: Graduate standing in P&TX and consent of instructor.

P&TX 990. Postdoctoral Research. 1-11 Credits.
Advanced level research in collaboration with a faculty member in the department. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Doctoral degree or equivalent in an appropriate related area, and consent of instructor.

P&TX 999. Doctoral Dissertation. 1-11 Credits.
Hours and credit to be arranged. Original investigation in pharmacology and toxicology. Prerequisite: Consent of instructor.

Master of Science in Pharmacology and Toxicology

Pharmacology and Toxicology Graduate Programs

The Department of Pharmacology and Toxicology has research strengths in neuropharmacology — especially in neurodegeneration, mood disorders, and addiction — and the effects of diabetes on the nervous system. The research program is founded on a strong graduate program. The major aim of this Master of Science (MS) degree program is to provide qualified graduates to institutions in academia, industry, and government. The Master of Science in Pharmacology and Toxicology program emphasizes student’s research skills in molecular and neuro-pharmacology. In addition to the didactic component of our training, we view hands-on training in laboratory research critical to the master’s thesis experience. The department’s research programs and faculty place it at the leading edge of research in the pharmacological and toxicological neurosciences.

Distance Master’s Degree Program

The department also offers a distance master’s program. Please see the website (https://pharmtox.ku.edu/distance-masters/) for details. The program features the same high-quality lectures and courses offered in the Ph.D. program. The program allows the industrial scientist or student to remain at their respective institutions and earn the M.S. degree under a collaborative academic environment. Students will typically take 1 course a semester and the program is designed for individuals who are seeking additional academic qualifications that will facilitate their professional advancement or increase their competitiveness for admission to other advanced degree programs. For questions, contact our Administrative Assistant Ms. Sarah Hoadley, 785-864-4001, pharmtox@ku.edu or the Director of the Distance Master’s Program, Rick T. Dobrowsky, Ph.D., 785-864-3531, dobrowsky@ku.edu

Graduate Admission

Admission is based on the student’s undergraduate record in a relevant field, Graduate Record Examination scores, and 3 letters of recommendation. A minimum grade-point average of 3.0 on a 4.0 scale is required. Applications from non-English-speaking countries must include a copy of the Test of English as a Foreign Language score. Acceptance depends on the availability of space and faculty commitment.

Students are expected to have bachelor’s degrees in pharmacy, chemistry, biology, pharmacology, toxicology, or other physical science related disciplines. Submit your graduate application online (http://www.graduate.ku.edu/). Send transcripts of all completed college and university course work and all other requested application materials to the department:

The University of Kansas
Department of Pharmacology and Toxicology
Malott Hall
1251 Wescoe Hall Drive, Room 5064
Lawrence, KS 66045

M.S. Degree Requirements

Course Work

Students must earn 18 credit hours in the following courses or their equivalents:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>P&amp;TX 730</td>
<td>Advanced Pharmacology I - CNS and ANS</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 731</td>
<td>Advanced Pharmacology II - Cardiovascular and Renal System</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 732</td>
<td>Advanced Pharmacology III - Immunology and Inflammatory Diseases</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 733</td>
<td>Advanced Pharmacology IV - Endocrinology</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 741</td>
<td>Biomedical Statistics (3 credits)</td>
<td></td>
</tr>
<tr>
<td>P&amp;TX 742</td>
<td>Experimental Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>P&amp;TX 747</td>
<td>Molecular Toxicology</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 799</td>
<td>Pharmacology and Toxicology Seminar</td>
<td>3</td>
</tr>
<tr>
<td>P&amp;TX 825</td>
<td>Research in Pharmacology and Toxicology (Combination of P&amp;TX 825 and P&amp;TX 899 must equal 12 hours)</td>
<td>3-9</td>
</tr>
<tr>
<td>P&amp;TX 899</td>
<td>Master's Thesis (Combination of P&amp;TX 825 and P&amp;TX 899 must equal 12 hours)</td>
<td>3-9</td>
</tr>
</tbody>
</table>

Research Skills Requirement

Each MS degree student is required to take credit hours of Research in Pharmacology and Toxicology (P&TX 825) and Masters Thesis (P&TX 899). Enrollment in either course must continue until a total of 12 credit hours are earned, such that when taken together with didactic coursework, research, and thesis, totals 30 hours of graduate coursework.

Students need to maintain continuous enrollment in the program until completion. It is expected that students usually will complete the requirements and graduate in two years.

Each MS degree student is required to submit and defend a thesis resulting from research of sufficient originality and quality for publication in peer reviewed scientific journals. The research is conducted under the supervision and guidance from the student’s advisor, with input from the thesis committee as needed.

Top graduates, if interested, may transfer into a Ph.D. program in Pharmacology and Toxicology offered in the department.
Doctor of Philosophy in Pharmacology and Toxicology

Pharmacology and Toxicology Graduate Programs

The Department of Pharmacology and Toxicology has research strengths in neuropharmacology — especially in neurodegeneration, mood disorders, and addiction — and the effects of diabetes on the nervous system. The research program is founded on a strong Ph.D. graduate program. Doctoral students are prepared to teach and do research in a university, pharmaceutical, biotechnology, or government laboratory setting.

New Ph.D. students can look forward to personal development in an atmosphere that fosters strong collaborative activities as well as independent scholarship. The department recruits about 4 Ph.D. students each year and offers stipends and tuition coverage. The department's research programs and faculty place it at the leading edge of research in the pharmacological and toxicological neurosciences.

Graduate Admission

Admission is based on the student's undergraduate record in a relevant field, Graduate Record Examination scores, and 3 letters of recommendation. A minimum grade-point average of 3.0 on a 4.0 scale is required. Applications from non-English-speaking countries must include a copy of the Test of English as a Foreign Language score. Acceptance depends on the availability of space and faculty commitment.

Students are expected to have bachelor’s degrees in pharmacy, chemistry, biology, pharmacology, toxicology, or other physical science related disciplines. Submit your graduate application online (http://www.graduate.ku.edu/). Send transcripts of all completed college and university course work and all other requested application materials to the department:

The University of Kansas
Department of Pharmacology and Toxicology
Malott Hall
1251 Wescoe Hall Drive, Room 5064
Lawrence, KS 66045

Ph.D. Degree Requirements

Course Work

Incoming students should have completed 4 semesters of Chemistry and 4 semesters of Biology, including a course in Cell Biology and one in Biochemistry. Prerequisites can be completed during the first year. The core courses in Pharmacology and Toxicology that all students are required to take are listed below. Prerequisite for all courses is graduate standing in the Pharmacology and Toxicology Program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>P&amp;TX 700</td>
<td>Professional Issues in the Biomedical Sciences</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 730</td>
<td>Advanced Pharmacology I - CNS and ANS</td>
<td>2</td>
</tr>
<tr>
<td>P&amp;TX 731</td>
<td>Advanced Pharmacology II - Cardiovascular and Renal System</td>
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<tr>
<td>P&amp;TX 733</td>
<td>Advanced Pharmacology IV - Endocrinology</td>
<td>2</td>
</tr>
</tbody>
</table>

P&TX 740 | Advanced Biotechnology                      | 3     |
P&TX 742 | Experimental Pharmacology                  | 4     |
P&TX 747 | Molecular Toxicology                       | 2     |
P&TX 799 | Pharmacology and Toxicology Seminar       | 1-2   |
P&TX 800 | Pharmacology and Toxicology Teaching Principles | 2     |
P&TX 801 | Issues in Scientific Integrity            | 1     |
P&TX 803 | Pharmacology Literature Review I          | 1     |
P&TX 805 | Pharmacology Literature Review II         | 1     |
BIOL 841 | Biometry I                                 | 5     |
P&TX 775 | Chemistry of the Nervous System (Elective option that a student may decide to take depending on their interests and the advice of their mentor) | 3     |
P&TX 825 | Research in Pharmacology and Toxicology (Can be repeated during the graduate program based on the advice of each student's mentor) | 3-9   |
P&TX 999 | Doctoral Dissertation (Can be repeated during the 1-11 graduate program based on the advice of each student's mentor) | 1-11   |

Research Advisory Committee members for Ph. D degree aspirants should be identified by the end of the second year in the program. The committee is composed of at least three members, and the research director serves as chairman. The final Dissertation Defense Committee should consist of the original Advisory Committee (3 members) plus two (2) other members of the Graduate Faculty. At least one member of the final Dissertation Committee must be from outside the Department.

Comprehensive Exam Requirements for Ph. D. Students

The comprehensive examination is composed of 3 parts:

1. Written Comprehensive Examination: Each student must complete two written examinations to complete P&TX 803 and P&TX 805.

2. Preparation of an NIH-style research proposal: After successful completion of the second written comprehensive exam, the student should begin working on their NIH Grant proposal. These serve as the basis for the Oral Comprehensive Exam.

3. Oral Comprehensive Examination: After approval of the research proposal by the student's advisory committee, each student, in consultation with the advisor, takes an oral examination covering the student's major field.

Dissertation Research

The student, with the advisor's assistance, develops a dissertation project. After the oral comprehensive examination, the student presents the dissertation research project to the advisory committee and receives periodic advice from this committee throughout the project. Upon acceptance of the dissertation by the advisory committee, the candidate must pass a final oral examination, including a defense of the dissertation before the dissertation committee and any other interested members of the Graduate Faculty.
Department of Pharmacy Practice

Pharmacy Practice Graduate Program

The Department of Pharmacy practice furthers the mission of the School of Pharmacy by striving for excellence in teaching, research, scholarly activity, service, and patient care.

The faculty provide professional educational opportunities for undergraduate, graduate, and postgraduate students and practitioners to enable them to practice pharmaceutical care, adapt to changing professional roles, use new technologies, assume leadership roles in a dynamic health-care environment, and contribute new knowledge to the profession.

Department of Pharmacy Practice - Lawrence

2010 Becker Drive, Room 2001
Lawrence, KS 66047
785-864-4881
http://pharmpractice.ku.edu/

Frank Weinhold, PharmD, MS, Chair of Pharmacy Practice, Department of Pharmacy Practice
Dennis Grauer, PhD, MS, RPh, Associate Chair, Lawrence, Department of Pharmacy Practice

Department of Pharmacy Practice - KUMC

KU Medical Center, 6330 Wescoe
Mail Stop 4040, 3910 Rainbow Blvd.
Kansas City, KS 66160
913-588-5360
http://pharmpractice.ku.edu/

Frank Weinhold, PharmD, MS, Chair of Pharmacy Practice, Department of Pharmacy Practice
Ryan Funk, PhD, MS, PharmD, Associate Chair, KUMC, Department of Pharmacy Practice

Department of Pharmacy Practice - Wichita Campus

1010 N. Kansas, Suite 2331
Wichita, KS 67214
316-293-3500
http://pharmpractice.ku.edu/

Frank Weinhold, PharmD, MS, Chair of Pharmacy Practice, Department of Pharmacy Practice
Bradley J. Newell, PharmD, BCACP, BCGP, FASCP, Associate Chair, Wichita, Department of Pharmacy Practice

Courses

PHPR 506. Precision Medicine. 1 Credits.
This course will address the role of precision medicine in pharmacy practice and is designed to extend the students' understanding of the basis for interindividual variation in drug response and the evolving role of the pharmacist. The course will include required readings, lectures, cases and in-class discussions that focus on the evidence and practicality of precision medicine in pharmacy practice. Using selected examples, students will learn about patient factors that drive variability in drug response and how these factors drive drug selection and dosing. With the current focus on the use of genomic data to drive individualized therapy, students will learn about current pharmagenomic-based practice guidelines and clinical practice references. Students will prepare a 2-page writing assignment and an in-class presentation on the impact of precision medicine on pharmacy practice. Prerequisite: Must be admitted to the School of Pharmacy.

PHPR 507. Advanced Community Practice. 1 Credits.
The objective of this course is to prepare pharmacy students to practice as advanced pharmacists in a community setting. The course will cover patient care as well as the business and insurance aspects surrounding community pharmacy practice. We will cover a variety of topics including reimbursement, legal issues, Medication Therapy Management (MTM), communication, ethics, and the future of Community Pharmacy practice. Prerequisite: 3rd professional year standing in the School of Pharmacy.

PHPR 508. Hematology/Oncology Pharmacy. 1 Credits.
This course explores many cancer-related topics, including non-pharmacologic treatment modalities, complications of cancer and its treatment, supportive care issues, and precision medicine. It also reviews current cancer screening and prevention guidelines and cancer research. Various cancers are discussed, such as myeloma, pediatric cancers, and cancers of the bladder, kidneys, ovaries, and testes. Prerequisite: Students must have third year professional standing in the School of Pharmacy and have successfully completed MDCM 626.

PHPR 509. Medicare Part D. 1 Credits.
This elective course will focus on the understanding and active enrollment of patients into Medicare prescription drug benefit (Part D). Students will mainly focus on the understanding of Medicare eligibility, benefits, formulary requirements, and the administration of benefits. Students will also participate in community outreach which may focus on underserved patients. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Must be a 2nd or 3rd professional year standing in the School of Pharmacy.

PHPR 510. Medical Terminology Elective. 1 Credits.
This course provides the fundamentals for developing a medical vocabulary. The student will develop the ability to understand, define and utilize medical terminology and abbreviations used in patient care.

PHPR 513. Chemical Dependency Elective. 1 Credits.
This elective course will enhance the pharmacy student's knowledge and understanding of the current theories behind the addiction process, frequently abused drugs and/or chemicals and the treatment and recovery process. Prerequisite: Must be accepted to the Pharmacy Program.

PHPR 514. Communication and Counseling. 1 Credits.
An elective course designed to help students improve professional communication skills. Prerequisite: PHAR 500.

PHPR 515. The Aging Patient. 1 Credits.
This elective course is designed for the learner to explore many of the clinical considerations employed when caring for the aging patient within our health care system. The course will be devoted to exploring perceptions of the older adult patient, learning how the aging process can impact patient care, and identifying the role of the pharmacist in enhancing this care through the 5Ms of geriatric care. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy.

PHPR 516. Pharmacy in Public Health. 1 Credits.
Public health is more than providing treatment for an illness; it is a concern for the health of an entire population. The ideal is to ensure...
the health of all. This course will focus on providing students with a solid foundational understanding of what public health is and how pharmacists play a role as a public health provider. The course will cover the concepts and tools used in public health including issues such as: determining health, cultural competence, health promotion, disease prevention, epidemiology and disease, describing populations and community health. Lastly, the course will provide students with specific pharmacist models of public health. Successful models include tobacco cessation programs, community vaccination programs, obesity prevention, tuberculosis monitoring, emergency preparedness and domestic violence. Prerequisite: Must be accepted to the Pharmacy Program.

**PHPR 517. Medication Safety and Error Prevention. 1 Credits.**
This course introduces the student to medication safety and the technology as well as the tools used in error prevention. The student will also learn about adverse drug events including both medication errors and adverse drug reactions in hospital and retail pharmacy settings. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy.

**PHPR 519. Business Planning for Pharmacy. 1 Credits.**
This course is designed for students interested in developing a business plan. Most pharmacists will have an opportunity to develop a new service, product line or even start a new business venture in their careers. Students need to know how to create a formal business plan and how to present the plan to decision makers. The course will cover the basic components and rationale of creating a formal a business plan. When finished students will be expected to have created a written business plan and will present their creation to the class. In this manner, students will gain experience in developing an idea into a plan. Prerequisite: Students must be admitted to the school of pharmacy.

**PHPR 520. Specialty Pharmacy. 1 Credits.**
This course will review a variety of diseases including: multiple sclerosis, hepatitis C and autoimmune conditions (psoriasis, ulcerative colitis, etc) and the specialty medications used to treat these conditions. Specialty pharmacy accreditation standards as well as topic discussions reviewing many issues facing the specialty pharmacy industry will be discussed. Guest speakers from different specialty pharmacies in the greater Kansas City area will also present information on their career experiences. Prerequisite: Students must have second or third year professional standing in the School of Pharmacy.

**PHPR 521. Practical Pediatrics. 1 Credits.**
This course will expose students to conditions frequently encountered in pediatric care. Students will further develop knowledge and skills necessary to provide appropriate pediatric care in institutional, ambulatory, and community practice settings. The course will involve interactive lectures followed by case-based learning to promote student application of knowledge to relevant clinical situations. Prerequisite: Students must be admitted to the School of Pharmacy and must be in their 3rd professional year.

**PHPR 522. Pharmacy-Based Travel Health Services. 1 Credits.**
This course reviews pertinent problems traveling entails and services pharmacists can provide for traveling patients. The course will involve interactive lectures followed by case-based learning to promote student application of knowledge to relevant clinical situations. Following the completion of this course, students should be able to recognize the need to establish travel health services, the role of pharmacists in these services, identify the commonly encountered disease states and problems for travelers, and what components comprise travel health by utilizing comprehensive knowledge, skills and resources necessary to establish and deliver successful travel health service. Prerequisite: Students must be admitted to the School of Pharmacy and must be in their 2nd or 3rd professional year. Students must have successfully completed the APhA Pharmacy-Based Immunization Delivery program.

**PHPR 523. Critical Care Problem-Based Learning. 1 Credits.**
This is an elective course focusing on advanced clinical decision making within the field of critical care. Using clinical critical care cases, student will work as a team to assess and make therapeutic recommendations through problem-based learning exercises. These activities aim to prepare students for advanced pharmacy practice and residency experiences in acute care settings by providing instruction in application of primary literature to patient cases, following patient progress through emergency department and intensive care settings, and oral presentation of evidence-based patients cases. Additionally, students will participate in an acute care interprofessional simulation. Prerequisite: Students must be admitted to the School of Pharmacy and must be in their 3rd professional year.

**PHPR 525. Ambulatory Care. 1 Credits.**
This elective course will explore many of the clinical and practical considerations employed when caring for patients in the ambulatory care setting. The course will expose the learner to a variety of topics that impact the pharmacist’s role in this practice setting, including collaborative practice agreements, patient case evaluations, communication skill development, and practice evaluation. The course will be facilitated by the ambulatory care practice group at The University of Kansas Health System and will prepare the student for advanced pharmacy practice and residency experiences in the ambulatory care setting. Prerequisite: P2 or P3 standing in the School of Pharmacy.

**PHPR 526. Introduction to Pharmacy Residencies. 1 Credits.**
This course is team-taught by KU clinical faculty with the support of pharmacy residency program directors, residency preceptors, and pharmacy residents. This course is designed to increase knowledge, interest, and confidence amongst students about residency training; identify and develop the skills necessary to apply to residency programs; and increase the number of students obtaining residency positions upon graduation. Prerequisite: Third year professional standing in the School of Pharmacy and instructor consent.

**PHPR 527. Advanced Psychiatric Pharmacy. 1 Credits.**
This elective course is designed to provide learners with the opportunity to gain further clinical and practical considerations when caring for patients with psychiatric disorders and substance use disorders. The course will expose the learner to a variety of topics that impact the pharmacist’s role in treating patients with psychiatric disorders. This course will help prepare students who are interested in the field of psychiatry. Prerequisite: Successful completion of PHPR 662.

**PHPR 528. Infectious Diseases Therapeutic Drug Monitoring. 1 Credits.**
This advanced elective course will focus on clinical application of vancomycin, aminoglycoside, and anti-fungal therapeutic drug monitoring utilizing multiple-day real patient cases. The course format will consist of alternating week(s) of online learning via calculation assignments and in-person class debriefing discussions. Prerequisite: P3 Standing in School of Pharmacy.

**PHPR 529. Introduction to the Pharmaceutical Industry. 1 Credits.**
This course introduces the foundations of the pharmaceutical industry, by first introducing the drug development process from investigational molecules to FDA approval and beyond. A variety of departments within the pharmaceutical industry will be explored, including but not limited to: Clinical development and operations, regulatory affairs, medical affairs and information, market access, sales and commercial operations, and pharmacovigilance. Additionally, pharmaceutical industry fellowships will be introduced, and projects will aid in the development of materials to
assist in applications, interviews, and success in PhRMA. Prerequisite: P2 and P3 students enrolled at the KU School of Pharmacy are eligible to enroll in this course.

PHPR 541. Foundations of Interprofessional Collaboration I. 0 Credits.
This TeamSTEPPS Level 1 experience will introduce interprofessional students to the basic concepts of interprofessional collaboration including values and ethics, roles and responsibilities of healthcare team members, and interprofessional communication tools using the evidence-based national curriculum of TeamSTEPPS. Upon completion of this training experience students will be able to: 1) demonstrate a work ethic with individuals of other professions to maintain a climate of mutual respect and shared values; 2) define the role of health professions (including your own) within the healthcare system; 3) identify opportunities to seek expertise of health professionals to improve communication and healthcare; and 4) acquire basic TeamSTEPPS communication tools to effectively use with healthcare teams. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Student must have P1 standing in the School of Pharmacy.

PHPR 542. Foundations of Interprofessional Collaboration II. 0 Credits.
This TeamSTEPPS Level 2 experience will provide interprofessional students opportunities to apply key knowledge and skills gained in FIPC I, through role-play and case-based learning. Students will apply their knowledge of roles and responsibilities of healthcare team members and interprofessional communication tools and continue learning with, from, and about students from other professions. Upon completion of this training experience students will be able to: 1) engage diverse healthcare professionals who complement one’s own professional expertise, as well as associated resources, to develop strategies to meet specific patient care needs; 2) choose effective communication tools and techniques, including information systems and communication technologies, to facilitate discussions and interactions that enhance team function; and 3) engage other health professionals appropriate to the specific care situation—in shared patient-centered problem-solving. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Student must have P2 standing in the School of Pharmacy and successfully completed PHPR 661.

PHPR 543. Foundations of Interprofessional Collaboration III. 0 Credits.
This TeamSTEPPS Level 3 experience will provide interprofessional students opportunities to demonstrate key knowledge and skills gained in FIPC I and II, through simulation. Students will demonstrate their interprofessional communication skills, including specific opportunities to utilize TeamSTEPPS tools. Students will also demonstrate their teamwork abilities by working with interprofessional students during the simulation. Upon completion of this training experience students will be able to: 1) demonstrate communicating effectively with other health professionals about a patient case; 2) exhibit teamwork skills with an interprofessional healthcare team; and 3) utilize key TeamSTEPPS tools with an interprofessional healthcare team. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Students must have third year professional standing in the School of Pharmacy. Students must have successfully completed PHPR 663.

PHPR 601. Advanced Pharmacy Practice Experience 1. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an “Excellent”, “Satisfactory”, or “Unsatisfactory” grading basis.

PHPR 602. Advanced Pharmacy Practice Experience 2. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an “Excellent”, “Satisfactory”, or “Unsatisfactory” grading basis.

PHPR 603. Advanced Pharmacy Practice Experience 3. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an “Excellent”, “Satisfactory”, or “Unsatisfactory” grading basis.

PHPR 604. Advanced Pharmacy Practice Experience 4. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an “Excellent”, “Satisfactory”, or “Unsatisfactory” grading basis.

PHPR 605. Advanced Pharmacy Practice Experience 5. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an “Excellent”, “Satisfactory”, or “Unsatisfactory” grading basis. Prerequisite: Students must have fourth year professional standing in the School of Pharmacy.

PHPR 606. Advanced Pharmacy Practice Experience 6. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an “Excellent”, “Satisfactory”, or “Unsatisfactory” grading basis. Prerequisite: Students must have fourth year professional standing in the School of Pharmacy.

PHPR 607. Advanced Pharmacy Practice Experience 7. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage the student to apply their didactic education to clinical problem solving. Both clinical and distributive pharmacy services will be integrated in these experiences for optimal learning. This course is graded using an “Excellent”, “Satisfactory”, or “Unsatisfactory” grading basis. Prerequisite: Students must have fourth year professional standing in the School of Pharmacy.

PHPR 608. Advanced Pharmacy Practice Experience 8. 4 Credits.
The final year of the Doctor of Pharmacy program is spent participating in pharmacy practice experience rotations. These consist of nine, one-month rotations, in various health care settings. Such practice settings may include a variety of acute care, ambulatory care, managed care, hospital and community practice sites. Each rotation provides an academically structured environment that enables the student to gain practical experience under the guidance of a practicing health care professional. The purpose of providing pharmacy students with a pharmacist role model is to foster the development of both professional confidence as well as competence. These practice-based experience settings encourage...
sector, and what lies in the future for health care delivery. The purpose of the course is to prepare pharmacy students for non-clinical aspects of their practice sites. Enrollment limited to pharmacy majors. Prerequisite: Students must have first year professional standing in the School of Pharmacy.

**PHPR 620. Ethical, Legal, and Cultural Issues in Patient Care. 2 Credits.**
This course provides an introduction to the fundamentals of law and ethics as they apply to the practice of pharmacy. Course sessions will focus on ethical expectations of the profession, principles and issues in medical and pharmacy ethics, and laws that govern medication dispensing.

**PHPR 621. Pharmacy Law. 2 Credits.**
A course developed to increase students’ knowledge and understanding of laws that regulate the pharmacy profession. Prerequisite: Students must be admitted to the School of Pharmacy to enroll in this course. Students must be in their third professional year standing in the School of Pharmacy and eligible for APPE rotations at the conclusion of the semester.

**PHPR 624. Pharmacoepidemiology and Public Health. 2 Credits.**
Pharmacy profession has a unique and critical opportunity and responsibility to contribute to the improvement of population health. Public health is a broader discipline that encompasses population health with a variety of other areas, including but not limited to epidemiology, cultural competence, health promotion, disease prevention, and drug safety. Pharmacoepidemiology is the application of the principles of epidemiology to the study of medications and their effects. Considerations are centered on providing beneficial or adverse effects of medication use in large populations and making relevant inferences from essential analytical research designs used in public health. Using population-based-care approach, students will adopt and fulfill public health roles and activities. This course provides a broad introduction to the principles of pharmacoepidemiology and public health with a focus on applications in the field of pharmacy. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Students must have P3 standing in the School of Pharmacy.

**PHPR 629. Research Design and Biostatistics. 2 Credits.**
This course reviews study designs and statistical methods commonly used in primary medical literature. In collaboration with other courses in the curriculum, this course prepares students to interpret and apply primary literature during patient care, collect and analyze data, and maintain clinical competency throughout their professional career in pharmacy. Following completion of this course, students should be able to identify or select appropriate research methods and study designs; collect, summarize and interpret research data; understand basic statistical concepts; identify or select appropriate statistical tests for hypothesis testing; conduct and interpret the results of statistical tests; and evaluate the validity and reliability of published research studies.

**PHPR 630. Drug Information and Literature Evaluation. 1 Credits.**
This course will review the fundamental tools used to identify drug information in primary, secondary and tertiary resources. In addition, students will learn to assess published literature, utilize electronic resources, and learn to formulate a response to drug information questions. Following completion of this course, students will be able to understand the strengths and weaknesses of the drug information resources and to apply drug information skills to clinical practice relevant to patient care. Prerequisite: Successful completion of PHPR 629 and Fifth year standing (P3 student).

**PHPR 635. Problems in Pharmacy Practice. 1-5 Credits.**
A course designed for the study of special topics in pharmacy practice. A research paper will be required. Prerequisite: Consent of instructor.

**PHPR 661. Pharmacotherapy I. 4 Credits.**
A course dealing with the clinical applications of drug knowledge to patient care. Drug interactions and patient counseling techniques will be covered. Over-the-counter medications and herbas will also be a significant portion of the course. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Student must have first year professional standing in the School of Pharmacy and successfully completed PHAR 510, PHAR 512 and concurrent enrollment or successfully completed PHAR 515 and PHAR 517.

**PHPR 662. Pharmacotherapy II. 4 Credits.**
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Prerequisite: Students must be admitted to the school of Pharmacy and have successfully completed PHPR 661 and PHAR 515 and PHAR 517 to enroll in this course.

**PHPR 663. Pharmacotherapy III. 4 Credits.**
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Prerequisite: Students must be admitted to the school of Pharmacy to enroll in this course. Student must have second year professional standing in the School of Pharmacy and successfully completed PHPR 662 and PHAR 520.

**PHPR 664. Pharmacotherapy IV. 4 Credits.**
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Prerequisite: Students must be admitted to the school of Pharmacy and have successfully completed PHPR 663 and PHAR 525 to enroll in this course.

**PHPR 665. Pharmacotherapy V. 4 Credits.**
A course dealing with the clinical applications of drug knowledge to patient care. Disease and drug knowledge will be applied to the design and monitoring of therapeutic treatment plans for patients. Prerequisite: Students must have third year professional standing in the School of Pharmacy. Students must have successfully completed PHAR 530 and PHPR 664.

**PHPR 670. Clinical Assessment. 2 Credits.**
This laboratory course will allow students to develop clinical assessment skills necessary in the provision of pharmaceutical care to patients with a variety of disease states. Students will combine physical assessment skills, patient counseling skills, and pharmacotherapy management and interprofessional healthcare teams. The lab component will require students to meet between 1:00 to 5:00 PM on either Monday, Tuesday, or Wednesdays. In addition, there is a required Thursday discussion section. A detailed schedule of lab meeting dates and times will be provided in the syllabus. Prerequisite: Students must be admitted to the School of Pharmacy to enroll in this class. Students must pass PHPR 664 to be eligible to complete PHPR 670.

**PHPR 690. Research in Pharmacy Practice. 1-5 Credits.**
Students will conduct original research in a laboratory, educational, or clinical research setting under the supervision of department faculty. Prerequisite: Students must be admitted to the School of Pharmacy to enroll in this class.
PHPR 845. Professional Communications and Leadership. 2 Credits.
A course designed to give the graduate student a practical experience in areas of professional communications such as administrative proposals, grants, letters, memos, poster presentations, and written papers. The course focuses on the different kinds of communications required to relate to other health care professionals. Prerequisite: Consent of instructor.

PHPR 855. Economic Evaluation of Health Care Programs and Services. 3 Credits.
The course will provide students with an overview and appraisal of the "state-of-the-art" in the evaluation of health care programs and services (with a special emphasis on pharmaceutical programs, services, and products). The purpose of the course is to provide the student with the tools to conduct economic rather than general evaluation of health care programs and services. There will be some discussion of theoretical concepts, but the major emphasis will be on practical methodological issues in economic evaluation of pharmaceutical programs. The course integrates the perspectives of pharmaceutical and health care technology assessment, managed care, outcomes research, and public health. The main topics covered in the course include: cost, cost-minimization, cost-effectiveness, cost-utility, and cost-benefit analyses.

PHPR 860. Seminar in Pharmacy Practice. 1 Credits.
Research reports, reviews, and/or presentations on the current status of various aspects of pharmacy practice. Prerequisite: Consent of instructor.

PHPR 865. Advanced Institutional Pharmacy Services I. 1.5 Credits.
Advanced Institutional Pharmacy Services (I) includes activities involving administrative and behavioral science techniques to manage 'the business of pharmacy practice'. Topics and information will be borrowed from the disciplines of business management, accounting, economics, finance, marketing, operations research and applied to the practice of pharmacy. Upon completion of the course, students should be able to explain, understand and apply pharmacy practice management techniques in the following general areas: business management, pharmacy financial management and operations management. Prerequisite: Consent of instructor.

PHPR 866. Advanced Institutional Pharmacy Services II. 1.5 Credits.
Advanced Institutional Pharmacy Services (II) includes activities involving administrative and behavioral science techniques to manage 'the business of pharmacy practice'. Topics and information will be borrowed from the disciplines of business management, accounting, economics, finance, marketing, operations research and applied to the practice of pharmacy. Upon completion of the course, students should be able to explain, understand and apply pharmacy practice management techniques in the following general areas: human resource management, clinical services management, specialty pharmacy services and technology management. Prerequisite: Consent of Instructor.

PHPR 899. Research in Pharmacy Practice. 1-6 Credits.
Original investigation in the area of pharmacy practice. Prerequisite: Consent of instructor.

Master of Science in Pharmacy Practice

Pharmacy Practice Graduate Program
The Department of Pharmacy practice furthers the mission of the School of Pharmacy by striving for excellence in teaching, research, scholarly activity, service, and patient care.

The faculty provide professional educational opportunities for undergraduate, graduate, and postgraduate students and practitioners to enable them to practice pharmaceutical care, adapt to changing professional roles, use new technologies, assume leadership roles in a dynamic health-care environment, and contribute new knowledge to the profession.

Graduate Admission
In addition to meeting the general requirements for admission to graduate studies (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/?num1_1=), applicants are considered for admission if they are graduates of a school of pharmacy accredited by the Accreditation Council for Pharmaceutical Education (ACPE) (https://www.acpe-accredit.org/) and are eligible for licensure as registered pharmacists by the Kansas State Board of Pharmacy (http://pharmacy.ks.gov/). A Bachelor of Science degree or a Doctor of Pharmacy (Pharm.D.) degree with a major in pharmacy is required.

Submit your graduate application online (http://www.graduate.ku.edu/).
Send transcripts of all completed college and university course work and all other requested application materials to the department:

The University of Kansas
Department of Pharmacy Practice
2010 Becker Drive, Room 2001
Lawrence, KS 66047

M.S. Degree Requirements
A minimum of 30 credit hours, with a majority of hours in pharmacy, is required for the degree. These courses may be selected from related fields after approval by the department. Examples are health-system pharmacy, clinical pharmacy, nuclear pharmacy, computer science, business administration, health policy and management, and related fields. An approved project, representing 6 to 9 credit hours of original research, is required. It may be in pharmaceutical sciences, clinical pharmacy, pharmacy practice, pharmacotherapy, or health-system pharmacy.

An accredited PGY1/PGY2 residency in Health-Systems Pharmacy Administration in an approved hospital is required of each student. Requirements for the residency program include eligibility for licensure as a pharmacist in Kansas. The student must complete the residency concurrently with the academic portion of the program. Upon satisfactory completion of the residency, the student receives a certificate of residency from the cooperating hospital. The length of the program is 2 years. For students who have previously completed a residency accredited by the American Society of Health-System Pharmacists (http://www.ashp.org/), this part of the program may be waived on approval of the department.
Professional Studies

Graduation requirements and regulations for every academic program are provided in this catalog. Degree requirements and course descriptions are subject to change. In most cases, you will use the catalog of the year you entered KU (see your academic success coach (https://edwardscampus.ku.edu/program-advisors/) for details). Other years' catalogs.

Bachelor of Applied Science in Biotechnology (p. 2359)
Bachelor of Applied Science in Project Management (p. 2361)
Bachelor of Arts and Bachelor of General Studies in American Sign Language and Deaf Studies (p. 2362)
Bachelor of Health Sciences (p. 2364)
Bachelor of Science in Applied Biological Sciences (p. 2366)
Bachelor of Science in Information Technology (p. 2368)
Bachelor of Science in Project Management (p. 2370)
Undergraduate Certificate in Advanced American Sign Language (p. 2372)
Undergraduate Certificate in ASL/English Interpreting (p. 2372)
Undergraduate Certificate in Biotechnology (p. 2373)
Undergraduate Certificate in Deaf Studies and Social Justice (p. 2373)
Undergraduate Certificate in Nutrition (p. 2373)
Undergraduate Certificate in Public and Population Health (p. 2374)
Post-Baccalaureate Certificate in Health Sciences (p. 2374)
Graduate Certificate in Advanced American Sign Language (p. 2375)
Graduate Certificate in ASL/English Interpreting (p. 2375)
Graduate Certificate in Cybersecurity (p. 2376)
Graduate Certificate in Deaf Studies and Social Justice (p. 2377)
Graduate Certificate in Foundations of Engineering Management (p. 2377)
Graduate Certificate in Foundations of Project Management (p. 2378)
Graduate Certificate in Professional Workplace Communication (p. 2378)
Graduate Certificate in Software Engineering and Management (p. 2379)
Master of Arts in Organizational Communication (p. 2379)
Master of Engineering in Project Management (p. 2380)
Master of Science in Project Management (p. 2380)
Master of Science in Engineering Management (p. 2382)
Master of Science in Information Technology (p. 2383)
Minor in Biotechnology (p. 2384)
Minor in Nutrition (p. 2385)
Minor in Public and Population Health (p. 2385)

Introduction

The KUEC School of Professional Studies provides high-quality academic programs, research activities, and engaged learning initiatives that meet workforce, economic, and student needs. Our work is guided by our shared commitment to the values of collaboration, innovation, and social equity as we serve our students and the community.

The School of Professional Studies is a University of Kansas academic unit designed and charged with serving the needs of non-traditional and transfer students in the Kansas City metro area and nationally. The undergraduate programs in the School of Professional Studies are interdisciplinary degree completion programs aimed at preparing students for high demand workforce needs.

In partnership with their academic success coach, it is the students’ responsibility to become thoroughly acquainted with all requirements for the degree programs in which they plan to participate. These include all university requirements, as well as the requirements of the School of Professional Studies outlined in this section of the catalog. Students are also responsible for understanding the requirements that are unique to individual programs. By taking an active role in their undergraduate education, students maximize the value of their KU experience.

The school offers undergraduate programs in:

- American Sign Language and Deaf Studies
- Applied Biological Sciences
- Biotechnology
- Health Sciences
- Information Technology
- Nutrition
- Project Management
- Public and Population Health

View additional undergraduate programs offered at the KU Edwards Campus (https://edwardscampus.ku.edu/academic-programs/#undergraduate).

Admission

Information on undergraduate admission standards and requirements, as well as application procedures and deadlines, is found on the School of Professional Studies Programs pages. Visit the Office of Admissions (http://admissions.ku.edu/) for information about admission to KU. Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions. Students interested in pursuing a degree in the School of Professional Studies should meet with an academic success coach to learn more.

Advising

To ensure student success, all students in the School of Professional Studies will work with an academic success coach (https://edwardscampus.ku.edu/student-services/program-info/) through their time at KU. Coaches work with students from the admissions process through graduation. For advising information, contact 913-897-8539 or visit https://edwardscampus.ku.edu/student-services/program-info#coach.

Transfer Communities

Transfer Communities (https://edwardscampus.ku.edu/student-services/communities/) at the KU Edwards Campus are an integrated program designed to help you transition seamlessly to KUEC while you’re achieving your Associate’s Degree from your community college. These program-specific experiences will connect you to events, career conversations, faculty, staff and peers with similar goals and interests to create a true community while you pursue your degree.

University Honors Program

The School encourages qualified students to participate in the Edwards Honors Program (https://edwardscampus.ku.edu/honors/). The KU Edwards Campus Honors Program is here to help you get the most out of your college experience, whether you’re transferring from a community college honors program, or just getting started on your honors journey.

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The school offers graduate programs in:

- Advanced American Sign Language
- ASL/English Interpreting
- Cybersecurity
- Deaf Studies and Social Justice
- Engineering Management
- Information Technology
- Organizational Communication
- Project Management
- Software Engineering and Management

View additional graduate programs offered at the KU Edwards Campus (https://edwardscampus.ku.edu/academic-programs/#graduate).

Degree Requirements

Requirements for the completion of master’s degrees in the School of Professional Studies are governed by department- or program-specific policy, School policies and procedures, Graduate Studies policies, and the University Senate Rules and Regulations.

Information on degree requirements presented in this section is limited to the most frequently consulted policies and key milestones in the graduate career. Students will find additional information under the KU Policy Library (http://policy.ku.edu/), the Graduate Studies (https://catalog.ku.edu/graduate-studies/) and College's graduate regulations sections of the online catalog, the academic unit's handbook, and the University of Kansas Rules and Regulations (https://catalog.ku.edu/regulations/).

Admission

Information on graduate admission standards and requirements, as well as application procedures and deadlines, is found on the School of Professional Studies Programs pages. Visit Graduate Studies Admission (https://graduate.ku.edu/prospective-students/) for information about admission to KU. Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions. Students interested in pursuing a degree in the School of Professional Studies should meet with an academic success coach to learn more.

Advising

To ensure student success, all students in the School of Professional Studies will work with an academic success coach (https://edwardscampus.ku.edu/student-services/program-info/#coach) through their time at KU. Coaches work with students from the admissions process through graduation. For advising information, contact 913-897-8539 or visit https://edwardscampus.ku.edu/student-services/program-info#coach (https://edwardscampus.ku.edu/student-services/program-info/#coach).

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Undergraduate & Graduate Scholarships and Financial Aid

The School of Professional Studies seeks to make the KU experience affordable to all students and encourages all students to explore the affordability (https://edwardscampus.ku.edu/edwards-campus-tuition-fees/) options available through KU Edwards. Additional scholarship resources can be found through the KU Edwards Financial Aid and Scholarship (https://edwardscampus.ku.edu/financial-aid-scholarships/) and Financial Aid and Scholarships (https://financialaid.ku.edu/).

Metro KC Tuition Rate

The KU Edwards Campus Metro KC Rate (https://edwardscampus.ku.edu/metrokc-tuition-rate/) offers tuition equivalent to in-state rates for Missouri residents who meet the qualifications below. To receive this special rate, please fill out the Metro KC Rate (http://edwardscampus.ku.edu/edwards-campus-metrokc-application/).

To receive a need-based scholarships, the student must have submitted the FAFSA form (https://studentaid.gov/h/apply-for-aid/fafsa/) and be determined to be eligible. Merit-based scholarships are also offered.

Additional funds may be available from the University of Kansas Financial Aid & Scholarships (http://affordability.ku.edu/).

Graduate Fellowships and Assistantships

Visit the Graduate Studies website for information about funding opportunities (http://graduate.ku.edu/funding/) for graduate students at KU.

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

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

Undergraduate Regulations

Absences

A student with excessive absences may be withdrawn from the course by the Dean. Instructors may require a certain level of attendance for passing a course and may drop a student for lack of attendance without the student’s consent.

Change of School

Students with a KU cumulative GPA of 2.00 or higher (or in their first semester) fill out a Change of School form requesting to be admitted to the School of Professional Studies, from a different KU school, through the last day of class for the current semester. Requests made after that will be for admission in the upcoming semester. This process is for active KU students. Students not admitted to KU follow the University’s admission policy.

Credit/No Credit

A Credit/No Credit option is available to all degree-seeking undergraduates. Students may enroll in one course a semester under the option if the course is not in your major or minor. For more information, visit the KU Policy Library (http://policy.ku.edu/).
Warning: Certain undesirable consequences may result from exercising the option. Some schools, scholarship committees, and honorary societies do not accept this grading system and convert grades of No Credit to F when computing grade-point averages. Always check with your advisor before electing C/NC as policies vary from program to program.

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

Honor Roll (Dean’s List)
Students with grade-point averages of 3.75 who have completed at least 12 hours with letter grades are recognized on the honor roll or dean’s list in fall and spring. Credit/No Credit grades are not accepted. S grades are accepted. An honor roll notation appears on the transcript.

Maximum and Minimum Semester Enrollment
No student may enroll in more than 20 hours a semester, or more than 9 hours in a summer session without permission from an undergraduate advisor.

Nonresidence Study Before the Last 30 Hours
Before the last 30 hours required for the degree, students may, under certain conditions, take courses at other institutions and transfer the credit to KU. Before enrolling in a nonresidence course, check on how your courses will transfer to KU (https://admissions.ku.edu/transfer-requirements-deadlines/transfer-college-credits/) or complete KU’s standard form, Request for Tentative Evaluation of Transfer Credit, in your dean’s office or student services office. After completing the coursework, you must request that an official transcript be sent to the Office of Admissions (https://admissions.ku.edu/), KU Visitor Center, 1502 Iowa St., Lawrence, KS 66044-7576, 785-864-3911. For transcripts to be official, they must be mailed from the college or university directly to KU. Faxed transcripts are not accepted for posting of transfer credit. Nonresidence credit includes all credits from another college or university taken after initial enrollment at KU, military service courses, and other undergraduate course work not formally offered in the Schedule of Classes (https://classes.ku.edu/). Majors must submit the Request for Tentative Evaluation of Transfer Credit form before they enroll.

Prerequisites and Corequisites
Students are advised to enroll according to prerequisites and corequisites noted in individual course descriptions. Prerequisite waivers are used at the discretion of the Associate Dean of the School of Professional Studies and the appropriate academic program director.

Probation
Good Standing
Students with a KU cumulative GPA of 2.0 or higher are in good academic standing.

Placed on Probation
A student whose KU cumulative grade-point average falls below a 2.0 is placed on probation for the following semester.

Continued on Probation
A student on probation is continued on probation for one more semester if the KU semester grade-point average is not yet a 2.0 but progress is being made as determined by a faculty committee.

Returned to Good Standing
A student on probation is returned to good standing if the KU cumulative grade-point-average is at least 2.0.

Dismissal
A student on probation is dismissed for failure to earn a KU cumulative grade-point average of at least 2.0 in the next semester of enrollment after two consecutive semesters on probation. Students who are dismissed are dropped from any courses enrolled in for future semesters. Students who are dismissed may appeal the dismissal through the School of Professional Studies faculty committee. A student reinstated is continued on probation and has one semester to return to good standing. Students dismissed by the School may apply to another KU school or the College by completing a Change of School form.

Reinstatement after Dismissal
Students who have been dismissed may apply for readmission through the regular admissions process. Students applying for readmission after dismissal must have successfully completed any requirements set by the School of Professional Studies for readmission, if any.

Repetition of Courses
The School of Professional Studies follows the University’s course repeat and grade replacement policy.

Required Work in Residence
To earn a bachelor’s degree from KU, you must complete the last 30 hours of credit for the degree by resident study. Students may petition the dean for a waiver. Up to 6 hours of work completed at another institution may be accepted as part of the last 30 hours, if the hours are in required courses in the major. If a student completes more than 6 of the last 30 hours at another college, they must complete additional KU course work to graduate. Transfer courses must be completed with a C or higher. Always check with you advisor concerning enrollment as part of the last 30 hours of your degree.

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

Courses completed at other institutions are accepted to fulfill graduation requirements (e.g., in place of specifically prescribed courses) only if they are substantially equivalent as indicated by course description, hours of credit, and prerequisites. For courses not listed on CredTran (http://credittransfer.ku.edu/), the student must submit a petition along with a course syllabus to the School of Professional Studies. Petition forms are available by contacting a School of Professional Studies academic success coach (https://edwardscampus.ku.edu/program-advisors/).
Only transfer grades of C- or higher apply toward graduation from the School of Professional Studies.

Graduate Regulations

It is the students’ responsibility to comply with all requirements for the degree programs in which they plan to participate. These include the university requirements for graduate study at KU outlined in the Graduate Studies sections of the KU Policy Library (http://www.policy.ku.edu/), the University Senate Rules and Regulations (https://catalog.ku.edu/regulations/), the Graduate Studies (https://catalog.ku.edu/graduate-studies/) sections of the online catalog, as well as the requirements of the School of Professional Studies outlined in this catalog section. Additionally, students are responsible for understanding the requirements that are unique to individual graduate programs listed herein.

To ensure student support navigating these processes, all students in the School of Professional Studies will work with an academic success coach (https://edwardscampus.ku.edu/student-services/program-info/) through their time at KU. Coaches work with students from the admissions process through graduation. To connect with your coach, contact 913-897-8539 or visit https://edwardscampus.ku.edu/student-services/program-info#coach (https://edwardscampus.ku.edu/student-services/program-info#coach).

Admission

Graduate Studies defines the eligibility and admission criteria (https://catalog.ku.edu/graduate-studies/#admissiontext) for different categories of admission to graduate study at the University of Kansas. Further details of program specific admission, provisional admission, and readmission information can be found at https://edwardscampus.ku.edu/school-professional-studies (https://edwardscampus.ku.edu/school-professional-studies/).

Enrollment

Full-time, Half-Time and Part-Time Enrollment

Please see the Full-time Enrollment policy in the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for the definitions of full-time, half-time, and part-time enrollment.

Maximum enrollment for graduate students in the School of Professional Studies is 16 hours in Fall or Spring semester and 9 hours in the Summer session. Students may appeal to their program for exceptions.

At a minimum, all graduate students must be continuously enrolled in the Fall and Spring semesters while completing the requirements for fulfillment of their degree. Please consult the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for other enrollment regulations.

Probation and Dismissal Guidelines

To be in good standing, a student must maintain a 3.0 cumulative grade-point average and be making satisfactory progress toward the degree, as determined by Graduate Studies’ Good Academic Standing policy and the department or program’s internal guidelines. The Good Academic Standing policy may be found in the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog and the KU Policy Library. (http://policy.ku.edu/)

Probation Due to GPA

In any semester, a student whose cumulative GPA has fallen below a 3.0 is automatically placed on academic probation for the following semester (Fall or Spring). Students are notified by the School of Professional Studies of their probationary status. Students are removed from probation once the 3.0 CUM GPA is regained. Once a student is on probation they must maintain at least a 3.0 semester (Fall, Spring, Summer) GPA to maintain progress towards removal from probation. Failure to do so will result in a review that could result in dismissal.

Dismissal

It is the academic unit’s responsibility to ensure that students who are not demonstrating academic achievement sufficient to meet the requirements of a School of Professional Studies graduate degree are dismissed from their programs. This typically occurs when a student fails to meet the terms of the probationary period. Academic dismissal should occur immediately following a student’s failure to meet the terms of the probationary period. The School will notify the student in writing of the reasons for their dismissal.

A student who has been dismissed from a graduate program at KU is not eligible for readmission to graduate study in any department or program at the University of Kansas. A student may petition for an exception. The petition must be approved by the department to which the student intends to apply, the graduate division of the College, and the Dean of Graduate Studies. Such petitions are rarely approved.

University Regulations on Grading

Article II of the University Senate Rules and Regulations provides detailed information on regulations governing the grading of graduate coursework. Students should also consult the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog and the KU Policy Library (http://policy.ku.edu/) for more information on the Grading Policy.

Time Limits

The University has established time limits governing various stages of the graduate student career.

Maximum Time to Count Required Course Work

Courses completed at the University of Kansas, or transfer credits from another university, are valid for a period of 10 years. With the endorsement of their graduate programs, students may petition the School to accept out-of-date course work to fulfill the requirements for their graduate degrees, provided they are able to justify why this course work meets the current standards of scholarship in the discipline.

Maximum Time to Complete the Degree

Graduate Studies has established time limits on master’s and doctoral degree completion. Please see Graduate Studies policies on Doctoral Program Time Constraints and Master’s Program Time Constraints in the Graduate Studies (https://catalog.ku.edu/graduate-studies/) sections of the online catalog and in the KU Policy Library (http://policy.ku.edu/) for
full details. Master's degree students have a total of seven calendar years, excluding any periods of absence due to an approved leave of absence or voluntary discontinuation from a program, in which to complete the work for a master's degree.

A time limit extension may be granted by the School. All extension petitions require the department to prepare and submit a Graduate Degree Completion Agreement, which must then be approved by the School of Professional Studies Academic Council. Per Graduate Studies policy, extensions may be granted for up to 1 year. However, additional time may be requested in the Completion Agreement. If a Completion Agreement with a timeline greater than one year is approved, the department must submit a renewal petition annually after the first year until the Completion Agreement has ended. Renewal petitions must indicate the student's progress on the Completion Agreement and will receive expedited review.

Academic units may set their own, more rigorous time limits. Consult with your advisor and review your academic unit's handbook and the relevant Departments and Programs section of the online catalog for program-specific information, requirements, and restrictions.

Academic and Research Integrity

The School of Professional Studies strictly enforces KU and School policies on academic and scholarly misconduct. Academic integrity requires honest performance of academic and research responsibilities by students. These include, but are not limited to, ethical preparation of assignments, reports, and research papers; completion of examinations; ethical treatment of human and animal subjects; execution of administrative requirements; and a sincere and conscientious effort by students to abide by the policies set forth by instructors and research advisors. See the School of Professional Studies website (https://edwardscampus.ku.edu/school-professional-studies/) for procedures for misconduct and grievances.

Graduation

All graduate students must be enrolled the semester they complete all degree requirements.

Graduate Studies establishes an early deadline for degree completion for each semester and summer session, usually occurring at the end of the first 2 weeks of a semester or the end of the first week of summer session. If the student was enrolled the previous semester and meets all degree requirements including the submission of all required documentation by the early deadline, they are not required to enroll for that semester.

The final Graduate Application for Graduation deadline is set by the Registrar for each semester. Please consult the official Academic Calendar (https://registrar.ku.edu/calendar/) for specific dates. To be eligible for graduation, an application for degree must be submitted and all degree requirements met by this deadline. This includes the submission of all required documentation to the School of Professional Studies.

The School of Professional Studies and KU Edwards Campus (https://edwardscampus.ku.edu/student-services/career-skills/) is committed to helping you accomplish your career goals, and offers resources to help you find career solutions on how to navigate the career change process, career mobility, and/or develop strategies for that first career conversation.

University Career Center

The University Career Center (https://career.ku.edu/), Summerfield Hall, Room 206, (785-864-3624), provides career counseling and services for all KU students, including students in the School of Professional Studies, both in person as well as online through Jayhawk Ready (https://jayhawkready.tuapath.com/).

Courses

ASLD 311. Introduction to Deaf Studies. 3 Credits.
Students in the course will learn about the world of the deaf in America, deaf culture, the education of deaf children, useful technology, and the integration of deaf people into the American society. This introductory course is for students interested in fields, such as audiology; speech-language pathology; medicine; education; school, rehabilitation and mental health counseling; psychology; interpreting; ASL and deaf studies; and for anyone with a deaf person in his or her life. This course is offered at the 300 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 611.

ASLD 312. Intersectionality and Deaf Communities. 3 Credits.
This course brings students to the next level of understanding of the impact and role of various identities within the Deaf communities on the international and national levels, following the framework of intersectionality. Intersectionality conceptualizes the various identities, ethnicities, linguistic uses and experiences of persons, groups of people, or social problems in the world of deaf. Intersectionality looks at deaf people's overlapping identities and experiences in order to understand the complexity of prejudices they face due to their deaf, race, class, gender, sexual orientation, religion, and other identity markers. This course is offered at the 300 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 612.

ASLD 313. Social Justice and Allyship with Deaf Communities. 3 Credits.
Students are introduced to the concept of allyship as one of the tenets of social justice and the process of allyship and social justice in the Deaf communities. Allyship involves support and empowerment of individuals or people experiencing oppression. Within the Deaf communities, there are varieties of Deaf individuals or peoples, such as Deaf Blacks, Deaf Native Americans, and LGBTQI. Students will learn what it means to be an ally, a process of social justice. This course is offered at the 300 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 613. Prerequisite: ASLD 311 or instructor permission.

ASLD 414. Historical Foundations of Deaf Education. 3 Credits.
This course engages in the study of the development of deaf educational policy, practice, and theory in relation to changes in social institutions and thought regarding language, education and cultural and medical models in the education of and for the deaf. It focuses on the analysis of contemporary deaf educational problems in the light of historical perspectives. This course is offered at the 400 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 614.

ASLD 428. Special Topics in Deaf Studies: ______. 3 Credits.
Students will gain an in depth understanding of the social life of deaf people by choosing an area of focus. Since this is a special topics course, students, interested in gaining knowledge through research about deaf social life, will choose a timely area of study in a field, such as anthropology, economics, geography, history, political science, psychology, and sociology. An example of a timely area of study in Deaf Studies is Deaf gain. Through an individualized course design, students
may choose the approach of immersion in Deaf community, defined literature review, or other activity to gain an in depth understanding. This course is offered at the 400 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 628 if topic is the same.

**ASLD 450. Independent Study. 1-3 Credits.**
Investigation of a special research problem or directed reading in an area not covered in regular courses. No more than 6 hours of ASLD 450 may be counted toward the minimum hours required for the major. Prerequisite: Instructor consent.

**ASLD 451. Directed Readings. 1-3 Credits.**
This course is designed for the study of special topics related to American Sign Language and Deaf Studies at the Junior/Senior level. Prerequisite: Instructor consent.

**ASLD 501. Introduction to the ASL/English Interpreting Profession. 3 Credits.**
This course provides an introduction to interpreting as an occupation. Students will come to understand the history of interpreting along with the importance of interpersonal communication skills, professional ethics, parameters of responsibilities, community resources and legal ramifications as they relate to the interpreter. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 701. Prerequisite: ASL IV or Instructor permission.

**ASLD 502. Theories of Interpreting: Co-Constructions of Meaning. 3 Credits.**
This course provides an introduction to current theories in the processes of translation and interpreting through a lens of meaning-based analysis and co-construction of meaning. Students will come to understand and apply several theoretical constructs as they perform intra- and interlingual exercises. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 702. Prerequisite: ASLD 501 or ASLD 701 and ASLD 521 or 721 with a minimum of a C; B recommended or Instructor Approval.

**ASLD 505. American Sign Language V (ASL V). 3 Credits.**
This course is the expanded study of ASL IV with emphasis on increased conversation skills, vocabulary, storytelling, knowledge of Deaf culture and the Deaf community. Vocabulary is enhanced through the introduction of various content areas dealing with current events, world affairs, literature, the arts and abstract ideas. Students participate in group discussions, speculate, make analogies, give instructions, and express feelings and intentions. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 705. Prerequisite: ASL IV or instructor approval.

**ASLD 506. American Sign Language VI (ASL VI). 3 Credits.**
This course is continuing from ASLD 505 ASL V. Students focus on discourse, variation in sign language use, and understanding how the Deaf community is part of a linguistic and cultural minority. Topics that will be covered include perspectives on Deafhood, attitudes toward Deaf people and signed languages, technology and communication. Students will expand on vocabulary by working on areas of advanced subject matter, application of non-manual markers, use of classifiers, and proper pronominalization. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 706. Prerequisite: ASL 505 or ASL 705 or instructor approval.

**ASLD 520. American Sign Language Linguistics. 3 Credits.**
In this course, students take an analytical approach to language and the field of linguistics as it applies to American Sign Language. ASL phonology, morphology, syntax, semantics, bilingualism, language use and usage will be examined and discussed. Language samples will be viewed and analyzed for evidence of different language structures and forms. Students will also read and critique research articles pertaining to ASL and other signed languages. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 720. Prerequisite: ASL IV or instructor approval.

**ASLD 521. Discourse Analysis of ASL. 3 Credits.**
This course focuses on analysis of ASL Discourse structure and features, such as use of space for cohesion, depiction, discourse markers, and use of classifiers. The course also focuses on the use of ASL discourse in formal and informal settings. Students study the genres of dialogues, public speaking, artistic expression, debate, persuasive and narrative styles in ASL. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 721. Prerequisite: ASL V with a minimum grade of C; B recommended or instructor approval.

**ASLD 523. ASL Pragmatics and Syntax. 3 Credits.**
This course will focus on the study of syntactic structure and its interaction with meaning. Word order, lexical categories, sentence types, clause structure, topicalization and sentences with transitive, intransitive and agreement verbs are studied. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 723. Prerequisite: ASLD 520 or ASL 720.

**ASLD 524. Visual-Gestural Communication. 3 Credits.**
Students will develop capabilities in non-verbal communication and visual gestural communication utilizing the study of gestures as a form of communication and basis for visual language. Emphasis is on learning to think visually in pictures and building production and comprehension communication skills. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 724. Prerequisite: ASLD 520 or ASL 720.

**ASLD 530. American Sign Language Literature. 3 Credits.**
This course will provide basic introduction, discussion, and demonstration of literature in American Sign Language (ASL). Such literature involves ASL Poetry, ASL Storytelling/ Narratives, Deaf Humor, Deaf Folklore and other genres that have been passed on from one generation to another by culturally Deaf people. Students will receive, analyze and retell a variety of ASL literature. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 730. Prerequisite: ASL IV or instructor approval.

**ASLD 588. Internship in American Sign Language and Deaf Studies. 1-3 Credits.**
This course provides opportunities for students to have direct interaction with Deaf, Hard of Hearing, DeafBlind community members in order to apply cultural, linguistic and power/privilege concepts learned in the classroom. Students must complete 50 hours per credit hour. Schedule will be determined by student and instructor. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 788. Prerequisite: Instructor approval.

**ASLD 589. Research Experience in American Sign Language and Deaf Studies. 3 Credits.**
This course guides the students in reading, understanding and evaluating current research in ASL, Deaf Studies, ASL/English interpreting and related fields. Students will learn how to publish a paper and present a poster on a chosen topic of their interest. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 789. Prerequisite: Instructor approval.
ASLD 603. Interpreting: Mediated Interactions in Communications. 3 Credits.
This course provides an introduction to real-time interpreting in mediated interaction contexts through a lens of meaning-based analysis and co-construction of meaning. Students will come to understand and apply theories, decision-making and engage in reflective practice. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 803. Prerequisite: ASLD 501 or ASLD 701, ASLD 502 or ASLD 702 with a minimum grade of B or instructor approval.

ASLD 604. Interpreting: ASL to English. 3 Credits.
This course provides an introduction to real-time interpreting with an emphasis on ASL source materials through a lens of meaning-based analysis and co-construction of meaning. Students will come to understand and apply theories and engage in reflective practice. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 804. Prerequisite: ASLD 501 or ASLD 701, ASLD 502 or ASLD 702 and ASL proficiency or instructor approval.

ASLD 605. Interpreting: English to ASL. 3 Credits.
This course provides an introduction to real-time interpreting with an emphasis on English source materials through a lens of meaning-based analysis and co-construction of meaning. Students will come to understand and apply theories and engage in reflective practice. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 805. Prerequisite: ASLD 501 or ASLD 701, ASLD 502 or ASLD 702 and ASL proficiency.

ASLD 606. Interpreting: Diverse Communities. 3 Credits.
This course examines language, culture and identity and the implications when interpreting among diverse populations. Students will apply interpreting theories, decision-making and reflective practice to both monologue and dialogic materials in both ASL and English. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 806. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805 or instructor approval.

ASLD 607. Ethics and Professionalization for Interpreters. 3 Credits.
This course examines ethics as it relates to the work of interpreting through study of ethical codes of conduct, models of decision-making and elements of becoming an ethical professional. Students will come to understand the complexities of ethical decision-making and the importance of self-awareness, reflective practice and responsibility as they consider implications on micro and macro levels. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 807. Prerequisite: ASLD 603 or ASLD 803 or instructor approval.

ASLD 608. ASL/English Interpreting Observation Practicum. 1-6 Credits.
This practicum requires a minimum of 50 hours of observation, shadowing, teaming, professional responsibilities, duties, and/or activities (e.g., scheduling, preparation, invoicing, meetings, and in-service training) in authentic settings where interpreters are employed. Discussion and analysis will occur with instructor and peers on-line and in-person throughout the semester. Prerequisite: ASLD 603 or ASLD 803 with a minimum grade of a B or instructor approval.

ASLD 609. Practicum in American Sign Language Interpreting. 1-6 Credits.
This practicum requires 250 hours of field experience which may include observation, shadowing, teaming, professional responsibilities, duties, and/or activities (e.g., scheduling, preparation, invoicing, meetings, and in-service training) in authentic settings where interpreters are employed. A minimum of 90 hours will be direct provision of interpreting under the supervision of a certified interpreter. Discussion and analysis will occur with instructor and peers on-line and in-person throughout the semester. Students will consult with their advisor prior to enrolling in the course. Students are required to complete a minimum of 3 credit hours to complete the ASLD 609 requirements. This 250 hour practicum may be completed in one semester by enrolling in 3 credit hours, or can be completed over multiple semesters. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 809. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805, ASLD 608 or ASLD 808 with a minimum grade of a B, and completion of an interpreting proficiency exam or instructor approval.

ASLD 610. Psychological Effects of Interpreting. 3 Credits.
This course examines both affective and cognitive psychological effects on interpreting practitioners. The importance of self-care, reflective practice, case-conferencing; as well as vicarious trauma, compassion fatigue, role-space, power and privilege are among topics discussed. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 810. Prerequisite: ASLD 603 or ASLD 803 or instructor approval.

ASLD 611. Introduction to Deaf Studies. 3 Credits.
Students in the course will learn about the world of the deaf in America, deaf culture, the education of deaf children, useful technology, and the integration of deaf people into the American society. This introductory course is for students interested in fields, such as audiology; speech-language pathology; medicine; education; school, rehabilitation and mental health counseling; psychology; interpreting; ASL and deaf studies; and for anyone with a deaf person in his or her life. This course is offered at the 300 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 311. Prerequisite: Graduate standing or Instructor permission.

ASLD 612. Intersectionality and Deaf Communities. 3 Credits.
This course brings students to the next level of understanding of the impact and role of various identities within the Deaf communities on the international and national levels, following the framework of intersectionality. Intersectionality conceptualizes the various identities, ethnicities, linguistic uses and experiences of persons, groups of people, or social problems in the world of deaf. Intersectionality looks at deaf people’s overlapping identities and experiences in order to understand the complexity of prejudices they face due to their deaf, race, class, gender, sexual orientation, religion, and other identity markers. This course is offered at the 300 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 312. Prerequisite: Graduate standing or Instructor permission.

ASLD 613. Social Justice and Allyship with Deaf Communities. 3 Credits.
Students are introduced to the concept of allyship as one of the tenets of social justice and the process of allyship and social justice in the Deaf communities. Allyship involves support and empowerment of individuals or people experiencing oppression. Within the Deaf communities, there are varieties of Deaf individuals or peoples, such as Deaf Blacks, Deaf Native Americans, and LGBTQI. Students will learn what it means to be an ally, a process of social justice. This course is offered at the 300 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 313. Prerequisite: ASLD 311, ASLD 611 or Instructor permission.

ASLD 614. Historical Foundations of Deaf Education. 3 Credits.
This course engages in the study of the development of deaf educational policy, practice, and theory in relation to changes in social institutions and thought regarding language, education and cultural and medical models in the education of and for the deaf. It focuses on the analysis of contemporary deaf educational problems in the light of historical perspectives. This course is offered at the 400 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 414. Prerequisite: Graduate standing or Instructor permission.

**ASLD 615. Business Practices for Interpreters. 3 Credits.**
This course will provide students an introduction to business practices for interpreters. Concepts explored will include resume development, interview skills, invoicing, record keeping for tax purposes, certification maintenance and licensure renewal, etc. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 815. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805 or instructor approval.

**ASLD 616. Interpreting: Dynamic Paralinguistic Demands. 3 Credits.**
This course examines a variety of paralinguistic demands in the context of interpreting. Types of demands will include emotional communication, accents, regional dialects, physical and mental factors (Cerebral Palsy, injuries, etc.), fast paced communication, etc. Students will apply interpreting theories, decision-making and reflective practice to both monologue and dialogic materials in both ASL and English. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 815. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805 or instructor approval.

**ASLD 626. Topics in ASL Vocabulary and Discourse: _____. 3 Credits.**
This course will expand the interpreter training students' vocabulary related to specialized fields and technical contexts. Students will enhance terminology in medical, mental health, education, religion, sex, drugs/alcohol and strong language/culturally rich ASL. Students' development of comprehension and production skills in common formal and informal settings will be emphasized. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 826 if topic is the same. Prerequisite: ASL IV or Instructor approval.

**ASLD 628. Special Topics in Deaf Studies: _____. 3 Credits.**
Students will gain an in-depth understanding of the social life of deaf people by choosing an area of focus. Since this is a special topics course, students interested in gaining knowledge through research about deaf social life, will choose a timely area of study in a field, such as anthropology, economics, geography, history, political science, psychology, and sociology. Through an individualized course design, students may choose the approach of immersion in Deaf community, defined literature review, or other activity to gain an in depth understanding. This course is offered at the 400 and 600 level with additional assignments at the 600 Level. Not open to students with credit in ASLD 428 if topic is the same. Prerequisite: Graduate standing or instructor permission.

**ASLD 631. Advanced American Sign Language Literature. 3 Credits.**
This course analyzes and compares the various genres of American Sign Language literature. ASL poetry, narrative, humor, as well as written work by Deaf individuals and other language devices will be examined and discussed. Students will create and evaluate original work illustrating the similarities and uniqueness of ASL. Students will become familiar with well-known contributors such as: Clayton Valli, Patrick Graybill, Ella Mae Lentz, and the like. Research articles pertaining to ASL or Deaf Literature will be critiqued and discussed. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 831. Prerequisite: ASLD 530 or ASLD 730.

**ASLD 638. Topics in Interpreting: _____. 3 Credits.**
This course provides the opportunity for experimentation with innovative course content and learning strategies in accordance with guidelines established by faculty. Topics include interpreting in specialized settings, current trends, etc. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 838 if topic is the same. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805 or instructor approval.

**ASLD 701. Introduction to the ASL/English Interpreting Profession. 3 Credits.**
This course provides an introduction to interpreting as an occupation. Students will come to understand the history of interpreting along with the importance of interpersonal communication skills, professional ethics, parameters of responsibilities, community resources and legal ramifications as they relate to the interpreter. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 501. Prerequisite: ASL IV or Instructor permission.

**ASLD 702. Theories of Interpreting: Co-Constructions of Meaning. 3 Credits.**
This course provides an introduction to current theories in the processes of translation and interpreting through a lens of meaning-based analysis and co-construction of meaning. Students will come to understand and apply several theoretical constructs as they perform intra- and interlingual exercises. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 502. Prerequisite: ASLD 501 or ASLD 701 and ASLD 521 or 721 with a minimum of a C; B recommended or Instructor Approval.

**ASLD 705. American Sign Language V (ASL V). 3 Credits.**
This course is the expanded study of ASL IV with emphasis on increased conversation skills, vocabulary, storytelling, knowledge of Deaf culture and the Deaf community. Vocabulary is enhanced through the introduction of various content areas dealing with current events, world affairs, literature, the arts and abstract ideas. Students participate in-group discussions, speculate, make analogies, give instructions, and express feelings and intentions. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 505. Prerequisite: ASL IV or instructor approval.

**ASLD 706. American Sign Language VI (ASL VI). 3 Credits.**
This course is continuing from ASLD 705 ASL V. Students focus on discourse, variation in sign language use, and understanding how the Deaf community is part of a linguistic and cultural minority. Topics that will be covered include perspectives on Deafhood, attitudes toward Deaf people and signed languages, technology and communication. Students will expand on vocabulary by working on areas of advanced subject matter, application of non-manual markers, use of classifiers, and proper pronominalization. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 506. Prerequisite: ASLD 505 or ASLD 705 or instructor approval.

**ASLD 720. American Sign Language Linguistics. 3 Credits.**
In this course, students take an analytical approach to language and the field of linguistics as it applies to American Sign Language. ASL phonology, morphology, syntax, semantics, bilingualism, language use and usage will be examined and discussed. Language samples will be viewed and analyzed for evidence of different language structures and forms. Students will also read and critique research articles pertaining
to ASL and other signed languages. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 520. Prerequisite: ASL IV or instructor approval.

**ASLD 721. Discourse Analysis of ASL. 3 Credits.**
This course focuses on analysis of ASL Discourse structure and features, such as use of space for cohesion, depiction, discourse markers, and use of classifiers. The course also focuses on the use of ASL discourse in formal and informal settings. Students study the genres of dialogues, public speaking, artistic expression, debate, persuasive and narrative styles in ASL. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 521. Prerequisite: ASL V with a minimum grade of B or instructor approval.

**ASLD 723. ASL Pragmatics and Syntax. 3 Credits.**
This course will focus on the study of syntactic structure and its interaction with meaning. Word order, lexical categories, sentence types, clause structure, topicalization and sentences with transitive, intransitive and agreement verbs are studied. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 523. Prerequisite: ASLD 520 or ASLD 720.

**ASLD 724. Visual-Gestural Communication. 3 Credits.**
Students will develop capabilities in non-verbal communication and visual gestural communication utilizing the study of gestures as a form of communication and basis for visual language. Emphasis is on learning to think visually in pictures and building production and comprehension communication skills. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 524. Prerequisite: Graduate standing or Instructor permission.

**ASLD 730. American Sign Language Literature. 3 Credits.**
This course will provide basic introduction, discussion, and demonstration of literature in American Sign Language (ASL). Such literature involves ASL Poetry, ASL Storytelling/ Narratives, Deaf Humor, Deaf Folklore and other genres that have been passed on from one generation to another by culturally Deaf people. Students will receive, analyze and retell a variety of ASL literature. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 530. Prerequisite: ASL IV or instructor approval.

**ASLD 788. Internship in American Sign Language and Deaf Studies. 1-3 Credits.**
This course provides opportunities for students to have direct interaction with Deaf, Hard of Hearing, Deaf Blind community members in order to apply cultural, linguistic and power/privilege concepts learned in the classroom. Students must complete a minimum of 50 hours per credit hour. Schedule will be determined by student and instructor. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 588. Prerequisite: Instructor approval.

**ASLD 789. Research Experience in American Sign Language and Deaf Studies. 3 Credits.**
This course guides the students in reading, understanding and evaluating current research in ASL. Deaf Studies, ASL/English interpreting and related fields. Students will learn how to publish a paper and present a poster on a chosen topic of their interest. This course is offered at the 500 and 700 level with additional assignments at the 700 Level. Not open to students with credit in ASLD 589. Prerequisite: Instructor approval.

**ASLD 803. Interpreting: Mediated Interactions in Communications. 3 Credits.**
This course provides an introduction to real-time interpreting in mediated interaction contexts through a lens of meaning-based analysis and co-construction of meaning. Students will come to understand and apply theories, decision-making and engage in reflective practice. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 603. Prerequisite: ASLD 501 or ASLD 701, ASLD 502 or ASLD 702 with a minimum grade of B or instructor approval.

**ASLD 804. Interpreting: ASL to English. 3 Credits.**
This course provides an introduction to real-time interpreting with an emphasis on ASL source materials through a lens of meaning-based analysis and co- construction of meaning. Students will come to understand and apply theories and engage in reflective practice. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 604. Prerequisite: ASLD 501 or ASLD 701, ASLD 502 or ASLD 702 and ASL proficiency or instructor approval.

**ASLD 805. Interpreting: English to ASL. 3 Credits.**
This course provides an introduction to real-time interpreting with an emphasis on English source materials through a lens of meaning-based analysis and co- construction of meaning. Students will come to understand and apply theories and engage in reflective practice. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 605. Prerequisite: ASLD 501 or ASLD 701, ASLD 502 or ASLD 702 and ASL proficiency.

**ASLD 806. Interpreting: Diverse Communities. 3 Credits.**
This course examines language, culture and identity and the implications when interpreting among diverse populations. Students will apply interpreting theories, decision-making and reflective practice to both monologue and dialogic materials in both ASL and English. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 606. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805 or instructor approval.

**ASLD 807. Ethics and Professionalization for Interpreters. 3 Credits.**
This course examines ethics as it relates to the work of interpreting through study of ethical codes of conduct, models of decision-making and elements of becoming an ethical professional. Students will come to understand the complexities of ethical decision-making and the importance of self-awareness, reflective practice and responsibility as they consider implications on micro and macro levels. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 607. Prerequisite: ASLD 603 or ASLD 803 or ASLD 805 or instructor approval.

**ASLD 808. ASL/English Interpreting Observation Practicum. 1-6 Credits.**
This practicum requires a minimum of 50 hours of observation, shadowing, teaming, professional responsibilities, duties, and/or activities (e.g., scheduling, preparation, invoicing, meetings, and in-service training) in authentic settings where interpreters are employed. Discussion and analysis will occur with instructor and peers on-line and in-person throughout the semester. Students will consult with their advisor prior to enrolling in the course. Each credit hour requires at least 50 hours of field experience. Prerequisite: ASLD 603 or ASLD 803 with a minimum grade of B or instructor approval.

**ASLD 809. Practicum in American Sign Language Interpreting. 1-6 Credits.**
This practicum requires 250 hours of field experience which may include observation, shadowing, teaming, professional responsibilities, duties,
and/or activities (e.g., scheduling, preparation, invoicing, meetings, and in-service training) in authentic settings where interpreters are employed. A minimum of 90 hours will be direct provision of interpreting under the supervision of a certified interpreter. Discussion and analysis will occur with instructor and peers on-line and in-person throughout the semester. Students will consult with their advisor prior to enrolling in the course. Students are required to complete a minimum of 3 credit hours to complete the ASLD 809 requirements. This 250 hour practicum may be completed in one semester by enrolling in 3 credit hours, or can be completed over multiple semesters. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 609. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805, ASLD 608 or ASLD 808 with a minimum grade of a B, and completion of an interpreting proficiency exam or instructor approval.

ASLD 810. Psychological Effects of Interpreting. 3 Credits.
This course examines both affective and cognitive psychological effects on interpreting practitioners. The importance of self-care, reflective practice, case-conferencing; as well as vicarious trauma, compassion fatigue, role-space, power and privilege are among topics discussed. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 610. Prerequisite: ASLD 603 or ASLD 803 or instructor approval.

ASLD 815. Business Practices for Interpreters. 3 Credits.
This course will provide students an introduction to business practices for interpreters. Concepts explored will include resume development, interview skills, invoicing, record keeping for tax purposes, certification maintenance and licensure renewal, etc. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 610. Prerequisite: ASLD 603 or ASLD 803 or instructor approval.

ASLD 816. Interpreting: Dynamic Paralinguistic Demands. 3 Credits.
This course examines a variety of paralinguistic demands in the context of interpreting. Types of demands will include emotional communication, accents, regional dialects, physical and mental factors (Cerebral Palsy, injuries, etc.), fast paced communication, etc. Students will apply interpreting theories, decision-making and reflective practice to both monologue and dialogic materials in both ASL and English. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 615. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805 or instructor approval.

ASLD 826. Topics in ASL Vocabulary and Discourse. 3 Credits.
This course will expand the interpreter training students' vocabulary related to specialized fields and technical contexts. Students will enhance terminology in medical, mental health, education, religion, sex, drugs/ alcohol and strong language/culturally rich ASL. Students' development of comprehension and production skills in common formal and informal settings will be emphasized. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 626 if topic is the same. Prerequisite: ASL IV or instructor approval.

ASLD 831. Advanced American Sign Language Literature. 3 Credits.
This course analyzes and compares the various genres of American Sign Language literature. ASL poetry, narrative, humor, as well as written work by Deaf individuals and other language devices will be examined and discussed. Students will create and evaluate original work illustrating the similarities and uniqueness of ASL. Students will become familiar with well-known contributors such as: Clayton Valli, Patrick Graybill, Ella Mae Lentz, and the like. Research articles pertaining to ASL or Deaf Literature will be critiqued and discussed. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 631. Prerequisite: ASLD 530 or ASLD 730.

ASLD 838. Topics in Interpreting: _____ 3 Credits.
This course provides the opportunity for experimentation with innovative course content and learning strategies in accordance with guidelines established by faculty. Topics include interpreting in specialized settings, current trends, etc. This course is offered at the 600 and 800 level with additional assignments at the 800 Level. Not open to students with credit in ASLD 638 if topic is the same. Prerequisite: ASLD 603 or ASLD 803, ASLD 604 or ASLD 804, ASLD 605 or ASLD 805 or instructor approval.

Courses

BSCI 350. Genetics. 4 Credits. N
Why are related individuals more similar than unrelated individuals and what is the basis for heritable traits? From Mendel's discoveries of the patterns of genetic inheritance, to the study of transmissible hereditary factors, genetics is central to understanding the biological sciences. Topics include molecular genetics and genetic engineering; Mendelian genetics and mapping; control of gene expression; cytogenetics; epigenetics and non-Mendelian genetics; and population and quantitative genetics. Examples are taken from a wide variety of organisms, including viruses, bacteria, plants, fungi, insects, and humans. Not open to students with credit in BIOL 350. Prerequisite: CHEM 135 or CHEM 175 or CHEM 195 and CHEM 196, with a grade of C- or higher and BIOL 150 or BIOL 151 with a grade of C- or higher; or consent of instructor.

BSCI 351. Genetics Laboratory. 3 Credits. U
A laboratory course that provides hands-on experience with classical genetics and modern molecular genetics. Experiments involve Mendelian genetics (dominance/recessivity, complementation, segregation, independent assortment) in eukaryotic organisms; recombinant DNA; basic bacterial genetics; polymerase chain reaction; DNA sequencing; and computational genetics. Not open to students with credit in BIOL 405. Prerequisite: Concurrent or prior enrollment in BSCI 350 or BIOL 350.

BSCI 400. Microbiology. 3 Credits. N
The course focuses on the structure and function of prokaryotic cells and viruses, cultivation, growth and death of bacteria, microbial metabolism, basic immunology, microbial ecology, and the diversity and classification of organisms that the field encompasses. Not open to students with credit in BIOL 400 or BIOL 401. Prerequisite: BIOL 150 or BIOL 151 with a grade of C- or higher and two semesters of college chemistry with a grade of C- or higher, or consent of the instructor.

BSCI 401. Microbiology Laboratory. 2 Credits. U
The course focuses on molecular cell biology with emphasis on experimental approaches to understanding cell function; topics
include biological membranes and transmembrane transport, vesicular trafficking (secretion and endocytosis), cell signaling, cell motility and the cytoskeleton, and the regulation of the cell division cycle. Not open to students with credit in BIOL 416. Prerequisite: BIOL 150 or BIOL 151; BSCI 350 or BIOL 350 or BIOL 360; CHEM 130, or CHEM 170, or CHEM 190 and CHEM 191; and CHEM 135, or CHEM 175, or CHEM 195 and CHEM 196; or consent of the instructor.

**BSCI 417. Developmental Biology. 3 Credits. N**
A general course designed to introduce students to the developmental biology of animals. Emphasis is placed on understanding how a single-celled fertilized egg develops into a complex multicellular organism by the processes of cell division, differentiation, growth, and morphogenesis. Lectures stress experimental approaches to investigating development, including classic embryology and modern molecular genetics. Not open to students with credit in BIOL 417. Prerequisite: BSCI 350 or BIOL 350 and BSCI 416 or BIOL 416 or consent of the instructor.

**BSCI 421. Topics in Applied Biological Sciences: _____ 3 Credits. N**
Lecture instruction and the preparation and presentation of oral and written reports on selected topics from the recent research literature in molecular biosciences. Students may enroll in a given topic only once. Prerequisite: Course work varying with the topic of the seminar; or consent of instructor.

**BSCI 430. Molecular Biology Laboratory. 3 Credits. U**
Practical experience in recombinant DNA technology and molecular cloning. Not open to students with credit in BIOL 430. Prerequisite: BSCI 416 or BIOL 416 or a course in biochemistry or microbiology.

**BSCI 435. Neurobiology. 3 Credits. N**
The focus for this course will be on the nature of communication among nerve cells and their targets. Topics will include the development, structure and function of nerve cells, chemistry of neurotransmission, processing and integration including the cellular and molecular basis of higher functions and neurological disorders. Not open to students with credit in BIOL 435. Prerequisite: BSCI 350 or BIOL 350 and BSCI 416 or BIOL 416 or consent of the instructor.

**BSCI 490. Internship and Practical Applications. 1-6 Credits. N**
This course provides credit for supervised practical experiences in an occupational area of interest. In addition to the work-related activity, students will be expected to complete reading and writing assignments, participate in on-line discussions, and create a final summary of internship accomplishments. Hours of credit earned (1-6) are based on number of hours at internship site and agreement of instructor. Repeatable for up to 6 credit hours, provided the internship experiences are different. Prerequisite: Consent of instructor.

**BSCI 503. Immunology. 3 Credits. N**
A molecular and cellular based approach to understanding the immune system by characterizing both the innate and adaptive immune systems and their functions. Emphasis is placed on the adaptive immune response, including humoral immunity and cell-mediated immunity, antigens and antigen recognition, immunoglobulins, B cell and T cell development, activation, and differentiation, and the effector functions of these different cells and branches of the immune system to create a comprehensive response to defend the body against pathogens. Other topics include immune system dysfunction (hypersensitivities, autoimmunity, and immunodeficiencies) as well as vaccine mechanisms. Not open to students with credit in BIOL 503. Prerequisite: BSCI 400, BIOL 400 or BIOL 401, or consent of instructor.

**BSCI 506. Bacterial Infectious Diseases. 3 Credits. N**
Explores bacterial infectious diseases from the perspective of how disease is established and the mechanisms that underlie disease, as well as how to treat and prevent infectious disease. Not open to students with credit in BIOL 506. Prerequisite: BSCI 400, BIOL 400 or BIOL 401 with a grade of C- or higher, or consent of instructor.

**BSCI 512. Virology. 3 Credits. N**
Lectures and discussions covering the basic nature and characteristics of viruses from a general biological point of view: viruses of bacteria, animals and plants, physical-chemical properties; host cell-viral interactions; mode of replication of DNA and RNA viruses, tumor viruses. Not open to students with credit in BIOL 512. Prerequisite: BSCI 400, BIOL 400, or BIOL 401 with a grade of C- or higher, or consent of instructor.

**BSCI 546. Mammalian Physiology. 3 Credits. N**
An intermediate course in the structures, functions, mechanisms, and interactions of mammalian organ systems. Discussions span topics from molecular to whole animal functions. Not open to students with credit in BIOL 546. Prerequisite: BIOL 150; BIOL 152 or BIOL 240; and CHEM 330 or consent of instructor.

**BSCI 599. Senior Seminar: _____ 1 Credits. N**
A synthesis and discussion of current trends in the biological sciences as it relates to student interests and career paths. Emphasis is placed on providing seniors with an appreciation of the discipline’s state-of-the-art and on developing skills for success in the next stage of a career in the biological sciences by using peer-reviewed research papers to work on communication and presentation of scientific topics to different audiences. Prerequisite: Must be taken in the final year of a degree and students must have completed most of the course work required for one of the degrees in the biological sciences.

**BSCI 600. Biochemistry. 3 Credits. N**
Designed to offer the essentials of the chemistry of the constituents of living organisms and the changes these constituents undergo (during life processes) in the human body and other living forms. Not open to students with credit in BIOL 600. Prerequisite: BIOL 150 or BIOL 151 and one semester of organic chemistry.

**BSCI 601. Biochemistry Laboratory. 2 Credits.**
Theory and methods in the development of protein separation and purification, enzyme structure/function, and enzyme kinetics derived from primary literature searches and readings. Not open to students with credit in BIOL 601. Prerequisite: Corequisite: BIOL 600 or BSCI 600; or consent of instructor.

**BSCI 612. Microbiology. 3 Credits. N**
Lectures. Fundamental principles of microbiology with emphasis in physical and chemical properties of the bacterial cell; microbial metabolism, cultivation, growth and death of bacteria; microbial genetics; pathogenesis and immunity, industrially important microorganisms. Meets with BSCI 400, but students will be given additional and more advanced assignments, and will carry higher expectations. Not open to students with credit in BIOL 612. Prerequisite: BIOL 150 or BIOL 151 and two semesters of college chemistry, or consent of instructor.

**Courses**

**BTEC 300. Research Methods in Biotechnology. 3 Credits. N**
An integrated lecture and laboratory course exploring the science and basic laboratory skills used in food science, agricultural science, pharmaceutical science, clinical medicine, animal health, and environmental science. Survey of career opportunities in biotechnology. Guest lectures from field-experts in biotechnology. Prerequisite: BIOL 152; concurrent or prior enrollment in CHEM 330; or consent of instructor.
BTEC 305. Molecular and Microbiological Techniques. 4 Credits. N

An integrated lecture and laboratory course exploring the science and tools used in microbiology-based fields. A strong focus is placed on developing functional scientific skills required to run an R&D or Production Lab. Students will survey the diversity of microbial life while becoming proficient in the tools that are used extensively in the laboratory. We emphasize hands-on experience with lab techniques applicable to addressing a variety of scientific problems. Specifically, this course will challenge students to apply their knowledge and skills to construct and express recombinant proteins in mammalian cells, purify, and quantitate their products. Prerequisite: Concurrent or prior enrollment in BIOL 350 and BTEC 300; or consent of instructor.

BTEC 310. Scientific Communications. 3 Credits. N

Theory and practice exploring communications relevant to careers in science. This course will explore the fundamentals of clear, effective communications in written and oral formats. Students will gain experience communicating in a variety of real-world situations with technical and lay audiences. Particular emphasis will be placed on the communications occurring within the work place setting. Students will also be challenged to build a network with the biotech industries through external events. Prerequisite: ENGL 102; or consent of instructor. Students must be in their junior or senior year of a science-related degree.

BTEC 341. Principles of Bioprocessing Laboratory I. 1 Credits. N

Laboratory sessions involve use of microbial expression vectors, fermentation systems, and large-scale purification of recombinant protein. Includes bacterial cell culture techniques, principles of bioreactor/fermentation operations and purification techniques, and calibration. Primary goal of this course is to provide students with an advanced background in bacterial upstream and downstream biotechnology. Prerequisite: BTEC 300; BTEC 340 or concurrent enrollment in BTEC 340.

BTEC 400. Applied Immunology. 3 Credits. N

An integrated lecture and laboratory course exploring the fundamentals of immunology. The course focuses on developing a conceptual knowledge of the constituents and processes of the immune system. Students will develop a functional understanding of how to operate and apply current immunology-based techniques. Laboratory activities will explore the use of immunological tools for research, discovery, and analysis of processes and experimental compounds. Prerequisite: BTEC 300; BTEC 305; or consent of instructor.

BTEC 424. Independent Study in Biotechnology. 1-3 Credits. N

Independent project at a related bioscience industry partner or faculty in selected topics of current translational research interest. May be undertaken only with the consent of the major advisor who will guide the research after determining objectives with the interested industry partner or faculty. Prerequisite: Consent of instructor.

BTEC 441. Principles of Bioprocessing Laboratory II. 1 Credits. N

Mammalian cell culture techniques, principles of bioreactor operations and purification techniques, and calibration. The primary goal of this course is to provide students with an advanced background in mammalian upstream and downstream biotechnology. Prerequisite: BTEC 341; BTEC 440 or concurrent enrollment in BTEC 440.

BTEC 475. Applied Separation Science and Quantitative Analysis. 6 Credits. N

An integrated lecture and laboratory course exploring the fundamentals of separation science and quantitative analysis of small molecules, peptides, and proteins. Students will be challenged to develop a functional understanding of the theory and application of sample preparation, separation technologies, and methods for quantification. Prerequisite: BTEC 300; or consent of instructor.

BTEC 494. Selected Topics in Biotechnology: _____. 1-3 Credits. N

A synthesis and discussion of current trends related to biotechnology. Emphasis is placed on providing students with an awareness of advances on the leading edge of discovery, critically analyzing data, and developing skills for success in the next stage of a career in biotechnology. This course can be repeated for up to 2 credit hours. Prerequisite: Concurrent or prior enrollment in BTEC 300; or consent of instructor. Students must be in their junior or senior year of a biology-related degree.

BTEC 501. Biotechnology Ethics and Responsible Conduct of Research. 3 Credits. N

Student investigations and discussions of current controversial issues in biotechnology. This course emphasizes thinking about new technologies in a rational and thoughtful way. Prerequisite: BTEC 300.

BTEC 540. Biotechnology Capstone I. 3 Credits. N

A project-based course that challenges students to develop, plan, execute, and communicate the results of a biotech-related project. Students will be guided through the initial stages of project design, project management, logistics, and technical training necessary to complete their project. This course is the first of a two semester series (BTEC 540 & BTEC 640.) Prerequisite: BTEC 305; BTEC 475; concurrent or prior enrollment in BIOL 600; or consent of instructor.

BTEC 547. Bioanalytical Lab. 2 Credits. N

Analytical methods used for testing biotherapeutics are examined. Emphasis is placed on assessing protein concentration, purity, identity and activity. The importance of sample processing, throughput and level of validation are explored as samples from upstream processing, downstream processing and final bulk are interrogated. Students also learn key concepts used to validate the performance of analytical methods. Prerequisite: BTEC 300.

BTEC 550. Applied Bioinformatics. 2 Credits. N

Overview of the fields of bioinformatics and genomics. Topics, tools, issues and current trends in these and related fields are discussed. Principles and practical application of bioinformatics tools in molecular biology, genetics, and electronic medical records are evaluated. The haploid human genome occupies a total of just over 3 billion DNA base pairs. The medical records of a population contain clues concerning better identification and treatment of disease. This information is not contained in books, but stored in electronic databases. This course is designed for life scientists from all fields to introduce them to the power of bioinformatics and enable them to access and utilize biological information in databases for their own research. Prerequisite: BTEC 300; BIOL 570 or MATH 365 (preferred); consent of instructor.

BTEC 599. Biotechnology Internship. 1-6 Credits. N

Supervised internship at a biotech company; or an independent thesis; or honors thesis with Honors Program. This course can be repeated for up to a total of 6 credit hours. Prerequisite: BTEC 305; BTEC 475; and consent of instructor.

BTEC 630. Biotechnology, Regulation, Quality Control, and Quality Assurance. 3 Credits. N

An integrated lecture and laboratory course exploring quality control, quality assurance, and regulatory considerations. Hands-on experimentation will develop a functional understanding of protocol design and a practical knowledge of GXP-guided processes. This course will focus on issues relevant to manufacturing, packaging, labeling, testing, and control of pharmaceutical products. Guest lectures from field-experts...
in the biotechnology industry. Prerequisite: Concurrent or prior enrollment in BTEC 599; or consent of instructor.

**BTEC 640. Biotechnology Capstone II. 3 Credits.**
A project-based course that challenges students to develop, plan, execute, and communicate the results of a biotech-related project. Students will be guided through the execution of their proposed plan with particular emphasis placed on managing scientists, gathering and analyzing data, and instituting quality controls/quality assurance protocols. Students will communicate the results of their project through a combination of an oral presentation and poster. This course is the second of a two semester series (BTEC 540 & BTEC 640.) Prerequisite: BTEC 540; or consent of instructor.

**Courses**

**EMGT 608. Principles of Engineering Management. 3 Credits.**
Principles used by the engineer in managing technology-based organizations, focusing on core management functions. Prerequisite: Senior or graduate standing in an engineering curriculum or consent of the instructor.

**EMGT 800. Special Topics in Engineering Management. 1-4 Credits.**
Advanced study of a specialized nature representing unique or changing engineering management knowledge.

**EMGT 801. Management Theory and Practice for Engineering Managers. 3 Credits.**
Foundation for managing in technology-based organizations. Topics include essential management functions, schools of management thought, motivation, and management style.

**EMGT 802. Statistical Analysis and Prediction of Engineering Systems. 3 Credits.**
Production of required statistical analyses and predictions for engineering and management systems. Content from probability through regression and analysis of variance. Prerequisite: Admission to the EMGT program or instructor consent.

**EMGT 803. Technological Forecasting and Assessment. 3 Credits.**
Methods of technology assessment and forecasting. Topics include scenario analysis, cross-impact analysis, judgmental mental forecasting methods such as Delphi, and foundational time series forecasting methods such as trend projection and auto-aggressive moving averages. Prerequisite: Admission to the EMGT program or instructor consent.

**EMGT 804. Business Development and Marketing of Professional Services. 3 Credits.**
A broad review of the major components of marketing and integration of these components, culminating in students developing marketing plans for services. Theories, principles, and practices of business development and marketing applied to consulting oriented professional engineering and architectural firms.

**EMGT 805. Management of Innovation. 3 Credits.**
Preparation for managing technological change involving innovation. Topics include essential management functions, innovation types, impact of organizational structure and climate, and change management.

**EMGT 806. Finance for Engineers. 3 Credits.**
An introduction to finance in technology-based organizations. Topics include financial statements analysis, valuation of future cash flows, capital budgeting, risk and return, capital structure, and working capital management.

**EMGT 807. Labor and Employee Relations for the Engineering Manager. 3 Credits.**
Foundation for negotiation and administration of labor agreements. Topics include labor relations; human resources management; employment practices in unionized and non-union organizations; and historical, legal, and structural environments influencing collective bargaining processes.

**EMGT 808. Quality Management. 3 Credits.**
Practical application of total quality management (TQM) concepts from planning through customer acceptance in technology-based organizations, focusing on understanding the concepts of the total supply chain, managerial aspects of quality, and improvement methodologies throughout.

**EMGT 809. Personal Development for the Engineering Manager. 4 Credits.**
Objectives, theories, and tests of engineering and management ethics and the relationship to personal values, and communications strategies. Development of career and life plans, and personal brand. Strong emphasis on the creation of both written papers and oral presentations.

**EMGT 810. Applications of Quantitative Analysis in Decision Making. 3 Credits.**
Practitioner-oriented presentation of managing and implementing optimization methods for improving design and decision making. Focus on methods of mathematical programming (linear, integer, and non-linear), queuing analysis, and decision analysis. Prerequisite: Admission to the EMGT program or instructor consent.

**EMGT 811. Engineering Systems Simulation. 3 Credits.**
Practitioner-oriented presentation of developing and using discrete-event simulation to improve engineering analysis and design, and management decision making processes, including instruction in a chosen simulation language. Prerequisite: Admission to the EMGT program or instructor consent.

**EMGT 812. Law and the Design Professional. 3 Credits.**
Legal doctrines relating to owners, design professionals, and contractors; contracts, including formation, rights and duties, interpretation, performance problems, disputes, and claims, standards of care and the management of construction claims, duties and obligation of the design professional, the owner, and the contractor; surety bonds and insurance; and sources of law, forms of association, and agency. Prerequisite: Admission to the EMGT program or instructor consent.

**EMGT 813. Design Project Management in Professional Practice. 3 Credits.**
Managing design projects, integrating perspectives of profitability and cost control, client satisfaction, and project team relations. Topics include explanation of a project manager's job via an augmented model of the Blake-Mouton grid. Prerequisite: Admission to the EMGT program or instructor consent.

**EMGT 814. Leadership Techniques and Methods for the Engineering Manager. 3 Credits.**
Formulating and communicating a compelling vision, convincing others to pursue that vision, and marshaling resources and talents. Coaching and public speaking. Improving decision making and communications, earning trust and building momentum, and inspiring and enabling others to excel.

**EMGT 815. Business Relationships and Selling Skills. 3 Credits.**
Fundamentals of business relationships and professional selling for any technical professional who would like to be more effective in "getting their message across" to external or internal customers. Relationship management, including ethical issues in business relationships. Experimental exercises on conducting and evaluating
EMGT 817. Mathematics for the Engineering Manager. 3 Credits. Comprehensive math course addressing engineering managers' need for a greater understanding of mathematical concepts.

EMGT 818. Advanced Mathematics for the Engineering Manager. 2 Credits. Supplements Engineering Management students' mathematical skills and knowledge as relevant to career needs.

EMGT 820. Developing the Engineering Manager. 3 Credits. Integrating essential concepts and effective practices in communication, management, and leadership with the application of key organizational resources for enhanced management performance. Emphasizes on working with and through others, on useful human resources-oriented knowledge and skills, and on working with human resources professionals.

EMGT 821. Strategic Analysis of Technology Projects. 3 Credits. Strategic assessment of developmental projects, focusing on the proposed product or service, the organization, project details, and the environment. Topics include application of financial figures of merit, feasibility of competing projects, decisions under uncertainty, risk vs return, and forecasting. Prerequisite: Admission to the EMGT program or instructor consent.

EMGT 823. Management of Internal Engineering Projects. 3 Credits. Managing organizations' technology-oriented projects, both as inside staff and outside consultant. Covers the entire project life cycle as reflected in the Project Management Book of Knowledge. Practical considerations addressed include material procurement, work with contractors and consultants, selecting software, and managing the project team.

EMGT 824. Product Marketing for Engineering Managers. 3 Credits. A broad review of the major components of marketing and integration of these components, culminating in students developing marketing plans for new or existing products. Theories, principles, and practices of marketing applied to engineering managers in production or manufacturing. Prerequisite: Admission to the EMGT program or instructor consent.

EMGT 826. Management of New Product Development Projects. 3 Credits. This course discusses how to properly manage new product development processes using project management tools and techniques. New projects are not projects until they are analyzed, planned, scheduled, budgeted, managed, and controlled by managers. It is not typically technical process issues that result in failed new product introductions, but rather a failure in their management and marketing. Prerequisite: Approval of the EMGT program or instructor consent.

EMGT 830. Case Studies in Engineering Management. 2-3 Credits. A capstone course for the program, integrating the material presented in other courses through analysis of several engineering management case studies. Note: Research paper and presentation are part of the 3 credit hours option. Prerequisite: Must have completed of 21 credit hours in the Engineering Management program.

EMGT 835. Field Project (M.S.). 1-3 Credits. Research on a problem in engineering management, the satisfactory completion of which satisfies the project requirement for the degree of Master of Science in Engineering Management. Prerequisite: Must have completed of 21 credit hours in the Engineering Management program, including EMGT 810 and EMGT 821.

EMGT 840. Systems Approach to Engineering. 3 Credits. Formal methods and processes in bringing complex systems into being, and improving existing systems. Topics include formal specification methods, definition of customer needs, systems life cycles, value-to-value analysis, and management of the systems engineering process.

EMGT 845. Service Management for the Engineering Manager. 3 Credits. Managing service-oriented organizations. Covers a wide array of industries, addressing service management from four primary perspectives: the basics of service science, the customer encounter, managing service operations, and the exceptional customer experience.

EMGT 850. Environmental Issues for Engineering Managers. 3 Credits. Survey of environmental problems and their solution, and environmental regulations. Topics include the quantity and quality of various types of pollutants emitted to various media, and the risks posed by these pollutants; the regulatory process; and historical perspective, including pollution generation (sources), transportation, fate and effects.

EMGT 860. Special Problems in Engineering Management. 1-4 Credits. Original independent research on engineering management problems or subjects of immediate interest. May be repeated for credit to a maximum of four hours. Prerequisite: Approval of instructor.

EMGT 862. Manufacturing Systems Integration. 3 Credits. Engineering and management-specific aspects of manufacturing and information systems integration. Engineering topics include agile, flexible, intelligent, and advanced manufacturing sub-systems; material handling and identification; vendor-specific automation; communication linkage between sub-systems; network and protocol alternatives; and hardware platform alternatives. Management topics include implementation approaches, quality management systems, long-range planning, support systems, and integration project management.

EMGT 867. Advanced Operations Management. 3 Credits. Strategic issues and practical application of modern and advanced methods for designing and analyzing manufacturing processes and systems. Topics include: forecasting, product and service design, capacity planning, quality management, inventory management, scheduling, supply chain management, project management and simulation of manufacturing processes, and just-in-time, lean, synchronous, and agile systems.

Courses

HMGT 300. Introduction to Healthcare Management. 3 Credits. Participants will learn key principles, practices, and personalities of health care management. The content is broadly applicable to healthcare enterprises of every kind: public health organizations, physician practices and clinics, hospitals and health systems, agencies and service organizations, for-profit firms, not-for-profit enterprises, etc. The course will provide an overview of how health care institutions are organized and governed, the role of the employees in these organizations, and the systems designed for their efficient and effective operation.

HMGT 305. Health Policy and Healthcare Systems. 3 Credits. This introductory course is designed to familiarize students with basic concepts and ideas concerning the distribution of health and illness in society, the organization of the health care system, and the relationship of one to the other. The course will address health disparities, the U.S. health care system and health policy and comparisons to other countries, and the roles of government in health systems and policy.

HMGT 310. Health Communication. 3 Credits.
This course introduces diverse approaches to health communication. Students will learn health communication in a variety of health contexts, ranging from interpersonal communication to public health campaigns. We examine theoretical and conceptual backgrounds in health communication and evaluate examples of health communication practices. Issues include provider-patient interaction, the role of the patient, health organizations, the media and health, and end-of-life concerns.

**HMGT 320. Applied Healthcare Law and Ethics. 3 Credits.**
This course addresses fundamental and applied concepts in health sciences and healthcare. Current and past issues in health law and ethics will be addressed, including historical origins and development of health law, cultural concerns, conflict of interest, health information confidentiality issues, human subjects research, and the application of law and ethics in health systems and workplaces.

**HMGT 440. Applied Ethics in Clinical Trials and Healthcare. 3 Credits.**
This course addresses current and past issues in health ethics for the healthcare manager and clinical trials coordinator, including historical origins and development of health ethics and relevant laws, informed consent and human subjects research, cultural perspectives, conflict of interest issues, health information confidentiality, institutional review boards, individual and organizational ethics, and ethical and legal issues in clinical research/clinical trials. The course will include discussion of case studies from the public, private, and nonprofit sectors of the industry.

**HMGT 450. Economics and Finance of Healthcare. 3 Credits.**
This course covers economic and financial concepts relevant to health care management and demonstrates how they are applied to actual situations in the health care industry in the public, private, and nonprofit sectors. It examines general issues of healthcare consumption, supply and demand, and healthcare resource allocation as well as specific concepts of financial management and decision making, budgeting, and revenue management and their application to the healthcare system. In addition, the course will cover healthcare payment systems and reimbursement methods of various payers in the health services industries.

**HMGT 460. Healthcare Law and Regulation. 3 Credits.**
The course provides an overview of the primary healthcare laws and regulations for the healthcare manager who needs an understanding of healthcare-related legal issues. It covers the legal framework that governs modern health systems and surveys the laws, statutes, and regulations that govern and direct the provision of healthcare services, including fundamentals of American health law and regulation, privacy law, delivery and quality of medical services, and transactions and liability within the healthcare industry.

**HMGT 500. Introduction to Clinical Trials Management. 3 Credits.**
This course will provide foundational knowledge for clinical trials coordination and management, including an overview of the clinical and pre-clinical processes involved in setting up clinical trials and the roles and responsibilities of those conducting and administering trial; the processes involved in conducting safe, thorough, and reliable trials; and the steps necessary for completion and evaluation of clinical trials processes. Topics to be addressed include development process for biologic, pharmaceutical, and medical devices products and related regulations, the rationale for design features of Phase I, II, and III trials, participant recruitment, retention, safety, and adherence, techniques for randomization, data collection and endpoints, interim monitoring, validity of a clinical trial, and results reporting. Students will demonstrate an understanding of the mechanics and key regulatory requirements of conducting a clinical trial.

**Courses**

**HSCI 315. Exploring Careers in Health Science. 1 Credits.**
Through self-assessment, aligning individual strengths with career pathways, and connecting with industry professionals, students will explore a wide variety of health and science-related careers. This course will outline how to gain formative experiences and utilize networking opportunities to help gain opportunities in the future.

**HSCI 320. Principles of Nutrition. 3 Credits.**
Applied study of the relationship of normal food and nutrition principles to health promotion in select stages of the lifecycle. Not open to those with credit in HSES 330.

**HSCI 340. Introduction to Public Health. 3 Credits.**
This course is an introductory course that examines public health issues in the United States and is designed to provide an overview of major health issues that impact the public’s health. The course emphasizes the essential services of public health, challenges and strategies for working with communities, and provides an overview of the United States public health system.

**HSCI 415. Career Readiness in Health Sciences. 1 Credits.**
Through creating a career development plan, students will identify specific, achievable career goals and then design and implement strategies to reach them. This course will help students identify and articulate marketable skills through written and verbal communication and demonstrate how to convey transferable skills to employers through resumes, cover letters, and interviews in preparation for the capstone experience/internship in Health Science.

**HSCI 420. Nutrition Through the Life Cycle. 3 Credits.**
The influence of normal physiological changes on nutritional needs throughout the life span. Prerequisite: HSCI 320 or HSES 330 or instructor consent.

**HSCI 421. Public Health Nutrition. 3 Credits.**
The public health and nutrition concerns and services to maintain and improve the health of people living in the US.

**HSCI 422. Nutrition Assessment. 3 Credits.**
Methods and tools to screen and assess the nutritional status of individuals. Prerequisite: HSCI 320 or HSES 330 or instructor consent.

**HSCI 425. Nutrition Education. 3 Credits.**
Principles and practices used for teaching and reaching individuals and groups about nutrition to promote healthy living. Prerequisite: HSCI 320 or HSES 330 or instructor consent.

**HSCI 440. Introduction to Epidemiology. 3 Credits.**
This course will present the fundamentals of epidemiology including study designs, measures of morbidity and risk, types of research biases and specific epidemiology disciplines. These concepts will be illustrated with various examples of epidemiologic research and through lab exercises.

**HSCI 441. Population Health. 3 Credits.**
This is an introductory course that provides a population perspective on social determinants of health as well as the distribution of risk factors and disease across populations. It explores population-based approaches to explore how behavioral, social, and environmental factors influence health and methods to reduce these health disparities.

**HSCI 445. Introduction to Environmental Health. 3 Credits.**
This course is designed to provide a foundation for understanding how the natural and built environment affect human health in industrialized and developing countries by examining the impact of physical, chemical, and...
biological factors external to humans. Students will gain an understanding of the interaction of individuals and communities with the environment, the potential impact on health of environmental agents, and specific applications of concepts of environmental health. (Same as EVRN 445.)

HSCI 490. Independent Study. 1-6 Credits.
Directed readings or research project on a topic under the supervision of the instructor. Topic or project to be agreed upon in advance with supervising faculty member. Final report required. Prerequisite: Instructor consent.

HSCI 498. Pathways in Health Science Careers. 1 Credits.
This course provides an integrated approach through individual pre-health coaching and peer group reflection. Students will explore exercises that identify their individual strengths and align them with career goals. Through creating actionable plans, students will focus on broadening professional experiences and improving underdeveloped aspects of their application for professional programs in the health sciences. By the end of the course, students will have detailed an inventory of their professional experiences and a resume that clearly reflects them. Students will practice articulating their strengths through written materials and designing an entrance exam study plan. Through informational interviews, students will gain a clearer understanding of interprofessional teams and opportunities for alternative pathways in health careers.

HSCI 499. Topics in Health Sciences: ______. 1-3 Credits.
Courses on special topics in Health Sciences. These courses may be lecture, discussions, or readings. Students may select sections according to their special needs. Repeatable for credit if topic varies.

HSCI 521. Advanced Nutrition and Metabolism. 3 Credits.
Building upon the basic principles of nutrition, this course delves more deeply into the biological functions of nutrient and their interaction in the human body. Students will be introduced to the role of nutrition in disease. Prerequisite: HSCI 320 or HSES 330 and HSCI 422, or instructor consent.

HSCI 522. Advanced Sports Nutrition. 3 Credits.
The study of nutrient needs to support optimal performance in sports and exercise throughout the lifespan. Prerequisite: HSCI 320 or HSES 330 and HSCI 422 or instructor consent.

HSCI 599. Health Science Capstone. 3 Credits.
The capstone provides students with a broad-based, interdisciplinary educational experience and allows them to integrate and synthesize the knowledge they have gained in their health sciences curriculum. Students gather and analyze data throughout the class, and present their final work to a variety of audiences. Prerequisite: Students must be in their final year of coursework required for one of the degrees in the biological sciences. Restricted to declared Health Sciences majors only.

Courses

ITEC 310. Computer Organization and Platform Technologies. 3 Credits.
Machine-level representation of data, digital logic and digital systems, computer architecture and organization, computing infrastructure, introduction to multiprocessing systems, firmware, hardware and software integration, introduction to intersystems communications, enterprise deployment management introduction to virtual machine emulation, platform technologies. Prerequisite: EECS 210, EECS 268 and PHSX 114 or consent of instructor.

ITEC 320. System and Network Administration. 3 Credits.
This course introduces operating systems and network administration and presents topics related to selection, installation, configuration, and maintenance of operating systems and computer networks. Topics to be covered include: Unix and Windows operating systems installation, configuration, and maintenance, server administration and management, client and server services, user and group management and support, software systems installation and configuration, content management and deployment, security management, network administration, backup management and disaster recovery, resource management, automation management, operating systems and Web domain management, operating systems and application version control management. A laboratory component will provide hands-on experience with system and network administration. Prerequisite: EECS 210, EECS 268 and PHSX 114 or consent of instructor. Corequisite: ITEC 310.

ITEC 330. Web Systems and Technologies. 3 Credits.
The objective of this course is to discuss how the Web systems are programmed and maintained and how online pages are created and delivered by Web servers and used by clients. Topics to be covered include: Web systems and technologies, information architecture, digital media, Web development, Web standards, vulnerabilities, social network software, client-side programming, server-side programming, Web services and servers, XHTML, CSS, flash and CGI programming, CSS, Web systems security, JavaScript, PHP, and emerging technologies. Prerequisite: EECS 210, EECS 268 and PHSX 114 or consent of instructor. Corequisite: ITEC 310.

ITEC 340. Computer and Information Security. 3 Credits.
Fundamentals of computer security, security mechanisms, information states, security attacks, threat analysis models, vulnerability analysis models, introduction to cryptography, authentication, intrusion detection, intrusion prevention (firewalls), operating systems security, database security, software security, host hardening, incident and disaster response. Prerequisite: EECS 210, EECS 268 and PHSX 114 or consent of instructor.

ITEC 342. Information Security Management. 3 Credits.
The objective of this course is to present topics related to the administration and management of information security. Topics to be covered include: security fundamentals, operational issues, cost-benefit analysis, asset management, security risk management, security policies and enforcement, risk avoidance, risk prevention, risk transfer, security services, security forensics, contingency planning, security auditing. A laboratory component will provide hands-on experience with security management and administration. Prerequisite: ITEC 340 or consent of instructor.

ITEC 380. Managing IT Projects. 3 Credits.
The objectives of this course are to cover the fundamental concepts in managing IT projects. Topics include planning, executing, monitoring, controlling, and closing a project, designing a comprehensive project management plan, developing strategies in managing complexity in large projects, and understanding agility in project management. Project management concepts such as planning, scheduling, cost and effort estimation, risk analysis and mitigation, human resources management, communication management, and stakeholder management will be presented in detail. Prerequisite: EECS 210, EECS 268 and PHSX 114 or consent of instructor.

ITEC 399. Directed Reading in ITEC. 1-4 Credits.
Reading under the supervision of an instructor on a topic in Information Technology. The topic, expected outcome, evaluation criteria, and the number of credit hours must be mutually agreed on by the student and the instructor. Course may not be used to fulfill major elective requirements. Consent of the department required for enrollment. Prerequisite: Instructor permission required.

ITEC 410. Software Engineering and Management. 3 Credits.
This course introduces the software development life cycle and key concepts related to software engineering. Topics include software
process models, software project management, software requirements engineering, formal and informal modeling, software architecture, software design, coding and implementation, software testing and quality assurance, software deployment, and software evolution. Additional topics such as software metrics and measures, application domains, software engineering standards, and software configuration management will also be presented. This is a project-driven course. Prerequisite: ITEC 380.

ITEC 414. Database Design. 3 Credits.
The objective of this course is to present key concepts related to database design and implementation. Topics to be discussed include: database architecture, relational data model, SQL, database design life cycle, conceptual data modeling, relational database normalization, query processing, transaction processing, database security, and database administration. This is a project-driven course. Prerequisite: ITEC 330.

ITEC 416. System Integration and Architecture. 3 Credits.
This course introduces system integration and architecture. Key concepts to be presented include: system architecture, system requirements, organizational context, acquisition and sourcing, system and component integration, middleware platforms, design patterns, integrative coding, scripting coding, testing and quality assurance, system deployment. Prerequisite: ITEC 410.

ITEC 420. Operating Systems. 3 Credits.
This course introduces operating systems principles and associated key concepts. Topics to be discussed include: processes and threads, concurrency, scheduling and dispatch, memory management, processor management, device management, security and protection, file system, disk scheduling, real-time and embedded systems, fault tolerance, scripting, and an introduction to virtualization. Prerequisite: ITEC 320.

ITEC 422. Computer Networks. 3 Credits.
Foundations of computer networking with practical applications and network administration, with emphasis on the Internet and wireless public switched telephone network. Topics to be covered include routing and switching, routing algorithms, physical layer, data link layer, network layer, network security, network management, and application areas. Prerequisite: ITEC 320.

ITEC 424. Network Security. 3 Credits.
This course covers the fundamental concepts, principles, and mechanisms in network and distributed system security. The topics that will be covered include: network security primitives, distributed authentication, key management, secure communication protocols, firewalls, intrusion detection, traffic monitoring and analysis, email and Web security, etc. Prerequisite: ITEC 340 and ITEC 422.

ITEC 430. Human-Computer Interaction. 3 Credits.
This course introduces principles of human-computer interaction. Important topics to be presented include: human factors, human-centered design and evaluation, graphical user interfaces, multimedia system integration, interactive systems development, computer-supported cooperative work, human cognitive skills, accessibility, alternative input/output media, and emerging technologies. Prerequisite: Completion of nine credits of ITEC 300-level coursework or consent of the instructor.

ITEC 440. Cloud Computing. 3 Credits.
This course introduces principles of cloud computing and the business and computing technology trends that enable and necessitate its uses. Cloud computing and its engineering and delivery models, Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS), will be covered. Cloud-based and RESTful web services for developing new applications and offering new services will be discussed. Topics related to cloud computing security, identity, auditing, and authorization management will be presented. The course will be project based and an existing cloud computing platform (e.g., Amazon AWS) will used for projects. Prerequisite: ITEC 320 or consent of the instructor.

ITEC 450. Social and Professional Issues. 3 Credits.
This course will provide an overview of the history of computing and presents key concepts related to the social and professional aspects of IT. Topics to be covered include: pervasive themes in IT, social context of computing, intellectual property, legal issues in computing, professional and ethical issues and responsibilities, privacy and civil liberties. Prerequisite: Completion of nine credits of ITEC 300-level coursework or consent of the instructor.

ITEC 452. Special Topics in ITEC: _____.
This course introduces a special topic of current interest in information technology, offered as the need arises. May be repeated for additional credit. Prerequisite: Junior or Senior-level standing or consent of instructor.

ITEC 490. ITEC Capstone I. 3 Credits.
Capstone is a senior level course designed to allow a student to review, analyze, integrate, and apply technical knowledge in a meaningful and practical manner. The student will be expected to complete an approved academic project in IT that may be in collaboration with an industrial partner. Prerequisite: Corequisite: ITEC 410.

ITEC 492. ITEC Capstone II. 3 Credits.
ITEC Capstone II is a continuation of ITEC Capstone, is a senior level course designed to allow a student to review, analyze, integrate, and apply technical knowledge in a meaningful and practical manner. The student will be expected to complete an approved academic project in IT that may be in collaboration with an industrial partner. Prerequisite: ITEC 490.

ITEC 710. Information Security and Assurance. 3 Credits.
This introductory security course covers a wide range of topics in the area of information and network security, privacy, and risk: the basic concepts: confidentiality, integrity and availability; introduction to cryptography; authentication; security models; information and database security; computer systems security; network security; Internet and web security; risk analysis; social engineering; computer forensics. Prerequisite: Graduate standing in EECS, or permission of the instructor.

ITEC 711. Security Management and Audit. 3 Credits.
Administration and management of security of information systems and networks, intrusion detection systems, vulnerability analysis, anomaly detection, computer forensics, auditing and data management, risk management, contingency planning and incident handling, security planning, e-business and commerce security, privacy, traceability and cyber-evidence, human factors and usability issues, policy, legal issues in computer security.

ITEC 712. Network Security and its Application. 3 Credits.
This course focuses on network-based information and communication systems, and examines network technologies and service applications to provide the students with a comprehensive introduction to the field of network security and its application. The course covers key concepts and critical network security services including authentication and access control, integrity and confidentiality of data, routing, firewalls, virtual private networks, web security, virus protection, and network security architecture and policy development. The students are expected to understand the technical vulnerabilities of networked systems and to develop methods to eliminate or mitigate those vulnerabilities. Prerequisite: IT 710 and one of the following: IT 422, EECS 563, or EECS 780.

ITEC 714. Information Security and Cyber Law. 3 Credits.
The objectives of this course is to present an introduction to the legal and ethical issues and challenges in the information age, to provide a survey of legal and ethical issues introduced by information security, and to discuss individual rights vs. national interests. A coverage of key cyber laws that impact information security and IT professionals and topics related to intellectual property, copyrights, digital forensics, e-surveillance, and e-discovery for legal evidence and lawsuits will be provided. A review of preventative legal management practices in the context of information security (including employee awareness training) will be presented. Prerequisite: IT 710 or instructor permission.

ITEC 746. Database Systems. 3 Credits.
Introduction to the concept of databases and their operations. Basic database concepts, architectures, and data storage structures and indexing. Though other architectures are discussed, focus is on relational databases and the SQL retrieval language. Normalization, functional dependencies, and multivalued dependencies also covered. Culminates in the design and implementation of a simple database with a web interface. Prerequisite: EECS 448 or consent of instructor. Students cannot receive credit for both EECS 647 and EECS 746.

ITEC 780. Communication Networks. 3 Credits.
Comprehensive in-depth coverage to communication networks with emphasis on the Internet and the PSTN (wired and wireless, and IoT-IoT-Internet of Things). Extensive coverage of protocols and algorithms will be presented at all levels, including: social networking, overlay networks, client/server and peer-to-peer applications; session control; transport protocols, the end-to-end arguments and end-to-end congestion control; network architecture, forwarding, routing, signaling, addressing, and traffic management, programmable and software-defined networks (SDN); quality of service, queuing and multimedia applications; LAN architecture, link protocols, access networks and MAC algorithms; physical media characteristics and coding; network security and information assurance; network management. Prerequisite: EECS 563 or equivalent or permission of instructor.

ITEC 810. Software Engineering and Management. 3 Credits.
Principal concepts in software engineering with a focus on formalism as well as managerial issues; software development models; software process models; software configuration management; software development life cycle activities; project management; planning and estimation; requirements engineering, software architecture, software modular design; software reusability; implementation strategies; testing techniques; software quality assurance; software evolution; metrics and measurements, ethics and professionalism. Prerequisite: Programming experience, preferably in Java or C++.

ITEC 811. IT Project Management. 3 Credits.
Management issues in the creation, development, and maintenance of IT systems; effort and cost estimation techniques; project planning and scheduling; resource allocation; risk analysis and mitigation techniques; quality assurance; project administration; configuration management; organizational issues; software process modeling; process improvement; frameworks for quality software.

ITEC 814. Software Quality Assurance. 3 Credits.
Software quality engineering as an integral facet of development from requirements through delivery and maintenance; verification and validation techniques; manual and automated static analysis techniques; fundamental concepts in software testing; test case selection strategies such as black-box testing, white-box testing; formal verification; unit, integration, system, and acceptance testing; regression testing; designing for testability; models for quality assurance; reviews, inspection, documentation, and standards; industry and government standards for quality. Prerequisite: IT 810.

ITEC 818. Software Architecture. 3 Credits.
Designing architectures; software architectural styles and patterns; architectural components and connectors; architectural modeling and analysis, architectural deployment, designing for nonfunctional properties such as efficiency, scaleability, adaptability, and security; domain-specific software architectures; architecture product lines; architecture description languages (ADLs); standards. Prerequisite: IT 810.

Courses

PFS 301. Communication in the Workplace. 3 Credits.
This course presents an overview of communication dynamics in the modern increasingly complex, diverse and dispersed modern workplace. Course content and activities will explore the various task, relational and identity dynamics that generate effective communication across a variety of different workplace relationships and situations. Special consideration will be given to understanding the influence of workplace power dynamics/hierarchies, communication technologies, identities, and cultural differences in delivering effective interpersonal, small group, written and presentation messages. Course activities will help emerging professionals recognize how to leverage their daily communication at work to earn trust, build productive working relationships, and organize collaborative work processes to achieve workplace goals.

PFS 302. Leadership in Practice. 3 Credits.
This course will introduce students to the principal theories of effective leadership, ranging from the "individual star" model to contemporary frameworks of distributive and collaborative leadership. The course draws important distinctions between leadership and management and assists learners in understanding their natural preferences. Through exercises, assignments, lectures, videos, case studies, and discussion, we transform theory into applicable, real-world practice. Students will experience a dynamic, applied, and realistic view of what leadership is like in contemporary organizational life. Topics include strategic thinking, operational excellence, emotional intelligence, navigating change, conflict management, and team communication.

PFS 303. Professionalism and the Workplace. 3 Credits.
This course presents an overview of the importance and challenges associated with professionalism and the workplace expectations regarding demonstrating respect for coworkers, colleagues, and customers, business etiquette and attire, appropriate use of communication tools, and acting in the best interest of the organization, community, and the environment. The basic skills necessary for achieving success in today's challenging work environment are enhanced through this course.

PFS 730. Writing and Speaking for Decision Makers. 3 Credits.
This courses is an advanced level communication skills course focused on developing and refining managerial-level business writing and presentation skills. Course assignments and activities provide practice and expert feedback on these core professional skills. Course content offers research-based insights to develop one's ability to assess various stakeholders' needs, motivations and values, while also addressing critical situational needs and relational concerns in a variety of workplace communication scenarios. Participants learn to craft communication that is thoughtful, strategic, research-backed, and designed to signal their readiness for additional career development opportunities.

PFS 741. Intercultural Communication in Organizations. 3 Credits.
This course explores the intercultural communication dynamics that influence individual work satisfaction, workplace relationships, team effectiveness and project outcomes across an increasingly global workforce. Course content and activities will focus on understanding
how national and regional cultural differences influence group and team dynamics. Special focus will be on de-centering one's own cultural norms and personal preferences and adapting to engage in communication that signals respect for cultural difference at work. Topics will include developing personal awareness, appreciation and skills required to respectfully and effectively engage difference related (but not limited) to language, time, gender, family status, religion, and the role of organizational hierarchies in shaping colleagues' communication at work. Course will focus on how to adapt to these areas of difference and using strategies for integrating flexibility while collaborating with diverse colleagues to achieve shared organizational goals.

PFS 801. Interpersonal and Persuasive Communication Skills for Managers. 3 Credits.
This course examines how communication practices and patterns influence employee engagement, team productivity, organizational cultures, and individual career development. In short, this course centers communication as the primary way people organize, build relationships and get things done in organizations. Factors influencing what makes communication “effective” in various contexts and relationships will be identified, providing you a toolkit for enhancing team effectiveness and business outcomes, as well as facilitating your individual career advancement. Course activities and assignments are designed to build self-awareness and global workplace communication competencies, with a focus on situational awareness and personal adaptability. The course is designed to differentiate KU graduates by providing a powerful set of research-based communication concepts and frameworks for use in diagnosing and meaningfully addressing the most common work and career-related challenges facing mid-career professionals in today's increasingly complex, diverse and ever-changing organizations.

PFS 802. Managing Teams and Leading People. 3 Credits.
This course examines the foundational body of knowledge relating to effective organizational management and leadership. Beginning with an exploration of the essential differences between management and leadership, the course then addresses such topics as leading with emotional intelligence, change management, organizational culture, individual and team performance coaching and management, innovation theories, stakeholder analysis, and personal brand development.

PFS 803. Financial Management for Professional Success. 3 Credits.
This course introduces the concepts and applications of financial planning and management for professional managers working in diverse professional environments. Topics include time value of money, asset valuation, capital structures and budgeting, financial analysis and cash flow, and project and operations decision-making. This "finance for non-financial managers" course equips managers with the fundamental knowledge and skills to operate a unit in collaboration with their organization's financial professionals.

PFS 804. Project Management for Professionals. 3 Credits.
This course introduces the project management body of knowledge with a focus on developing project management plans for use in diverse professional environments. The project life cycle is covered from inception to closeout with an emphasis on project scope, budget, schedule, and risk; and practical application of stakeholder, procurement, resource, quality, and communication management. The course will be valuable to managers of units, teams and organizations either to directly manage projects of various types or have a strong understanding of what to expect from formal project managers.

PFS 810. Organizational Communication Strategies. 3 Credits.
This course addresses key communication processes in organizations, including developing effective workplace relationships and nurturing organizational cultures and team work in increasingly complex, global organizations. Topics include change management communication strategies, how organizational hierarchies and other structures influence communication flows, the role of different social group identities in shaping individual's experiences within organizations, and managing virtual teams. Students will be able to identify the influence of organizational culture, power dynamics, and communication ethics on workplace communication patterns and outcomes, and will craft communication strategies to enhance workplace cultures, project outcomes and personal leadership communication skills.

PFS 821. Employee Onboarding and Role Development. 3 Credits.
This course explores the communication dynamics that facilitate employee onboarding and integration for new hires and newly promoted supervisors, managers and leaders. Content and activities will explore the challenges and opportunities embedded in the socialization process for individuals and organizations, including the hidden communication complexities of role transitions, including navigating expectations of colleagues, understanding the dynamics of the personal identity shift one must navigate during transition, and balancing the desire to affect change with the pressure to assimilate into organizational expectations. Participants will design an onboarding and communication plan for a workplace socialization need of their choice.

PFS 823. Organizational Change and Communication. 3 Credits.
This course explores communication processes embedded in organizational change, with a specific focus on identifying the needs, expectations and values of various stakeholders who will be participating in and/or affected by an organizational change. Course focuses on understanding change as an inherently communicative process (rather than only a business strategy). Participants will learn to identify a full range of internal and external stakeholders, recognize the root causes of stakeholder concerns, and understand common sources of "resistance" to change at every level of an organization. Participants will develop a comprehensive communication plan and sample communication documents to engage the full range of stakeholders in change planning, implementation and long-term integration into organizational culture and structures related to a change of their choice.

PFS 825. Communication Practices for Inclusive Organizations. 3 Credits.
This course examines the challenges and opportunities facing individuals in organizations. Weekly discussion and assignments will examine the challenges and opportunities employees/members face based on navigating organizational structures, workplace cultures and leadership actions. Participants will develop strategies to build inclusive workplace around race, gender, age, sexuality, (dis)ability, socioeconomic status, and other social identities. Challenges and opportunities related to intersectional identities will be explored as well. The class has an applied, practical focus featuring weekly guest speakers and focus on becoming more aware of forms of personal privilege and becoming advocates for meaningful change within organizations.

PFS 827. Communication Ethics for Managers and Leaders. 3 Credits.
This course examines current leadership communication and workplace culture issues through a lens of communication ethics. The course uses several frameworks for identifying ethical issues in the communication used to organize people and ideas within organizations and communities. Communication ethics and related power dynamics shaping communication processes and outcomes will be explored related to employee engagement campaigns, corporate communication tactics, leadership and management communication practices, conflict resolution
practices within organizations, and communicating organizational change. Participants will gain skills and confidence to recognize and actively engage with the communication ethics concerns embedded in today’s daily workplace interactions, leadership and management communication, decision-making processes, organizational policy creation, and corporate communication initiatives.

PFS 829. Communicating Across Workplace Generations. 3 Credits.
This course explores the dimensions of the popular “generations” framing of age-related diversity in the modern workplace. This course will unpack and challenge the concept of “generations” and its implications for workplace cultures, policies, leadership and career development practices. Course will explore different types of generations that emerge within organizations related to factors like workplace cohort, team dynamics and individual lifestage. Organizational communication assumptions, patterns and practices will be centered as a factor in shaping the individual experiences of these generational members, with the goal of identifying new strategies for stimulating meaningful, productive cross-generational working relationships, mentoring and collaboration across organizations.

PFS 831. Case Studies in Organizational Communication. 3 Credits.
This course explores the ways we organize ourselves through communication, both within and beyond traditionally-structured organizations. We'll examine traditional, new and emerging messages, practices and structures used to organize people across traditional boundaries. The course will explore “hidden” forms of organization that shape our personal experiences and public discourse, ranging our informal professional networks to a variety of online “dark web” groups organizing followers around non-traditional belief systems. Discussion will explore the role of loss of trust in formal institutions, technology and social media, and groups seeking to intentionally disrupt and dismantle traditional forms of organization. Participants will recognize the full range of ways communication can be used to (dis)organize groups, create new organizations and social movements, and influence public discourse and organizations.

PFS 833. Communication and Team Development. 3 Credits.
This course will explore team development through the lens of communication, exploring requisite individual teaming skills, team-level processes and organizational-level norms and structures. The course will provide research-based insights to help team managers and leaders facilitate more effective team onboarding, decision-making and conflict management processes across organizational structures, while recognizing individual difference and utilizing inclusive communication practices that fuel rewarding teamwork, positive project outcomes and career development for all. Course content will discuss necessary forms of organizational-level sponsorship, structures, technology access, and training necessary to support team communication and development. This course will be especially helpful for those serving in (or seeking to advance into) team management and leadership roles.

PFS 835. Interpersonal Communication Skills at Work. 3 Credits.
This course provides research-based interpersonal communication insights for developing personal effectiveness across increasingly global, complex and resource-constrained organizations. Course content and activities will help professionals work on personal skill development related to building effective working relationships, initiating difficult conversations, navigating conflict, building internal and external networks, effectively advocating for self and others, and demonstrating a commitment to personal communication ethics. Insights and skill practice will focus on developing a personal communication skillset for working effectively across various situations, cultural contexts and stakeholder groups. Content will be helpful for both individuals and managers/leaders recognizing the need to further develop their interpersonal skills in various workplace settings.

PFS 837. Communication Strategies for Remote and Hybrid Teams. 3 Credits.
This course explores the communication challenges and opportunities presented by remote work in geographically dispersed organizations. Course content and activities will explore how leaders, managers and front-line staff can utilize communication-based relationship-building skills, as well as project planning, meeting facilitation and technological tools to build productive working relationships, stronger teams and optimal productivity across multiple workplace structures, cultures, project teams, time zones and geographies. Participants will gain valuable insights about the human needs embedded in virtual work as well as gain practical skills needed for leading successfully in a virtual work environment.

PFS 839. Conflict Dynamics in Organizations. 3 Credits.
This course explores the multiple sources and levels of conflict in organizations. Course content will help participants recognize and address the historical and cultural roots of conflict in organizations. Course activities will help develop the individual insights and communication skills necessary to initiate meaningful change to conflict management processes within teams and organizations, with the goal of facilitating more equitable, fair and trusting work relationships, communication flows, and positive outcomes for all. This course will be especially helpful for those looking to advance into management and leadership positions.

PFS 850. Interview-Based Research in Organizations. 3 Credits.
The course provides hands-on practice designing an interview or focus-group based research project. Activities build skills related to project design, managing sponsor and stakeholder pressures, interview questions crafting, managing interview dynamics, ensuring confidentiality and research ethics, conducting data analysis, crafting findings, report writing, delivering a final presentation to stakeholders. Major course activity involves working with sample data and crafting a future research proposal for an organization selected by the participant.

PFS 860. Exploring Communication Theory. 3 Credits.
This course involves exploring the theories that provide deeper insight into underlying individual, group, organizational and societal level factors influencing communication patterns, practices and policies in organizations. This course provides a solid understanding of the unique value of the communication studies lens for examining common workplace communication issues at the individual, team and organizational levels. Participants will leave the course with a toolkit of organizational communication concepts and theories for better understanding "what's really going on here," providing a powerful set of insights for identifying, unpacking and addressing common issues related to coworker relationships and conflict, managerial and leadership communication, diversity and inclusion, and workplace culture, to name just a few.

PFS 875. Special Topics in Organizational Communication. 3 Credits.
The specific topic of this course may vary from semester to semester; course will explore a variety of current issues related to organizational culture and communication, with a focus on translating research into practice within organizational roles.

PFS 895. Independent Study in Organizational Communication. 1-3 Credits.
This course is reserved for students working independently with faculty supervision to study a topic of interest. The specific topic and related
readings, assignments and meeting schedule will be worked out between the faculty member and individual student(s) and pre-approved by the faculty member leading the independent study. A permission code is required to register for PFS 895 course hours.

PFS 897. Comprehensive Exam Prep. 1-3 Credits.
A culminating course to prepare students for their Organizational Communication Masters comprehensive exam. Students will work with faculty to prepare materials for the comprehensive exams upon completion of all course work. Prerequisite: Minimum 20 credit hours completed in program.

PFS 898. Capstone Project in Organizational Communication. 1-3 Credits.
This course is reserved for students working on the capstone project required to complete the degree in organizational communication. The specific topic, research method, organizational sponsor, and meeting schedule will be worked out between the supervising faculty member and individual student(s). The capstone project must be pre-approved by the faculty member supervising the capstone project. Prerequisite: Consent of department or instructor.

Courses

PMGT 305. Foundations of Project Management. 3 Credits.
This course offers students an opportunity to learn how to approach project management (PM) and understand PM essential concepts from both a theoretical and applied perspective. Students will learn to identify the elements of the PM life cycle, understand PM processes, comprehend and become familiar with basic PM tools and techniques, utilize techniques for optimizing project results, manage stakeholder communications, understand the principles of team leadership, and identify the career paths in the PM profession.

PMGT 310. Project Communications. 3 Credits.
This course offers students the opportunity to develop comprehensive technical communications and stakeholder-engagement knowledge and skills. Students will master theoretical and applied skills for properly communicating with project stakeholders and team members.

PMGT 315. Project Scheduling and Control. 3 Credits.
This course explores project scheduling, monitoring, and controlling techniques used by successful project managers. Concepts covered in this course include arrow, PERT, precedence, and linear scheduling methods; resource leveling; time-cost analysis; and time-scaled diagrams. Prerequisite: PMGT 305.

PMGT 320. Introduction to Microsoft Project. 3 Credits.
A schedule helps a project manager plan and execute project activities. Microsoft Project is a powerful tool that can help with the planning of project schedules. This course will provide students with practice creating and managing schedules in Microsoft Project. Students will utilize Microsoft Project to create project plans, explore task dependencies, and generate reports.

PMGT 325. Effective Project Team Leadership. 3 Credits.
This course will introduce students to the fundamental relationship management, communications, and leadership skills necessary to effectively lead project teams. Students will be given a dynamic, applied, and comprehensive view of what project leadership is like in contemporary organizational life. Readings, case studies, and videos integrate best current knowledge with established scholarly research in a way that makes the topic of leadership come alive. The course examines such topics as: Personal vs. Positional Power; Influence vs. Authority; Delegation; Motivating, Prioritizing, and Coaching Teams; Stakeholder Communication; and Conflict Resolution.

PMGT 330. Organizational Strategy and Project Initiation. 3 Credits.
This course will explore the linkages between the implementation of projects and overall organizational success. Students will learn to utilize organizational strategy to guide project selection and initiation to achieve value for the organization. In addition, various tools for evaluating and selecting projects will be explored. Students will also evaluate the steps needed to properly initiate a project. Prerequisite: PMGT 305.

PMGT 335. Project Stakeholder Engagement. 3 Credits.
This course introduces the rationales, processes, and general principles of stakeholder engagement for success in projects. Students will examine and analyze the wide range of methods and tools available to engage with the stakeholders on a project. In addition, the key skills and competencies needed to effectively engage with stakeholders will be explored. Prerequisite: PMGT 305.

PMGT 405. Organizational and Project Risk Management. 3 Credits.
This is an introductory course to teach students how to identify, analyze, plan, and manage project-related risks. Students will gain an understanding of the importance and benefit of risk management for projects. Qualitative and quantitative risk management techniques will be presented to students in this course. Prerequisite: PMGT 305.

PMGT 410. Managing Project Success. 3 Credits.
Students in this course will learn the importance and process of identifying the root cause of the problem to be addressed by a project. Projects frequently fail because the project team failed to properly identify the root cause of the problem. Students will also explore the various types and components of project success with a focus on managing project tradeoffs that must be made. Lastly, students will analyze the many situations where project success is achieved through early termination the project. Prerequisite: PMGT 305.

PMGT 415. Project Procurement and Supply Chain Management. 3 Credits.
This course provides students with an overview of procurement, outsourcing, and supply chain management. The history of procurement and supply chain management will be discussed. The most recent methodologies will then be examined, along with the tools and techniques that are needed to manage procurement and the supply chain in an effective way.

PMGT 420. Emerging Trends in Project Management. 3 Credits.
This course explores emerging trends in project management expected to impact project management methodologies and tools over the next one to two decades. The challenges associated with implementing these trends in organizations will be examined. In addition, the skills project managers will need to develop to successfully implement these emerging trends will also be explored. Prerequisite: PMGT 305.

PMGT 425. Global Project Management. 3 Credits.
This course introduces students to the management challenges in conducting projects across borders and cultures. The critical success factors for managing projects across national boundaries are discussed. In addition, consideration of vendor and outsourcing management, remote stakeholder management, and effectively addressing cross-cultural, social, and political issues are examined. Prerequisite: PMGT 305.

PMGT 430. Managing Virtual Project Teams. 3 Credits.
This course is designed to provide an overview of key individual, group, and organizational issues involved in managing virtual project teams. Concepts discussed include setting team members up for virtual success, the additional challenges of effective virtual teams, conducting
virtual team meetings, and leading teams across cultures. Prerequisite: PMGT 325.

PMGT 510. Advanced Agile Approaches to Project Management. 3 Credits.
Students will move beyond a basic understanding of agile project management by exploring various agile development philosophies and methodologies and how they can be applied to manage current projects. Students will learn how to utilize Scrum and several additional agile frameworks. They will also develop an understanding of when to use agile methodologies (and when not to) and how to tailor agile practices for maximum project success. Prerequisite: PMGT 305.

PMGT 520. Advanced Microsoft Project. 3 Credits.
Students will learn how they can utilize Microsoft Project beyond basic project scheduling. Students will utilize Microsoft Project to level project resources and capture both cost and schedule progress. Students will also learn to set up a project with a calendar, manage baselines, create custom fields and columns, create custom reports, and understand manual vs. automatic scheduling. Prerequisite: PMGT 315 and PMGT 320.

PMGT 599. Project Management Capstone. 3 Credits.
The capstone serves as a culminating experience for the project management courses in this curriculum. Students will demonstrate what they have learned throughout the project management program by applying leadership, critical thinking, problem solving, and creativity skills to real-world project situations. Subjects covered include project selection and initiation, scheduling and work breakdown structures, cost control and earned value management (EVM), risk management, monitoring and controlling, and project closure. Prerequisite: Completion of at least 33 credit hours of PMGT courses.

PMGT 800. Special Topics: ______. 3 Credits.
Advanced or experimental work of specialized nature representing unique or changing needs and resources in project management. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

PMGT 802. Innovation and Change Management Process. 3 Credits.
This course will examine innovation models and change management process utilized by successful organizations. The course will emphasize how these concepts relate to project management within an organization and the management of technical operations. The course will address the following topics: -Key models for innovation and how they impact planned change processes -Key organizational factors that impact planning for change -Strategies for change within project work -Resistance to change within planned change process -Ethical considerations relating to change management

PMGT 806. Finance for Project Manager. 3 Credits.
A study of finance including financial planning and management in technological based organizations. Topics covered include financial statement analysis, present value of financial markets, capital budgeting, taxes, investment decisions, replacement decisions, cash flow budgets and sources of capital.

PMGT 808. Lean Six Sigma. 3 Credits.
This course is an introduction to the principles of implementing the Lean Six Sigma philosophy and methodology. Lean Six Sigma is a total enterprise philosophy. Topics follow the DMAIC process and include tools and methods such as process flow diagrams, cause and effect diagrams, failure mode and effects analysis, capability studies, and design of experiments. The use of various concepts to reduce waste and improve system performance such as process flow, standardized work, value streams, workplace organization, and visual controls are covered. Course Objectives: -Understand and apply the Six Sigma DMAIC model for improvement activities. -Utilize Six Sigma knowledge and skills to lead successful improvement projects that deliver meaningful results. -Facilitate the use of improvement tools and techniques in improvement projects.

PMGT 809. Personal Development for Project Managers. 4 Credits.
Concepts and skills development in the primary areas of communication methods, ethical behavior, conflict resolution, workforce diversity, and continuous learning, and secondary areas of basic project and project team contexts and related interpersonal relations. Career development is emphasized.

PMGT 810. Financial Management. 3 Credits.
A study of the concepts and applications of financial planning and management for project and operational managers. Topics include time value of money, asset valuation, capital structures and budgeting, financial analysis and cash flow, and project and operational investment decision-making. Course Objectives: -Knowledge and understanding the principles of financial planning and management. -Knowledge and skills with corporate structures, financial institutions, and investments. -Knowledge and skills with financial reports including balance sheets, income statements and financial ratios. -Ability to apply time valuations, cash flows, and taxation in project and operational environments. -Ability to apply capital structures and budgeting in project and operational decisions.

PMGT 811. Project Contracts and Procurement. 3 Credits.
An advanced study of the project procurement and contract administration bodies of knowledge and their applications. The project procurement’s place in a supply chain life cycle is covered from needs identification to contract closeout with emphasis on requirements definition, vendor selection, contract negotiation and award, service delivery, and performance monitoring. Course Objectives: -Knowledge and understanding of the theories, principles, and benefits of the project procurement life cycle. -Knowledge and application of procurement planning and contract administration best practices, processes, and tools. -Practical application of the project management body of knowledge specific to project procurement management. -Practical application of the supply chain and commercial business body of knowledge specific to contract award, execution, and closeout.

PMGT 816. Project Management Fundamentals I. 3 Credits.
Managerial concepts and skills development in relation to the project-oriented business environment, project lifecycle, integrated project management, project selection, and project initiation. Focus is on management of a single project.

PMGT 817. Project Management Fundamentals II. 3 Credits.
Planning concepts and skills development in relation to developing needed information on project scope, time, cost, and risk, and making direct use of such information to develop key documentation such as the project schedule and budget. Examples of specific topics considered include project work content and change, documentation, and resource requirements. Planning content is complementary to that of PMGT 818. Prerequisite: PMGT 816.

PMGT 818. Project Management Fundamentals III. 3 Credits.
Concepts and skills development in relation to planning for management of communications, human resource aspects of project team formation and development, procurement, and quality. Examples of specific topics considered include information handling, reporting, and stakeholder
relationships. Planning content is complementary to that of PMGT 817. Prerequisite: PMGT 816.

**PMGT 819. Project Management Fundamentals IV. 3 Credits.**
Concepts and skills development in relation to project execution, including processes monitoring and controlling, and project closure. Examples of specific topics considered include handling change requests, procurement, teamwork and team development, and cost management. Course content represents systematic treatment of all aspects of project management beyond planning—but is, in project execution and closing phases. Prerequisite: PMGT 816.

**PMGT 820. Management of New Product Development Projects. 3 Credits.**
This course discusses how to properly manage new product development processes using project management tools and techniques. New products are not projects until they are analyzed, planned, scheduled, budgeted, managed, and controlled by managers. It is not typically technical process issues that result in failed new product introductions, but rather a failure in their management and marketing. Prerequisite: PMGT 816 or PFS 804.

**PMGT 821. Management of Consulting Projects. 3 Credits.**
Application area course exposing students to specialized knowledge, standard, and regulations involved in managing consulting projects. Attention is directed to unique characteristics of consulting project environments, major project phases-from selection to closing-and related management processes. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

**PMGT 822. Management of Governmental Projects. 3 Credits.**
Application area course exposing students to specialized knowledge, standards, and regulations involved in managing projects for governmental entities. Attention is directed to unique characteristics of the governmental project environments, major project phases-from selection to closing-and related management processes. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

**PMGT 823. Risk Management for Project Managers. 3 Credits.**
Advanced study of risk management theory and practice as applied in managing projects. Basic concepts and methods of risk management are reviewed-such as qualitative and quantitative risk assessment and details then examined. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

**PMGT 824. Project Cost Estimation, Analysis, and Control. 3 Credits.**
Advanced study of cost estimation methodology, cost engineering, and cost control applicable in project management. Includes review of commonly used supportive software. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

**PMGT 825. Portfolio Analysis and Program Management. 3 Credits.**
Review practices and processes to achieve organizational objectives by utilizing portfolio analysis and program management. Project evaluation and selection, funding, and performance tracking processes will be examined as well as the facilitation of these efforts across multi-tiered organizations. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

**PMGT 827. Project Team Management and Development. 3 Credits.**
Concepts and methods of team and team member development, achieving higher-performance teams while satisfying organizational expectations. Specific topics include management concepts and practices, team dynamics, and interpersonal skills in negotiation and conflict resolution. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

**PMGT 828. Management of Global Projects. 3 Credits.**
Survey of management challenges in conducting international projects, emphasizing cross-culture issues. Differences across world regions and selected key countries in relation to communication and interpersonal norms, business conventions, and legal systems will receive particular attention. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

**PMGT 829. Management of Distributed Project Teams. 3 Credits.**
Concepts and methods of conducting high-performance, multi-site team operations, focusing on intra-team communication, coordination, and control. Incorporates review of practical technologies with emphasis on web-enabled approaches. Prerequisite: PMGT 816, Project Management-Master of Engineering plan code, or PMP Certified.

**PMGT 830. Case Studies in Project Management. 1-3 Credits.**
Reinforcement and demonstration of developing project management skills through case analysis and discussion. Goal is integration of learning across all core courses, and also drawing on content from general management, applications area, and advanced project management elective courses taken. Emphasis is on integrated project management. The students will document their project in a written report and present their project during the final oral examination to the Project Management faculty and student's employer or representative if practical. Prerequisite: Must have completed 21 PMGT credit hours and have completed PMGT 816, PMGT 817, and PMGT 818.

**PMGT 833. Management of Internal Projects for Scientists and Technical Professionals. 3 Credits.**
The purpose of this course is to introduce the student to all aspects of managing a project within a company or organization. The entire project life cycle will be covered from inception to close-out, and many practical considerations will be discussed including material procurement, working with contractors and consultants, selecting software, and managing the project team. The course will focus on how to manage project scope, schedule, budget, and resources using personal computer software. A semester project is required presenting an example of project management or investigating some aspect of project management in detail.

**PMGT 835. Project Management Capstone. 1-3 Credits.**
The capstone serves as a culminating experience for this degree. Students will develop an applied workforce project or benefit to in the student's place of employment for full time students. The students will document their project in a written report and present their project during the final oral examination to the Project Management facility and student's employer or representative if practical. This course can be taken up to three times for a maximum of three credits. Prerequisite: Must have completed 21 PMGT credit hours and have completed PMGT 816, PMGT 817, and PMGT 818.

**PMGT 840. Developing as a Project Leader. 3 Credits.**
Leadership is a critically important, yet elusive concept. There are more than 200 definitions of leadership in the scholarly literature today, reflecting a growing interest in understanding the topic. This course is designed to provide a comprehensive examination of the key attributes of effective leadership in a project management context. The drivers of effective leadership - including emotional intelligence, change adaptability, conflict management, communication, trust, and resilience - will be studied. Students will explore their own natural leadership attributes and learn to develop a compelling, authentic style that aligns with their personalities, experiences, and beliefs. This course examines several theories of leadership, from the original conception of "trait" theory to
more contemporary frameworks involving distributive, servant, and ethical leadership. It also enriches student understanding of positional vs. personal power and influence vs. authority. Prerequisite: PMGT 816.

PMGT 842. Project Management in an Agile Environment. 3 Credits.
This course provides a comprehensive overview of the principles, processes, and practices for managing projects in an agile development environment. Students will learn the basic tenants of the Agile Manifesto and how to apply it to real-world projects. The strengths and weaknesses of an Agile approach to project management vs. a traditional waterfall approach will be explored, emphasizing how to leverage or mitigate the strengths and weaknesses to manage various types of projects. Prerequisite: PMGT 816.

PMGT 860. Project Management Independent Study. 1-4 Credits.
Graduate-level independent study of problems or subjects of immediate interest to a student or faculty member. Project topic to be agreed upon in advance with supervising faculty member. May be repeated for credit up to a maximum of four hours in the degree program. Prerequisite: Consent of instructor.

Bachelor of Applied Science in Biotechnology

Biotechnology Program
Grounded in biological sciences, chemistry and advanced technology, biotechnology employs biological systems to solve scientific challenges that impact society. Through this program, you will be equipped for diverse career options in fields such as:

- Medical education or professions
- Food science
- Environmental and agricultural sciences
- Animal health
- Pharmaceuticals

In this unique program, you will not be assessed based on your ability to memorize an array of facts but by your ability to reference facts, formulate an approach and integrate data to solve problems.

Undergraduate Admission

Admission to KU
All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

Biotechnology

KU Edwards Campus
The undergraduate program in biotechnology is offered in its entirety only at the KU Edwards Campus (http://edwardscampus.ku.edu/), 12600 Quivira Rd., Overland Park, KS 66213. This program is designed for students who have earned an associate’s degree or equivalent hours and wish to complete the upper-level courses necessary for a bachelor’s degree.

B.A.S. in Biotechnology

Biotechnology is grounded in biological sciences, chemistry and advanced technology. Biotech scientists employ biological systems to solve scientific challenges and positively impact our society. The medical, food, environmental and agricultural sciences, as well as the animal health and pharmaceutical industry, are all considered part of the biotechnology field. Contact the your academic success coach (https://edwardscampus.ku.edu/program-advisors/) for more information.

Requirements for the Bachelor of Applied Science Degree in Biotechnology

General Education Requirements
In addition to degree and major requirements for all plans and subplans, all students must complete the KU Core.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>10</td>
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<tr>
<td>&amp; CHEM 135</td>
<td>and General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>PHSX 114</td>
<td>College Physics I</td>
<td>1-4</td>
</tr>
<tr>
<td>BIOL 150</td>
<td>Principles of Molecular and Cellular Biology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 151</td>
<td>Principles of Molecular and Cellular Biology, Honors</td>
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<tr>
<td>BIOL 154</td>
<td>Introductory Biology Lab for STEM Majors</td>
<td>2</td>
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<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
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<td>or BSCI 350</td>
<td>Genetics</td>
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<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td>3</td>
</tr>
<tr>
<td>or BSCI 600</td>
<td>Biochemistry</td>
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Bachelor of Applied Science Core Curriculum

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td>3</td>
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<tr>
<td>or BIOL 570</td>
<td>Introduction to Biostatistics</td>
<td></td>
</tr>
<tr>
<td>MGMT 305</td>
<td>Survey of Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>or PUAD 407</td>
<td>Introduction to Project Management</td>
<td></td>
</tr>
<tr>
<td>or MGMT 310</td>
<td>Principles of Management</td>
<td></td>
</tr>
<tr>
<td>BTEC 310</td>
<td>Scientific Communications</td>
<td>3</td>
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<tr>
<td>or COMS 310</td>
<td>Advanced Organizational and Professional Communication</td>
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<tr>
<td>or COMS 330</td>
<td>Effective Business Communication</td>
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Biotechnology Requirements.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>BTEC 300</td>
<td>Research Methods in Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 305</td>
<td>Molecular and Microbiological Techniques</td>
<td>4</td>
</tr>
<tr>
<td>BTEC 400</td>
<td>Applied Immunology</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Applied Science in Biotechnology

**Major Hours & Major GPA**

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

### Major Hours
Satisfied by 47 hours of major courses.

### Major Hours in Residence
Satisfied by a minimum of 15 hours of KU resident credit in the major.

### Major Junior/Senior Hours
Satisfied by a minimum of 45 hours from junior/senior courses (300+) in the major.

### Major Junior/Senior Graduation GPA
Satisfied by a minimum of 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the BAS in Biotechnology. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to the freshman year, fall semester.

### Freshman

#### Fall
- Goal 2.1 Written Communication 3
  - BTEC 475 Applied Separation Science and Quantitative Analysis 6
  - BTEC 501 Biotechnology Ethics and Responsible Conduct of Research 3
  - BTEC 540 Biotechnology Capstone I 3
  - BTEC 550 Applied Bioinformatics 2
  - BTEC 599 Biotechnology Internship 3
  - BTEC 630 Biotechnology, Regulation, Quality Control, and Quality Assurance 3
  - BTEC 640 Biotechnology Capstone II 3

#### Spring
- Elective (Total Hours) 6

**Major Hours: 14, Total Hours: 15-16**

### Sophomore

#### Fall
- Elective (Total Hours) 3

**Total Hours: 119-121**

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1. Concurrent or prior enrollment in CHEM 130 is required.
2. CHEM 135 is offered at the Lawrence campus in Fall, Spring and Summer semesters. BTEC 350 is a Fall only course offered at the Edwards campus. BIOL 600 is a Spring and Summer course offered at the Edwards campus.
3. Most medical schools require the full CHEM 330, CHEM 331, CHEM 335, and CHEM 336 sequence.
Refer to the Degree Requirements tab for a list of courses that can fulfill this major requirement.

Please note:

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Bachelor of Applied Science in Project Management**

KU’s online Bachelor of Applied Science in Project Management is a degree-completion program that provides those hoping to enter project management professions the opportunity to strengthen their background in content related to their anticipated profession. In these programs, you will learn how theory and practice work together to solve real-world problems in a variety of fields.

According to the Project Management Institute (PMI), organizations and companies across sectors and geographic borders steadily embrace project management. As a growing profession, project management is on track to gain nearly 2.2 million new jobs globally each year through 2027.

Driven by globalization, evolving technology and rapid automation of work processes, all types of organizations are placing growing emphasis on project-based planning, development and even operations, to gain a competitive advantage.

As you pursue your project management bachelor’s degree online with KU, you will be able to partner the project management foundation with additional areas of interest to tailor your education to your desired career path such as:

- Information technology management
- Construction management
- Healthcare management
- Advertising and marketing
- Public administration

**Undergraduate Admission**

**Admission to KU**

Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

The proposed BAS in PM program is unique because it allows students to gain a thorough understanding of project management principles, while also focusing coursework in a variety of specializations such as health informatics/healthcare, hospitality management, information technology, construction management, etc. from community college partners, specializations such as biotechnology or public and population health within SPS, or appropriate specializations from the Lawrence campus. The flexible curriculum of this program allows students to create an academic experience consistent with their career goals.

The proposed Bachelor of Applied Science in Project Management is comprised of six parts:

- **KU Core Requirements**: 33 credit hours
  - Core 1.1: Critical Thinking Course
  - Core 1.2: Quantitative Literacy Course: MATH 101 College Algebra: _____
  - Core 2.1: Communication Course: ENGL 101 Composition
  - Core 2.1: Communication Course: ENGL 102 Critical Reading and Writing or BUS 305 Business Writing
  - Core 2.2: Communication Course: COMS 130 Speaker-Audience Communication
  - Core 3H: Arts and Humanities Course
  - Core 3N: Natural Science Course
  - Core 3S: Social Sciences Course
  - Core 4.1: Human Diversity Course
  - Core 4.2: Global Culture/Awareness Course
  - Core 5.1: Social Responsibility and Ethics Course
  - Core 6: Integration and Creativity Course: Fulfilled by Major

- **BAS Project Management Sequence Courses**: 36 credit hours
  - MATH 365 Elementary Statistics
  - PMGT 305 Foundations of Project Management
  - PMGT 310 Project Communications
  - PMGT 315 Project Scheduling and Control
  - PMGT 320 Introduction to Microsoft Project
  - PMGT 325 Effective Project Team Leadership
  - PMGT 405 Organizational and Project Risk Management
  - PMGT 330 Organizational Strategy and Project Initiation
  - PMGT 410 Managing Project Success
  - PMGT 415 Project Procurement and Supply Chain Management
  - PMGT 335 Project Stakeholder Engagement
  - PMGT 420 Emerging Trends in Project Management

- **Emphasis Area Courses**: 21 credit hours
  - Twenty-one (21) credit hours of emphasis area courses are to be completed at KU or transferred from another institution

- **PMGT Elective Courses**: 9 credit hours of the courses below
  - PMGT 425 Global Project Management
  - PMGT 510 Advanced Agile Approaches to Project Management
  - PMGT 430 Managing Virtual Project Teams
  - PMGT 520 Advanced Microsoft Project

- **Upper-Division General Electives or Minor**: 18 credit hours
  - Eighteen (18) credit hours of upper-division courses (300+ level or above) are allocated for electives or for a minor

- **Emphasis area course may be eligible to count towards Minor.**

- **Capstone**

  PMGT 599 Project Management Capstone (3 credit hours)

**Example Plan of Study**: Please consult with an academic success coach for a personalized plan.
### Bachelor of Arts and Bachelor of General Studies in American Sign Language and Deaf Studies

Culture and language intertwine in the Bachelor of Arts (BA) and Bachelor of General Studies (BGS) in American Sign Language (ASL) and Deaf Studies. Gain an understanding of Deaf studies and social justice.

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 101 (KU Core 1.2)</td>
<td>3</td>
<td>.COM 130 (KU Core 2.2)</td>
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</tr>
<tr>
<td>ENGL 101 (KU Core 2.1)</td>
<td>3</td>
<td>ENGL 102 (KU Core 2.1)</td>
<td>3</td>
</tr>
<tr>
<td>KU Core 3N Natural Science Course</td>
<td>3</td>
<td>KU Core 3H Arts and Humanities Course</td>
<td>3</td>
</tr>
<tr>
<td>Emphasis Area Course 1</td>
<td>3</td>
<td>KU Core 1.1 Critical Thinking Course</td>
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</tr>
<tr>
<td>Elective/Minor Course</td>
<td>3</td>
<td>Emphasis Area Course 2</td>
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**Sophomore**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KU Core 4.1 Human Diversity Course</td>
<td>3</td>
<td>MATH 365</td>
<td>3</td>
</tr>
<tr>
<td>KU Core 3S Social Sciences Course</td>
<td>3</td>
<td>KU Core 4.2 Culture, Diversity &amp; Global Awareness</td>
<td>3</td>
</tr>
<tr>
<td>Emphasis Area Course 3</td>
<td>3</td>
<td>Emphasis Area Course 5</td>
<td>3</td>
</tr>
<tr>
<td>Emphasis Area Course 4</td>
<td>3</td>
<td>Emphasis Area Course 6</td>
<td>3</td>
</tr>
<tr>
<td>Elective/Minor Course</td>
<td>3</td>
<td>Emphasis Area Course 7</td>
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**Junior**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 305 Foundations of Project Management</td>
<td>3</td>
<td>PMGT 315 Project Scheduling and Control</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 310 Project Communications</td>
<td>3</td>
<td>PMGT 325 Effective Project Team Leadership</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 320 Introduction to Microsoft Project</td>
<td>3</td>
<td>PMGT 335 Project Stakeholder Engagement</td>
<td>3</td>
</tr>
<tr>
<td>Elective/Minor Course</td>
<td>3</td>
<td>Elective 1</td>
<td>3</td>
</tr>
<tr>
<td>Elective/Minor Course</td>
<td>3</td>
<td>Elective/Minor Course</td>
<td>3</td>
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**Senior**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 330 Organizational Strategy &amp; Project Initiation</td>
<td>3</td>
<td>PMGT 405 Organizational &amp; Project Risk Management</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 410 Managing Project Success</td>
<td>3</td>
<td>PMGT 420 Emerging Trends in Project Management</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 415 Project Procurement and Supply Chain Management</td>
<td>3</td>
<td>KU Core 5.1 Social Responsibility and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PMGT Elective 2</td>
<td>3</td>
<td>PMGT Elective 3</td>
<td>3</td>
</tr>
<tr>
<td>Elective/Minor Course</td>
<td>3</td>
<td>PMGT 599 Project Management Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours 120**

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Although they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

The major requires as total of at least 30 credit hours (completed through 10 courses at three credit hours each). Students are recommended to consult with their academic success coach prior to enrolling in course work to ensure that all pre-requisites are met.

**Courses:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 311</td>
<td>Introduction to Deaf Studies</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 312</td>
<td>Intersectionality and Deaf Communities</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 313</td>
<td>Social Justice and Allyship with Deaf Communities</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 505</td>
<td>American Sign Language V (ASL V)</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 506</td>
<td>American Sign Language VI (ASL VI)</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 588</td>
<td>Internship in American Sign Language and Deaf Studies</td>
<td>3</td>
</tr>
<tr>
<td>or ASLD 589</td>
<td>Research Experience in American Sign Language and Deaf Studies</td>
<td>3</td>
</tr>
<tr>
<td>Select at least four electives from the following list:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASLD 414</td>
<td>Historical Foundations of Deaf Education</td>
<td></td>
</tr>
<tr>
<td>ASLD 428</td>
<td>Special Topics in Deaf Studies: _____</td>
<td></td>
</tr>
<tr>
<td>ASLD 501</td>
<td>Introduction to the ASL/English Interpreting Profession</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 502</td>
<td>Theories of Interpreting: Co-Constructions of Meaning</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 520</td>
<td>American Sign Language Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 521</td>
<td>Discourse Analysis of ASL</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 523</td>
<td>ASL Pragmatics and Syntax</td>
<td></td>
</tr>
<tr>
<td>ASLD 530</td>
<td>American Sign Language Literature</td>
<td>3</td>
</tr>
</tbody>
</table>
### BA in American Sign Language and Deaf Studies

Below is a sample 4-year plan for students pursuing the BA in American Sign Language and Deaf Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

#### Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANG U Elementary American Sign Language I</td>
<td>3 LANG U Elementary American Sign Language II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPED U Introduction to the Deaf Community</td>
<td>3 ENGL 102</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3</td>
<td>KU Core Goal 3S - Social Science</td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal 1.1 - Critical Thinking and Quantitative Literacy</td>
<td>3 Elective or Minor/Certificate Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core Goal 2.2 - Communication</td>
<td>3 KU Core Goal 3H - Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

#### Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANG U Intermediate American Sign Language</td>
<td>3 LANG U Intermediate American Sign Language II</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LANG U Fingerspelling I</td>
<td>2 LING S Intro to American Sign Language Linguistics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 101 (satisfies KU Core Goal 1.2)</td>
<td>3 ENGL H American Sign Language Literature</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core Goal 3N Natural Science with Lab</td>
<td>4 KU Core Goal 4.2 - Culture and Diversity</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 311</td>
<td>3</td>
<td>ASLD 312</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 313</td>
<td>3</td>
<td>ASLD 506</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 505</td>
<td>3 Elective or Minor/Certificate Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core Goal 5 - Social Responsibility and Ethics</td>
<td>3 Elective or Minor/Certificate Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective or Minor/Certificate Course</td>
<td>3 Elective or Minor/Certificate Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

### Senior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 501</td>
<td>3</td>
<td>ASLD 502</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 521</td>
<td>3</td>
<td>ASLD 588</td>
<td>3</td>
</tr>
<tr>
<td>Elective or Minor/Certificate Course</td>
<td>3 Elective or Minor/Certificate Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective or Minor/Certificate Course</td>
<td>3 Elective or Minor/Certificate Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective or Minor/Certificate Course</td>
<td>3 Elective or Minor/Certificate Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Hours 120**

1. The major requires a total of 30 credit hours (completed through 10 courses at three credit hours each).
2. Elective courses can be ASL courses or topics from other disciplines. Students are encouraged to utilize elective options to pursue a minor or certificate program.
3. The University of Kansas Edwards Campus only teaches classes at the Junior and Senior level. Students are recommended to meet with their Academic Success Coach/Advisor each semester to ensure that the degree requirements are met. This is a suggested semester-by-semester degree completion plan based on the transfer pathway from JCCC's Associates of Arts program with the ASL Certificate. Students may follow the course sequencing above, but are not required to complete the course work in this order.

**Please note:**

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### BGS in American Sign Language and Deaf Studies

Below is a sample 4-year plan for students pursuing the BGS in American Sign Language and Deaf Studies. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).
Bachelor of Health Sciences

**Freshman**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANG U Elementary American Sign Language I</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>SPED U Introduction to the Deaf Community</td>
<td>3 ENGL 102</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>3 KU Core Goal 3S - Social Science</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal 1.1 - Critical Thinking and Quantitative Literacy</td>
<td>3 Elective or Minor/Certificate Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal 2.2 - Communication</td>
<td>3 KU Core Goal 3H - Humanities</td>
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</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td><strong>30</strong></td>
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**Sophomore**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANG U Intermediate American Sign Language</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>LANG U Fingerspelling I</td>
<td>3 LING S Intro to American Sign Language Linguistics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (satisfies KU Core Goal 1.2)</td>
<td>3 ENGL H American Sign Language Literature</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal 3N Natural Science with Lab</td>
<td>4 KU Core Goal 4.2 - Culture and Diversity</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal 4.1 - Culture and Diversity</td>
<td>3 Elective or Minor/Certificate Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td><strong>30</strong></td>
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**Junior**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 311</td>
<td>3 ASLD 312</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ASLD 313</td>
<td>3 ASLD 506</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ASLD 505</td>
<td>3 Elective or Minor/Certificate Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective or Minor/Certificate Course</td>
<td>3 Elective or Minor/Certificate Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KU Core Goal 5 - Social Responsibility and Ethics</td>
<td>3 Elective or Minor/Certificate Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td><strong>30</strong></td>
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</tbody>
</table>

**Senior**

<table>
<thead>
<tr>
<th>Course</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 501</td>
<td>3 ASLD 502</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ASLD 521</td>
<td>3 ASLD 588</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective or Minor/Certificate Course</td>
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<td>Elective or Minor/Certificate Course</td>
<td>3 Career Preparation Course</td>
<td></td>
<td>3</td>
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<tr>
<td>Elective or Minor/Certificate Course</td>
<td>3 Elective or Minor/Certificate Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Total Hours 120**

1 The major requires a total of 30 credit hours (completed through 10 courses at three credit hours each). Please consult with the ASLD academic success coach.

2 The University of Kansas Edwards Campus only teaches classes at the Junior and Senior level. Students are recommended to meet with their Academic Success Coach/Advisor each semester to ensure that the degree requirements are met. This is a suggested semester-by-semester degree completion plan based on the transfer pathway from JCCC’s Associates of Arts program with the ASL Certificate. Students may follow the course sequencing above, but are not required to complete the course work in this order.

Please note:

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

**Bachelor of Health Sciences**

KU’s online Bachelor of Health Sciences is a degree completion program that provides students hoping to enter health science professions the opportunity to strengthen their background in content related to their anticipated healthcare profession. The program also lets students explore elective courses that help them concentrate their knowledge in areas including nutrition, public and population health, and health management and policy. Students should be sure to discuss their longterm plans with their academic success coach for help selecting the best courses for their desired educational pathway and career.

The field of health sciences covers a variety of in-demand professions, including public health, health care, nutrition and more. Someone with a bachelor’s degree in health sciences might apply their knowledge in the following ways:

- Continuing to graduate school in a variety of specialized areas in health care or medicine
- Entering healthcare administration or continuing to graduate school in healthcare administration
- Researching and implementing public health initiatives
- Advising local or state governments regarding elements of healthcare or public health policies

**Undergraduate Admission**

**Admission to KU**

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

The Bachelor of Health Science (BHS) degree will be a JCERT funded 100% online completion degree for students transferring from community colleges or KU Lawrence. Elective courses will afford students the
ability to concentrate in the following areas focus: Nutrition, Public and Population Health, and Health Management and Policy. BHS degrees will prepare students to directly enter the workforce or continue on to pursue graduate education in Public Health, Hospital Administration, Nutrition and Dietetics, among other Health related management graduate degrees.

The proposed Bachelor of Health Sciences program is unique because it draws upon coursework from multiple programs and disciplines. The flexible curriculum of this science program allows students to create an academic experience consistent with their health care career goals.

The proposed Bachelor of Health Sciences degree is comprised of six parts:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KU Core Requirements</td>
<td>24 credit hours to be selection with guidance from advisor</td>
<td></td>
</tr>
<tr>
<td>Foundation Science Courses</td>
<td>Two semesters of introductory biology</td>
<td>6-8</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____</td>
<td>3</td>
</tr>
<tr>
<td>One Chemistry Course</td>
<td>Elementary Statistics</td>
<td>3-5</td>
</tr>
<tr>
<td>MATH 365</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Health Sciences Core Courses</td>
<td>Fundamentals of Human Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 240</td>
<td>Principles of Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 310</td>
<td>Scientific Communications</td>
<td>3</td>
</tr>
<tr>
<td>or HMG 310</td>
<td>Health Communication</td>
<td></td>
</tr>
<tr>
<td>BTEC 501</td>
<td>Biotechnology Ethics and Responsible Conduct of Research</td>
<td>3</td>
</tr>
<tr>
<td>HSES 371</td>
<td>Medical Terminology for Health Professionals</td>
<td>3</td>
</tr>
<tr>
<td>or HEIM 230</td>
<td>Medical Terminology</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 200</td>
<td>Basic Microbiology</td>
<td></td>
</tr>
<tr>
<td>or BSCI 400</td>
<td>Microbiology</td>
<td></td>
</tr>
<tr>
<td>HSCI 340</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>HMGT 300</td>
<td>Introduction to Healthcare Management</td>
<td>3</td>
</tr>
<tr>
<td>HMGT 305</td>
<td>Health Policy and Healthcare Systems</td>
<td>3</td>
</tr>
<tr>
<td>HMGT 350</td>
<td>Professional Development in the Health Sciences or HSCI Equivalent(In Development)</td>
<td>2</td>
</tr>
<tr>
<td>HSCI 315</td>
<td>Exploring Careers in Health Science</td>
<td>1</td>
</tr>
<tr>
<td>HSCI 415</td>
<td>Career Readiness in Health Sciences</td>
<td>1</td>
</tr>
</tbody>
</table>

Health Science Elective Courses

Select 24 credit hours of the courses below or other departmentally approved courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 704</td>
<td>Principles of Statistics in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 543</td>
<td>Natural Hazards and Environmental Risks</td>
<td>3</td>
</tr>
<tr>
<td>EVRN 730</td>
<td>Environmental Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 320</td>
<td>Principles of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>or HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td></td>
</tr>
<tr>
<td>HSCI 420</td>
<td>Nutrition Through the Life Cycle</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 421</td>
<td>Public Health Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 422</td>
<td>Nutrition Assessment</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 440</td>
<td>Introduction to Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 441</td>
<td>Population Health</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 445</td>
<td>Introduction to Environmental Health</td>
<td>3</td>
</tr>
</tbody>
</table>

HSCI 521 | Advanced Nutrition and Metabolism                  | 3     |
HSES 308 | Drugs and Diseases in Society                       | 3     |
HSES 310 | Research and Data Analysis in Health, Sport, and Exercise Sciences | 3     |
HSES 331 | Sport and Exercise Nutrition                        | 3     |
HSES 489 | Health and Human Sexuality                          | 3     |
HEIM 415 | Healthcare Delivery Systems                         | 3     |
HEIM 420 | Legal Aspects of Healthcare                         | 3     |
HEIM 575 | Applied Statistics and Research Methods in Healthcare | 3     |
SOC 424 | Sociology of Health and Medicine                    | 3     |
SOC 425 | Sociology of Global Health                          | 3     |
HSCI 499 | Topics in Health Sciences: _____                    | 1-3   |

General Electives or Minor

Eighteen (18) credit hours of electives or for a minor

Capstone

HSCI 599: Health Science Capstone | 3     |

Below is a sample 4-year plan for students pursuing the Bachelor in Health Science. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

Freshman

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 130 (KU Core Goal 3 Natural Science, General Science Requirement)</td>
<td>5 COMS 130 (KU Core Goal 2.2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 101 (KU Core Goal 2.1)</td>
<td>3 KU Core Goal 3H Arts and Humanities Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 150 (KU Core Goal 3 Natural Science, Major Requirement)</td>
<td>3 BIOL 152 (KU Core Goal 3.2)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 101 (KU Core Goal 1.2)</td>
<td>3 ENGL 102 (KU Core Goal 2.1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective or Minor Course</td>
<td>2 KU Core Goal 1.1 Critical Thinking Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Sophomore

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 240</td>
<td>3 LA&amp;S 172</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SOC 104</td>
<td>3 MATH 365</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>KU Core Goal 3S Social Science Course</td>
<td>3 BIOL 246</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective or Minor Course</td>
<td>3 KU Core Goal 4.2 Culture, Diversity &amp; Global Awareness Course</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIOL 154</td>
<td>2 Elective or Minor Course</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Junior

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 340</td>
<td>3 HSES 371</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HMGT 350</td>
<td>3 BSCI 400</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Science Elective</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 340</td>
<td>3 HSES 371</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HMGT 350</td>
<td>3 BSCI 400</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Science Elective</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>
Bachelor of Science in Applied Biological Sciences

Applied Biological Sciences

KU Edwards Campus

The undergraduate program in applied biological sciences is offered in its entirety only at the KU Edwards Campus (http://edwardscampus.ku.edu/), 12600 Quivira Rd., Overland Park, KS 66213. This program is designed for students who have earned an associate’s degree or equivalent hours and wish to complete the upper-level courses necessary for a bachelor’s degree.

Requirements for the B.S. Degree in Applied Biological Sciences

The program offers students a strong background in genetics, microbiology, cell biology, and biochemistry, as well as laboratory skills in genetics and microbiology. Graduates have entered medical school, dental school, and graduate school with high success rates. Contact the Applied Biological Science academic success coach on the Edwards Campus for more information.

General Education Requirements

In addition to degree and major requirements for all plans and subplans, all students must complete the KU Core.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 130</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 190</td>
<td>Foundations of Chemistry I, Honors &amp; CHEM 191 and Foundations of Chemistry I Laboratory, Honors</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 135</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 195</td>
<td>Foundations of Chemistry II, Honors &amp; CHEM 196 and Foundations of Chemistry II Laboratory, Honors</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 330</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 380</td>
<td>Organic Chemistry I, Honors</td>
<td></td>
</tr>
<tr>
<td>CHEM 331</td>
<td>Organic Chemistry I Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 335</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 385</td>
<td>Organic Chemistry II, Honors</td>
<td></td>
</tr>
<tr>
<td>MATH 115</td>
<td>Calculus I</td>
<td>4-6</td>
</tr>
<tr>
<td>MATH 116</td>
<td>and Calculus II</td>
<td></td>
</tr>
<tr>
<td>MATH 125</td>
<td>Calculus I (Calculus I)</td>
<td></td>
</tr>
<tr>
<td>PHYS 114</td>
<td>College Physics</td>
<td>8-9</td>
</tr>
<tr>
<td>PHYS 115</td>
<td>and College Physics</td>
<td></td>
</tr>
</tbody>
</table>

Please note:

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

Admission to KU

All students applying for admission must send high school and college transcripts to the Office of Admissions. Unless they are college transfer students with at least 24 hours of credit, prospective students must send ACT or SAT scores to the Office of Admissions. Prospective first-year students should be aware that KU has qualified admission requirements that all new first-year students must meet to be admitted. Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.
**Major Junior/Senior Hours**  
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Hours in Residence**  
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

### Major Hours & Major GPA

While completing all required courses, majors must also meet each of the following hour and grade-point average minimum standards:

**Major Hours**
Satisfied by 43-44 hours of major courses.

**Major Hours in Residence**
Satisfied by a minimum of 15 hours of KU resident credit in the major.

**Major Junior/Senior Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the major.

**Major Junior/Senior Graduation GPA**
Satisfied by a minimum of a 2.0 KU GPA in junior/senior courses (300+) in the major. GPA calculations include all junior/senior courses in the field of study including F's and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).

Below is a sample 4-year plan for students pursuing the B.S. in Applied Biological Sciences. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (http://kucore.ku.edu/courses/).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104, or equivalent prior to the freshman year, fall semester.

The Applied Biological Sciences major is only available at the Edwards campus in Overland Park, KS. The Edwards Campus only offers Junior/ Senior level courses (300+). Lower level courses (100-299) may need to be taken at the KU Lawrence campus or transferred in from another institution. Please consult an academic advisor for more assistance.

**Freshman**

### Fall Hours
- **BIOL 150 or 151 (Goal 3)**
- **Natural Science, Major Requirement)**
- **BIOL 154 (Major Requirement)**
- **CHEM 130 (Goal 1.2 Quantitative Literacy, General Science Requirement)**
- **Goal 2.1 Written Communication (First Course, 2 Crs Required)**

### Hours
- 3
- 2
- 5
- 3
- 3

### Spring Hours
- **Goal 2.2 Communication**

### Hours
- 3

**Sophomore**

### Fall Hours
- **Goal 3 Arts and Humanities**
- **MATH 116 (General Science Requirement)**
- **CHEM 330 (General Science Requirement)**
- **CHEM 331 (General Science Requirement)**
- **BSCI 350**

### Hours
- 3
- 3
- 3
- 2
- 4

### Spring Hours
- **BSCI 421 Topics in Applied Biological Sciences: ______**

### Hours
- 1

**Junior**

### Fall Hours
- **Goal 3 Social Science**
- **PHSX 211 & PHSX 216 (or PHSX 114, Goal 1.1 Critical Thinking, General Science Requirement)**

### Hours
- 3
- 5

### Spring Hours
- **& PHSX 236 (or PHSX 115; Goal 1.2 Science Requirement)**

### Hours
- 4
Consult the advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.

### Bachelor of Science in Information Technology

#### Bachelor of Science in Information Technology Program

Graduates who have earned a bachelor's degree in information technology will combine technical expertise with modern problem-solving and communication skills to plan, configure, implement, integrate, and maintain computing and information technology solutions for an organization's computing infrastructure.

The undergraduate program in Information Technology is offered in its entirety only at the KU Edwards Campus, 12600 Quivira Rd., Overland Park, KS 66213. Students considering this degree option should contact the Information Technology academic success coach on the Edwards Campus, bsiit@ku.edu, or 913-897-8623 for advising.

*This program is funded by the Education and Research Triangle (http://edwardscampus.ku.edu/johnson-county-education-research-triangle/) initiative.*

#### Careers

**Professional Opportunities**

Information technology (IT) professionals are needed in nearly every business sector. They may find careers in information security, software development, platform technologies, networking and system administration, Web system development, and IT project management.

#### Undergraduate Admission to the B.S. in Information Technology Program

Applications to the B.S. in Information Technology program will generally be considered under the guidelines of the Transfer Admission Standards. In addition, to be considered for admission, students will need to complete the B.S. in Information Technology prerequisite course work listed below.

#### B.S. in Information Technology Prerequisite Course Work

The successful completion of the following requirements is needed for admission into the B.S. in Information Technology program:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfy GE 2.1 (Typically completed with ENGL 101 and ENGL 102.) (Recommended)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Satisfy GE 2.2 (Typically completed with COMS 130, COMS 322, or JOUR 150.) (Recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Satisfy KU Core Goal GE3N (Recommended)</td>
<td>4-5</td>
<td></td>
</tr>
<tr>
<td>Satisfy KU Core Goal GE3S (Recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Satisfy KU Core Goal GE3H (Recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Satisfy KU Core Goal AE4.1 or AE 4.2 (Recommended)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 103</td>
<td>Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 115</td>
<td>Calculus I</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Requires MATH ACT scores of 26+, a comparable SAT or KU Math Placement Exam score, or credit for a MATH 101 or MATH 104 equivalent course. MATH 125 can be taken instead of MATH 115 and MATH 116 to fulfill the B.S. Molecular Biosciences math requirement.

2 Concurrent or prior enrollment in CHEM 130 is required.

3 CHEM 335 is offered only in the spring and summer (Lawrence campus). BIOL 570 is offered only in the fall (Lawrence campus).

4 BSCI 350, BSCI 351, and BSCI 601 are offered only on the Edwards campus in the fall.

5 BSCI 400, BSCI 401, and BSCI 600 are offered on the Edwards campus in both spring and summer semesters.

6 BSCI 416, BSCI 430, and BSCI 599 are offered on the Edwards campus only in the spring.

7 Twelve hours of BSCI/BIOL 400+ level elective and seminar courses, including at least 2 hours of seminar/tопics course. No more than 3 hours of independent study can be applied towards the elective requirements.

**Please note:**

All students are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.

### Study Abroad

Consult an advisor at least 4 months before undertaking study abroad. Consult the Office of Study Abroad (http://www.studyabroad.ku.edu/), 108 Lippincott Hall, for information about study in one of the many countries (e.g., Scotland, Australia, Switzerland) with special arrangements with KU.
Bachelor of Science in Information Technology Degree Requirements

The KU Core

This is the university-wide curriculum that all incoming undergraduate students will complete as part of their degree requirements. It comprises three general education goals and three advanced education goals. Associated with each goal is one or more learning outcomes:

1. GE 1.1, Goal 1/Outcome 1, Critical Thinking;
2. GE 1.2, Goal 1/Outcome 2, Quantitative Literacy;
3. GE 2.1, Goal 2/Outcome 1, Written Communication;
4. GE 2.2, Goal 2/Outcome 2, Oral Communication;
5. GE 3H, Goal 3/Outcome 1, Arts & Humanities;
6. GE 3N Goal 3/Outcome 2, Natural Sciences;
7. GE 3S Goal 3/Outcome 3, Social Sciences;
8. AE 4.1, Goal 4/Outcome 1, Diversity;
9. AE 4.2 Goal 4/Outcome 2 Culture;
10. AE 5.1, Goal 5/Outcome 1, Social Responsibility & Ethics (course);
11. AE 5.2, Goal 5/Outcome 2, Social Responsibility & Ethics (practice);
12. AE 6.1, Goal 6/Outcome 1/2, Integration & Creativity.

Details of the KU Core can be found at kucore.ku.edu (http://kucore.ku.edu). Some required courses in the IT curricula satisfy a KU Core goal and/or outcome 1. For these courses, the goal/outcome code is given in parentheses after the course on the pages below. Where required courses do NOT specifically satisfy KU Core goals (Goals 2, 3, and 4) students must choose from a list of several means to satisfy the required goals.

A minimum of 120 credit hours is required for the B.S. in Information Technology, as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSX 114</td>
<td>College Physics I (Meets KU Core goal GE 1.1)</td>
<td>4</td>
</tr>
<tr>
<td>or PHSX 210 &amp; PHSX 216 &amp; PHSX 211</td>
<td>General Physics I for Engineers and General Physics I Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 101</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 290</td>
<td>Elementary Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>or AE 4.1</td>
<td>Social Responsibility &amp; Ethics (course); AE 5.1, Goal 5/Outcome 1, Social Responsibility &amp; Ethics (course); AE 5.2, Goal 5/Outcome 2, Social Responsibility &amp; Ethics (practice); AE 6.1, Goal 6/Outcome 1/2, Integration &amp; Creativity.</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 103</td>
<td>Trigonometry</td>
<td></td>
</tr>
<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 115</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 125</td>
<td>Calculus I</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 290</td>
<td>Elementary Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>Discrete Structures I 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Discrete Structures II 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Programming Fundamentals 2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>EECS 168</td>
<td>Programming I</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 290</td>
<td>Elementary Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
<td></td>
</tr>
<tr>
<td>or MATH 115</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>or MATH 125</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>or MATH 290</td>
<td>Elementary Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>UNIX Scripting and Utilities 3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Database Management 3</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ITEC 310</td>
<td>Computer Organization and Platform Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 320</td>
<td>System and Network Administration</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 330</td>
<td>Web Systems and Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 340</td>
<td>Computer and Information Security</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 342</td>
<td>Information Security Management</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 410</td>
<td>Software Engineering and Management</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 416</td>
<td>System Integration and Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 420</td>
<td>Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 422</td>
<td>Computer Networks</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 430</td>
<td>Human-Computer Interaction</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 450</td>
<td>Social and Professional Issues (Satisfies AE 5.1)</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 490</td>
<td>IITEC Capstone I (AE 6.1)</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 492</td>
<td>IITEC Capstone II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra: _____ (GE 1.2)</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 290</td>
<td>Elementary Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>or MATH 104</td>
<td>Precalculus Mathematics</td>
<td></td>
</tr>
<tr>
<td>or MATH 115</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>or MATH 125</td>
<td>Calculus I</td>
<td></td>
</tr>
<tr>
<td>or MATH 290</td>
<td>Elementary Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>Discrete Structures I 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Discrete Structures II 2</td>
<td></td>
<td>3</td>
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<tr>
<td>MATH 365</td>
<td>Elementary Statistics (or other Statistics Course)</td>
<td>3</td>
</tr>
<tr>
<td>or BSAN 202</td>
<td>Statistics</td>
<td></td>
</tr>
<tr>
<td>or BSAN 302</td>
<td>Quantitative Methods and Data Analysis</td>
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</tr>
<tr>
<td>or PSYC 210</td>
<td>Statistics in Psychological Research</td>
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</table>
| Basic Science
| Satisfy GE3N |                                | 3     |
| PHSX 114 | College Physics I (Satisfies GE 1.1) | 4     |
| or PHSX 210 & PHSX 216 & PHSX 211 | General Physics I for Engineers and General Physics I Laboratory | 4     |
| or MATH 104 | Precalculus Mathematics         |       |
| or MATH 115 | Calculus I                     |       |
| or MATH 125 | Calculus I                 |       |
| or MATH 290 | Elementary Linear Algebra   |       |
| Business and Management
| MGMT 305 | Survey of Management and Leadership                        | 3     |
| or MGMT 310 | Principles of Management |       |
| or BBA 303 | Organizational Behavior                   | 3     |
| or BBA 305 | Management Science and Operations Management             | 3     |
| or SCM 310 | Management Science and Operations Management           | 3     |
| or COMS 342 | Problem-Solving in Teams and Groups |       |
| or LDST 201 | Introduction to Leadership                   | 3     |
| or PUAD 441 | Public Service Leadership       | 3     |
| or ABSC 150 | Community Leadership        | 3     |
| ITEC 380 | Managing IT Projects                        | 3     |
Information Technology 4-Year Graduation Plan

The undergraduate program in Information Technology is offered in its entirety only at the KU Edwards Campus in Overland Park, 12600 Quivira Rd., Overland Park, KS 66213. This program is designed for students who have earned an associate’s degree or equivalent hours and wish to complete the upper-level courses necessary for a bachelor’s degree. Students planning to attain the degree will need to transfer key credits from other academic institutions as not all required courses are available through KU.

Students considering this degree option should contact the Information Technology advisor on the KU Edwards Campus, bsit@ku.edu, or 913-897-8623 for advising on the first two years of study.

Year 1

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Hours</th>
<th>Semester 2</th>
<th>Hours</th>
</tr>
</thead>
</table>
| KU Core Goal GE 2.1 (first)
| MATH 101 (GE 1.2)
| Programming Fundamentals |
| KU Core Goal GE3S Course |
| KU Core Goal GE 2.2 |
| 3 |
| 3 |
| 4 |
| 3 |
| 3 |
| 3 |
| 4-5 |
| 3 |

Year 2

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Hours</th>
<th>Semester 2</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrete Structures I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KU Core Goal GE 3H Course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Database Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 60

1 Means of satisfying KU Core Goals are chosen from a variety of options (see kucore.ku.edu (http://kucore.ku.edu)). Hours listed are assuming the goals are satisfied with course work.

2 This specific course is not offered at KU, however an equivalent course from KU may be substituted. Consult your advisor.

3 No equivalent course is offered at KU; it must be transferred from a different college or university. Consult your advisor.

Bachelor of Science in Project Management

KU’s online Bachelor of Science in Project Management is a degree-completion program that provides those hoping to enter project management professions the opportunity to strengthen their background in content related to their anticipated profession. In these programs, you will learn how theory and practice work together to solve real-world problems in a variety of fields.

According to the Project Management Institute (PMI), organizations and companies across sectors and geographic borders steadily embrace project management. As a growing profession, project management is on track to gain nearly 2.2 million new jobs globally each year through 2027.

Driven by globalization, evolving technology and rapid automation of work processes, all types of organizations are placing growing emphasis on project-based planning, development and even operations, to gain a competitive advantage.

As you pursue your project management bachelor’s degree online with KU, you will be able to partner the project management foundation with
additional areas of interest to tailor your education to your desired career path such as:

- Information technology management
- Construction management
- Healthcare management
- Advertising and marketing
- Public administration

**Undergraduate Admission**

**Admission to KU**

Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

The proposed BS in PM program is unique because it allows students to gain a thorough understanding of project management principles, while also focusing coursework in a variety of specializations such as health Informatics/healthcare, hospitality management, information technology, construction management, etc. from community college partners, specializations such as biotechnology or public and population health within SPS, or appropriate specializations from the Lawrence campus. The flexible curriculum of this program allows students to create an academic experience consistent with their career goals.

The proposed Bachelor of Science in Project Management is comprised of seven parts:

- KU Core Requirements: 24 credit hours
  - Core 1.1: Critical Thinking Course
  - Core 1.2: Quantitative Literacy Course: *Fulfilled by BS Core*
  - Core 2.1: Communication Course: ENGL 101 Composition
  - Core 2.1: Communication Course: ENGL 102 Critical Reading and Writing or BUS 305 Business Writing
  - Core 2.2: Communication Course: COMS 130 Speaker-Audience Communication
  - Core 3H: Arts and Humanities Course
  - Core 3N: Natural Sciences Course: *Fulfilled by BS Core*
  - Core 3S: Social Sciences Courses: *Fulfilled by BS Core*
  - Core 4.1: Human Diversity Course
  - Core 4.2: Global Culture/Awareness Course
  - Core 5.1: Social Responsibility and Ethics Course
  - Core 6: Integration and Creativity Course: *Fulfilled by Major*
- Bachelor of Science Core Courses: 24 Credits
  - MATH 101 College Algebra: _____
  - MATH 115 Calculus I
  - MATH 365 Elementary Statistics
  - CHEM 130 General Chemistry I (or a physical science course with lab)
  - ACCT 200 Fundamentals of Financial Accounting
  - IST 205 Survey of Information Systems
  - ECON 142 Principles of Microeconomics or ECON 144 Principles of Macroeconomics
- PMGT 305 Foundations of Project Management
- PMGT 310 Project Communications
- PMGT 315 Project Scheduling and Control
- PMGT 320 Introduction to Microsoft Project
- PMGT 325 Effective Project Team Leadership
- PMGT 405 Organizational and Project Risk Management
- PMGT 330 Organizational Strategy and Project Initiation
- PMGT 410 Managing Project Success
- PMGT 415 Project Procurement and Supply Chain Management
- PMGT 335 Project Stakeholder Engagement
- PMGT 420 Emerging Trends in Project Management
- Emphasis Area Courses: 21 credit hours
  - Twenty-one (21) credit hours of emphasis area courses are to be completed at KU or transferred from another institution
- PMGT Elective Courses: 9 credit hours of the courses below
  - PMGT 425 Global Project Management
  - PMGT 510 Advanced Agile Approaches to Project Management
  - PMGT 430 Managing Virtual Project Teams
  - PMGT 520 Advanced Microsoft Project
- Electives or Minor Courses: 6 credit hours
  - Six (6) credit hours of upper-division courses (300+ level or above) are allocated for electives or to count towards a minor
  - Emphasis area course may be eligible to count towards Minor.
- Capstone
  - PMGT 599 Project Management Capstone (3 credit hours)

Example Degree Plan: Please consult with an academic success coach for a personalized plan.

**Freshman**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 130 (KU Core 3N)</td>
<td>5</td>
<td>COMS 130 (KU Core 2.2)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101 (KU Core 1.2)</td>
<td>3</td>
<td>KU Core 3H Arts and Humanities Course</td>
<td>3</td>
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<tr>
<td>ENGL 101 (KU Core 2.1)</td>
<td>3</td>
<td>ENGL 102 (KU Core 2.1)</td>
<td>3</td>
</tr>
<tr>
<td>Emphasis Area Course 1</td>
<td>3</td>
<td>KU Core 1.1 Critical Thinking Course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Sophomore**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 115</td>
<td>3</td>
<td>ACCT 200</td>
<td>4</td>
</tr>
<tr>
<td>KU Core 4.1 Human Diversity Course</td>
<td>3</td>
<td>IST 205</td>
<td>3</td>
</tr>
<tr>
<td>ECON 142 (KU Core 3S)</td>
<td>3</td>
<td>KU Core 4.2 Culture, Diversity &amp; Global Awareness</td>
<td>3</td>
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<tr>
<td>Emphasis Area Course 3</td>
<td>3</td>
<td>Emphasis Area Course 5</td>
<td>3</td>
</tr>
<tr>
<td>Emphasis Area Course 4</td>
<td>3</td>
<td>Emphasis Area Course 6</td>
<td>3</td>
</tr>
</tbody>
</table>
Undergraduate Certificate in Advanced American Sign Language

The Advanced American Sign Language certificate is designed for students who are looking to enter ASL and/or ASL interpreting fields. Alternatively, this certificate could serve students who are sufficiently proficient and fluent in both American Sign Language and English to pass a language proficiency entrance exam. These individuals in this latter category may be Deaf or hearing heritage ASL users. This certificate moves students from basic ASL to ASL proficiency. This certificate provides information about KS interpreter certification and licensing. If you plan to obtain a license or certification in a state other than Kansas or a US territory after completion of your program, it is highly recommended you first seek guidance from the appropriate licensing agency BEFORE beginning the academic program to ensure you can obtain a license or certification in your home state or territory. The website https://rid.org/advocacy-overview/state-information-and-advocacy/ provides resources for licensure and certification boards outside of Kansas. The Undergraduate and Graduate Certificates in ASL/English Interpreting do not guarantee that students will pass the certification exams, but covers the necessary materials to prepare students to sit for the exam.

Introduction to ASL/English Interpreting Track

Undergraduate Certificate in ASL/English Interpreting

This certificate is designed for students who have completed course work toward a BA with ASL proficiency IV. It is also open to students who are heritage language signers, or have completed ASL I-IV. It is highly recommended that students complete the Advanced ASL certificate before the ASL/English Interpreting track due to the level of proficiency required. Students that enter the program with proficiency beyond ASL VI are eligible to pursue the ASL/English Interpreting certificate without completion of the Advanced ASL certificate, with instructor permission. There is an ASL proficiency test required to begin the ASL/English Interpreting certificate.

The Undergraduate and Graduate Certificates in ASL/English Interpreting aim to prepare students to sit for the NIC and BEI national certification exams so they are eligible for state credentialing in KS and MO. Students in KS who pass the performance certification exam are eligible to register in KS as an interpreter. The website http://www.dcf.ks.gov/services/RS/Pages/KCDHH/KQAS.aspx (http://www.dcf.ks.gov/services/RS/Pages/KCDHH/KQAS.aspx?url=https%3A%2F%2Fwww.dcf.ks.gov%2FsServices%2F%2FRS%2FPages%2FKCDHH%2FKQAS.aspx%3D&reserved=0) provides information about KS interpreter registration. Students in MO who pass the MO certification exam are eligible to seek licensure in MO as an interpreter. The website https://mcdoth.mo.gov/interpreters/ provides information about MO interpreter certification and licensing. The website https://rid.org/advocacy-overview/state-information-and-advocacy/ provides information about state interpreter registration. Students in MO who pass the MO certification exam are eligible to seek licensure in MO as an interpreter. The website https:// mcdoth.mo.gov/interpreters/ provides information about MO interpreter certification and licensing.

The ASL/English Interpreting Undergraduate Certificate is a 15 credit hour certificate that requires the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 505</td>
<td>American Sign Language V (ASL V)</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 506</td>
<td>American Sign Language VI (ASL VI)</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 520</td>
<td>American Sign Language Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 521</td>
<td>Discourse Analysis of ASL</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 523</td>
<td>ASL Pragmatics and Syntax</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 524</td>
<td>Visual-Gestural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 530</td>
<td>American Sign Language Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

Approved Courses:

- American Sign Language V (ASL V)
- American Sign Language VI (ASL VI)
- American Sign Language Linguistics
- Discourse Analysis of ASL
- ASL Pragmatics and Syntax
- Visual-Gestural Communication
- American Sign Language Literature

**Total Hours 120**

Undergraduate Certificate in Advanced American Sign Language

The Advanced American Sign Language certificate is designed for students who are looking to enter ASL and/or ASL interpreting fields. Alternatively, this certificate could serve students who are sufficiently proficient and fluent in both American Sign Language and English to pass a language proficiency entrance exam. These individuals in this latter category may be Deaf or hearing heritage ASL users. This certificate moves students from basic ASL to ASL proficiency. This certificate provides information about KS interpreter certification and licensing. If you plan to obtain a license or certification in a state other than Kansas or a US territory after completion of your program, it is highly recommended you first seek guidance from the appropriate licensing agency BEFORE beginning the academic program to ensure you can obtain a license or certification in your home state or territory. The website https://rid.org/advocacy-overview/state-information-and-advocacy/ (https://nam10.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.dcf.ks.gov%2FsServices%2F%2FRS%2FPages%2FKCDHH%2FKQAS.aspx%3D&reserved=0) provides resources for licensure and certification boards outside of Kansas. The Undergraduate and Graduate Certificates in ASL/English Interpreting do not guarantee that students will pass the certification exams, but covers the necessary materials to prepare students to sit for the exam.

Introduction to ASL/English Interpreting Track

Undergraduate Certificate in ASL/English Interpreting

This certificate is designed for students who wish to pursue ASL/English interpreting at either the introductory or professional level. This certificate could serve students who are sufficiently proficient and fluent in both American Sign Language and English to pass a language proficiency entrance exam. These individuals in this latter category may be Deaf or hearing heritage ASL users.

The ASL/English Interpreting Undergraduate Certificate is a 15 credit hour certificate that requires the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 626</td>
<td>Topics in ASL Vocabulary and Discourse</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 631</td>
<td>Advanced American Sign Language Literature</td>
<td>3</td>
</tr>
</tbody>
</table>
Undergraduate Certificate in Biotechnology

Certificate in Biotechnology

Grounded in biological sciences, chemistry and advanced technology, biotechnology employs biological systems to solve scientific challenges that impact society. Through this certificate, you will diversify your education and become better equipped for careers in:

- Research and Development
- Human Health
- Animal Health
- Pharmaceuticals

In this unique certificate, you will be challenged to apply your scientific knowledge and solve problems. You will routinely formulate and execute experimental approaches, analyze data, and communicate results. Through this experience you will work to master:

- Spectroscopy (Abs, Fluorescence, Luminescence)
- Quantitative Analysis
- Separation Science (HPLC)
- DNA Manipulation (Primer Design, PCR, DNA Gels)
- Expression of proteins in microbial systems
- Cell-based Analysis (Flow cytometry)
- Tools used in Bioinformatics

Undergraduate Certificate in Deaf Studies and Social Justice

The Deaf Studies and Social Justice certificate is designed for students interested in learning more about the world of the deaf in America, deaf culture, the education of deaf children, useful technology, and the integration of deaf people into the American society. Students from other disciplines are welcome pursue this certificate program. ASL proficiency is not required, but some course may be taught in ASL with an English interpreter.

The Deaf Studies and Social Justice Undergraduate Certificate is a 15 credit hour certificate program that requires the following:

Undergraduate Certificate in Nutrition

With a curriculum focused on the role of nutrition in a wide range of areas, KU’s undergraduate certificate provides a useful area of focus for your degree or professional background, helping you become more marketable
in a growing career field. Pursue an undergraduate certificate to earn a valuable credential and help start or refocus your work in a nutrition-related field. Alternately, a certificate in nutrition can supplement your undergraduate studies to prepare you for a successful career in health, nutrition, wellness, fitness and beyond. The courses and credential from the nutrition program may make you more successful in continuing your education in graduate school.

The Undergraduate Certificate in Nutrition regards 12 credits hours:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 320</td>
<td>Principles of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>or HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 420</td>
<td>Nutrition Through the Life Cycle</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 421</td>
<td>Public Health Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 422</td>
<td>Nutrition Assessment</td>
<td>3</td>
</tr>
</tbody>
</table>

**Undergraduate Certificate in Public and Population Health**

KU’s undergraduate programs in public and population health provide a broad exposure to the key concepts of public and population health, as well as an understanding of the connections between public health and the community. KU’s programs focus on understanding the network of behavioral and social factors of health and how they’re intertwined with the community. Students gain knowledge in understanding core concepts in epidemiology and biostatistics, disease prevention, population health and health disparities.

Coursework required for the certificate is designed to provide a broad exposure to the key concepts of public and population health as well as an understanding of the connections between public health and other disciplines.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 340</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 440</td>
<td>Introduction to Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 441</td>
<td>Population Health</td>
<td>3</td>
</tr>
<tr>
<td>EVRN/HSCI 445</td>
<td>Introduction to Environmental Health</td>
<td>3</td>
</tr>
</tbody>
</table>

**Post-Baccalaureate Certificate in Health Sciences**

KU’s Post-Baccalaureate Certificate in Health Sciences helps traditional and non-traditional students complete upper-level undergraduate biology and biotechnology courses. The curriculum allows students who hold a bachelor’s degree to grow in areas where academic strengthening is needed, develop clinical reasoning skills, and acquire additional training to begin or advance a career in health sciences or biotechnology.

The Post-Baccalaureate Certificate in Health Sciences focuses on developing health science, biotechnology and research science knowledge and skills, which apply toward admission to medical school, as well as a wide variety of health or biotechnology-related careers, depending on the academic track chosen.

**Admission to KU**

Consult the Office of Admissions (http://admissions.ku.edu/) for application deadlines and specific admission requirements.

Visit the International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Students considering transferring to KU may see how their college-level course work will transfer on the Office of Admissions (http://credittransfer.ku.edu/) website.

**Admissions criteria:**

The Post-Baccalaureate Certificate in Health Sciences is available to students who already hold a bachelor’s degree and passed the following prerequisite courses with a 2.7 GPA or better: General Biology I with a lab and General Chemistry I and II with a lab (Physics I with a lab and General Biology II are recommended).

**Admissions Requirements:**

The Post-Baccalaureate Certificate in Health Sciences is available to students who already hold a bachelor’s degree with a 2.7 GPA or better and passed the following prerequisite courses: General Biology I with a lab and General Chemistry I and II with a lab (Physics I with a lab and General Biology II are recommended).

**Health Science Track**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 350</td>
<td>Principles of Genetics</td>
<td>4</td>
</tr>
<tr>
<td>or BSCI 350</td>
<td>Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOL 400</td>
<td>Fundamentals of Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>or BSCI 400</td>
<td>Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 416</td>
<td>Cell Structure and Function</td>
<td>3</td>
</tr>
<tr>
<td>or BSCI 416</td>
<td>Cell Structure and Function</td>
<td></td>
</tr>
<tr>
<td>BIOL 600</td>
<td>Introductory Biochemistry, Lectures</td>
<td>3</td>
</tr>
<tr>
<td>or BSCI 600</td>
<td>Biochemistry</td>
<td></td>
</tr>
<tr>
<td>HSCI 498</td>
<td>Pathways in Health Science Careers</td>
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</tr>
<tr>
<td>HSCI 499</td>
<td>Topics in Health Sciences: _____</td>
<td>1-3</td>
</tr>
<tr>
<td>Electives:</td>
<td>(12-15 credit hours; 4-5 courses)</td>
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</tr>
<tr>
<td>BIOL 402</td>
<td>Fundamentals of Microbiology Laboratory</td>
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</tr>
<tr>
<td>or BSCI 401</td>
<td>Microbiology Laboratory</td>
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<tr>
<td>BIOL 405</td>
<td>Laboratory in Genetics</td>
<td>3</td>
</tr>
<tr>
<td>or BSCI 351</td>
<td>Genetics Laboratory</td>
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<tr>
<td>BIOL 417</td>
<td>Biology of Development</td>
<td>3</td>
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<tr>
<td>or BSCI 417</td>
<td>Developmental Biology</td>
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<tr>
<td>BIOL 435</td>
<td>Introduction to Neurobiology</td>
<td>3</td>
</tr>
<tr>
<td>or BSCI 435</td>
<td>Neurobiology</td>
<td></td>
</tr>
<tr>
<td>BIOL 503</td>
<td>Immunology</td>
<td>3</td>
</tr>
<tr>
<td>or BSCI 503</td>
<td>Immunology</td>
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<tr>
<td>BIOL 506</td>
<td>Bacterial Infectious Diseases</td>
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</tr>
<tr>
<td>or BSCI 506</td>
<td>Bacterial Infectious Diseases</td>
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<tr>
<td>BIOL 512</td>
<td>General Virology</td>
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</tr>
<tr>
<td>or BSCI 512</td>
<td>Virology</td>
<td></td>
</tr>
<tr>
<td>BIOL 546</td>
<td>Mammalian Physiology</td>
<td>3</td>
</tr>
</tbody>
</table>
Research Science Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 601</td>
<td>Principles of Biochemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>or BSCI 601</td>
<td>Biochemistry Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours: 28-30

Graduate Certificate in Advanced American Sign Language

The Advanced American Sign Language certificate is designed for students who want to learn ASL and/or ASL interpreting skills. Alternatively, this certificate could serve students who are sufficiently proficient and fluent in both American Sign Language and English to pass a language proficiency entrance exam. These individuals in the latter category may be deaf or hearing heritage ASL users. This certificate also benefits working interpreters and educators working with the deaf community. Students who have knowledge of ASL, but wish to improve their skills.

Admission to Graduate Studies

An applicant seeking to pursue graduate study may be admitted as either a degree-seeking or non-degree-seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 220) section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://kyzaim.ks.gov/graduate-studies/admission-to-graduate-study/). Applications may be submitted at http://graduate.ku.edu/ku-graduate-application (http://graduate.ku.edu/ku-graduate-application/).

Students must complete an American Sign Language proficiency exam prior to admissions into the program.

The Advanced ASL Graduate Certificate is a 15 credit hour certificate that requires the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 705</td>
<td>American Sign Language V (ASL V)</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 706</td>
<td>American Sign Language VI (ASL VI)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three electives:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 720</td>
<td>American Sign Language Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 721</td>
<td>Discourse Analysis of ASL</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 723</td>
<td>ASL Pragmatics and Syntax</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 724</td>
<td>Visual-Gestural Communication</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 730</td>
<td>American Sign Language Literature</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 831</td>
<td>Advanced American Sign Language Literature</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 826</td>
<td>Topics in ASL Vocabulary and Discourse: _____</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 29-30

Graduate Certificate in ASL/English Interpreting

The ASL/English interpreting certificate is designed for students wishing to pursue ASL/English interpreting at either the introductory or professional level. This certificate could serve students who are sufficiently proficient and fluent in both American Sign Language and English to pass a language proficiency entrance exam. These individuals in the latter category may be deaf or hearing heritage ASL users.

This certificate is designed for students who have completed course work toward a BA with ASL proficiency IV. It is also open to students who are heritage language signers, or have completed ASL I-IV. It is highly recommended that students complete the Advanced ASL certificate before the ASL/English Interpreting track due to the level of proficiency required. Students that enter the program with proficiency beyond ASL VI are eligible to pursue the ASL/English Interpreting certificate without completion of the Advanced ASL certificate, with instructor permission. There is an ASL proficiency test required to begin the ASL/English Interpreting certificate.

The Undergraduate and Graduate Certificates in ASL/English Interpreting aim to prepare students to sit for the NIC and BEI national certification exams so they are eligible for state credentialing in KS and MO. Students in KS who pass the performance certification exam are eligible to register in KS as an interpreter. The website http://www.dcf.kg.gov/services/RS/Pages/KCDDH/KQAS.aspx (https://nam10.safelinkts.com?url=http%3A%2F%2Fwww.dcf.kg.gov%2Fservices%2FRRS%2FPages%2FKCDDH%2FKQAS.aspx&data=02%7C01%7C1storme%40ku.edu%7C7cf565cba52f4b4a7e97708b860fae5%2C7C3c176538afe643f56b99636leabbe3c1%7C7C0%7C7C0%7C637365723670185232&sdata=ozdM5UhzdmcrnLsKYoG1bEX8A%3D&reserved=0) provides information about KS interpreter registration. Students in MO who pass the MO certification exam are
elgible to seek licensure in MO as an interpreter. The website [https://mcdth.mo.gov/interpreters/](https://mcdth.mo.gov/interpreters/) provides information about MO interpreter certification and licensing. If you plan to obtain a license or certification in a state other than Kansas or a US territory after completion of your program, it is highly recommended you first seek guidance from the appropriate licensing agency BEFORE beginning the academic program to ensure you can obtain a license or certification in your home state or territory. The website [https://rid.org/advocacy-overview/state-information-and-advocacy/](https://rid.org/advocacy-overview/state-information-and-advocacy/) provides resources for licensure and certification boards outside of Kansas. The Undergraduate and Graduate Certificates in ASL/English Interpreting does not guarantee that students will pass the certification exams, but covers the necessary materials to prepare students to sit for the exam.

### Admission to Graduate Studies

An applicant seeking to pursue graduate study may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study ([http://policy.ku.edu/graduate-studies/admission-to-graduate-study/](http://policy.ku.edu/graduate-studies/admission-to-graduate-study/)). Applications may be submitted at [http://graduate.ku.edu/ku-graduate-application/](http://graduate.ku.edu/ku-graduate-application/).

Students must complete an American Sign Language proficiency exam prior to admissions into the program.

The ASL/English Interpreting Graduate Certificate is a 15 credit hour certificate that allows students to pursue one of the following tracks.

### Introduction to ASL/English Interpreting Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 701</td>
<td>Introduction to the ASL/English Interpreting Profession</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 702</td>
<td>Theories of Interpreting: Co-Constructions of Meaning</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three of the following electives:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 803</td>
<td>Interpreting: Mediated Interactions in Communications</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 806</td>
<td>Interpreting: Diverse Communities</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 807</td>
<td>Ethics and Professionalization for Interpreters</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 808</td>
<td>ASL/English Interpreting Observation Practicum</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 810</td>
<td>Psychological Effects of Interpreting</td>
<td>3</td>
</tr>
</tbody>
</table>

### Professional ASL/English Interpreting Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 702</td>
<td>Theories of Interpreting: Co-Constructions of Meaning</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 807</td>
<td>Ethics and Professionalization for Interpreters</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 809</td>
<td>Practicum in American Sign Language Interpreting</td>
<td>3</td>
</tr>
</tbody>
</table>

### Graduate Certificate in Cybersecurity

The Graduate Certificate in Information Security and Assurance (ISA) is a 12-credit graduate-level certificate designed to provide advanced knowledge of information security concepts, governance, fundamental and emerging technologies in network security and computer systems security, as well as proficiency in security policies, procedures, risk management and audit. The purpose of this graduate certificate is to offer a practitioner-oriented credential in the information security area to students who are seeking an opportunity for more focused study.

The requirements for students entering the graduate certificate program include:

- BS degree in a computing or related discipline with a GPA of 3.0 or better or substantial experience in information technology;
- Two or more years of practical experience in IT; and
- Three letters of reference.

Applicants must complete an application to Graduate Studies ([http://graduate.ku.edu/ku-graduate-application/](http://graduate.ku.edu/ku-graduate-application/)) for admission into the certificate program and submit an application fee along with the following materials:

- Copy of Official Transcripts
- Statement of Purpose
- Resume
- Three Letters of Recommendation

*Unless the applicants native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the department’s standard for the Test of English as a Foreign Language (TOEFL).

To complete the program and obtain the certificate degree, the following three courses must be completed:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEC 710</td>
<td>Information Security and Assurance</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 711</td>
<td>Security Management and Audit</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 712</td>
<td>Network Security and its Application</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEC 780</td>
<td>Communication Networks</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 811</td>
<td>IT Project Management</td>
<td>3</td>
</tr>
</tbody>
</table>
The completion requirements of the graduate certificate in Cybersecurity include: (a) students must have a GPA of 3.0 or better on the required courses; (b) the minimum grade for any course to be applied toward the certificate is a grade of C; and (c) no credits may be transferred from another institution for this certificate.

Note: The completion of the graduate certificate program does not lead to automatic admission to the MSIT program, particularly if the student lacks the BS degree in computing or related discipline. However, for students who are able to gain admission to the MSIT program within three years of earning the certificate, all certificate course work completed with a grade of B or higher will be recognized through a combination of the following methods.

For students admitted to the MSIT program before completion of the certificate, all certificate course work may also be applied to the degree-granting program. For students admitted to the MSIT program after completing the certificate, departments will use a combination of transfer credit and degree requirement waivers to recognize the 12 hours earned through the certificate program. At the discretion of the degree-granting program and the Graduate Division, up to nine (9) credit hours may be transferred to the degree program. For the purposes of the MSIT program, completion of the graduate certificate in Cybersecurity within three years, with a grade of B or better, shall also be recognized as exceptional preparation which warrants the waiver of course work completed during the certificate program and not transferred. Please see the M.A. & M.S. Degrees and Graduate Credit policies for more information.

Graduate Certificate in Deaf Studies and Social Justice

The Deaf Studies and Social Justice certificate is designed for students interested in learning more about the world of the deaf in America, deaf culture, the education of deaf children, useful technology, and the integration of deaf people into the American society. Students from other disciplines are welcome to pursue this certificate program. ASL proficiency is not required, but some course may be taught in ASL with an English interpreter.

Admission to Graduate Studies

An applicant seeking to pursue graduate study may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study. Applications may be submitted at http://graduate.ku.edu/ku-graduate-application/. Applications may be submitted at http://graduate.ku.edu/ku-graduate-application/.

The Graduate Certificate in Deaf Studies and Social Justice requires the completion of three core courses and one elective for a total of 12 credit hours.

Graduate Certificate in Foundations of Engineering Management

The Graduate Certificate in Engineering Management is a 12 credit graduate-level certificate designed to provide content and skills for the professionally minded student. This graduate certificate serves as an introduction to the Engineering Management degree by offering a curriculum in management and technical systems with an emphasis on organizing and managing resources to successfully lead engineering or technical personnel and projects. This program is for individuals who have a minimum of 2 years professional engineering management experience.

Admission to Graduate Studies

An applicant seeking to pursue graduate study may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study. Applications may be submitted at http://graduate.ku.edu/ku-graduate-application/.

The Graduate Certificate in Engineering Management requires the completion of three core courses and one elective for a total of 12 credit hours.

Foundations of Engineering Management (12 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMGT 810</td>
<td>Applications of Quantitative Analysis in Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>EMGT 820</td>
<td>Developing the Engineering Manager</td>
<td>3</td>
</tr>
<tr>
<td>EMGT 821</td>
<td>Strategic Analysis of Technology Projects</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Pick one of the following electives or other departmentally approved courses.</td>
<td></td>
</tr>
<tr>
<td>EMGT 800</td>
<td>Special Topics in Engineering Management</td>
<td></td>
</tr>
<tr>
<td>EMGT 801</td>
<td>Management Theory and Practice for Engineering Managers</td>
<td></td>
</tr>
<tr>
<td>EMGT 802</td>
<td>Statistical Analysis and Prediction of Engineering Systems</td>
<td></td>
</tr>
<tr>
<td>EMGT 803</td>
<td>Technological Forecasting and Assessment</td>
<td></td>
</tr>
<tr>
<td>EMGT 804</td>
<td>Business Development and Marketing of Professional Services</td>
<td></td>
</tr>
<tr>
<td>EMGT 805</td>
<td>Management of Innovation</td>
<td></td>
</tr>
</tbody>
</table>

The Deaf Studies and Social Justice Graduate Certificate is a 15 credit hour certificate program that requires the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 611</td>
<td>Introduction to Deaf Studies</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 612</td>
<td>Intersectionality and Deaf Communities</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 613</td>
<td>Social Justice and Allyship with Deaf Communities</td>
<td>3</td>
</tr>
</tbody>
</table>

Pick two electives from the following list:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLD 614</td>
<td>Historical Foundations of Deaf Education</td>
</tr>
<tr>
<td>ASLD 628</td>
<td>Special Topics in Deaf Studies:_____</td>
</tr>
<tr>
<td>ASLD 788</td>
<td>Internship in American Sign Language and Deaf Studies</td>
</tr>
<tr>
<td>ASLD 789</td>
<td>Research Experience in American Sign Language and Deaf Studies</td>
</tr>
<tr>
<td>LING 735</td>
<td>Psycholinguistics I</td>
</tr>
</tbody>
</table>
**Graduate Certificate in Foundations of Project Management**

The Graduate Certificate in Project Management is a 12 credit graduate-level certificate designed to provide industry content and skills for the professionally-minded student. This graduate certificate serves as an introduction to the fundamental aspects of Project Management, with an emphasis on planning, organizing, and managing resources to bring about the successful completion of specific project goals. The program is for individuals who have at least 2 years of professional experience in project management or management systems.

**Admission to Graduate Studies**

An applicant seeking to pursue graduate study may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Applications may be submitted at http://graduate.ku.edu/ku-graduate-application (http://graduate.ku.edu/ku-graduate-application/).

The proposed Graduate Certificate in Project Management requires the completion of three core courses and one elective course at a total of 12 credit hours from the following courses.

**Foundations of Project Management (12 credits)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 816</td>
<td>Project Management Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 817</td>
<td>Project Management Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 818</td>
<td>Project Management Fundamentals III</td>
<td>3</td>
</tr>
<tr>
<td>Elective Course (1 PMGT elective course, 3 credit hours required.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Please note, elective course MUST be designated PMGT

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**Graduate Certificate in Professional Workplace Communication**

**Professional Workplace Communication Certificate**

The 4-course, 12 credit hour Professional Workplace Communication Certificate (https://edwardscampus.ku.edu/certificates-masters-communication-studies/) takes you beyond the numbers to understand what really makes organizations tick – the everyday communication practices we too often take for granted. Beyond emails, meetings and those informal hallway discussions, workplace communication is the hidden element within every organization that brings people and ideas together. It’s the dimension of any workplace that explores the human side of organizations – and helps facilitate your career success. You’ll learn how to craft messages, share information and build relationships in ways that create greater understanding – both internally and externally. Skills taught apply to communicating with internal peers, teams, managers, and leaders – as well as external stakeholders such as customers, vendors, partners, regulators, and media.

These workplace communication competencies are at the core of effective decision-making, team-building, problem-solving, and crisis-resolution practices. The certificate program teaches how and when to ask the bigger-picture questions that improve communication within your organization – and help advance your career.

All courses for KU’s Professional Workplace Communication Certificate are offered online through the KU Edwards Campus in Overland Park, Kansas. Visit the program web page (https://edwardscampus.ku.edu/communication/) to learn more.

**Application process**

Current KU graduate students and other non-KU students may apply for the graduate certificate. Please check the departmental website for the most updated certificate application requirements (https://edwardscampus.ku.edu/admissions-masters-communication-studies/).

An applicant seeking to pursue graduate study may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Non-native speakers of English must meet English proficiency requirements as described here (http://graduate.ku.edu/english-proficiency-requirements/). Applications may be submitted at http://graduate.ku.edu/ku-graduate-application (http://graduate.ku.edu/ku-graduate-application/).

For additional questions regarding the program requirements or application process, please visit our website (https://edwardscampus.ku.edu/communication/) or contact your academic success coach (https://edwardscampus.ku.edu/program-advisors/).
Certificate Requirements

The Professional Workplace Communication graduate certificate requires completion of 12 credit hours, including 2 required courses and 2 elective options.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFS 730</td>
<td>Writing and Speaking for Decision Makers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or PFS 801</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interpersonal and Persuasive Communication Skills for Managers</td>
<td></td>
</tr>
<tr>
<td>PFS 810</td>
<td>Organizational Communication Strategies</td>
<td>3</td>
</tr>
</tbody>
</table>

Students will then choose 2 of the following electives or other departmentally approved courses to complete their certificate. (COMS 930 Seminar in Speech: _____ courses may be eligible to count with departmental approval.)

Graduate Certificate in Software Engineering and Management

The Software Engineering and Management certificate program is designed primarily for industry practitioners who are involved in software engineering activities and who would like to enhance their formal education in software engineering and acquire the most modern development practices without completing a full Masters' degree. The program is also for individuals who have formal education in computing and who would like to acquire software engineering education to apply for software engineering positions.

The entrance requirements for students entering the graduate certificate program include:

- BS degree in a computing or related discipline with a GPA of 3.0 or better or substantial experience in information technology;
- Two or more years of practical experience in IT; and
- Three letters of reference.

Applicants must complete an application to Graduate Studies (http://graduate.ku.edu/ku-graduate-application/) for admission into the certificate program and submit an application fee along with the following materials:

- Copy of Official Transcripts
- Statement of Purpose
- Resume
- Three Letters of Recommendation

*Unless the applicant's native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, the applicant must meet the department's standard for the Test of English as a Foreign Language (TOEFL).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEC 810</td>
<td>Software Engineering and Management</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 811</td>
<td>IT Project Management</td>
<td>3</td>
</tr>
<tr>
<td>EECS 812</td>
<td>Software Requirements Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 814</td>
<td>Software Quality Assurance</td>
<td>3</td>
</tr>
<tr>
<td>ITEC 818</td>
<td>Software Architecture</td>
<td>3</td>
</tr>
</tbody>
</table>

The completion requirements of the graduate certificate in Software Engineering and Management include: (a) students must have a GPA of 3.0 or better on the required courses; (b) the minimum grade for any course to be applied toward the certificate is a grade of C; and (c) no credits may be transferred from another institution for this certificate.

Note: The completion of the graduate certificate program does not lead to automatic admission to the MSIT program, particularly if the student lacks the BS degree in computing or related discipline. However, for students who are able to gain admission to the MSIT program within three years of earning the certificate, all certificate course work completed with a grade B or higher will be recognized through a combination of the following methods.

For students admitted to the MSIT program before completion of the certificate, all certificate course work may also be applied to the degree-granting program. For students admitted to the MSIT program after completing the certificate, departments will use a combination of transfer credit and degree requirement waivers to recognize the 12 hours earned through the certificate program. At the discretion of the degree-granting program and the Graduate Division, up to nine (9) credit hours may be transferred to the degree program. For the purposes of the MSIT program, completion of the graduate certificate in Software Engineering and Management within three years, with a grade of B or better, shall also be recognized as exceptional preparation which warrants the waiver of course work completed during the certificate program and not transferred. Please see the M.A. & M.S. Degrees and Graduate Credit policies for more information.

Master of Arts in Organizational Communication

The Master of Arts in Organizational Communication is an online degree that focuses on helping mid-career professionals refine an advanced set of communication competencies related to understanding and managing organizational culture, team productivity and their personal career growth. The degree is applicable to a wide range of professions, including human resources, communications, or engineering—especially as one advances into management and leadership positions.

Professionals in every field today must be skilled at communicating across boundaries and uniting people around big new ideas and business imperatives. The MA in Organizational Communication provides students research-based insights helpful in clarifying, connecting, and inspiring diverse groups of employees and customers through communication. This differentiating communication skillset will help graduates become a trusted advisor for peers, company leaders and clients. Whether planning for a role change, looking to transition back into the workforce after taking care of family, or simply looking to effectively share expertise with others,
advanced communication knowledge helps professionals transition within and across multiple industries and professions over the long term.

The program focuses on key facets of communication within organizations such as,

- Effectively building trust, prevent conflict across diverse teams and departments
- Identifying the management communication issues driving low employee engagement
- Leading a global team on a complex organizational change project
- Increasing retention of a diverse workforce with inclusive team communication practices
- Building effective onboarding programs for new hires and promotions
- Distilling survey findings into a presentation or report to address the concerns of multiple stakeholders or audiences, from marketing to finance and manufacturing
- Leveraging the power of social networks to successfully launch new internal initiatives, products

To apply for admission, the applicant must supply the following materials:

1. Complete an online application (https://gradapply.ku.edu/apply/). An application fee will be charged at the time of applying online. Applicants must pay the application fee with a credit card.
2. Submit one copy of official transcripts of all previous college work, both undergraduate and graduate. Transcripts will be submitted online by the student, and the applicant must send an official sealed copy to the department at the address listed below.
3. Submit three letters of recommendation from individuals in a position to comment meaningfully on the applicant's potential for graduate work. Individuals writing letters will be sent an e-mail from College Net with instructions to fill out an evaluation form and attach a copy of their letter to that. These items will be uploaded to the student's account when complete.
4. Submit online a two to three page statement of purpose letter indicating the importance of your goals and academic interests and how these goals and interests relate to the sub-fields of Communication Studies upon which currently faculty focus. If there are faculty members whose research/teaching you find particularly interesting, please list them at the conclusion of your statement.
5. Submit online a resume or curriculum vita
6. Submit a research writing sample

Applicants are evaluated on the overall strength of their materials based on a balance of the following criteria: academic record as reflected in overall GPA and GPA in Organizational Communication or a related major; the degree to which the statement of purpose represents a sophisticated interest in studying a sub-field emphasized by faculty in the department; the strength of recommendation letters; and the strength of the research sample submitted by the student. The final decision is based on the overall strength of the application as reflected in all of the criteria listed.

The proposed MA in Organizational Communication degree is comprised of the following 30 credit hours:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFS 730</td>
<td>Writing and Speaking for Decision Makers</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Options: 15 credit hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFS 741</td>
<td>Intercultural Communication in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PFS 821</td>
<td>Employee Onboarding and Role Development</td>
<td>3</td>
</tr>
<tr>
<td>PFS 823</td>
<td>Organizational Change and Communication</td>
<td>3</td>
</tr>
<tr>
<td>PFS 825</td>
<td>Communication Practices for Inclusive Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PFS 827</td>
<td>Communication Ethics for Managers and Leaders</td>
<td>3</td>
</tr>
<tr>
<td>PFS 829</td>
<td>Communicating Across Workplace Generations</td>
<td>3</td>
</tr>
<tr>
<td>PFS 831</td>
<td>Case Studies in Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>PFS 833</td>
<td>Communication and Team Development</td>
<td>3</td>
</tr>
<tr>
<td>PFS 835</td>
<td>Interpersonal Communication Skills at Work</td>
<td>3</td>
</tr>
<tr>
<td>PFS 837</td>
<td>Communication Strategies for Remote and Hybrid Teams</td>
<td>3</td>
</tr>
<tr>
<td>PFS 839</td>
<td>Conflict Dynamics in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PFS 875</td>
<td>Special Topics in Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>PFS 895</td>
<td>Independent Study in Organizational Communication</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Capstone: 3 credit hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFS 898</td>
<td>Capstone Project in Organizational Communication</td>
<td>1-3</td>
</tr>
</tbody>
</table>

*The master's degree concludes with a demonstration of content mastery. Students can choose to complete either a comprehensive exam or a capstone project. Selection from these two options should be based on your learning goals and chosen in consultation with program faculty and your academic success coach. An additional three credit hours of electives will be required for the exam option. Please consult with your advisor to discuss which option will work best for your needs and goals.

Project Management (M.E. & M.S.)

Project Management Graduate Program

Master of Engineering (M.E.) or Master of Science (M.S.)

KU Edwards Campus

Project Management (http://www.pmgt.ku.edu/) is driven by globalization, the internet, and the rapid advancement for work processes. Organizations must implement projects faster than ever before. These organizations are looking for technically oriented and highly skilled project managers. Our Project Management degree addresses workforce needs by providing individuals from multiple disciplines with the skills, confidence, and competence to manage a variety of projects, as well as bridge the fields of engineering, technology, people, and business. Individuals may opt for a Master of Engineering (http://www.pmgt.ku.edu/me-pm) (M.E.) in Project Management or a Master of Science (http://www.pmgt.ku.edu/ms-pm) (M.S.) in Project Management depending on their undergraduate discipline.
The Project Management (PMGT) fundamental courses will strengthen knowledge and ability to apply the theories and concepts of Project Management in the real world. Electives will be offered on a rotational basis and will remain current with Project Management trends, demands, and the interests of our students.

Courses are offered in various formats including in person in Overland Park on the KU Edwards Campus (http://edwardscampus.ku.edu/), in person on the Leavenworth Campus and online. In-person courses are also recorded and live-streamed. Classes are taught by Graduate Faculty members of the School of Professional Studies and members of the professional community.

Graduate Admission Requirements

An applicant seeking to pursue graduate study may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Applications may be submitted at http://graduate.ku.edu/ku-graduate-application (http://graduate.ku.edu/ku-graduate-application/).

For admission to KU’s Master of Engineering in Project Management, applicants must have:

1. An undergraduate degree in engineering or related science from an accredited institution.
2. A 2.5 or higher undergraduate grade point average (on a 4.0 scale). Applicants may be admitted with a grade point average between 2.0-2.5 upon program review of their overall credentials.
3. Two years full-time, post-undergraduate work experience in a technological environment.
4. International students must also meet the English requirement by taking either the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) or have a degree from an English speaking institution. Financial support requirements must also be met.

All applications are completed online. A complete application includes the application fee, application form, résumé, 1 original transcript showing degree conferred, and a statement of purpose. Course schedules, faculty biographical information, and other program information may be requested from the PMGT office or downloaded from the Project Management website.

International students and students who indicated English as a second language, are required to show proof of English proficiency for admission purposes and must check in at the Applied English Center (https://aec.ku.edu/) upon arrival on campus for orientation. This process serves to confirm each student’s level of English proficiency and determine whether English courses will be included as a requirement of the student’s academic program. Note: Students who demonstrate English proficiency at the waiver level or who have earned a degree from one of the specified English-speaking countries listed in the policy (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/) are not required to check in at the AEC (see eligibility requirements on the Graduate Studies website (https://graduate.ku.edu/english-proficiency-requirements/)).

The University of Kansas Edwards Campus
Project Management
12600 Quivira Road
Overland Park, KS 66213

Degree Requirements

The Masters in Project Management requires a total of 33 semester hours of graduate work. A total of 12 hours will be completed in Project Management (PMGT) fundamentals for both the Master of Engineering and Master of Science, while the remaining 21 hours will be completed in varying required course work and electives depending on the degree program. Please refer to the Plan of Study below for the corresponding degree program. Students will work with their academic success coach and/or program director to finalize course selections to meet department and university requirements for degree completion and complete their Plan of Study.

Master of Engineering in Project Management

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 816</td>
<td>Project Management Fundamentals I</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 817</td>
<td>Project Management Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 818</td>
<td>Project Management Fundamentals III</td>
<td>3</td>
</tr>
<tr>
<td>PMGT 819</td>
<td>Project Management Fundamentals IV</td>
<td>3</td>
</tr>
<tr>
<td>PFS 801</td>
<td>Interpersonal and Persuasive Communication Skills for Managers</td>
<td>3</td>
</tr>
<tr>
<td>PFS 802</td>
<td>Managing Teams and Leading People</td>
<td>3</td>
</tr>
<tr>
<td>PFS 803</td>
<td>Financial Management for Professional Success</td>
<td>3</td>
</tr>
<tr>
<td>EMGT 820</td>
<td>Developing the Engineering Manager</td>
<td>3</td>
</tr>
</tbody>
</table>

Research & Practica

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMGT 830</td>
<td>Case Studies in Project Management</td>
<td>3</td>
</tr>
</tbody>
</table>
Graduate Admission Requirements

An applicant seeking to pursue graduate study may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (p. 2408) section of the online catalog.

For more information on admission to a graduate certificate program at KU, see the policy on Admission to Graduate Study (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/). Applications may be submitted at http://graduate.ku.edu/ku-graduate-application (http://graduate.ku.edu/ku-graduate-application/).

For admission to KU’s Master of Science in Engineering Management program, applicants must have:

1. Bachelor of Science undergraduate degree in engineering or related science from an accredited institution. Non-Bachelor of Science degrees or Technology degrees are considered only with a very high (e.g. 3.8) GPA and substantial experience (8-10 years) and with the applicant having completed the necessary math and science requirements.

2. A 2.5 or higher undergraduate grade point average (on a 4.0 scale). Applicants may be admitted with a grade point average between 2.0 and 2.5 upon program review of their overall credentials.

3. Two years full-time, post-undergraduate work experience in a technological environment.

4. International students must also meet the English requirement by taking either the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS) or have a degree from an English speaking institution. Financial support requirements must also be met.

Engineering Management (EMGT) does not require the GRE or GMAT.

A completed application includes the application fee, application form, résumé, 1 original transcript, and a statement of purpose. International students must also meet English and financial requirements. Course schedules, faculty biographical information, and other program information may be requested from the EMGT office or downloaded from the program’s website.

International students and students who indicated English as a second language, are required to show proof of English proficiency for admission purposes and must check-in at the Applied English Center (https://aec.ku.edu/) (AEC) upon arrival on campus for orientation. This process serves to confirm each student’s level of English proficiency and determine whether English courses will be included as a requirement of the student’s academic program. Note: Students who demonstrate English proficiency at the waiver level or who have earned a degree from one of the specified English-speaking countries listed in the policy (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/) are not required to check in at the AEC (see eligibility requirements on the Graduate Studies website (https://graduate.ku.edu/english-proficiency-requirements/)).

The University of Kansas Edwards Campus
Engineering Management
12600 Quivira Road
Overland Park, KS 66213
M.S. Degree Requirements
KU Edwards Campus

The Master of Science program in Engineering Management requires 33 hours of credits (12 credits in of interdisciplinary career skills courses, 9 credits of foundation of engineering management courses, 9 credits in electives and 3 hours of a field project or case study) with a final oral examination.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interdisciplinary Career Skills Courses (12 credit hours)</td>
<td>12</td>
</tr>
<tr>
<td>PFS 801</td>
<td>Interpersonal and Persuasive Communication Skills for Managers</td>
<td></td>
</tr>
<tr>
<td>PFS 802</td>
<td>Managing Teams and Leading People</td>
<td></td>
</tr>
<tr>
<td>PFS 803</td>
<td>Financial Management for Professional Success</td>
<td></td>
</tr>
<tr>
<td>PFS 804</td>
<td>Project Management for Professionals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foundations of Engineering Management Courses (9 credits)</td>
<td></td>
</tr>
<tr>
<td>EMTG 810</td>
<td>Applications of Quantitative Analysis in Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 820</td>
<td>Developing the Engineering Manager</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 821</td>
<td>Strategic Analysis of Technology Projects</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Required Electives: Select 9 credit hours of electives.</td>
<td>9</td>
</tr>
<tr>
<td>EMTG 830</td>
<td>Case Studies in Engineering Management</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 835</td>
<td>Field Project (M.S.)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 33

Required Electives (9 credits)

Electives

All elective courses outside of the EMGT program must be listed as graduate courses, taken for graduate credit, and approved by an EMGT faculty member in order to apply toward the Master of Science in Engineering Management degree. Approved EMGT elective courses are listed below:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMTG 801</td>
<td>Management Theory and Practice for Engineering Managers</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 802</td>
<td>Statistical Analysis and Prediction of Engineering Systems</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 803</td>
<td>Technological Forecasting and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 804</td>
<td>Business Development and Marketing of Professional Services</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 805</td>
<td>Management of Innovation</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 807</td>
<td>Labor and Employee Relations for the Engineering Manager</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 808</td>
<td>Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 811</td>
<td>Engineering Systems Simulation</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 812</td>
<td>Law and the Design Professional</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 814</td>
<td>Leadership Techniques and Methods for the Engineer Manager</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 815</td>
<td>Business Relationships and Selling Skills</td>
<td>3</td>
</tr>
<tr>
<td>EMTG 824</td>
<td>Product Marketing for Engineering Managers</td>
<td>3</td>
</tr>
</tbody>
</table>

Master of Science in Information Technology

The technological advances that have made our society what it is today are due largely to the efforts of electrical engineers, computer engineers, and computer scientists. Among these advances are radio, television, telephones, wireless and mobile communications, personal computers, workstations, mainframe computers, aircraft avionics, satellite electronics, automobile electronics, office machinery, medical electronic equipment, video games, electric power generation and distribution systems, telecommunications, computer networks (including the Internet), personal entertainment products, radar, defense electronics, artificial intelligence, and a variety of computer software.

Admission

The Master of Science degree in Information Technology (M.S.I.T.) is designed for Information Technology (IT) professionals in the Kansas City area. Courses are offered in the evening on the Edwards Campus, which is conveniently located in Johnson County. The M.S.I.T. program is intended for students with a bachelor’s degree in information technology, computer science, computer information systems, computer engineering, or a related field for their advanced studies, or for those who seek additional academic studies for professional growth or career advancement. A student with good preparation in other fields of engineering, mathematics, business, or science may qualify by taking appropriate additional undergraduate courses. Such courses normally do not count toward the graduate degree.

Applicants who hold an undergraduate degree in information technology, computer science, computer information systems, computer engineering, or related discipline are required to have a minimum of 2 years of professional work experience in IT. Applicants without an undergraduate degree in a computer-related field must have 4 years of relevant professional work experience in IT. The professional work experience requirement may be waived for recent graduates with an undergraduate degree in IT. Applicants must be able to demonstrate knowledge of programming via experience or equivalent coursework in data structures and a modern programming language. For a technology-based degree requiring knowledge in probability, statistics, and advanced algebra, an applicant must be able to demonstrate sufficient mathematics aptitude via academic background and work history.

Unless the applicant’s native language is English or the applicant has received a baccalaureate degree or higher from an accredited U.S. institution of higher education, he or she must meet the department’s standard for the Test of English as a Foreign Language (TOEFL), which is higher than the general KU requirement.

Application Information & Deadlines

Fall Priority Deadline: December 15
Minor in Biotechnology

Minor in Biotechnology

Grounded in biological sciences, chemistry and advanced technology, biotechnology employs biological systems to solve scientific challenges that impact society. Through this minor, you will diversify your education and become better equipped for careers in:

- Human and animal health
- Environmental and agricultural sciences
- Pharmaceuticals

In this unique minor, you will be challenged to apply your scientific knowledge and solve problems. You will routinely formulate and execute experimental approaches, analyze data, and communicate results.

Requirements for the Minor

Students selecting this minor must complete each of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTEC 300</td>
<td>Research Methods in Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 305</td>
<td>Molecular and Microbiological Techniques</td>
<td>4</td>
</tr>
<tr>
<td>BTEC 400</td>
<td>Applied Immunology</td>
<td>3</td>
</tr>
<tr>
<td>BTEC 475</td>
<td>Applied Separation Science and Quantitative Analysis</td>
<td>6</td>
</tr>
<tr>
<td>BTEC 550</td>
<td>Applied Bioinformatics</td>
<td>2</td>
</tr>
</tbody>
</table>

Biotechnology Minor Hours & Minor GPA

While completing all required courses, minors must also meet each of the following hour and GPA minimum standards:

**Minor Hours**

Satisfied by 18 hours of minor courses.

**Minor Hours in Residence**

Satisfied by a minimum of 9 junior/senior (300+) hours of KU resident credit in the minor.

**Minor Junior/Senior (300+) Hours**

Satisfied by a minimum of 12 hours from junior/senior courses (300+) in the minor.

**Minor Graduation GPA**

Satisfied by a minimum of a 2.0 KU GPA in all departmental courses in the minor. GPA calculations include all junior/senior courses in the field of study including F’s and repeated courses. See the Semester/Cumulative GPA Calculator (http://clas.ku.edu/undergrad/tools/gpa/).
Minor in Nutrition

With a curriculum focused on the role of nutrition in a wide range of areas, KU’s minor in nutrition provides a useful area of focus for your degree or professional background, helping you become more marketable in a growing career field. Pursue a minor to earn a valuable credential and help start or refocus your work in a nutrition-related field. Alternatively, a minor in nutrition can supplement your undergraduate studies to prepare you for a successful career in health, nutrition, wellness, fitness and beyond. The courses and credential from the nutrition program may make you more successful in continuing your education in graduate school.

Undergraduate Minor in Nutrition (18 credit hours)

Complete the courses for 12 credit hours listed above and choose 2 more courses from the list below:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 320</td>
<td>Principles of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>or HSES 330</td>
<td>Principles of Nutrition and Health</td>
<td></td>
</tr>
<tr>
<td>HSCI 420</td>
<td>Nutrition Through the Life Cycle</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 421</td>
<td>Public Health Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 422</td>
<td>Nutrition Assessment</td>
<td>3</td>
</tr>
<tr>
<td>Select two of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSES 331</td>
<td>Sport and Exercise Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 425</td>
<td>Nutrition Education</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 521</td>
<td>Advanced Nutrition and Metabolism</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 522</td>
<td>Advanced Sports Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor in Public and Population Health

KU’s minor in public and population health provide a broad exposure to the key concepts of public and population health, as well as an understanding of the connections between public health and the community. KU’s programs focus on understanding the network of behavioral and social factors of health and how they’re intertwined with the community. Students gain knowledge in understanding core concepts in epidemiology and biostatistics, disease prevention, population health and health disparities.

Degree Requirements

Coursework required for the minor is designed to provide a broad exposure to the key concepts of public health as well as an understanding of the connections between public health and other disciplines.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCI 340</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 440</td>
<td>Introduction to Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 441</td>
<td>Population Health</td>
<td>3</td>
</tr>
<tr>
<td>HSCI 445</td>
<td>Introduction to Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>or EVRN 445</td>
<td>Introduction to Environmental Health</td>
<td></td>
</tr>
<tr>
<td>Elective (3 credit hours at 300 Level or above.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSES 308</td>
<td>Drugs and Diseases in Society (Or other elective chosen in consultation with an advisor)</td>
<td>3</td>
</tr>
<tr>
<td>or HSES 418</td>
<td>Health Aspects of Aging</td>
<td></td>
</tr>
</tbody>
</table>
Social Welfare

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

Bachelor of Social Work (p. 2398)
Master of Social Work (p. 2401)
Doctor of Philosophy in Social Work (p. 2405)

The School of Social Welfare

The University of Kansas School of Social Welfare is the oldest school of social welfare in the state and the only one to offer degree preparation from undergraduate through doctoral degrees.

- Bachelor of Social Work (p. 2398)
- Master of Social Work (p. 2401)
- Doctor of Philosophy in Social Work (p. 2405)

Vision, Mission, and Guiding Principles & Values

Vision Statement

All individuals, families, & communities utilize their power to achieve justice, equity, & well-being.

Mission

The University of Kansas School of Social Welfare, rooted in the Strengths Perspective, aims to transform lives and social contexts and promote social, economic, and environmental justice in Kansas, the nation and the world. We do so by educating students to practice with integrity and competence; advancing the science and knowledge base of social work through scholarship and research; and participating in community-engaged service.

Guiding Principles and Values

The work of the KU School of Social Welfare is guided and driven by a set of principles and values that inform our teaching, research endeavors, and service to community at various levels. These include:

Relationship Building: We engage in relationship building that fosters creativity, collaboration, and mutual learning. Relationship building is essential across practice, scholarship, education and service. We take a strengths approach as we serve our local, state, national, and global communities.

Diversity, Equity and Inclusion: We embrace the inherent worth of all people. By taking the position of cultural humility and applying the lens of intersectionality, we seek to develop and promote modes of anti-oppressive social work and dismantle structures of exclusion.

Practice with Integrity: We demonstrate our integrity and trustworthiness as scholars, educators, practitioners, and community members by promoting social work values, ethical practice, and the process of critical reflection.

Multisystem Competency: We recognize that social, economic, and environmental injustices are the root causes of inequities and multiple strategies are necessary to address these. Our work integrates micro/macro social work and builds collaboration across systems and disciplines to create multi-level change.

Critical Perspective: We engage in deliberate and continuing examination of social conditions and solutions. We use critical inquiry to analyze and challenge existing structures and systems in order to advance the field and promote social, economic, and environmental justice.

Empirically Informed Social Work: We rigorously advance empirical research that impacts the social work knowledge base. By translating and applying evidence, we continually transform practice and policy across multiple systems.

Goals

1. To prepare BSW, MSW and Ph.D. students to practice with integrity and attain multi-level competency while working to promote well-being and build community.
2. To conduct, disseminate, and translate theoretical and empirically informed scholarship and research that impacts the social work knowledge base and transforms practice and policy.
3. To promote social, economic, and environmental justice through service at local, state, national, and international levels.

The Programs

The curriculum brings students from the introductory level through advanced study in clinical social work practice or social work macro practice. Under the umbrella of a practice orientation, the programs are structured to support the guiding principles and values of the School.

Classroom work is one component of professional preparation; field practicum placements comprise the other. Placements in social service agencies provide students the opportunity to apply and further develop skills learned in the classroom. Bachelor of Social Work and Master of Social Work students spend time in practicum settings throughout the region.

The goal of the doctoral program in social welfare is to prepare students to become leaders nationally and internationally in advancing social work practice and policy through research, teaching, and scholarship. Our students graduate from the program with the critical knowledge and skills they need to become innovative stewards of the discipline who generate and disseminate knowledge as researcher, scholars, and educators.

Learn more about the School of Social Welfare programs (https://socwel.ku.edu/academic-programs/). (https://socwel.ku.edu/academics/degrees_landing/)

Student Handbook

The student handbook contains full descriptions of policies and other details for degree programs and field practicum.

The Profession

The mission of the social work profession is rooted in a set of core values. These core values, embraced by social workers throughout the profession’s history, are the foundation of social work’s unique purpose and perspective:
• Service
• Social justice
• Dignity and worth of the person
• Importance of human relationships
• Integrity
• Competence

NASW Code of Ethics
As a guide to professional conduct, the Code of Ethics of the National Association of Social Workers (http://www.socialworkers.org/) represents the fundamental values of the profession. The National Association of Social Workers is the largest organization of professional social workers in the world, with a membership of 130,000.

View the entire Code of Ethics (https://www.socialworkers.org/About/Ethics/Code-of-Ethics/) or request a copy.

Resources
Faculty
The faculty’s scholarly interests, as reflected in teaching, research, and publications, span a wide range, including health, mental health, child welfare, adult and juvenile justice, gerontology, multiculturalism, women’s issues, history of social work, public policy analysis, homelessness, gender equity, poverty reduction and asset building, and macro social work including community practice and social work administration.

School of Social Welfare faculty members hold doctoral degrees in social work, social welfare, and other fields. In addition, outstanding social work practitioners serve as part-time classroom instructors, and 280 social work practitioners serve as practicum instructors.

Faculty members serve the public interest and the profession of social work as consultants and board members in professional and citizens’ organizations.

Research Office
The School supports research and scholarship designed to impact social service delivery and policy at the local, national and international levels. Grounded in the Strengths Perspective and with strong ties to the Grand Challenges for Social Work, we design and conduct applied research and scholarship that advances the science and knowledge base of social work through collaboration, curriculum, scholarship and research. Learn more at https://socwel.ku.edu/research-home (https://socwel.ku.edu/research/).

Undergraduate Programs
The undergraduate program (https://socwel.ku.edu/bsw/) prepares graduates for generalist social work practice. The program defines generalist practice as maintaining focus on practice and advocacy based on ethical principles, scientific inquiry, and best practices at the interface between and among systems (i.e., individual, family, groups, organizations, and communities). The program is offered on both the Lawrence and Edwards campuses.

University Honors Program
The school encourages qualified undergraduates to participate in the University Honors Program (https://honors.ku.edu/).

Graduate Programs
The Master of Social Work program (https://socwel.ku.edu/MSW-catalog/), established in Lawrence and at the KU Medical Center in Kansas City in 1946, has been continuously accredited since 1947. KU’s MSW program is consistently ranked among U.S. national public universities..

The doctoral program (https://socwel.ku.edu/phd/) admitted its first students in 1981. It prepares students to be leaders of the profession through advanced research, scholarship, and teaching.

Financial Aid
To be eligible for financial aid, applicants should complete the Free Application for Federal Student Aid (FAFSA) by March 1, even before receiving information about acceptance. FAFSA materials can be obtained from all college or university financial aid offices or submitted online (https://studentaid.gov/h/apply-for-aid/fafsa/). The School of Social Welfare uses the FAFSA need determination level in making awards. For more information regarding financial aid visit the KU Office of Financial Aid & Scholarship (http://affordability.ku.edu/). (http://affordability.ku.edu/)

For Ph.D. students (https://socwel.ku.edu/phd-funding/), financial assistance, including tuition and significant salary, is available from the school through teaching and research assistantships in research and training areas such as adult and children’s mental health, aging, child welfare, corrections, social policy, LGBTQ populations, gender-based violence, or other areas of faculty grants and interests.

Scholarships and Awards
The School of Social Welfare has several sources of financial assistance available to students who meet the various criteria. Awards are made on an annual basis and are applied directly towards tuition and fees in most instances. All students interested in applying are required to submit a Free Application for Federal Student Aid by March 1. All recipients are expected to maintain a minimum grade point average of 3.0. Students must renew their applications each year they wish to be considered.

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

For information about school regulations refer to the student handbook (http://socwel.ku.edu/resources/forstudents/academic-handbooks/).

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

For information about school regulations refer to the student handbook (https://socwel.ku.edu/current-students/).

Undergraduate Graduation with Distinction
The top 10 percent of the graduates of the BSW program each year receive degrees with distinction.
Undergraduate Honor Roll (Dean’s List)

Students who have been accepted into the BSW program, enrolled in a minimum of 9 credit hours during the semester, and earned a semester grade-point average in the top 20 percent of their class qualify for the KU School of Social Welfare BSW Dean’s List.

Undergraduate Required Work in Residence

No baccalaureate degree is granted to an undergraduate who has not completed at least 30 semester credit hours of residence courses at KU. No exceptions are granted. To earn a bachelor’s degree from KU, you must complete the last 30 hours of credit for the degree by resident study. You may petition the BSW program director for a waiver. Up to 6 hours of work taken at another institution may be accepted as part of the last 30 hours, if the hours are not in required social work courses.

Undergraduate Student Advancement Policy

Refer to the student handbook (https://socwel.ku.edu/current-students/) for specific information.

Undergraduate Advising

Once a student is admitted to the School of Social Welfare, an academic adviser will be assigned to assist students in the enrollment process and with other academic program requirements. Students consult with their academic adviser before enrollment each semester and have their advising held removed. In addition, a member of the School’s faculty is assigned as a professional/career adviser. Current students can view their advisers in Jayhawk GPS or the myKU P (https://my.ku.edu/uPortal/t/academics/normal/render.uportal).

Transfer of Credit/Credit Waiver

BSW Program

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

Transfer of credit allows specific course work from other accredited colleges or universities to count toward the BSW degree. Decisions to accept prior credits are made by KU’s transcript evaluator during the admission process. Exceptions must be petitioned through the BSW Director. Petitions must be accompanied by a catalog description and a syllabus of the course and submitted at the time of application. Community college equivalents to KU courses are available from the school or through community college counselors. A maximum of 64 credit hours from a community college may be transferred toward the BSW degree.

MSW Program

Students who request transfer from other programs accredited by the Council of Social Work Education must first go through the admission process and provide transcripts, a syllabus for each course for which credit is being requested, descriptions of field practicum content, written evaluations of field practicum performance, and the number of practicum clock hours. Course syllabi must include readings, assignments, and weekly topics covered in that class. Students requesting credit waivers must include these materials by the application deadline. Waiver credit will not be offered for courses taken prior to admission for students accepted in the Advanced Standing Program. Courses submitted for waiver credit won’t be considered if a student earned a grade of less than a B.

Credits for continuing education institutes and workshops or programs conducted by nonaccredited or nondegree-granting organizations are not accepted. Additionally, courses taken in an MSW program as a non-degree seeking student will not receive waiver credit. Students may not receive waiver credit for advanced level coursework taken prior to completion of foundation level coursework in another MSW program. Students can request to enroll as nondegree seeking students and take generalist level classes. However, it is contingent upon admission as a nondegree seeking student and classroom availability after all current degree seeking students are enrolled. Up to nine hours of credit as a nondegree seeking student can be applied toward the MSW degree should a nondegree seeking student later apply to admission into the MSW program. Any such credit will be given only for coursework in which the student earned a B or greater.

Prior Work Experience

In accordance with national curriculum policy, prior employment and life experience may not be credited toward classroom course work or practicum requirements for undergraduate or graduate programs.

Undergraduate/Graduate Leave of Absence and Withdrawal

Refer to the student handbook (https://socwel.ku.edu/current-students/) for specific information.

Undergraduate/Graduate Guidelines for Conduct

Refer to the student handbook (https://socwel.ku.edu/current-students/) for specific information.

Employment Opportunities

Some employment opportunities (https://socwel.ku.edu/after-graduation/) for social workers include:

- Practice in health care systems and settings.
- Child protection, foster care, and adoption services.
- Service in community centers, juvenile courts, and residential treatment centers.
- Women’s counseling and shelter facilities.
- Family services, substance abuse, illness, and unemployment services.
- Community services for people with mental illness.
- Services for the elderly in home care, nursing homes, and senior centers.
- Community practice and social change.
- Services for offenders and their families in community corrections programs.
- Leadership in human service organizations and policy settings.

University Career Center

The University Career Center (https://career.ku.edu/), Summerfield Hall, Room 206, (ph:785-864-3624), provides career counseling and services for all KU students, including students in the School of Social Welfare.
Courses

SW 210. Contemporary Social Topics: ____. 1-3 Credits.
This course provides the opportunity for experimentation with innovative course content and unique learning strategies in accordance with guidelines established by faculty. Subjects offered as topics include Training for Diversity, Organizing in Underserved Communities, etc.

SW 220. Intro to Social Work, Social Welfare and U.S. Society. 3 Credits. SF S
This course serves as an introduction to the profession of social work and the institution within which it operates: the social welfare system. This course is not a skills-based course; rather, its purpose is to make clear the influences and constraints that shape the profession--historical, social, cultural, political, and legal--and give it its uniqueness. Specifically, the course introduces students to how social workers apply generalist knowledge, values, and skills in a variety of settings and with a variety of client populations. Emphasis will be placed on a social worker's use of the strengths perspective, commitment to the empowerment, respect for individual difference across a range of intersecting social identities; and, relatedly, our obligation to work for a more socially, economically, and environmentally just, humane society.

SW 303. Human Sexuality. 3 Credits.
This introductory course approaches human sexuality from a social work perspective to provide students with an in-depth understanding of their own and others sexuality and gender through a social justice-informed lens. Students will explore topics such as sexuality and sexual development across the life course; privilege and oppression and it relates to sexuality and gender; attitudes, beliefs, and values pertaining to human sexuality; gender-based violence; sexual health practices; and LGBTQIA+ identities. The course utilizes a range of learning methods including lecture, discussion, group discussion, audio-visual materials, and critical self-reflection.

SW 310. Dealing with Stress and Supporting Wellbeing. 3 Credits.
This course is designed to assist students with developing skills for managing the transition to a university setting, and its associated social and emotional challenges. Students will learn techniques designed to enhance mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness skills. This course is designed to empower students by providing a range of experiences and techniques that will give students new insights and choices about their own behaviors, as well as skills that will help them in their interactions with others. Skills will be practiced through hands-on experience in the classroom, as well as weekly goal-setting to investigate the impact of developing these skills on our personal wellbeing. Prerequisite: Corequisite: MATH 2, MATH 101 or LA&S 108.

SW 410. Professional Writing Skills in Social Work. 3 Credits.
Students learn the principles of organizing, developing, writing and revising documentation for different professional social work settings. Student will master basic writing skills and become proficient in several types of social work writing styles.

SW 420. Social Work in Urban Settings. 3 Credits.
Students gain knowledge about the historical and current relationships between the definition of social problems, the development of social welfare policies, and the delivery of social services in urban settings. Students will learn to access current policies and practices as they impact local communities in the Kansas City area.

SW 455. Topics in Social Welfare: ____. 1-3 Credits.
This course covers a variety of topics on a rotating basis and provides the opportunity for experimentation with innovated course content in accordance with guidelines established by faculty. These topics may include, but are not limited to, globalization and poverty, special topics in child welfare, mental health, juvenile justice, etc.

SW 490. Directed Readings. 1-3 Credits.
Individual and supervised readings in selected areas of social welfare. Prerequisite: Consent of instructor and approval by dean's office.

SW 510. Introduction to Social Work Practice: Interviewing Skills. 1.5 Credits.
This skills-focused course is designed to assist students with developing and practicing concrete interviewing strategies in preparation for field placements. These strategies will be revisited in the context of engagement and assessment during senior year fall semester courses. Students will learn interviewing strategies used in common social work practice approaches, such as motivational interviewing, solution-focused interviewing, and non-directive listening skills. This course is designed to provide students with baseline interviewing skills and provide them with practice before working with clients in their practicums. We will practice cultivating these skills through hands-on experience in the classroom. Prerequisite: MATH 101 or LA&S 108; Grade of B or better in SW 220; SW 530; SW 540; SW 555.

SW 512. Skills-Based Policy Advocacy. 1.5 Credits.
In this course, students learn policy-informed practice skills for effective advocacy in policy change strategies, grounded in core social work topics. These policy-informed practice skills include grassroots policy advocacy, such as developing policy agendas, social media campaigns, community organizing with constituents, and direct policy advocacy including giving testimony in legislative contexts, using policy briefs and other communication aids, and drafting new legislation. Emphasis on using social work values and ethics to work collaboratively with individuals and organizations will be central to the course. The course underscores social welfare policy as the foundation for social work practice and prepares students for policy advocacy as part of their effective and ethical social work practice. Prerequisite: MATH 101 or LA&S 108; Grade of B or better in SW 220; SW 530; SW 540; SW 555.

SW 530. Introduction to Theory for Multi-level Social Work. 3 Credits.
A study of human behavior theories and their application to social work practice. Theories discussed include, but are not limited to empowerment, systems, psychodynamic, critical, life span and life course, cognitive and moral development, and psychodynamic theories, which are applied to individuals, families, groups, communities, societies, and in international contexts. Prerequisite: MATH 101 or LA&S 108, Grade of B or better in SW 220.

SW 534. Introduction to Social Policy and Advocacy. 3 Credits.
This generalist policy analysis and advocacy course provides students with essential policy knowledge and policy practice skills. The course examines existing social policies through the lens of social work values--particularly our profession's commitment to social, economic, racial, and environmental justice--and equips students to engage in policy change in pursuit of societal equity and human well-being. In this course, students learn policy analysis knowledge and skills, with an emphasis on understanding how social welfare policy design, funding, and implementation affect people's lives and influence the delivery of social work services. Policies designed to reduce poverty, address racial inequities, improve health, and increase social justice serve as exemplars for developing conceptual abilities in this course. Through critical examination of policies in the major domains of social work practice (physical and mental health, children and families, aging, housing, economic security), students prepare for policy-informed practice and for effective engagement in policy change strategies. Continuing students'
preparation for professional practice, the course emphasizes social welfare policy as the foundation for social work practice and positions policy analysis and intervention as integral to effective and ethical social work. Prerequisite: MATH 101 or LA&S 108; Grade of B or better in SW 220; SW 530; SW 540; SW 555.

SW 540. Introduction to Social Work Research. 3 Credits. This course provides students with the basic concepts of research processes and methods utilized in addressing social work problems. It will cover quantitative, qualitative, and mixed methods research but emphasize quantitative methods. Students will learn various aspects of research including reviewing the literature, formulating a research problem and research question, conceptualizing the research, constructing measurement instruments, understanding measurement reliability and validity, sampling, and various research designs such as survey and experimental (pre-, pure-, and quasi-) designs. Students will become familiar with social work research ethics and will recognize the importance of sensitivity to diversity, oppression, and marginalization through each of the research processes. After understanding the basic concepts and processes of research, students will be able to read and critically analyze empirical research articles with an eye towards evidence-based social work practice. Prerequisite: MATH 101 or LA&S 108; Grade of B or better in SW 220.

SW 555. Diversity, Equity and Inclusion in Social Work Practice. 3 Credits. This course provides students with a foundational knowledge of diversity, equity, and inclusion within multi-level social work practice. Students will examine theoretical, conceptual, and policy-based knowledge of systems of oppression, both historical and contemporary, and the ways in which power and privilege are manifested within them. Through ongoing and critical self-reflection, students will examine their own social identities (e.g. race/ethnicity, gender, sexual identity, age, social class, ability status, religion, national origin, etc.), as well as their beliefs, values, and ethics through a justice and equity framework. Critical self-reflection is an essential skill to develop toward ethical and effective social work practice. This course will help prepare social work students to understand and resist systematic and interpersonal dynamics related to oppression and advocate for justice within a myriad contexts and across a range of policies and practices that inform social work practice. As a social work diversity course, this course takes an explicitly anti-racist, anti-sexist, anti-colonialist, and anti-oppressive stance. Prerequisite: MATH 101 or LA&S 108; Grade of B or better in SW 220.

SW 560. Study Abroad Topics: ______. 3 Credits. This course provides the opportunity for Study Abroad in developed and developing countries such as Costa Rica and Italy.

SW 570. Centering on Decolonization in Social Work. 1.5 Credits. This course introduces theories and concepts of colonization and decolonization, centering on Indigenous people in America. Emphasis will be on students’ examination of the frameworks, policies, and concept-based knowledge in which colonization and decolonization develops, expands, and impacts these populations. Social work values and ethics will be used to unpack colonization historically and contemporarily particularly with social work practice. In addition, students will analyze efforts to examine decolonization in the field of social work and apply that to their development of multi-level practice skills. Prerequisite: Math 101 or LA&S 108; Grade of B or better in SW 220; SW 530; SW 540; SW 555.

SW 571. Responding to Suicide and Self-Harm. 1.5 Credits. This course is designed to assist students with developing assessment and intervention skills for responding to suicide and self-harm across the life course. We will examine the etiology, function, and presentation of self-injurious thoughts and behaviors, with particular emphasis on the development of these behaviors in childhood and adolescence and their progression into adulthood. Students will learn techniques for responding to suicide and self-harm, including the use of generalist social work practice skills (e.g., crisis intervention, advocacy, brokering, behavior management), developing effective treatment plans, and providing psychoeducation to individuals impacted by suicide and self-harm. Prerequisite: Math 101 or LA&S 108; Grade of B or better in SW 220; SW 530; SW 540; SW 555.

SW 572. Substance Use. 1.5 Credits. This course introduces students to the issues and challenges that face people affected by psychoactive substances in addition to the range of services developed to address these challenges. Substance-related harms are commonly observed across all social work settings, and substance misuse often directly or indirectly affect clients and their communities served by generalist practitioners. BSW students will gain essential knowledge that will assist them in working with these clients, such as substance-specific effects on individual functioning; why we think people misuse psychoactive substances; relationship to other existing health and mental health conditions; impact of substance misuse on an individual’s family and community; and the system of care developed to prevent, address, and sustain recovery from addictive behaviors. Prerequisite: Math 101 or LA&S 108; Grade of B or better in SW 220; SW 530; SW 540; SW 555.

SW 573. Intergenerational and Historical Trauma. 1.5 Credits. This course introduces students to the impact of historic and intergenerational trauma. The foundational context for the course is the impact of historic and intergenerational trauma on Native American and Black Americans, within the context of colonization and slavery dating to the 1600s at the founding of the United States. The course will examine the literature related to the history of multiple traumas endured by communities, which can result in cumulative emotional and mental health wounds that carry across generations. Students will understand and be aware of the many factors surrounding intergenerational trauma and a look in to inherited behaviors and epigenetics. Prerequisite: Math 101 and LA&S 108; Grade of B or better in SW 220; SW 530; SW 540; SW 555.

SW 600. Field Education Seminar. 1 Credits. Field Education Seminar is a bi-weekly, two-semester course designed to bridge social work scholarship and the field education experience by engaging in discussion and critical examination of theory, practice, and practicum. Students explore the role of field practicum in their learning and how to maximize the experience through group processing facilitated by the Seminar Instructor/Field Liaison. Concurrent enrollment is required in SW 601. Prerequisite: Successful completion of SW 500 level coursework.

SW 601. Field Practicum. 5 Credits. Students complete 416 clock hours of field practicum during the fall and spring semesters. They are in one continuous field placement for 16 hours per week for 26 weeks. The practicum is a generalist experience covering direct practice and community practice as well as research and policy practice. Typical agency settings for BSW students include community mental health centers, child welfare offices, long term care facilities, and juvenile justice and/or corrections settings. This course is taken for two semesters (fall-spring), with credit given only after completion of the second semester. Concurrent enrollment in SW 600 and SW 610 (fall), SW 612 (spring). Prerequisite: Successful completion of SW 500 level coursework.

SW 610. Multilevel Engagement and Assessment in Social Work Practice. 3 Credits.
This course prepares students for generalist social work practice with individuals, families, groups, organizations, and communities. Focusing on the beginning phases of the helping process, students will develop knowledge and skills to build rapport with individuals and families, connect with and leverage group dynamics, navigate and influence organizational cultures, and assess the strengths and needs of communities. In addition, students will learn how generalist skills can help to address population needs across levels of practice. This course will ask students to apply evidence- and theory-driven approaches for engagement and assessment, and students will critically consider how to support goal development, intervention planning, and collaborative assessment in diverse contexts. Concurrent enrollment in SW 601. Prerequisite: Successful completion of SW 500 level coursework.

**SW 612. Multilevel Intervention and Evaluation in Social Work Practice. 3 Credits.**
In the second course of the multilevel generalist practice sequence, students will gain competencies for the middle and ending phases of the helping process. They will build skills to intervene and critically evaluate interventions to improve outcomes with individuals, families, groups, organizations, and communities. Students will also examine cross-system and cross-level intervention strategies and the knowledge and skills needed to work effectively across practice domains. In addition to exposure to a range of generalist practice intervention approaches, students will develop competencies for client-centered evaluation and termination, empowering group interventions, organizational transformation, and base building for community change. Concurrent enrollment in SW 601. Prerequisite: SW 610.

**SW 622. Human Rights, Social, Economic and Environmental Justice. 3 Credits.**
This course lays a human rights-centered foundation for students’ social work education, elevating the pursuit of social, economic, and environmental justice as a core dimension of social work practice. The course familiarizes students with the global human rights framework, exposes them to key human rights challenges in the current landscape, and engages them in countering these challenges and promoting opportunities for human rights. Students critically examine the state of human rights in the United States and also expand their lens to consider social work as a global enterprise, where lessons are to be learned and contributions made in diverse transnational contexts. While emphasizing human well-being as a core aim of the profession, the course emphasizes the importance of restoring and protecting the natural world, as an end in itself and an essential precondition for human thriving. Students develop human rights literacy, learning the history of human rights governance, the mechanisms for protecting individual and group rights—and the limitations of these tools. They demonstrate empathy with those experiencing threats to their human rights, drawing on their commitment to diversity, equity, and inclusion. They take responsibility to act as global community members committed to the dignity and worth of every person. Equipped with this complement of knowledge, skills, and values, students are prepared for generalist practice from a human rights-based perspective. Prerequisite: Successful completion of SW 500 level coursework.

**SW 623. Capstone: Social Work Professional Issues. 3 Credits.**
This course focuses on the values and ethical dimensions of contemporary professional social welfare policy and practice while integrating insights from theory and research. Students fully digest and relevantly apply the professional social work Code of Ethics. In addition, they clarify and solidify their professional identities as beginning social workers. SW 623 represents the culmination of the School’s professional socialization process. Because this class focuses on the process of developing and clarifying a strong sense of the social work profession and the professional self, it relies heavily on student participation, interaction, reflection, and discussion. This course is offered in the final seminar of the BSW program culminating the field of social work study. Concurrent enrollment in SW 600/601 and SW 612. Prerequisite: SW 610.

**SW 634. Child Welfare - Protecting Children, Strengthening Families. 1.5 Credits.**
This course will introduce undergraduate students to the child welfare service system that aims to promote safety, permanency and well-being of children and their families. Students will learn about the history of the U.S. child welfare system, seminal policies that have shaped this system during the 20th and 21st centuries, and historical and current day tensions that influence child welfare services. The course examines the full continuum of services within the child welfare system, including prevention, in-home family supports and family preservation, foster care, kinship care, independent living, adoption, and post-adoption. Students will also learn about personal, familial, and environmental factors that place families at risk for involvement with the child welfare system, including critical analysis of racial inequities that characterize child welfare services and outcomes. The course emphasizes the need for multi-level and multi-system perspectives as necessary for working collaboratively and confidently with the many different individuals, organizations, and systems that intersect with child welfare. Prerequisite: Successful completion of SW 500 level coursework.

**SW 635. Gender and Sexual Diversity. 1.5 Credits.**
This course is designed to meet the needs of undergraduate-level social work students. The focus is on generalist social work practice pertaining to sexuality and gender with a primary focus on working with people with marginalized sexualities and genders (e.g., lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, pansexual, etc.). Utilizing a social justice and equity framework, students examine their own identities, experiences, and larger systems of oppression to engage in effective and ethical generalist practice with people who have marginalized sexualities and genders. As a mini-course, this class integrates history, policy, and practice and is centered within social work tenets, ethics, and values. Prerequisite: Successful completion of SW 500 level coursework.

**SW 636. Social Work Across and Among Borders: International SW and SW with Immigrant Populations. 1.5 Credits.**
Social work encompasses practice across and among geographic nation-state borders. This course’s purpose is twofold. First, it will provide students with a review of social work from a global context, including the topics of social and economic development, the capability approach based on the writing of Sen and Nussbaum, and the values of the International Federation of Social Work. Second, it will seek to understand the trends of immigration along with the unique experiences of people who migrate across borders to the US. Students will learn about social workers’ past and present opportunities to engage in social work globally and with immigrant populations, including examining the pitfall of “saviorism” and acting as agents of social control, as well as the possibility of supporting community and individual directed change, advocacy, and support. Prerequisite: Successful completion of SW 500 level coursework.

**SW 637. Criminal Justice System: Abolish or Reform. 1.5 Credits.**
The course will seek to understand historical and contemporary abolition movements. A major focus being on prison industrial complex abolition drawing on the writing of Mariame Kaba, Ruth Wilson Gilmore, and Angela Davis. Topics will include the history of policing, surveillance, and prisons in the United States, transformational justice, and restorative practices. Students will be invited to interrogate the framing of the criminal justice system, ask questions about future of abolition, and investigate
what abolition offers as a political organizing strategy. Prerequisite: Successful completion of SW 500 level coursework.

**SW 640. Grant Writing and Program Development. 1.5 Credits.**
This course will introduce undergraduate students to grant writing and program development for human service programs in private not-for-profit agencies. The course focuses on community-engaged techniques for developing programs and grant proposals that are responsive to the needs and strengths of communities. Students will learn the basics of identifying funding opportunities that are well-matched to their program and not-for-profit agency. The course also covers strategies for developing and writing funding proposals. Students will learn the key components of a proposal, including letter of inquiry, project abstracts, problem statements, program descriptions, evaluation, project timeline, dissemination plans, budget, and budget narrative. Beyond program development and grant writing techniques, students will examine how the social work values of social, economic, racial, and environmental justice can be integrated into programs and proposals. Prerequisite: Successful completion of SW 500 level coursework.

**SW 641. Dismantling White Supremacy. 1.5 Credits.**
This course examines the work of dismantling white supremacy, predicated on the professional social work value of social justice with the accompanying ethical principle "social workers will challenge injustice" to which all social workers should aspire. White supremacy, defined here as an ideology of white superiority and entitlement that is embedded in political, economic, and cultural systems across a broad array of institutions and social settings. The study of the systemic and institutional forms of white supremacy will be the major focus of the course. Topics will include the history of the concept of white supremacy, what it is and isn't, manifestations such as disproportionality and disparities in child welfare, incarceration, poverty, and other social work focused social problems. Additionally, students will examine the conceptualization of white supremacy at the organizational level and seek to identify the role social workers have in dismantling it within their multi-system practice. Prerequisite: Successful completion of SW 500 level coursework.

**SW 642. Financial Capability and Social Work Practice. 1.5 Credits.**
This course introduces BSW students to the field of financial capability in social work practice. Utilizing a social justice framework, it includes content about poverty, personal household finance, and financial access within the context of social work practice. Discussion focusses on economic and financial concepts as related to individuals and families across the life cycle, and communities, particularly vulnerable and oppressed populations and communities experiencing poverty and near-poverty. Research, practice, social policy, and policy change efforts related to these areas are also examined. Prerequisite: Successful completion of SW 500 level coursework.

**SW 643. Gender-based Violence: What It Is and What Social Workers Can Do To Prevent and Respond To It. 1.5 Credits.**
Gender-based violence (GBV), which includes domestic and sexual violence, human trafficking, and child marriage, is recognized by the United Nations and the World Health Organization as a global social and health problem with pervasive costs. Using an intersectional approach, this mini-course will provide an overview of the significance and impact of GBV as relevant to social work professional code to address social injustice. Additional topics will include the eco-sociological framework applied to GBV prevention, the relationship between GBV and gender and social norms, protective and risk factors based on the Center for Disease Control and Prevention, efforts to engage men in prevention, trauma informed responses to survivors, and the role of policy. Students will also gain clarity about the conceptual and practical implications of the difference between prevention of and response to GBV, and the different ways social workers can engage in change work. Prerequisite: Successful completion of SW 500 level coursework.

**SW 690. Professional Education Topics in Social Welfare: _____ 0.5-3 Credits.**
Current topics supplementing general social work knowledge of professionals in the field. Subjects offered as topics include: Addictions and Professional Enabling, Dynamics of Change, Computer Skills for Social Services Budgeting, Short Term Social Work Interaction.

**SW 700. Field Education Seminar. 1 Credit.**
Field Education Seminar is a bi-weekly, two-semester course designed to bridge social work scholarship and the field education experience by engaging in discussion and critical examination of theory, practice, and practicum. Students explore the role of field practicum in their learning and how to maximize the experience through group processing facilitated by the Seminar Instructor/Field Liaison. Concurrent enrollment with SW 701 is required.

**SW 701. Basic Field Practicum. 6 Credits.**
Students complete 416 clock hours of practicum during the fall and spring semesters. Practicum placements require 16 hours of field education per week for 26 continuous weeks in one setting. The practicum is a generalist experience covering direct practice and community practice as well as research and policy practice. Typical agency settings for generalist students include community mental health centers, child welfare offices, long-term care facilities, and juvenile justice and/or corrections. Students take this course for two semesters (fall-spring), with credit given only after completion of the second semester. Open only to generalist level MSW students. Concurrent enrollment is required in SW 700 and encouraged in SW 710 and SW 711.

**SW 708. Human Rights and Social, Economic, and Environmental Justice. 3 Credits.**
This generalist course lays a human rights foundation for graduate social work education, elevating the pursuit of social, racial, economic, environmental, and ecological justice as core dimensions of social work practice. The course familiarizes students with a global human rights framework and related critical, systems, empowerment, and strengths perspectives, exposes them to current human rights challenges, and engages them in countering these challenges. This course helps students critically examine the state of human rights across a range of diverse and intersectional populations and issues in the United States and expands their lens to consider social work as a global enterprise where lessons are to be learned and contributions made in transnational contexts. This course is offered to students in their first semester of the generalist MSW curriculum.

**SW 710. Multi-Level Engagement and Assessment: Individuals, Families, Groups, Organizations and Communities. 3 Credits.**
This course is the first in a two-course sequence that prepares students for generalist social work with individuals, families, groups, organizations, and communities. Focusing on the beginning phases of the helping process, students will develop knowledge and skills to build rapport with individuals and families, understand group dynamics, build basic group facilitation skills, navigate and influence organizational cultures, and assess the strengths and needs of communities. In addition, students will learn how generalist skills can help to address population needs across levels of practice. This course will ask students to apply evidence- and theory-driven approaches for engagement and assessment, and students will critically consider how to support goal development, intervention planning, and collaborative assessment in diverse contexts. Students are required to take both courses in this sequence (SW 710 and SW 711) with the same instructor. When not possible, students must contact their
SW 711. Multi-Level Intervention & Evaluation of Intervention: Individuals, Families, Groups, Organizations. 3 Credits.

In the second course of the generalist social work sequence, students will gain competencies for the middle and ending phases of the helping process. They will build skills to intervene and critically evaluate interventions to improve outcomes with individuals, families, groups, organizations, and communities. Students will also examine cross-system and cross-level intervention strategies and the knowledge and skills needed to work effectively across practice domains. In addition to exposure to a range of generalist social work intervention approaches, students develop competencies for client- and community-centered evaluation and termination, empowering group interventions, organizational transformation, and facilitation of community change. Students are required to take SW 710 before SW 711 with the same instructor. If this is not possible, students must contact their academic advisor for guidance. Concurrent enrollment in SW 701 (Field Practicum) is encouraged.

SW 712. Social Work Advanced Standing Seminar. 3 Credits.

This course is designed to prepare advanced standing students for successful entry into the specialization year of the MSW program. The seminar provides the link between students' undergraduate degree from an accredited BSW program and the MSW specialization curricula in clinical or macro social work. Based on the School's mission, vision, and guiding principles, the Advanced Standing Seminar takes a practice-centered approach to preparing students for advanced graduate study in social work. The primary emphasis during this summer seminar is to advance and deepen students' understanding of the School's approach to generalist social work and to review the most salient concepts covered in the generalist curricula of the MSW program. This allows students to learn a common language and understanding of generalist social work thereby supporting their transition into the advanced level specializations. Students are provided with intensive classroom experiences (readings, discussions, exercises, assignments, and other learning activities) to help them adjust to the rigor of graduate education. They also have opportunities to develop working relationships with a cadre of student colleagues who will support their academic growth as they transition into their advanced level studies. Open only to students admitted to the MSW Advanced Standing Plan of Study.

SW 720. Social Policy Analysis and Advocacy in Social Work. 3 Credits.

This generalist course in policy analysis and advocacy provides students with essential social policy knowledge and helps them develop policy practice skills. The course examines existing social policies through the lens of social work values, particularly the profession's commitment to social, racial, economic, and environmental justice. The course focuses on understanding how social welfare policy design, funding, and implementation affect people's lives and influence the delivery of social work services. Through critical examination of policies in the major domains of social work practice (physical and mental health, children and families, aging, housing, economic security) students prepare for policy-informed practice and for effective engagement in policy change strategies. Social welfare policy and program analysis skills are central in our work to value diversity, engage in multi-systemic change, end oppression and discrimination, and promote social, racial, economic, and environmental justice. This course also provides a knowledge foundation for understanding how the different identities held by clients and community members interact to shape experiences with social policies and the outcomes they produce. The advocacy dimensions of the course will help students develop competencies that prepare them for advanced specialization courses and practice in clinical and/or macro social work.

SW 740. Applied Research in Multi-Level Social Work. 3 Credits.

This generalist research course introduces MSW students to fundamental concepts in social work research to support empirically-informed practice. In keeping with the mission of the School, this course emphasizes research knowledge and skills necessary for effective social work practice that advances personal and collective strengths and resources, honors human diversity, promotes empowerment and justice, and reflects critical and creative thinking. By translating and applying evidence, we continually transform practice and policy across multiple systems.

This course contributes to the overall generalist preparation of the student for advanced professional practice by providing skills necessary for critical thinking and continual improvement of practice and policy approaches. This course also focuses on strengthening students' capacity for evaluating practice-informed research and research-informed practice. Understanding how knowledge is generated, what standards apply, and how translation occurs is critical to professional practice. Thus, students come to appreciate not only the accumulation of and integration of knowledge for use in practice, but also the need to critically examine what they are being taught and the gaps that exist in the current knowledge base and demand future knowledge development.

SW 755. Diversity, Equity and Inclusion in Social Work. 3 Credits.

This course provides students with a foundational knowledge of diversity, equity, and inclusion within multi-level social work. Students will examine theoretical, conceptual, and policy-based knowledge of systems of oppression, both historical and contemporary, and the ways in which power and privilege are embedded in them. Through ongoing and critical self-reflection, students will examine their own social identities (e.g., race/ethnicity, gender, sexual identity, age, social class, ability status, religion, national origin, etc.), as well as their beliefs, values, and ethics through a justice and equity framework. Critical self-reflection is an essential skill to develop for ethical and effective social work. This course will help prepare social work students to: (1) understand and resist systemic and interpersonal dynamics leading to oppression and (2) advocate for justice within myriad contexts and across a range of institutions and policies that contextualize social work in the contemporary US. In keeping with social work values, this course takes an explicitly anti-racist, anti-sexist, anti-colonialist, and anti-oppressive stance. Prerequisite: Student must be admitted to MSW Program.

SW 760. Studies: _____ 1-3 Credits.

This course provides the opportunity for experimentation with innovative course content in accordance with guidelines established by faculty.

SW 801. Advanced Field Practicum-Clinical Practice. 7 Credits.

Students are assigned to social service agencies that provide opportunities for advanced level clinical social work practice. All students work under the supervision of a qualified field instructor where they have the opportunity to integrate theory and practice and develop beginning competence in clinical social work practice. This course is generally taken for two semesters, with credit being given only after completion of the second semester. Open only to Advanced-level M.S.W. students. Enrollment must be concurrent with SW 810 and SW 811. Prerequisite: Completion of all foundation requirements.

SW 803. Advanced Field Practicum-Clinical Practice. 2-6 Credits.

Students are assigned to social service agencies that provide opportunities for advanced level clinical social work practice. All students work under the supervision of a qualified field instructor where they have the opportunity to integrate theory and practice and develop beginning competence in clinical social work practice. This course is generally
taken for three semesters, with credit being given only after completion of the third semester. Open only to Advanced-level M.S.W. students with an approved modified practicum plan. Enrollment must be concurrent with SW 810 or SW 811. Prerequisite: Completion of all foundation requirements.

**SW 804. Advanced Field Practicum-Macro Practice. 7 Credits.**

Students are assigned to social service agencies that provide practice opportunities in community practice, advocacy and/or social work administration. All students work under the supervision of a qualified field instructor where they have the opportunity to develop beginning competence in macro social work practice. This course is generally taken for two semesters, with credit being given only after completion of the second semester. Open only to Advanced-level M.S.W. students. Prerequisite: Completion of all foundation requirements.

**SW 805. Advanced Field Practicum-Macro Practice. 2-6 Credits.**

Students are assigned to social service agencies that provide practice opportunities in community practice, advocacy and/or social work administration. All students work under the supervision of a qualified field instructor where they have the opportunity to develop beginning competence in macro social work practice. This course is generally taken for three semesters, with credit being given only after completion of the third semester. Open only to Advanced-level M.S.W. students with an approved modified practicum plan. Prerequisite: Completion of all foundation requirements.

**SW 810. Clinical Practice Strategies I. 3 Credits.**

This course is the first of a two-part advanced clinical reasoning and application sequence focusing on the use of effective helping methods in clinical social work. SW 810 provides students with in-depth, integrative training in conducting and applying comprehensive biopsychosocial assessments to inform intervention selection while incorporating understanding of client readiness and the multi-dimensional impacts of social, systemic, and cultural diversity influences on client experiences. Students will learn how overarching frameworks and theoretical perspectives and principles inform and influence engagement, assessment, and practice approaches, thus strengthening their foundation for clinical reasoning. This advanced methods course will assist in the preparation of students for advanced practice by offering in-depth training in the selection and application of three (3) specific interventions for use in treatment settings: motivational interviewing, contingency management, and trauma-focused cognitive behavioral therapy. Students will be expected to engage in self-reflection and peer interaction to develop awareness of clinical processes and decision making at various points in the clinical relationship. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 811. Clinical Practice Strategies II. 3 Credits.**

This course is the second of a two-part advanced clinical reasoning and application sequence focusing on the use of effective helping methods in clinical social work. SW 811 extends the curricula by providing students with in-depth, integrative training in specific, emerging clinical strategies, including transdiagnostic approaches to clinical interventions. Students will learn how overarching frameworks and theoretical perspectives and principles inform and influence engagement, assessment, and practice approaches, thus strengthening their foundation for clinical reasoning. Students will be expected to engage in self-reflection and peer interaction to develop awareness of clinical processes and decision making at various points in the clinical relationship. Students are required to take SW 810 before SW 811. If this is not possible, students should contact their academic advisors for guidance. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 833. Interdisciplinary Aging Practice. 3 Credits.**

Interdisciplinary Aging Practice is designed to meet the needs of social work students and those from related disciplines such as psychology, sociology, speech and hearing, nursing, medicine, and public health who have an interest in practice and research with older adults. The course is informed by a social justice-oriented perspective and seeks to foster integrated critical thinking across aging- and life course-related theory, practice, policy, and research with an emphasis on issues of diversity and equity. As interdisciplinary collaboration is necessary to gerontological practice and scholarship, this course applies a cross-discipline learning model to foster in students a critical awareness of their own disciplinary identities and contributions. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 834. Social Work in Schools. 3 Credits.**

An in-depth examination of social work in school settings. Students demonstrate the capacity to integrate research, policy, direct practice, and human behavior in considering the issues central to this area of practice. Students will also be able to explain how diversity issues manifest themselves at both the policy and direct practice levels. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 840. Multi-System Community-Engaged Program Design. 3 Credits.**

In this macro specialization course, advanced social work students learn to design social justice, human service and community development programs and write grant proposals to fund those programs. Topics include program design, grant writing, fundraising, and public/private sector resource development for programs to advance social, racial, economic, and environmental justice; meet basic human and social service needs and enhance community well-being. Students will learn how to design programs from a multi-system perspective for individuals, families, groups, organizations, and communities. In addition, advanced social work students will develop skills in engaging communities to guide program design. Prerequisite: Completion of social welfare generalist level requirements.

**SW 841. Advanced Policy Analysis. 3 Credits.**

This advanced course in the macro specialist curriculum builds on students' generalist social policy knowledge, as well as their understanding of policy practice as a key dimension of social workers' professional responsibility. Designed to meet the specific needs and goals of students whose career aspirations center macro approaches to catalyzing social change, this course equips students for leadership in policy intervention-as administrators, substantive policy experts, and/ or advocates. Through advanced readings, applied policy analyses, class discussions, and critical reflections, this course provides policy analysis frameworks and sophisticated examination of policymaking and policy evaluation in different institutional domains: legislative, agency, regulatory, budgetary, and judicial. Students apply their knowledge and analytical skills to policies and policy debates and complete written and oral assignments to demonstrate their critical thinking, effective communication skills, and advanced policy knowledge. Students will complete this course prepared to examine the policy levers through which to address identified problems, compare alternative proposals for policy reform, and reframe issues from a lens that elevates social work values of social, economic, racial, and environmental justice. Prerequisite: Completion of all social welfare generalist requirements.

**SW 842. Agency-Based Evaluation. 3 Credits.**

How do social work administrators know if their agencies and organizations are making a positive difference in the lives of clients and communities? This course focuses student learning on how to
gather and use information to improve social service agencies, social justice organizations and, by extension, client and community outcomes. Using an agency-based perspective, students learn how to do holistic evaluations to improve well-being at all levels of social work. Prerequisite: Completion of all social welfare generalist requirements.

**SW 843. Supervision and Mentoring. 1.5 Credits.**
Social workers who help direct human service, social justice, and community practice agencies and organizations must be able to stay abreast of new knowledge and build new skills in supervising and managing people. This course focuses on the tasks, roles, and functions of managers including effective employee supervision and human resource management, as well as the development and retention of a diverse workforce. Evidence-based mentoring practices will be covered in this course, and the mentoring content woven throughout the semester through readings, class discussions, exercises, and assignments. Prerequisite: Completion of all social welfare generalist requirements.

**SW 846. Advanced Justice-Centered Community and Advocacy Practice. 3 Credits.**
This course is designed to build on the content of generalist practice courses and on students’ advanced policy analysis and critical thinking. Through examination and application of theories of community and policy change, design of macro interventions, and ethical demonstration of advanced advocacy and community transformation skills, students will equip themselves for advanced macro practice in the domains of policy advocacy, community organizing, coalition-building, and strategic social administration. The course helps students build the advanced analytical, empirical, and relational competencies needed to effectively advocate with different human service constituencies and to envision and pursue community transformation for social, racial, economic, and environmental justice. Specific competencies assessed include power analyses, effective multi-channel communication, grassroots engagement, collaboration with diverse constituencies, multi-level system reform, and harnessing organizational resources for social transformation. Prerequisite: Completion of all social welfare generalist requirements.

**SW 849. Program Management. 1.5 Credits.**
Social workers who help direct human service, social justice, and community practice agencies and organizations must be able to stay abreast of new knowledge and build new skills in managing programs. This course focuses on necessary functions, roles, and tasks for effective program management. The use of data to guide decision-making in programs, agencies, and organizations is emphasized. The course builds student skills in tracking timely resource development, budgeting, overseeing up-to-date measures of financial health as well as over-time financial trends, and analyzing budget variances by program area. These areas of program management are contextualized for specific programs and communities, and students learn how local, state, and federal policies provide either enabling or constraining resources. Prerequisite: Completion of all social welfare generalist requirements.

**SW 855. Study Abroad Topics: _____. 3 Credits.**
This course provides the opportunity for Study Abroad in developed and developing countries such as Costa Rica, India, Ireland, Italy and South Korea.

**SW 860. Loss and Grief Across the Life Course. 3 Credits.**
This course examines the wide scope of loss and grief processes that occur over the life span and includes impactful but infrequently discussed losses such as trauma losses, abuse and neglect, as well as losses of social roles, identities, and relationships. We cover major life transitions and more commonly identified losses such as those that occur with divorce or death. The course frames grief and loss in terms of various theoretical, definitional, and process-oriented understandings. We will identify unique experiences of loss and grief at specific life stages. Students will learn varied cultural interpretations of loss, issues of differential diagnosis, and interventions relevant to each stage of life. This course addresses the importance of resiliency and “meaning making” for clients and community members, as well as the role of self-care among service providers attending to grief processes. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 861. Global Gender-Based Violence Prevention and Intervention. 3 Credits.**
This interdisciplinary course examines efforts to stop gender violence around the world, with an emphasis on comparing African and US contexts. It will address topics such as domestic violence, human trafficking, sex workers’ rights, rape and consent, war-time violence, and sexual health. We explore how culture shapes gendered patterns of violence and resistance against violence. Students will learn how to use postcolonial theory to interrogate traditions of Western feminism that blames cultural practices for forms of violence found around the world. We will examine alternative transnational movements grounded in legal, medical, and social movements, including human rights, public health, and anti-carceral feminist activism. Readings will combine critical on-the-ground accounts with current social work best-practices for prevention and intervention, including clinical approaches. Assignments will include projects integrating these perspectives into concrete, cultural-sensitive, and intersectional solutions for some of the most pressing problems facing women and girls throughout the world today. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 863. Mental Health and Psychopathology. 3 Credits.**
This course emphasizes mental health diagnoses commonly encountered in social work practice. The relationship between social work assessment and the diagnostic process will be covered in detail. Information will be presented from the perspective of social work as a professional discipline, emphasizing the continuing and complex interactions between the person and environment (biological, psychological, social, spiritual, and ecological) and multiple influences on mental health, including the incorporation of social justice and critical perspectives. The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) is used as an organizing framework for this course; however, alternative taxonomies, as well the adequacy and appropriateness of the DSM-5 in social work practice will be addressed throughout the course. Influential considerations such as social work's ethical directives, the impact of poverty, race, class, heteronomativity, stress, social support, and forms of bias will be highlighted in the course. Full time clinical specialization students should take this course no later than fall of their specialized year. Part-time clinical specialization students are encouraged to consult with their academic advisors for enrollment guidance. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 866. Children’s Mental Health. 3 Credits.**
This course focuses on enhancing clinical knowledge and skills for social work related to children’s mental health. The course will provide an overview of prevalence, definitions, and policies that frame the issue of children’s mental health and will explore how child development, trauma, and other social and environmental contexts can impact mental health concerns and treatment for children and adolescents. The course will also cover assessment, common mental health diagnoses for children, and evidence informed services and treatment. Recognizing the role of family and multiple systems in children’s lives, the course will emphasize the continuing and complex interactions between the person and environment and the resulting multiple influences on mental health, including the
incorporation of social justice and critical perspectives. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 868. Assessment and Treating Suicide and Self-Harm. 3 Credits.**

This course helps students develop engagement, assessment, intervention, and evaluation skills for responding to suicide and self-harm across the life course. We will examine the etiology, function, and presentation of self-injurious thoughts and behaviors, with particular emphasis on the development of these behaviors in childhood and adolescence and their progression into adulthood. Students will learn techniques for assessing and treating suicide and self-harm, including employing functional and transdiagnostic assessment methods, and utilizing empirically supported transdiagnostic treatment approaches with an emphasis on cognitive-behavioral interventions. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 869. Assessing and Treating Substance Misuse. 3 Credits.**

Alcohol and other drug (AOD) related problems are endemic throughout the global population, and social workers encounter them in a wide variety of contexts and human service settings. Substance use disorders (SUDs) are a clinical and service system challenge requiring knowledge, skill, creativity, and coordination with multi-disciplinary professionals across the treatment continuum. This course enhances professional social work readiness by providing targeted information regarding a wide range of substances, as well as their differential impact on individuals (behavioral, psychological, physical, social, and spiritual) and communities (social, racial, economic, political, and cultural). Based on a fundamental understanding of addiction theories and etiology as well as personalized approaches to recovery, this course explores specific treatment strategies. SUDs most commonly co-occur with health and mental health problems, so knowledge of such problems is vital and covered in this course. This holistic approach informs many other core content areas in the course allowing an analysis of a broad range of biopsychosocial issues. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 871. Indigenous Families. 3 Credits.**

This course is designed to prepare graduate students with clinical social work skills within the context of diverse views and experiences of Indigenous people in the United States. Students completing this course will be able to apply a variety of social work frameworks of knowledge, policies, and practice methodologies needed to serve Indigenous individuals, families, and communities. Topics will address Indigenous lifeways prior to contact, historical and cultural forces, such as policies that have impacted the everyday living of Indigenous people. Students will learn evidence-based forms of helping as well as Indigenous ways of helping. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 873. Sexuality and Gender Diversity. 3 Credits.**

This course is designed to meet the needs of graduate social work students, as well as those from related disciplines such as psychology; applied behavioral science; women, gender, public health, and sexuality studies. The focus is on enhancing clinical skills (e.g., diagnostic assessment; individual, group, and family therapy approaches) for practice pertaining to sexuality and gender with a primary focus on working with people with marginalized sexualities and genders (e.g., lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, pansexual, etc.). Utilizing a social justice and equity framework, students examine their own identities, experiences, and larger systems of oppression to engage in effective and ethical practice with people who have marginalized sexualities and genders. The course integrates history, theory, research, policy, and practice and is centered within social work tenets, ethics, and values while also creating space for students to engage across multiple disciplines and enhance transdisciplinary practice skills. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 874. Social Work with Womxn and Femmes. 3 Credits.**

This course expands knowledge and skills in working with womxn and femmes across multi-level social work practice settings. This course is delivered through an intentional intersectional lens, which will provide historical and conceptual critiques of dominant and mainstream feminist approaches, while informing students of other possible frameworks toward practice with womxn and femmes, including critical, liberal, and womxn and femme of Color lenses. Will include examination of practice approaches to problems that womxn and femmes frequently experience. Prerequisite: Admission to MSW Advanced Standing plan of study or completion of social welfare generalist courses.

**SW 875. Readings and Investigations: . 1-3 Credits.**

Opportunity for scholarly investigation in an area of special interest. Students pursue independent study in an area of social work practice through the guidance of a selected faculty member.

**SW 878. Social Work with African American Families. 3 Credits.**

The purpose of this course is to introduce students to the basic knowledge, values, and skills needed to work effectively with African American clients and their families. Critical examination of issues such as racism, oppression, and the historical context and their impact on African American families. Prerequisite: Completion of all foundation requirements.

**SW 885. Professional Development Seminar. 3 Credits.**

This capstone course provides a transitional space to help both clinical and macro specialization students reflect upon their learning throughout their MSW experience and build professional skills that prepare them to begin their post-graduate social work careers. Students will clarify and solidify their professional identities as MSW-level social workers, helping them practice and commit to life-long learning strategies that support intentional professional growth and development. Students will incorporate diverse skills and perspectives with attention to navigating complex multi-level systems, engaging ethical ambiguity, and critically analyzing implications for theory, research, policy, and practice. This course makes an explicit ethical commitment to support the pursuit of socially just, anti-oppressive, and empowering multi-level practice through professional development. Students take this course in their final semester of the MSW program. Prerequisite: Admission to MSW AdvancedStanding plan of study or completion of social welfare generalist courses.

**SW 890. Current Issues in Professional Social Work Education: . 0.5-3 Credits.**

Course provides opportunity for innovative course content designed for the social work professional. Subjects offered include: Psychopathology: A Biopsychosocial Approach, Ethics and the Social Worker, Mediation, Solution Focused Practice, Strengths-based Management, Outcome-based Measurement of Practice.

**SW 911. PhD Seminar I. 1 Credits.**

Students will discuss critical issues related to both substantive and professional issues related to doctoral education, the education of social workers, research and methodological procedures and practices, transitioning from student to academic scholar, and social work ethics in all realms of scholarship. Graded on a satisfactory/unsatisfactory basis.
Prerequisite: Student must be admitted to the School of Social Welfare PhD program.

SW 912. PhD Seminar II. 1 Credits.
Building on the first year of the doctoral program and SW 911 - PhD Seminar I, students will continue to discuss critical issues related to both substantive and professional issues related to doctoral education, the education of social workers, research and methodological procedures and practices, transitioning from student to academic scholar, and social work ethics in all realms of scholarship. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Student must be admitted to the School of Social Welfare PhD program. Successful completion of SW 911.

SW 955. Study Abroad Topics: _____ 3 Credits.
This course provides the opportunity for Study Abroad in developed and developing countries such as Costa Rica, India, Ireland, Italy, and South Korea.

SW 970. Community Based Participatory Research for Social Justice. 3 Credits.
This course explores the use of community-based participatory research (CBPR), and similar approaches such as youth participatory action research, within social justice-oriented research. Students will examine key theories, principles, and strategies of CBPR; explore advantages and limitations to CBPR and related approaches; and develop skills necessary for implementing and effectively carrying out CBPR projects. Additionally, students will incorporate the knowledge and skills pertaining to CBPR within a social justice-oriented research area of their choosing. The course format reflects the principles and values inherent in CBPR by engaging in an iterative process of co-teaching and co-learning, critical self-reflection and group discussion, and anti-racist and anti-oppressive pedagogy.

SW 975. Racial Equity and Social Justice in Research and Practice. 3 Credits.
This course explores racial equity and social, economic, and environmental justice as it relates to research and implementation science. These two major components are explored and integrated throughout the semester. First, through a historical equity lens, students identify the ways in which research has contributed toward oppression and marginalization. They situate their own research in an anti-oppressive framework and critical lens to understand and identify research methods that promote equity and justice both in the research process and potential impacts. Second, students develop an understanding and application of implementation science principles and frameworks. Students gain knowledge and skills for identifying and using implementation science strategies that support the translation of research into real-world practice. Implementation is examined from an equity lens to consider how implementation processes can promote racial equity and social, economic, and environmental justice.

SW 976. Practice and Politics of Writing. 3 Credits.
This course is designed for students who are in the second year of the full-time PhD program and who are preparing to write the Qualifying Paper and begin developing the dissertation proposal in the following academic year. Students will explore key aspects of developing one’s own writing practice, develop and refine strategies and organizational tools for conducting literature reviews, and generate ideas for research proposals, including the dissertation proposal. Students will discuss and critically examine the politics of writing within and beyond the academy. Conversations will focus on the tension between learning how to write for success in academia while interrogating the privileging of scientific writing and peer-reviewed publications. Towards advancing the goals of racial equity and social justice, students will explore anti-oppressive and community-based dissemination strategies and gain knowledge and skills for dissemination in multiple settings, a variety of formats, and creative approaches. Each student will explore the course content around their own area of scholarly interest and develop a writing product that fits their current writing objectives. The course will provide a supportive space for writing and receiving feedback on writing, emphasizing the development of collegial relationships as sources of writing support while developing peer review skills. Prerequisite: Student must be in the second year of the full-time PhD program.

SW 976. Research Design and Methods. 3 Credits.
This class is an in-depth introduction to the process of conducting research. This introduction provides the essential context for the qualitative, quantitative, and mixed methods research courses.

SW 979. Methods of Qualitative Inquiry I. 3 Credits.
This course is the first in a sequence of two courses on qualitative inquiry required for students in the social work Ph.D. program. It provides a detailed overview of knowledge and skills for designing qualitative inquiry. It examines issues in the philosophy of science, paradigms for qualitative inquiry in social work, and a diverse range of methods that flow from these paradigms. It emphasizes principles and procedures for qualitative inquiry design, including an introduction to data collection, analysis, and criteria for establishing methodological rigor (i.e., trustworthiness).

SW 980. History and Philosophy of Social Work. 3 Credits.
This course is designed to provide students with opportunities to examine the underlying conceptual frameworks of social work practice—its history and present manifestations. This course rests on the definition of social work practice that includes the interaction of knowledge, value, and skill around professional purpose and in the context of professional sanction.

SW 981. Advanced Quantitative Research Methods I. 3 Credits.
This course, which includes a lab, focuses on quantitative research methodology and related inferential statistics, emphasizing mastery of specific methodological and statistical knowledge and skills. The course will address the following topics: the framing of research questions; the selection of appropriate research methods and designs; the selection of appropriate statistics for data analysis; the principles of analysis; interpretation of findings; and the presentation of results.

SW 982. Social Welfare Policy. 3 Credits.
This seminar helps doctoral students learn to analyze social welfare policies and programs. After comparing and contrasting various policy analysis frameworks, students learn to analyze the ways in which social conditions, values, and ideologies shape the definitions of social problems as well as the development, implementation, and evaluation of social welfare policies that impact those problems.

SW 983. Advanced Quantitative Research Methods II. 3 Credits.
The purpose of this advanced research methods course is to help equip professionals to design and carry out research with direct implications for social work practice and social welfare policy. Building on the experience in SW 978 and SW 981, this course will focus on more advanced topics in research design and both experimental and correlational statistical analyses.

SW 984. Social Work Practice: Identifying and Improving "Best Practices. 3 Credits.
The main focus of this seminar is on developing skills for conduction multi-dimensional, value critical inquiry about "best practices" relevant to social work practice, and applying the results of that inquiry toward extending and improving current "best practices".

SW 985. Theory for Social Work Research. 3 Credits.
This course provides an introduction to interdisciplinary theory for applied social research, focusing on: (1) the roles and uses of theory in social inquiry (2) theory building and theory testing (3) induction and deduction
(4) the articulation of common or related theoretical traditions in various social science disciplines.

SW 987. Teaching Social Work: Philosophy and Methods. 3 Credits.
The purpose of the course is to prepare doctoral students for effective teaching of Social Work courses at all levels of higher education. Doctoral students need practical skills, a theoretical base, experience, and confidence in order to improve their teaching performance.

SW 988. Mixed Methods in Social Science Research. 3 Credits.
The purpose of this course is to provide an overview of mixed methods research, consisting of the history and philosophy of mixed methods research, the emerging literature on it, purposes and characteristics of mixed methods research, types of research problems addressed, the specification of mixed methods purpose statements and research questions, types of major mixed methods designs, data collection and analysis strategies, and reporting and evaluating results.

SW 989. Methods of Qualitative Inquiry II. 3 Credits.
This course is the second in a sequence of two courses on qualitative inquiry required for students in the social work Ph.D. program. It provides in-depth methodological knowledge and skills for implementing qualitative inquiry and writing research reports. It examines implementation issues related to a diverse range of methods that flow from the paradigms addressed in SW 979. It provides guidance for implementation of research designs for projects developed in SW 979, including application of methods for data collection, analysis, supporting criteria for methodological rigor (i.e. trustworthiness), and writing up findings and implications. Prerequisite: SW 979.

SW 990. Graduate Research. 1-9 Credits.
Individual research preparatory to defense of dissertation prospectus. (By arrangement with doctoral chair.) Graded on a satisfactory progress/limited progress/no progress basis.

SW 998. Doctoral Applied Research and Education Studies. 1 Credit.
This course provides the opportunity for doctoral students to learn about research or teaching through direct application of research or teaching skills under the mentorship of faculty.

SW 999. Dissertation. 1-12 Credits.
Graded on a satisfactory progress/limited progress/no progress basis.

Courses

SWWD 101. Home Visiting I. 1 Credit.
This course provides the foundational knowledge for Family Support professionals on home visiting and developing relationships with families that are informed by the multiple, intersectional issues that families face. Topics will include: Prenatal Basics, Child Development, and Child Abuse and Neglect. Prerequisite: Must be admitted as undergraduate Social Welfare non-degree seeking (SOCWN) students.

SWWD 102. Home Visiting II. 1 Credit.
Building on foundational skills, this course will provide extended knowledge in the areas of Breastfeeding, risks of substance use, and confidentiality. Family Support Professionals will gain the knowledge necessary to support families beyond basic needs to essential life skills. Prerequisite: Must be admitted as undergraduate Social Welfare non-degree seeking (SOCWN) students.

SWWD 110. Supervision for Family Support Professionals. 1 Credit.
This course focuses on skills for supporting Family Support Professionals in the practice of early intervention services. Supervisors will gain knowledge in the areas of cultural diversity, ethics, and professional development. Prerequisite: Must be admitted as undergraduate Social Welfare non-degree seeking (SOCWN) students.

Bachelor of Social Work

Bachelor of Social Work Program

The School of Social Welfare provides the education and experience necessary for a career in social work. By helping shape students' capacity for anti-racist, anti-oppressive, and socially-just practice, the School prepares social workers to carry out the unique purposes of the profession — to develop human potential, to promote individual well-being, and to bring about a more just society.

Social work is a major professional discipline in the Social Sciences. The term social welfare denotes organized public or private social services pertaining to human needs: adequate nutrition and safe housing, health and mental health, education, economic security, social participation, dignity, and civil and political rights for disadvantaged people.

The undergraduate program prepares graduates for generalist social work practice. The program defines generalist practice as maintaining focus on practice and advocacy, based on ethical principles, scientific inquiry, and best practices at the interface between systems (i.e., individual, family, groups, organizations, and communities), with particular emphasis on:

- The strengths inherent in these systems.
- The need to understand the role of gender, age, race/ethnicity, class, religious beliefs, sexual orientation, disability, and culture in all phases of the social work process.
- The promotion of human rights and social, economic, and environmental justice for those disenfranchised on the basis of the attributes listed above.
- The assumption of a critical perspective regarding different ways of knowing.

Beginning generalist practice uses multilevel prevention and interventions methods, depending on the needs of the client system, and incorporates a knowledge, value, and skill base that is transferable between and among diverse contexts and locations.

The BSW program is offered on the Lawrence and Edwards campuses.

Advising

Once a student is admitted to the School of Social Welfare, an academic adviser will be assigned to assist students in the enrollment process and with other academic program requirements. Students consult with their academic adviser before enrollment each semester and have their advising hold removed. In addition, a member of the School's faculty is assigned as a professional/career adviser. Current students can view their advisers on Jayhawk GPS.

For more information on BSW advising, review the student handbook (https://socwel.ku.edu/current-students/) (http://socwel.ku.edu/resources/forstudents/academic-handbooks/).

Transfer Students

For undergraduates who plan to transfer to KU but currently attend another college, advising is available by appointment. The school works closely with counselors from all Kansas colleges.
Degree Progress Report
The Degree Progress Report (DPR) is a computerized advising and degree-audit system, used to assist students and advisers in tracking progress toward completion of general education degree and major requirements. Students should review their DPR each semester and be prepared to review and discuss information contained in the DPR at all advising appointments. The DPR can be accessed through the student’s account in the myKU portal (https://my.ku.edu/uPortal/f/welcome/normal/render.up) under the Advising tab. Although the DPR provides a list of courses taken and grades earned, it is not an official transcript and can be used only for internal advising.

Certificate Programs
Certificate in Child Welfare
The School of Social Welfare’s Certificate in Child Welfare (https://socwel.ku.edu/child-welfare-certificate/) provides seniors in the BSW program with specialized knowledge and skills to prepare them for a career in the field of child welfare. The certificate offers specialized training in social work practice with children and families who are involved with the child welfare system and provides a child welfare practicum as part of the experience.

Undergraduate Experiential Learning Certificate Programs
The university offers several experiential learning certificate programs that work well with the undergraduate social work major. Students who complete an engaged learning certificate program receive a notation of it on their transcripts. Learn more about KU certificate programs (https://advising.ku.edu/special-programs-certificates/). (https://experience.ku.edu/)

Undergraduate Admission to KU
Students are directly admitted to the School of Social Welfare as new freshmen and transfer students. Visit the Office of Admissions (http://admissions.ku.edu/) for information about admission to KU. Visit the Office of International Support Services (http://www.iss.ku.edu/) for information about international admissions.

Current KU students changing from another major to Social Welfare should complete a Change of School form and must meet the advancement requirements

Undergraduate Advancement Review for the School of Social Welfare
Advancement Requirements
For students to advance into 500 and 600 level Social Welfare coursework, they must complete the BSW Advancement Review (https://socwel.ku.edu/bsw/apply/) prior to beginning 500 level classes. The Advancement Review includes the following:

- 54 hours of General Education requirements or elective hours including:
  - Math 101 (College Algebra) or LA&S 108 (Personal Numeracy)
  - English 101 (Composition)
  - English 102 (Critical Reading and Writing)
- Minimum cumulative GPA of 2.50.
- Earned grade of B or higher in SW 220.
- One reference form from a professor, work supervisor, volunteer supervisor or other professional colleague who are familiar with your work and/or know your potential as a social worker. Reference information will be emailed to the individual for completion.

If all of the above criteria are met, students are successfully advanced into 500 level coursework.

Note: Students must complete all general education requirements including electives prior to the start of 600 level course work and practicum.

Grade-Point Average
A student must maintain a minimum cumulative grade-point average of 2.5 and a 2.5 in social work required courses. Evaluation of transcripts submitted as part of the application for admission includes computation of grade-point average for all work completed. This admission grade-point average is adjusted to include only courses that transfer to KU. Both transferable credits and all work taken at KU count in the grade-point average when advancement requirements are reviewed.

Bachelor of Social Work Degree Requirements
Primary responsibility for meeting graduation requirements rests with the student.

- A minimum of 120 credit hours of course work, including 12 credit hours of field practicum and field preparation & seminar.
- 51 Social Welfare hours including SW 220.
- 37 hours of general education requirements.
- 32 hours of electives.
- A 2.5 minimum grade-point average for all classroom work.
- A 2.5 minimum grade-point average in required social work courses.
- Successful completion of field practicum.
- Recommendation by the faculty of the school to the chancellor and the Kansas Board of Regents that the degree be granted.

Curriculum

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 220</td>
<td>Intro to Social Work, Social Welfare and U.S. Society (Must earn a B or higher.)</td>
<td>3</td>
</tr>
<tr>
<td>SW 510</td>
<td>Introduction to Social Work Practice: Interviewing Skills</td>
<td>1.5</td>
</tr>
<tr>
<td>SW 512</td>
<td>Skills-Based Policy Advocacy</td>
<td>1.5</td>
</tr>
<tr>
<td>SW 530</td>
<td>Introduction to Theory for Multi-level Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SW 534</td>
<td>Introduction to Social Policy and Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>SW 540</td>
<td>Introduction to Social Work Research</td>
<td>3</td>
</tr>
<tr>
<td>SW 555</td>
<td>Diversity, Equity and Inclusion in Social Work Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Topics - 500 Level Mini Courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 570</td>
<td>Centering on Decolonization in Social Work</td>
</tr>
<tr>
<td>SW 571</td>
<td>Responding to Suicide and Self-Harm</td>
</tr>
<tr>
<td>SW 572</td>
<td>Substance Use</td>
</tr>
<tr>
<td>SW 573</td>
<td>Intergenerational and Historical Trauma</td>
</tr>
</tbody>
</table>
Field Practicum (SW 600 & SW 601)

The field education office works with community agencies to provide field practicum opportunities for students. Students are placed in these agencies through a collaborative process among the field education office, the student, and the agency. The field education office is responsible for ensuring that all field placements are able to provide the appropriate learning opportunities for students and that qualified field instructors will be available to the student.

Learn more about field education (https://socwel.ku.edu/field-education/).

Required Hours for Field Practicum

Students with 9 or more remaining elective or general education requirement credit hours in the fall of the senior year may be required to complete these hours before beginning field placement. Students who are completing these hours may take SW 622 and the mini-courses, but they cannot enroll in SW 610, SW 612, or SW 623.

Liberal Arts Requirements for a broad base of understanding

Learn more about the BSW curriculum (https://socwel.ku.edu/bsw-curriculum/) and liberal arts prerequisites.

Requirements for the Major in Social Work

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 220</td>
<td>Intro to Social Work, Social Welfare and U.S. Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must complete SW 220 before entering 500 level classes and must earn a grade of B or higher.

Junior

<table>
<thead>
<tr>
<th>Code</th>
<th>Fall Hours</th>
<th>Spring Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 530</td>
<td>3</td>
<td>SW 510</td>
</tr>
<tr>
<td>SW 540</td>
<td>3</td>
<td>SW 512</td>
</tr>
<tr>
<td>SW 555</td>
<td>3</td>
<td>SW 534</td>
</tr>
</tbody>
</table>
Undergraduate Certificate in Child Welfare

Certificate Description

The KU School of Social Welfare’s Certificate in Child Welfare provides seniors in the B.S.W. Program with specialized knowledge and skills to prepare them for a career in the field of child welfare. The Certificate in Child Welfare offers specialized training in social work practice with children and families who are involved with the child welfare system and provides a child welfare practicum as part of the experience.

Requirements for the Certificate in Child Welfare are as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 600</td>
<td>Field Education Seminar</td>
<td>1</td>
</tr>
<tr>
<td>SW 601</td>
<td>Field Practicum</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Field practicum must be with an agency which is working with children and families as part of the child welfare system.</td>
<td></td>
</tr>
<tr>
<td>SW 610</td>
<td>Multilevel Engagement and Assessment in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SW 612</td>
<td>Multilevel Intervention and Evaluation in Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SW 634</td>
<td>Child Welfare - Protecting Children, Strengthening Families</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>One of the following mini-courses:</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>SW 635 Gender and Sexual Diversity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SW 636 Social Work Across and Among Borders: International SW and SW with Immigrant Populations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SW 637 Criminal Justice System: Abolish or Reform</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ABSC 160 Introduction to Child Behavior and Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PSYC 104 General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Master of Social Work

Master of Social Work

Social workers help individuals, families, groups, organizations, and communities survive and thrive. With a focus on enhancing the social, economic, and environmental wellbeing of disadvantaged, disenfranchised, and marginalized people, social workers can help
children and adults resolve problems in living, increase emotional and behavioral health, enhance psychological and social wellbeing, and change policies and programs to better serve communities.

Built upon a commitment to helping identify and enhance the strengths of individuals, families and communities, the Master of Social Work program (https://socwel.ku.edu/MSW-catalog/) offers professional education with learning opportunities in the classroom and in the field for students who want to work to increase the quality of life for all people.

Some students have earned a BSW degree before beginning the MSW program, while other students come with different educational backgrounds and undergraduate degrees. We encourage people with undergraduate degrees to apply to the MSW program if they are passionate about helping others by providing social services and working to achieve social justice.

Full-time students who have already earned a BSW from a CSWE-accredited program are able to complete the MSW in as little as one year (summer, fall, and spring terms) with an advanced standing plan of study. Students with an advanced standing plan of study can also earn their MSW degree on a part-time basis.

Students with undergraduate degrees in fields other than social work can complete the MSW program with a traditional plan of study in as little as two years full-time. We also allow students with traditional plans of study the opportunity to earn their MSW degree part-time in three or four years.

The first year of the traditional plan of study in the MSW program prepares students for generalist social work practice with individuals, families, groups, organizations, and communities. Generalist courses include content on human rights; social, economic, and environmental justice; policy and advocacy; applied research; professional ethics; theory for practice; and diversity, equity, and inclusion. In addition, students learn how to engage, assess, intervene, and evaluate their interventions at all levels of practice in generalist MSW courses and in their first practicum placements.

Following generalist courses and field education, MSW students advance to one of two areas of social work specialization: (1) clinical practice or (2) macro practice. The clinical practice specialization prepares students for social work with individuals, families, and groups in a counseling setting. The macro specialization prepares students for leadership positions in organizations and communities. Macro specialization courses include advanced content in the administration of programs and agencies, as well as community practice and advocacy.

The MSW program is offered in Lawrence, at the Edwards Campus in Overland Park, and in other Kansas communities such as Pittsburg.

Master of Social Work

Traditional MSW Plan of Study - Full-Time or Part-Time

Applicants must have undergraduate degrees from accredited universities before beginning the MSW program. Most students with a traditional plan of study do not have BSW degrees. However, some students with BSWs want a traditional plan of study in order to get up to speed after a number of years away from social work education and/or two different practicum placements to bolster their MSW field education.

Advanced Standing Plan of Study - Full-Time or Part-Time

Advanced standing requires a bachelor’s degree from a CSWE-accredited social work program with a grade-point average of at least 3.0. We are interested in references from instructors who can speak to your academic abilities and readiness for graduate education. In addition, applicants with work experience in human services and/or social justice are encouraged to submit letters of recommendation from supervisors who can address your competencies in the field. Current seniors who are applying for advanced standing should submit their fall semester transcript and documentation of their successful undergraduate field education experience.

For both the traditional and advanced standing plans of study, we have a holistic approach to admission decisions. We admit students based on a review of several factors including successful completion of undergraduate liberal arts courses, measures of academic achievement including undergraduate GPA, prior work experience in human services or social justice, and strong references from instructors and supervisors. All applications to the MSW program become the property of the University of Kansas.

Learn more about the MSW programs. (https://socwel.ku.edu/MSW-catalog/)

Admission to the MSW Program

MSW Admission Requirements

- Bachelor’s degree from an accredited university (Traditional MSW).
- Bachelor’s of social work degree from a CSWE-accredited social work program (Advanced Standing).
- Undergraduate grade-point average of 3.0 or above preferred. The admissions committee takes into account special circumstances such as improvement of grades in upper-division or graduate courses. We look for evidence of an applicant’s commitment to the well-being of people and communities; a well-developed sense of self; emotional maturity and the ability to think clearly, creatively, and independently.
- Online application including three electronic reference forms and student-issued transcripts from all previously attended schools regardless of degree status.
- All applicants who have been employed in a social work setting should submit an electronic M.S.W. reference form from at least one supervisor who can address the applicant’s knowledge, skill and readiness for graduate social work education as one of the three references.
- Non-refundable application fees for domestic and international students.
- Graduate Record Examination scores are not required. Applicants are evaluated on undergraduate grade-point average, graduate course work (if any), volunteer and work experience especially related to social work, and evidence of potential for a social work career in the application narrative and references.

Deadlines

Posted application deadlines for the Advanced Standing and Traditional MSW Plans of Study may be found on the program website (https://socwel.ku.edu/master-social-work-msw/).
Admission Process

MSW degree program students are admitted for summer semester for Advanced Standing and fall semester for Traditional plans of study. Applications may be submitted anytime between Oct. 1 and the appropriate application deadline. All fully completed applications are reviewed upon receipt. Admission decisions are made in the spring of each year. MSW students admitted for the Advanced Standing plan of study begin in June; MSW students admitted for the Traditional plan of study (full time and part time) begin in August. A summer term start may be available for MSW students admitted to the Traditional plan of study. Contact the Coordinator for Graduate Admissions & Advising for more information.

Learn more about the application process (https://socwel.ku.edu/msw-apply/).

International Students

International students from all regions of the world are encouraged to apply. For more information about international student applications and resources and regulations contact International Support Services (https://iss.ku.edu/) and the Applied English Center (https://aec.ku.edu/).

International students and students who indicated English as a second language, are required to show proof of English proficiency for admission purposes and must check-in with the Applied English Center (https://aec.ku.edu/) (AEC). This process serves to confirm each student’s level of English proficiency and determine whether English courses will be included as a requirement of the student’s academic program. Note: See English Proficiency Requirements for Admission to Graduate Study (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/).

Note: The need to take English courses may delay your start in or extend the length of the MSW program.

If admitted to the MSW program, your admission to the School of Social Welfare is provisional. The International Conference on Social Welfare recommends that before seeking professional education for social work in the United States, a student should complete comparable study available in his or her own country and acquire a minimum of 2 years of social work experience there.

MSW Traditional Plan of Study Degree Requirements

The School of Social Welfare requires a total of 64 credit hours for the MSW degree, consisting of

- 38 credit hours of classroom work maintaining a grade-point average of 3.0 (B).
- 26 credit hours of field practicum with an (S) grade for satisfactory performance.
- Recommendation of the faculty of the School of Social Welfare to the University Registrar that the master’s degree be granted.

MSW Generalist Curriculum

The following courses are required (32 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 700</td>
<td>Field Education Seminar</td>
<td>1</td>
</tr>
<tr>
<td>SW 701</td>
<td>Basic Field Practicum</td>
<td>5</td>
</tr>
<tr>
<td>SW 708</td>
<td>Human Rights and Social, Economic, and Environmental Justice</td>
<td>2</td>
</tr>
<tr>
<td>SW 710</td>
<td>Multi-Level Engagement and Assessment: Individuals, Families, Groups, Organizations and Communities</td>
<td>3</td>
</tr>
<tr>
<td>SW 711</td>
<td>Multi-Level Intervention &amp; Evaluation of Intervention: Individuals, Families, Groups, Organizations</td>
<td>3</td>
</tr>
<tr>
<td>SW 720</td>
<td>Social Policy Analysis and Advocacy in Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SW 740</td>
<td>Applied Research in Multi-Level Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SW 755</td>
<td>Diversity Research in Multi-Level Social Work</td>
<td>3</td>
</tr>
</tbody>
</table>

MSW Specialization Curriculum

Following generalist courses and field education, students advance to one of two areas of specialization: (1) clinical practice or (2) macro practice. This selection is based on their goals of working directly with individuals, families, and groups or at the macro-level of practice. With the exception of study abroad courses offered by the School of Social Welfare and SW 863, students may not enroll in specialization classes before completing generalist requirements. Students should consult their academic advisor for enrollment guidance.

All students completing the MSW degree are eligible to apply for licensure in the State of Kansas as Licensed Master Social Workers (LMSW). Students who anticipate working towards meeting the requirements for the Licensed Specialist Clinical Social Worker (LSCSW) examination should enroll in the clinical social work practice concentration.

Clinical Social Work Specialization

This 32-credit-hour specialization prepares MSW students for clinical social work with individuals, families, and groups. Students specializing in clinical social work develop the knowledge and skills to help people resolve chronic and/or acute problems in living, increase emotional and behavioral health, and enhance psychological and social wellbeing. Clinical social work students learn advanced engagement and assessment practice skills, as well as a wide variety of interventions and how to evaluate the efficacy of those interventions. From a social work perspective, the clinical specialization prepares students to work in counseling and mental health settings with clients who have personal, interpersonal, and social needs requiring theoretically grounded and evidence-based therapeutic services. Students also have the opportunity to practice their clinical skills in field education settings as part of their graduate studies in social work. Students who anticipate taking the Licensed Specialist Clinical Social Worker (LSCSW) examination should specialize in this area.

The following courses must be taken in the clinical specialization (32 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 801</td>
<td>Advanced Field Practicum-Clinical Practice</td>
<td>7</td>
</tr>
<tr>
<td>SW 810</td>
<td>Clinical Practice Strategies I</td>
<td>3</td>
</tr>
<tr>
<td>SW 811</td>
<td>Clinical Practice Strategies II (Clinical Practice Selective)</td>
<td>3</td>
</tr>
</tbody>
</table>
Macro Social Work Specialization

The 32-credit-hour macro practice curriculum prepares MSW students for leadership in social work agencies and social justice organizations. Students specializing in macro practice learn advanced administrative and advocacy skills and abilities for work in both the public and private sectors. The macro specialization helps students achieve competence in designing and implementing human services, community practice, and policy practice from a social work perspective. Knowledge and skills developed in this specialization include program design, managing information and resource, human resource management, community organizing, advanced advocacy, and program evaluation. This specialization prepares MSW students to be program and agency administrators, supervisors, advocates, and evaluators in public agencies and departments (local, state, and federal) and private human services and social justice organizations. Students in the macro practice specialization are eligible to take the LMSW license examination in Kansas immediately upon graduation from the MSW program.

The following courses must be taken in the Macro specialization (32 credit hours):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 804</td>
<td>Advanced Field Practicum-Macro Practice</td>
<td>7</td>
</tr>
<tr>
<td>SW 840</td>
<td>Multi-System Community-Engaged Program Design</td>
<td>3</td>
</tr>
<tr>
<td>SW 841</td>
<td>Advanced Policy Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SW 842</td>
<td>Agency-Based Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>SW 843</td>
<td>Supervision and Mentoring</td>
<td>1.5</td>
</tr>
<tr>
<td>SW 846</td>
<td>Advanced Justice-Centered Community and Advocacy Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

MSW Advanced Standing Plan of Study

The Advanced Standing (https://socwel.ku.edu/msw-curriculum/) plan of study requires an enrollment of 38 credit hours, as follows:

- A summer enrollment in 2 classes:
  a. SW 712, a social work practice class organized around the school's major curriculum themes. Students must earn a minimum grade of B in SW 712 to continue matriculating.
  b. An elective course selected by the student to broaden the base of knowledge.
- The specialization level of the MSW program (32 credit hours):
  a. 18 credit hours of classroom work maintaining a grade-point average of 3.0 (B)
  b. 14 credit hours of field practicum with an S grade for satisfactory performance

Field Practicum

The field education office works with community agencies to provide field practicum opportunities for students. Students are placed in these agencies through a collaborative process among the field education office, the student, and the agency. The field education office is responsible for ensuring that all field placements are able to provide the appropriate learning opportunities for students and that qualified field instructors will be available to the student.

Learn more about field education (https://socwel.ku.edu/field-education/).

Prior Work Experience

In accordance with national curriculum policy, prior employment and life experience may not be credited toward classroom course work or practicum requirements.

Advanced Standing Plan of Study Degree Plan

Students should work with an academic advisor for enrollment guidance and for part-time plans of study.

Clinical

Year 1

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours</th>
<th>Fall</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW 712</td>
<td>3 SW 801</td>
<td>7 SW 801</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SW 863 or Clinical Elective</td>
<td>3 SW 810</td>
<td>3 SW 811</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversity-Focused Elective</td>
<td>3 Clinical Elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SW 863 or Clinical Elective</td>
<td>3 SW 885</td>
<td>3</td>
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Total Hours 38
Doctor of Philosophy in Social Work

The goal of the University of Kansas School of Social Welfare doctoral program is to prepare students to become leaders nationally and internationally in advancing social work practice and policy through research, teaching, and scholarship. Our students graduate from the program with the critical knowledge and skills they need to become innovative stewards of the discipline who generate and disseminate knowledge as researchers, scholars, and educators. The school is known nationally and internationally as a prime innovator in the Strengths Perspective for social work practice. Doctoral students have played a key role in advancing this work to its 21st century applications.

Program Highlights

- Creative, critical thinking about social work practice, social policy, and guiding theoretical frames
- Advanced quantitative and qualitative research skills
- Opportunities for innovative scholarship and for the development of teaching skills
- Student-centered educational approach
- Financial support and mentoring for students
- Appreciation for human diversity and the development of a global perspective
- Racial, social, economic, and environmental justice focus
- Study Abroad opportunities

Doctoral students are immersed in the excitement and creativity in the profession — how professionals come to know what they know, how they put that knowledge into practice and how it affects social justice.

Consider Our Program

The Ph.D. program offers effective options for building knowledge by initiating systematic inquiry into methods, forms, and outcomes of social work practice and social welfare policy. We are dedicated to educating scholars who desire to build knowledge for the profession through quantitative, qualitative, theoretical, or conceptual analyses, and historiographic investigations. Demand for our Ph.D. graduates is high. Our alumni are engaged in teaching, research, and administrative endeavors and are found in faculty positions at premier research universities and at smaller colleges and universities throughout the United States and abroad.

Curriculum

Doctoral courses prepare students as scholars with conceptual and methodological sophistication.

- The history and philosophy course focuses on the intellectual history, current status, and innovation of social work ideas, ideologies, and theories.
• In the research sequence, students learn both qualitative and quantitative methodologies, designs, advanced modes of analysis, theory for research, and appropriate applications.
• The policy/practice courses provide the opportunity to analyze policies of interest to the student and discover “best” practices as they affect specific populations. Students develop and apply a critical perspective when considering human problems, strengths, and strategies for change and transformation.
• Qualifying papers and electives help students develop deep understanding in areas of special interest.
• A required course as well as teaching seminars for GTAs prepare students to be effective educators.
• The dissertation involves advanced and focused research into a topic selected by the student, based on quantitative, qualitative, historical, or other methods of inquiry.

GTA & GRA - Teaching and Research Opportunities

Our Ph.D. program contributes significantly to the model of strengths and community-based research, service, and education developed by the School. Under the direction of faculty members, many Ph.D. students work on research projects and serve as teaching assistants. For example, doctoral research assistants work in such areas as aging, asset-building, child welfare, criminal justice, diversity issues, domestic violence, health and disability, child and adult mental health, poverty, social policy, and spirituality.

It is part of the School’s mission to focus on teaching, inquiry, and practice that benefit populations who have been oppressed by our systems and institutions. The School is committed to diversity, inclusion, and multicultural perspectives. Many of the faculty are involved in research and service projects which aim to achieve direct and positive impacts on Black, Indigenous and people of color as well as other oppressed groups. Doctoral students work with faculty to bring these projects to life.

Admission Criteria & Requirements

Criteria used in judging applications include the applicant’s potential for excellence in academic performance, professional practice experience, and potential for contributions to knowledge-building for social work.

Required
• Master’s degree in social work or related field.
• Graduate grade-point average of 3.5 or higher.
• Personal statement of scholarly and research interests in social work practice.
• Three letters of reference.
• Completion of a basic statistics course within the past two years with a grade of B or higher. The applicant must include a written statement showing how this requirement has been met or how it will be met before entering the program, or indicate they plan to apply for a waiver of this requirement based on extensive research experience.
• Completion of the online graduate application (https://graduate.ku.edu/application-process/).
• Students whose native language is not English must follow the policy for English Proficiency Requirements for Admission to Graduate Study. (http://policy.ku.edu/graduate-studies/english-proficiency-international-students/?num1.5)
• Undergraduate grade-point average of 3.0 or higher preferred.
• MSW degree preferred. Applicants with master’s degrees related to social work and affiliation with social work activities and values are considered.
• Two years of social work or related practice; two years of post-master’s professional social work experience preferred.

Application Timeline and Procedure

Ph.D. admissions are considered every other year. The deadline to apply is January 15, 2023, for the Fall 2023 term. Applications are not reviewed until all materials are received. Late applications are considered only on a space-available basis.

Learn more about the admission process (https://socwel.ku.edu/phd-apply/).

International Students

International students from all regions of the world are encouraged to apply. For more information about international student applications and resources and regulations contact International Support Services (http://www.iss.ku.edu/) and the Applied English Center (https://aec.ku.edu/).

Ph.D. Degree Requirements

The program requires a minimum of 64 credit hours, as follows:

• 37 credit hours of required coursework.
• 9 credit hours of electives.
• A qualifying paper.
• A comprehensive examination process.
• Completion of a dissertation.

In fulfilling the elective hours, students may take graduate-level courses in any substantive area or research skills necessary for successful completion of their goals. Students can take electives in social science or other relevant graduate disciplines. They may also complete Independent Study under faculty direction and/or choose from one of the study abroad courses offered by the School.

Beyond course work, students complete one qualifying paper under the guidance of a faculty committee. This demonstrates their ability to integrate knowledge and skills across the curriculum areas in relation to a theme of inquiry developed by the student in their chosen specialization. After the qualifying paper is completed, students complete an oral comprehensive exam (dissertation proposal defense) and then undertake and complete an approved research project, and write and defend the doctoral dissertation.

Required course work (https://socwel.ku.edu/phd-curriculum/) can be completed in 2 years. Additional time is needed to complete the qualifying papers and dissertation. The program can be completed in 4 years of focused work. Students may start on a part-time basis but eventually must spend 1 year in residence, which entails 2 semesters of full-time course work (9 hours) and may include one summer session (6 hours); or a combination of 6 hours of course work and half-time appointment as a teaching or research assistant for 2 semesters.
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<tr>
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<td>Advanced Quantitative Research Methods II</td>
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<td>SW 984</td>
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<td>Theory for Social Work Research</td>
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<td>SW 987</td>
<td>Teaching Social Work: Philosophy and Methods</td>
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<td>Mixed Methods in Social Science Research (optional elective)</td>
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<td>SW 999</td>
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Office of Graduate Studies, Lawrence and Edwards Campus Students

Graduate Studies

Graduate Studies (http://www.graduate.ku.edu) at the University of Kansas is the administrative unit responsible for graduate education for the Lawrence and Edwards Campuses.

Graduate Studies (http://www.kumc.edu/academic-affairs/graduate-studies.html) on the KU Medical Center campus (a unit of the Office of Academic Affairs) is responsible for graduate programs in the Schools of Health Professions, Medicine, and Nursing. Please see the online catalog section for the KU Medical Center (KUMC) - Office of Graduate Studies (http://catalog.ku.edu/graduate-studies/kumc/) for more information.

Graduate degrees are conferred by the professional schools and the College of Liberal Arts and Sciences with the exception of the Health Informatics master's degree, which is conferred by the KUMC Office of Graduate Studies upon recommendation by the Health Informatics Advisory Council. Appointments to the Graduate Faculty are authorized by the schools and the College, or by the individual academic units on the Medical Center campus, and administered by the appropriate Graduate Studies office.

KU offers the Master of Arts degree, the Master of Science degree, specific professional master's degrees, the professional degree of Specialist in Education, and the Doctor of Philosophy degree, as well as professional doctorates of Audiology, Education, Engineering, Musical Arts, and Speech-Language Pathology. KU also offers graduate certificate programs and currently enrolls more than 5,000 graduate students on the Lawrence campus.

Goals of Graduate Study

The traditional goals of graduate study are independent scholarship, competence in research or other creative work, and the cultivation of skill and commitment in teaching. Having acquired a broad education as an undergraduate, the student is expected to master a specific field, to learn the methods of investigation employed therein, and to proceed toward making an original contribution to knowledge. Since many of those who earn advanced degrees seek careers in higher education, the acquisition of skill in teaching and in directing research are also essential parts of graduate education.

Emerging societal interests and changing market demands continue to underscore the importance of the traditional goals of graduate study. At the same time, they emphasize the need for flexibility in programs and accommodation in career objectives. Graduates in many fields continue to pursue increasingly diverse careers and, as they do, they demonstrate the value of graduate study and research to society, government, business, industry, the diverse professions, and the arts.

Graduate Military Programs

The Office of Graduate Military Programs (GMP) (http://gmp.ku.edu/) facilitates collaboration between the university and the US Armed Forces for the development of academic programs and research initiatives that support the needs of the Department of Defense (DOD). GMP develops and maintains programs for select officers attending the Command and General Staff College at nearby Fort Leavenworth, instructors at the United States military academies, foreign area officers, logisticians, and other DOD personnel requiring the advanced degrees necessary to teach and conduct research at the highest level. The office assists principal investigators throughout the university to find well-matched research grant opportunities, prepare proposals, and coordinate with the appropriate DOD entities. GMP also collaborates with the Student Veteran Center and serves as a voice for all educational issues related to student veterans. GMP is committed to creating and maintaining a positive learning environment for military veterans attending our university.

Research

Research is an integral part of the university's educational mission and approach to graduate study. The National Science Foundation classifies KU as a major university receiving substantial research support. The Carnegie Classification of Institutions of Higher Education classifies KU as a doctorate-granting R1 Research University with the Highest Research Activity, and KU has been a member of the Association of American Universities since 1909. The university has a long and successful record of research collaboration through independent, multidisciplinary research centers that focus on common themes. KU is home to university research centers and institutes, affiliated centers, core service labs, the Kansas Geological Survey, and the Kansas Biological Survey. In addition, a number of research centers exist in individual departments and academic units throughout the university. For more information about research on the Lawrence campus, visit the Research (http://www.ku.edu/research/) page or the Office of Research (http://www.research.ku.edu/).

Fellowships and Scholarships

Visit the Graduate Studies website (http://graduate.ku.edu) for information about funding opportunities for KU graduate students.

Admission to Graduate Study

Persons whose records indicate their ability to succeed in advanced work may be admitted to the University of Kansas for graduate study in one of the professional schools or in the College of Liberal Arts and Sciences. The key university requirements for admission are outlined in the following two policies: Admission to Graduate Study (https://policy.ku.edu/graduate-studies/admission-to-graduate-study/) and English Proficiency Requirements for Admission to Graduate Study (https://policy.ku.edu/graduate-studies/english-proficiency-international-students/). Departments and programs may have more stringent requirements.

Transcripts

Applications must be accompanied by one copy of official transcripts from the institution where the applicant earned the bachelor's degree (or equivalent)*. This official transcript will be used to verify the completion (or intended completion) of a baccalaureate degree (or equivalent).

For processing purposes, applicants may attach scanned versions of official transcripts to their application. If applicants are admitted to a program and accept the admission offer, they will be required to submit an official, final transcript that shows their degree has been conferred. If the applicant has completed any graduate work, official transcripts from the graduate institution(s) must be included as well. Letters of
recommendation and test scores may also be required. Applicants should check with the program(s) to which they are applying for more information.

In order to be considered official, transcripts and test scores must be sent through secure means (e.g., a sealed envelope, electronic transmission) directly from the degree-granting institution or testing service to the University of Kansas. Transcripts and test scores provided through unofficial means will not be considered to be official documents for the purpose of admission.

*Applicants with KU degrees are not required to provide official KU transcripts or copies of KU transcripts to apply for admission.

Additional Application Requirements

Letters of recommendation, test scores, personal statements, and other materials may also be required. Applicants should check with the program(s) to which they are applying for more information.

Application Fees

Nonrefundable application fees payable to the University of Kansas are required. Rates are subject to change. Some departments and programs require deposits from admitted students to be fully credited against required fees upon enrollment.

| Degree-seeking domestic application | $65 |
| Degree-seeking international application | $85 |
| Certificate seeking application* | $30 |
| Non-degree-seeking application (domestic and international) | $30 |

*Does not apply to current degree-seeking graduate students.

View the current Lawrence and Edwards Campus application fees (https://registrar.ku.edu/comprehensive-fee-schedule/) within the Comprehensive Fee Schedule on the University Registrar’s website.

Degrees

Degrees are awarded three times each year, in August, December, and May. Degrees for each academic year are conferred formally at the annual commencement ceremony in May. Degree candidates are not eligible to graduate if the graduate grade-point average (GPA) is lower than 3.0 in all courses acceptable for graduate credit. Doctoral candidates who have fulfilled all of their degree requirements by the deadline dates for graduation in a doctoral hooding ceremony.

Students who are working toward two degrees must complete the requirements for each degree. Course work may not count toward fulfilling degree requirements for more than one degree.

Graduate students may not be awarded an additional KU degree with the same name and degree code as a previously awarded degree from KU. This applies to the completion of different degree tracks, concentrations, and sub-specialties within a given degree. This does not prohibit students from earning additional master's or doctoral degrees in another discipline.

View the current Lawrence and Edwards Campus policy on graduate degrees (http://policy.ku.edu/graduate-studies/degrees/).

Master's Degree Programs

KU grants traditional Master of Arts and Master of Science degrees, as well as professional master's degrees that have developed out of these traditional arts and science degrees. View the current Lawrence and Edwards Campus policy on master's degrees (http://policy.ku.edu/graduate-studies/ma-ms-degrees/).

Historically, most of the master's degrees granted at KU have been the Master of Arts and Master of Science degrees. This fact conforms to the traditional liberal arts background out of which most U.S. graduate schools developed. KU grants a number of professional master's degrees, most of which are offered through the professional schools. Students should consult the appropriate college or school section of the online catalog for detailed descriptions of professional master's programs.

The degree of Specialist in Education (p. 281) is offered through the School of Education and Human Sciences and may be earned as a concentration on the basis of two years of graduate work (which can include an appropriate master's degree or equivalent). Information on this degree, including the concentration in which it may be earned, can be found in the School of Education section of the online catalog.

Jointly Administered Degrees

In a few cases, a degree is offered through two schools and administered by a joint committee from the two faculties. The master of arts degree in Speech-Language Pathology and the master of arts degree in Audiology are administered by an intercampus committee drawn from the Department of Speech-Language-Hearing: Sciences and Disorders in Lawrence and from the Department of Hearing and Speech of the School of Health Professions in Kansas City.

Master's Degree Requirements

The Executive Council of Graduate Faculty determines the common requirements for master's degrees at the University of Kansas. Specific requirements for each individual degree program are outlined in the catalog section maintained by the school or college offering that degree.

More detailed information on common degree requirements can be found in the Policy Library. Key policies include:

- Master's Degree Requirements (https://policy.ku.edu/graduate-studies/ma-requirements/)
- Master's Program Time Restraints (http://policy.ku.edu/graduate-studies/ma-program-time-constraints/)
- Master's Final Examinations (http://policy.ku.edu/graduate-studies/masters-final-exams/)
- Graduate Student Oral Exam Attendance (http://policy.ku.edu/graduate-studies/oral-exam-attendance/)
- Master's Student Oral Exam Committee Composition (https://policy.ku.edu/graduate-studies/masters-oral-exam-committee-composition/)
- Master's Thesis Submission and Publication (https://policy.ku.edu/graduate-studies/ma-thesis/)

Doctoral Degree Programs

KU offers the following doctoral degrees:

- Doctor of Philosophy (Ph.D.),
- Doctor of Audiology (Au.D.),
• Doctor of Education (Ed.D.);
• Doctor of Engineering (D.E.), and
• Doctor of Musical Arts (D.M.A.)

The programs offering these degrees are administered by the schools and colleges through their departments and graduate divisions, from admission through final recommendation for awarding the degree.

This section of the catalog provides succinct, general descriptions of each of the five doctoral degrees in order to facilitate convenient comparison of the degrees. Detailed information about requirements for each degree, as it is offered in a specific discipline, should be obtained from the appropriate college, school, or department listing in the online catalog.

The School of Law (p. 720) offers the Juris Doctor (J.D.) and Doctor of Juridical Science (S.J.D.) degrees.

The School of Medicine (p. 2127) offers the Doctor of Medicine (M.D.) degree. The KU Medical Center campus (p. 2416) offers additional doctoral degrees, such as the Clinical Doctorate in Speech-Language Pathology (S.L.P.D.), the Doctor of Nursing Practice (D.N.P.), the Doctor of Occupational Therapy (O.T.D.), and the Doctor of Physical Therapy (D.P.T.).

**Doctor of Philosophy**

The degree of Doctor of Philosophy (Ph.D.) is the highest degree offered by the university. It is awarded for mastering a field of scholarship, for learning the methods of investigation appropriate to that field, and for completing a substantial piece of original research. In addition to preparing research specialists, the process of earning a Ph.D. shares certain goals with liberal education:

• putting order into human experience;
• fostering a love of learning for its own sake;
• instilling respect for human values;
• integrating various human powers into a process of creation; and
• making vital, in many fields at least, a sense of history.

Although the courses and research leading to the Ph.D. are necessarily specialized, the attainment of this degree should not be an isolated event in the enterprise of learning. The Ph.D. aspirant is expected to be a well-educated person with a broad base of general knowledge, not only as preparation for more advanced work but also as a means of knowing how the chosen specialty is related to other fields of human thought.

To give depth and breadth to their doctoral programs, many departments require some work in a minor field or at least an articulated selection of extra-departmental courses. Because of the diversity of the fields in which the Ph.D. is offered, and the variety of needs and interests of individual students, the degree does not have a specific requirement for a minor. However, the Ph.D. aspirant is encouraged to plan an integrated program, under departmental direction, that includes courses outside the major field.

View the current Lawrence and Edwards Campus policy on the Doctor of Philosophy degree. ([http://policy.ku.edu/graduate-studies/doctor-of-philosophy/](http://policy.ku.edu/graduate-studies/doctor-of-philosophy/))

**Doctor of Audiology**

The Doctor of Audiology (Au.D.) degree program prepares the student to enter clinical practice as an audiologist. Offered by the KU School of Health Professions, the program produces professionals skilled in providing diagnostic, rehabilitative, and related services in the fields of sound, balance, and hearing sciences. There is an emphasis on the clinical learning experience, although research is also a significant component of the program. Degree requirements are listed under Communicative Disorders: Intercampus Program (p. 583) in the online catalog.

**Doctor of Education**

The degree of Doctor of Education (Ed.D.) is a professional degree designed primarily for practitioners in the field of education. While many of the requirements for the degree closely parallel those for the Ph.D., the degree program—particularly the dissertation—focuses on research concerned with application of existing knowledge rather than on basic research. Specific degree requirements are listed in the School of Education and Human Sciences (p. 153) section of the online catalog.

**Doctor of Engineering**

The degree of Doctor of Engineering (D.E.) is directed toward the practice of engineering and includes the entire process of technology from planning to product. Candidates for the degree are intimately associated throughout their tenure with technology project teams, generally composed of master's degree candidates and undergraduates. Specific degree requirements are listed in the School of Engineering (p. 347) section of the online catalog.

**Doctor of Musical Arts**

The degree of Doctor of Musical Arts (D.M.A.) is intended as recognition of high professional attainment. Since only exceptionally well-qualified candidates are admitted to the program, students are expected to devote their doctoral studies primarily to developing professional qualifications for teaching at the college level. The degree of Doctor of Musical Arts is offered in the specific fields of bassoon; church music (organ or choral conducting emphasis); clarinet; composition; conducting (band, choral, or orchestral); flute; French horn; oboe; organ; percussion; piano performance, literature, and pedagogy; saxophone; strings; trombone; trumpet; tuba; and voice. Degree requirements are listed under the School of Music (p. 2137) section of the online catalog.

**Doctoral Degree Requirements**

The Executive Council of Graduate Faculty determines the common requirements for master's degrees at the University of Kansas. Specific requirements for each individual degree program are outlined in the catalog section maintained by the school or college offering that degree.

More detailed information on common degree requirements can be found in the Policy Library. Key policies include:

• [Engagement and Enrollment in Doctoral Programs](https://policy.ku.edu/graduate-studies/engagement-enrollment-doctoral-programs/)
• [Research Skills and Responsible Scholarship Requirements](https://policy.ku.edu/graduate-studies/research-skills-responsible-scholarship/)
• [Comprehensive Oral Examinations](https://policy.ku.edu/graduate/studies/doctoral-oral-exams/)
• [Doctoral Student Oral Exam Committee Composition](https://policy.ku.edu/graduate-studies/doctoral-student-oral-exam-committee-composition/)
• Doctoral Comprehensive Exam Time Constraints (http://policy.ku.edu/graduate-studies/doctoral-exam-time-constraints/)
• Graduate Studies Representative on Doctoral Exam Committees (https://policy.ku.edu/graduate-studies/graduate-studies-representative-on-doctoral-exam-committees/)
• Dual-Title Doctor of Philosophy Degrees (http://policy.ku.edu/graduate-studies/dual-title-PhD-degrees/)
• M.A., M.S., and Ph.D. with a Major in Interdisciplinary Studies (http://policy.ku.edu/graduate-studies/ma-ms-phd-interdisciplinary-studies/)
• Doctoral Candidacy (Post-comp enrollment) (https://policy.ku.edu/graduate-studies/doctoral-candidacy/)
• Doctoral Dissertation (https://policy.ku.edu/graduate-studies/doctoral-dissertation/)
• Final Oral Examination (https://policy.ku.edu/graduate-studies/final-oral-exams/)

Joint Degrees, Dual Degrees, and Dual Degrees-Accelerated

KU offers joint, dual and dual-accelerated degrees. An explanation of these program types can be found in the Academic Programs Definitions policy (https://policy.ku.edu/provost/academic-program-definitions/). For more information about specific degree programs, students should contact their academic department of study.

Distance Education, Online, or Hybrid Graduate Programs

The University of Kansas offers online and hybrid courses and certificate and degree programs. For more information about specific online course and degree program options, students should contact their academic department of study. Similar to regular courses, the availability of online courses varies by semester and year.

View KU's current online or hybrid programs (https://online.ku.edu/programs/).

Independent Study

Independent study is a research experience or directed readings independently pursued through an academic department. Students should contact their academic department to discuss independent study opportunities to investigate a special research problem or directed readings in an area not covered by regular courses.

Graduate Certificates

The graduate certificate is a focused collection of courses that, once completed, affords the student some record of coherent academic accomplishment in a given discipline or set of related disciplines. Eligibility and admission criteria for graduate certificates are governed by the policy on Admission to Graduate Study. (http://policy.ku.edu/graduate-studies/admission-to-graduate-study/?num1_1=)

The completion of a graduate certificate is noted on the official transcript. The transcript serves as the official proof of certificate completion. Graduate certificates are not recognized by a diploma or any campus-wide recognition ceremony. Though not serving as official proof of the certificate completion, students may also request a printed certificate of recognition from the Office of Graduate Studies to mark the achievement.

View the current policy on Graduate Certificate Programs (http://policy.ku.edu/graduate-studies/certificate-programs-policies-procedures/) and Graduate Credit (https://policy.ku.edu/graduate-studies/graduate-credit/).

The Graduate Faculty

The Graduate Faculty consists of members of the university faculty and other persons qualified by training and experience who are duly nominated and appointed. Only members of the Graduate Faculty may participate on graduate exam committees. Graduate degree programs are responsible for nominating faculty to hold Graduate Faculty appointments and for ensuring compliance with all policies.

The Graduate Faculty Appointments (http://policy.ku.edu/graduate-studies/graduate-faculty-appointments/) policy provides detailed guidelines on eligibility, the nomination process, chairing privileges, emeritus/emerita status, and graduate faculty as students.

Graduate Research Assistants, Graduate Teaching Assistants, and Graduate Assistants

Appointment Types

Graduate Research Assistantships (GRA)

Graduate Research Assistants (GRA) are salaried graduate student employees who perform research in their field or a closely related field of study. This research experience forms an integral part of their graduate education. For further information, applicants should communicate directly with the chair or graduate advisor of the major department.

Graduate Teaching Assistantships (GTA)

Graduate Teaching Assistants (GTA) are salaried graduate student employees whose job duties consist primarily of direct involvement in classroom or laboratory instruction. Graduate students should communicate directly with the chair or graduate advisor regarding GTA appointments. Graduate teaching assistantships in Lawrence are governed by a Memorandum of Agreement (https://humanresources.ku.edu/document/gta-moa/) (MoA) between KU, the Kansas Board of Regents, and the American Federation of Teachers, which represents KU GTAs in Lawrence. The Memorandum of Agreement, with additional information on tuition and fee payment, appointments, wages, benefits, and other topics of interest to GTAs, is available on the Graduate Studies website (https://graduate.ku.edu/gta-gra-ga/).

Graduate Assistantships (GA)

Graduate Assistants (GA) are graduate student employees (either salaried or hourly) whose job duties are professional in nature and further their professional and academic development. For further information, applicants should communicate directly with the chair or graduate advisor of the major department.

Policy Statement

The following premises and eligibility requirements govern all Graduate Research Assistant (GRA), Graduate Teaching Assistant (GTA), and Graduate Assistant (GA) appointments at the University of Kansas, Lawrence:
Principles:
1. Individuals who enroll in graduate educational programs at the University of Kansas do so in order to attain specific educational goals. It is the University’s responsibility to help ensure that graduate students attain their academic goals in a reasonable amount of time and move on to the next stage in their careers, whether to another advanced degree program or to professional employment.

2. When departments and schools offer GRA, GTA, or GA appointments, the assistantships must contribute to the training experience of the graduate student.

3. GRA, GTA, and GA responsibilities should be in balance with the student’s responsibilities to the graduate program. For salaried appointments of 50% (0.50 FTE), the expectation is that the assigned duties will average no more than twenty (20) hours per week during the semester. For hourly appointments at 50% (0.50 FTE), assigned duties should require 20 hours per week during the semester. For appointments at other percentages, the number of hours per week must be proportional to the appointment percentage.

More detailed information on GTA, GRA, and GA policies and exceptions can be found in the Policy Library. The most referenced policies include:

- Appointment Limits (http://policy.ku.edu/graduate-studies/GRAGMA-guidelines-eligibility/)
- GTA, GRA, and GA Eligibility Requirements (http://policy.ku.edu/graduate-studies/GRAGMA-guidelines-eligibility/)
- Term Limits for GTA Appointments (http://policy.ku.edu/graduate-studies/appointment-limit-GTA/)
- GTA Out-Of-Field Appointments (http://policy.ku.edu/graduate-studies/out-of-field-gta-appointments-policy/)
- Benefits Available to GTAs, GRAs, and GAs (http://policy.ku.edu/graduate-studies/benefits-for-GRAs-GTAs-GAs/)
- Improving Doctoral Experiences on External Awards (https://policy.ku.edu/graduate-studies/GRATuition-assistance-policy/)
- Spoken English Language Competency of Faculty and GTAs (KBOR) (http://policy.ku.edu/KBOR/spoken-english-competency-BOR-policy/)

Graduate Policy
The Executive Council of Graduate Faculty establishes all graduate-specific policy at the University of Kansas, subject to stakeholder review and Provost approval. The Policy Library is the official repository for this policy. Graduate policy is subject to revision. Graduate education is also governed by the policies established in the University Senate Rules and Regulations (https://policy.ku.edu/governance/USRR/).

A comprehensive list all graduate policy with links to the Policy Library is available on the Office of Graduate Studies website (https://graduate.ku.edu/policies/). These policy links include but are not limited to graduate specific policies on enrollment, grading, good academic standing, academic probation, and grievance procedures.

Student Responsibilities
All graduate students are responsible for informing themselves of Graduate Studies’ requirements and policies. Students should visit the Graduate Studies website (http://www.graduate.ku.edu/) for the most up-to-date requirements and policies. Graduate students are also expected to be familiar with the regulations and requirements of their Graduate Divisions and of their home academic departments and programs. Members of the Graduate Faculty and staff members in the Graduate Divisions are expected to be ready to answer questions and offer counsel.

It is each graduate student’s responsibility to know and observe all regulations and procedures relating to the graduate degree program the student is pursuing. In no case will a regulation be waived or an exception be granted because students plead ignorance of, or contend that they were not informed of, requirements, regulations, procedures, and deadlines. Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

Course Numbering System
Generally, graduate courses are numbered according to the following scheme:

- Courses numbered 500-699 are designed for juniors and seniors, but are also taken by some graduate students who have fewer than 30 hours of graduate credit.
- Courses numbered 700-799 are designed for graduate students who have fewer than 30 hours of graduate credit, but they are also taken by some undergraduates.
- Courses numbered 800-899 are designed for graduate students who have fewer than 30 hours of graduate credit.
- Courses numbered 900-999 are designed for graduate students who have 30 or more hours of graduate credit.

Courses that contain a mixture of undergraduate and graduate students should set requirements for graduate credit beyond or different from the requirements for undergraduate credit. No course, regardless of its number, can give graduate credit unless it has been approved for graduate credit by the appropriate Graduate Division and is taught by a person holding a current appointment to the Graduate Faculty. Please see the Graduate Credit policy (https://policy.ku.edu/graduate-studies/graduate-credit/) for more information.

Graduation Calendar
The Office of Graduate Studies publishes a graduation calendar for each academic year, available on the OGS website. (http://graduate.ku.edu/graduation/)
Office of Graduate Studies, Medical Center Campus Students

The Office of Graduate Studies (a unit of the Office of Academic and Student Affairs (http://www.kumc.edu/academic-affairs.html)) on the KU Medical Center campus (http://www.kumc.edu/) is the administrative unit responsible for graduate education on that campus. A variety of graduate programs are offered through the Medical Center's Schools of Health Professions (p. 542), Medicine (p. 2018), and Nursing (p. 2239).

Graduate degrees on the Medical Center campus are conferred by the Schools of Health Professions, Medicine, and Nursing. Appointments to the Graduate Faculty are recommended by the individual academic units offering graduate programs. The appointment process is administered by the Graduate Studies office with approval for graduate appointments granted by the Dean of Graduate Studies.

Goals of Graduate Study

Independent scholarship, competence in research or other creative work, and the cultivation of teaching commitment and skill are the traditional goals of graduate study. Having acquired a broad education as an undergraduate, the student is expected to master a special field, to learn the methods of investigation employed therein, and to proceed toward making an original contribution to knowledge. Since many of those who earn advanced degrees find careers in higher education, the acquisition of skill in teaching and in directing research is also an essential part of graduate education.

These traditional goals gain renewed significance in changing times, while newly emerging societal interests and needs and new demands of the marketplace both underscore their importance and emphasize the necessity for flexibility in programs and accommodation in career objectives.

Research

Research is an integral part of the university’s educational mission. The National Science Foundation classifies KU as a major university receiving substantial research support. KU is also a Carnegie Doctoral/Research Extensive University and has been a member of the Association of American Universities since 1909. The university has a long and successful record of research collaboration through independent, multidisciplinary research centers that focus on common themes. For more information about research on the Medical Center campus, visit the University of Kansas Medical Center Research Institute (http://www.kumc.edu/kumcri.html) website page.

This catalog is not itself a source of policy and does not create a contract between the University of Kansas and its students. University policy is the binding agent in the event an inconsistency is noted between the catalog and official University policy. Whenever possible the catalog provides information from the latest policies at the time of publication.

· Admission Notification (p. 2415)
· Admission Procedure (p. 2415)
· Application Fees (p. 2415)
· Background Check (p. 2415)
· Degree Seeking Admission (p. 2413)
· Graduate Certificate Admission (p. 2414)
· Minimum English Proficiency Requirement (p. 2414)
· Non-degree Seeking Admission (p. 2414)
· Reactivation (p. 2415)

Admission to Graduate Studies

Persons whose records indicate their ability to succeed with advanced work may be admitted for graduate study. Applicants may apply as degree seeking, non-degree seeking, or to a Graduate Certificate program. Applicants seeking an identifiable degree program are degree seeking, while those applicants who do not have an identified degree program should be admitted under the non-degree seeking category. No student may work toward a graduate degree without being accepted as a degree seeking student in a specific graduate program.

Degree Seeking Admission

Students who wish to work toward a specific graduate degree should be considered for admission under the degree seeking category.

Regular Admission

Regular admission status requires a bachelor’s degree and a cumulative grade-point average (GPA) of at least a 3.0 on a 4.0 scale, from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor’s degree requirements. The bachelor’s degree is not acceptable if it contains credit awarded for work experience that was not directly supervised by faculty members (life experience) of an accredited university or not evaluated in units that identify the academic content (e.g., P/F, S/U). Applicants who are not native speakers of English must demonstrate they meet the Minimum English Proficiency Requirements as described below.

Applicants must meet these minimum admission requirements to qualify for regular admission. Individual academic programs may have additional admission requirements that the applicant must also meet to be eligible for regular admission status to that program.

In exceptional cases, persons not holding bachelor’s degrees may be admitted if they are academically well prepared. In these cases, the Dean of Graduate Studies reviews the student’s academic background and a letter of petition from the program director and determines if the student will be admitted for graduate study.

Regular Admission, Special B

The Special B Admission category is available only to degree seeking graduate students applying to the Interdisciplinary Graduate Program in Biomedical Sciences (p. 2114) (IGPBS)
offered by the School of Medicine. A student meeting the minimum admissions requirements described under Regular Admission and the academic standards of the basic science departments is admitted to study in IGPBS.

After completion of the IGPBS program, the student seeks entrance directly into a specific graduate discipline in one of the basic science departments. When the department accepts an IGPBS student, the department submits a Progress to Degree form to formally change the individual student's academic program from IGPBS to the specific basic science doctoral program.

Non-degree Seeking Admission

A non-degree seeking applicant applies to the university for admission as a non-degree seeking student and may be processed by a specific department or program. Admission requires a bachelor's degree from KU or from another regionally accredited institution or foreign university with substantially equivalent bachelor's degree requirements. Applicants who are not native speakers of English must demonstrate they meet the Minimum English Proficiency Requirements as described below. The applicant is not required to meet the other admission standards of regular admission.

Non-degree seeking admission is not intended to bypass regular admission into a graduate degree program. However, if a non-degree seeking student later applies for admission as a regular degree seeking student, and is accepted by an academic program, the total transfer credits toward a graduate degree may not exceed six hours, or eight hours if the student holds a baccalaureate degree from KU (this total includes credit from other accredited graduate programs as well as non-degree credit earned at KU).

Graduate Certificate Admission

An application is required to pursue a graduate certificate. A graduate certificate program must adhere to the same minimum admission standards required for degree seeking admission as described in the section above.

No student may work toward a graduate certificate without being accepted in a specific graduate certificate program. Graduate certificates are not granted retroactively. Graduate credit from another institution may not be transferred to a KU graduate certificate program. The certificate program is not intended to serve as a default system for students in a degree program who find that they are not able to complete the degree for academic or other reasons. Should a student drop out of a degree program and seek admission to a certificate program, all certificate admission requirements must be followed for admission and conferral of the certificate.

Applicants apply directly to a graduate certificate program for admission unless the applicant is a current graduate degree seeking student. To admit a current degree seeking graduate student to a certificate program, the student must be in good standing (3.0 or higher grade-point average) with their degree program. If pursuing a graduate certificate offered by another department, the student must inform the graduate director, advisor, or coordinator in the home degree program of intent to seek the certificate. If approved by the home department, the student must then make application directly to the graduate certificate program.

The graduate certificate program is not a means of entry into a graduate degree program. If students admitted to a graduate certificate program are later admitted to a graduate degree program as degree seeking, applicable courses taken for the graduate certificate program may, upon recommendation of the program to the Office of Graduate Studies and within general guidelines, be approved by the Dean of Graduate Studies to be counted toward the degree.

While the courses comprising a graduate certificate may be used as evidence in support of a student’s application for admission to a graduate degree program, the certificate itself is not considered to be a prerequisite and does not guarantee admission into any graduate degree program.

Minimum English Proficiency Requirement for Admission to a Graduate Program

Academic programs must verify that all applicants, whether domestic or international, who are not native speakers of English, meet the minimum English proficiency requirement to be admitted for graduate study as degree seeking, non-degree seeking, or certificate program students. Verification may come in any one of the following forms:

- Official transcript showing the applicant graduated with a baccalaureate degree (or higher) earned in residence from an accredited U.S. institution of higher education.
- Official transcript showing the applicant graduated with a baccalaureate degree (or higher) from an institution whose medium of instruction is English. This does not apply to degrees earned online. The verification may be from a catalog or program description brochure or an official letter from a department chair, dean, or other university official stipulating English as the language of instruction. Verification of English instruction from the institution must be included unless the degree is from one of the countries on the "TOEFL/IELTS Exemption List" posted on the Office of International Programs (http://www.kumc.edu/international-programs/academic-english-requirements.html) website. The program considering admission should also conduct a phone interview with the prospective student.
- Receipt of an official copy (not student's copy) of applicant's TOEFL or IELTS scores achieved not more than two years before the semester of admission. Below are the minimum scores required on the TOEFL or IELTS to satisfy the minimum English proficiency requirement for admission. Individual programs may opt for a more restrictive policy regarding English proficiency for the students they recommend to Graduate Studies for admission.

**TOEFL scores (paper)**
- 57 overall minimum
- 5.0 minimum on essay

**TOEFL scores (iBT)**
- 23 minimum Reading and Listening
- 19 minimum on Writing

**IELTS scores**
- The overall band score should be at least 6.5 with no component band score below 6

If a student does not meet the minimum requirement for admission, the academic program may petition the Dean of Graduate Studies for
an exception. The petition will include a justification for admitting the specific student, including a description of the interview process, and a plan for the student to achieve academic success. The petition should also describe the metrics that the program proposes for evaluating the academic success of the student and the timeline that will be followed for the plan.

Additional Spoken English Proficiency Requirements for Graduate Teaching Assistant, Medical Center Campus

The Kansas Board of Regents (http://www.kansasregents.org/) requires that in order to be appointed as a Graduate Teaching Assistant (GTA), students must first attain a minimum score of 50 on the TSE or SPEAK tests, a minimum iBT speaking score of 24, or a minimum IELTS speaking score of 8. The SPEAK test is administered free of charge by appointment in the Office of International Programs (http://www.kumc.edu/international-programs/academic-english-requirements/speak-test-faq.html). SPEAK scores from other institutions will not be accepted.

Admission Procedure — Medical Center Campus

The Office of Admissions (http://www.kumc.edu/student-services/office-of-admissions.html) facilitates the application process for all graduate programs through the KUMC online application (https://gograd.ku.edu/apply/?sr=ca7d45b3-1f3c-471c-89d2-5abe042c53bb). To ensure adequate time for review, the applicant should check with each individual degree program for its application deadline date.

Graduate Studies requires official transcripts from the baccalaureate granting institution that show a bachelor’s degree was conferred, plus any transcripts from institutions attended post-baccalaureate. International applicants must provide English proficiency test scores as described in the Minimum English Proficiency Requirement above. Programs may request transcripts for all college courses taken and other application materials. Applicants should check with the program to which they are applying for information on required, program-specific application materials.

Background Check

A background check is required during the admission process; it may affect the student’s eligibility to enter the program. In the case of students involved in direct patient contact, additional checks maintained by various health care disciplines may be required. Prospective students should check with their individual academic programs regarding these requirements.

All domestic students, as well as any international students who have been in the United States for more than 30 days prior to admission*, must submit to at least a standard background check through Validity Screening Solutions. In the case of students involved in direct patient contact, additional checks of Employment Disqualified Listings maintained by various health care disciplines may be required by specific programs. Prospective students should check with their individual department or program to determine the process and appropriate institutional or program code number to be provided to Validity Screening Solutions for the transmittal of the background check results.

Background check results will be considered on a case-by-case basis, but in general, the following may be considered as disqualifying findings and therefore prevent admission or matriculation. Future licensing requirements can determine admission.

- Felony convictions
- Misdemeanor convictions or felony deferred adjudications involving crimes against persons (physical or sexual assault or abuse)
- Misdemeanor convictions related to moral turpitude (e.g., prostitution, public lewdness, etc.)
- Felony deferred adjudications for the sale, possession, distribution or transfer of narcotic drugs or other controlled substances
- Registered sex offender status
- Medicare, Medicaid or other healthcare fraud or misuse

Should you have any questions concerning this requirement for admission to Medical Center campus programs, please contact your specific program or department.

*International students admitted on valid visas and who have not resided in the United States for more than 30 days may be excused from this requirement due to the background checks conducted as part of their visa screening process.

Application Fees

Nonrefundable application fees payable to the University of Kansas are required. Rates are subject to change. Some departments and programs require deposits from admitted students to be fully credited against tuition upon enrollment.

<table>
<thead>
<tr>
<th>Program</th>
<th>Fee</th>
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<tbody>
<tr>
<td>School of Health Professions</td>
<td>$75</td>
</tr>
<tr>
<td>degree or certificate seeking</td>
<td></td>
</tr>
<tr>
<td>application</td>
<td></td>
</tr>
<tr>
<td>School of Health Professions</td>
<td>$60</td>
</tr>
<tr>
<td>non-degree seeking application</td>
<td></td>
</tr>
<tr>
<td>School of Medicine degree or</td>
<td>$60</td>
</tr>
<tr>
<td>certificate seeking application</td>
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</tr>
<tr>
<td>School of Medicine non-degree</td>
<td>$60</td>
</tr>
<tr>
<td>seeking application</td>
<td></td>
</tr>
<tr>
<td>School of Nursing degree or</td>
<td>$75</td>
</tr>
<tr>
<td>certificate seeking application</td>
<td></td>
</tr>
<tr>
<td>School of Nursing non-degree</td>
<td>$75</td>
</tr>
<tr>
<td>seeking application</td>
<td></td>
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</tbody>
</table>

Admission Notification

Each applicant is notified of the admission decision by email. The admission decision letter from the Dean of Graduate Studies includes the admission classification (degree-seeking, Special B, non-degree seeking or certificate-seeking). For all admission categories, enrollment in specific courses may be subject to fulfillment of program course prerequisites and/or consent of the instructor.

After an applicant has been admitted, a program may defer an applicant’s admission for one year after which time the applicant must submit a new application.

Admission to graduate studies does not imply admission to candidacy for a higher degree. Requirements for an advanced degree must be regarded as minimum requirements. Additional requirements depend on the student’s undergraduate preparation and the particular field of graduate work chosen.

Reactivation

Students who are not continuously enrolled should check with their academic program to see if they will be required to re-apply for admission or if they may be reactivated without re-applying. If permission is granted
by the program to reactivate, the student completes the Reactivation Form (http://www.kumc.edu/reactivationform/) posted on the Registrar’s website. Individual programs make the determination about when a student is required to re-apply. However, after an absence of 5 years, Graduate Studies requires the student to re-apply for admission to their graduate program.

Limitations on Admission

Because of limitations of space, faculty, or general resources for research and instruction, some programs must restrict the number of applicants they admit. Questions should be directed to the program to which the prospective student wishes to apply.

- Awarding of Degrees (p. 2416)
- Combined Degrees (p. 2425)
- Dissertation Committee for Ph.D. (p. 2422)
- Dissertation Submission and Publication for Ph.D. (p. 2423)
- Doctoral Degree Programs (p. 2418)
- Doctoral Degree Requirements Clinical Doctorate (p. 2419)
- Doctoral Degree Requirements Ph.D. (p. 2422)
- Final Oral Exam (dissertation defense for Ph.D.) (p. 2422)
- Interdisciplinary Studies (p. 2424)
- Master's Degree Programs (p. 2416)
- Master's Degree Requirements (p. 2416)
- Master's General Examination, Thesis Defense or Project Defense (p. 2417)
- Oral Comprehensive Exam for Ph.D. (p. 2421)
- Post-Comprehensive Enrollment for Ph.D. (p. 2422)
- Research Skills and Responsible Scholarship for doctoral students (p. 2419)
- Thesis Submission and Publication for master's students (p. 2417)

Awarding of Degrees

Degrees are awarded three times each year, in August, December, and May. Degrees are conferred formally at the annual commencement held in May each year. Degree candidates are not eligible to graduate if the graduate cumulative grade-point average is lower than 3.0 in all courses taken for graduate credit.

Students who are working toward two degrees must complete requirements for each degree. Course work may not count toward fulfilling degree requirements for more than one degree.

Graduate students may not earn an additional KU degree with the same name and degree code as a previously awarded degree from KU. This applies to the completion of different degree tracks, concentrations, and subspecialties within a given degree. This does not prohibit students from earning additional master's or doctoral degrees in another discipline.

Master's Degree Programs

Master of Arts (M.A.) and Master of Science (M.S.)

Historically, most of the master’s degrees granted have been the Master of Arts (M.A.) and Master of Science (M.S.). This fact conforms with the traditional liberal arts background out of which most U.S. graduate schools developed. The degree requirements for the M.A. and M.S. are generally concentrated in one area or major discipline. The KU Medical Center campus, with oversight from the Office of Graduate Studies, offers Master of Science degrees in several disciplines through the Schools of Health Professions (p. 542), Medicine (p. 2018), and Nursing (p. 2239).

Professional Master's Degrees

In more recent years, professional master’s degree programs have been developed for entry level or advancement in specific professions. On the Medical Center campus, this includes health services administration (M.H.S.A.) (http://catalog.ku.edu/medicine/health-policy-management/mhsa/) and public health (M.P.H.). (p. 2104)

Master's Degree Requirements

This section gives the general and common requirements for all master’s degree programs. The program sections of the online catalog give specific requirements for the degrees they offer.

Master's Program Time Constraints

Normal expectations are that most master’s degrees (excluding some professional terminal degrees) should be completed in 2 years of full-time study. However, master’s degree students are allowed 7 years for completion of all degree requirements. In cases in which compelling reasons or circumstances recommend a 1-year extension, the Office of Graduate Studies, on recommendation of the academic program, has authority to grant the extension. In cases where more than 8 years are requested, the Office of Graduate Studies considers petitions for further extensions. These may be granted provided evidence of continuous progress, currency of knowledge, and other reasons are compelling. Some academic programs may have more stringent rulings about time restrictions. Students should ask about the policy in effect in the academic program in which they plan to study.

Master's Enrollment Requirement

All graduate students enrolled in master’s graduate programs must be enrolled the semester they complete master’s degree requirements. Master’s students who complete degree requirements during the first week of summer session or within the first 2 weeks of the fall or spring semester are not required to be enrolled for that term unless they were not enrolled during the previous semester. See the current Graduate Studies Calendar (https://www.kumc.edu/academic-and-student-affairs/departments/graduate-studies/about/calendar-and-events.html) for deadlines for specific semesters.

M.A. and M.S. Specific Degree Requirements

A Master of Arts (M.A.) or a Master of Science (M.S.) degree requires at least 1 year of graduate work or its equivalent. Stated in terms of hours of credit, the standard master’s program requires 30 hours. With permission of the academic program (or in the case of interdepartmental programs, permission of the joint program committee) and of the Office of Graduate Studies, it is sometimes possible to complete a 30-hour master’s degree with as few as 24
hours if the student enters the program especially well prepared and maintains a superior grade-point average. Work for a master's degree is concentrated in the major area, with only a minimal amount of work (usually no more than 6 hours) that is completed at KU permitted outside the major department. Each master's program must contain a research component, represented either by a thesis (usually for 6 hours of credit) or by an equivalent enrollment in research, independent investigation, or seminars. Within these requirements, departmental master's programs may be flexible enough to meet the particular needs of individual students.

In a few cases, the degree is offered through two schools and administered by joint committees with faculty representation from both schools. The Master of Arts degree in speech-language pathology and the Master of Arts degree in audiology are administered by an intercampus committee drawn from the Department of Speech-Language-Hearing: Sciences and Disorders in Lawrence and from the Department of Hearing and Speech in the School of Health Professions in Kansas City.

**M.A. and M.S. Final General Examination, Thesis Defense or Project Defense**

Completion of a final general examination, defense of a thesis, or defense of a project in the major subject, is the culminating academic phase of the M.A. and M.S. degree programs and is required of all candidates for these two degrees. At the option of the academic program, the final general examination may be oral or written, or partly oral and partly written. In some departments, passing a written examination is a necessary preliminary to taking the oral examination by which success or failure is judged. For students defending a master's thesis, the student must be enrolled in a minimum of one hour of master thesis the semester the thesis is defended.

The committee for the administration of the general exam or the defense of a thesis or project, must consist of at least 3 members, all of whom must be members of the Graduate Faculty as described in the Graduate Faculty (p. 2426) section of this catalog. The majority of committee members serving on a graduate student oral examination committee in most cases are in the candidate’s department/program of study.

The examination is held during the semester of the student’s final enrollment in course work. The thesis defense should be held when the thesis has been substantially completed and is held normally during the student’s final semester of enrollment. If defending a thesis, the student must be enrolled in a minimum of one hour of thesis the semester the student defends the thesis.

When a M.A. or M.S. student is in their final semester, the degree program requests the Office of Graduate Studies approve the scheduling of the final general exam, thesis, or project defense via the Progress to Degree system. The degree program should ascertain that the student is in good academic standing (3.0 or higher cumulative grade-point average) before scheduling the examination or defense. The Progress to Degree request must be submitted at least two weeks prior to the examination date. The Office of Graduate Studies verifies that criteria described in the preceding paragraphs has been met upon receiving a Progress to Degree form requesting the scheduling of the general exam, thesis defense, or project defense. If the criteria has been met, Graduate Studies approves the request to proceed.

For every scheduled examination, thesis defense or project defense, the degree program reports on the Progress to Degree form an examination result of Honors, Satisfactory, or Unsatisfactory. Use of the Honors designation is at the program’s discretion. If the aspirant receives a result of Unsatisfactory, it may be repeated upon the recommendation from the program/department.

Ideally, all members of the committee are physically present for the final general exam, thesis defense, or project defense. A majority of committee members must be physically present for the examination or defense to commence; for master’s oral examinations the requirement is 2 of the 3 members.

In addition, it is required that the student being examined and the chair of the committee be physically present at the examination or defense. Mediated attendance by the student or chair is prohibited. When a situation arises in which a member cannot be physically present, attendance via mediated means (tele/video-conferencing) is acceptable at the discretion of the committee chair. In cases where the student prefers an examination in which all committee members are physically present, the student’s preference shall be honored.

A request for substitution of any members of the committee once approved by Graduate Studies through the Progress to Degree system must be approved by Graduate Studies in advance of the exam.

In the case of failure of technology during the examination, all members of the committee present must concur that the examination was substantially complete. If any member of the committee dissents, the examination is considered cancelled and must be rescheduled. The committee members at remote locations must be contacted to submit their decision concerning the assessment of the examination before the exam results are recorded.

The Office of Graduate Studies will manage consideration of and decisions on exceptions to the exam policy outlined above. Requests for exceptions to this policy shall be submitted in writing to the Dean of Graduate Studies. If exceptions are granted, Graduate Studies will request that a member of the departmental leadership (the department chair or graduate director) be present at the examination.

**M.A. and M.S. Thesis Submission**

Formatting requirements and instructions for the proper format of the thesis are included on the Graduate Studies website. The student must be the author of the thesis, and every publication from it must indicate that authorship. Practices vary among disciplines, and even among scholars in a given field, as to whether the mentor's name may appear as a co-author and whether as senior or junior, on subsequent publication of the thesis (usually revised), or on articles prepared from it. Clear understandings in individual cases are expected to be established during the apprenticeship period, when the ethical practices in publication are addressed within the program’s professional development training.

When the thesis defense has been passed and all requested changes have been made to the thesis, the student arranges for the thesis committee chair (or co-chairs) to review changes and approve the final thesis on behalf of the thesis committee, the committee chair then sends the thesis to the program’s Graduate Director for review and approval. When the Graduate Director has
determined the thesis meets program requirements and is formatted correctly for publishing by ProQuest, they send approval on behalf of the program via email to the Office of Graduate Studies. At that time, the date of the Graduate Director’s approval is entered by the student on the student’s acceptance page in their thesis prior to uploading to ProQuest.

The student is then required to arrange publication of the thesis through ProQuest (https://www.proquest.com/products-services/dissertations/) and payment of all associated fees (including copyright fee if applicable), through the electronic submission process (https://www.kumc.edu/academic-and-student-affairs/departments/graduate-studies/for-students/electronic-thesis-and-dissertation.html) detailed on the Graduate Studies website.

A form regarding publication permissions and embargo preferences is one of the required documents that is submitted to the Office of Graduate Studies following successful defense of the thesis. Theses will be made available through ProQuest (http://www.proquest.com/kuscholarworks.ku.edu/) unless there is an embargo in place or special circumstances pertain as outlined in the Embargo of Theses and Dissertations (https://catalog.ku.edu/graduate-studies/kumc/#regulationtext) policy in the Regulations section of this catalog.

**Doctoral Degree Programs**

KU Medical Center campus with oversight from the Office of Graduate Studies offers the Doctor of Philosophy (Ph.D.) in several specific disciplines and offers seven clinical doctorate degree programs. General descriptions for each of the doctoral degrees offered are given here in succinct form to provide convenient comparison of the degrees. Detailed information about requirements for each degree as it is offered in specific disciplines should be obtained from the appropriate academic program pages in this catalog. Note: The School of Medicine also offers the Doctor of Medicine (p. 2127) (M.D.) (p. 2127) degree which is administered by the School of Medicine.

**Doctor of Philosophy (Ph.D.)**

The degree of Doctor of Philosophy (Ph.D.) is the highest degree offered by the university. It is awarded for mastering a field of scholarship, for learning the methods of investigation appropriate to that field, and for completing a substantial piece of original research. In addition to preparing research specialists, the process of earning a Ph.D. shares certain goals with liberal education: putting order into human experience; fostering a love of learning for its own sake; instilling respect for human values; integrating various human powers into a process of creation; and making vital, in many fields at least, a sense of history.

Although the courses and research leading to the Ph.D. are necessarily specialized, the attainment of this degree should not be an isolated event in the enterprise of learning. The Ph.D. aspirant is expected to be a well-educated person with a broad base of general knowledge, not only as preparation for more advanced work but also as a means of knowing how the chosen specialty is related to other fields of human thought.

To give depth and breadth to their doctoral programs, many departments require some work in a minor field or at least an articulated selection of courses. Because of the diversity of the fields in which the Ph.D. is offered, and the variety of needs and interests of individual students, the degree does not have a specific requirement for a minor. However, the Ph.D. aspirant is encouraged to plan an integrated program, under departmental direction, that includes courses outside the major field.

Doctor of Philosophy (Ph.D.) is offered by programs in specific disciplines by the Schools of Health Professions (p. 542), Medicine (p. 2018), and Nursing (p. 2239). Admission and degree requirements are listed under the individual programs in each school of this online catalog.

**Clinical Doctorates:**

**Clinical Doctorate in Speech-Language Pathology (S.L.P.D.)**

The Clinical Doctorate in Speech-Language Pathology (S.L.P.D.) program is intended for individuals who have completed a Master of Speech-Language Pathology degree and have entered clinical practice. The program prepares the student at the doctoral level to meet the demands of complex clinical practice. This degree program is offered by the KU School of Health Professions. Admission and degree requirements are listed under Communicative Disorders: Intercampus Program (p. 583) of this online catalog.

**DOCTORATE IN CLINICAL LABORATORY SCIENCES (D.C.L.S.)**

The Doctorate in Clinical Laboratory Science is an advanced-practice degree for actively practicing, currently ASCP-certified, medical laboratory scientists. It is designed for those interested in increasing practical and theoretical knowledge of clinical laboratory science, advancing in the profession, and positively impacting the current health care system. This degree program is offered by the KU School of Health Professions. Admission and degree requirements are listed in the Doctorate in Clinical Laboratory Sciences (p. 610) section of this online catalog.

**Doctor of Audiology (Au.D.)**

The Doctor of Audiology (Au.D.) program prepares the student to enter clinical practice as an audiologist. The program produces professionals skilled in providing diagnostic, rehabilitative, and related services in the fields of sound, balance, and hearing sciences. There is an emphasis on the clinical learning experience, although research is also a significant component of the program. This degree program is offered by the KU School of Health Professions. Admission and degree requirements are listed under Communicative Disorders: Intercampus Program (p. 583) of this online catalog.

**Doctor of Nurse Anesthesia Practice (D.N.A.P.)**

The Doctor of Nurse Anesthesia Practice (D.N.A.P.) degree program prepares the registered nurse to become a nurse anesthesia practitioner with the capability to deliver competent nurse anesthesia services, engage in research, and assume leadership roles in the profession. Students receive extensive education in both the academic and clinical components of nurse anesthesia. Students learn to administer anesthesia
to all patient populations in a variety of clinical settings using all current anesthesia techniques. Graduates are prepared to take the national certification examination required to become Certified Registered Nurse Anesthetists. This degree program is offered by the KU School of Health Professions. Admission and degree requirements are listed in the Doctor of Nurse Anesthesia Practice (p. 655) section of this online catalog.

**Doctor of Nursing Practice (D.N.P.)**
The Doctor of Nursing Practice (D.N.P.) prepares advanced practice nurses at the highest level of nursing practice. The D.N.P. offers sophisticated, cutting-edge experiences that help nurses actively engage in a complex, dynamic, and demanding health care field. Skills in collaboration, innovation, and evaluation, complemented by advanced practice skills, prepare nurses to share the future of health care. Students preparing for advanced practice roles learn to provide patient-centered care that is evidence-based, and contribute to the development of the highest level of evidence-based practice. Students preparing for indirect care roles learn to provide the highest level of leadership in a variety of care and educational settings. This degree program is offered by the KU School of Nursing. Admission and degree requirements are listed in the Doctor of Nursing Practice (p. 2270) section of this online catalog.

**Doctor of Occupational Therapy (O.T.D.)**
The Doctor of Occupational Therapy (O.T.D.) program of study is intended for occupational therapists who have either a bachelor’s degree or a Master of Occupational Therapy degree and wish to upgrade their knowledge and skills to the doctoral level to meet the increasing demands of complex practice issues. There are two tracks of the O.T.D., which are entry-level and post-professional. This degree program is offered by the KU School of Health Professions. Admission and degree requirements for the two tracks are listed in the Occupational Therapy (p. 660) section of this online catalog.

**Doctor of Physical Therapy (D.P.T.)**
The Doctor of Physical Therapy (D.P.T.) degree program is designed for individuals pursuing careers in physical therapy. The program prepares a physical therapy practitioner with the skills for lifelong professional development. This degree program is offered by the KU School of Health Professions. Admission and degree requirements are listed in the Doctor of Physical Therapy (p. 682) section of this online catalog.

**Clinical Doctorate Degree Requirements**
The following sections list the general and common requirements for doctoral degrees. Specific degree requirements, including requirements for the clinical doctoral degrees, set by specific departments, programs, and schools appear in the sections of the catalog devoted to those units.

**Maximum Tenure for Doctoral Programs**
After being admitted to doctoral programs at KU, students complete all degree requirements in 8 years. The Office of Graduate Studies has authority to grant a 1-year extension based on a program’s written recommendation, which should include compelling circumstances for the extension. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in 2 years of full-time study, and both master’s and doctorate in 6 years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy in effect in the department in which they plan to study.

**Doctoral Enrollment Requirement**
All graduate students enrolled in doctoral graduate programs must be enrolled the semester they complete doctoral degree requirements. Doctoral students who complete degree requirements during the first week of summer session or within the first 2 weeks of the fall or spring semester are not required to be enrolled for that term unless they were not enrolled during the previous semester. See the current Graduate Studies Calendar (https://www.kumc.edu/academic-and-student-affairs/departments/graduate-studies/about/calendar-and-events.html) for deadlines for specific semesters.

**Research Skills and Responsible Scholarship**
All doctoral students must meet this requirement before proceeding to comprehensive exams. The requirement must include at least 2 components:

1. Every doctoral student is required to have training in responsible scholarship pertinent to the field of research.
2. Every doctoral student is required to obtain research skills pertinent to the doctoral level of research in their field(s).

**Procedure**
All doctoral programs must have a research skills and responsible scholarship requirement plan approved by the Office of Graduate Studies. Students meet this requirement as determined by the approved plan for their program. It is the responsibility of the program to report when the student completed the requirement and how the requirement was met.

No course graded CR or NC can count toward the satisfaction of the requirements for a graduate degree. This prohibition includes any courses taken to meet the Research Skills and Responsible Scholarship requirement.

It is the purview of the department or program to determine the necessary topics in training doctoral students in the areas of responsible scholarship. Such topics may include:

- Protection of human subjects
- Welfare of laboratory animals
- Conflicts of interest
- Data management
- Mentor/student responsibilities
- Collaborative research
- Authorship, publication, plagiarism, copyright
- Peer review
- Professional practices
Maintenance of confidentiality

Appropriate research conduct and research misconduct

It is also the purview of the department or program to determine the research skills necessary to perform doctoral level research. Research skills may include:

- Knowledge of language(s) significant to the field
- Research methodology
- Methods of qualitative and quantitative data analysis
- Computer programming necessary for the field
- Laboratory skills and techniques necessary for the discipline

Note: These lists serve as guides; additional appropriate topics may exist.

Doctor of Philosophy (Ph.D.) Degree Requirements

This section lists KU regulations common to the administration of all doctoral Ph.D. programs. The particular application, interpretation, or method of implementation of such a common element for individual degree programs and departments is, in certain cases, left to the faculty of the department or the degree program (e.g., Research Skills and Responsible Scholarship requirement). Additional requirements specific to each degree, along with variations permitting each student to achieve particular academic goals, are listed in the section of this catalog for the school through which the degree program is offered.

1. Admission

Upon admission to a Ph.D. program, the student is known as an aspirant for the degree and remains so designated until successful completion of the comprehensive oral examination. After passing that examination, the student is designated a candidate for the degree until successful defense and submission of the finished dissertation.

2. Program Time Constraints

Minimum Tenure

The student must spend 3 full academic years, or the bona fide equivalent thereof, in resident study at this or some other approved university, including the time spent in attaining the master’s degree. Resident study at less than full time requires a correspondingly longer period, but the requirement is not measured merely in hours of enrollment. Because a minimum number of hours for the degree is not prescribed, no transfer of credit is appropriate. However, graduate degree programs take relevant prior graduate work into consideration in setting up programs of study leading to the doctorate.

Residence Requirement

Two semesters, which may include one summer session, must be spent in resident study at KU. For the two specific semesters counted towards meeting this requirement, the student must be involved full time in academic or professional pursuits, such as a GTA or GRA appointment for teaching or research if it is directed specifically toward degree objectives. Enrollment in approved distance-learning courses offered through KU cannot be used to meet the doctoral residence requirement.

Full-time enrollment for a graduate student is 9 hours for fall or spring semesters and 6 hours for the summer semester. For semesters in which a student holds a GTA or GRA appointment, full-time enrollment is 6 hours for fall or spring semesters and 3 hours for the summer semester. The residence requirement must be met prior to the semester the Comprehensive Oral Examination is scheduled. It is the responsibility of the academic program to report the two semesters that will satisfy the residency requirement via the Progress to Degree form requesting approval to schedule the Comprehensive Oral Examination.

Note: Those noted above are minimum residence requirements. Please check with the individual program for any additional requirements.

Maximum Tenure

After being admitted to doctoral programs at KU, students must complete all degree requirements in 8 years. In cases in which compelling circumstances recommend a 1-year extension, Graduate Studies has authority to grant the extension on the written advice of the department and dissertation committee. Students who complete the master’s degree at KU and subsequently begin doctoral studies have a maximum total enrolled time of 10 years to complete both degrees. Normal expectations, however, are that most master’s degrees (excluding some professional terminal degrees) should be completed in 2 years of full-time study, and both master’s and doctorate in 6 years of full-time study. Some graduate degree programs may have more stringent time restrictions. Students should inquire about the policy that is in effect in the department in which they plan to study.

A student in any of the above categories may petition the Dean of Graduate Studies through the program for a leave of absence during either the pre- or post-comprehensive period to pursue full-time professional activities related to the doctoral program and long-range professional goals. Leaves of absence also may be granted because of illness or other emergency. Ordinarily a leave of absence is granted for 1 year, with the possibility of extension upon request. After an absence of 5 years, however, a doctoral aspirant or candidate loses status as such and must apply for readmission to the program.

3. Research Skills and Responsible Scholarship

All doctoral students must meet this requirement before proceeding to comprehensive exams. The requirement must include at least 2 components:

1. Every doctoral student is required to have training in responsible scholarship pertinent to the field of research.

2. Every doctoral student is required to obtain research skills pertinent to the doctoral level of research in their field(s).
Procedure

All doctoral programs must have a research skills and responsible scholarship requirement plan approved by the Graduate Studies Office. Students meet this requirement as determined by the approved plan for their program. The approved plan for meeting this requirement is included in the Degree Requirements section of this catalog for each Ph.D. program offered. It is the responsibility of the program to report when the student completed the requirement and how the requirement was met via the Progress to Degree form requesting approval to schedule the Comprehensive Oral Examination.

No course graded CR or NC can count toward the satisfaction of the requirements for a graduate degree. This prohibition includes any courses taken to meet the Research Skills and Responsible Scholarship requirement.

It is the purview of the department or program to determine the necessary topics in training doctoral students in the areas of responsible scholarship. Such topics may include:

- Protection of human subjects
- Welfare of laboratory animals
- Conflicts of interest
- Data management
- Mentor/student responsibilities
- Collaborative research
- Authorship, publication, plagiarism, copyright
- Peer review
- Professional practices
- Maintenance of confidentiality
- Appropriate research conduct and research misconduct

It is also the purview of the department or program to determine the research skills necessary to perform doctoral level research. Research skills may include:

- Knowledge of language(s) significant to the field
- Research methodology
- Methods of qualitative and quantitative data analysis
- Computer programming necessary for the field
- Laboratory skills and techniques necessary for the discipline

Note: These lists serve only as guides; additional appropriate topics may exist.

4. Comprehensive Oral Examination

The comprehensive oral examination covers the major field and any extra departmental work for which the program wishes to hold the aspirant responsible. When a doctoral aspirant has completed the major portion of the course work at a level satisfactory to the graduate degree program and met all other program and general requirements prerequisite to the comprehensive oral examination, including the residence requirement and the research skills and responsible research requirement as appropriately applied and established for the student’s particular program, the degree program requests the Office of Graduate Studies approve the scheduling of the comprehensive oral examination via the Progress to Degree system. The degree program should ascertain that the student is in good academic standing (3.0 or higher grade-point average) before scheduling the examination. The examination may be scheduled provided that at least 5 months have elapsed from the time of the aspirant’s first enrollment at KU and at least 90 days have elapsed since any unsuccessful attempt. The examination request must be submitted at least two weeks prior to the examination date.

The committee for the comprehensive oral examination must consist of at least five members, all of whom must be members of the Graduate Faculty as described in the Graduate Faculty (p. 2426) section of this catalog. The majority of committee members serving on a graduate student oral examination committee in most cases are in the candidate’s department/program of study. The chair of the committee must hold dissertation status. If the committee has co-chairs, at least one of the co-chairs must hold dissertation status. At least one member of the committee must be from a department other than the aspirant’s major department. This outside committee member represents the Office of Graduate Studies and must hold either regular or dissertation graduate faculty status in a department outside the major department to be eligible to serve in this capacity. Before the examination, Graduate Studies provides the outside committee member a list of responsibilities as the Graduate Studies representative. The Graduate Studies representative is a voting member of the committee, has full right to participate in the examination, and reports any unsatisfactory or irregular aspects of the examination to the Office of Graduate Studies and its Dean.

The Office of Graduate Studies verifies that all criteria described in the preceding paragraphs has been met upon receiving a Progress to Degree form requesting the scheduling of the oral comprehensive exam. If the criteria has been met, Graduate Studies approves the request to proceed with the exam.

For every scheduled examination, the degree program reports on the Progress to Degree form an examination result of Honors, Satisfactory, or Unsatisfactory. Use of the Honors designation is at the program’s discretion. If the aspirant receives a result of Unsatisfactory on the comprehensive oral examination, it may be repeated on the recommendation of the program, but under no circumstances may it be taken more than 3 times. In any case, the examination may not be repeated until at least 90 days have elapsed since the last unsuccessful attempt.

Ideally, all members of the committee are physically present for the examination. A majority of committee members must be physically present for an examination to commence; for doctoral oral examinations, the requirement is 3 of the 5 members.

In addition, it is required that the student being examined, the chair (or co-chairs) of the committee, and the outside committee member all be physically present at the examination or defense. Mediated attendance by the student or chair is prohibited. When a situation arises in which a committee member cannot be physically present...
present, attendance via mediated means (tele/video-conferencing) is acceptable at the discretion of the committee chair (or co-chairs). In cases where the student prefers an examination in which all committee members are physically present, the student’s preference shall be honored.

A request for substitution of any members of the committee once approved by Graduate Studies through the Progress to Degree system must be approved by Graduate Studies in advance of the exam.

In the case of failure of technology during the examination, all members of the committee present must concur that the examination was substantially complete. If any member of the committee dissents, the examination is considered cancelled and must be rescheduled. The committee members at remote locations must be contacted to submit their decision concerning the assessment of the examination before the exam results are recorded.

The Office of Graduate Studies will manage consideration of and decisions on exceptions to the exam policy outlined above. Requests for exceptions to this policy shall be submitted as a petition to the Dean of Graduate Studies. If exceptions are granted, Graduate Studies will request that a member of the departmental leadership (the department chair or graduate director) be present at the examination.

5. Candidacy

Dissertation Committee

Upon passing the comprehensive oral examination, the aspirant becomes a candidate for the doctorate. If it has not begun before, the traditional, close student-mentor apprenticeship relationship comes into being. The student is expected to learn by both precept and example of the mentor, and often in collaboration. The chosen field of scholarship is explored using acquired research tools. The principles and customs of academic inquiry and the codes of ethics traditional to the various disciplines and professional fields become part of the student’s thinking and working.

Post-Comprehensive Enrollment

Doctoral candidates are required, after passing the comprehensive oral examination, to be continuously enrolled in one or more hours that both moves the student towards degree completion and reflects, as accurately as possible, the candidate’s demands on faculty time and university facilities. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session.

Post-comprehensive enrollment may include enrollment during the semester in which the comprehensive oral examination has been passed. If after 18 hours of post-comprehensive enrollment the degree is not completed, the candidate must continue to enroll each semester until all degree requirements have been met. The number of hours at this stage may be as little as one hour a semester. The number of hours of enrollment is determined by the candidate’s advisor and must reflect as accurately as possible the candidate’s demands on faculty time and university facilities.

6. Dissertation

The candidate must present a dissertation showing the planning, conduct, and results of original research and scholarly creativity. The purpose of the dissertation is to encourage and ensure the development of broad intellectual capabilities as well as to demonstrate an intensive focus on a problem or research area. The dissertation itself should be an evident product of the candidate’s growth and attainment of the ability to identify significant problems; organize, analyze, and communicate scholarly results; and bring to bear on a useful area of interest a variety of research skills and scholarly or creative processes. It must show some original accomplishment, but it should also demonstrate without doubt the candidate’s potential to make future contributions to knowledge and understanding.

The dissertation is to be a coherent scholarly work, not a collage of separate, distinct pieces. Its unity of theme and treatment may still accommodate several subtopics by demonstrating their relationships and interactions. If previously published material by other authors is included in the dissertation, it must be quoted and documented appropriately. It should be noted that prior publication does not guarantee acceptance of the dissertation by the dissertation committee. Final acceptance of the dissertation is subject to the approval of the dissertation committee. The dissertation—or one or more substantial portions of it, often rewritten—is expected to be publishable and indeed to be published (see the Dissertation Submission and Publication section).

Both the dissertation research and the dissertation itself are to be completed under the guidance and direction of the dissertation committee. Formatting requirements and instructions (http://graduate.ku.edu/etd-formatting-and-working-multimedia-files/) for the proper format of the dissertation are available on the Graduate Studies website. Candidates and faculty members are reminded that the dissertation is to be a coherent, logically organized scholarly document. Because the demands and practices of different disciplines are varied, the format is somewhat flexibly described, and moderate departures from the norm are allowed when justified by the nature of the work or the circumstances of presentation. Any substantial divergences must be approved in advance as prescribed by the instructions, and candidates and faculty members are urged to seek early approval to avoid last-minute disappointments over unacceptable format or reproduction.

7. Final Oral Examination (dissertation defense)

Completion of the dissertation is the culminating academic phase of a doctoral program. This phase is comprised of the final oral examination and defense of the dissertation. In all but the rarest cases, tentative approval of the dissertation is followed promptly by the final oral examination (dissertation defense). When the completed dissertation has been accepted by the committee in final draft form, and all other degree requirements have been satisfied as outlined in the program’s degree requirements section of this catalog, the candidate’s program requests that Graduate Studies approve the scheduling of the final oral examination via the Progress to Degree form. This request must be made at least 3 weeks prior to the desired examination to allow sufficient time to publicize the
examination so that interested members of the university community may attend.

At least 5 months must elapse between the successful completion of the comprehensive oral examination and the date of the final oral examination. Under normal circumstances, the doctoral candidacy period between passage of the oral comprehensive examination and the final dissertation defense must last no longer than 5 years. If a student took the oral comprehensive examination more than 5 years prior to the dissertation defense, a re-evaluation of the student’s candidacy status is necessary. Re-evaluation of the student’s candidacy status could include retaking the comprehensive oral examination.

The committee for the final oral examination must consist of at least five members, all of whom must be members of the Graduate Faculty as described in the Graduate Faculty (p. 2426) section of this catalog. In most cases, the majority of committee members serving on a graduate student oral examination committee are in the candidate’s department/program of study. The chair of the committee must hold dissertation status. If the committee has co-chairs, at least one of the co-chairs must hold dissertation status. At least one member of the committee must be from a department other than the aspirant’s major department. This outside committee member represents the Office of Graduate Studies and must hold either regular or dissertation graduate faculty status in a department outside the major department to be eligible to serve in this capacity. Before the examination, Graduate Studies provides the outside committee member a list of responsibilities as the Graduate Studies representative. The Graduate Studies representative is a voting member of the committee, has full right to participate in the examination, and reports any unsatisfactory or irregular aspects of the examination to the Dean of Graduate Studies.

The dissertation defense should be held when the dissertation has been substantially completed and is held normally during the student’s final semester of enrollment. The student must be enrolled in a minimum of 1 hour of dissertation the semester the student defends the dissertation. Doctoral students who complete degree requirements during the first week of summer session or within the first 2 weeks of the fall or spring semester are not required to be enrolled for that term unless they were not enrolled during the previous semester. See the current Graduate Studies Calendar (https://www.kumc.edu/academic-and-student-affairs/departments/graduate-studies/about/calendar-and-events.html) for deadlines for specific semesters.

The Office of Graduate Studies verifies that all criteria described in the preceding paragraphs has been met upon receiving a Progress to Degree form requesting the scheduling of the final oral examination. If the criteria has been met, Graduate Studies approves the request to proceed with the exam.

For every scheduled examination, the degree program reports on the Progress to Degree form an examination result of Honors, Satisfactory, or Unsatisfactory. Use of the Honors designation is at the program’s discretion. If an Unsatisfactory result is reported, the candidate may be allowed to repeat the examination on the recommendation of the program/department.

Ideally, all members of the committee are physically present for the examination. A majority of committee members must be physically present for an examination to commence; for doctoral oral examinations the requirement is 3 of the 5 members.

In addition, it is required that the student being examined, the chair (or co-chairs) of the committee, and the outside committee member all be physically present at the examination or defense. Mediated attendance by the student or chair (or co-chairs) is prohibited. When a situation arises in which a member cannot be physically present, attendance via mediated means (tele/video-conferencing) is acceptable at the discretion of the committee chair (or co-chairs).

In cases where the student prefers an examination in which all committee members are physically present, the student’s preference shall be honored.

A request for substitution of any members of the committee once approved by Graduate Studies through the Progress to Degree system must be approved by Graduate Studies in advance of the exam.

In the case of failure of technology during the examination, all members of the committee present must concur that the examination was substantially complete. If any member of the committee dissents, the examination is considered cancelled and must be rescheduled. The committee members at remote locations must be contacted to submit their decision concerning the assessment of the examination before the exam results are recorded.

The Office of Graduate Studies will manage consideration of and decisions on exceptions to the exam policy outlined above. Requests for exceptions to this policy shall be submitted in writing to the Dean of Graduate Studies. If exceptions are granted, Graduate Studies will request that a member of the departmental leadership (the department chair or graduate director) be present at the examination.

8. Dissertation Submission and Publication

Formatting requirements and instructions for the proper format of the dissertation are included on the Graduate Studies website. The student must be the author of the dissertation, and every publication from it must indicate that authorship. Practices vary among disciplines, and even among scholars in a given field, as to whether the mentor’s name may appear as a co-author and whether as senior or junior, on subsequent publication of the dissertation (usually revised), or on articles prepared from it. Clear understandings in individual cases are expected to be established during the apprenticeship period, when the ethical practices in publication are addressed within the program’s professional development training.

When the student has passed the final oral examination and all requested changes have been made to the dissertation, the student arranges for the dissertation committee chair (or co-chairs) to review changes and approve the final dissertation on behalf of the dissertation committee. The committee chair then sends the dissertation to the program’s Graduate Director for review and approval. When the Graduate Director has determined the dissertation meets program requirements and is formatted correctly for publishing by ProQuest, they send approval on behalf of the program via email to the Office of Graduate Studies. At that time, the date of the Graduate Director’s approval is entered by the
student on the student’s acceptance page in their dissertation prior to uploading to ProQuest.

The student is then required to arrange publication with ProQuest (https://www.proquest.com/products-services/dissertations/) of the dissertation and payment of all associated fees (including copyright fee, if applicable), through the electronic submission process (https://www.kumc.edu/academic-and-student-affairs/departments/graduate-studies/for-students/electronic-thesis-and-dissertation.html) detailed on the Graduate Studies website.

A form regarding publication permissions and embargo preferences is one of the required documents that is submitted to the Office of Graduate Studies following successful defense of the dissertation. Dissertations will be made available through ProQuest (http://www.proquest.com/products-services/dissertations/) and KU ScholarWorks (https://kuscholarworks.ku.edu/) unless there is an embargo in place or special circumstances pertain as outlined in the Embargo of Theses and Dissertations (https://catalog.ku.edu/graduate-studies/kumc/#regulationstext) policy in the Regulations section of this catalog.

Interdisciplinary Studies

M.A., M.S., and Ph.D. with a Major in Interdisciplinary Studies

Only superior students admitted and enrolled in a graduate program at KU whose proposed studies require direction not available in any single department are considered for admission to an Interdisciplinary Studies program. Before seeking acceptance, an applicant must assemble a graduate faculty advisory committee headed by a faculty member authorized to direct master’s research (for M.A. or M.S. in Interdisciplinary Studies), doctoral research and dissertations (for Ph.D. in Interdisciplinary Studies). The applicant, in conjunction with the committee, must prepare a proposal for the course of study. The proposal must provide a rationale for the particular mix of disciplines, demonstrating how each contributes to a central theme or focus. It must also show that the proposed program cannot be achieved through an established master’s or doctoral program at KU.

The student seeking to enter the Interdisciplinary Studies program must have an outstanding academic record (a grade-point average of 3.75 or higher on a 4.0 scale for graduate courses or a grade-point average of 3.5 or higher on a 4.0 scale for undergraduate courses if no graduate courses have been taken) and must be admitted to and enrolled in a graduate program at KU at the time of application. A graduate student who has failed to maintain the required grade-point average is not eligible for the Interdisciplinary Studies program. A student is not eligible for this program if he or she has tried and failed to achieve candidacy in a regular graduate department or program at KU.

The student is expected to assume the initiative in determining his or her potential eligibility through consultation with graduate advisors, and if deemed eligible, in forming an advisory committee and preparing documentation to support the application.

Preadmission Procedures

To enter the program, a student should

1. Determine that KU offers courses and research in the areas appropriate to the their interest(s).

2. Prepare a tentative study plan based on those offerings to serve as a basis for initial discussion.

3. Approach a professor whose interests are comparable to those of the student and request that he or she acts as advisor. Normally this professor is a faculty member of the program of principal interest to the student. To grant an M.A. or M.S. in Interdisciplinary Studies, it is essential that the school has the authority to grant master’s degrees. To grant a Ph.D. in Interdisciplinary Studies, it is essential that the school has the authority to grant doctoral degrees. The selected professor must be a full member of the graduate faculty and authorized to chair doctoral dissertation committees for Ph.D. in Interdisciplinary Studies.

4. After a professor agrees to serve as an advisor, the student should assemble an advisory committee of at least 3 additional professors representing the disciplines covered in the Interdisciplinary program. At least 2 disciplines or departments must be represented.

5. In conjunction with the advisor and the committee, the student prepares a proposal for study, including

   • A statement, with supporting documentation, that the proposed Interdisciplinary Studies program cannot be accomplished through established programs.

   • A statement of the interdisciplinary or transdisciplinary nature of the proposed area of study.

   • A definition of the field of study incorporating, including consistent descriptions of the contribution each discipline makes to the broader field.

   • An outline of the course of study, indicating substantive work in the fields represented. Readings courses and independent study do not substitute for regular courses.

   • A description of the method for satisfying research skills and responsible scholarship requirements.

   • A description of the comprehensive examination procedures for the Ph.D. (nature of the examinations and possible examining committee) or final examination for the M.A./M.S.

   • A description, to the extent possible, of the nature of the field in which a dissertation or master’s thesis might be written, indicating the respective contributions of the selected disciplines to the final product.

   • The following attachments:

     i. complete transcripts of all previous work.

     ii. a cover sheet, signed by committee members, indicating their support of the proposal.

     iii. letters of recommendation and other appropriate supporting documents.

Note: The diploma indicates the degree awarded as “M.A. in Interdisciplinary Studies,” “M.S. in Interdisciplinary Studies,” or “Ph.D. in Interdisciplinary Studies,” and does not specify the area of specialization. The transcript notes the area of specialization as determined by the admissions committee.
Admission and Review Procedure
Upon completion of the above, the student must submit the application for admission into the Interdisciplinary Studies program to the Dean of Graduate Studies. The Dean of Graduate Studies appoints an admission committee consisting of (a) the associate dean’s designate for the school most involved in the interdisciplinary undertaking (the school in which the major advisor resides), (b) 2 or more doctoral chairing faculty members from unrelated fields, including at least 1 member of the Graduate Council, and (c) the chair or the graduate director of the department in which the student resides at the time of application. The Dean of Graduate Studies serves as ex-officio chair of the Interdisciplinary Studies admissions committee. The committee reviews the documents and may, if necessary, interview the student and the advisor for clarification and additional information or to discuss suggested revisions to the proposal.

Approved Program Implementation
Upon acceptance of the proposal and admission to the Interdisciplinary Studies program, the student is admitted to the school of the major advisor to facilitate record keeping and to provide a central administrative office. The associate dean or director of graduate studies of that school must enroll the student and monitor the program, and along with the major advisor, must make annual reports to Graduate Studies on the student’s progress. These reports are distributed to the directors of other involved programs along with a request to supply any additional information regarding the student’s performance. Proposals for major deviations from the approved course of study must be submitted for review by Graduate Studies and by the school in which the student resides. It is understood that no additional requirements unique to traditional graduate programs of the school(s) or departments may be imposed unless stated explicitly in the approved study plan.

Once approved, changes to the program plan must be approved by a Graduate Studies committee, appointed by the Dean of Graduate Studies. Significant curricular changes may require a new proposal and admissions process.

All basic rules and requirements for the Master of Arts, Master of Science, and Doctor of Philosophy degrees apply to Interdisciplinary Studies programs. These include program time constraints, residence requirement, post-comprehensive enrollment, final examinations, research skills and responsible scholarship requirements, thesis or dissertation submission and publication, grade-point average, etc. (See Master’s Degree Requirements and Doctoral Degree Requirements in this section of the online catalog.)

Combined Degrees
Combined degrees are granted in programs meeting the requirements of the graduate master’s or doctoral degree and the professional post-baccalaureate degree.

Combined Medical and Master’s Degrees
Graduate students in the basic medical science departments in the School of Medicine are primarily enrolled in graduate programs. Outstanding medical students, however, are allowed to participate in work leading jointly to the M.D. degree and a graduate degree. A student admitted to both academic programs may enroll concurrently in courses in the respective programs, provided the regular medical course load is reduced to compensate for the added graduate work. The student should discuss concurrent enrollment with the department chair or graduate advisor of the master’s degree program; departmental policies vary. All requirements for the degrees must be met, but within these limitations, superior students may be able to complete the joint degree program in less time than the total required for the 2 degrees to be earned separately. For the master’s degree, a student must complete graduate work equivalent to at least 1 academic year in addition to the time spent on the medical curriculum.

Combined Medical and Doctoral Degrees
Outstanding students who are accepted into the M.D.-Ph.D. Physician Scientist Training Program will work toward the completion of the M.D. and the Ph.D. degrees. All the requirements for the respective degrees must be met. The joint degree requirements and application information for the joint M.D.-Ph.D. Physician Scientist Training Program (https://catalog.ku.edu/medicine/combined-md-phd/) are described in that program’s section of this catalog.

Policies and Processes for Graduate Certificate Programs
The graduate certificate is a focused collection of courses that when completed, affords the student some record of coherent academic accomplishment in a given discipline or set of related disciplines. Students may be awarded these certificates upon completion of a well-defined program of course work. The didactic material comprised within a graduate certificate program may represent a more practice-oriented subset of an existing graduate discipline.

The KU Medical Center campus with oversight from the Office of Graduate Studies offers graduate certificate programs in several disciplines through the Schools of Health Professions, Medicine, and Nursing. Specific information about the certificate programs offered can be found in the the Schools of Health Professions (p. 542), Medicine (p. 2018), and Nursing (p. 2239) sections of this catalog.

Eligibility and Admission Criteria
See Graduate Certificate Admission (p. 2413) section of this catalog for admission criteria on the Medical Center campus.

Number of Credits
A graduate certificate program will comprise no less than 9 and generally no more than 18 credit hours of course work in a particular discipline or related disciplines of study.

Expiration of Program
All proposals for graduate certificate programs will be adopted for a 7-year time period. The certificate program will expire at the end of that period. The program may request renewal of the certificate program by sending an updated program proposal, endorsed by the department and School to the Graduate Council on the Medical Center campus. The proposal will be evaluated for an additional 7-year period. The Office of Graduate Studies will remind the graduate certificate program about its renewal one year before the graduate certificate program is scheduled to expire. If a program expires or is discontinued, no new students may be enrolled in the program and those students currently in the program will continue until completion.
Student Records Criteria

- It is the responsibility of the degree program that houses the graduate certificate program to maintain all student records of the graduate certificate program. These records should include, but are not limited to, the number of students that apply to the program, the number accepted and denied into the program, the number of students enrolled in the program by semester, and the number of students who complete the program by semester.
- The courses taken in the graduate certificate program will be listed on the student’s transcript and recognition of the earned certificate will also be posted on the transcript.
- The awarding of graduate certificates will coincide with the August, December, and May graduations at the University of Kansas. The certificate awarding program will instruct students to submit an “Application for Degree” (AFD) the semester the student will complete certificate requirements. The same degree granting deadlines for filing the AFD will apply to the awarding of graduate certificates.
- The Registrar’s Office will provide Graduate Certificates for students who successfully complete all certificate program requirements each semester using the same timeline as the one established for diplomas.
- Graduate certificates will not be recognized by any Graduate Studies official graduation ceremony.

Process of Approval for New Graduate Certificate Programs

Approval Process

Proposals for new graduate certificate programs may be created and submitted by graduate faculty in the same manner as proposals for new graduate degree programs, with the exception that all approvals are made internally at the University of Kansas. The proposal must be approved by the Vice Chancellor for Academic and Student Affairs and accompanied by endorsement from the department chairperson, the dean of the school in which the contributing course work is administered, and the Dean of Graduate Studies.

After a proposal has been endorsed by the sponsoring department and school, the proposal must go to the Graduate Council, and if approved, will be forwarded by the Dean of Graduate Studies to the Vice Chancellor for Academic and Student Affairs.

Curriculum Criteria

- All certificate programs must be linked to a specific KU degree program(s), such that they provide a specific set of skills or knowledge base within a defined body of knowledge of the particular discipline. Certificate programs are encouraged where they might provide value-added benefits to students in existing graduate degree programs or provide a needed educational initiative for post-baccalaureate students in an area not currently addressed by a graduate degree program. These programs are not encouraged where they might detract from existing graduate programs.
- The proposed sequence of course work must offer a clear and appropriate educational objective at the post-baccalaureate level.
- The proposed certificate program must achieve its educational objective in an efficient and well-defined manner.
- A statement of the proposed course sequence associated with the certificate, including titles, number of credit hours of courses, and course descriptions both for existing courses and any new courses that may be developed.
- Graduate certificate programs may be at the post-baccalaureate, the post-master’s, or post-doctoral level.
- Graduate certificate programs must be proposed for current KU graduate students or new KU students seeking a post-baccalaureate certificate.
- The certificate program must include an appropriate number of credit hours. In general, certificate programs should be no less than 9 credit hours. All proposals must have a maximum time to completion of no more than 4 full academic years.
- The proposal will identify the extent to which the curriculum overlaps with the curriculum of existing degree programs.
- The proposal will identify requirements of the program that are supplemented to the course work, including but not limited to laboratories, practicum, internships, and projects.

Faculty Criteria

Instructors in graduate certificate programs must have gained appointment to the Graduate Faculty.

Materials Required for New Certificate Proposal

Proposals for a graduate certificate program at KU must include the following materials:

- A statement of the educational objectives of the program.
- A statement of the proposed course sequence associated with the certificate, including course titles, number of graduate credit hours, and course descriptions both for existing courses and any new graduate courses that may be developed.
- A statement identifying the important academic objectives of the proposed certificate program, including the range of skills and knowledge future graduates will possess. Proposals should show how the graduate certificate program complements existing courses and does not detract from existing programs.
- A statement of how the proposed course sequence associated with the certificate will meet the stated educational objectives.
- A statement of the need for the proposed program and the basis for such need, supported by either external or internal derived data.
- A list of the names of the faculty associated with or contributing to the certificate program, either by teaching the courses or advising the students within the program. An up-to-date curriculum vitae for each faculty member listed needs to be included.
- The name and curriculum vitae of the faculty member who will be designated as the coordinator of the program.
- A planned date of implementation.

The Graduate Faculty

The Graduate Faculty consists of members of the university faculty and other persons qualified by training and experience who are duly nominated by a graduate department and appointed by the Office of Graduate Studies. Only members of the Graduate Faculty may teach courses for graduate credit, supervise master’s programs, serve on master’s examination and defense committees, or serve on doctoral examination committees.

There are three types of appointment to the Graduate Faculty:

- Regular Status
- Dissertation Status (Dissertation Chair Status)
- Special Member Status
The following sections describe each type of status.

**Regular Graduate Faculty Status**

Any faculty member who is appointed to a tenure-track position in a graduate degree granting department on the Medical Center campus is eligible for regular graduate status. Present or newly appointed faculty members in tenure-track appointments with the rank of assistant professor or above in departments or programs with approved graduate programs are granted regular membership in the Graduate Faculty, provided they have received the terminal degree in their field of specialization or have acquired equivalent training and/or professional experience as determined by the Office of Graduate Studies.

Members of the Graduate Faculty with Regular status may:

- teach courses for graduate credit;
- supervise the master’s programs and thesis students;
- serve on master’s and doctoral examination and defense committees;
- chair master’s committees; and/or
- co-chair dissertation committees.

When appropriate, a qualified member of the Regular Graduate Faculty may be nominated to serve as co-chair of a specific dissertation committee if a faculty member with Dissertation status serves as co-chair of the committee and agrees to ensure that all requirements are met. However, if the regular member of the Graduate Faculty has lost dissertation status, this does not apply.

In special cases where faculty members who hold regular membership in the graduate faculty enroll in a KU graduate program as part of their professional development, they may be permitted to retain their Graduate Faculty status. They may not supervise or serve as the instructor of record for students who are peers in the graduate program in which they are enrolled.

To hold regular membership in the Graduate Faculty, a faculty member must continue to show evidence of a pattern of productive professional activity demonstrating the ability to contribute to high-quality graduate education. The form that productive professional activity may take varies across disciplines. Conventional evidence of such activity includes such things as effective teaching, scholarly publication, participation in professional societies, and other scholarly activity. Graduate degree programs are responsible for monitoring faculty with regular membership in the Graduate Faculty.

**Dissertation Graduate Faculty Status**

To qualify for the privilege of chairing doctoral dissertation committees, a regular member of the Graduate Faculty must demonstrate continuing activity commensurate with being an established scholar in his or her field and involvement in the graduate education program as evidenced by:

- teaching graduate courses;
- advising and mentoring graduate students and serving on thesis and dissertation committees; and/or
- maintaining an ongoing program of scholarly activity including a record of scholarship, publication and other contributions to the field.

It is the graduate program’s responsibility to nominate members of the Graduate Faculty for authorization to chair doctoral committees and to provide evidence of scholarship and involvement in the graduate education program. Authorization to chair dissertation committees is reviewed as part of each graduate program review.

**Special Graduate Faculty Status**

Special membership may be granted to any university employee or non-employee who is uniquely qualified by training or experience for membership in the Graduate Faculty for the purposes of:

- teaching a course or courses;
- having courses cross-listed as KU courses if they are part of a cooperative graduate program between KU and the appointee’s home institution;
- serving on the thesis, dissertation, or examination committee of a particular student or students;
- chairing master’s thesis committees of a particular student or students; and/or
- co-chairing dissertation committees of a particular student or students.

When appropriate, a qualified member with Special status may be nominated to serve as co-chair of a specific dissertation committee if a faculty member with Dissertation status serves as co-chair of the committee and agrees to ensure that all requirements are met.

Special status memberships are limited to a maximum period of 5 calendar years for teaching purposes or for the duration of the specified committee assignment. Special memberships are renewable.

All nominations for special membership must state clearly the specific purposes for which the nomination is being sought, and when it can be known in advance, the length of time for which it is being requested. Special appointments are reviewed by the appointing graduate department when the term ends and recommended to the Dean of Graduate Studies for renewal as appropriate. The request to renew includes the purpose to be fulfilled by the renewal of the appointment.

**Graduate Faculty Appointment Chart**

This chart summarizes the organization and privileges of the various types of Graduate Faculty appointments.

<table>
<thead>
<tr>
<th>Type of Graduate Faculty</th>
<th>Employment Tenure</th>
<th>Teach Graduate Courses</th>
<th>Serve on Master’s Committee</th>
<th>Chair Doctrinal Committees</th>
<th>Serve on Doctoral Committee</th>
<th>Co-Chair Doctoral Committees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular KU Graduate Faculty status</td>
<td>Tenure - Yes, track/tenured</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes, unless dissertation status was discontinued</td>
</tr>
<tr>
<td>GraduatKU Faculty with dissertation status</td>
<td>Tenure - Yes, track/tenured</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Outside Graduate Faculty Member for Ph.D. Examination Committees

The outside member of a Ph.D. committee must be a member of the Graduate Faculty with Regular or Dissertation status granted by a department other than the aspirant's major department. The outside member serves as the Graduate Studies representative on the committee.

The presence of the Graduate Studies representative is designed to ensure the appropriate standards of fairness, professionalism, judgment, and skill are applied throughout the examination process for the benefit of the institution and in the best interest of the student.

The Graduate Studies representative is a voting member of the committee and has full rights to participate in the examination. In the case of any unsatisfactory or irregular aspects of the examination or violation of Graduate Studies policy, the Graduate Studies representative shall provide a written report to the Dean of Graduate Studies for consideration of further action.

Before the examination, Graduate Studies provides a list of responsibilities to the Graduate Studies representative. By accepting the role, the outside faculty member attests there is no conflict/duality of interest that would preclude service as an objective participant observer on behalf of Graduate Studies. Following are the specific Graduate Studies guidelines the Graduate Studies representative is verifying:

1. The examination or defense was conducted in compliance with Graduate Studies policies regarding committee composition and attendance at the examination as stated in the Doctoral Degree Requirements (p. 2416) section of this catalog.
2. The examination or defense was held in a manner that was free and open to the public.
3. S/he was accorded full participatory rights in the examination or defense.
4. S/he was accorded full voting rights as a member of the committee.
5. The examination or defense was free from irregularities, unfairness, or perceived conflicts of interest to the student.
6. The examination or defense was free from irregularities, unfairness, or perceived conflict of interest among faculty members.

ASSISTANTSHIP Appointment Types

The Medical Center Campus through their academic departments offers a limited number of Graduate Teaching Assistantships, Graduate Research Assistantships and Graduate Assistantships. Only degree-seeking graduate students are eligible for these appointments. Graduate students interested in an assistantship should inquire directly to their academic program/department about GTA and GRA appointment opportunities. GA appointments are managed by the Office of Graduate Studies. The assistantship policy is administered on the Medical Center campus by the Office of Graduate Studies.

Principles Guiding Assistantships

The following principles govern all graduate teaching assistant (GTA), graduate research assistant (GRA) and graduate assistant (GA) appointments on the Medical Center campus:

1. Individuals who enroll in graduate educational programs at the University of Kansas do so in order to attain specific educational goals. It is the University’s responsibility to help ensure that graduate students attain their academic goals in a reasonable amount of time
and move on to the next stage in their careers, whether to another advanced degree program or to professional employment.

2. When academic programs/departments offer GTA, GRA or GA appointments, the assistantships must contribute to the training experience of the graduate student.

3. The responsibilities required of the GTA, GRA or GA should be in balance with their responsibilities as a student in the graduate program. For appointments of .50 FTE, the expectation is that the assigned duties will average no more than 20 hours per week during the semester. For appointments at other percentages, the number of hours per week must be proportional to the appointment percentage.

ASSISTANT Appointment Limits

Appointments shall not normally exceed .50 FTE. Appointments in excess of .50 FTE but not exceeding .75 FTE for all University employment combined must be approved by the academic program and the Dean of Graduate Studies in advance of an appointment offer and will be approved only in special circumstances. Departments are expected to monitor appointments in excess of .50 FTE to ensure that the graduate students’ assistantship assignments enhance their academic preparation and do not interfere with progress towards degree.

Graduate Teaching Assistantships (GTA)

Graduate Teaching Assistants are paid as salaried student employees whose job duties consist primarily of direct involvement in classroom or laboratory instruction. The duties are performed under the supervision of faculty. The University also requires that a GTA’s teaching assignment be in his/her own field of study or one that is closely related.

A limited number of Graduate Teaching Assistantships are available. Graduate students should inquire directly to their academic program/department about GTA appointment opportunities. Graduate Teaching Assistantship policy is administered on the Lawrence campus. Graduate Teaching Assistantships on the Medical Center campus are governed by a memorandum of agreement between the University of Kansas, the Graduate School, and the Graduate Teaching Assistants’ Coalition, American Federation of Teachers - Kansas (GTAC), which represents KU GTAs in Lawrence only.

GTA Eligibility

The following eligibility requirements govern all Graduate Teaching Assistant (GTA) appointments at the Medical Center campus:

1. During the semester of appointment, the GTA is admitted to and enrolled in a graduate degree program offered by the Medical Center campus.

2. During the semester of appointment, the GTA is enrolled in no fewer than 6 graduate credit hours per fall and spring semester and 3 graduate credit hours summer semester. See "Enrollment Exceptions" in section following this list.

3. During the semester of appointment, the GTA must be in good academic standing and making satisfactory progress toward a graduate degree, as determined by Graduate Studies and the department in which the student is enrolled. However, if a program judges that a graduate student whose GPA falls below 3.0 is nonetheless making satisfactory progress, the program may recommend to the Dean of Graduate Studies that the student be allowed to continue with the GTA appointment.

4. The GTA must satisfy the English proficiency criteria established by the Board of Regents for GTAs - see Minimum English Requirement for GTAs in section immediately following this list.

5. A student completing their graduate degree may not continue in a GTA appointment after the graduation date unless the student has just completed a master's degree and is enrolled in a doctoral program in the same field or a closely related field or is a doctoral graduate who has been accepted into another graduate program.

GTA Minimum English Requirement

All applicants for graduate teaching assistantships whose first language is not English, including international students and U.S. residents or citizens, must meet one of the following criteria:

1. Score a minimum of 22 on the spoken English portion of the TOEFL iBT.

2. Score a minimum of 8 on the spoken English portion of the IELTS.

3. Score a minimum of 50 on the SPEAK administered by the Office of International Programs (http://www.kumc.edu/international-programs/academic-english-requirements/speak-test-faq.html) on the Medical Center campus.

GTA Enrollment Exception

A Ph.D. student appointed as a GTA, who has successfully completed the doctoral comprehensive examination and 18 post-comprehensive credit hours, may request approval to reduce enrollment below the GTA minimum enrollment requirement. The request form is located on the Graduate Studies website (http://www.kumc.edu/academic-and-student-affairs/opags/graduate-studies/gta-and-gra.html) and is subject to approval by the academic department and the Dean of Graduate Studies.

A clinical doctoral (Au.D., D.C.L.S., D.N.A.P., D.N.P., D.P.T., O.T.D., S.L.P.D.) student appointed as a GTA who is in his or her final semester, may request approval to reduce enrollment below the GTA minimum enrollment requirement. The request form is located on the Graduate Studies website (http://www.kumc.edu/academic-and-student-affairs/opags/graduate-studies/gta-and-gra.html) and is subject to approval by the academic department and the Dean of Graduate Studies. Approval will not be granted for a subsequent semester if the semester approved for reduced enrollment is not his or her final semester after all.

A master’s student appointed as a GTA, who is in his or her final semester, may request approval to reduce enrollment below the GTA minimum enrollment requirement. The request form is located on the Graduate Studies website (http://www.kumc.edu/academic-and-student-affairs/opags/graduate-studies/gta-and-gra.html) and is subject to approval by the academic department and the Dean of Graduate Studies. Approval will not be granted for a subsequent semester if the semester approved for reduced enrollment is not the student’s final semester after all.

GTA Tuition Benefit

The Medical Center campus pays the tuition of graduate students who receive appointments as Graduate Teaching Assistants as defined below for the semester of appointment:

| .40 FTE or more appointment | 100% of tuition |
| .30 FTE but less than .40 FTE appointment | 75% of tuition |
opportunities. Graduate Research Assistantship policy is administered on or research professionals. A limited number of Graduate Research study and is integral to the student's education (e.g., dissertation topic). The duties performed are under the direct supervision of faculty on the Medical Center campus if they will perform research that is in their fields (or a closely related field) of study and is integral to the student's education (e.g., dissertation topic).

<table>
<thead>
<tr>
<th>FTE</th>
<th>Tuition Waiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>.20</td>
<td>50% of tuition</td>
</tr>
<tr>
<td>.10</td>
<td>25% of tuition</td>
</tr>
</tbody>
</table>

A graduate student who has a GTA appointment or a combination of a GTA and GRA appointment of at least .40 FTE is eligible for in-state (resident) tuition rates for the semester of appointment. The tuition payment program covers only tuition. If the student is eligible for in-state rates, these will be assessed before applying the tuition waiver. The tuition payment program is not applicable to fees (e.g. campus fees, course fees, e-learning fees, etc).

**GTA Health Insurance Benefit**

A graduate student who has a GTA appointment or combination GTA and GRA appointment of at least .50 FTE for a given semester is eligible to participate in a health care benefits plan for that semester for which the University provides a contribution. The health care benefits plan is the same plan that is available to all students, but a portion of the premium is paid by the University if the student appointed as a .50 FTE GTA/GRA selects the GTA-GRA plan. The health insurance information is available from the Student Health Insurance Office (http://www.kumc.edu/student-affairs/student-health-insurance.html) in Student Affairs.

**GTA Resignation or Termination**

If a GTA resigns or abandons the position or the appointment is terminated before working a minimum of 8 pay-periods during the semester, the student must pay full tuition for that semester and will lose eligibility for in-state (resident) tuition rates and, if a non-resident, will be required to pay non-resident tuition for that semester.

**Graduate Research Assistantships (GRA)**

Graduate Research Assistants are salaried student employees who perform research that is in their fields (or a closely related field) of study and is integral to the student’s education (e.g., dissertation topic). The duties performed are under the direct supervision of faculty or research professionals. A limited number of Graduate Research Assistantships (GRA) are available. Graduate students should inquire directly to their academic program/department about GRA appointment opportunities. Graduate Research Assistantship policy is administered on the Medical Center campus by the Office of Graduate Studies.

**GRA Eligibility**

The following eligibility requirements govern all Graduate Research Assistant (GRA) appointments at the Medical Center campus:

1. During the semester of appointment, the GRA is admitted to and enrolled in a graduate degree program offered by the Medical Center campus. Graduate students enrolled in a graduate degree program offered by the Lawrence or Edwards campuses may be approved by petition to the Dean of Graduate Studies to be appointed as a GRA on the Medical Center campus if they will perform research that is in their fields (or a closely related field) of study and is integral to the student’s education (e.g., dissertation topic).
2. During the semester of appointment, the GRA is enrolled in no fewer than 6 graduate credit hours per fall and spring semester and 3 graduate credit hours summer semester. See "Enrollment Exceptions" in section following this list.
3. During the semester of appointment, the GRA must be in good academic standing and making satisfactory progress toward a graduate degree, as determined by Graduate Studies and the department in which the student is enrolled. [Note: A graduate student must maintain a cumulative grade point average of 3.0 to remain in good academic standing. However, if a program judges that a graduate student whose GPA falls below 3.0 is nonetheless making satisfactory progress, the program may recommend to the Dean of Graduate Studies that the student be allowed to continue with the GRA appointment.]
4. A student completing their graduate degree may not continue in a GRA appointment after the graduation date unless the student has just completed a master's degree and is enrolled in a doctoral program in the same field or a closely related field or is a doctoral graduate who has been accepted into another graduate program.

**GRA Tuition Benefit**

A graduate student who has a GRA appointment or a combination of a GRA and GTA appointment of at least .40 FTE is eligible for in-state (resident) tuition rates for the semester of appointment.

**GRA Health Insurance Benefit**

A graduate student who has a GRA appointment or combination GRA and GTA appointment of at least .50 FTE for a given semester is eligible to participate in a health care benefits plan for that semester, for which the University provides a contribution. The health care benefits plan is the same plan that is available to all students, but a portion of the premium is paid by the University if the student appointed as a .50 FTE GTA/GRA selects the GTA-GRA plan. The health insurance information is available from the

**GRA Resignation or Termination**

If a GRA resigns or abandons the position or the appointment is terminated before working a minimum of 6 pay-periods during the semester, the student will lose eligibility for in-state (resident) tuition rates and, if a non-resident, will be required to pay non-resident tuition for that semester.

**GRADUATE ASSISTANTSHIPS (GA)**

Graduate Assistants are salaried student employees who hold a position that furthers the professional and/or academic development of the graduate student. The duties performed are professional in nature and under the direct supervision of faculty, academic professionals, or administrators. Responsibilities may include, but are not limited to, administrative and professional internships. The Dean of Graduate Studies must approve GA appointments. [Note: Graduate Assistant positions are a distinct category of graduate student support. This category does not include Graduate Research Assistants, Graduate Teaching Assistants, or student-hourly positions held by graduate students.] A limited number of Graduate Assistantships (GA) are available. Graduate Assistantship policy is administered on the Medical Center campus by the Office of Graduate Studies.

**GA Eligibility**

The following eligibility requirements govern all Graduate Assistant (GA) appointments at the Medical Center campus:

1. During the semester of appointment, the GA is admitted to and enrolled in a graduate degree program offered by the Medical Center campus.
2. During the semester of appointment, the GA is enrolled in no fewer than 6 credit hours per fall and spring semester. See “Enrollment Exceptions” in section following this list.
3. During the semester of appointment, the GA must be in good academic standing and making satisfactory progress toward a graduate degree, as determined by Graduate Studies and the department in which the student is enrolled. [Note: A graduate student must maintain a cumulative grade point average of 3.0 to remain in good academic standing. However, if a program judges that a graduate student whose GPA falls below 3.0 is nonetheless making satisfactory progress, the program may recommend to the Dean of Graduate Studies that the student be allowed to continue with the GA appointment.]
4. A student completing their graduate degree may not continue in a GA appointment after the graduation date.

**GA ENROLLMENT EXCEPTION**

A Ph.D. student appointed as a GA, who has successfully completed the doctoral comprehensive examination and 18 post-comprehensive credit hours, may request approval to reduce enrollment below the GA minimum enrollment requirement. The request form is located on the Graduate Studies website (http://www.kumc.edu/academic-and-student-affairs/opags/graduate-studies/gta-and-gra.html) and is subject to approval by the academic department and the Dean of Graduate Studies. Approval will not be granted for a subsequent semester if the semester approved for reduced enrollment is not the student’s final semester after all.

A master’s student appointed as a GA, who is in their or her final semester, may request approval to reduce enrollment below the GA minimum enrollment requirement. The request form is located on the Graduate Studies website (http://www.kumc.edu/academic-and-student-affairs/opags/graduate-studies/gta-and-gra.html) and is subject to approval by the academic department and the Dean of Graduate Studies. Approval will not be granted for a subsequent semester if the semester approved for reduced enrollment is not the student’s final semester after all.

**GA TUITION BENEFIT**

A graduate student who has a GA appointment of at least 0.40 FTE is eligible for in-state (resident) tuition rates for the semester of appointment.

**GA HEALTH INSURANCE BENEFIT**

A graduate student who has a GA appointment of at least 0.50 FTE for a given semester is eligible to participate in a health care benefits plan for that semester, for which the University provides a contribution. The health care benefits plan is the same plan that is available to all students, but a portion of the premium is paid by the University if the student appointed as a 0.50 FTE GTA/GRA/GA selects the GTA,GRA,GA plan. The health insurance information is available to all students, but a portion of the premium is paid by the University if the student appointed as a 0.50 FTE GTA/GRA/GA selects the GTA,GRA,GA plan. The health insurance information is available from the Student Health Insurance Office (http://www.kumc.edu/student-affairs/student-health-insurance.html) in Student Affairs.

**GA RESIGNATION OR TERMINATION**

If a GA resigns or abandons the position or the appointment is terminated before working a minimum of 6 pay-periods during the semester, the student will lose eligibility for in-state (resident) tuition rates and, if a non-resident, will be required to pay non-resident tuition for that semester.
• Academic Calendar (p. 2432)
• Academic Misconduct (p. 2432)
• Academic Probation (p. 2436)
• Academic Standing (p. 2436)
• Childbirth Accommodation (p. 2436)
• Course Numbering System (p. 2438)
• Co-enrollment for Seniors in Graduate Level Courses (p. 2438)
• Discontinuance (p. 2438)
• Dismissal (p. 2438)
• Embargo of Theses and Dissertations (p. 2438)
• Enrollment Definitions (p. 2439)
• Enrollment Policy (p. 2440)
• Grading (p. 2440)
• Graduate Credit (p. 2441)
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• Leave of Absence (p. 2443)
• Post-Comprehensive Enrollment for Doctoral Candidates (p. 2443)
• Posthumous Degree (p. 2443)
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• Research Compliance (p. 2444)
• Student Responsibilities (p. 2444)
• Transfer Credit (p. 2441)
• Undergraduate Student Enrollment in Graduate Level Courses for Undergraduate Credit (p. 2444)

Academic Calendar

The Academic Calendar (https://www.kumc.edu/academic-and-student-affairs/departments/registrars-office/academic-calendar.html) with the official university calendar dates is maintained by the Office of the Registrar and is available online. Many of the Medical Center campus programs have different starting and ending dates, so check with your academic program for more detailed information.

The Graduate Studies Calendar (https://www.kumc.edu/academic-and-student-affairs/departments/graduate-studies/about/calendar-and-events.html) indicates graduation deadlines related to master's and doctoral examination dates and the submission of theses and dissertations. The calendar is maintained by Graduate Studies and is available online.

Academic Misconduct

Guidelines for Alleged Misconduct

The following information shall serve as guidelines for dealing with situations where inappropriate deviations from these accepted standards of conduct by a graduate student are alleged to have occurred. All questions concerning these guidelines should be directed to the Dean of Graduate Studies or his/her designee.

I. Expectations for Conduct by a Graduate Student

One goal shared by the graduate programs at the University of Kansas Medical Center is to provide a seminal educational environment in which a student can master a special field of knowledge and strive to develop competence in independent scholarship and research to make original contributions to knowledge. In achieving that goal, there is an expectation by the University of Kansas Medical Center that the graduate faculty and their students will conduct themselves with high integrity and professional ethics. Such conduct by a graduate student must include adherence to the written and observed or taught guidelines for ethical standards of the profession for which the student is seeking to enter. A graduate student is responsible for informing himself/herself about these requirements and expectations of conduct as well as seeking answers to his/her own questions about what constitutes misconduct. Potential sources for this information include the:

A. Director of the Graduate Program and the faculty members of the department in which the graduate student has entered;

B. Student Handbook or a similar document prepared by the student’s academic program, department, and/or school;

C. the University of Kansas Medical Center “Behavioral Standards in Patient Care.”

Academic Misconduct

Academic misconduct by a student shall include but not be limited to: cheating on examinations whether by a student on his/her own behalf or by giving to another student or receiving from another student unauthorized aid on examinations; giving or receiving of unauthorized aid in the preparation of notebooks, themes, reports, or other types of assignments, or in the preparation of master’s theses and/or doctoral dissertations; or knowingly misrepresenting the source of any academic work; falsification of research results, plagiarizing of another’s work, violation of regulations, ethical or professional codes for the treatment of humans and animals, or otherwise acting dishonestly.

II. Decisions by a Faculty Member Relative to Academic Misconduct

A. Not to Make a Recommendation for an Investigative Hearing: A faculty member (acting as an instructor or assistant in a course, or a graduate student's advisor or mentor for his/her research and/or academic program, etc.) may decide not to recommend an investigative hearing, as outlined in these guidelines, for what he/she believes is academic misconduct by a student. The faculty member thus may treat as unsatisfactory any student work which he/she believes is a product of academic misconduct and impose a sanction(s) appropriate to the traditionally accepted realm

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of authority or jurisdiction of the faculty member. Any action by the faculty member shall be with due written notice to the student.

B. Make a Recommendation for an Investigative Hearing:
The Faculty Member may decide to recommend to his/her Chairperson (also see Section IV. A. 4, and Section IV. B., below):

1. that an investigative hearing be held for the alleged occurrence of academic misconduct, and/or

2. imposing a sanction that is outside of the traditionally accepted realm of authority or jurisdiction of the Faculty Member (e.g., see Section VI. D. below). Hence, the Faculty Member initiates the procedures in Section IV.

III. Procedural Information for and Investigative Hearing Process

A. Definitions of Terms Hereafter Applied in these Guidelines

1. "The Faculty Member" is the faculty member initiating an allegation of academic misconduct by a student.

2. "The Student" is the graduate student identified by the Faculty Member as the subject of the alleged act(s) of academic misconduct.

3. The "Involved Department" is the department, center, or functional unit in which the act(s) of academic misconduct allegedly occurred by the student.

4. The "Chairperson" is the Chairperson of the involved department in which the act(s) of academic misconduct allegedly occurred by the student and is the next higher administrative officer to whom the Faculty Member sends the initial report about an allegation of academic misconduct.

   a. "Dean of the School of Nursing" replaces the designation of "Chairperson" hereafter throughout these Guidelines for Dealing With Alleged Misconduct by a Graduate Student as the appropriate administrative officer to whom faculty members in the School of Nursing shall forward any report or recommendation, if the alleged act occurred in this School.

   b. Possible Conflicts of Interest:

      i. If the Faculty Member perceives (relative to Section III. B., above) that there may be a conflict of interest involved in this issue between the Student and the Chairperson, or if the Chairperson is the Faculty Member initiating the allegation of misconduct, then the Faculty Member's inquiry report of the alleged incident(s) (see Section IV. B., below) shall be forwarded to the Dean of the Faculty Member's or Chairperson's, respectively, School or the next higher administrative officer, as appropriate, who thereafter will assume the responsibilities of "the Chairperson" identified throughout these Guidelines for Dealing With Alleged Misconduct by a Graduate Student.

      ii. For Other Situations when questions arise about conflict of interest, the questions shall be directed to the Dean of Graduate Studies.

5. The Official Record of the Hearing Process:
The Dean of Graduate Studies shall initiate and maintain in the Office of Graduate Studies an Official Record (i.e., file) of the entire hearing process. All subsequent original written communications, documents, audio tape recordings (see Section V. 3., below), and recommendations that relate to the alleged misconduct and the hearing shall be sent on a timely basis by the Chairperson and/or the Hearing Officer (see Section IV. E., below) to the Dean of Graduate Studies for inclusion in the official record. If the final conclusion of the hearing process is that academic misconduct has not occurred, then only the Dean's official record of the entire hearing process shall be saved as the permanent record; all other faculty, Departmental, and School copies of a "record/ file" for the hearing process must be destroyed (see Section V. B. 2. a., below).

6. The Time Periods for the Hearing Process:
Throughout these guidelines, maximum limits are specified for the length of time allowed for certain stages of the overall hearing process to take place. Unless specified otherwise, all lengths of time shall be in terms of the traditionally considered "working days" of any given week (recognized holidays that occur on otherwise traditional working days are not to be counted in these time frames). Any request for an extension of a time limit shall be made expeditiously, and before the expiration of the limit, to either the Chairperson or the Hearing Officer or the Dean of Graduate Studies, as appropriate, (or, in their absence, their designates), who shall decide and notify within three (3) days if there is good cause for the extension, and if so, for what period of time. Notification shall be to all involved parties of the hearing process and may be done first by telephone if deemed appropriate, and then shall be followed by written notification.

B. Inquiry Report by the Faculty Member is Sent to the Chairperson: Following the decision by the Faculty Member in Section III. B., above, and with due notice to the Student, the Faculty Member shall submit a detailed written report about the allegation (hereafter called the Inquiry Report) to the Chairperson. The Inquiry Report shall be submitted within twenty (20) days of the discovery of the alleged occurrence of misconduct. The Chairperson shall, within fifteen (15) days of receiving the Inquiry Report, review the report and attempt to resolve the allegation through consultation and mediation with the involved persons. If the Chairperson determines that the allegation should be resolved through the investigative hearing process, then the Chairperson shall continue the procedure outlined hereafter in these guidelines. Written notice shall be sent to the Student (see Section IV. D., below) and to the Faculty Member (including a request for the Faculty Member to respond, within ten (10) days of receipt of the notice, with
his/her selection of a faculty member to serve on the Hearing Panel; see Section IV. E. 2., below).

C. Notification of the Dean of Graduate Studies: The Chairperson shall send a written notification to the Dean of Graduate Studies that an investigative hearing process for alleged academic misconduct by the Student is going to be initiated. The Chairperson's notification shall include copies of the Faculty Member's Inquiry Report of the alleged misconduct and all written communications up to this time with the Student.

D. Notification About the Allegation to the Student: A written notification of the specific allegation shall be sent (certified or registered letter with return receipt requested indicating the date of receipt) to the Student by the Chairperson within fifteen (15) days after the time the Chairperson receives the Faculty Member's Inquiry Report. A copy of this notification shall be sent to the Dean of Graduate Studies. The notice shall include:

1. a statement of the specific allegation(s) with sufficient explanatory information to enable the Student to understand the nature and extent of the allegation(s);

2. an invitation for the student to provide, to the Chairperson, within ten (10) days after receiving the notification letter: a. a written response to the allegation(s); and b. the name of a faculty member whom the Student selects to serve on the Hearing Panel (see Section IV. E. 2., below), and a statement indicating that this faculty member told the Student that he/she agreed to serve;

3. a statement indicating that the Student has the right to continue attending class as scheduled until such time as the Dean of Graduate Studies has reached his/her final decision UNLESS there is a question of unsafe and/or disruptive behavior and/or offense against other persons (including patients of or visitors to) and/or property of the University of Kansas;

4. a copy of these "Guidelines for Dealing With Alleged Academic Misconduct by a Graduate Student," so that the student is aware of the procedural process and possible actions.

E. Selection of Members for the Hearing Panel: The Hearing Panel shall be composed of four (4) members of the graduate faculty (voting members of the Panel), excluding the Faculty Member initiating the allegation of misconduct (See Section IV. A. 4., above) and excluding the chairperson of the department in which the Student named in the allegation is a graduate student member, and one (1) graduate student (voting member of the Panel), excluding the Student who is the subject of the allegation. One of the graduate faculty members of the Panel will be designated by the Chairperson as the "Hearing Officer" in charge of the Hearing Panel. Any member of the Hearing Panel who perceives that there is any irregularity in the proceedings of the Hearing process has the responsibility of PROMPTLY reporting this to the Dean of Graduate Studies. Selection of the Hearing Panel shall include at least one but no more than two faculty members from the Involved Department in the allegation and shall be done as follows:

1. the graduate student member:
   -shall be selected by the officers of the Graduate Student Council at an on-need basis;
   -shall not be a graduate student member of the same department as the Student named in the allegation; and
   -must be currently classified as a regular graduate student in the category of degree seeking students and in good academic standing (not on probation);

2. one faculty member from inside or outside the Involved department may be selected by the student named in the allegation;

3. one faculty member from inside or outside the Involved department may be selected by the Faculty Member initiating the allegation; and

4. two faculty members selected by the Chairperson. The Chairperson's selections shall assure that the composition of the Panel includes at least one but no more than two members from the Involved Department in the event that the student and/or the Faculty Member do not select such a member. Additionally, if the Student and/or the Faculty Member decline(s) to select a Panel member or fail to respond to the Chairperson within ten (10) days of the request (see Section IV. B. and IV. D. 2., above), then the Chairperson will also select that member or members, likewise with due consideration for the basic composition of the Panel as defined above.

F. Scheduling the Hearing: The Hearing Officer shall, within five (5) days of the selection of members of the Hearing Panel, (1) schedule the day, time, and place for the Hearing to occur (which shall be sometime between twenty [20] and thirty [30] days after the selection of the Hearing Panel), and (2) provide written notice of this schedule to the Faculty Member, the Student, the Chairperson, and the Dean of Graduate Studies. Both the Student and the Faculty Member shall be informed with this scheduling notification that during the Hearing each:

1. will be given the opportunity to present his/her own viewpoint of the situation(s) that directly led to the allegation(s); and/or

2. may have witnesses speak or have witnesses' affidavits read on his/her behalf.

G. Documents, Representatives, and Witnesses for the Hearing: All information cited below shall be promptly sent to (see time deadlines indicated in this Section) or collected by the Hearing Officer, who shall promptly distribute copies of the information to the Student, the Faculty Member, and the rest of the Hearing Panel members.

1. The Faculty Member's Inquiry Report sent to The Chairperson (see Section IV. B.);

2. The Chairperson's Notification of Allegation letter sent to the Student (see Section IV. D.);
3. The Hearing Officer’s letter to the Student and the Faculty Member stating the day, time, and place for the hearing (see Section IV. F.);

4. The Student’s written Response to the allegation(s), if such was sent to the Chairperson (see Section IV. D. 2. a.);

5. Any documents provided by the Student and/or the Faculty Member for presentation as evidence to the Hearing Panel (sent at least by five (5) days before the Hearing);

6. Names of Representatives:

Each party to the Hearing should be present for the Hearing unless the Chairperson agrees that another person may appear as a substitute representative. A Hearing may be held even if the Student and/or the Faculty Member fail to appear for the Hearing. Neither the Student nor the Faculty Member is compelled to appear or testify at the Hearing, and no inference may be drawn by the Hearing Panel against the Student or the Faculty Member due to his/her failure or refusal to testify or appear.

The use of legal counsel is discouraged;

7. Names of Witnesses: The Student and the Faculty Member shall provide a list of intended witnesses, if any, to the Hearing Officer at least ten (10) days before the Hearing is to occur. The Hearing Officer shall provide these names, reciprocally, to the Faculty Member and the Student at least five (5) days before the Hearing; and

8. All materials (including the audio recording tapes identified in Section IV. H. 3., below) concerning the alleged violation of misconduct should be treated as CONFIDENTIAL documents. The Hearing Panel members will return all materials received for the Hearing to the Hearing Officer at the end of the scheduled Hearing. The Hearing Officer will forward ALL ORIGINAL AND PHOTOCOPIED AND AUDIO TAPE RECORDED MATERIALS to the Dean of Graduate Studies (see Section IV. A. 5., above).

H. Conducting the Hearing: The Hearing Officer of the Hearing Panel may establish procedures in addition to those listed, however, the basic requirements of the Hearing procedure as listed here may not be altered by the Hearing Officer. The Hearing shall be conducted in a closed session and witnesses shall be excluded from the Hearing except when actually testifying.

1. The Hearing Officer shall have the authority to keep order, rule on questions of relevance and evidence, and shall possess other powers normal and necessary for a fair and orderly Hearing. Rules of Evidence that govern courtroom proceedings shall not apply.

2. There shall be only a single audio tape recording made of the proceedings to provide an accurate record of the Hearing for possible review by the Hearing Panel (Section IV. I. 1) and/or Dean of Graduate Studies (Section IV. I. 4.).

3. The Hearing Officer shall introduce the Hearing Panel members, the Faculty Member, the Student, and their representatives, if any.

4. The Hearing Officer shall explain the Hearing Procedures as outlined herein.

5. The Hearing Officer shall announce that the Faculty Member initiating the allegation has the responsibility to persuade the Hearing Panel by a preponderance of evidence that academic misconduct has occurred.

6. The Hearing Officer shall orally review the allegation(s) of misconduct which led to the Hearing, and the possible sanction(s).

7. The Hearing Officer shall allow the Faculty Member to state the allegation and explain the incident. The Faculty Member may choose to remain silent (see Section IV. G. 6. a.).

8. The Hearing Officer shall allow the Student to reply and explain the incident. The Student, if present, may choose to remain silent (see Section IV. G. 6. a.).

9. Hearing Panel members may direct questions to the Faculty Member (if present), the Student (if present), and any witnesses and/or representatives.

10. Through the procedural process of the Hearing, the Student and the Faculty Member may question one another and any witnesses appearing. One witness at a time may be called by either the Faculty Member or the Student. No witness will be permitted to participate in the Hearing if his/her name was not previously given to the Hearing Officer in accord with Section, IV. G. 7., above. IN EXCEPTIONAL CIRCUMSTANCES, this provision may be modified by decision of the Hearing Officer, and if it is, the Student and the Faculty Member will be given sufficient opportunity to collect information to respond to whatever the witness presents.

11. The Hearing Officer shall state that the Hearing Panel will make a recommendation to the Dean of Graduate Studies within seven (7) days after the Hearing.

I. Findings of the Hearing Panel and Recommendation Carried Forward:

1. At the conclusion of the Hearing, the Panel members, alone and in closed session, shall deliberate and decide by a majority vote (anonymous written ballot counted by the Hearing Officer and verified by the graduate student member) if "academic misconduct," as alleged by the Faculty Member and only based upon all evidence presented to and heard by the Hearing Panel, "has occurred" or "has not occurred."

2. If the Panel’s decision is that "academic misconduct has occurred," then the Panel members shall deliberate and determine (by majority vote) their
recommendation(s) for specific disciplinary action and/or sanction(s), if any.

3. The Hearing Officer shall compile comments, rationale, findings, voting results, and recommendations in writing and forward them within seven (7) days after the Hearing to the Dean of Graduate Studies. The Hearing Panel recommendation(s) shall not be binding upon the Dean of Graduate Studies.

4. The Dean of Graduate Studies shall consider the recommendation(s) and report of the Hearing Officer and any relevant information and take action.

J. Notifications Consequent to the Hearing Process:

1. The Dean of Graduate Studies shall, within seven (7) days of receipt of the summary final report of the Hearing Officer, send written notification of his/ her action(s) to the Faculty Member, the Student (notification by certified or registered mail with return receipt requesting delivery date), and the Hearing Officer.

2. If this final action of the Hearing process concludes that academic misconduct by the Student has NOT occurred, then the Dean of Graduate Studies also shall, in writing, instruct the chairperson(s) of the involved department(s) that: a. all materials appended to any and all departmental files, including a possible so-called permanent file on the Student, that would not have been in these files if an allegation of misconduct had not been made shall be removed (also see Section IV. A. 5., above) b. conscientious efforts are to be made by the involved department(s) not to subject the student to unwarranted bias or action by the department(s) consequent to the hearing process.

IV. Sanctions that may be Imposed for Academic Misconduct:

A. Censure: A written reprimand for actions which constitute academic misconduct. Censure may include a written warning that subsequent actions of academic misconduct may be the cause for a more severe disciplinary sanction.

B. Unsatisfactory Work: Treating as unsatisfactory any work which is a product of academic misconduct. This may include reduction of a pending or existing grade (including the awarding of a Failing grade) for the work and/or a grade in the course.

C. Suspension: Exclusion from classes and other specified privileges or activities for a definite period not in excess of two years.

D. Expulsion: Termination of graduate student status for an indefinite period. The conditions of readmission, if any, shall be stated in the order of expulsion. Approved by Graduate Studies Committee. University of Kansas Medical Center, April 4, 1991.

Academic Probation

The cumulative grade point average is computed at the end of each semester with the inclusion of grades earned at KU for all courses taken for graduate credit. If the cumulative graduate grade point average falls below 3.0 (B average), the student is placed on probation by Graduate Studies and the student and program are both notified in writing by the Dean of Graduate Studies.

The grades of P, S, U, CR, NC, and I for which no numerical equivalents are defined, are excluded from the cumulative grade point average computation. If the student’s overall graduate average has been raised to a 3.0 by the end of the next semester of enrollment after being placed on probation, the student may be returned to good academic standing. If not, the student may not be permitted to enroll and will be dismissed unless the Dean of Graduate Studies acts favorably on a program recommendation for the student to continue study.

Students who have been dismissed from a graduate program may be reenrolled for further graduate study at KU only by petition of the graduate program that will accept the student. The petition must be approved by the Dean of Graduate Studies on the appropriate campus (Medical Center or Lawrence).

Academic Standing

Evaluation of graduate student academic standing includes, but is not limited to, consideration of performance in and progress through a graduate program according to program expectations. Graduate students must maintain an expected level of performance throughout their program. The evaluation of satisfactory performance is based, but not limited to, the following factors:

1. A minimum cumulative grade-point average (GPA) of 3.0 or higher.
2. Academic and scholarly integrity;
3. Compliance with academic policies at the university, school, and departmental level; and
4. Satisfactory progress toward completion of the degree or certificate as determined by the program. Graduate programs are responsible for evaluating students at least annually to assess progress toward a degree. Progress may be determined by factors including:

   a. Completion of coursework, milestones, exams, or other program components on a specified timeframe;
   b. Official time to degree; and
   c. Total time in program.

Graduate programs may have additional measures of progress. Failure to maintain an expected level of performance and progress will result in a student not being in good academic standing. Lack of good academic standing will result in the graduate program placing the student on academic probation or recommending to the Dean of Graduate Studies dismissal from the program.

It is expected that graduate programs will evaluate students pursuing more than one degree program based on their progress in each program individually.

Childbirth Accommodation

This policy is intended to describe the process for providing students reasonable accommodations for pregnancy-related limitations or the impending birth or adoption of a child, so the student may continue to make progress toward the completion of their degree.
University of Kansas Medical Center’s Title IX Policy prohibits discrimination on the basis of sex, including on the basis of pregnancy, against any individual participating in the University’s education programs or activities. KU Medical Center will neither require nor prohibit leaves of absence for reasons of pregnancy or childbirth-related concerns. The University will make good-faith efforts to reasonably accommodate students who request accommodations due to pregnancy, childbirth, adoption or the foster care of a child. The University will grant students up to a six-week accommodation period, or longer if medically necessary, for pregnancy-related illnesses or complications, the birth of a child, the adoption of a child, or the placement of a child for adoption or foster care. The accommodation period can be granted as leave, a revised academic, research, or clinical schedule, or a combination of leave and a revised schedule.

This policy applies to all enrolled students regardless of gender or marital status. Other situations related to family life continue to be covered by general leave of absence. Depending on their academic program, timing of birth/adoption, and level of support they will receive in caring for a newborn, a student may find it more advantageous both academically and personally to take a leave of absence rather than utilizing the childbirth accommodation policy.

DEFINITIONS
Students: any person enrolled or otherwise participating, including students from other institutions, in any graduate or undergraduate education at KU Medical Center.
Title IX: Title IX of the Education Amendments of 1972 is a federal statute that prohibits sex discrimination or harassment, including harassment or discrimination based on pregnancy, in any academic program or activity.

APPLYING FOR THE ACCOMMODATION PERIOD
Students requesting a reasonable accommodation under this policy can seek to remain enrolled and continue meeting their academic requirements through a revised schedule or they can request a leave of absence. An accommodation to remain enrolled may include a rescheduling of course assignments, examinations, and other academic requirements and/or an extension of academic milestones, if necessary.

Academic Accommodations
To request an accommodation under this policy, a student should contact Academic Accommodation Services, at (913) 945-7035, to initiate the process as soon as possible, but no later than four months prior to the anticipated delivery date, or as soon as a pregnancy-related illness or complication arises. If a child is being welcomed through adoption or foster care, please contact Academic Accommodation Services as soon as possible depending on the situation. The Academic Accommodations Coordinator will review the student’s request and, along with the student and other necessary parties (i.e. advisors, instructors), determine if the requested accommodation, or a sufficient alternative, can be provided. These discussions should also detail the type of academic engagement and progress expected from the student while on leave or on a revised academic schedule. Upon approval of a student’s request, a plan will be submitted to the Associate Dean for Student Affairs of the student’s School. The plan will outline the specific accommodations being provided for a student, as well as any expectations from the academic program.

If a program administrator believes that, due to the student’s particular circumstances and their academic requirements, a leave of absence would be more appropriate, the program administrator must consult with the University’s Title IX Coordinator before denying an accommodation request. Any denial of an accommodation request must be made to the student in writing with adequate justification and must provide a plan for the student to be able to return to the same academic status following a leave of absence. Students may appeal decisions regarding accommodations. The appeal of the decision must be made in writing and submitted to the Dean of the student’s School. The Dean of the student’s School will have final decision-making authority.

All academic programs and departments are expected to work with their students and make a good-faith effort to provide reasonable accommodations so that their students can remain in good academic standing and continue progress towards their degree while also balancing the demands of caring for a new child. It is also encouraged that advisors, academic staff, and departmental leaders work with sensitivity and imagination to provide more than these minimum standards put forth by KU Medical Center when circumstances allow for further accommodations. Students should be proactive in speaking with advisors, instructors, and academic deans when they are planning a family or expecting a child to devise the best personal and academic plan.

Student Status
Students will retain their full time student status if approved for an academic accommodation period. Additionally, for students who decide to take a leave of absence, they will have the option to pay student fees if they wish to have continued access to campus resources.

Financial Support (applicable to those funded by GTAs, GRAs, GAS, or Fellowships)
For students who currently receive stipends through a graduate teaching assistantship (GTA), graduate research assistantship (GRA), or graduate assistantship (GA), they will remain fully funded for a six-week period. Students who do not receive stipends at the time of application are not eligible for financial support. Any continuation of support past six weeks will be determined on an individual basis. Students will remain funded by their current stipend source for the first two weeks and then will be funded by a Childbirth Accommodation Fund through the Office of Graduate Studies for up to four additional weeks. If a student is on a grant or fellowship that allows them to receive stipends during maternity/paternity leaves, then they will continue to be paid by their current funding source for the entire six-week period. If funding is not allowed by the outside grant or fellowship, then the student will receive six weeks of support from the Childbirth Accommodation Fund.

If a student believes they are experiencing discrimination due to pregnancy or related conditions, the student should contact KUMC’s Office of Equal Opportunity and Academic Compliance, which can review potential violations of the University’s Title IX Policy. If a student believes that they are being disparately treated due to status as a parent, the EOAC Office can also review claims of parental status discrimination.
The official policy resides in KUMC PolicyStat (https://kumc.policystat.com/policy/7283651/latest/) which is an internal KUMC only website.

Course Numbering System
Courses that may give graduate credit are numbered according to the following scheme:

- **Courses numbered 500-699** are designed primarily for juniors and seniors, but are also taken by some graduate students who have fewer than 30 hours of graduate credit.
- **Courses numbered 700-799** are designed primarily for graduate students who have fewer than 30 hours of graduate credit, but they are also taken by some undergraduates.
- **Courses numbered 800-899** are designed primarily for graduate students who have fewer than 30 hours of graduate credit.
- **Courses numbered 900-999** are designed primarily for graduate students who have 30 or more hours of graduate credit.

Courses that contain a mixture of undergraduate and graduate students should set requirements for graduate credit beyond or different from the requirements for undergraduate credit. No course, regardless of its number, can give graduate credit unless it has been approved for graduate credit by the appropriate Graduate Studies Office (Medical Center or Lawrence) and is taught by a person holding a current appointment to the Graduate Faculty. See the graduate credit section below for more information.

Co-enrollment for Seniors in Graduate Level Courses
Seniors at KU who will complete the requirements for a baccalaureate degree in a given semester, and who have very strong academic records (grade-point average higher than 3.0 on a 4.0 scale), may be allowed to enroll in graduate course work during their final undergraduate semester. Seniors requesting the privilege of co-enrollment must make formal application through the online graduate application process and be admitted as degree-seeking before the student may proceed with enrollment in a graduate course.

Procedure
To meet the criteria of co-enrollment, the student must earn undergraduate credit for at least one class during the co-enrollment semester. Continuing education courses may be used to satisfy this requirement. If after the co-enrollment semester the baccalaureate degree is not completed, the student will not be permitted to enroll in courses for graduate credit until the baccalaureate degree has been conferred.

Students who are eligible to co-enroll receive an email from the Registrar’s Office before enrollment with instructions on how to enroll in more than one career (ex. LAW, GRDL-Graduate, GRDK-Graduate, UGDL-Undergraduate). Students will have separate appointment times to enroll for each career and must enroll only in the courses that will count correctly toward the career in which they are enrolling during each appointment time. When enrollment is complete for each career, students must check the grading option for each course to ensure the class will be counted correctly.

Discontinuance
A student may voluntarily resign from their program of study by submitting an online “Official Severance Form” located on the Registrar’s website (https://www.kumc.edu/academic-and-student-affairs/departments/registrar-office.html).

Dismissal
Graduate programs are responsible for evaluating the students in their programs to ensure that they are making satisfactory progress toward a degree. If the graduate program finds that a student is not meeting performance standards and/or not making satisfactory progress, the program may recommend to the Dean of Graduate Studies that the student be dismissed from the program. Dismissal is requested by the graduate program through submission of the dismissal form in the Progress to Degree system.

A dismissal recommendation may be based, but not limited to, the following:

- Continuation on academic probation (cumulative grade-point average continues below 3.0);
- Failure to maintain good academic standing as defined under Academic Standing heading in this same section of the catalog;
- Running out of allowable time to degree as defined in degree requirements in the Degree Programs (https://catalog.ku.edu/graduate-studies/kumc/#programstext) section of this catalog;
- Neither enrolling nor receiving approval for a leave of absence for two consecutive semesters;
- Committing Academic Misconduct as defined in this same section of the catalog;

Students who have been dismissed from a graduate program may be readmitted for further graduate study at KU only by petition of the graduate program that will accept the student. The petition must be approved by the Dean of Graduate Studies.

Embargo of Theses and Dissertations
When an exception to the immediate release of a thesis or dissertation is necessary, an embargo provides a temporary, delayed public release of the work. Embargo periods of six months, one year, or two years are available. While embargoes are not intended to be permanent, renewals of the original embargo period are permissible. Considerations that may be deemed reasonable for granting permission for an embargo include, but are not limited to:

- Patentable rights or other issues are contained in the work the disclosure of which may be detrimental to the rights or interests of the author.
- There is a need to prevent disclosure of government information about persons, institutions, technologies, etc. that is contained in the work.
- An academic or commercial press has expressed interest in acquiring the rights to publish the work as a book that may require an embargo.
- The work contains content that has already been submitted to a peer-reviewed journal that may require an embargo.
- Approval for delay has been granted by the KU Restricted Research Committee.

Requests for an extension of the embargo should be directed to the Office of Graduate Studies on the appropriate campus (Medical Center or Lawrence) and must be received at least one month prior to the expiration of the current embargo to ensure sufficient time to process the request. A request for an embargo submitted to the University of Kansas affects only the publication of the thesis or dissertation in KU ScholarWorks. It is
the graduate student’s responsibility to additionally request an extension through ProQuest for the copy published by them.

While there is no limit to the number of times a student can request an embargo extension, embargoes that have been allowed to expire without a request for an extension will result in the thesis or dissertation being made publicly available.

The embargo period will be calculated beginning at the end of the semester in which the student graduates with the specific dates being: December 31st, May 31st, and August 31st.

**Steps necessary for embargoing a thesis or dissertation:**

Theses and dissertations at the University of Kansas are made available in two electronic databases: KU ScholarWorks and ProQuest Dissertations and Theses. Items in KU ScholarWorks are publicly accessible on the world-wide web and can be indexed by search engines.

Students who do not wish to have their theses or dissertations made public in these two venues must receive permission from their committee chair, department graduate director or department chair to embargo their theses or dissertations. The student must document this permission with the Electronic Thesis and Dissertation (ETD) Release Form. Once the student has obtained the requisite signatures on this form, the student must take two additional steps before graduation to ensure that their work is properly embargoed.

- First, the student must submit the Electronic Thesis and Dissertation (ETD) Release Form to the Office of Graduate Studies on the appropriate campus (Medical Center or Lawrence). If an embargo has been approved, this form will ensure that the work is temporarily restricted in KU ScholarWorks.
- Second, during the electronic submission process to ProQuest, the student must select the embargo option under the publishing restrictions section. If an embargo has been approved, this step will ensure that public view of the work is temporarily restricted in the ProQuest Dissertations and Theses database.

**Enrollment Definitions (Full-Time, 3/4-Time, Half-Time, and Part-Time)**

**Full-time enrollment for fall and spring semester**

- Enrollment in 9 credit hours;
- Enrollment in 6 credit hours plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 6 credit hours for graduate students using the Montgomery GI Bill® – Active Duty (MGIB-AD) and Post-9/11 GI Bill® – Active Duty;
- Doctoral candidates enrolled in dissertation hour(s). *See doctoral candidates below.

**Full-time enrollment for summer semesters**

- Enrollment in 6 credit hours;
- Enrollment in 3 credit hours plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 3 credit hours for graduate students using the Montgomery GI Bill® – Active Duty (MGIB-AD) and Post-9/11 GI Bill® – Active Duty;
- Doctoral candidates enrolled in dissertation hour(s). *See doctoral candidates below.

**3/4-time Enrollment for Fall and Spring Semesters**

- Enrollment in 7 credit hours;
- Enrollment in 4.5 credit hours plus a GRA appointment, regardless of percentage of appointment.

**3/4-time Enrollment for Summer Semesters**

- Enrollment in 4.5 credit hours;
- Enrollment in 2 credit hours plus a GRA appointment, regardless of percentage of appointment.

**Half-time enrollment for fall and spring semesters**

- Enrollment in 5 credit hours;
- Enrollment in 3 credit hours plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 3 credit hours for graduate students using the Montgomery GI Bill® – Active Duty (MGIB-AD) and Post-9/11 GI Bill® – Active Duty.

**Half-time enrollment for summer semesters**

- Enrollment in 3 credit hours;
- Enrollment in 1 credit hour plus a GTA, GRA, or GA appointment, regardless of percentage of appointment;
- Enrollment in 1 credit hour for graduate students using the Montgomery GI Bill® - Active Duty (MGIB-AD) and Post-9/11 GI Bill® – Active Duty.

**Part-time enrollment**

- Students enrolled in fewer hours than defined by half-time enrollment are considered part-time.

*Note: If a student does not receive permission for an embargo and/or does not submit the required documentation requesting such an embargo to the Office of Graduate Studies prior to graduation, the work will be made publicly available through KU ScholarWorks, and search engines will find and index the work. For this reason, once a work is released publicly, it is impossible to deploy an embargo in its entirety, because copies of a released work are likely to be stored on the web even if the KU ScholarWorks and ProQuest copies are retracted. Therefore it is crucial for students who desire the embargo option to request it prior to graduation and to request extensions, if needed, prior to the work being exposed to public search engines.

Dissertation defenses are open to the public. In the event that an embargo is deemed necessary for a dissertation, the committee should consider holding an additional question period for the defense that is closed to the public. Any sensitive data may be discussed in the closed session.

*A doctoral candidate is defined as a doctoral student who has successfully passed the Comprehensive Oral Examination for
Grading

graduate courses. See these policies in this section of the catalog:

Under some circumstances, undergraduate students may enroll in hours a semester or more than 8 hours in summer session. Graduate students are not normally permitted to enroll for more than 16 hours required for the fulfillment of their degrees unless they have been All graduate students are expected either to be enrolled or to be on the program.

International Student Enrollment

Undergraduate Student Enrollment in Graduate Level Course for Co-enrollment for Seniors in Graduate Level Courses

Grading

General Guidelines

Grading scales are assigned on a course-by-course basis. The grading scale selected for a course must be appropriate to the course type and to the students and programs that the course serves. It is expected that designated thesis, dissertation, capstone courses, and their approved equivalent courses will be graded using the A, B, C, D, F, P scale. The I grade is not appropriate for enrollment in thesis, dissertation, capstone projects, or research courses and is not allowed.

Once a grading scale for a particular course has been recommended by the department/program and approved by Graduate Studies, it must be applied to the entire student enrollment in the course or section. This applies to all graduate-level courses.

The individual schools have the option of using or not using the +/-, according to the policy adopted by the particular school.

In courses with the letter-grade scales, the grade of C- is not considered a passing grade. Students receiving a grade of C-, D, and F in a course may not count that course toward fulfilling degree requirements.

Cumulative GPA

Overall, students must earn at least a B average (i.e., 3.0 GPA) on course work counted toward any master's or doctoral degree at KU. All graduate-level courses will be included in the calculation of the cumulative graduate GPA. Undergraduate courses, even when the student enrolls as part of their graduate career, will not count toward the cumulative graduate GPA. Graduate courses counted as part of the undergraduate degree will not be counted in the cumulative graduate GPA. The student's graduate GPA calculation will include any degree or certificate graduate course work completed at KU. Courses graded P, S, U, CR, NC, or I are excluded from the computation of the GPA.

The I Grade: Incomplete Work

The I grade indicates course work that has been of passing quality but which is partially unfinished for good reason. Use of the I grade is optional in some grading scales but is not permitted by other scales (see below). Generally, the I grade is an appropriate option for enrollments other than thesis, dissertation, research, capstone, or the first semester of a two-semester sequence course.

As stated in the University Senate Rules and Regulations, Article II, Section 2.2.3.2 (http://policy.ku.edu/governance/USRR/#art2sect2): "A student who has an I posted for a course must make up the work by the date determined by the instructor, in consultation with the student, which may not exceed one calendar year, or the last day of the term of graduation, whichever comes first. An I not removed according to this rule shall automatically convert to a grade of F or U, or the lapse grade assigned by the course instructor, and shall be indicated on the student's record."

Grading Scale for Regular Courses (two options)

Grading Scale: A, B, C, D, F

The basic system is an A, B, C, D, F scale, where:

- A designates above-average graduate work;
- B designates average graduate work;
- C designates passing but not average graduate work;
- C-, D and F designate failing graduate work.

Grading Scale: A, B, C, D, F, I

The basic system is an A, B, C, D, F, I scale, where:

- A designates above-average graduate work;
- B designates average graduate work;
- C designates passing but not average graduate work;
- C-, D and F designate failing graduate work;
- I designates incomplete work per definition earlier in this section.

Grading Scale for Research Courses including thesis and dissertation

Grading Scale: A, B, C, D, F, P

Departments/programs use this scale to grade their thesis, dissertation, capstone project, and approved thesis- or dissertation-equivalent courses. Other research courses are
also graded using the A, B, C, D, F, P scale. The I grade is not appropriate for enrollment in thesis, dissertation, capstone project, or research courses and is not allowed by this grading scale.

In this grading scale the letter P indicates participation in coursework where evidence of performance may not be available. This grading scale is appropriate in two types of situations:

- In designated thesis, dissertation, approved thesis- or dissertation-equivalent, capstone, or research courses;
- In the first semester of two-semester sequence courses.

In any semester, an instructor has the option to assign a letter grade of A, B, C, D, or F, instead of P, when evidence about performance is available. Upon completion of thesis, dissertation, or research hours leading to a master’s or doctoral degree, the P remains on the final transcript in all semesters for which it was recorded.

For departments/programs that use this scale, a letter grade (A, B, C, D, or F) must be assigned for a student’s final semester of enrollment in thesis, dissertation, capstone, or research course work. The letter grade assigned characterizes the quality of the final product.

Result Choices for Milestone Examinations
Honors, Satisfactory, Unsatisfactory
Performance on milestone examinations may be graded Honors, Satisfactory, or Unsatisfactory. These outcome grades are appropriate to the following milestone examinations:

- the general examination for the master’s degree;
- the project defense for the master’s degree;
- the thesis defense for the master’s degree;
- the comprehensive oral examination for the Doctor of Nursing Practice (D.N.P.);
- the comprehensive oral examination for the Ph.D.; and
- the final examination for the Ph.D.

Use of the Honors designation is at the department’s discretion.

Other Grading Scales
Grading Scale: S, U, I
The grades of S and U designate satisfactory (S) and unsatisfactory (U) performance. This grading scale is appropriate to three types of course: continuing education courses; workshop courses; and institute courses.

No more than 6 hours total of graduate course work graded S may count toward a degree. The S, U, I grading scale may be adopted at the department/program’s discretion per the Incomplete grade definition earlier in this section.

Graduate Credit
Criteria for Offering Graduate Credit
The following three conditions must be met for a student to receive graduate credit for work satisfactorily completed at KU:

1. The student must have gained graduate admission.
2. The course must be numbered 500 level or above and have been approved for graduate credit by the appropriate school and the Graduate Council on the Medical Center campus.
3. The instructor must hold a current appointment to the Graduate Faculty.

Minimum Grade for Graduate Credit
A minimum grade of C is required for a course completed at KU to count for graduate credit. Grades of C- and below do not count toward fulfilling requirements and the course cannot be counted toward a degree or certificate.

Credit by Examination
Credit by examination is not accepted toward graduate degree or certificate programs.

Graduate Course Work Expiration Dates
Courses completed at KU, or transfer credits from another university, cannot be used to fulfill graduate degree requirements if these courses were completed more than ten (10) years prior to the final defense for doctoral candidates or graduation for master’s students. A request to make an exception to this policy must be approved by the program and the Dean of Graduate Studies.

Transfer Credit
Up to six hours of graduate credit taken at a regionally accredited graduate school may be transferred and applied to a master’s degree at KU if the credits were taken before the final semester of enrollment at KU and have the approval of the program. Eight hours may be approved for transfer if the student holds a baccalaureate degree from KU. Graduate credit will not transfer for courses
Graduate Students are required to complete their degree requirements within a timeframe set by their graduate department. If exceptions are granted, these exceptions to the policy shall be submitted in writing to the Dean of Graduate Studies.

The Office of Graduate Studies will manage consideration of and record exceptions to the policy outlined above. Requests for exceptions to this policy must be approved by the department/program and the Dean of Graduate Studies.

In order to initiate the actual transfer of credits meeting the transfer credit guidelines, the transfer credit form in the Progress to Degree system must be submitted to Graduate Studies by the student's department/program.

Graduate Student Oral Exams Attendance

Attendance
All voting members of the committee should attend graduate student oral examinations. For M.S. students this includes the final general exam, project defense, capstone, or thesis defense. For Ph.D. students, this includes the comprehensive oral examination, and the final oral examination (dissertation defense).

A majority of committee members must be in attendance for an examination to commence; for doctoral oral examinations, this requirement is 3 of the 5 members, for master's oral examinations the requirement is 2 of the 3 members.

In addition, it is required that the student being examined, the candidate's department/program, and the outside committee member (Ph.D. examinations) all attend the examination or defense. Attendance via mediated means (tele/videoconferencing) is acceptable at the discretion of the committee chair (or co-chairs). In cases where the student prefers an examination in which all committee members are physically present, the student's preference shall be considered.

A request for substitution of any members of the committee once approved by Graduate Studies through the Progress to Degree system must be approved by Graduate Studies in advance of the exam.

In the case of failure of technology during the examination, all members of the committee in attendance must concur that the examination was substantially complete. If any member of the committee dissects the examination is considered canceled and must be rescheduled. The committee members at remote locations must be contacted to submit their decision concerning the assessment of the examination before the exam results are recorded.

The Office of Graduate Studies will manage consideration of and decisions on exceptions to the policy outlined above. Requests for exceptions to this policy shall be submitted in writing to the Dean of Graduate Studies. If exceptions are granted, Graduate Studies will request that a member of the departmental leadership (the department chair or graduate director) attend the examination.

Graduate Student Oral Exams Committee Composition

The majority of committee members serving on a graduate student oral examination committee in most cases are in the candidate's department/program of study.

Ph.D. Committees
Ph.D. doctoral committees are composed of at least five voting members all of whom must be members of the Graduate Faculty as described in the Graduate Faculty (p. 2426) section of this catalog. The committee structure must adhere to the following requirements:

1. The chair of the committee must hold dissertation status. If the committee has co-chairs, at least one of the co-chairs must hold dissertation status.
2. One member must meet the requirements for serving as an outside member: i.e., be a KU faculty member holding regular or dissertation graduate faculty status and is not a faculty member holding graduate status in the candidate's department/program. The outside member represents Graduate Studies and is a voting member of the committee, has full rights to participate in the examination, and reports any unsatisfactory or irregular aspects of the examination.

Master's Committees
Master's committees are composed of at least three voting members all of whom must be members of the Graduate Faculty as described in the Graduate Faculty (p. 2426) section of this catalog.

Grievance Policy and Procedures for Graduate Students

A graduate student who believes herself or himself unfairly or unlawfully treated in an academic matter may present a grievance to the academic department or appropriate program chairperson. Each academic unit has established grievance policies and procedures. Concerns regarding illegal discrimination or harassment should be reported to the Equal Opportunity Office. For academic misconduct issues, see the Academic Misconduct policy in this section of the catalog.

The grievance procedure may not be used as an appeal for a grade. Grades should be appealed at the department or program level. Committees established at the department, program or school level to hear grievances proceed in accordance with their own specific procedures and make recommendations to the appropriate administrative officers as provided in those procedures. Appeals from the decision of a department or program or school must be made to the Dean of Graduate Studies.

The appellate process is designed to ensure that due process has been afforded an individual in the initial hearing. The Dean of Graduate Studies will appoint the committee chair from the membership of the KUMC Graduate Council. Two other members will be selected by the chair from the Graduate Council and one other graduate faculty member selected by the student complainant and a second graduate faculty member selected by the accused. The selection of these faculty members shall be acceptable to both parties. A student member will be selected by the President of the Graduate Student Council. Care should be taken to ensure that none of the members has a conflict of interest in this case.
This committee will examine all pertinent documents including student records and interview the parties directly involved in the complaint as well as other parties deemed necessary. Minutes of testimony will be made available to both the complainant and accused parties after the hearing is completed. It is essential that all parties retain confidentiality of information gained through the hearing process. Both parties will be provided an opportunity to respond to the minutes in writing before the committee’s final recommendation is forwarded to the Dean of Graduate Studies who will make the final determination. The documents provided to the grievance committee will be retained in the Office of Graduate Studies for a period of three years, after which time they will be destroyed. There is no further appeal.

Intellectual Property Policy

All enrolled students are subject to the Board of Regents and KU Intellectual Property Policies. The ownership of student works submitted in fulfillment of academic requirements is retained by the creator(s). By enrolling, the student gives the institution a nonexclusive royalty-free license to mark on, modify, retain the work in the process of instruction, or otherwise handle the work, as set out in the institution’s Intellectual Property Policy or in the course syllabus. The institution does not have the right to use the work in any other manner without the written consent of the creator(s).

Leave of Absence

The Office of Graduate Studies may grant a leave of absence (LOA) from an academic program for up to one academic year, with the possibility of extension. The student must complete the official Leave of Absence Checklist. A leave of absence may be granted in extraordinary circumstances (e.g. cases of illness, emergency, financial hardship, military leave, pregnancy/childbirth), to pursue family responsibilities, or to pursue full-time activities related to long-range professional goals. The LOA request must be submitted at the beginning of the semester. Evidence of progress toward degree will also be a determining factor in the decision to grant a leave. If the leave of absence is approved at the program level, the program forwards the student’s request along with the program’s recommendation to the Dean of Graduate Studies for approval. If approved by the Dean of Graduate Studies, the time on leave from the academic program will not be counted toward the maximum time granted to complete a degree (doctoral, 8 years; master’s, 7 years).

All steps to complete a leave request are outlined on the Leave of Absence Checklist. First, students discuss the leave with their mentor/advisor and/or their Program Director. If those administrators believe that the leave is the best path forward for the student, the student completes the official Leave of Absence Checklist. Second, students meet with individuals in the Registrar’s Office and Financial Aid to verify understanding of how the leave could impact their enrollment, access to campus resources, health insurance, and/or loans. Third, the student completes the section of the form asking for details about their leave and how they can be contacted. Fourth, the student returns the form to their Program Director for a second signature that acknowledges the student completed all steps. The form is then forwarded to the Dean of Graduate Studies for a final approval. After the Dean of Graduate Studies approves the Leave of Absence form, the form is forwarded to the Office of the Registrar to be recorded in the student’s academic record.

When a student is ready to return from an LOA, the student must complete the Request for Return from Leave of Absence Checklist. The form requires the student to complete information about when they will return as well as a signature from the Program Director. After the Program Director approves the Return LOA Checklist, the Program Director will send the form to the Office of Graduate Studies. The Office of Graduate Studies will review and respond with an approval via email. Then, the Office of Graduate Studies will send the form to the Office of the Registrar to reactive the student in Enroll and Pay.

The Requests for Leave of Absence Checklist and for Return from Leave of Absence are on the Graduate Studies Policies and Regulations page [link] of their department website.

Post-Comprehensive Enrollment for Doctoral Candidates

Doctoral candidates are required, after passing the comprehensive oral examination, to be continuously enrolled in one or more hours of dissertation that both moves the student towards degree completion and reflect, as accurately as possible, the candidate’s demands on faculty time and university facilities. During this time, until all requirements for the degree are completed (including the filing of the dissertation) or until 18 post-comprehensive hours have been completed (whichever comes first), the candidate must enroll for a minimum of 6 hours a semester and 3 hours a summer session.

Post-comprehensive enrollment may include enrollment during the semester or summer session in which the comprehensive oral examination has been passed. If after 18 hours of post-comprehensive enrollment the degree is not completed, the candidate must continue to enroll each semester and each summer session until all degree requirements have been met. The number of hours of each enrollment are determined by the candidate’s advisor and must reflect as accurately as possible the candidate’s demands on faculty time and university facilities.

Posthumous Degrees

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

The dean of the school posthumously conferring the degree should contact the Office of the University Registrar to confirm the correct information for the degree to be conferred, notify the Vice Provost for Academic Affairs, and coordinate with the Office of the Chancellor for notification to the family. Posthumous degrees are conferred during the semester in which the student was expected to graduate. The Chancellor informs the student’s family in writing of the posthumous award of the degree.

Progress to Degree Policy

The Progress to Degree system is used by Graduate Studies to track and monitor graduate student progress. The forms should be used to report items such as change in degree plan within the same department, transfer credit towards a master’s degree, dismissal from the program, master’s general exam, master’s thesis, capstone defense, project defense, or oral comprehensive, and final exam (dissertation defense) for PhD students. This system is used by designated faculty or staff to request Graduate
Studies approval for the various functions indicated. The Registrar’s Office receives notification when forms approved and enters relevant information in the student record system.

**Research Compliance**

There are certain types of research or activities that may not be pursued unless specific prior approval and/or training has been obtained. Students should refer to KUMC Office of Compliance (https://www.kumc.edu/office-of-compliance.html) policies.

**Student Responsibilities**

All graduate students are responsible for informing themselves of requirements and policies of the Office of Graduate Studies. They are also expected to be familiar with the regulations and requirements of their departments and of their graduate programs. Program Graduate Directors and the Office of Graduate Studies staff are ready to answer questions and offer counsel. It is each graduate student’s responsibility to know and observe all regulations and procedures relating to the graduate degree program the student is pursuing. In no case will a regulation be waived or an exception be granted because students plead ignorance of, or contend that they were not informed of, requirements, regulations, procedures, and deadlines. Responsibility for following all policies and meeting all requirements and deadlines rests with the student.

**Undergraduate Student Enrollment in Graduate Level Courses for Undergraduate Credit**

Well-qualified undergraduate students may be permitted to enroll in 800- or 900-level courses for undergraduate credit with the approval of the instructor and the student’s advisor. For graduate courses offered by the KUMC campus, the student must bring a Count Towards Degree form signed by the instructor, a letter of explanation and recommendation from the advisor, and current academic record to the Office of Graduate Studies for approval. If approved, the Office of Graduate Studies signs the Count Towards Degree form, which the student must then present to the staff in the KUMC Registrar’s Office if currently enrolled as a KUMC undergraduate or to the Student Records Center in Lawrence if currently enrolled as Lawrence undergraduate. The appropriate office staff (KUMC Registrar’s Office or Student Records Center) will enroll the student in the course(s). Courses taken for undergraduate credit may not be transferred to graduate credit.
Office of Academic Success

Academic Success supports the intellectual engagement and pursuit of learning by KU students throughout their academic career, from orientation to graduation and beyond. Courses offered teach students to navigate the university, explore intellectual interests, maximize experiential learning opportunities, and prepare students for a meaningful career after graduation.

- Undergraduate Certificate in Arts Engagement (p. 2445)
- Undergraduate Certificate in Service Learning (p. 2446)

Courses

UNIV 1. Math Skill Development I. 2 Credits.
Offered to provide opportunities for deeper understanding of MATH 2 content through interactive learning. The course will support students preparing to take Kansas Algebra (KAP) course (Math 2). The content of the course uses the MATH 2 foundations and emphasizes helping students generate a mathematical mindset, understanding how learning occurs in mathematics, and strategies to be successful in future mathematics coursework. Students will engage in discussions surrounding their roles in mathematical learning and practice using mathematical thinking strategies to improve understanding. Prerequisite: Open only to students withdrawing from MATH 2 during the semester.

UNIV 101. Orientation Seminar. 1-2 Credits.
This course will provide an introduction to the University community and the value and role of higher education in our society, strategies for successful transition to and participation in that community, exploration of the University commitment to diversity and multiculturalism, and information about University resources and procedures. Prerequisite: Eligible students must have fewer than thirty credit hours from the University of Kansas.

UNIV 120. Introduction to Engaged Learning. 2 Credits.
Explore your interests through hands-on mini experiences in service learning, study abroad, undergraduate research, and internships. With individualized support from your instructor in this small course, you’ll test out various experiences both on and off campus, connect to relevant KU departments, and prepare materials needed to apply to these experiences after completing the course.

UNIV 299. Service Learning Project. 0-1 Credits.
Service Learning Project. Graded on a satisfactory/unsatisfactory basis.

UNIV 492. Special Projects in the Community. 2 Credits.
UNIV 492 begins with the premise that community service is a valuable response to the social problems that we face in today’s society and that understanding of self, knowledge of social issues, and commitment to service are essential for effective engagement in communities. Students will be introduced to existing responses to social problems and will work to formulate their own individual and collective responses. Course is offered in partnership with KU Alternative Breaks. Alternative Breaks works to motivate college students to become active and present members of their own communities, to recognize the different needs of local, national, rural and urban communities, and to engender an understanding of how to be involved in the betterment of society.

UNIV 602. Sponsored Educational Experiences. 0 Credits.
Goal 6 can be met through an approved experience designed by student and faculty member. Students with a faculty sponsor may propose a unique experience to fulfill Goal 6. Experiences must meet the following set of principles that define a sponsored educational experience.

1) Intention, Preparedness and Planning; 2) Reflection; 3) Monitor Progress; 4) Assessment and Evaluation. In addition, each educational experience considered for the KU Core should have a specific number of contact hours equal to at least 3 credit hours or 120 hours in and out of the classroom over the semester; and an outcome should include a product representative of the student's effort. Graded on a satisfactory/unsatisfactory basis.

Undergraduate Certificate in Arts Engagement

The Arts Engagement Certificate requires three different components: classes, experiences, and written reflections. Classes and experiences can happen in any order. Most students will attend events during the same semesters that they are taking qualifying courses. The final written reflection should be completed after the coursework and event attendance is completed.

To register for the Arts Engagement Certificate, log in to MyKU (http://my.ku.edu) and select Academics > Undergraduate Certificates. From there, you will be able to register for the certificate.

The Arts Engagement Certificate requires three different components: classes, experiences, and written reflections. Classes and experiences can happen in any order. Most students will attend events during the same semesters that they are taking qualifying courses. The final written reflection should be completed after the coursework and event attendance is completed.

Classes

Complete at least 2 arts classes, totaling a minimum of 6 credit hours, with a grade of C or better. These 2 classes should each be from a different school/department.

All classes offered by the following schools and departments qualify:

<table>
<thead>
<tr>
<th>Column One</th>
<th>Column Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture (<a href="https://architecture.ku.edu/">https://architecture.ku.edu/</a>)</td>
<td>Dance (<a href="https://dance.ku.edu/">https://dance.ku.edu/</a>)</td>
</tr>
<tr>
<td>Design (<a href="https://design.ku.edu/">https://design.ku.edu/</a>)</td>
<td>Creative Writing (<a href="https://english.ku.edu/courses/">https://english.ku.edu/courses/</a>)</td>
</tr>
<tr>
<td>Film &amp; Media Studies (<a href="https://film.ku.edu/">https://film.ku.edu/</a>)</td>
<td>History of Art (<a href="https://arthistory.ku.edu/">https://arthistory.ku.edu/</a>)</td>
</tr>
<tr>
<td>Music (<a href="https://music.ku.edu/">https://music.ku.edu/</a>)</td>
<td>Theatre (<a href="https://theatradance.ku.edu/">https://theatradance.ku.edu/</a>)</td>
</tr>
<tr>
<td>Visual Art (<a href="https://art.ku.edu/">https://art.ku.edu/</a>)</td>
<td>Honors classes taught by arts faculty (<a href="https://honors.ku.edu/">https://honors.ku.edu/</a>)</td>
</tr>
</tbody>
</table>

Experiences

There are two options to choose from in completing this certificate requirement:

Option A

- Attend 6 art events from 3 different arts areas. (These can be any events offered on campus). Example: 2 dance performances, 2 design lectures, and 2 visual art exhibitions. Write a reflection over
each event and submit it on the Experiential Learning Certificates portal within 2 weeks event attendance.

Option B

- Attend 3 art events from 3 different arts areas. Write a reflection over each event and submit it on the Experiential Learning Certificates portal within 2 weeks of event attendance.
- Complete a semester long, hands-on arts experience (e.g., an additional class - in a different school/department than the courses used to fulfill the coursework requirement - producing creative work; an arts-related internship; or participating in campus music, theatre, or dance productions). Then, submit a written reflection (at least 600 words) and some kind of artifact from your experience on the Experiential Learning Certificates portal. This can be photo documentation of a project with descriptions, video, content that you produced during an internship, a final reflection that was required to complete a class, etc.

You must complete either Option A or Option B to satisfy this component of the certificate.

Most arts events offered at the University of Kansas will count toward the Arts Engagement Certificate. Here is a general list of arts venues and types of arts events that can be count toward your certificate:

- All KU theatre (http://kutheatre.com/performances/) performances
- All performances and art-related talks at the Lied Center (http://lied.ku.edu/calendar/) & master classes
- All exhibitions, performances, and art related talks at Spencer Museum of Art (https://spencerart.ku.edu/calendar/)
- All exhibitions, performances, and art related talks at Nelson Atkins (https://www.nelson-atkins.org/)
- All School of Music (https://music.ku.edu/school-music-calendar/) events
- Senior recitals, thesis exhibitions, and student showcases
- Visiting artists and art-related lectures on campus (e.g. at The Commons, Kansas Union, Hall Center, departmental guest artists, etc.)
- Optional, hands-on workshops offered by participating Arts Engagement Departments
- Film screenings with discussions
- Artist talks, exhibitions, and theatre, music, and dance performances at the Lawrence Arts Center (https://lawrenceartscenter.org/calendar/)
- Art Lectures at the Lawrence Public Library (https://lawrence.bibliocommons.com/events/search/index/)
- Artist talks and exhibitions at the Student Union Gallery in the Kansas Union
- All exhibitions at the Art and Design Building Gallery
- Final Fridays (https://www.explorelawrence.com/events/annual-events/final-fridays/) (Lawrence) or First Fridays (http://kccrossroads.org/first-fridays/) (Kansas City) are fine to attend for visual art; however, you need to write about a specific work of art or exhibition.

If you have questions about whether or not an event can count, please e-mail artsengagement@ku.edu (artsengagement@ku.edu)

Final Reflection

Answer 6 written reflection essay questions and take a short exit questionnaire on the Experiential Learning Certificates portal.

Undergraduate Certificate in Service Learning

The Certificate in Service Learning (CSL) recognizes your experiences in utilizing your classroom skills to meet community-identified needs.

Earning the certificate involves taking classes, engaging in volunteer work, and reflecting on your service learning experiences. Once you have earned the certificate, it is acknowledged on your official academic transcript.

Completion of this certificate fulfills KU Core Goal 5: Social Responsibility and Ethics.

- Introduction to Service Learning
  - The Service Learning Orientation is an online and self-paced introduction to service pathways and ethical service work.
  - This is not a class. Modules and resources to complete this component will be available on the Center for Service Learning’s website. After reviewing the online modules, you will respond to reflection questions.
  - All Service Learning Orientation components must be completed during the same semester in which you register for the certificate.

- 1 service learning course and 1 social awareness course
  - Take 1 designated service-learning (SL) class and 1 social awareness (SA) class. View eligible classes. (https://csl.ku.edu/students/mandatorycourse)
  - Service learning courses must be taken for a minimum of 3 credit hours. Classes that qualify toward the certificate vary by semester.
  - Some approved courses offer optional service or multiple projects that serve for-profit and non-profit organizations. In order for your service to be approved for the certificate, you must have participated in the service learning component of the course, and the service must be completed in the non-profit sector. You may have taken a SL or SA service-learning class that is not included on the list of courses on the Center for Service Learning website (https://csl.ku.edu/students/mandatorycourses) or with approval from the Center for Service Learning. In order to seek approval or recommend a course be designed as a service-learning or social awareness course, submit the form on the Center for Service Learning’s website.

- 60 hours of service
  - Complete a minimum of 60 hours of service. Service hours from your service learning class count toward the cumulative 60 hours needed to complete the certificate. If the service hours from your courses fall below 60 hours, you may complete additional service in one of the following ways:
    - participate in an alternative break trip
    - volunteer at a non-profit agency
    - complete another service learning course
  - If you continue service at an agency beyond what is required for your service learning class, you may use those hours to complete this component. Contact the Center for Service Learning with
questions or to discuss other options for completing the additional service.

- If you complete service hours that are not part of a class, you will need to fill out an additional service verification form (https://kusurvey.ca1.qualtrics.com/jfe/form/SV_6YEHRsDcORCMkJg/) that includes completion of reflection questions and upload it to your submission.

- All service learning activities completed as part of a designated service learning course will be accepted, no matter when completed.

- Up to 30 hours of service learning and volunteer activities may be accepted toward certificate requirements prior to completion of the Service Learning Orientation requirement, if service adheres to the established criteria on the Center for Service Learning’s website. However, students must complete a structured reflection with CSL staff to satisfy the reflection requirement for these hours by participating in a session offered by the CSL. Staff will not approve additional service hours beyond 30 unless the student has registered for the certificate and completed the Service Learning Orientation module.

- **Final Reflection**
  - Write a reflection summary including all your service experiences. Because you will be including all of your service experiences in the reflection, you may not submit the reflection prior to completing your service experiences. Visit csl.ku.edu (http://csl.ku.edu) for more specific details on reflection requirements. To access the final reflection, you must have registered for the certificate, completed Service Learning Orientation, and finished your coursework and service hours.
Office of International Affairs

International Affairs (https://international.ku.edu/) is the central administrative office for the international division, empowering Jayhawks from all 50 states and over 105 nations to achieve their full potential by mobilizing discovery, research, and service across geopolitical borders. Academic programs include English language instruction provided through the Applied English Center (http://aec.ku.edu/), and a Global Awareness certificate administered by Study Abroad and Global Engagement (https://studyabroad.ku.edu/).

Courses

AEC 1. Level 1 Support Course. 2 Credits.
In this class, learners will look at vocabulary in authentic contexts. Students examine vocabulary for depth, considering the types of word knowledge needed to know, to understand, and to use words correctly. Examples of this data include collocations, synonyms, antonyms, and word parts (prefixes, roots, and suffixes). This course also focuses on increasing the breadth of learner vocabulary. Prerequisite: Placement by the Applied English Center.

AEC 2. Level 2 Support Course. 2 Credits.
Verbs enable language users to convey multi-dimensional messages, allowing them to travel precisely back and forth in time and indicate what is possible, permissible and polite. Yet many students see and use verbs in a one-dimensional way, focusing on the definition of the verb but disregarding the time message of tense and the nuance of modals. This class will address that discrepancy. Although students will practice verb forms, the class concentration will be on the recognition and accurate use of the functional message of verb tenses and modals. Specifically, students will analyze the forms and functions of targeted verb tenses, select appropriate verb tenses in written and oral activities and expand control of sentence-level grammar. Prerequisite: Placement by the Applied English Center.

AEC 3. Level 3 Support Course. 2 Credits.
This course supports the Level 3 core courses by emphasizing and targeting reading skills in an effort to further improve their reading comprehension, increase their reading fluency and develop their vocabulary as demonstrated in their writing and speaking. Reading selections target comprehension and critical thinking skills while timed word and reading selections are used to promote reading speed and fluency. Vocabulary development is targeted through morphemic analysis of roots and affixes and study of context clues. Prerequisite: Placement in this course by the Applied English Center.

AEC 4. Elective: Special Topics in: ______. 2 Credits.
Skill-based or content-based special topics for upper level students enrolled in at least one Applied English Center core course. Prerequisite: Placement in this course by the Applied English Center.

AEC 5. Short Term Program with Applied English Center Course Enrollment: ______. 0-16 Credits. U
Skill-based special topics at appropriate level(s) for short term program students attending core AEC courses for a partial term. Prerequisite: Placement in this course by the Applied English Center.

AEC 6. Anticipated Future Applied English Center Credit Hours. 1-16 Credits. U
This course is a placeholder for future anticipated Applied English Center credit hour enrollment. Prerequisite: Placement in this course by the Applied English Center.

AEC 7. Short Term Programs Self-Contained Enrollment: ______. 0-16 Credits. U
Specialized English language courses for short term program students. Courses focus on the use of English in particular fields of study or employment based on program objectives. Prerequisite: Placement in this course by the Applied English Center.

AEC 90. English Proficiency Test. 0 Credits. U
Final proficiency test. Required of all students enrolled in one or more Applied English Center courses, except AEC 82. Graded on a satisfactory/unsatisfactory basis.

Courses

AECB 10. Basic English. 1-15 Credits.
Basic English is a fully-integrated English as a Second Language course designed for students at the lowest level of English proficiency. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, speaking, listening, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at a beginning to middle A1 CEFR proficiency level. Specifically, students will be able to understand and use familiar everyday expressions and very basic phrases in both speech and writing. Students will also be able to interact in a simple way provided the other person talks slowly and clearly.

AEC 13. Listening, Speaking and Grammar for Academic Purposes 1. 3-8 Credits. U
Students in Level 1 Listening/Speaking/Grammar are at the beginning of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in listening, speaking, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the A2 CEFR proficiency level. Specifically, students will be able to communicate and understand simple, foundational English relevant to academic study. Prerequisite: Placement in this course by the Applied English Center.

AEC 20. Listening, Speaking and Grammar for Academic Purposes 2. 3-8 Credits. U
Students in Level 2 Listening/Speaking/Grammar are at a high-beginning/low-intermediate level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in listening, speaking, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B1 CEFR proficiency level. Specifically, students will be able to understand the main points of clear standard input regularly encountered in academic study and can produce simple connected speech on relevant topics. Prerequisite: Placement in this course by the Applied English Center.

AEC 30. Listening, Speaking and Grammar for Academic Purposes 3. 3-8 Credits. U
Students in Level 3 Listening/Speaking/Grammar are at an intermediate level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in listening, speaking, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B2 CEFR proficiency level.
Specifically, students will be able to understand the main ideas of lectures on both concrete and abstract topics and will be able to interact with a degree of fluency and spontaneity that makes regular interaction with native speakers possible. Prerequisite: Placement in this course by the Applied English Center.

**AECO 140. Listening, Speaking and Grammar for Academic Purposes 4. 3-8 Credits. U**

Students in Level 4 Listening/Speaking/Grammar are at a low-advanced level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in listening, speaking, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B2/C1 CEFR proficiency level. Specifically, students will be able to understand the main ideas and begin to recognize implicit meaning in lectures on both concrete and abstract topics, and will be able to begin to express him/herself fluently and spontaneously for academic purposes. Prerequisite: Placement in this course by the Applied English Center.

**AECO 151. Listening, Speaking and Grammar for Academic Purposes 5. 3-7 Credits. U**

Students in Level 5 Listening/Speaking/Grammar are at an advanced and final level of English for Academic Purposes study. The purpose of this course is to help students strengthen and refine their English skills in listening, speaking, grammar and vocabulary. By the end of this course, students will be able to produce language at the C1 CEFR proficiency level. Specifically, students will be able to understand a wide range of demanding, longer speech and recognize implicit meaning in lectures on both concrete and abstract topics. Students will also be able to express themselves fluently and spontaneously and use language flexibly and effectively for academic purposes. Prerequisite: Placement in this course by the Applied English Center.

**Courses**

**AECO 21. University Life in the U.S. 1. 1 Credits.**

This is the first course in a two-course series whose purpose is to introduce and acculturate students to U.S. university life and culture. In this first course, students will learn about the U.S. university system, be introduced to campus culture in the U.S., discover what resources and support are available for students at U.S. universities, and explore different aspects of student life. While language development is not the primary objective of this course, students will be able to self-assess their language skills through their ability to complete course activities. Additionally, students will take a language assessment at the end of the course that will give them an idea of their English proficiency and where they would potentially begin their study should they choose to attend the University of Kansas.

**AECO 22. University Life in the U.S. 2. 1 Credits.**

This is the second course in a two-course series whose purpose is to introduce and acculturate students to U.S. university life and culture. In this second course, students will become familiar with U.S. academic culture and expectations, discover and utilize learning strategies that will be particularly helpful in U.S. classrooms, understand what technology skills are needed to succeed and learn about how to apply to U.S. universities. While language development is not the primary objective of this course, students will be able to self-assess their language skills through their ability to complete course activities. Additionally, students will take a language assessment at the end of the course that will give them an idea of their English proficiency and where they would potentially begin their study should they choose to attend the University of Kansas.

**AECO 51. Intensive English Online 1. 6.5 Credits.**

This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students’ accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Low B1 to Mid B1 CEFR range, and is the first level of an eight-level, fully online program.

**AECO 52. Intensive English Online 2. 6.5 Credits.**

This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students’ accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B1 to High B1 CEFR range, and is the second level of an eight-level, fully online program.

**AECO 53. Intensive English Online 3. 6.5 Credits.**

This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students’ accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B1+ to High B1+ CEFR range, and is the third level of an eight-level, fully online program.

**AECO 54. Intensive English Online 4. 6.5 Credits.**

This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students’ accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B1+ to High B1+ CEFR range, and is the fourth level of an eight-level, fully online program.

**AECO 55. Intensive English Online 5. 6.5 Credits.**

This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students’ accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Low B2-Mid B2 CEFR range, and is the fifth level of an eight-level, fully online program.

**AECO 56. Intensive English Online 6. 6.5 Credits.**

This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students’ accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B2 to High B2 CEFR range, and is the sixth level of an eight-level, fully online program.

**AECO 57. Intensive English Online 7. 6.5 Credits.**

This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students’ accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This
course targets students at the High B2 to Mid B2+ CEFR range, and is the seventh level of an eight-level, fully online program.

AECO 58. Intensive English Online 8. 6.5 Credits. This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B2+ to High B2+ CEFR range, and is the last level of an eight-level, fully online program.

AECO 81. Staying Current: Professional Development for EFL Teachers. 2 Credits. This practical and project-oriented course is for current EFL teachers who want to enhance their professional knowledge and skills. The course has two foundational modules: Enhancing Planning and Engaging the EFL learner. Enhancing Planning builds on foundations of lesson planning through analyzing strong lesson planning features, addressing areas of weakness in plan development, applying new strategies in lesson sequence, and aligning courses with intended outcomes. Engaging the EFL learner is a multifaceted approach to creating a dynamic classroom through cultivating classroom management, using technology and authentic materials, and adapting materials and lessons. Course participants will also participate in two specialized modules: pedagogical grammar and pronunciation. Pedagogical grammar and pronunciation will focus on considerations and best practices in various teaching contexts. Participants will apply what they have learned by developing activities and strategies ready to be used in a classroom setting.

Courses

AECR 13. Reading, Writing and Grammar for Academic Purposes 1. 3-8 Credits. U Students in Level 1 Reading/Writing/Grammar are at the beginning of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce written language at the A2 CEFR proficiency level. Specifically, students will be able to communicate and understand simple, foundational English relevant to academic study. Prerequisite: Placement in this course by the Applied English Center.

AECR 20. Reading, Writing and Grammar for Academic Purposes 2. 3-8 Credits. U Students in Level 2 Reading/Writing/Grammar are at a high-beginning/low-intermediate level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B1 CEFR proficiency level. Specifically, students will be able to understand the main points of clear standard input regularly encountered in academic study and produce simple connected text on relevant topics. Prerequisite: Placement in this course by the Applied English Center.

AECR 30. Reading, Writing and Grammar for Academic Purposes 3. 3-8 Credits. U Students in Level 3 Reading/Writing/Grammar are at an intermediate level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B2 CEFR proficiency level. Specifically, students will be able to understand the main ideas of complex text on both concrete and abstract topics and will be able to produce clear, detailed text on a wide range of subjects. Prerequisite: Placement in this course by the Applied English Center.

AECR 140. Reading, Writing and Grammar for Academic Purposes 4. 3-8 Credits. U Students in Level 4 Reading/Writing/Grammar are at a low advanced level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B2/C1 CEFR proficiency level. Specifically, students will be able to understand the main ideas of complex text on both concrete and abstract topics and begin to recognize implicit meaning. Students will also be able to produce clear, detailed text on a wide range of subjects and begin to demonstrate control of organizational patterns, connectors and cohesive devices. Prerequisite: Placement in this course by the Applied English Center.

AECR 151. Reading, Writing and Grammar for Academic Purposes 5. 3-7 Credits. U Students in Level 5 Reading/Writing/Grammar are at an advanced and final level of English for Academic Purposes study. The purpose of this course is to help students strengthen and refine their English skills in reading, writing, grammar and vocabulary. By the end of this course, students will be able to produce language at the C1 CEFR proficiency level. Specifically, students will be able to understand a wide range of demanding, longer texts, and recognize implicit meaning and will be able to use language flexibly and effectively for academic purposes. Students will also be able to produce clear, well-structured detailed texts showing controlled use of organizational patterns, connectors and cohesive devices. Prerequisite: Placement in this course by the Applied English Center.

Courses

AECT 1. Special Enrollment in English as a Second Language Non-Credit Tutorial: _____. 1-16 Credits. U Individualized schedule of instruction in one or more language skills at appropriate level(s) for students enrolling in level 1, 2, or 3 AEC courses. Prerequisite: Placement in this course by the Applied English Center.

AECT 101. Special Enrollment in English as a Second Language For-Credit Tutorial: _____. 1-16 Credits. U Individualized schedule of instruction in one or more language skills at appropriate level(s) for students enrolling in level 4 or 5 AEC courses. Prerequisite: Placement in this course by the Applied English Center.

AESP 1. Applied English Center Special Topics: _____. 1-3 Credits.

This course is designed by the Applied English Center to meet the needs of international students of varying majors, whose first language is not English. These courses are available in several different areas and topics.

AESP 160. Applied English Center Special Topics: _____. 0-3 Credits.

This course is designed by the Applied English Center to meet the needs of international students of varying majors, whose first language is not English. These courses are available in several different areas and topics.
Applied English Center

The Applied English Center (AEC) helps prepare students linguistically, academically, and culturally for their program of study. Founded in 1964, our nationally accredited program has a long and illustrious history of serving international students in their goals of English language learning.

The AEC offers several courses and programs to serve a wide range of constituents.

- Intensive English Program (https://aec.ku.edu/iep/)
- Advanced Courses for KU International Students (https://aec.ku.edu/aesp-courses-ku-international-students/)
- Programs for KU Schools and Departments (https://aec.ku.edu/programs-ku-schools-and-departments/)
- Short Programs (https://aec.ku.edu/international-short-programs/)
- TEFL Certificate Program (https://aec.ku.edu/aec-tefl-certificate-program/)

Additionally, the AEC offers students a variety of resources and support services.

- Conversation Groups and Activities (https://aec.ku.edu/conversation-groups-and-activities/)
- Cross-Cultural Advising (https://aec.ku.edu/cross-cultural-advising/)
- Access to the Learning English Online (LEO) Computer Lab (https://aec.ku.edu/leo/)
- SPEAK Test (https://aec.ku.edu/speak-test/)
- Tutoring Services at The Point (https://aec.ku.edu/tutoring/)

Please visit the Applied English Center (https://aec.ku.edu/) website for more information about our programs and services.

Courses

AEC 1. Level 1 Support Course. 2 Credits.

In this class, learners will look at vocabulary in authentic contexts. Students examine vocabulary for depth, considering the types of word knowledge needed to know, to understand, and to use words correctly. Examples of this data include collocations, synonyms, antonyms, and word parts (prefixes, roots, and suffixes). This course also focuses on increasing the breadth of learner vocabulary. Prerequisite: Placement by the Applied English Center.

AEC 2. Level 2 Support Course. 2 Credits.

Verbs enable language users to convey multi-dimensional messages, allowing them to travel precisely back and forth in time and indicate what is possible, permissible and polite. Yet many students see and use verbs in a one-dimensional way, focusing on the definition of the verb but disregarding the time message of tense and the nuance of modals. This class will address that discrepancy. Although students will practice verb forms, the class concentration will be on the recognition and accurate use of the functional message of verb tenses and modals. Specifically, students will analyze the forms and functions of targeted verb tenses, select appropriate verb tenses in written and oral activities and expand control of sentence-level grammar. Prerequisite: Placement by the Applied English Center.

AEC 3. Level 3 Support Course. 2 Credits.

This course supports the Level 3 core courses by emphasizing and targeting reading skills in an effort to further improve their reading comprehension, increase their reading fluency and develop their vocabulary as demonstrated in their writing and speaking. Reading selections target comprehension and critical thinking skills while timed word and reading selections are used to promote reading speed and fluency. Vocabulary development is targeted through morphemic analysis of roots and affixes and study of context clues. Prerequisite: Placement in this course by Applied English Center.

AEC 4. Elective: Special Topics in: ______. 2 Credits.

Skill-based or content-based special topics for upper level students enrolled in at least one Applied English Center core course. Prerequisite: Placement in this course by the Applied English Center.

AEC 5. Short Term Program with Applied English Center Course Enrollment: ______. 0-16 Credits. U

Skill-based special topics at appropriate level(s) for short term program students attending core AEC courses for a partial term. Prerequisite: Placement in this course by the Applied English Center.

AEC 6. Anticipated Future Applied English Center Credit Hours. 1-16 Credits. U

This course is a placeholder for future anticipated Applied English Center credit hour enrollment. Prerequisite: Placement in this course by the Applied English Center.

AEC 7. Short Term Programs Self-Contained Enrollment: ______. 0-16 Credits. U

Specialized English language courses for short term program students. Courses focus on the use of English in particular fields of study or employment based on program objectives. Prerequisite: Placement in this course by the Applied English Center.

AEC 90. English Proficiency Test. 0 Credits. U

Final proficiency test. Required of all students enrolled in one or more Applied English Center courses, except AEC 82. Graded on a satisfactory/unsatisfactory basis.

Courses

AECB 10. Basic English. 1-15 Credits.

Basic English is a fully-integrated English as a Second Language course designed for students at the lowest level of English proficiency. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, speaking, listening, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at a beginning to middle A1 CEFR proficiency level. Specifically, students will be able to understand and use familiar everyday expressions and very basic phrases in both speech and writing. Students will also be able to interact in a simple way provided the other person talks slowly and clearly.

AEC 13. Listening, Speaking and Grammar for Academic Purposes 1. 3-8 Credits. U

Students in Level 1 Listening/Speaking/Grammar are at the beginning of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in listening, speaking, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the A2 CEFR proficiency level. Specifically, students will be able to communicate and understand simple, foundational English relevant to academic study. Prerequisite: Placement in this course by the Applied English Center.

AEC 20. Listening, Speaking and Grammar for Academic Purposes 2. 3-8 Credits. U
Students in Level 2 Listening/Speaking/Grammar are at a high-beginning/low-intermediate level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in listening, speaking, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B1 CEFR proficiency level. Specifically, students will be able to understand the main points of clear standard input regularly encountered in academic study and can produce simple connected speech on relevant topics. Prerequisite: Placement in this course by the Applied English Center.

AECL 30. Listening, Speaking and Grammar for Academic Purposes 3. 3-6 Credits. U
Students in Level 3 Listening/Speaking/Grammar are at an intermediate level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in listening, speaking, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B2 CEFR proficiency level. Specifically, students will be able to understand the main ideas of lectures on both concrete and abstract topics and will be able to interact with a degree of fluency and spontaneity that makes regular interaction with native speakers possible. Prerequisite: Placement in this course by the Applied English Center.

AECL 140. Listening, Speaking and Grammar for Academic Purposes 4. 3-8 Credits. U
Students in Level 4 Listening/Speaking/Grammar are at a low-advanced level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in listening, speaking, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B2/C1 CEFR proficiency level. Specifically, students will be able to understand the main ideas and begin to recognize implicit meaning in lectures on both concrete and abstract topics, and will be able to begin to express him/herself fluently and spontaneously for academic purposes. Prerequisite: Placement in this course by the Applied English Center.

AECL 151. Listening, Speaking and Grammar for Academic Purposes 5. 3-7 Credits. U
Students in Level 5 Listening/Speaking/Grammar are at an advanced and final level of English for Academic Purposes study. The purpose of this course is to help students strengthen and refine their English skills in listening, speaking, grammar and vocabulary. By the end of this course, students will be able to produce language at the C1 CEFR proficiency level. Specifically, students will be able to understand a wide range of demanding, longer speech and recognize implicit meaning in lectures on both concrete and abstract topics. Students will also be able to express themselves fluently and spontaneously and use language flexibly and effectively for academic purposes. Prerequisite: Placement in this course by the Applied English Center.

Courses

AECO 21. University Life in the U.S. 1. 1 Credits.
This is the first course in a two-course series whose purpose is to introduce and acclimate students to U.S. university life and culture. In this first course, students will learn about the U.S. university system, be introduced to campus culture in the U.S., discover what resources and support are available for students at U.S. universities, and explore different aspects of student life. While language development is not the primary objective of this course, students will be able to self-assess their language skills through their ability to complete course activities.

Additionally, students will take a language assessment at the end of the course that will give them an idea of their English proficiency and where they would potentially begin their study should they choose to attend the University of Kansas.

AECO 22. University Life in the U.S. 2. 1 Credits.
This is the second course in a two-course series whose purpose is to introduce and acclimate students to U.S. university life and culture. In this second course, students will become familiar with U.S. academic culture and expectations, discover and utilize learning strategies that will be particularly helpful in U.S. classrooms, understand what technology skills are needed to succeed and learn about how to apply to U.S. universities. While language development is not the primary objective of this course, students will be able to self-assess their language skills through their ability to complete course activities. Additionally, students will take a language assessment at the end of the course that will give them an idea of their English proficiency and where they would potentially begin their study should they choose to attend the University of Kansas.

AECO 51. Intensive English Online 1. 6.5 Credits.
This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Low B1 to Mid B1 CEFR range, and is the first level of an eight-level, fully online program.

AECO 52. Intensive English Online 2. 6.5 Credits.
This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B1 to High B1 CEFR range, and is the second level of an eight-level, fully online program.

AECO 53. Intensive English Online 3. 6.5 Credits.
This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B1 to Mid B1+ CEFR range, and is the third level of an eight-level, fully online program.

AECO 54. Intensive English Online 4. 6.5 Credits.
This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B1+ to High B1+ CEFR range, and is the fourth level of an eight-level, fully online program.

AECO 55. Intensive English Online 5. 6.5 Credits.
This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course
targets students at the Low B2-Mid B2 CEFR range, and is the fifth level of an eight-level, fully online program.

**AECO 56. Intensive English Online 6. 6.5 Credits.**
This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B2 to High B2 CEFR range, and is the sixth level of an eight-level, fully online program.

**AECO 57. Intensive English Online 7. 6.5 Credits.**
This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the High B2 to Mid B2+ CEFR range, and is the seventh level of an eight-level, fully online program.

**AECO 58. Intensive English Online 8. 6.5 Credits.**
This integrated skills course focuses on the language and academic skills students will need to be successful in a university program of study. Instruction will be given in reading, writing, listening and speaking. Grammar and pronunciation will also be taught in order to increase students' accuracy and fluency. Students will be exposed to content and vocabulary they will likely encounter in their course of study. This course targets students at the Mid B2+ to High B2+ CEFR range, and is the last level of an eight-level, fully online program.

**AECO 81. Staying Current: Professional Development for EFL Teachers. 2 Credits.**
This practical and project-oriented course is for current EFL teachers who want to enhance their professional knowledge and skills. The course has two foundational modules: Enhancing Planning and Engaging the EFL learner. Enhancing Planning builds on foundations of lesson planning through analyzing strong lesson planning features, addressing areas of weakness in plan development, applying new strategies in lesson sequence, and aligning courses with intended outcomes. Engaging the EFL learner is a multifaceted approach to creating a dynamic classroom through cultivating classroom management, using technology and authentic materials, and adapting materials and lessons. Course participants will also participate in two specialized modules: pedagogical grammar and pronunciation. Pedagogical grammar and pronunciation will focus on considerations and best practices in various teaching contexts. Participants will apply what they have learned by developing activities and strategies ready to be used in a classroom setting.

**Courses**

**AECR 13. Reading, Writing and Grammar for Academic Purposes 1. 3-8 Credits.** <U>
Students in Level 1 Reading/Writing/Grammar are at the beginning of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce written language at the A2 CEFR proficiency level. Specifically, students will be able to communicate and understand simple, foundational English relevant to academic study. Prerequisite: Placement in this course by the Applied English Center.

**AECR 20. Reading, Writing and Grammar for Academic Purposes 2. 3-8 Credits.** <U>
Students in Level 2 Reading/Writing/Grammar are at a high-beginning/low-intermediate level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B1 CEFR proficiency level. Specifically, students will be able to understand the main points of clear standard input regularly encountered in academic study and produce simple connected text on relevant topics. Prerequisite: Placement in this course by the Applied English Center.

**AECR 30. Reading, Writing and Grammar for Academic Purposes 3. 3-8 Credits.** <U>
Students in Level 3 Reading/Writing/Grammar are at an intermediate level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B2 CEFR proficiency level. Specifically, students will be able to understand the main ideas of complex text on both concrete and abstract topics and will be able to produce clear, detailed text on a wide range of subjects. Prerequisite: Placement in this course by the Applied English Center.

**AECR 140. Reading, Writing and Grammar for Academic Purposes 4. 3-8 Credits.** <U>
Students in Level 4 Reading/Writing/Grammar are at a low advanced level of English for Academic Purposes study. The purpose of this course is to help students develop and strengthen their English skills in reading, writing, grammar and vocabulary, and to prepare them for academic English learning at higher levels. By the end of this course, students will be able to produce language at the B2/C1 CEFR proficiency level. Specifically, students will be able to understand the main ideas of complex text on both concrete and abstract topics and begin to recognize implicit meaning. Students will also be able to produce clear, detailed text on a wide range of subjects and begin to demonstrate control of organizational patterns, connectors and cohesive devices. Prerequisite: Placement in this course by the Applied English Center.

**AECR 151. Reading, Writing and Grammar for Academic Purposes 5. 3-7 Credits.** <U>
Students in Level 5 Reading/Writing/Grammar are at an advanced and final level of English for Academic Purposes study. The purpose of this course is to help students strengthen and refine their English skills in reading, writing, grammar and vocabulary. By the end of this course, students will be able to produce language at the C1 CEFR proficiency level. Specifically, students will be able to understand a wide range of demanding, longer texts, and recognize implicit meaning and will be able to use language flexibly and effectively for academic purposes. Students will also be able to produce clear, well-structured detailed texts showing controlled use of organizational patterns, connectors and cohesive devices. Prerequisite: Placement in this course by the Applied English Center.

**Courses**

**AECT 1. Special Enrollment in English as a Second Language Non-Credit Tutorial: _____ 1-16 Credits.** <U>
Individualized schedule of instruction in one or more language skills at appropriate level(s) for students enrolling in level 1, 2, or 3 AEC courses. Prerequisite: Placement in this course by the Applied English Center.
AECT 101. Special Enrollment in English as a Second Language
For-Credit Tutorial: ______. 1-16 Credits. U
Individualized schedule of instruction in one or more language skills at
appropriate level(s) for students enrolling in level 4 or 5 AEC courses.
Prerequisite: Placement in this course by the Applied English Center.

Courses
AESP 1. Applied English Center Special Topics: ______. 1-3 Credits.
This course is designed by the Applied English Center to meet the needs
of international students of varying majors, whose first language is not
English. These courses are available in several different areas and topics.

AESP 160. Applied English Center Special Topics: ______. 0-3
Credits.
This course is designed by the Applied English Center to meet the needs
of international students of varying majors, whose first language is not
English. These courses are available in several different areas and topics.

Undergraduate Certificate in Global Studies

The Global Awareness Program Certificate (GAP) allows students
to explore the world at KU and beyond through a combination of
coursework, on-campus events, and international experiences. Open to
all majors, GAP highlights students’ knowledge of and experience with the
broader world. Greater understanding of political, social, and economic
landscapes outside the United States will better prepare our students for
the demands of the 21st century. GAP is noted on the official transcript.

By completing GAP, you will:

• View the world from various perspectives through courses and hands-
on experiences.
• Engage with people from the 100+ countries represented at KU. Meet
friends from around the world, experience new cultures and create a
global network.
• Communicate your broad cultural knowledge and skills to future
employers.

GAP combines courses, on-campus cultural activities, and study abroad. Complete 2 components to earn the certificate and all 3 for GAP with Distinction.

Undergraduate Certificate in Global Awareness

Global Awareness Program (GAP)

• Open to all undergraduates
• Complete 2 components to earn GAP OR Complete all 3 to earn GAP with Distinction
• Noted on official transcript
• Offers a competitive advantage and a unique way to highlight your international experience

Academics

Domestic Students

• A minimum of 2 semesters of college-level study in the same modern foreign language
• AND 3 courses (http://gap.ku.edu/course-list/) with a modern, international focus from 3 different departments (2 different departments for STEM students)

International Students

• Pass the English Proficiency Exam through the Applied English Center (AEC), or receive an English requirement waiver
• Native English-speakers need to pass two semesters of a foreign language
• AND 2 courses with a modern international focus and 1 course (https://gap.ku.edu/us-focused-courses/) with a U.S. focus.

On-Campus Cultural Activities

• Participate in 20 hours of on-campus activities that have an international and/or cultural focus outside of your ethnicity and/or religion.
• Answer reflection questions on your activities

International Experience

Domestic students

• Participate in a KU-approved study/research/internship abroad program for credit.
• Once you return, answer short-answer reflection questions or participate in a discussion group

International students

• Your time at KU counts as your international experience. Answer short-answer reflection questions or participate in a discussion group
Reserve Officers Training Corps

The University of Kansas is one of only 37 U.S. universities with a full offering of Army, Air Force, and Naval ROTC programs. These programs are integrated into the mainstream of campus activities. All ROTC programs offer scholarships that pay tuition and fees, furnish books and uniforms, and provide a monthly living allowance.

Students in ROTC pursue regular courses toward a degree and augment their studies with courses from the Departments of Military Science, Aerospace Studies, or Naval Science. These courses may be cross-listed with a professional school or reviewed on an individual basis by the Assembly of the College of Liberal Arts and Sciences for accreditation toward degree requirements.

On successful completion of requirements and graduation from KU, Army and Air Force ROTC cadets are commissioned into their respective service as Second Lieutenants. Naval ROTC midshipmen commission as Ensigns in the Navy, or Marine Corps Second Lieutenants.

Programs

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

Army - Army: Department of Military Science

Air Force - Air Force: Department of Aerospace Studies

Navy - Navy: Department of Naval Science

Army: Department of Military Science

The Program

The Department of Military Science administers the Army Reserve Officers Training Corps program at KU. The military science curriculum provides a student with unique leadership and management training, along with practical experience. It develops qualities basic to success in the Army and in the civilian sector. It also offers the student the opportunity to earn an officer's commission in the Army.

Eligible students enrolled at KU may register for a 100- or 200-level military science course or for ARMY 303 or ARMY 450. These students receive credit if the course they are enrolled in has been approved for degree credit in the College of Liberal Arts and Sciences. The credit does not count toward the required 100 hours in the College for students earning a baccalaureate degree in the College of Liberal Arts and Sciences.

Students who want to receive a commission in the Army through the ROTC program must meet the eligibility requirements of Section 2103, Title 10, U.S. Code, and current Department of Defense and Department of the Army guidelines.

Army: Department of Military Science

Military Science Building
Advanced Course

The advanced course normally is taken during the final 2 years of college. It offers instruction in military organization, tactics, military law, Army administration, and leadership. All necessary books, classroom supplies, uniforms, and other equipment are issued to students at no cost. During the summer between the junior and senior years of college, students must attend the Leadership Development and Assessment Camp, a fully paid, five-week training and evaluation course. LDAC gives each student the chance to practice for an extended period of time what they have learned in the classroom. All students contracted in the advanced course receive stipends from the government of up to $5,000 a year.

The advanced course is composed of a total of 4 courses.

First Year

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>ARMY 301</td>
<td>Theory and Dynamics of Tactical Operations I</td>
<td>3</td>
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Second semester:

<table>
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<tr>
<td>ARMY 302</td>
<td>Theory and Dynamics of Tactical Operations II</td>
<td>3</td>
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Second Year

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ARMY 401</td>
<td>Concepts of Military Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Second semester:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMY 402</td>
<td>The Military Profession</td>
<td>3</td>
</tr>
</tbody>
</table>

2-Year Program

Students can receive credit for the basic course in 3 ways other than taking the 4 courses associated with the basic course. Students who complete the basic course by 1 of these alternate means can enroll in basic course classes but cannot enroll in the advanced course until they are academic juniors. Any upper-level student, junior through graduate, may earn a commission through the 2-year program. The 3 alternate ways to receive basic course credit are

1. Successfully completing the basic enlisted training offered by any of the armed services.
2. Successfully completing the ROTC Leadership Training Course held each summer (prerequisite to ARMY 301).
3. Successfully completing at least 4 years of high school Junior ROTC.

Professional Military Education Course

The following course is required for commissioning:

Military History. Gain an understanding of the evolution of warfare, military theory, the military profession, and the place of military institutions in American society. The requirement can be met by successfully completing a history course focusing on either a major war or on military history in general. ROTC courses also meet this requirement.

Scholarships and Financial Assistance

Army ROTC offers 2-, 3-, and 4-year scholarships to qualified students. Scholarships are awarded on a competitive basis to students with outstanding academic and leadership abilities. These scholarships pay for all tuition, required fees, $1,200 a year for books and other supplies, and a stipend of up to $5,000 a year. Special consideration is given to students who major in nursing, engineering, or the sciences. The Kansas Board of Regents Scholarship.

Army National Guard and Army Reserve Students

Students who are members of the Army National Guard or the Army Reserve may enroll in Army ROTC classes and be members of their units at the same time. Once students enter a contractual agreement as early as their sophomore year, they can remain members of their units under the Simultaneous Membership Program. These students are still eligible for all military benefits they have earned under enlisted contract such as Tuition Assistance, GI Bill®, and drill pay; additionally, they may compete for guaranteed reserve forces designated ROTC scholarships if they commit to commissioning to the Army Reserve or Army National Guard.

Courses

ARMY 10. Leadership Laboratory. 0 Credits. U
Required of all Army Cadets. A study of Army customs and courtesies, drill and ceremony, career opportunities in the Army, and the life and work of a junior Army officer. Cadets develop leadership potential through practical supervised training. Course must be taken in conjunction with Army 101, 102, 201, 202, 301, 302, 401, and 402. Course not approved for credit in the College of Liberal Arts and Sciences.

ARMY 101. Introduction to Military Science I. 1 Credits. U
Required introductory course for the Army military science program. Course is comprised of one hour of lecture and one hour of laboratory per week. Introduces the military science program as an element of the reserve forces and includes an examination of major legislation, the Army organization structure, and military leadership techniques. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions.

ARMY 102. Introduction to Military Science II. 1 Credits. U
Course comprised of one hour of lecture and one hour of leadership laboratory per week. A general study and appreciation of the American military system from colonial times to the present. The course identifies factors present in the American society and national policy in each particular historical period which influenced the development of American military systems. The relationship between the military establishment and the larger American society is examined in each historical period. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 101 or department approval.

ARMY 201. Basic Military Science I. 1 Credits. U
Course comprised of one hour of lecture and one hour of laboratory per week. Analyzes the principles of war and military leadership at small unit level, and introduces principles of military writing. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 102 or department approval.

ARMY 202. Basic Military Science II. 1 Credits. U
Course is comprised of one hour of lecture and one hour of leadership laboratory per week. Curriculum consists of the fundamentals of topographic map reading and their application in a field environment. Includes instruction in various types of maps, marginal information, topographic symbols and colors, scale, distance, direction and use of
the magnetic compass. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 201 or department approval.

ARMY 301. Theory and Dynamics of Tactical Operations I. 3 Credits. 
Course is comprised of three hours of lecture and two hours of leadership laboratory per week. A comprehensive study of conventional tactical operations. Emphasizes the fundamentals of land warfare and the qualities necessary to conduct fluid, non-linear operations. Introduces the student to the tenets of Air-Land Battle, the underlying structure of modern warfare, the dynamics of combat power, and the application of classical principles of war to a contemporary battlefield. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 302 or department approval.

ARMY 302. Theory and Dynamics of Tactical Operations II. 3 Credits. 
Course is comprised of three hours of lecture and two hours of leadership laboratory per week. Expands on the application of conventional tactical operations in the low, medium, and high intensity conflict spectrum. Examines the three-dimensional nature of modern warfare and the unified battlefield. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 301 or department approval.

ARMY 303. Military Conditioning. 1 Credit. 
Introduction to the theoretical and practical aspects of developing physical fitness programs for all Army personnel from the commander or supervisor’s perspective. Provides an overview of total fitness, defines physical fitness, outlines the phases of fitness, discusses various types of fitness programs, and presents evaluation criteria. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 302 or department approval.

ARMY 401. Concepts of Military Management. 3 Credits. 
Course is comprised of three hours of lecture and two hours of leadership laboratory per week. An introduction to the military management system with special attention to the functions, organizations, and operations of military training, logistics and administration. The use of standardized staff formats in the development of plans and orders is emphasized from the standpoint of the leader with limited resources. Extensive use of standard staff procedures is emphasized in problem solving scenarios. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 301 or department approval.

ARMY 402. The Military Profession. 3 Credits. 
Course is comprised of three hours of lecture and two hours of leadership laboratory per week. A seminar on the military profession as an object of social inquiry. Focus is on the internal structure of the profession, current problems, and interaction with the larger American society. Seminar topics include but are not limited to the following: a historical perspective on the military profession; civil-military relations; social and political impact of military activities; military justice; professionalism versus careerism. Approved for degree credit in the College of Liberal Arts and Sciences. Such courses count within the limit of 25 hours accepted from other schools and divisions. Prerequisite: ARMY 401 or department approval.

ARMY 450. Military Analysis. 1 Credit. 
A study of present and future military operations; emphasis placed on analysis of problem. The student will defend his/her analysis through written and oral presentations. Prerequisite: Permission of department chairperson.

Reserve Officers Training Corps - Air Force

The Program

The Air Force Reserve Officer Training Corps (AFROTC) program provides education and training to prepare men and women to become Air Force officers while completing their college degree. To accomplish this, the Air Force, with the approval of the University of Kansas, has established a curriculum that allows a student to commission as an officer in either 3- or 4- years. Students with previous college credit require a 2.0 GPA to enroll.

Air Force: Department of Air & Space Studies

Detachment 280, Military Science Building
1520 Summerfield Hall Drive, Room 109
Lawrence, KS 66045
785-864-4676
https://afrotc.ku.edu/

Lieutenant Colonel Charles Dorssom, Chair
785-864-4676

The Program

The 3- and 4-year Air Force ROTC programs are divided into the General Military Course (GMC) and Professional Officer Course (POC). Each cadet must maintain a minimum cumulative GPA of 2.0 to be in the program.

General Military Course (GMC)

The GMC is offered during the first two years of college and constitutes an introduction to the present day Air Force. The emphasis is on the role of military forces in world affairs, customs and courtesies, being an officer, professionalism, the mission and organization of the Air Force, and the history of air power. All necessary textbooks, classroom material, uniforms, and other equipment are furnished at no cost. Students who have completed the GMC, have met academic, physical and medical standards, and have successfully completed 4 weeks of Field Training may enter the Professional Officer Course (POC).

The GMC is composed of a total of 4 courses. A student may enter the GMC at one of three points (if eligible).

1. Entering First Semester – First Year Students (Freshmen Year)

First Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 144 - Foundations of the USAF - 1 credit

Second Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 148 - Foundations of the USAF - 1 credit

Third Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 284 - Airpower History - 1 credit
Fourth Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 288 - Airpower History - 1 credit

2. Entering Second Semester – First Year Students (Freshmen Year)

First Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 148 - Foundations of the USAF - 1 credit

Second Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 144 - Foundations of the USAF - 1 credit
AIR 284 - Airpower History - 1 credit

Third Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 288 - Airpower History - 1 credit

3. Entering Third Semester – Second Year Students (Sophomore Year)

Students with previous college credit require a 2.0 GPA to enroll.

First Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 148 - Foundations of the USAF - 1 credit
AIR 284 - Airpower History - 1 credit

Second Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 144 - Foundations of the USAF - 1 credit
AIR 288 - Airpower History - 1 credit

Professional Officer Course (POC)

The POC normally is taken during the final 2 years of college. The emphasis is on leadership and management, organizational patterns, technologies, military policies and procedures and provides in-depth study of national security affairs. Cadets also learn and practice communication, leadership and management skills. POC cadets receive a non-taxable subsistence allowance. All necessary textbooks, classroom material, uniforms, and other equipment are furnished at no cost.

The POC is composed of a total of 4 courses.

First Year (Junior Year)

First Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 344 - Leadership Studies - 3 credits

Second Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 348 - Leadership Studies - 3 credits

Second Year (Senior Year)

First Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 404 - National Security Affairs - 3 credits

Second Semester:
AIR 100 - Leadership Laboratory - 0 credits
AIR 408 - National Security Affairs - 3 credits

Scholarships

High school seniors may apply for Air Force ROTC scholarships covering the 4-year college period. Some technical majors, such as engineering, are regularly approved for five-year scholarship support. Students should apply no later than December 1 of the senior year of high school. Online applications are available beginning 1 June of the junior year.

Qualified college students can compete for 2- and 3- year scholarship opportunities. These are awarded competitively and students automatically qualify to compete if they meet designated standards.

Scholarships generally cover tuition, laboratory and incidental fees, $600 a year for books, and the non-taxable subsistence allowance. Visit the afrotc.com for more information and to apply online for a high school scholarship.

Courses

AIR 100. Leadership Laboratory. 0 Credits. U
The AS 100 and AS 200 Leadership Laboratory courses (LLABs) include a study of Air Force customs and courtesies, drill and ceremonies, and military commands. The LLAB also includes studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. The AS 300 and AS 400 LLABs consist of activities classified as leadership and management experiences. They involve the planning and controlling of military activities of the cadet corps and the preparation and presentation of briefings and other oral and written communications. LLABs also include interviews, guidance, and information which will increase the understanding, motivation, and performance of other cadets. Graded on a satisfactory/unsatisfactory basis. Prerequisite: Cumulative 2.0 GPA required to enroll.

AIR 144. Heritage and Values of the United States Air Force I. 1 Credits. U
Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps (ROTC). Featured topics include: Air Force Leadership, opportunities and benefits in the Air Force, our heritage and values, Air Force operations, principles of war, and an introduction to communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

AIR 148. Heritage and Values of the United States Air Force II. 1 Credits. U
Survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps (ROTC). Featured topics include: Air Force Leadership, opportunities and benefits in the Air Force, our heritage and values, Air Force operations, principles of war, and an introduction to communication skills. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

AIR 284. Team and Leadership Fundamentals I. 1 Credits. U
A course designed to provide a fundamental understanding of both leadership and team building. It examines many layers to leadership, including aspects that don't always jump to mind such as listening, understanding, being a good follower and problem solving efficiently. The students will apply these leadership perspectives when completing team building activities and discussing things like conflict management, motivation, standards and accountability, and stress management. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

AIR 288. Team and Leadership Fundamentals II. 1 Credits. U
A course designed to provide a fundamental understanding of both leadership and team building. It examines many layers to leadership, including aspects that don't always jump to mind such as listening, understanding, being a good follower and problem solving efficiently. The students will apply these leadership perspectives when completing team building activities and discussing things like conflict management, motivation, standards and accountability, and stress management. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing cadets with followership experiences.

**AIR 344. Leading People and Effective Communication I. 3 Credits.**

This course designed to build on the leadership fundamentals taught in AIR 284 and 288. The goal is for students to have a more in-depth understanding of how to effectively lead people, and provide them with the tools to use in leadership roles. The class is centered on leadership and ethics, and is mostly guided discussion with the intent of helping students think about leadership through their own lens. Additionally, students will hone their writing and briefing skills, and this class is designed to get them used to public speaking. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply the leadership principles taught in this course.

**AIR 348. Leading People and Effective Communication II. 3 Credits.**

This course designed to build on the leadership fundamentals taught in AIR 284 and 288. The goal is for students to have a more in-depth understanding of how to effectively lead people, and provide them with the tools to use in leadership roles. The class is centered on leadership and ethics, and is mostly guided discussion with the intent of helping students think about leadership through their own lens. Additionally, students will hone their writing and briefing skills, and this class is designed to get them used to public speaking. Leadership Laboratory is mandatory for AFROTC cadets and complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply the leadership principles taught in this course.

**AIR 404. National Security/Leadership Responsibilities and Commissioning Preparation I. 3 Credits.**

This course will teach students to comprehend the basic elements of national security policy and process. The student should know basic air force domain operations as well as understand selected roles of the military in society and current domestic and international issues affecting the military profession. Students should understand the responsibility, authority, and functions of an Air Force commander and selected provisions of the military justice system. The final portion of this course is designed to prepare AFROTC cadets for life as a second lieutenant, and prepare them to transition from civilian life to military life. Leadership Laboratory complements this course by providing advanced leadership experiences giving students the opportunity to apply leadership principles in a dynamic setting.

**AIR 408. National Security/Leadership Responsibilities and Commissioning Preparation II. 3 Credits.**

This course will teach students to comprehend the basic elements of national security policy and process. The student should know basic air force domain operations as well as understand selected roles of the military in society and current domestic and international issues affecting the military profession. Students should understand the responsibility, authority, and functions of an Air Force commander and selected provisions of the military justice system. The final portion of this course is designed to prepare AFROTC cadets for life as a second lieutenant, and prepare them to transition from civilian life to military life. Leadership Laboratory complements this course by providing advanced leadership experiences giving students the opportunity to apply leadership principles in a dynamic setting.

### Navy: Department of Naval Science

#### The Program

Courses in naval science include both practical and theoretical instruction in subjects pertaining to the Navy and the Marine Corps. The **Navy-option** student receives 23 credit hours of naval science instruction over a period of 4 years. The **Marine-option** student receives 17 credit hours of instruction.

Additionally, naval science laboratory meets every semester for 4 years. Laboratory sessions integrate and apply knowledge gained from naval science courses through practical application during tactical planning exercises, leadership training, and professional development. They also include classroom instruction on issues relating to naval careers and policies and some close-order drill.

#### 4-Year Scholarship NROTC Students

Students may begin applying for scholarships as early as their second semester of their high school junior year (preceding the year in which the scholarship is desired). This scholarship is rolling, and therefore students will be selected periodically until the deadline (which typically occurs between December and January). Selection is based on high school grades, SAT/ACT test results, physical ability, citizenship, and aptitude for naval service.

If selected, students are appointed as midshipmen and granted compensation and benefits specified by law. These benefits include tuition, required fees, laboratory equipment, a $750-a-year book stipend, and subsistence pay of $250 a month for first-year students. Subsistence pay increases to $300 a month for sophomores, $350 for juniors, and $400 for seniors.

Scholarship students participate in 3 required summer training cruises. Scholarship students assume an obligation to serve at least 5 years on active duty after commissioning as Ensign, U.S. Navy, or 4 years as Second Lieutenant, U.S. Marine Corps.

Students with 30 or more college credits are not eligible to apply for this scholarship. More information can be found at [https://www.nrotc.navy.mil/](https://www.nrotc.navy.mil/).

#### 4-Year College Program NROTC Students

These NROTC students have the status of civilians who have entered into an agreement with the Navy. They are not entitled to the benefits and compensation given to scholarship NROTC students, but are entitled to uniform issue. A subsistence allowance of $350 a month for juniors...
and $400 for seniors is paid in the final two years of training if they are selected for scholarship.

These students participate in one summer cruise between their junior and senior years. College program students agree to accept commissions in the Navy or Marine Corps.

Upon proven superior performance in the college program, students will apply for a 3- or 2-year scholarship with the same requirements and benefits as 4-year scholarship students. Students must be selected for a scholarship by the end of their junior year to complete training. Admission into this program is through the KU NROTC Recruiting Officer.

3- and 2-Year Programs (Side-load Scholarship)

Entrance into the 3- or 2-year scholarship, or “side load scholarship”, program is offered to qualified students with 3 or 2 years remaining to complete their undergraduate degrees. Students applying for these scholarships are encouraged to have completed 1 year of differential and integral calculus of 1 real variable (MATH 115 and MATH 116, or MATH 121 and MATH 122) and must have attained a minimum grade of C.

Applications for these programs must be completed by date released via message to the Naval ROTC at University of Kansas. For more information contact the KU NROTC Recruiting Officer.

Naval Science Students

Any student enrolled at KU may enroll in a naval science course for KU credit after obtaining consent of the Naval Science Instructor. Such students are not considered to be in the NROTC program and are not entitled to receive any compensation, benefits, or a commission.

4-Year Program Requirements

Both Navy- and Marine-option students must take professional Navy and Marine courses as part of the NROTC program. The normal sequence of courses is:

**Navy Students**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVY 100</td>
<td>Naval Science Laboratory (every semester)</td>
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</tr>
<tr>
<td>NAVY 101</td>
<td>Introduction to Naval Science</td>
<td>2</td>
</tr>
<tr>
<td>NAVY 220</td>
<td>Seapower and Maritime Affairs</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 401</td>
<td>Principles of Naval Organization and Management (Leadership and Management I)</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 300</td>
<td>Navigation and Operations I</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 180</td>
<td>Introduction to Naval Ships Systems I (Engineering)</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 184</td>
<td>Introduction to Naval Ships Systems II (Weapons)</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 404</td>
<td>Navigation and Operations II</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 402</td>
<td>Seminar in Military Leadership and Management (Leadership and Management II)</td>
<td>3</td>
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</tbody>
</table>

**Marine Corps Students**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVY 100</td>
<td>Naval Science Laboratory (every semester)</td>
<td>0</td>
</tr>
<tr>
<td>NAVY 101</td>
<td>Introduction to Naval Science</td>
<td>2</td>
</tr>
<tr>
<td>NAVY 220</td>
<td>Seapower and Maritime Affairs</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 401</td>
<td>Principles of Naval Organization and Management (Leadership and Management I)</td>
<td>3</td>
</tr>
<tr>
<td>MCOR 380</td>
<td>Evolution of Warfare</td>
<td>3</td>
</tr>
<tr>
<td>MCOR 384</td>
<td>Fundamentals of Maneuver Warfare</td>
<td>3</td>
</tr>
<tr>
<td>NAVY 402</td>
<td>Seminar in Military Leadership and Management (Leadership and Management II)</td>
<td>3</td>
</tr>
</tbody>
</table>

The above courses are approved by the College of Liberal Arts and Sciences (http://clas.ku.edu/) and count as elective credit but do not count toward the required 100 hours in the College for students earning a baccalaureate degree in the College of Liberal Arts and Sciences.

**Navy Option**

Navy scholarship students must take the following courses in the College of Liberal Arts and Sciences:

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>MATH 115</td>
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<tr>
<td>MATH 116</td>
<td>Calculus II</td>
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<tr>
<td>MATH 125</td>
<td>Calculus I</td>
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<tr>
<td>MATH 126</td>
<td>Calculus II</td>
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<tr>
<td>PHSX 211</td>
<td>General Physics I</td>
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<tr>
<td>PHSX 216</td>
<td>General Physics I Laboratory</td>
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<tr>
<td>PHSX 212</td>
<td>General Physics II</td>
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</tr>
<tr>
<td>PHSX 236</td>
<td>General Physics II Laboratory</td>
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</table>

(MATH 126 is a prerequisite for PHSX 212.)

**Plus courses in the following areas**

- English: 6
- American History/National Security Policy: 3
- World Cultural/Regional Studies: 3

**Marine Corps Option**

All Marine-option students must take the following courses in the College of Liberal Arts and Sciences:
systems are investigated. This course provides the tools for the future
NAVY 184. Introduction to Naval Ships Systems II. 3 Credits.  U
The concept of weapons systems and the systems approach are
explored. The techniques of linear analysis of ballistics and weapons are
introduced. The dynamics of the basic components of weapons control
systems are investigated. This course provides the tools for the future
development in the student's understanding of the basic principles that
underlie all modern naval weapons systems. To understand the evolving
domain of cyber warfare, this course introduces topics in information
systems. Approved for degree credit in the College of Liberal Arts and
Sciences effective fall 1971. Such courses count within the limit of 25
hours accepted from other schools and divisions.

NAVY 220. Seapower and Maritime Affairs. 3 Credits.  U
A survey of U.S. naval history. Explores the historical evolution of sea
power and its effect on world history. Presents naval aspects of U.S.
conflicts from the American Revolution to the global war on terror.
Introduces prominent U.S. Navy and Marine Corps leaders and their
contributions. Examines the influence of technological innovation,
domestic politics, and foreign policy on the development and execution
of naval doctrine and tactics. Approved for degree credit in the College of
Liberal Arts and Sciences effective fall 1975. Such courses count within
the limit of 25 hours accepted from other schools and divisions.

NAVY 300. Navigation and Operations I. 3 Credits.  U
A study of the laws for the prevention of collisions at sea; tactical
formations and dispositions, relative motion, and the maneuvering
board. A portion of the semester is devoted to an analysis of naval
operations utilizing formal decision making theory, particularly as applied
to command and control. Numerous case studies are used to examine the
application of the above topics. Approved for degree credit in the College
of Liberal Arts and Sciences effective fall 1971. Such courses count within
the limit of 25 hours accepted from other schools and divisions.

NAVY 304. Navigation and Operations II. 3 Credits.  U
A study of close-order drill, ceremonial functions, and general military training.
Also applies knowledge learned from other accredited naval science
courses. Highly educated, well known, professional guest lecturers appear
frequently and make presentations on topics which apply to naval science
courses, increase the educational awareness of future Navy and Marine
Corps officers, and further develop the leadership and decision making of
the officer candidates. Graded on a satisfactory/unsatisfactory basis.

NAVY 101. Introduction to Naval Science. 2 Credits.  U
An introduction to the Department of the Navy (U.S. Navy and U.S.
Marine Corps) emphasizing its mission, organization, operation, and
relationship to other U.S. federal and military institutions. Through
historical overview, the development of the current Department of the
Navy mission, organization and operation, both at sea and ashore,
including customs, traditions, regulations, and professional/technical
vocabulary is examined. Educational opportunities and specializations for
naval officers are also detailed. Approved for degree credit in the College
of Liberal Arts and Sciences effective spring 1982. Such courses count
within the limit of 25 hours accepted from other schools and divisions.

NAVY 180. Introduction to Naval Ships Systems I. 3 Credits.  U
A course designed to familiarize students with the types, structures, and
purpose of naval ships. Ship compartmentation, propulsion systems,
auxiliary power systems, electrical systems, interior communications,
and control are included. Elements of ship design to achieve safe operations,
damage control, and ship stability characteristics are examined. Approved
for degree credit in the College of Liberal Arts and Sciences effective fall
1971. Such courses count within the limit of 25 hours accepted from other
schools and divisions.

NAVY 100. Naval Science Laboratory. 0 Credits.  U
Designed for and required annually of all NROTC midshipmen, Sailors
and Marines in order to provide increased knowledge in the areas of
close-order drill, ceremonial functions, and general military training.
Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>6</td>
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</tbody>
</table>

American History/National Security Policy 3

Courses

MCOR 384. Fundamentals of Maneuver Warfare. 3 Credits.  U
Broad aspects of warfare and their interactions with maneuver warfare
discipline. Focus on the United States Marine Corps as the premier
maneuver warfare fighting institution. Historical influences on current
tactical, operational, and strategic implications of maneuver warfare
practices. Approved for degree credit in the College of Liberal Arts and
Sciences effective Fall 1976. Such courses count within the limit of 25
hours accepted from other schools and divisions.

MCOR 380. Evolution of Warfare. 3 Credits.  U
A study of the art, science, concepts, and evolution of warfare as one
instrument of government policy throughout history. The study of selected
battles and campaigns serves as a vehicle to emphasize the application
of the classical principles of warfare, the influence of leadership, and
the advancement of technology of the art and science of war. Approved for
degree credit in the College of Liberal Arts and Sciences effective fall
1975. Such courses count within the limit of twenty-five hours accepted
from other schools and divisions.

NAVY 202. Seapower and Maritime Affairs. 3 Credits.  U
A survey of U.S. naval history. Explores the historical evolution of sea
power and its effect on world history. Presents naval aspects of U.S.
conflicts from the American Revolution to the global war on terror.
Introduces prominent U.S. Navy and Marine Corps leaders and their
contributions. Examines the influence of technological innovation,
domestic politics, and foreign policy on the development and execution
of naval doctrine and tactics. Approved for degree credit in the College of
Liberal Arts and Sciences effective fall 1975. Such courses count within
the limit of 25 hours accepted from other schools and divisions.

NAVY 300. Navigation and Operations I. 3 Credits.  U
A comprehensive study of the theory, principles, and procedures of ship
navigation in coastal and open ocean environment. Includes piloting,
triangulation, ocean and tidal currents, International and U.S. inland rules
of the road for navigation, sight reduction, publications, and logs; an
introduction to electronic navigation, including theory of wave propagation,
hyperbolic and azimuthal systems, doppler, inertial, and satellite systems.
Approved for degree credit in the College of Liberal Arts and Sciences
effective fall 1971. Such courses count within the limit of 25 hours
accepted from other schools and divisions.

NAVY 304. Navigation and Operations II. 3 Credits.  U
A study of the rules for the prevention of collisions at sea; tactical
formations and dispositions, relative motion, and the maneuvering
board. A portion of the semester is devoted to an analysis of naval
operations utilizing formal decision making theory, particularly as applied
to command and control. Numerous case studies are used to examine the
application of the above topics. Approved for degree credit in the College
of Liberal Arts and Sciences effective fall 1971. Such courses count within
the limit of 25 hours accepted from other schools and divisions.  
Prerequisite: MATH 101 or higher and NAVY 300.

NAVY 401. Principles of Naval Organization and Management. 3
Credits.  U
An introduction of management functions as they apply to routine daily
military activities. The concepts of planning, organizing, staffing, directing,
controlling, and coordinating are introduced and examined using lecture,
seminar, and case study methods. The course includes discussions
on responsibility and accountability, power and influence, managerial
theories, decision making, personnel appraisal, organizational structure,
and communications. Emphasis is placed on management of personnel
and physical resources. Approved for degree credit in the College
of Liberal Arts and Sciences effective fall 1975. Such courses count within
the limit of 25 hours accepted from other schools and divisions.

NAVY 402. Seminar in Military Leadership and Management. 3
Credits.  U 
A study of military leadership and management which investigates
techniques and concepts of task accomplishment in the absence of a
normative business environment. The course includes an examination
of military law, ethical leadership, personal responsibility, authority, and
bureaucracy. The focus of discussion is on those aspects of leadership
and management not normally present in civilian enterprise such as
operating in the presence of hostility and morale management. Approved
for degree credit in the College of Liberal Arts and Sciences effective fall
1975. Such courses count within the limit of 25 hours accepted from other schools and divisions.
Pre-Majors

If you’re planning an undergraduate degree in a KU school that doesn't admit first-year students, you’ll start out in the College of Liberal Arts and Sciences, complete your prerequisites, and then apply for admission to the KU school you want.

Meanwhile, you’ll be classified in one of the following ways:

- Prebusiness (p. 82)
- Preclinical laboratory science (p. 603)
- Predentistry (p. 1718)\(^2\)
- Pre-education (p. 153)
- Pre-education (elementary) (p. 212)
- Pre-education (secondary) (p. 212)
- Pre-education (sport science/community health) (p. 285)
- Pre-education (p.e./health teacher education) (p. 285)
- Pre-engineering (p. 347)
- Prehealth information management (p. 643)
- Prehealth professions (p. 542)
- Prejournalism (p. 699)
- Prelaw (p. 1718)\(^1\)
- Premedicine (p. 1718)\(^1\)
- Prenursing (p. 2239)
- Pre-occupational therapy (p. 660)\(^1\)
- Pre-optometry (p. 1718)\(^2\)
- Prepharmacy (p. 2290)
- Prephysical therapy (p. 297)\(^1\)
- Prephysician’s assistant (p. 1718)\(^2\)
- Prerespiratory care (p. 690)
- Presocial welfare (p. 2386)
- Preveterinary medicine (p. 1718)\(^2\)

\(^1\) These are graduate programs at KU. If you're interested in these programs, please consult your academic advisor for more information.

\(^2\) KU doesn't offer these degree programs. Students may indicate interest in these areas as preparation for programs at other colleges and universities.
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| Bachelor of Science in Geology | BA in Global and International Studies with concentration in Latin American and Caribbean | 1494 |
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| Bachelor of Science in History | BA in History | 1527 |
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| Bachelor of Science in Biology | BA in Human Biology with concentration in Anthropology | 1175 |
| Bachelor of Science in Biology | BA in Human Biology with concentration in Applied Behavioral Science | 1177 |
| Bachelor of Science in Biology | BA in Human Biology with concentration in Biology | 1178 |
| Bachelor of Science in Biology | BA in Human Biology with concentration in Psychology | 1179 |
| Bachelor of Science in Biology | BA in Human Biology with concentration in Speech-Language-Hearing | 1180 |
| Bachelor of Science in Chemistry | BA in Human Sexuality | 1856 |
| Bachelor of Science in Chemistry | BA in Italian Studies | 1403 |
| Bachelor of Science in Chemistry | BA in Law and Society | 1986 |
| Bachelor of Science in Chemistry | BA in Linguistics | 1606 |
| Bachelor of Science in Chemistry | BA in Literature, Language &amp; Writing | 1356 |
| Bachelor of Science in Chemistry | BA in Philosophy | 1664 |
| Bachelor of Science in Chemistry | BA in Physics with concentration in Computational Physics | 1685 |
| Bachelor of Science in Chemistry | BA in Political Science | 1711 |
| Bachelor of Science in Chemistry | BA in Psychology | 1737 |
| Bachelor of Science in Chemistry | BA in Public Administration | 1989 |
| Bachelor of Science in Chemistry | BA in Religious Studies | 1755 |
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| Bachelor of Science in Chemistry | BA in Slavic, German, and Eurasian Studies with concentration in Russian, East European, and Eurasian Studies | 1786 |
| Bachelor of Science in Chemistry | BA in Slavic, German, and Eurasian Studies with concentration in South Slavic Studies | 1787 |
| Bachelor of Science in Chemistry | BA in Sociology | 1807 |
| Bachelor of Science in Chemistry | BA in Speech-Language-Hearing | 1832 |
| Bachelor of Science in Chemistry | BA in Theatre with concentration in Performance | 1935 |
| Bachelor of Science in Chemistry | BA in Theatre with concentration in Theatre, Culture &amp; Society | 1936 |
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| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Anthropology | 1100 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Applied Behavioral Science | 1121 |
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| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Economics | 1321 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in English | 1345 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Environmental Studies | 1378 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Film and Media Studies | 1912 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Geography | 1420 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in History | 1523 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in History of Art | 1550 |
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| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Law and Society | 1985 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Linguistics | 1604 |
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| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Psychology | 1736 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Public Administration | 1988 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Religious Studies | 1753 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Sociology | 1806 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Speech-Language-Hearing | 1830 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Theatre | 1933 |
| Bachelor of Science in Exercise Science | Bachelor of Arts and Bachelor of General Studies in Women, Gender, and Sexuality Studies | 1858 |
| Bachelor of Science in Exercise Science | Bachelor of Arts in Astronomy | 1676 |
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| Bachelor of Science in Exercise Science | Bachelor of Arts in Biology | 1165 |
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<td>Bachelor of Arts in Molecular, Cellular, and Developmental Biology</td>
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<tr>
<td>Bachelor of Arts in Spanish</td>
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<td>Bachelor of Fine Arts in Design</td>
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<tr>
<td>Bachelor of Fine Arts in History of Art</td>
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